



Research Article

SYMPTOMATIC BURDEN AND CLINICAL MANIFESTATIONS OF UTERINE FIBROIDS AMONG WOMEN IN UDAIPUR, RAJASTHAN: A HOSPITAL-BASED CROSS-SECTIONAL SURVEY

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ABSTRACT

Uterine Fibroids is the most common benign tumours of uterus may produce menstrual and pressure related symptoms. Uterine fibroids are a major cause of hysterectomy and morbidity in women of childbearing age. This study describes demographic profile, menstrual and lifestyle factors and symptomatic burden with sonographically diagnosed patients. **Methods:** A cross-sectional survey was used to collect samples for a period of one year in an OPD basis was conducted on 100 women aged 20-50 years at a MMM Govt. Ayurved College, Udaipur. Cases were women with ultrasound-confirmed fibroids. Data were collected using structured and pre-validated questionnaire covering socio demographic characters, clinical presentation, reproductive history. **Results:** Among 100 patients with ultrasonographically diagnosed of uterine fibroids and majority were in reproductive-age. Demographic factors show that 90% were married and 70 were urban resident. Daily dairy product consumption were 66 participants, obesity and overweight were observed in 45 and 32. Most of the cases reported in our OPD having Menstrual disturbance like heavy and prolonged bleeding and pressure symptoms. **Conclusions:** Menstrual disturbance were common among women presenting with ultrasonographically diagnosed uterine fibroid. Detailed menstrual assessment and haemoglobin evaluation may be useful in clinical care, particularly in women presenting with heavy and prolonged bleeding.

INTRODUCTION

Uterine fibroids (also known as uterine leiomyomas) are the most common benign uterine tumor of reproductive age and one of the leading causes of gynaecological morbidity. 50 percent of cases of the fibroids are asymptomatic, and symptomatic cases can lead to complications such as heavy menstrual bleeding and infertility, which impair patients' reproductive health and quality of life. [1,2] The most common complication of it is heavy menstrual bleeding, so patients consider it as the normal part of menstruation; that's why patients do not show medical attention until symptoms become severe. Limited awareness among patients about the disease and the treatment options available remains

an important public health concern. There is considerable evidence that estrogens and progestogens proliferate tumor growth as the fibroids rarely appear before menarche and regress after menopause.[3,4] Hormonal disturbances and genetic alterations are postulated to contribute to the development of uterine leiomyoma, although their precise functions are not completely understood.[5,6] Literature shows that nulli-parity, early menarche, family history of uterine fibroid, obesity and age factors are the risk factors of uterine fibroids.[7,8] The aim of this study was to assess the symptomatic burden of uterine fibroid in reproductive women.

Method

Study design

The study was designed as a hospital-based descriptive cross-sectional study to evaluate the demographic profile, clinical characteristics, BMI, and dairy product consumption of women attending our Obs. and Gyne. OPD. Data were collected using a

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structured and prevalidated questionnaire along with relevant and ultrasonographic findings.

Study setting

The study was conducted in the Department of Obstetrics and Gynecology of MMM Govt. Ayurved College, Udaipur. The data was collected from January 2025 to December 2025.

Inclusion Criteria

Women aged 20-50 years with ultrasonographically diagnosed uterine fibroid.

Exclusion Criteria

Pregnancy at the time of enrolment, uterine malignancy, adenomyosis with uterine fibroid, severe medical illness, refuse to participate.

Sampling method

Eligible participants were enrolled by consecutive sampling until 100 participants fulfilling the inclusion criteria were included in the study.

Data source and measurement

The structured questionnaire was developed based on previous studies and a literature review and validated by five experts from senior gynecologists and senior nursing faculties.

The tool consists of section A: demographic variables such as age, marital status, Hb%, parity, family history, and dietary pattern, and section B: a structured schedule containing questions itemized based on clinical symptoms.

Study Size

The sample size consisted of 100 women diagnosed with uterine fibroids and also fulfilled the eligibility criteria.

Statistical analysis

Data collected from questionnaire and entered in Microsoft Excel and analysed using the statistical package for social science (SPSS). Descriptive statistics were used and findings were expressed as frequencies and percentages.

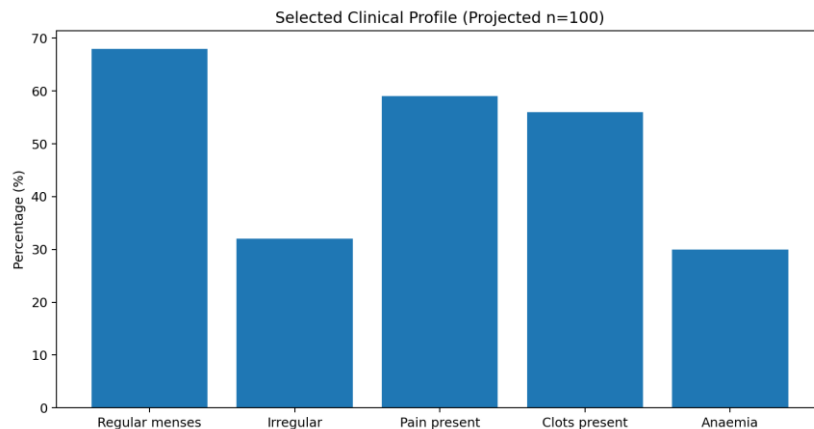
RESULTS

Table 1: Demographic and Personal Profile of patients with uterine fibroid (n=100)

Characteristics	Category / Clinical value	No. of patients (n=100)	Percentage (%)
Age (years)	20-29	30	30
	30-39	53	53
	40-50	17	17
Marital status	Married	90	90
	Unmarried	10	10
Habitat	Urban	70	70
	Rural	30	30
Parity	Nullipara	35	35
	Multipara	65	65
Dietary pattern	Vegetarian	63	63
	Non-vegetarian	37	37
Sleep	Disturbed	77	77
	Normal	23	23
Bowel habit	Regular	53	53
	Constipation	47	47
Bladder habit	Regular	50	50
	Burning/urinary complaint	50	50
Family history of uterine fibroid	No	80	80.0
	Yes	20	20.0
Oral contraceptive history	No	70	70.0
	Yes	30	30.0
BMI (kg/m ²)	Underweight (<18.5)	11	11.0
	Normal (18.5-24.9)	12	12.0
	Overweight (25.0-29.9)	45	45.0
	Obese (≥30)	32	32.0
Dairy product consumption	Daily	66	66.0
	Occasional	20	20.0
	Rarely/Never	14	14.0

Table 2: Clinical presentation among patients with uterine fibroid (n=100)

Characteristics	Category / Clinical value	No. of patients (n=100)	Percentage (%)
Age at menarche	11 years	23	23
	12 years	17	17
	13 years	20	20
	14 years	37	37
	15 years	3	3
Type of menstruation	Regular	68	68
	Irregular	32	32
Duration of menstrual bleeding	<5 days	14	14
	6–7 days	61	61
	8–9 days	18	18
	>9 days	7	7
Amount of menstrual bleeding	<15 pads/cycle	4	4
	15–20 pads/cycle	46	46
	20–25 pads/cycle	25	25
	>25 pads/cycle	25	25
Pain during menses	No pain	29	29
	Mild	43	43
	Moderate	18	18
	Severe	10	10
Interval between cycles	<21days	38	38
	21–35 days	46	46
	>35 days	16	16
Presence of clots	Present	56	56
	Absent	44	44
Haemoglobin (Hb)	≥12 g/dl	70	70
	<12 to >10 gm/dl	20	20
	<10 to >8 gm/dl	7	7
	<8 gm/dl	3	3

**Figure 1: Selected clinical characteristics of the study population (n=100)****RESULTS**

The demographic and personal characteristics of the study population showed that uterine fibroids were most frequently observed among women in the 30–39-year age group. Of the total participants, 53 (53%) were aged 30–39 years, followed by 30 (30%) in the 20–29-year group and 17 (17%) in the 40–50-year group.

Majority were married (90, 90%), 10 (10%) were unmarried. Most of the patient were of urban residents 70 (70%) patients and 30 (30%) of rural

areas. Regarding parity, 65 (65%) patients were multiparous, while 35 (35%) were nulliparous. With respect to dietary pattern vegetarian was reported by 63 (63%) women, whereas 37 (37%) followed a non-vegetarian diet.

Sleep disturbance was reported by 77 (77%) patients, while 23 (23%) reported normal sleep. Bowel habits were regular in 53 (53%) participants, whereas constipation was reported by 47 (47%). An equal proportion of patients had regular bladder habits and

urinary complaints, with 50 (50%) reporting regular bladder function and 50 (50%) reporting burning or other urinary complaints. A family history of uterine fibroid was present in 20 (20%) patients and absent in 80 (80%). Regarding oral contraceptive use, 30 (30%) patients reported a history of oral contraceptive use, while 70 (70%) did not.

Regarding BMI, 11 (11%) participants were underweight, 12 (12%) had normal BMI, 45 (45%) were overweight, and 32 (32%) were obese. Daily dairy-product consumption was reported by 66 (66%) participants, while 20 (20%) reported occasional consumption and 14 (14%) reported rare or no consumption

DISCUSSION

The menstrual and clinical characteristics of the participants demonstrated considerable variation. The most frequently reported age at menarche was 14 years, observed in 37 (37%) patients, followed by 13 years (20%), 12 years (17%), 11 years in (23%), and 15 years (3%) patients.

Menstruation was regular in 68 (68%) women, whereas 32 (32%) reported irregular cycles. The duration of menstrual bleeding was most commonly 6–7 days, reported by 61 (61%) patients. 18 (18%) women had bleeding for 8–9 days, 14 (14%) had bleeding for less than 5 days, and 7 (7%) reported bleeding for more than 9 days.

With regard to the amount of menstruation measured by self-reported menstrual bleeding burden 46 (46%) patients reported using approximately 15–20 pads per cycle. Twenty-five (25%) patients reported 20–25 pads per cycle and another 25 (25%) reported more than 25 pads per cycle, while only 4 (4%) reported fewer than 15 pads per cycle. These findings indicate that increased menstrual blood loss was a prominent clinical feature among the study participants.

Pain during menstruation was absent in 29 (29%) patients. Mild pain was reported by 43 (43%), moderate pain by 18 (18%), and severe pain by 10 (10%). Therefore, some degree of menstrual pain was reported by the majority of participants.

The interval between menstrual cycles varied considerably. A cycle interval of less than 21 days was reported by 38 (38%) patients, followed by 21–35 days in 46 (46%), more than 35 days in 16 (16%). The presence of clots during menstruation was reported by 56 (56%) participants, while 44 (44%) did not report clots.

Haemoglobin assessment showed that 70 (70%) patients had an Hb concentration of ≥ 12 g/dl. Mild reduction in Hb, with values below 12 to above 10g/dl, was observed in 20 (20%) patients. Seven (7%) patients had Hb levels below 10 to above 8g/dl,

while 3 (3%) had Hb levels below 8g/dl. Overall, 30% of the participants had Hb levels below 12g/dl, indicating varying degrees of anaemia in a substantial proportion of the study population.

Strengths and Limitations

Strengths

The study provides a structured description of demographic, reproductive, menstrual and selected lifestyle characteristics among women with ultrasonographically confirmed uterine fibroids. Use of a prevalidated questionnaire and inclusion of haemoglobin assessment provided a broader assessment of symptomatic burden.

Limitations

This study was hospital-based and on small sample of 100 patients; therefore, the findings may not be generalizable to the entire population of Rajasthan. The cross-sectional design does not allow assessment of temporal or causal relationships. As there was no non-fibroid control group, potential risk factors such as obesity, dietary pattern, family history or oral contraceptive use cannot be interpreted as independently associated with fibroid occurrence. Detailed information regarding fibroid number, size and location was also not included in the presented analysis.

CONCLUSION

The present study describes the demographic and clinical profile of 100 women with uterine fibroids. The majority of patients were in the 30–39-year age group, married, multiparous, and from urban areas. Menstrual disturbances represented an important component of the clinical presentation, with prolonged and increased menstrual bleeding, passage of clots, irregular cycles, and menstrual pain being frequently reported. Sleep disturbance, constipation, and urinary complaints were also commonly observed.

Although most participants had haemoglobin levels within the normal range, 30% had haemoglobin concentrations below 12 gm/dl, indicating the presence of anaemia in a substantial proportion of patients. The findings underline the importance of detailed menstrual assessment and routine haemoglobin evaluation in women with uterine fibroids, particularly those presenting with heavy or prolonged menstrual bleeding.

The study provides a useful descriptive overview of women presenting with uterine fibroids; however, the findings should be interpreted within the limitations of the sample size and descriptive study design. Further studies involving larger populations, appropriate control groups, and detailed assessment of fibroid size, number, location, reproductive factors, and treatment outcomes would help clarify the factors

associated with symptom severity and anaemia in women with uterine fibroids.

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