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Bridging the Gap: A Comparative Analysis of Menstrual Hygiene Practices and Health Promotion Behaviours Among Urban and Rural Working Women

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Abstract

Background: Menstrual hygiene practices and health promotion behaviours significantly impact women's health, particularly among working women balancing personal and professional lives. Differences in access to sanitary products, clean facilities, and education contribute to disparities between urban and rural populations. This study aims to assess and compare these practices and behaviours to identify factors influencing them and provide recommendations for targeted interventions.

Objectives: To evaluate and compare menstrual hygiene practices and health promotion behaviours among urban and rural working women and identify key influencing factors.

Materials and Methods: The study used a non-experimental correlational design with 100 participants selected through purposive sampling. Tools included a socio-demographic data form, a menstrual hygiene practices questionnaire, and a health promotion behaviour profile. Data were analysed for patterns and correlations.

Results: Among rural working women, 50% exhibited poor to moderate menstrual hygiene practices, with none achieving high scores, while 16.7% of urban women had poor scores, and 83.3% scored moderately. Health promotion behaviours were low for all rural women, while urban women were evenly split between low and moderate levels. Significant factors included socioeconomic status and physical activity for urban women, and age, socioeconomic status, and physical activity for rural women. A strong positive correlation was observed between menstrual hygiene practices and health-promoting behaviours.

Conclusion: The study highlights disparities in menstrual hygiene practices and health promotion behaviours between urban and rural working women, driven by differences in access to resources,

education, and infrastructure. Addressing these disparities through targeted interventions, such as improving access to sanitary products, health education, and better facilities, is critical for enhancing overall health and well-being.

Keywords: Menstrual Hygiene Practices, Health Promotion Behaviours, Urban and Rural Working Women.

Introduction

Menstrual hygiene practices and health promotion behaviours are vital components of women's health, directly impacting their physical, emotional, and social well-being. Proper menstrual hygiene helps prevent infections, enhances comfort, and contributes to overall health. However, women, particularly in rural areas, often face challenges such as limited access to sanitary products, clean water, sanitation facilities, and health education. These disparities become more evident when comparing urban and rural working women, each grappling with unique issues in managing menstrual health.

Effective menstrual hygiene ensures women can participate fully in daily activities, including work and education. Poor practices, like infrequent changing of menstrual products or inadequate access to clean water, can lead to infections and other health complications. Urban working women generally have better access to sanitary products, clean restrooms, and health education, enabling informed practices. Conversely, rural women often rely on traditional methods, face water scarcity, and endure cultural taboos, making them more vulnerable to health issues.

Socioeconomic status and education significantly influence menstrual hygiene and health behaviours. Women with higher education and income levels are better equipped to access resources and understand the importance of hygiene. Addressing these disparities requires targeted policies, including affordable sanitary products, health education campaigns, and improved sanitation facilities. By bridging the gap, these interventions can enhance the health and quality of life for all working women.

Background of the Study

Menstrual hygiene is a vital component of women's health, yet significant disparities persist globally, nationally, and within Tamil Nadu. Worldwide, 500 million women lack access to hygiene products, and inadequate menstrual facilities force 20% of girls in some regions to drop out of school (UNICEF, 2021). In India, 58% of women use sanitary pads, but many rely on unhygienic methods like cloth and ash, particularly in rural areas, while 23 million girls drop out annually due to menstruation-related challenges. Tamil Nadu has made progress through initiatives like the "Tamizhini" scheme, but 50% of women still use unsafe practices, and 20% of girls miss school during menstruation due to poor sanitation. Addressing these issues through education, product access, and sanitation facilities is essential to ensure menstrual health and dignity for all.

Need for the study

Health promotion behaviours encompass actions individuals take to maintain and improve their health and well-being. For women, particularly in the context of menstrual hygiene, these behaviours include maintaining proper hygiene, seeking health education, accessing medical care, and adopting a healthy lifestyle. Practices such as regularly using and changing sanitary products and washing hands are essential to preventing infections and ensuring comfort during menstruation. Health education plays a critical role,

empowering women with knowledge to manage their health effectively and seek medical care for concerns like irregular cycles or reproductive health issues. Nutrition and physical activity also contribute significantly, with a balanced diet supporting a healthy menstrual cycle and exercise alleviating menstrual pain. Mental health, including managing stress and premenstrual syndrome (PMS), is equally vital, as it impacts mood and quality of life.

A study comparing menstrual hygiene practices and health promotion behaviours among urban and rural working women is crucial for public health. It highlights disparities in access to resources, infrastructure, and education, especially for rural women, and addresses cultural stigmas that hinder open discussions about menstruation. Understanding these factors informs targeted interventions, policies to reduce inequalities, and the development of sustainable menstrual products, promoting holistic health, dignity, and empowerment for all women.

Statement of the Problem

"A Comparative Study to Assess the Menstrual Hygiene Practices and Health Promotion Behaviours among Urban and Rural Working Women".

Objectives

Primary

To assess and compare the level of menstrual hygiene practices and health promotion behaviours among urban and rural working women.

Secondary

- To correlate the level of menstrual hygiene practices and health promotion behaviours among urban and rural working women.
- To determine the association between menstrual hygiene practices, health promotion behaviours, and selected demographic variables of urban and rural working women.

Hypothesis

H1: Significant difference between menstrual hygiene practices and health promotion behaviours among urban and rural working women.

H2: Significant association between menstrual hygiene practices, health promotion behaviours, and selected demographic variables of urban and rural working women.

Delimitations

The study was limited to Choolai Urban and Medavakkam Rural working women only and was conducted over a duration of four weeks. Additionally, the sample size was restricted to 30 participants from both urban and rural areas.

Methods & Materials

The study utilized a quantitative research approach with a non-experimental correlational design, focusing on urban and rural working women in the Choolai (urban) and Medavakkam (rural) areas of Chennai. The research was conducted over four weeks with a sample size of 60 participants (30 from each area). A non-probability purposive sampling technique was used, with inclusion criteria including women within the reproductive age group, fluent in Tamil or English, and available during the data collection period. Data

was collected using structured interview questionnaires, assessing socio-demographic variables, menstrual hygiene practices, and health promotion behaviours. The tools' validity was established through content validation, and reliability was assessed with a Cronbach alpha of 0.76. Ethical considerations were addressed by obtaining informed consent, ensuring confidentiality, and adhering to the principles of beneficence, respect, and human dignity. Data was analysed using descriptive and inferential statistics to meet the study's objectives.

Results

The study found that 50% of rural working women had poor and moderate menstrual hygiene practices, with none scoring well, while in urban areas, 16.7% had poor scores, and 83.3% had moderate scores. All rural women exhibited low health promotion behaviours, while urban women were equally divided between low and moderate levels. A strong positive correlation was observed between menstrual hygiene practices and health-promoting behaviours. Socioeconomic status and physical activity were significant factors for urban women, while age, socioeconomic status, and physical activity were significant for rural women.

FIGURE 1. SCHEMATIC PRESENTATION

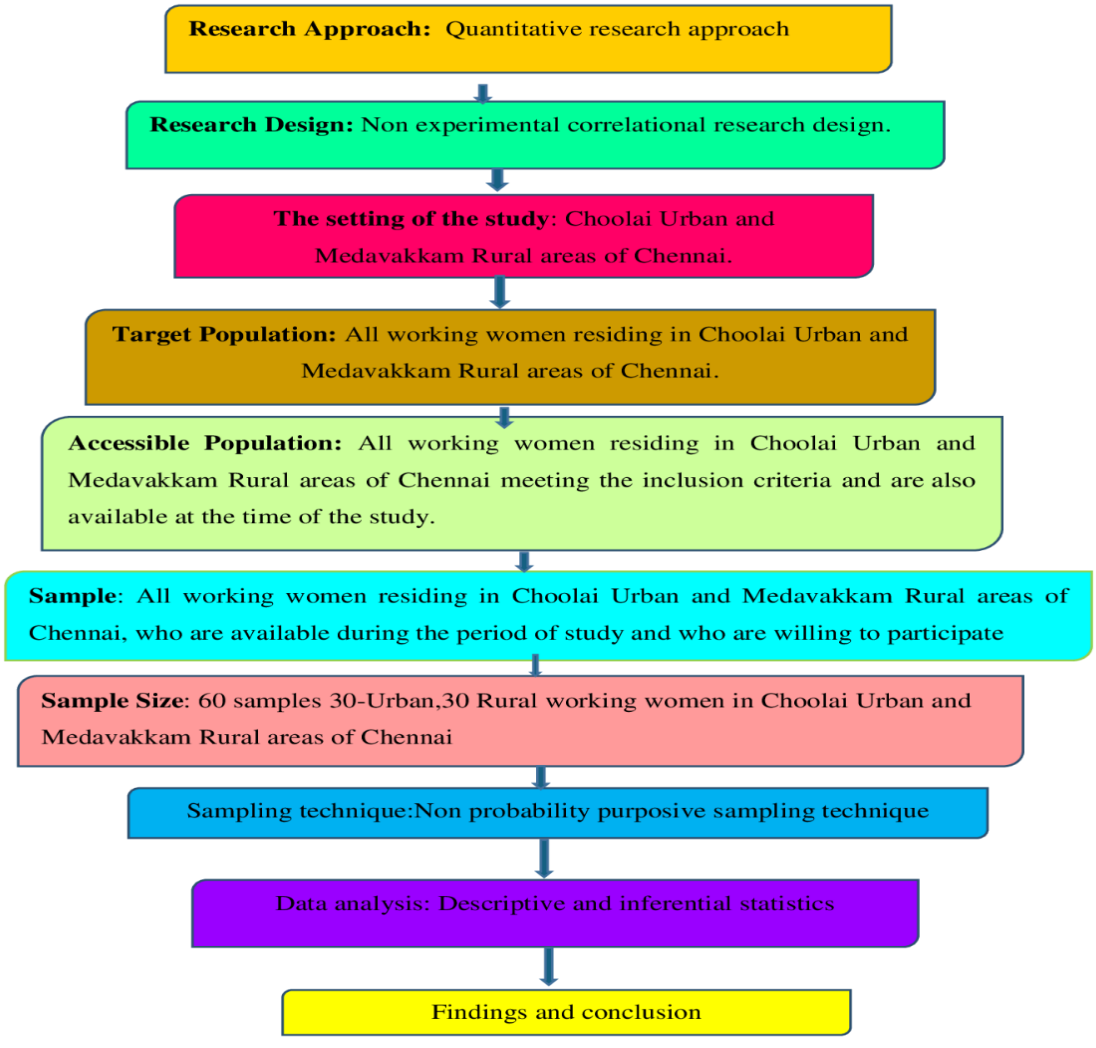


TABLE 1. DEMOGRAPHIC VARIABLES OF RURAL AND URBAN WOMEN

DEMOGRAPHIC VARIABLES		RURAL (N=30)	PERCENTAGE (RURAL)	URBAN (N=30)	PERCENTAGE (URBAN)
Age	20-30 years	10	33.30%	8	26.70%
	30-40 years	8	26.70%	10	33.30%
	>40 years	12	40.00%	12	40.00%
Gender	Female	30	100%	30	100%
	Other	0	0%	0	0%
Socioeconomic Status	Less than ₹5000	0	0.00%	0	0.00%
	₹5000-₹10000	25	83.30%	5	16.70%
	More than ₹10000	5	16.70%	25	83.30%
Education Level	High School	26	86.70%	0	0.00%
	Bachelor's Degree	4	13.30%	3	10.00%
	Master's Degree	0	0.00%	27	90.00%
Physical Activity	Less than 1 hour/week	18	60.00%	5	16.70%
	1-3 hours/week	10	33.30%	15	50.00%
	More than 3 hours/week	2	6.70%	10	33.30%

FIGURE 2. DEMOGRAPHIC VARIABLES OF RURAL AND URBAN WOMEN

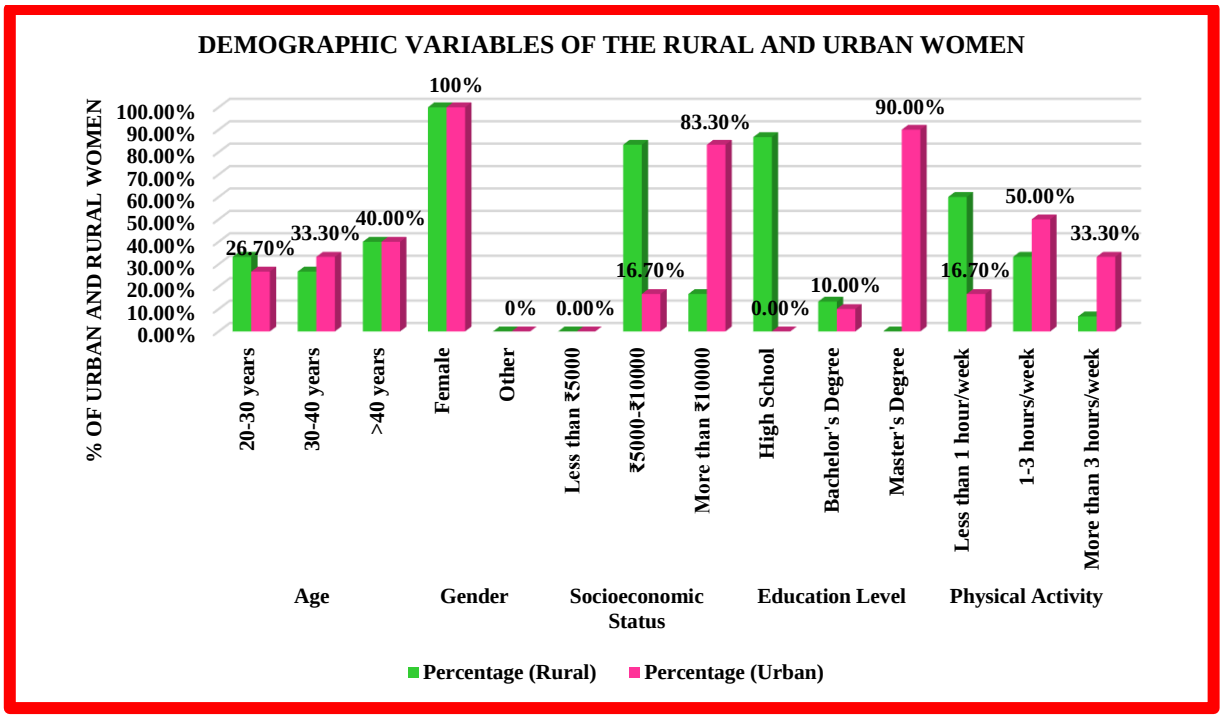


TABLE 2. LEVEL OF MENSTRUAL HYGIENE PRACTICES SCORE AMONG URBAN AND RURAL WORKING WOMEN.

MPQ Score Range	Frequency (Rural)	Percentage (Rural)	Frequency (Urban)	Percentage (Urban)
0-12	15	50.00%	5	16.70%
13-24	15	50.00%	25	83.30%
25-36	0	0.00%	0	0.00%
Total	**30**	**100%**	**30**	**100%**

FIGURE 3. LEVEL OF MENSTRUAL PRACTICES SCORE

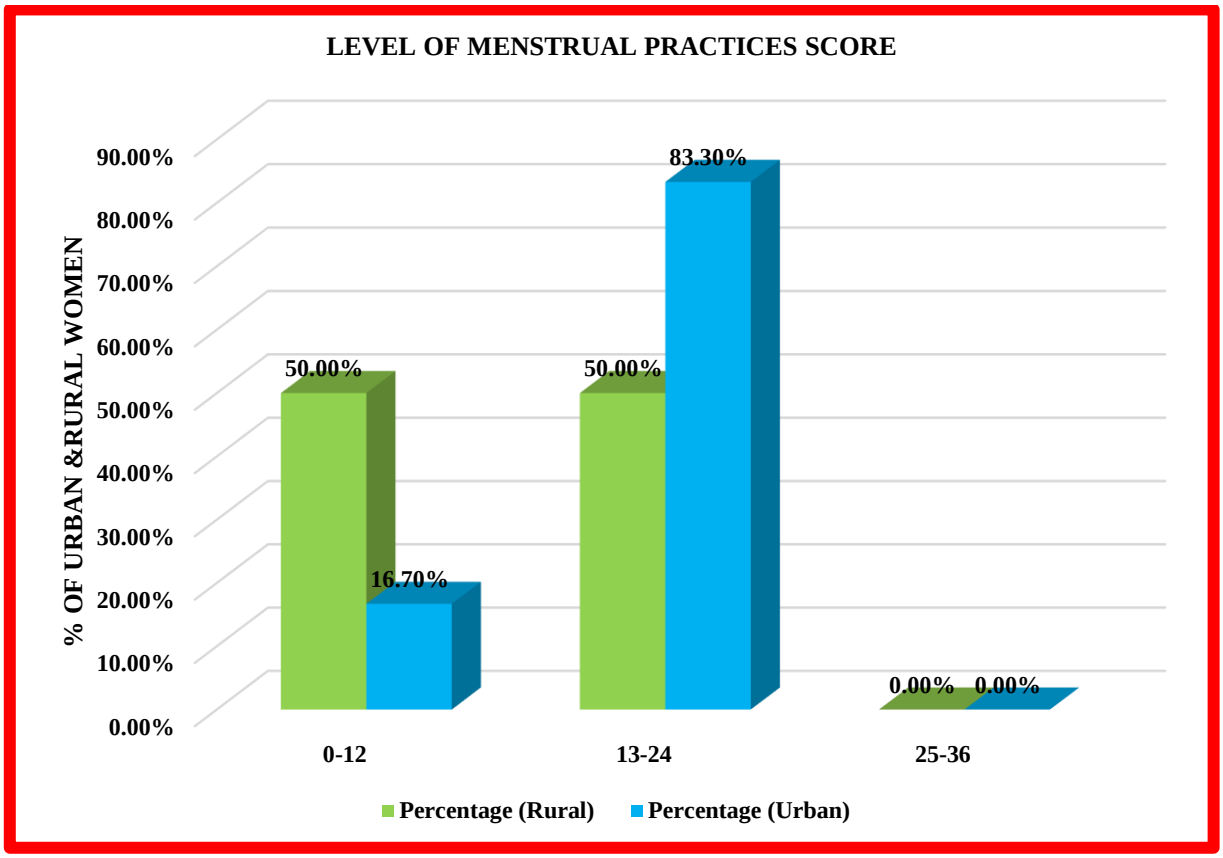


TABLE 3.LEVEL OF HEALTH PROMOTION BEHAVIOUR SCORE AMONG URBAN AND RURAL WORKING WOMEN

HPLP Score Range	Interpretation (Urban)	Frequency (Rural)	Percentage (Rural)	Frequency (Urban)	Percentage (Urban)
52 - 104	Low	30	100.00%	15	50.00%
105 - 130	Moderate	0	0.00%	15	50.00%
131 - 208	High	0	0.00%	0	0.00%
Total		**30**	**100%**	**30**	**100%**

FIGURE 4. LEVEL OF HEALTH PROMOTION BEHAVIOUR

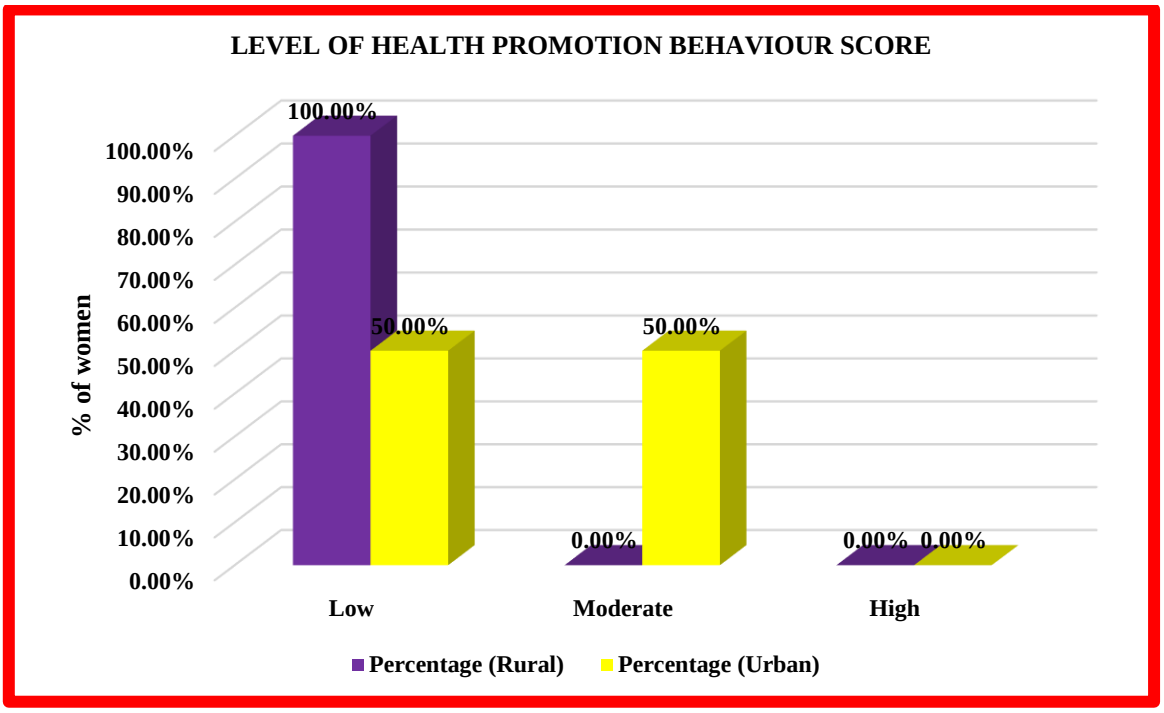


FIGURE.5. ASSOCIATION BETWEEN THE LEVEL OF MENSTRUAL PRACTICES SCORE WITH URBAN WOMEN DEMOGRAPHIC VARIABLES

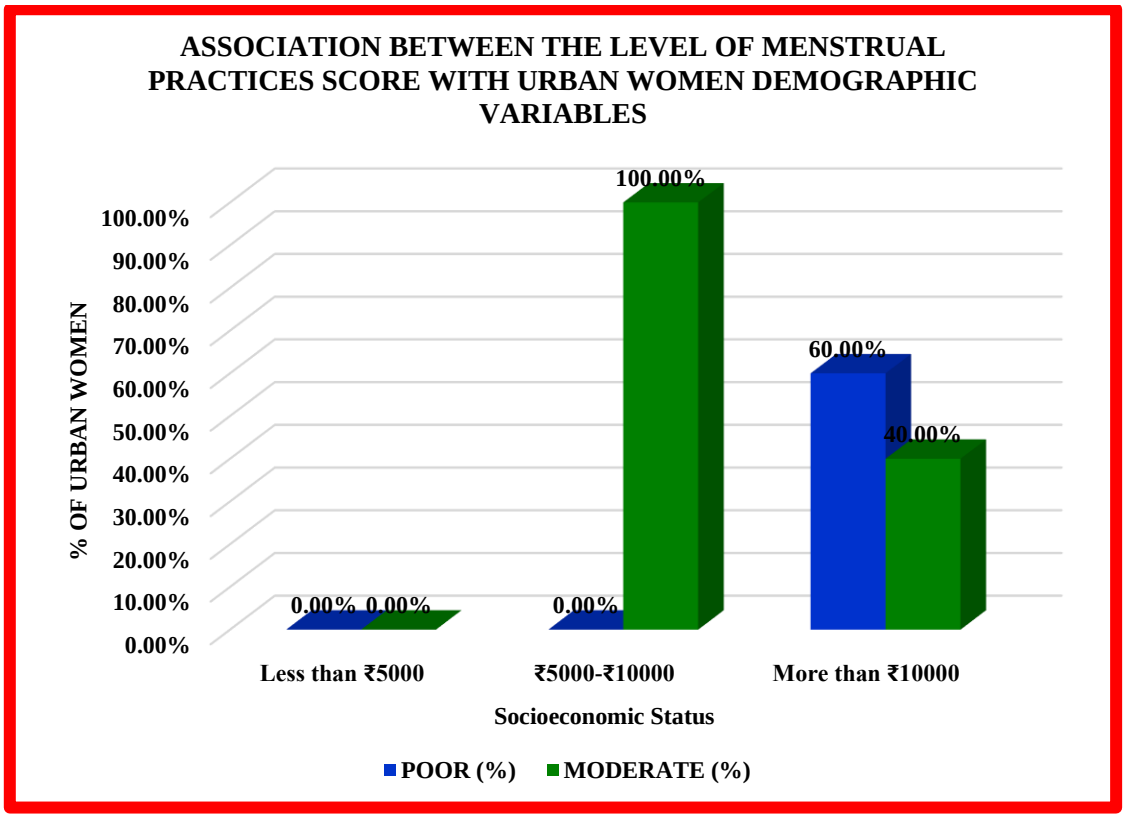
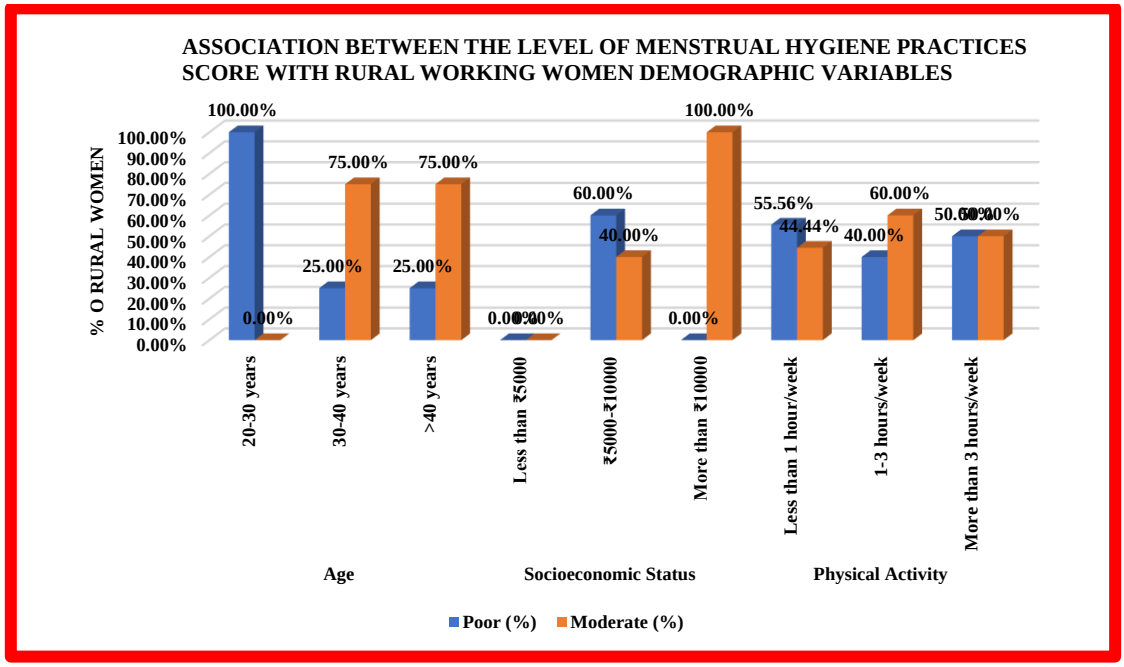


TABLE 4. ASSOCIATION BETWEEN THE LEVEL OF MENSTRUAL HYGIENE PRACTICES AMONG RURAL WORKING WOMEN WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

Demographic Variable		R=30	Poor		Moderate		χ^2	p-value	(LOS)
			Poor 15	Poor (%)	Moderate (N=15)	Moderate (%)			
Age	20-30 years	10	10	100.00%	0	0.00%	**15**	**0.0005**	S***
	30-40 years	8	2	25.00%	6	75.00%			
	>40 years	12	3	25.00%	9	75.00%			
Gender	Female	30	15	50.00%	15	50.00%	**0**	**1**	NS
	Other	0	0	0.00%	0	0.00%			
Socioeconomic Status	Less than ₹5000	0	0	0.00%	0	0.00%	**6**	**0.04**	S*
	₹5000-₹10000	25	15	60.00%	10	40.00%			
	More than ₹10000	5	0	0.00%	5	100.00%			
Education Level	High School	26	12	46.15%	14	53.85%	1.15	0.56	NS
	Bachelor's Degree	4	3	75.00%	1	25.00%			
	Master's Degree	0	0	0.00%	0	0.00%			
Physical Activity	Less than 1 hour/week	18	10	55.56%	8	44.44%	**6.47**	**0.03**	S*
	1-3 hours/week	10	4	40.00%	6	60.00%			
	More than 3 hours/week	2	1	50.00%	1	50.00%			



Discussion

The study revealed significant deficiencies in menstrual hygiene practices and health promotion behaviours among urban and rural working women. In urban areas, 16.70% had poor menstrual hygiene scores, 83.30% had moderate scores, and none had good scores. In rural areas, 50% had poor or moderate scores, with none achieving good scores. Regarding health promotion behaviours, 50% of urban women exhibited low and moderate levels, while all rural women scored low. **Chinyere Ukamaka Onubogu et al. (2023)** highlighted similar challenges, emphasizing inadequate menstrual knowledge and cultural restrictions. **Lindert et al. (2022)** reported urban-rural disparities in workplace health promotion in Germany. A strong positive correlation was observed between menstrual hygiene and health promotion behaviours, supported by **Jaseela Majeed et al. (2022)** and **Avijit Roy et al. (2020)**, who highlighted education and autonomy as key factors. Socio-demographic variables like age and socio-economic status were significant, echoing findings by **Shafique Ahmed et al. (2024)** and **Yohannes Habtegiorgis et al. (2021)**. Hypotheses 1 and 2 were accepted.

Implications of the study

Nursing Education

Incorporate menstrual health education as a key component in the nursing curriculum, emphasizing sanitary product access and cultural sensitivity. Train nursing students to develop community education programs on menstrual hygiene. Foster interdisciplinary collaboration to enhance menstrual health education and advocacy skills.

Nursing Administration

Develop policies to ensure menstrual health education in clinical and community settings. Allocate resources for menstrual hygiene products in healthcare facilities, focusing on underserved areas. Promote culturally sensitive training programs for staff and support evidence-based interventions.

Nursing Practice

Conduct assessments to identify menstrual hygiene practices and provide tailored education for patients. Promote the use of hygienic products through hands-on demonstrations. Address cultural beliefs and encourage open communication to normalize menstruation discussions.

Nursing Research

Explore experiences and perceptions of women regarding menstrual hygiene through qualitative studies. Evaluate the impact of education on menstrual hygiene and reproductive health outcomes. Investigate sustainable practices and access to products in underserved populations.

Recommendations

Conduct longitudinal studies to assess the impact of menstrual hygiene interventions. Explore technology-based educational tools to improve menstrual health management. Promote interdisciplinary and comparative studies to address diverse cultural and socioeconomic contexts.

Limitations

Limited sample diversity and duration may affect findings. Self-reported data could introduce bias. Cultural sensitivities and resource constraints pose challenges.

Conclusion

In conclusion, addressing menstrual hygiene practices and health promotion behaviours among working women is vital for improving overall health and well-being. Differences between urban and rural women, driven by access to resources, education, and infrastructure, reveal significant disparities that require targeted interventions. By improving access to sanitary products, health education, and proper facilities, policies can help bridge the gap and promote better menstrual hygiene management. Such efforts are essential in enhancing the quality of life for women in both urban and rural settings.

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