



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

PELVIC FLOOR DISORDERS AMONG PAROUS WOMEN OF REPRODUCTIVE AGE GROUP

KEY WORDS: Pelvic Floor Disorders, Parous women, reproductive age

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ABSTRACT

INTRODUCTION: In this research, we hope to assess the prevalence of pelvic floor disorders among parous women of reproductive age group (20-40 years).

MATERIALS AND METHODS: A questionnaire was designed to assess the prevalence of pelvic floor disorders and to identify the commonest type. It was distributed to the parous women in the age group 20-40 years who attended gynaecology OPD at AVBRH.

RESULT: The results revealed a high prevalence of Pelvic Floor Disorders in women in the age group 26-30 years. It also revealed that urinary incontinence is the commonest type of pelvic floor disorder.

CONCLUSION: In our study, we see a high prevalence of Pelvic Floor Disorders among women. With social inhibitions women may not express these symptoms in routine postnatal care. Hence, effective awareness and care are needed to reduce these problems.

INTRODUCTION:

Urinary and faecal incontinence and pelvic organ prolapse, classified as "pelvic floor disorders", are commonly found in female population.^[1] Pregnancy and child birth have long been considered as risk factors in the genesis of pelvic floor dysfunction. The mechanical strain during delivery may give rise to partial denervation of the pelvic floor and injury to the muscle and connective tissue.

Childbirth is a well-known risk factor for pelvic floor disorders in high-income settings^[2-4]. Since women in low-income countries have more pregnancies, less access to obstetric care and more physical strain in daily life, it is still possible that pelvic floor disorders may be more common and may affect daily life more severely than suggested by reports from high-income settings.

Parity, instrumental delivery, prolonged labor and increased birth weight have always been considered predisposing factors for pelvic floor injury.^[5] However clear data regarding protective effect of LSCS are inconsistent in patients presenting with incontinence. Very few Indian women seek treatment in spite of suffering from incontinence. There are few studies to state the prevalence of this condition in the Indian context. With this in mind a study was conducted to determine the prevalence of incontinence in women in our centre.

The prevalence of incontinence was 18.6%. Incontinence was reported in 12.5% of primigravidas as compared to 26.4% in multigravidas. The incidence of incontinence rose as age advanced. Sixteen percent developed incontinence following LSCS whereas 19.8% developed incontinence after normal delivery.^[6]

MATERIALS AND METHODS:

SITE: The research was conducted in Acharya Vinobha Bhave Rural Health Hospital, Sawangi, Wardha.

TYPE OF STUDY: Hospital based descriptive cross sectional based study.

DURATION: 2 Months

INCLUSION CRITERIA: All the parous women under reproductive age group 20-40 years giving consent for the interview.

EXCLUSION CRITERIA: Perimenopausal women and women who had undergone caesarian section without the trial of labor.

PROCEDURE: A predesigned and pretested proforma was used for interviewing the study participants, who were selected based on the inclusion criteria. The interview questionnaire was composed of mainly five sections (sociodemographic factors, obstetric and gynaecological history, questions on urinary incontinence, questions on faecal incontinence and presence or absence of prolapse symptoms). Maternal obstetric and gynaecological history such as parity, mode and place of delivery were noted. Urinary incontinence was assessed by a questionnaire. If women confirmed of urinary incontinence, detailed questions were asked about stress incontinence and urge incontinence. "Stress incontinence" is defined as loss of urine when coughing, sneezing or laughing. "Urge incontinence" defined as involuntary and sudden loss of urine with a strong, sudden need to urinate. If women confirmed of anal incontinence, detailed questions were asked about faecal incontinence and flatus incontinence. Faecal incontinence, bowel incontinence, anal incontinence and accidental bowel leakage can be defined as a lack of control over defecation, leading to involuntary loss of bowel contents—including flatus (gas), liquid stool elements and mucus, or solid feces.

Women were assessed for pelvic organ prolapse by asking questions about backache, pelvic pain, sensation of heaviness or pulling in the lower abdomen.

The study participants, after obtaining written consent (Annexure 1) were interviewed based on prestructured questionnaire (Annexure 2) in local language. All the parous women within reproductive age group (20-40 years) who visited the gynaecology OPD in AVBRH were asked to participate in the research. They were interviewed with the help of the proforma.

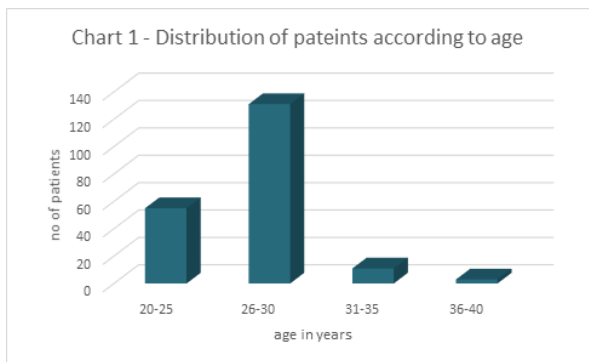
A comprehensive pelvic floor muscle rehabilitation programme for urinary symptoms, fecal dysfunction and pelvic pain was initiated for the parous women suffering from it. This included pelvic floor muscle training, behavior changes, management of constipation.

STATISTICS: A total number of 200 parous women were included in the study. A percentage wise analysis of their answers was done.

RESULTS:

Table 1 – Distribution of Patients according to age

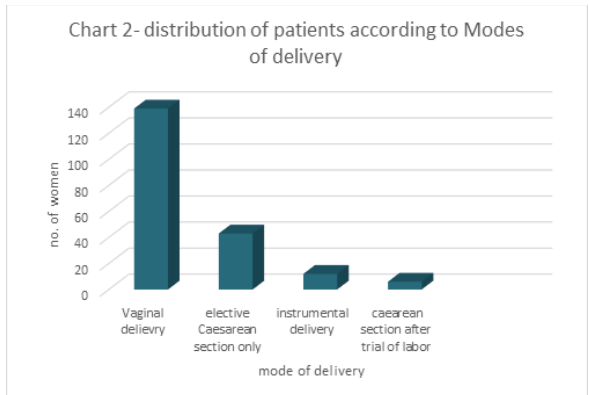
	AGE	NUMBER OF WOMEN
1.	20-25	55
2.	26-30	131
3.	31-35	11
4.	36-40	3



In the study done among 200 parous women maximum number of patients were in the age group 26-30 years comprising about 65.5% of the total sample size.

TABLE 2- Distribution of patients according to modes of delivery

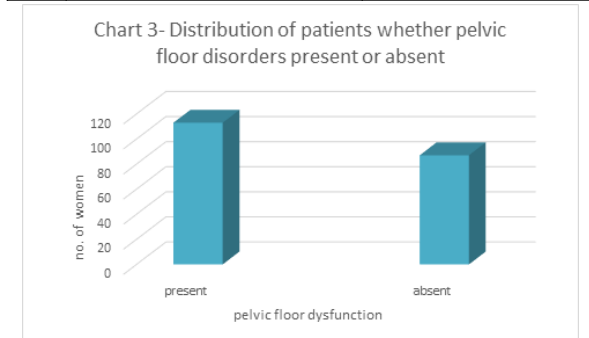
	MODES OF DELIVERY	NUMBER OF WOMEN
1.	Vaginal delivery	139
2	elective Caesarean section only	43
3	instrumental delivery	12
4	caesarean section after trial of labor	6



In the study done among 200 parous women, maximum number of women underwent vaginal delivery comprising 69.5%.

TABLE 3 – Distribution of patients whether pelvic floor disorders present or absent

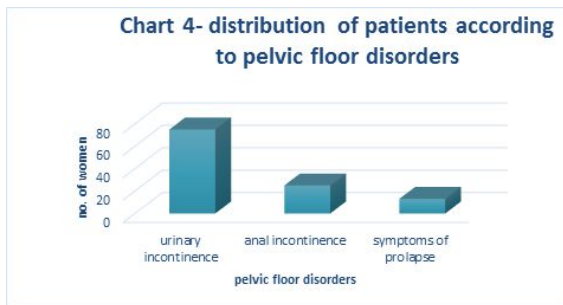
	PELVIC FLOOR DISORDER	NUMBER OF WOMEN
1.	Present	113
2.	Absent	87



In the study done among 200 parous women, it was found that 56.5% women suffered from pelvic floor disorders.

TABLE 4- Distribution of women according to pelvic floor disorders

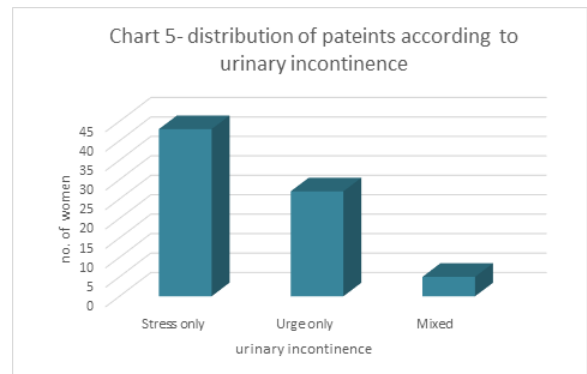
	PELVIC FLOOR DISORDERS	NUMBER OF WOMEN
1.	Urinary incontinence	75
2	Anal incontinence	25
3	Symptoms of prolapse	13



In the study done among 200 parous women, 113 were suffering from pelvic floor disorders out of which maximum were suffering from urinary incontinence comprising about 66.37%

TABLE 5- Distribution of patients according to urinary incontinence

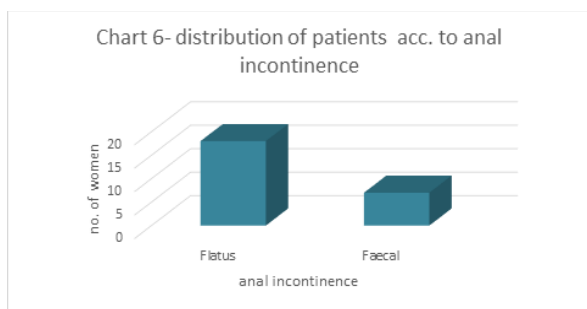
	URINARY INCONTINENCE	NUMBER OF WOMEN
1.	Stress only	43
2	Urge only	27
3	Mixed	5



In the study done among 200 parous women, 113 were reported of pelvic floor disorders out of which 75 suffered from urinary incontinence comprising mostly of "stress only" incontinence, about 57.33%.

TABLE 6- Distribution of patients according to anal incontinence

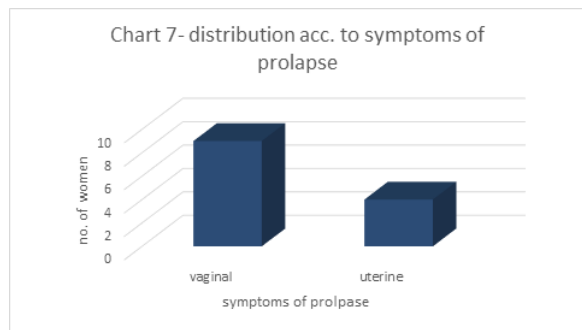
	ANAL INCONTINENCE	NUMBER OF WOMEN
1	Flatus	18
2	Faecal	7



In the study done among 200 parous women, 113 women suffered from pelvic floor disorders out of which 25 suffered from anal incontinence comprising mostly of flatus incontinence, about 72%.

TABLE 7- Distribution of patients according to symptoms of prolapse

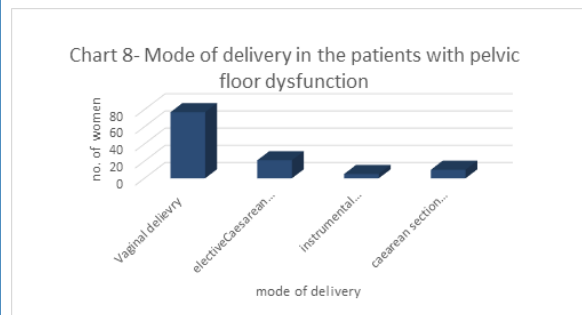
	SYMPTOMS OF PROLAPSE	NUMBER OF WOMEN
1.	Vaginal	9
2	uterine	4



In the study done among 200 parous women, 113 were reported of pelvic floor disorders out of which 13 had symptoms of prolapse comprising of mostly of vaginal symptoms, about 69.23%.

TABLE 8- Mode of delivery in the patients with Pelvic Floor Dysfunction

	MODE OF DELIVERY IN THE PATEINTS WITH PELVIC FLOOR DYSFUNCTION	NUMBER OF WOMEN
1.	Vaginal delievry	77
2	electiveCaesarean section only	21
3	instrumental delivery	5
4	caeaeran section after trial of labor	10



In the study done among 200 parous women, 113 were reported of pelvic floor disorders out of which maximum number of women underwent vaginal delivery comprising about 68.14%.

DISCUSSION:

In our study, as shown in Table 1, we see that most parous women fall in the age group of 26-30 years, while in a study conducted by Ingrid Nygaard et al., in The US most parous women were in the age group of 40-59 years.^[7] This disparity can be attributed to many socio-demographic factors like longer life expectancy among the people in developed countries like US, the better socioeconomic status and hence better quality of life. In Table 2, we see that 69.5% of women underwent vaginal birth, while in the research conducted by Jaspinder Kaur et al; in Punjab only 35% of women underwent vaginal delivery.^[8] This disparity in the prevalence can also be attributed to the fact that our study is conducted in a rural setup. In Table 3, we see that 56.5% women suffered from Pelvic floor disorders, while in the study conducted by Hafsa U Memon et al, in The US only 24% women were affected by these disorders.^[9] This disparity can be attributed to the same reasons as discussed about in Table 1. In Table 4, we see that 66.37% have urinary incontinence. These results on comparison with the study

conducted by Hafsa U Memon et al, in The US it was seen that only 16% of women experienced urinary incontinence, 3% had pelvic organ prolapsed and 9% suffered from faecal incontinence.^[9] In Table 5, we see that about 57.33% of women suffered from "stress only" incontinence. This disparity can be attributed to the better health facilities in developed countries. According to the study conducted by Hafsa U Memon et al, The International Continence Society defines SUI as involuntary loss of urine on effort or physical exertion or sneezing or coughing.^[9] SUI is a common condition which affects women of all ages.^[10] During the last 10 years, there has been a 27% increase in the rate of surgical management of SUI.^[11] In Table 6, we see that 72% of women had flatus incontinence. According to the research conducted by Hafsa U Memon et al, direct trauma and laceration of the anal sphincter complicates 2-16% of vaginal deliveries.^[9, 12, 13] Injury to the anal sphincter, even with recognition and repair, contributes to the development of anal incontinence. Numerous studies have demonstrated a significant short-term risk of anal incontinence after obstetrical anal sphincter laceration.^[12-14] In Table 7, we see that 69.23% of women reported vaginal symptoms of prolapse, whereas in the study conducted by Hafsa U Memon et al, most women have at least some degree of prolapse.^[9] Objective prolapse severity is weakly correlated with symptom burden.^[15-17] However, the general trend is that prolapse beyond the hymen is associated with an increase in symptoms, and therefore the hymen may represent a clinically significant threshold.^[17-19] In Table 8, we see that, 68.14% women who underwent vaginal delivery reported pelvic floor disorders. Whereas according to the study conducted by MacLennan et al, pelvic floor dysfunction was seen in 58% of women who had spontaneous vaginal delivery, compared with the 43% of those who underwent caesarean section.^[5]

CONCLUSION AND RECOMMENDATIONS

In our study, we see a high incidence of Pelvic Floor Disorders among women. Since most pregnant women undergo probable vaginal delivery, Pelvic floor dysfunction is a morbidity which could be a lifelong problem for them. Pelvic floor dysfunction is a significant health problem affecting physical and mental health of women and making them high risk for surgical intervention. This study concludes that prevalence of Pelvic floor dysfunction in the form of urinary incontinence, fecal incontinence and prolapse is significant. With social inhibitions women may not express these symptoms in routine postnatal care. Hence, effective awareness and care are needed to reduce these problems.

RECOMMENDATIONS- Pelvic Floor Disorders should be ruled out for all parous women attending gynecology OPD routinely. Preventive measures in the form of good antenatal, intrapartum and postpartum care is needed to avoid undue bearing down. Early resumption of work should be avoided. Pelvic floor exercises should be a part of effective post natal care and should be recommended for women of all age groups.

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