

## Sociodemographic profile of perimenopausal women having menstrual disturbances

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**Abstract**

**Objective:** To evaluate various sociodemographic factors associated with menstrual disturbances in perimenopausal women.

**Methods:** A total of 100 perimenopausal patients were studied for symptoms of menstrual disturbances at the Department of Gynecology and Obstetrics, Mamatha Medical College, Khammam. Socioeconomic strata were determined using modified Kuppaswamy scale.

**Results:** Out of 100 cases studied, maximum cases (70%) were from rural area. Age group most commonly involved was 40-45 years (66%). 91% of cases were from low socioeconomic strata. Uterus was found to be bulky in 48% of cases, followed by 45% of cases who had normal uterus. Majority of cases of benign, premalignant and malignant lesions were from rural population.

**Conclusion:** Significant association could be obtained between perimenopausal bleeding and socioeconomic status, age of menopause and awareness among patients. Menstrual disturbances and irregularities occurring at perimenopausal age is alarming and needs thorough evaluation, as it could be the only clinical manifestation of endometrial cancer, as was noticed in this study.

**Keywords:** Perimenopausal women, Menstrual irregularities, Age group, Economic status.

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**Introduction**

Excessive menstrual blood loss, more than 80 ml in a period is generally considered to be a common gynaecological complaint.<sup>(1)</sup> It can be caused by well-defined organic pathologic conditions, such as chronic endometritis, endo-metrial polyp, submucosal leiomyomas, or endometrial neoplasms, the largest single group encompasses functional disturbances, referred to as dysfunctional uterine bleeding (DUB).<sup>(2)</sup> DUB is defined as any excessive bleeding (excessively heavy, prolonged or frequent) of uterine origin which is not due to demonstrable organic disease, complications of pregnancy or systemic disease. Postmenopausal bleeding accounts for 9-10% of gynaecological complaints.<sup>(3)</sup> 10% of patients presenting with postmenopausal bleeding are diagnosed to have carcinoma endometrium, and at the same time 90% of the patients with carcinoma endometrium present with postmenopausal bleeding.<sup>(4)</sup> Other causes of postmenopausal bleeding including atrophic endometrium (60%), endometrial hyperplasia (10%), carcinoma cervix (10%) and other rare conditions (10%).<sup>(5)</sup> There is a basic level of information which all women need so that they can

interpret any symptom and seek advice for healthy life. The most feared symptom is one of postmenopausal bleeding which unless proved otherwise indicates genital malignancy.<sup>(6)</sup>

Hence, clinical suspicion and identification of risk factors is thus significant for prompt investigation and diagnosis of the condition. In this study we aimed to demonstrate the various sociodemographic factors and other related factors of perimenopausal women presenting with menstrual disturbance attending at tertiary care centre.

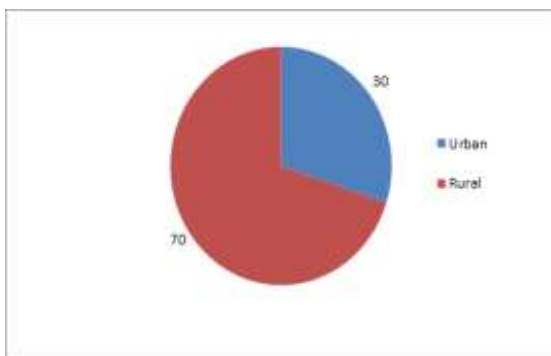
**Materials and Methods**

This is a prospective study conducted at Department of Obstetrics and Gynaecology, Mamatha Medical College, Khammam from November 2004 to June 2006. Study was initiated after approval of Institutional Ethical Committee. Total 100 perimenopausal women, aged above 40 years with menstrual disturbances were included in the study. Pregnancy related normal and abnormal bleeding was excluded from the study. The patients of age less than 40 years, patients on anticoagulant therapy and hormonal therapy other than tamoxifen and Hormone replacement therapy were excluded from this study. Data was collected by using predesigned proforma for recording their age, parity, menstrual symptoms and associated symptoms for clinical evaluation. Socioeconomic strata were determined using modified Kuppaswamy scale. The collected data was put in the master chart. They were grouped and tabulated according to the various criteria. After obtaining consent, detailed history was recorded and clinical examination conducted as per pretested structured

proforma with emphasis to risk factors of carcinoma endometrium. Ultrasound assessment of endometrial thickness was done followed by endometrial sampling to arrive at a diagnosis. Descriptive statistics like percentages are used for analysis. The comparison was made between these findings and conclusions were drawn after comparing and discussing with similar type of the work carried out by other authors.

## Results

The total number of patients attending the gynecology outpatient department above the age of 40 was 100 in the one year study period, who fulfilled inclusion and exclusion criteria. Out of 100 cases studied, maximum cases (70%) were from rural area, and 30% cases were from urban area (**Fig. 1**) Age group most commonly involved was 40-45 years (66%), 26% of cases from age group of 46 to 50 years. Least involved age group were those above 50 years (8%) (**Table 1**) 91% of cases were from low socioeconomic strata, while 9% cases were from middle age group individuals (**Table 2**) Uterus was found to be bulky in 48% of cases, followed by 45% of cases who had normal uterus. (**Table 3**) Majority of cases were of benign nature (79%), followed by premalignant lesions (24%). Benign, premalignant and malignant lesions were from rural population. (**Table 4**)



**Fig. 1: Geographical distribution of cases**

**Table 1: Age group wise distribution of cases**

Age (Years)	Cases	Percentage
40-45	66	66
46-50	26	26
Above 50	8	8
Total	100	100

**Table 2: Socio-economic status of cases**

Socioeconomic status	Cases	Percentage
Low	91	91
Middle	9	9
Total	100	100

**Table 3: Size of uterus in cases of menstrual irregularities**

Size of uterus	Cases	Percentage
Normal size	45	45
Bulky	48	48
Atrophic	7	7
Total	100	100

**Table 4: Analysis of cases in rural and urban area**

Type of lesion	Rural	Urban	Total
Benign	49	22	71
Premalignant	16	8	24
Malignant	5	0	5

## Discussion

Menopause is a biological phenomenon. Vaginal bleeding any time after 12 months of amenorrhea in a woman is known as postmenopausal bleeding.<sup>(7)</sup> Average age of menopause is 51.4 years<sup>(8)</sup>, while in India, it varies between 45-50 years<sup>(9)</sup>. World Health Organisation defines perimenopause as the period 2 -8 years preceding menopause and 1 year after the final menses.<sup>(10)</sup> However, a better practical definition is the phase preceding the menopause, generally occurring around 40 -50 years (average 45.5 - 47.5 years).<sup>(11)</sup> Perimenopausal period usually last for around 4 years.<sup>(12)</sup> Follicular development at this time has been demonstrated to be erratic, with consequent variability in estrogen levels and an increased percentage of anovulatory cycles.<sup>(13)</sup> Peri-menopausal bleeding is a symptom of varied etiology. It is associated with high incidence of genital tract malignancy. It is therefore mandatory to perform a thorough diagnostic evaluation in patients with postmenopausal bleeding. An accurate diagnosis will not only make it much easier to counsel the patient confidently about the appropriate course of action but also facilitate carrying out the proper treatment plan.

Bleeding in perimenopausal women is associated with endometrial carcinoma in 10% patients,<sup>(14)</sup> thus, correct diagnosis is crucial to plan an optimal treatment and to prevent endometrial cancer development.<sup>(15)</sup> Endometrial cancer, the most frequent gynaecologic malignancy in the western world, develop through preliminary stages of endometrial hyperplasia.<sup>(2)</sup> The previous study has shown that 10-20% of endometrial hyperplasias progress to carcinoma when left untreated. Thus correct diagnosis is crucial to plan an optimal treatment and to prevent endometrial cancer development.<sup>(16)</sup>

In the present study, maximum cases (70%) were from rural population, which is in line with observation of Sonia A et al<sup>(6)</sup>, where 60% cases belonged from rural background. Lack of awareness leading to ignorance of spotting after the menopause is the probable reason reported.<sup>(6)</sup> As regards to age group, occurrence of menstrual disorders was commonest in

age group of 40-45 years, as against to 50% of cases in age group of 45-50 years<sup>(6)</sup> and 43% of cases in age group of 50-55 years<sup>(4)</sup>. With ageing population and an increase in life expectancy, larger proportion of female population will be in postmenopausal age group.<sup>(6)</sup>

Considering socioeconomic status, majority of cases the patients belonged to the lower socioeconomic status (91%) and 9% were of middle socioeconomic status. This was in accordance with study by Sonia A et al<sup>(6)</sup>, while Viswanathan M et al<sup>(4)</sup> observed that cases were most common in middle socioeconomic strata. It is noted that incidence of post- menopausal bleeding increases with increase in socioeconomic status.<sup>(4)</sup>

Clinical evaluation showed that 48% of cases had bulky uterus, closely followed by 45% cases of normal uterus. Further evaluation of the cases showed benign, premalignant and malignant lesions in uterus which were all common in rural population. Benign lesions were most common accounting for 71% of cases. Menorrhagia in fibroids is due to increased size of uterine cavity thereby increasing the surface area of the endometrium, hyperestrogenemia causing endometrial hyperplasia, vascular alteration of the endometrium and obstructive effect of fibroid on uterine vasculature leading to endometrial venule ectasia which causes proximal congestion in the myometrium and the endometrium.<sup>(17)</sup> However, 5% of cases turned out to be malignant which were otherwise clinically innocuous. Post- menopausal bleeding is a symptom of varied etiology. It is associated with high incidence of genital tract malignancy. It is therefore mandatory to perform a thorough diagnostic evaluation in patients with postmenopausal bleeding.<sup>(4)</sup> This reemphasises the need for the evaluation of patients with menstrual irregularities, particularly from rural setup.

## Conclusion

This study identifies sociodemographic risk factors associated with menstrual disturbances in perimenopausal women. Significant association could be obtained between perimenopausal bleeding and socioeconomic status, age of menopause and awareness among patients. Menstrual disturbances and irregularities occurring at perimenopausal age is alarming and needs thorough evaluation, as it could be the only clinical manifestation of endometrial cancer, as was noticed in this study.

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