



AN EXPLORATORY STUDY ON LIFESTYLE AND PREVALENCE OF DYSMENORRHEA AMONG YOUNG WOMEN STUDYING IN SELECTED COLLEGE OF AGARTALA, WEST TRIPURA

Nursing

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ABSTRACT

The present exploratory study delves into the lifestyle factors and the prevalence of dysmenorrhea among young women enrolled in a selected college in Agartala, West Tripura. **Aim of the study:** is to explore the lifestyle and prevalence of primary dysmenorrhoea among young women. **Methodology:** Employing a multistage cluster sampling technique, the investigator gathered data from a sample of two hundred participants using a structured questionnaire focusing on lifestyle, menstrual characteristics, and symptoms associated with primary dysmenorrhea. **Result:** The study revealed that a substantial majority, 74%, experienced primary dysmenorrhea. Noteworthy dietary habits were identified, with 45% consuming fast food 2-4 times weekly, 40% indulging in sugar-containing items at a similar frequency, and a striking 75% reporting irregular fruit consumption. Regarding beverages, 26% consumed energy drinks weekly, and 42.5% drank coffee with the same frequency. Physical activity emerged as a significant factor, as 60.5% never engaged in exercise. Sleep disturbances during dysmenorrhea were prevalent in 56% of respondents. Several menstrual characteristics, including bleeding duration, irregular periods, abdominal cramps, and pain levels, were documented. Moreover, a noteworthy correlation was established between dysmenorrhea prevalence and dietary habits, lack of exercise, and specific associated symptoms. **Conclusion:** This study contributes valuable insights into the intricate relationship between lifestyle choices and dysmenorrhea, suggesting potential avenues for intervention and support in women's health.

KEYWORDS

Lifestyle, Dysmenorrhea, young women, menstrual characteristics, dietary habits, physical activity,

dysmenorrhoea and lifestyle among young women.

INTRODUCTION

Dysmenorrhea is a common gynecological condition characterized by painful menstrual cramps in the lower abdomen or pelvic region. It is a major health concern among young women, affecting their daily activities and quality of life. Dysmenorrhea can be classified as primary or secondary, depending on the underlying cause. Primary dysmenorrhea is the more common type and is not associated with any underlying medical condition. On the other hand, secondary dysmenorrhea is caused by underlying medical conditions such as endometriosis or uterine fibroids.

ysmenorrhea is a widespread issue affecting women globally, with a prevalence ranging from 50-90%. In India, cultural and lifestyle factors play a crucial role in women's health, yet comprehensive studies on the relationship between lifestyle and dysmenorrhea are lacking. This exploratory study focuses on young women in Agartala, West Tripura, aiming to provide context-specific insights into the prevalence and lifestyle contributors to dysmenorrhea. By addressing this gap in research, the study aims to inform targeted interventions for better menstrual health outcomes among Indian women.

Need of the Study:

The significance of this study is underscored by the substantial impact of dysmenorrhea on the lives of young women. According to global statistics, approximately 50-90% of menstruating women experience dysmenorrhea at some point in their lives, leading to compromised daily functioning and reduced quality of life. In India, where cultural and lifestyle factors play a pivotal role in women's health, understanding the relationship between lifestyle choices and dysmenorrhea becomes crucial. Furthermore, the prevalence of dysmenorrhea varies across regions, emphasizing the need for localized studies to inform targeted interventions. By delving into the unique context of Agartala, West Tripura, and utilizing statistical data, this study aims to provide nuanced insights that can inform evidence-based strategies for the prevention and management of dysmenorrhea among young women.

OBJECTIVES OF THE STUDY:

OBJECTIVES:

1. To determine the prevalence of primary dysmenorrhoea among young women.
2. To explore the lifestyle, menstrual characteristics and associated symptoms related to primary dysmenorrhoea among young women.
3. To find out the association between prevalence of primary

Assumptions:

- i. Young women may be suffering from primary dysmenorrhoea.
- ii. Certain lifestyles may trigger primary dysmenorrhoea.

HYPOTHESIS:

H₁: There is significant association between prevalence of primary dysmenorrhea and lifestyle among young women.

RESEARCH METHODOLOGY:

Research Design:

Non-Experimental Exploratory Research Design was adopted to identify, explore, and describe the existing phenomenon and its related factors.

Variables under Study: Lifestyle and prevalence of dysmenorrhea.

Setting:

The study was conducted at Women's College, Agartala, West Tripura, with a total student strength of 4343.

Population:

Target population included young women aged 18-24 years studying in Women's College, Agartala.

Sample Size and Sampling Technique:

A sample of 200 was selected using multistage cluster sampling. Clusters were divided into arts and science streams, and the final sample was chosen through systematic random sampling.

Inclusion Criteria:

Young women aged 18-24 years with primary dysmenorrhea in the last 6 menstrual cycles.

Exclusion Criteria:

Excluded those suffering from secondary dysmenorrhea.

Development of Tool:

The tool included a survey proforma, demographic variables proforma, and a structured questionnaire for lifestyle, menstrual characteristics, and associated symptoms.

Validity and Reliability:

Content validity was established through expert opinion. The tool demonstrated high reliability ($r=0.85$).

Ethical Considerations:

Permissions were obtained from the institution, HOD of Obstetrics and Gynaecological Nursing, and Research and Ethical Committee. Informed written consent was obtained, ensuring confidentiality and voluntary participation.

Pilot Study:

A pilot study involving 20 young women confirmed the feasibility and relevance of the tool.

Data Collection:

Data collection took place in January 2023 at Women's College. A total of 200 young women with primary dysmenorrhea were surveyed using the structured questionnaire.

Data Analysis:

Descriptive and inferential statistics were used. Demographic characteristics, lifestyle, menstrual characteristics, and associated symptoms were analyzed in terms of percentage distribution. Chi-square test was employed to examine the association between dysmenorrhea prevalence and lifestyle among young women.

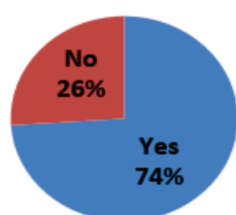
RESULTS:**Prevalence of primary dysmenorrhoea**

Figure-1 Findings related to prevalence of primary dysmenorrhea among young women N=572.

Regarding demographic findings of the study Among 200 respondents, 73% were aged 18-20, and 27% were 21-24 years old. Distribution across academic years revealed 48.5% in the 1st year, 26.5% in the 2nd year, and 25% in the 3rd year. In terms of monthly income, 42.5% had up to Rs 15000, 37.5% between Rs 15001 to 30000. The majority (85.5%) were Hindu, 48.5% resided in rural areas, and 40% had a family history of primary dysmenorrhea.

Findings related to lifestyle, menstrual characteristics and associated symptoms related to primary dysmenorrhea among young women.

Frequency and percentage distribution of lifestyle - eating behaviour of young women:

Among 200 respondents, eating behavior patterns were diverse. A mere 4% never consumed fast food, while 44.5% did so once weekly, 45% 2-4 times weekly, and 6.5% over 4 times weekly. Regarding sugar-containing foods, 5.5% never indulged, 34.5% once weekly, 40% 2-4 times weekly, and 20% over 4 times weekly. Vegetable consumption varied: 15% never ate them, 22.5% daily, 18.5% once weekly, 19% 2-4 times weekly, and 25% over 4 times weekly. Similar diversity was observed in egg, fish, meat, dairy, and whole grain cereal consumption. Notably, only 25% ate fruits regularly, while 75% did not.

The lifestyle analysis of beverage consumption among young women showed varied patterns. A significant 66.5% never consumed energy drinks, 26% did so weekly, 6% 2-4 times weekly, and only 1.5% over 4 times weekly. Alcohol consumption was low at 5.5%, with 94.5% abstaining. Tea consumption ranged: 21% never drank tea, 25.5% daily, 22.5% weekly, 17.5% 2-4 times weekly, and 13.5% over 4 times weekly. For coffee, 41% never drank, 3.5% daily, 42.5% weekly, 11% 2-4 times weekly, and 2% over 4 times weekly among the 200 participants.

The lifestyle examination of physical activity and sleeping patterns among young women revealed diverse habits. Notably, 60.5% never exercised, 26% did so weekly, 8.5% 2-4 times weekly, and 5% over 4

times weekly. Among those who exercised, 18.99% practiced yoga, 8.86% engaged in high-intensity workouts, 29.11% pursued light to moderate cardio, and 43.04% opted for brisk walks. Regarding sleep, 26% slept less than 7 hours, 64% slept 7-9 hours, while 10% slept over 9 hours. Sleep patterns indicated 44% sound sleep and 56% disturbed sleep among the participants.

Menstrual characteristics among young women varied significantly. Notably, 22.5% experienced their first period before 12 years, 54% between 12-13 years, and 23.5% after 13 years. Concerning the duration of bleeding, 49.5% had less than 5 days, 45.5% 5-7 days, and 5% more than 7 days. In the last 6 months, 77% had regular periods, while 23% experienced irregularities. Pain patterns included abdominal cramps (48%), back pain (35.5%), and lower limb pain (24%). Pain intensity on a scale of 0-10 revealed 19.5% mild, 62% moderate, and 18.5% severe pain during menstruation.

Table. no.1 Frequency and percentage distribution of associated symptoms related to primary dysmenorrhea among young women.

Associated symptoms related to primary dysmenorrhea	Yes		No	
	F	%	F	%
Dizziness	50	25	150	75
Swelling (arms or legs)	19	9.5	181	90.5
Headache	76	38	124	62
Nausea and/ vomiting	54	27	146	73
Irritable	160	80	40	20
Low mood	133	66.5	67	33.5
Diarrhea	10	5	190	95
Disturbed sleep	110	55	90	45
Tiredness/weakness	178	89	22	11
Fainting	17	8.5	183	91.5

Association between prevalence of primary dysmenorrhea and lifestyle - eating behaviour among young women

Statistical analysis revealed a significant association ($P < 0.05$) between dysmenorrhea and specific eating habits such as consuming fast food, sugar-containing items, meat, dairy products, and regular fruit intake. Consequently, the research hypotheses for these variables are accepted, rejecting the null hypotheses. Conversely, no statistically significant association ($p < 0.05$) was found between dysmenorrhea and the consumption of vegetables, eggs, fish, and whole grain cereals. Thus, the research hypotheses for these variables are not accepted.

The study unveils a significant association ($p < 0.05$) between primary dysmenorrhea prevalence and specific beverage consumption habits, including energy drinks, alcohol, and coffee. Consequently, the research hypotheses for these variables are accepted, rejecting the null hypotheses. Conversely, there was no statistically significant association ($p < 0.05$) between dysmenorrhea and tea consumption, leading to the non-acceptance of the research hypothesis for this variable.

The study unveils a significant association ($p < 0.05$) between primary dysmenorrhea prevalence and specific lifestyle factors, including physical activity (e.g., exercise) and sleep duration. Consequently, the research hypotheses for these variables are accepted, rejecting the null hypotheses. However, no statistically significant association ($p < 0.05$) was found between dysmenorrhea and sleeping pattern nature, leading to the non-acceptance of the research hypothesis for this variable.

CONCLUSION:

Dysmenorrhea is a very common problem among young women, and they experienced a number of symptoms associated with dysmenorrhea and with the increased intensity of pain in occurrence of dysmenorrhea, the probability of experiencing these symptoms are also increased.

The findings of this study also revealed that certain lifestyle has an impact on the dysmenorrhea, thus indicating the enormity of the problem and the need for appropriate intervention through a change in lifestyle.

This study illuminates significant associations between primary dysmenorrhea prevalence and specific lifestyle factors, including dietary choices, beverage consumption, physical activity, and sleep duration among young women. These findings underscore the intricate

interplay between lifestyle elements and menstrual health, contributing valuable insights for holistic approaches to menstrual well-being.

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