

Assess The Dysmenorrhea And Quality Of Life Among Women In Rural Populations At Chennai

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Abstract

Introduction: Dysmenorrhea, or painful menstruation, is a common condition that significantly impacts women's quality of life. In rural areas, challenges such as limited healthcare access, lack of menstrual hygiene products, and cultural stigma make it difficult for women to manage the condition. Many rely on inadequate products, which worsen symptoms and increase the risk of infections. **Methodology:** A total of 380 women from a rural population were selected from the primary health center in Thodukadu, Tiruvallur. Data was collected through interviews using a structured questionnaire developed by the researcher to assess dysmenorrhea. The WHOQOL-BREF tool was used to evaluate the quality of life. Descriptive and inferential statistics were employed for data analysis. **Results:** The study shows that the majority of women were aged 20–25 years (51%), married (54%), and 43% had completed secondary education. Significant proportions (60%) were in the low-income category. Dysmenorrhea affected 59% of the women, with 53% experiencing moderate symptoms and 33% reporting severe symptoms. The average score for dysmenorrhea was 2.18 (SD = 0.65), and for quality of life, it was 3.61 (SD = 0.67). A significant correlation ($r = 0.19$, $p = 0.0001$) was found, indicating that dysmenorrhea negatively impacted quality of life.

Conclusion: Dysmenorrhea is prevalent among rural women and significantly affects their quality of life. Addressing this issue through awareness programs and targeted interventions is essential for improving their health and well-being. By reducing the severity of dysmenorrhea, the overall quality of life for women in rural communities can be enhanced.

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Introduction

Women's health encompasses physical, mental, and social well-being and is influenced by biological, social, and cultural factors. Social determinants, including stigma surrounding menstruation, limited access to healthcare, and gender-based inequalities, play a significant role in shaping women's health outcomes. Menstruation is a natural and cyclical process that begins in adolescence and continues until menopause, serving as a vital marker of reproductive health. While many women experience regular menstrual cycles, a considerable proportion face irregularities, heavy bleeding, or painful menstruation, which can disrupt daily activities, work productivity, and social participation.

Dysmenorrhea, defined as painful menstrual cramps originating from the uterus, is one of the most prevalent gynecological conditions among women of reproductive age. It is classified into primary dysmenorrhea, occurring without underlying pathology, and secondary dysmenorrhea, associated with conditions such as endometriosis or ovarian cysts. The severity of symptoms ranges from mild to severe and can significantly impact physical functioning, emotional stability, sleep patterns, and social interactions. Globally, dysmenorrhea contributes to absenteeism from work or school, reduced productivity, increased susceptibility to stress, and a higher risk of developing chronic pain conditions later in life. Despite its high prevalence, many women do not seek medical attention, often considering menstrual pain a normal part of life.

In rural areas, challenges such as limited healthcare infrastructure, inadequate menstrual hygiene products, lack of awareness, and cultural taboos further exacerbate the burden of dysmenorrhea. These challenges not only affect physical health but also contribute to emotional distress, social withdrawal, and reduced quality of life. Understanding the prevalence, severity, and consequences of dysmenorrhea is therefore essential to develop effective interventions, health education programs, and supportive policies that improve women's overall well-being. Hence, the investigator chose women in rural populations to evaluate dysmenorrhea and its impact on the quality of life.

Aim Of The Study

To assess the prevalence of dysmenorrhea among women in rural areas and evaluate its impact on their quality of life.

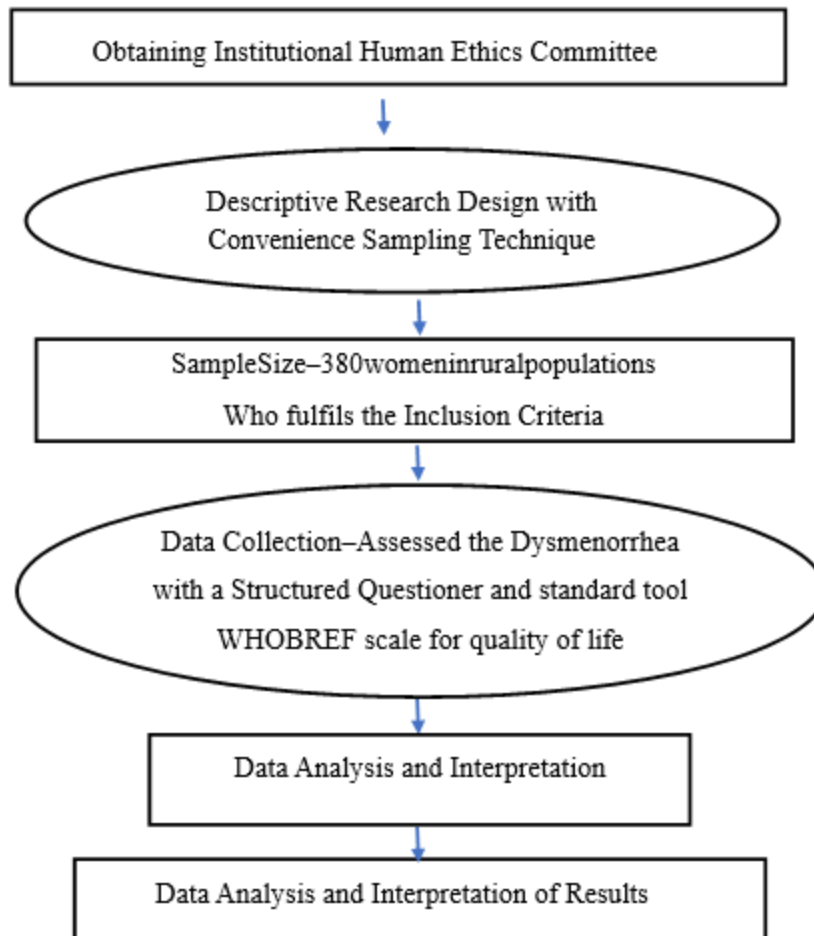
Methods And Materials

A quantitative, descriptive research design was used to assess dysmenorrhea and its impact on quality of life among women in rural areas. The study was conducted at the Primary Health Centre, Thodukadu, Tiruvallur District. A total of 380 women aged 20–39 years who met the inclusion criteria were selected through convenience sampling. The sample size was determined using power analysis based on previous studies.

Data were collected through interviews using a demographic proforma, a structured questionnaire on dysmenorrhea (12 items, maximum score 30), and the WHOQOL-BREF scale (26 items). The tools were validated by experts, language-verified by back translation, and reliability confirmed through a pilot study, yielding correlation coefficients of 0.92 (dysmenorrhea) and 0.96 (quality of life).

Ethical approval was obtained, and informed consent, confidentiality, and anonymity were ensured. Descriptive statistics (frequency, percentage, mean, SD) and Pearson correlation were used to analyze the data and examine the relationship between dysmenorrhea and quality of life.

Fig.1 Flow diagram of methodology



Statistical Analysis

Table 1: Analysis of Demographic Variables

Age, Marital Status, Education, Income level and Experience dysmenorrhea among study participants.

Demographic variables	Frequency(N=380)	Percentage (%)
Age		
20-25	196	51
26-30	83	22
31-35	90	24
36-39	11	3
Marital status		
Single	169	44
Married	207	54
Widow/divorcee	4	2
Education		
Non formal education	3	1
Primary education	121	32
Secondary education	163	43
Higher education	93	24
Income level		
Low	229	60
Medium	149	39
High	2	1
Experience dysmenorrhoea		
Yes	223	59
No	157	41

Over half of the women were aged 20–25 years (51%) and most were married (54%). A large proportion had secondary education (43%) and belonged to the low-income group (60%). Dysmenorrhea was prevalent in the population, reported by 59% of the women.

Table2: Distribution of Dysmenorrhea among the population

Dysmenorrhea	Frequency(N=380)	Percentage (%)
No risk	53	14
Moderate	203	53
Severe	124	33

More than half of the women experienced moderate dysmenorrhea (53%), while one-third reported severe levels (33%). This indicates a considerable burden of dysmenorrhea among women in the rural population.

Table3: Distribution of quality of life among the population

Quality of life	Frequency(N=380)	Percentage (%)
Poor	265	70
Moderate	95	25
Satisfied	9	2
Good	11	3

A considerable proportion of women (70%) experienced poor quality of life, indicating widespread reduced well-being in the rural population.

Table4: Assess the Dysmenorrhea and quality of life among population

Variables	Mean	SD
Dysmenorrhea	2.18	0.65
Quality of life	3.61	0.67

Dysmenorrhea had a mean score of 2.18 (SD = 0.65), and the quality-of-life score averaged 3.61 (SD = 0.67). These results show that women in the rural area experienced low quality of life, influenced by dysmenorrhea.

Table5: Correlation of Dysmenorrhea and quality of life among the population

Variables	<i>r</i> -value	<i>p</i> -value
Dysmenorrhea and Quality of life	0.19	0.0001

The findings showed a statistically significant positive association between dysmenorrhea and quality of life ($r = 0.19$, $p = 0.0001$), suggesting that dysmenorrhea impacts the well-being of women in the rural population.

Discussion

The analysis revealed that most women were aged 20–25 years (51%), over half were married (54%), and 43% had completed secondary education, with a considerable proportion belonging to the low-income group (60%). Dysmenorrhea was highly prevalent, affecting 59% of the participants, of whom 53% experienced moderate symptoms and 33% reported severe symptoms. The mean dysmenorrhea score was 2.18 (SD = 0.65), while the mean quality of life score was 3.61 (SD = 0.67).

A majority of women (70%) reported poor quality of life, demonstrating a substantial impact on their daily functioning and overall well-being. These findings are consistent with previous studies (Fernández-Martínez et al., 2019; Fathi et al., 2022; Odongo et al., 2023), which also reported high dysmenorrhea prevalence and reduced quality-of-life scores among affected women.

Correlation analysis indicated a statistically significant positive relationship between dysmenorrhea and quality of life ($r = 0.19$, $p = 0.0001$), suggesting that increasing dysmenorrhea severity is associated with poorer well-being. Similar outcomes were noted by Mizuta et al. (2023), who reported lower physical, psychological, and environmental quality-of-life scores among women with severe dysmenorrhea. Overall, the present study confirms that dysmenorrhea negatively impacts the quality of life of rural women in Tiruvallur, supporting the hypothesis (H1).

Results

The result shows that dysmenorrhea is highly prevalent among women in rural Tiruvallur, Chennai, with a significant number experiencing moderate to severe menstrual pain. This condition not only causes physical discomfort but also has a profound impact on emotional and social well-being. Many women reported feeling fatigued, irritable, or distressed during menstruation, which affected their ability to engage in routine activities, household responsibilities, and social interactions. The persistent pain and associated symptoms contribute to a sense of frustration and helplessness, making it challenging for women to maintain their usual lifestyle and participate fully in daily life.

Most of the women in the study reported poor quality of life, reflecting the wide-ranging effects of dysmenorrhea on overall health and well-being. Beyond the immediate physical symptoms, the condition influences mental health, social participation, and overall productivity. These findings underscore the urgent need for increased awareness, education, and targeted interventions in rural communities. Implementing effective management strategies, promoting access to appropriate healthcare, and providing support for women experiencing menstrual pain can play a crucial role in improving their well-being and enhancing the overall quality of life in this population.

Conclusion

Dysmenorrhea poses a significant challenge for women in rural areas, affecting their physical comfort, emotional stability, and social participation. Menstrual pain and associated fatigue can limit the ability to perform everyday tasks, manage household responsibilities, and engage in work or community activities. The condition also contributes to psychological stress, including feelings of frustration, irritability, and decreased overall well-being.

Effective management of dysmenorrhea is essential to improve the quality of life for affected women. Promoting awareness, providing education on menstrual health, and implementing targeted interventions can help women cope with menstrual discomfort. Access to

healthcare services, encouragement of self-care practices, and ongoing support are crucial in reducing the impact of dysmenorrhea, enabling women in rural communities to maintain a healthier, more active, and fulfilling lifestyle.

Limitations

- The study was limited to one rural area, which may affect generalizability.
- Data were self-reported, making them subject to bias.

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