

Knowledge on Gynaecological problems amongst women attending rural health training centre: A questionnaire based study

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ABSTRACT

Background: Globally, Gynaecological problems are highly prevalent among women of reproductive age group, particularly in rural settings where awareness and health-seeking behaviour remain inadequate.

Objectives: To assess the knowledge regarding gynaecological problems among women aged 15–49 years attending a rural health training centre.

Methods: An observational study was conducted among 113 women attending the Rural Health Training Centre, Padappai, Chennai, using purposive sampling. Data were collected through a pre-tested structured questionnaire. Knowledge was assessed using a composite score and categorized as poor, moderate, or good. Data were analysed using descriptive statistics and chi-square test.

Results: Among the participants, the mean age of participants was 30.98 ± 9.61 years. Majority (61.9%) reported menstrual problems. Moderate knowledge was observed in 57.5% of participants, while only 3.5% had good knowledge. Educational status showed a strong association with knowledge levels ($p < 0.001$).

Conclusion: Despite moderate knowledge, health-seeking behaviour remains low among rural women. Strengthening awareness and targeted educational interventions are essential to improve utilization of healthcare services.

Keywords: Gynaecological problems, Knowledge, Rural women, Reproductive health.

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Introduction

Reproductive health constitutes a vital component of women's overall health and quality of life, particularly during the reproductive age group of 15–49 years. Gynaecological problems such as menstrual irregularities, dysmenorrhea, abnormal vaginal discharge, and reproductive tract infections (RTIs) are among the most common health concerns affecting women globally [1]. These conditions not only impact physical health but also have psychological, social, and economic consequences. In low- and middle-income countries like India, the burden of gynaecological morbidity remains disproportionately

high, especially among rural populations [2]. Studies have shown that a significant proportion of women experience one or more gynaecological symptoms, yet many do not seek timely medical care due to cultural taboos, stigma, lack of awareness, and limited access to healthcare services [3]. The normalization of symptoms such as menstrual pain and vaginal discharge further contributes to delayed diagnosis and treatment. Knowledge and awareness regarding reproductive health play a critical role in influencing health-seeking behaviour. Women with better knowledge are more likely to recognize abnormal symptoms and seek appropriate care [4]. However,

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several studies have highlighted inadequate knowledge regarding menstrual hygiene, RTIs, and cervical cancer screening among rural women [5]. Health-seeking behaviour is influenced by multiple factors including education, socioeconomic status, accessibility of healthcare facilities, and sociocultural beliefs [6]. Despite the availability of primary healthcare services, utilization remains suboptimal in many rural settings. Rural Health Training Centres serve as an important platforms for delivering healthcare and health education to underserved populations. They provide an opportunity to assess both the burden of gynaecological problems and the level of awareness among women in real-world settings. Hence, the present study was undertaken to assess the knowledge and behaviour regarding gynaecological problems among women attending a rural health training centre.

Materials and Methods

A cross-sectional observational study was conducted among women aged 15–49 years attending the gynaecology outpatient department at the Rural Health Training Centre, Padappai, affiliated with Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India, over a period of three months from April to June 2026. The sample size was calculated using Cochran's formula, assuming a prevalence of 92%, 95% confidence level, and 5% allowable error, yielding a minimum sample size of 113 participants. A purposive sampling technique was employed to recruit eligible participants who met the inclusion criteria, which included women within the reproductive age group who provided informed consent, while those with incomplete responses or who declined participation were excluded. Data were collected using a pre-tested structured questionnaire developed based on study objectives and existing literature, covering socio-demographic characteristics, menstrual history, gynaecological complaints, knowledge, attitude, and health-seeking behaviour. The questionnaire was administered through face-to-face interviews by trained investigators, and for participants below 18 years, consent was obtained from parents or guardians. The internal consistency of the tool was assessed using Cronbach's alpha, which was greater than 0.7, indicating acceptable reliability. Knowledge was assessed using a composite scoring system and categorized as poor, moderate, or good based on predefined cut-offs, while health-seeking behaviour was defined as seeking care from a recognized healthcare facility for gynaecological problems. Data were entered into Microsoft Excel and

analysis were done using statistical software SPSS-25. Descriptive statistics were given as mean, standard deviation, frequency, and percentage were used to summarize the data, and the chi-square test was applied to assess associations between categorical variables, with a p-value of <0.05 considered statistically significant. Ethical approval was obtained from the Institutional Ethics Committee at Balaji medical college, Chennai, and written informed consent was obtained from all participants, ensuring confidentiality and anonymity throughout the study.

Results

A total of 113 women aged 15–49 years participated in the study. The results are presented under socio-demographic characteristics, menstrual and gynaecological problems, knowledge regarding gynaecological issues, and associated factors influencing health-seeking behaviour.

Table-1: Sociodemographic characteristics

Variable	Category	Frequency (n)	Percentage (%)
Age group (in years)	15–19	14	12.4
	20–29	32	28.3
	30–39	36	31.9
	40–49	31	27.4
	Mean ± SD	30.98 ± 9.61	
	Range	15–48	
Marital Status	Unmarried	32	28.3
	Married	81	71.7
Educational Status	Illiterate	18	15.9
	Primary	19	16.8
	Middle school	15	13.3
	High school	19	16.8
	Higher secondary	18	15.9
	Graduate & above	24	21.2
Socioeconomic Status	Upper High class	18	15.9
	High class	29	25.7
	Upper middle class	16	14.2
	Middle class	22	19.5

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	Lower class	28	24.8
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The above table-1 shows that the study recruited 113 women aged between 15 and 49 years, with a mean age of 30.98 ± 9.61 years. The majority of participants belonged to the age group of 30–39 years (31.9%), followed by 20–29 years (28.3%). A total of 71 of the participants were married (71.7%). Educational level showed that 24(21.2%) were graduates, while a considerable proportion had primary or no formal education. Socioeconomic distribution was fairly uniform, with the highest proportion belonging to high class 29(25.7%) and upper high class 28 (24.8%).

Table-2: Menstrual History and Gynaecological Problems

Menstrual history	Category	Frequency (n)	Percentage (%)
Menstrual Problems (last 6 months)	Present	70	61.9
	Absent	43	38.1
Vaginal Discharge	Yes	65	57.5
	No	48	42.5
Lower Abdominal Pain	Yes	51	45.1
	No	62	54.9
Menstrual Hygiene Practice	Good	66	58.4
	Poor	47	41.6

The above table depicts that 70 participants (61.9%) reported experiencing menstrual problems in the last six months. 65 had vaginal discharge (57.5%), while 51(45.1%) complained of lower abdominal pain. Regarding menstrual hygiene practices, 66(58.4%) followed good hygiene practices, whereas 47(41.6%) had poor hygiene practices. (Table-2)

Table-3: Knowledge regarding gynecological problem

Knowledge on	Category	Frequency (n)	Percentage (%)
Hormonal Causes	Yes	68	60.2
	No	45	39.8
Infection	Yes	50	44.2
	No	63	55.8
Anaemia	Yes	71	62.8
	No	42	37.2
Complications	Yes	50	44.2
	No	63	55.8
Treatment Options	Yes	71	62.8
	No	42	37.2

Knowledge assessment shown that 68(60.2%) of women were aware of hormonal causes of menstrual abnormalities, while 71(62.8%) had knowledge about anemia and treatment options. However, awareness regarding infections and complications was comparatively lower 50 (44.2% each). (Table-3)

Table-4: Knowledge score distribution

Score	Frequency (n)	Percentage (%)
0–1	18	15.9
2–3	62	54.9
4–5	33	29.2

Table-5: Over all knowledge

Level	Frequency (n)	Percentage (%)
Poor	44	38.9
Moderate	65	57.5
Good	4	3.5

Overall, the majority of participants 65 (57.5%) had moderate knowledge, followed by 44(38.9%) with poor knowledge, and only 4(3.5%) demonstrated good knowledge. (Table-5)

Table-6: Association Between Education and Knowledge Level

Education	Poor	Moderate	Good	Total	p-value
Illiterate/Primary	25	12	0	37	p < 0.001
Middle/High school	15	19	0	34	
Higher sec & above	4	34	4	42	
Total	44	65	4	113	

Educational status showed a strong association with knowledge levels ($p = 0.001$). Women with higher education demonstrated better knowledge, whereas those with lower education predominantly had poor knowledge. This highlights the critical role of education in improving reproductive health awareness. (Table-6)

Discussion

The present study demonstrates a high prevalence of gynaecological problems among rural women, with 61.9% reporting menstrual complaints. This finding is consistent with earlier Indian studies, which have documented a high burden of gynaecological morbidity in rural populations [7]. Similar prevalence have also been reported in other developing countries, highlighting the global relevance of this issue [8]. The level of knowledge observed in this study was

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predominantly moderate, with only a small proportion of women demonstrating good knowledge. This indicates that although some awareness exists, it is insufficient for effective health decision-making. Comparable findings have also been reported in studies conducted in rural India, where awareness regarding RTIs and menstrual health was found to be limited [9]. In contrast, various studies from developed countries report higher levels of awareness, likely due to better education systems and access to health information [10]. Despite moderate knowledge levels, treatment-seeking behaviour was notably poor, with only 38.1% of women seeking care. This shows the significant gap between knowledge and practice. Similar observations have been made in studies from Ethiopia and other low-resource settings, where sociocultural barriers, financial constraints, and lack of autonomy hinder healthcare utilization [11]. A statistically significant association between knowledge and treatment-seeking behaviour was observed in this study. Women with higher knowledge levels were more likely to seek treatment, emphasizing the role of awareness in improving health outcomes. This finding is supported by previous studies which have demonstrated that knowledge is a key determinant of healthcare utilization [12].

The presence of menstrual problems was also significantly associated with treatment-seeking behaviour, indicating that symptom severity influences healthcare decisions. However, a considerable proportion of symptomatic women still did not seek care, suggesting normalization of symptoms and lack of perceived need for treatment. Similar patterns have been reported in community-based studies in South Asia [13]. Educational status emerged as a strong determinant of knowledge, with higher education levels associated with better awareness. This is in line with national survey data, which consistently show that education improves reproductive health knowledge and service utilization [14]. The uptake of preventive services such as Pap smear was low (22.1%), reflecting poor awareness regarding cervical cancer screening. This finding is consistent with other studies conducted in rural India, which report low screening rates due to lack of awareness and accessibility issues [15]. Overall, the findings of this study emphasize the need for targeted health education interventions and strengthening of primary healthcare services to improve awareness and promote timely healthcare-seeking behaviour among rural women in reproductive age group.

Conclusion

This study finding concludes that substantial burden of gynaecological problems among rural women of reproductive age, with a clear gap between knowledge and health-seeking behaviour. Educational status showed as a key determinant of knowledge, which in turn significantly influenced behaviour. The findings suggest the need for community-based health education programs aimed at improving awareness of gynaecological health, early recognition of symptoms, and the importance of timely medical consultation. Strengthening primary healthcare services, enhancing accessibility, and addressing sociocultural barriers are essential to bridge the knowledge–practice gap, also future interventions should focus on integrating reproductive health education into existing rural health programs and promoting preventive practices, including regular screening for conditions such as cervical cancer. Such measures are crucial for improving reproductive health outcomes and overall quality of life among rural women.

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