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PREVALENCE, KNOWLEDGE, AND AWARENESS OF PELVIC FLOOR DISORDERS AMONG PREGNANT WOMEN IN A TERTIARY CARE HOSPITAL, KARACHI, PAKISTAN

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Article Info

Abstract

Background: *Pelvic floor disorders (PFDs) are common among women, particularly during pregnancy due to hormonal and mechanical changes affecting pelvic support. These conditions can negatively impact quality of life if not recognized early. However, knowledge and awareness of PFDs among pregnant women remain limited, especially in developing countries like Pakistan. Therefore, assessing their prevalence, knowledge, and awareness in a tertiary care hospital in Karachi is important to identify gaps and improve preventive care.*
Objective: *To determine the prevalence of pelvic floor disorders among pregnant women attending a tertiary care hospital in Karachi, Pakistan.*
Methodology: *This study will be cross-sectional descriptive study. It will be a non-probability purposive sampling technique to assess the prevalence, knowledge, and awareness of pelvic floor disorders among pregnant women in tertiary care hospitals of Karachi, Pakistan. Data will be collected using validated questionnaires (PIKQ and PFDI-20) over a period of six months, and analyzed using SPSS with appropriate statistical methods.*
Result: *A total of 151 pregnant women participated in the study, with the majority (55.0%) aged 23–35 years. Knowledge and awareness regarding pelvic floor disorders were moderate, although several misconceptions regarding diagnosis and treatment were identified. PFDI-20 findings revealed a high prevalence of pelvic floor symptoms, particularly lower abdominal pressure (76.8%), frequent urination (74.2%), urinary leakage (72.1%), and bowel-related symptoms (72.2%). Symptoms of pelvic organ prolapse, urinary incontinence, and colorectal distress were commonly reported. These findings indicate a substantial burden of pelvic floor disorders among pregnant women attending the tertiary care hospital.*
Conclusion: *The present study found a high prevalence of pelvic floor disorder symptoms among pregnant women in a tertiary care hospital in Karachi, with common urinary, bowel, and prolapse-related complaints. Although some awareness existed, significant knowledge gaps and misconceptions were observed. These results highlight the need for routine screening, education, and early intervention in antenatal care to improve pelvic floor health and quality of life.*

Keywords: *Pelvic floor disorder, Urinary incontinence, Pelvic organ prolapse, Pregnancy.*

INTRODUCTION:

"Despite the high burden of pelvic floor disorders during pregnancy, gaps in knowledge and awareness continue to delay early identification and management."

Pelvic floor dysfunction in women includes conditions that affect the function and support of the pelvic floor muscles, such as urinary incontinence, pelvic organ prolapse, fecal incontinence, and chronic pelvic pain. These disorders can significantly impair physical health, daily activities, and quality of life [1]. Pelvic floor dysfunction (PFD) is a condition in which the pelvic floor muscles and supporting tissues do not function properly, leading to symptoms such as urinary incontinence, fecal incontinence, and pelvic organ prolapse [2]. Pelvic floor disorder is a condition involving weakness or injury of the pelvic floor support structures, resulting in urinary, bowel, prolapse, pain, or sexual symptoms [3]. A total of 300 participants were included in the study. Among them, 58 had pelvic floor dysfunction (PFD), giving an overall prevalence of 19.33%, while 80.67% had no signs of PFD [2]. A large community-based study reported that 23.7% of women experienced at least one symptomatic pelvic floor disorder, highlighting its significant prevalence [4]. The prevalence of pelvic floor dysfunction varies across populations, with reported rates ranging from 1.9% to 46.5% [1]. Pelvic floor disorders significantly reduce quality of life by affecting women's physical, psychological, and social well-being [5]. The high prevalence of this condition highlights its significant clinical burden and the need for early identification and effective management [6]. Pelvic floor disorder imposes a notable burden in pregnancy by contributing to pelvic pain and perineal discomfort, which can reduce physical comfort and quality of life among pregnant women [7]. During pregnancy, the growing uterus increases pressure on the bladder and pelvic floor muscles, weakening their support and increasing the risk of pelvic floor disorders [8]. During pregnancy, hormonal, anatomical, and structural changes affect connective tissues, nerves, and muscles, contributing to changes in pelvic floor stability and function [9]. Pregnancy and childbirth cause physiological and structural changes in the pelvic floor, affecting its support, nerve function, and overall stability [10]. Pregnancy-related pelvic floor disorder results from mechanical loading, hormonal ligament laxity, and childbirth-related trauma that weaken pelvic floor support [11]. Management of pelvic floor disorders mainly involves conservative rehabilitation, with pelvic floor muscle training (PFMT) as the first-line treatment. Electrical stimulation may be used as an adjunct therapy, although its effectiveness requires further evidence [12]. Management of pelvic floor disorder during pregnancy includes antenatal education, pelvic floor muscle training, breathing exercises, physical activity, perineal massage, and lifestyle modification to reduce symptoms and protect pelvic floor function [13]. Management of pelvic floor disorder during pregnancy focuses on prevention and symptom reduction through pelvic floor exercises, respiratory training, perineal massage, physical activity, and education on protective lifestyle practices [14]. Management of pelvic floor disorder in pregnancy consists of preventive counseling, pelvic floor muscle training, respiratory exercises, perineal massage, physical activity, and lifestyle modification such as weight and constipation control [15]. Therefore, This study aims to assess the prevalence of pelvic floor disorders and to evaluate the level of knowledge and awareness about these conditions among pregnant women attending a tertiary care hospital in Karachi, Pakistan, in order to identify existing gaps and provide evidence for improving antenatal education and preventive strategies.

METHODOLOGY:

This study was a hospital-based cross-sectional descriptive study conducted among pregnant women attending a tertiary care hospital in Karachi, Pakistan, including Abbasi Shaheed Hospital, Jinnah Hospital, Aga Khan University Hospital, Liaquat National Hospital, National Medical Centre, Indus Hospital, PNS Shifa and Fauji Foundation Hospital (SOMH). Data were collected from pregnant women attending antenatal care in these hospitals, ensuring representation from different socioeconomic and educational backgrounds. The study was conducted over six months using a non-probability purposive sampling technique. Pregnant women aged above 18 years attending the antenatal clinic or

admitted to the hospital and who provided informed consent were included in the study [16]. Pregnant women who were unable to understand or complete the questionnaire were excluded from the study [16]. The minimum sample size was calculated as 151 participants using Open Epi software with a 5% margin of error and 95% confidence interval [17]. The Prolapse and Incontinence Knowledge Questionnaire (PIKQ), a self-administered tool designed to measure women's knowledge of urinary incontinence (UI) and pelvic organ prolapse (POP). The questionnaire consists of two distinct scales, one focused on UI and the other on POP [18]. The Pelvic Floor Distress Inventory-20 (PFDI-20) as a brief, condition-specific questionnaire to measure symptom-related distress in women with pelvic floor disorders, combining the Urinary Distress Inventory-6, Pelvic Organ Prolapse Distress Inventory-6, and Colorectal-Anal Distress Inventory-8 into 20 items scored on a 0–4 bother scale [19]. Data were analyzed using SPSS. Descriptive statistics were used to summarize the demographic, PIKQ and PFDI-20 scores. The Chi-square test was used for categorical variables, and a p-value of ≤ 0.05 was considered statistically significant.

RESULT:

Table 1: presents the age distribution of the study participants. Among the 151 pregnant women included in the study, more than half (55.0%, n = 83) were aged between 23 and 35 years, making this the largest age group. Participants aged 36–45 years accounted for 23.2% (n = 35) of the sample, while 21.9% (n = 33) were between 18 and 22 years of age. These findings indicate that the majority of respondents were within the prime reproductive age group of 23–35 years.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-22	33	21.9	21.9	21.9
	23-35	83	55.0	55.0	76.8
	36-45	35	23.2	23.2	100.0
	Total	151	100.0	100.0	

Table 1. Age Distribution of Pregnant Women (n = 151)

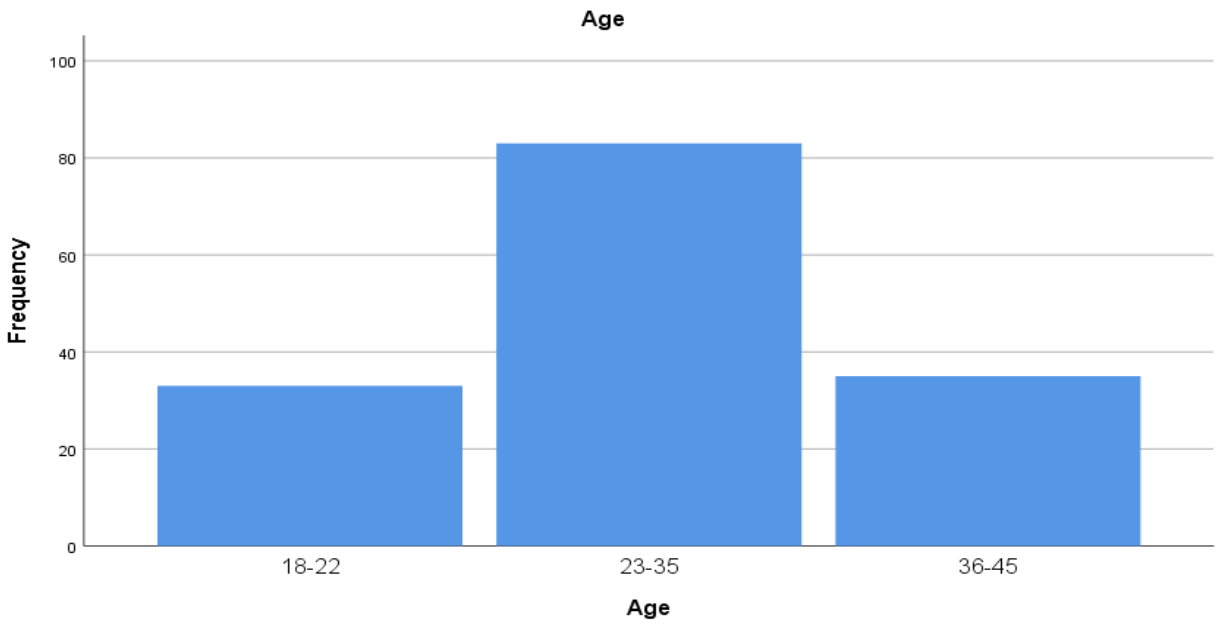

Figure 1. Age Distribution of Pregnant Women (n = 151)

Table 2: illustrates the ethnic distribution of the study participants. Among the 151 pregnant women, the largest proportion belonged to the Punjabi ethnic group, comprising 31.8% (n = 48) of the sample. Participants from other ethnic backgrounds accounted for 27.8% (n = 42), while Sindhi women represented 23.8% (n = 36) of the respondents. The Pathan ethnic group constituted 16.6% (n = 25) of the study population. These findings indicate that the participants were drawn from diverse ethnic backgrounds, with Punjabis representing the largest ethnic group in the study.

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sindhi	36	23.8	23.8	23.8
	Pathan	25	16.6	16.6	40.4
	Punjabi	48	31.8	31.8	72.2
	Other	42	27.8	27.8	100.0
	Total	151	100.0	100.0	

Table 2. Ethnic Distribution of Pregnant Women (n = 151)

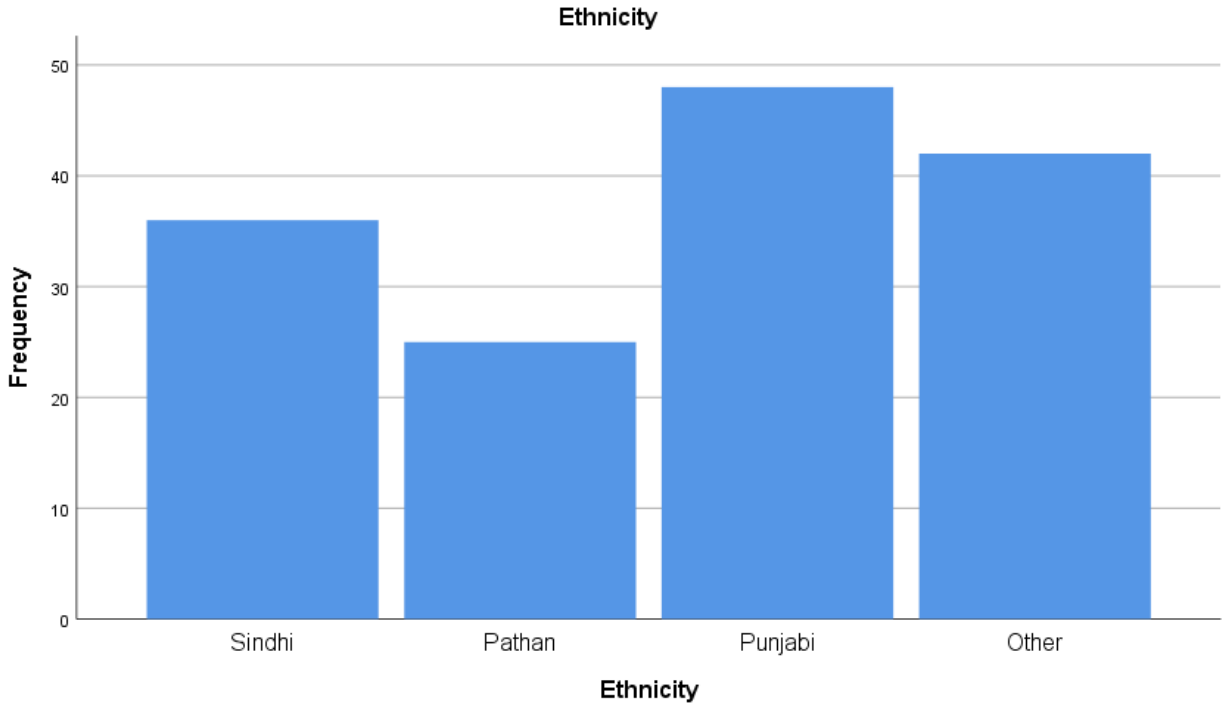

Figure 2. Ethnic Distribution of Pregnant Women (n = 151)

Table 3: presents the marital status of the study participants. All respondents included in the study were married, accounting for 100% (n = 151) of the total sample. This finding is expected, as the study was conducted among pregnant women attending a tertiary care hospital. Therefore, no variation in marital status was observed among the participants.

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	151	100.0	100.0	100.0

Table 3. Marital Status of Pregnant Women (n = 151)

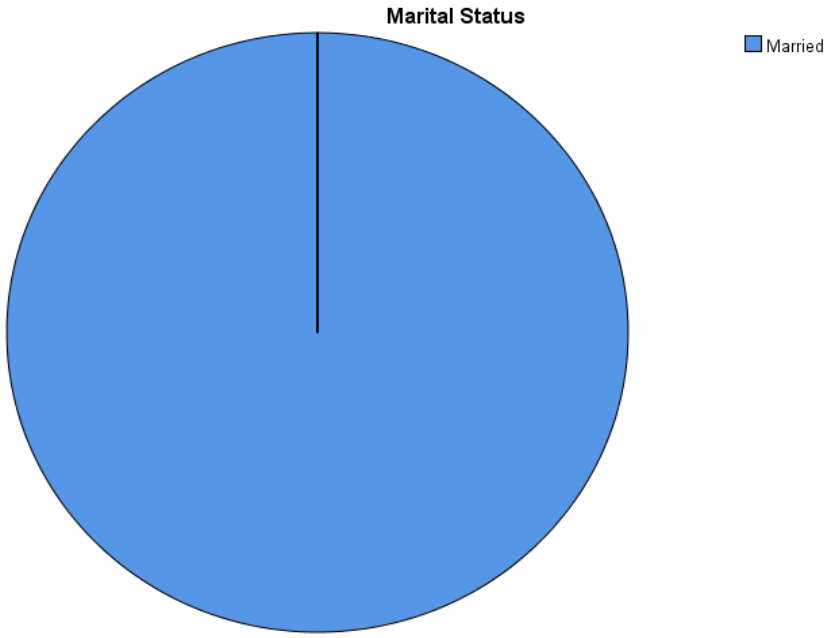

Figure 3. Marital Status of Pregnant Women (n = 151)

Table 4: shows the distribution of participants according to their Body Mass Index (BMI). Among the 151 pregnant women, the largest proportion had a normal BMI, accounting for 30.5% (n = 46) of the sample. Underweight participants constituted 20.5% (n = 31), while both overweight and obese categories each represented 24.5% (n = 37) of the respondents. Overall, nearly half of the participants (49.0%) were either overweight or obese, indicating a considerable prevalence of elevated BMI among the study population.

BMI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Underweight	31	20.5	20.5	20.5
	Normal weight	46	30.5	30.5	51.0
	Overweight	37	24.5	24.5	75.5
	Obese	37	24.5	24.5	100.0
	Total	151	100.0	100.0	

Table 4. Body Mass Index (BMI) Distribution of Pregnant Women (n = 151)

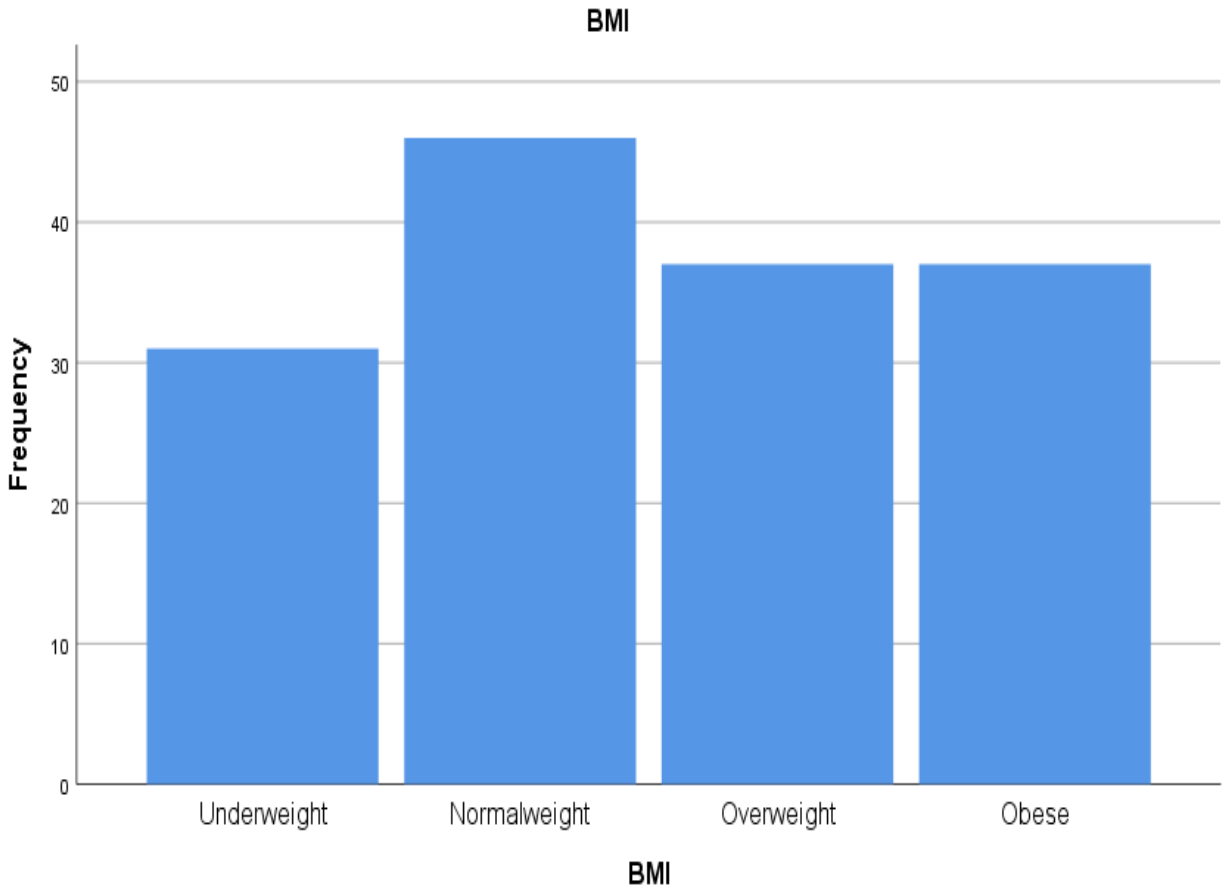

Figure 4. Body Mass Index (BMI) Distribution of Pregnant Women (n = 151)

Table 5: presents the educational status, antenatal care received, and history of gynecological surgery among the study participants. Regarding maternal education, the highest proportion of participants had completed secondary education (35.8%, n = 54), followed by primary education (28.5%, n = 43). Graduate-level education was reported by 25.8% (n = 39) of the respondents, while only 9.9% (n = 15) had attained a college-level education.

With respect to antenatal care, 40.4% (n = 61) of the participants received care from local clinics, making it the most common source of antenatal services. Specialist care was received by 31.8% (n = 48) of the women, whereas 27.8% (n = 42) were managed by medical officers or trainees.

Regarding medical history, 33.8% (n = 51) of the pregnant women reported a previous history of gynecological surgery, while the majority, 66.2% (n = 100), had no such history. These findings indicate a diverse educational background among participants, varied utilization of antenatal healthcare services, and a relatively low prevalence of prior gynecological surgical interventions.

Variable	Category	Frequency (n)	Percentage (%)
Maternal Education Level	Primary	43	28.5
	Secondary	54	35.8
	College	15	9.9
	Graduate	39	25.8
	Total	**151**	**100.0**
Antenatal Care Received	Local Clinic	61	40.4
	Medical Officer/Trainee	42	27.8
	Specialist Care	48	31.8
	Total	**151**	**100.0**
History of Gynecological Surgery	Yes	51	33.8
	No	100	66.2
	Total	**151**	**100.0**

Table 5. Maternal Education Level, Antenatal Care Received, and History of Gynecological Surgery Among Pregnant Women (n = 151)

Table 6: assesses the knowledge and awareness of pregnant women regarding urinary incontinence and its risk factors, diagnosis, and treatment options. The questionnaire included statements related to the prevalence of urinary leakage, gender differences, causes, diagnostic procedures, treatment modalities, and preventive measures. Participants were asked to indicate their level of agreement with each statement, providing insight into their understanding of urinary incontinence. The responses highlight both accurate knowledge and common misconceptions regarding urinary leakage. Analysis of these findings helps identify areas where awareness is adequate and aspects that may require further

educational interventions to improve understanding and promote early recognition and management of urinary incontinence among pregnant women.

Statement	Agree n (%)	Disagree n (%)	Don't Know n (%)
Urinary incontinence (loss of urine or leaky bladder) is more common in young women than in old women.	60 (39.7)	53 (35.1)	38 (25.2)
Women are more likely than men to leak urine.	66 (43.7)	53 (35.1)	32 (21.2)
Other than pads and diapers, not much can be done to treat leakage of urine.	70 (46.4)	59 (39.1)	22 (14.6)
It is NOT important to diagnose the type of urine leakage before trying to treat it.	87 (57.6)	42 (27.8)	22 (14.6)
Many things can cause urine leakage.	74 (49.0)	53 (35.1)	24 (15.9)
Certain exercises can be done to help control urine leakage.	70 (46.4)	56 (37.1)	25 (16.6)
Some medications may cause urinary leakage.	68 (45.0)	56 (37.1)	27 (17.9)
Once people start to leak urine, they are never able to control their urine again.	60 (39.7)	50 (33.1)	41 (27.2)
Doctors can do special types of bladder testing to diagnose urine leakage.	71 (47.0)	37 (24.5)	43 (28.5)
Surgery is the only treatment for urinary leakage.	69 (45.7)	31 (20.5)	51 (33.8)
Giving birth many times may lead to urine leakage.	66 (43.7)	39 (25.8)	46 (30.5)
Most people who leak urine can be cured or improved with some kind of treatment.	64 (42.4)	42 (27.8)	45 (29.8)

Table 6. Knowledge and Awareness Regarding Urinary Incontinence Among Pregnant Women (n = 151)

Table 7: presents the responses of pregnant women regarding their knowledge and awareness of pelvic organ prolapse (POP). Overall, participants demonstrated varying levels of awareness concerning the risk factors, symptoms, diagnosis, and treatment of POP.

Half of the respondents (50.3%) agreed that certain exercises can help prevent pelvic organ prolapse from worsening, while 49.7% recognized that a physical examination by a doctor is an effective method for diagnosing the condition. Additionally, 49.0% agreed that symptoms of pelvic organ prolapse may include pelvic heaviness or pressure, and an equal proportion believed that obesity is associated with pelvic organ prolapse.

Regarding risk factors, 43.0% of participants agreed that giving birth multiple times may lead to pelvic organ prolapse, while 41.1% identified heavy daily lifting as a contributing factor. Furthermore, 43.0% acknowledged that pelvic organ prolapse can occur at any age. Concerning treatment options, 44.4% agreed that surgery is one form of treatment, and 41.1% were aware that a pessary can be used to manage symptoms.

However, misconceptions were evident, as 47.0% believed that little can be done once pelvic organ prolapse develops, and 45.0% incorrectly thought that blood tests can be used to diagnose the condition. A considerable proportion of respondents also selected “Don't Know” for several statements, indicating gaps in knowledge and highlighting the need for improved educational interventions regarding pelvic floor disorders among pregnant women.

Statement	Agree n (%)	Disagree n (%)	Don't Know n (%)
Pelvic organ prolapse (bulging of the vagina, uterus, bladder, or rectum) is more common in young women than in old women	58 (38.4)	60 (39.7)	33 (21.9)
Giving birth many times may lead to pelvic organ prolapse	61 (40.4)	65 (43.0)	25 (16.6)
Pelvic organ prolapse can happen at any age	65 (43.0)	63 (41.7)	23 (15.2)
Certain exercises can help to stop pelvic organ prolapse from getting worse	76 (50.3)	46 (30.5)	29 (19.2)
Symptoms of pelvic organ prolapse may include pelvic heaviness and/or pressure	74 (49.0)	46 (30.5)	31 (20.5)
A good way for a doctor to diagnose pelvic organ prolapse is by examining the patient	75 (49.7)	44 (29.1)	32 (21.2)

Statement	Agree n (%)	Disagree n (%)	Don't Know n (%)
Once a patient has pelvic organ prolapse, not much can be done to help her	71 (47.0)	45 (29.8)	35 (23.2)
Heavy lifting on a daily basis can lead to pelvic organ prolapse	62 (41.1)	46 (30.5)	43 (28.5)
Surgery is one type of treatment for pelvic organ prolapse	67 (44.4)	53 (35.1)	31 (20.5)
Doctors can run a blood test to diagnose pelvic organ prolapse	68 (45.0)	50 (33.1)	33 (21.9)
A rubber ring called a pessary can be used to treat symptoms of pelvic organ prolapse	62 (41.1)	46 (30.5)	43 (28.5)
People who are obese are less likely to get pelvic organ prolapse	74 (49.0)	37 (24.5)	40 (26.5)

Table 7. Knowledge and Awareness Regarding Pelvic Organ Prolapse Among Pregnant Women (n = 151)

Table 8: summarizes the prevalence and severity of pelvic floor symptoms among pregnant women using the Pelvic Floor Distress Inventory-20 (PFDI-20). Pelvic organ prolapse-related symptoms were commonly reported, with 76.8% of participants experiencing pressure in the lower abdomen and 70.9% reporting heaviness or dullness in the lower abdomen to varying degrees. A sensation of bulging or something falling out in the vaginal area was reported by 68.2% of respondents. Additionally, 72.9% reported the need to push on the vagina or rectum to complete a bowel movement, while 69.5% experienced difficulty initiating or completing urination by pushing up in the vaginal area.

Colorectal and anal symptoms were also prevalent. Straining during bowel movements was reported by 72.1% of participants, whereas 68.8% experienced a feeling of incomplete bowel emptying. Loss of stool control for well-formed stool and loose stool was reported by 61.7% and 71.5% of women, respectively. Similarly, 69.5% reported loss of gas beyond their control, and 72.2% experienced pain during stool passage. Urgency to rush for a bowel movement and stool bulging outside the rectum during or after a bowel movement were reported by 58.9% and 64.2% of participants, respectively.

Urinary symptoms constituted a substantial component of pelvic floor distress. Frequent urination was reported by 74.2% of respondents, making it one of the most common symptoms. Urine leakage associated with urgency, coughing, laughing, or sneezing was reported by 72.1% and 65.6% of participants, respectively. Small amounts of urine leakage affected 74.8% of women, while 71.5% experienced difficulty emptying the bladder. Furthermore, 64.5% reported a sensation of incomplete bladder emptying.

Pain and sexual dysfunction symptoms were also evident among the participants. Pain or discomfort in the lower abdomen or genital region was reported by 66.3% of women. Pain during sexual intercourse was experienced by 58.4% of respondents, while 53.6% reported decreased interest in sexual activity. Overall, the findings indicate a high burden of pelvic floor-related symptoms among pregnant women, particularly urinary and bowel symptoms, highlighting the significant impact of pelvic floor disorders during pregnancy.

PFDI-20 Symptom Item	No n (%)	Not at All n (%)	Somewhat n (%)	Moderately n (%)	Quite a Bit n (%)
Pressure in the lower abdomen	2 (1.3)	33 (21.9)	52 (34.4)	40 (26.5)	24 (15.9)
Heaviness or dullness in the lower abdomen	10 (6.6)	34 (22.5)	50 (33.1)	45 (29.8)	12 (7.9)
Bulge or something falling out in the vaginal area	12 (7.9)	36 (23.8)	48 (31.8)	43 (28.5)	12 (7.9)
Push on vagina/rectum for complete bowel movement	5 (3.3)	36 (23.8)	59 (39.1)	33 (21.9)	18 (11.9)
Feeling of incomplete bladder emptying	15(9.9)	39 (5.9)	40 (26.7)	38 (25.2)	19 (12.6)
Push up in vaginal area to start/complete urination	20 (13.2)	26 (17.2)	54 (35.8)	33 (21.9)	18 (11.9)
Strain too hard for bowel movement	12 (7.9)	30 (19.9)	50 (33.1)	36 (23.8)	23 (15.2)
Feeling of incomplete bowel emptying	15 (9.9)	32 (21.2)	44 (29.1)	40 (26.5)	20 (13.2)
Loss of stool control (well-formed stool)	17 (11.3)	36 (23.8)	43 (28.5)	41 (27.2)	14 (9.3)
Loss of stool control (loose/liquid stool)	20 (13.2)	23 (15.2)	55 (36.4)	37 (24.5)	16 (10.6)
Loss of gas beyond control	16 (10.6)	30 (19.9)	55 (36.4)	35 (23.2)	15 (9.9)

PFDI-20 Symptom Item	No n (%)	Not at All n (%)	Somewhat n (%)	Moderately n (%)	Quite a Bit n (%)
Pain during stool passage	14 (9.3)	28 (18.5)	52 (34.4)	35 (23.2)	22 (14.6)
Urgency to rush for bowel movement	25 (16.6)	37 (24.5)	41 (27.2)	35 (23.2)	13 (8.6)
Stool bulging outside rectum during/after bowel movement	15 (9.9)	39 (25.8)	44 (29.1)	32 (21.2)	21 (13.9)
Frequent urination	13 (8.6)	26 (17.2)	48 (31.8)	39 (25.8)	25 (16.6)
Urine leakage with urgency	11 (7.3)	31 (20.5)	55 (36.4)	39 (25.8)	15 (9.9)
Urine leakage with laughing/coughing/sneezing	21 (13.9)	31 (20.5)	42 (27.8)	43 (28.5)	14 (9.3)
Small amounts of urine leakage	9 (6.0)	29 (19.2)	53 (35.1)	42 (27.8)	18 (11.9)
Difficulty emptying bladder	12 (7.9)	31 (20.5)	47 (31.1)	43 (28.5)	18 (11.9)
Pain/discomfort in lower abdomen or genital region	19 (12.6)	32 (21.2)	54 (35.8)	33 (21.9)	13 (8.6)
Pain with sexual intercourse	35 (23.2)	28 (18.5)	46 (30.5)	33 (21.9)	9 (6.0)
Decreased interest in sex	30 (19.9)	40 (26.5)	39 (25.8)	23 (15.2)	19 (12.6)

Table 8. Pelvic Floor Distress Inventory-20 (PFDI-20) Symptom Responses Among Pregnant Women (n = 151)

DISCUSSION:

The present study assessed the prevalence, knowledge, and awareness of pelvic floor disorders (PFDs) among pregnant women attending a tertiary care hospital in Karachi, Pakistan. The findings revealed a considerable burden of pelvic floor symptoms among pregnant women, with urinary, bowel, and pelvic organ prolapse-related symptoms being

frequently reported. Naseer S et al, 2024 noted that a significant proportion of pregnant women in Karachi believed that leakage, heaviness, or sexual discomfort after delivery were “normal” and would resolve on their own, and few realized that untreated PFDs could persist for years and affect quality of life and sexual health [20]. Despite the high prevalence of symptoms, varying levels of knowledge and awareness regarding pelvic floor disorders were observed.

The majority of participants were between 23 and 35 years of age, representing the prime reproductive age group. Furthermore, almost half of the respondents were either overweight or obese, which is a recognized risk factor for pelvic floor dysfunction due to increased intra-abdominal pressure. The study also found that one-third of participants had a history of gynecological surgery, which may further contribute to pelvic floor complications.

Knowledge regarding urinary incontinence and pelvic organ prolapse was moderate. Many participants correctly identified that pelvic organ prolapse may occur at any age and that repeated childbirth can contribute to its development. Awareness regarding conservative treatment options, including pelvic floor exercises, was also evident among a substantial proportion of respondents. Raza S et al, 2023 observed that women assessed in the first or early second trimester in a Karachi tertiary hospital had substantially lower PFD knowledge

scores than those in the third trimester, even though risk-factor counselling should

ideally start early, and this suggested that many women did not receive early

education about pelvic floor health during routine antenatal visits [21]. However, misconceptions persisted regarding diagnostic methods, treatment effectiveness, and the reversibility of pelvic floor disorders. A considerable number of participants believed that little could be done once pelvic organ prolapse develops or incorrectly assumed that blood tests can diagnose the condition. These findings indicate significant gaps in health literacy related to pelvic floor health.

The PFDI-20 results demonstrated that pelvic floor symptoms were common among pregnant women. Frequent urination, urinary leakage, incomplete bladder emptying, bowel dysfunction, and sensations of pelvic pressure were among the most frequently reported complaints. Pregnancy-related hormonal changes, increased uterine weight, and mechanical stress on pelvic floor structures likely contribute to the high prevalence of these symptoms. Hussain S et al, 2024 reported that when asked about treatment options, fewer than 20% of pregnant women in Karachi could name any non-surgical management for prolapse or incontinence (e.g., PFME, pessaries, physiotherapy), and most only knew surgery as the solution and therefore feared both PFDs and their treatment [22]. Additionally, symptoms related to sexual function, including pain during intercourse and decreased sexual interest, were reported by a notable proportion of participants, highlighting the broader impact of pelvic floor disorders on quality of life.

Overall, the findings emphasize that pelvic floor disorders represent a significant but often underrecognized health concern among pregnant women. The coexistence of high symptom prevalence and limited awareness underscores the need for enhanced patient education and early screening during antenatal care visits.

Strengths of the Study:

This study addresses an important and underexplored public health issue among pregnant women in Pakistan. A relatively adequate sample size of 151 participants increased the reliability of the findings. The use of the validated Pelvic Floor Distress Inventory-20 (PFDI-20) enabled comprehensive assessment of urinary, colorectal, and prolapse-related symptoms .The study evaluated both symptom prevalence and participants' knowledge and awareness, providing

a broader understanding of pelvic floor health. Data were collected from a tertiary care hospital, allowing access to women from diverse socioeconomic and educational backgrounds .The study findings may serve as baseline data for future research and intervention programs targeting pelvic floor disorders during pregnancy.

Limitations:

The cross-sectional design limits the ability to establish causal relationships between risk factors and pelvic floor disorders. Data were collected from a single tertiary care hospital, which may limit the generalizability of the findings to all pregnant women in Pakistan. Symptoms and awareness levels were self-reported, making the study susceptible to recall bias and reporting bias. Clinical examinations were not performed to confirm pelvic floor disorders, and findings relied primarily on questionnaire responses. Sociocultural sensitivities regarding pelvic and sexual health may have influenced participants' willingness to disclose symptoms.

Recommendations:

Routine screening for pelvic floor disorders should be incorporated into antenatal care services. Educational programs and awareness campaigns should be developed to improve knowledge regarding pelvic floor health, risk factors, prevention, and treatment options. Healthcare providers should educate pregnant women about pelvic floor muscle exercises and other conservative management strategies. Future studies should include larger multicenter samples to improve generalizability. Longitudinal studies are recommended to evaluate the progression of pelvic floor symptoms throughout pregnancy and the postpartum period. Clinical assessment alongside questionnaire-based evaluation should be incorporated in future research to improve diagnostic accuracy.

CONCLUSION:

The present study demonstrated a high prevalence of pelvic floor disorder symptoms among pregnant women attending a tertiary care hospital in Karachi. Urinary, bowel, and pelvic organ prolapse-related symptoms were frequently reported, indicating a substantial burden of pelvic floor dysfunction during pregnancy. Although some participants demonstrated awareness regarding risk factors and treatment options, important gaps in knowledge and misconceptions remained evident. These findings highlight the need for routine screening, patient education, and early intervention strategies within antenatal care settings to improve pelvic floor health and enhance the quality of life of pregnant women.

Acknowledgement

None

Informed Consent

Written informed consent was obtained from all participants before their inclusion in the study.

Conflict Interest

No conflict of interest

Funding Statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethical Approval

The study was approved by an independent Ethical Review Board (IERB) at the Foundation of Indus University under Protocol Number: IERB-01/U/AHS-DPT/26/1242.

AUTHOR CONTRIBUTION:

Author	Contribution
Maryam Fatima	**Substantial Contribution to study design, analysis and acquisition of data.** **Manuscript Writing.** **Has Given Final Approval of the version to be published.**
Khadija Usman	**Substantial Contribution to study design, acquisition and interpretation of data.** **Critical Review and Manuscript Writing.** **Has Given Final Approval of the version to be published.**
Okasha Anjum	**Substantial Contribution to acquisition and interpretation of data.** **Has Given Final Approval of the version to be published.**

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