

Coping Strategies for Dysmenorrhea among Female Undergraduate Students in Southwest Nigeria

MAYAKI-ADEOLU FELICIA FOYEKE

Joseph Ayo Babalola University, Ikeji-Arakeji, Osun State, Nigeria.

Abstract- Background: *Dysmenorrhea is a prevalent menstrual disorder among young women and represents a significant source of physical discomfort and functional limitation. University students often adopt various coping strategies to manage menstrual pain, ranging from pharmacological to non-pharmacological approaches. Understanding these strategies is essential for designing effective menstrual health interventions.*

Objective: *This study assessed the coping strategies employed by female undergraduate students for the management of dysmenorrhea in a private university in Southwest Nigeria.*

Methods: *A descriptive cross-sectional study was conducted among 257 female undergraduate students of Joseph Ayo Babalola University, Osun State, Nigeria. Data were collected using a structured self-administered questionnaire that assessed experience of dysmenorrhea and coping strategies used during menstruation. Coping strategies were categorized into pharmacological and non-pharmacological methods. Data were analyzed using SPSS version 29 and summarized using descriptive statistics.*

Results: *Among respondents who experienced dysmenorrhea, the most commonly reported coping strategies were physical activity or exercise (84.8%), heat therapy (73.2%), and use of herbal remedies (72.8%). Pharmacological methods such as the use of over-the-counter analgesics were reported by 61.4% of respondents. Bed rest (69.1%) and relaxation techniques (66.3%) were also frequently utilized. The majority of respondents reported using a combination of coping strategies rather than a single method.*

Conclusion: *Female undergraduate students employ diverse coping strategies to manage dysmenorrhea, with a preference for non-pharmacological approaches. While these methods may provide relief, reliance on self-care and informal remedies underscores the need for structured menstrual health education and access to professional healthcare support within university settings.*

Indexed Terms- *Dysmenorrhea, Coping Strategies, Menstrual Pain, Female Undergraduates, Nigeria*

I. INTRODUCTION

Dysmenorrhea, commonly described as painful menstruation, is one of the most frequent gynecological complaints among adolescents and young women. It is characterized by cramp-like lower abdominal pain occurring before or during menstruation and may be accompanied by symptoms such as nausea, headache, fatigue, diarrhea, and emotional disturbances. Dysmenorrhea is classified into primary dysmenorrhea, which occurs without underlying pelvic pathology, and secondary dysmenorrhea, which is associated with identifiable gynecological conditions.

Globally, the prevalence of dysmenorrhea among young women ranges from 50% to over 90%, with university students representing a particularly affected population. The condition has been associated with impaired academic performance, reduced participation in daily activities, sleep disturbance, and psychological distress. Despite its high prevalence and impact, dysmenorrhea is often under-managed, particularly in low- and middle-income countries.

Coping strategies for dysmenorrhea refer to the behavioral, pharmacological, and lifestyle measures adopted by individuals to alleviate menstrual pain and its associated symptoms. These strategies may include the use of analgesics, hormonal therapies, exercise, heat application, herbal remedies, dietary modifications, rest, and relaxation techniques. Cultural beliefs, access to healthcare, knowledge of menstrual health, and perceived severity of symptoms influence the choice of coping methods.

In Nigeria, menstruation remains a sensitive topic, and many young women rely on self-care and peer advice rather than professional medical guidance. Although some studies have examined the prevalence and impact of dysmenorrhea, there is limited evidence

focusing specifically on coping strategies among female undergraduate students, particularly in private university settings in Southwest Nigeria. This study therefore aimed to assess the coping strategies used by female undergraduate students for managing dysmenorrhea.

II. METHODS

Study Design and Setting

A descriptive cross-sectional study was conducted at Joseph Ayo Babalola University, a private, fully residential university located in Ikeji-Arakeji, Osun State, Southwest Nigeria.

Study Population and Sample Size

The study population comprised female undergraduate students aged 18 years and above. A sample size of 257 respondents was determined using the Taro Yamane formula.

Sampling Technique

A multistage sampling technique was employed. Two colleges were selected using simple random sampling, followed by stratified and proportionate sampling across departments and academic levels.

Data Collection Instrument

Data were collected using a structured self-administered questionnaire consisting of sections on socio-demographic characteristics, experience of dysmenorrhea, and coping strategies. Coping strategies were assessed using dichotomous (Yes/No) items and grouped into pharmacological and non-pharmacological categories.

Data Analysis

Data were analyzed using SPSS version 29. Descriptive statistics including frequencies and percentages were used to summarize coping strategies.

Ethical Considerations

Ethical approval was obtained from the university ethics committee. Informed consent was obtained from all participants. Participation was voluntary, and confidentiality was assured.

III. RESULTS

Coping Strategies for Dysmenorrhea

Among respondents who reported experiencing dysmenorrhea, a wide range of coping strategies was identified. Non-pharmacological methods were more commonly used than pharmacological methods.

Physical activity or exercise was the most frequently reported coping strategy (84.8%), followed by application of heat to the lower abdomen (73.2%) and use of herbal remedies (72.8%). Bed rest during menstruation was reported by 69.1% of respondents, while 66.3% practiced relaxation techniques such as listening to music or deep breathing.

Pharmacological coping strategies included the use of over-the-counter analgesics such as paracetamol and non-steroidal anti-inflammatory drugs, reported by 61.4% of respondents. A smaller proportion reported seeking medical consultation for menstrual pain.

Most respondents indicated using multiple coping strategies concurrently to manage dysmenorrhea symptoms.

IV. DISCUSSION

This study revealed that female undergraduate students adopt diverse coping strategies to manage dysmenorrhea, with a clear preference for non-pharmacological approaches. The high utilization of exercise and heat therapy aligns with evidence suggesting their effectiveness in reducing menstrual pain through improved blood flow and muscle relaxation.

The widespread use of herbal remedies reflects cultural practices and accessibility but raises concerns regarding safety, dosage, and efficacy. Similarly, the reliance on over-the-counter analgesics without professional guidance highlights the potential risk of inappropriate medication use.

The preference for self-managed coping strategies may be attributed to limited access to gynecological services, cultural perceptions of menstruation as a normal condition that should be endured, and lack of institutional menstrual health support. These findings

underscore the need for comprehensive menstrual health education and accessible healthcare services within universities.

V. CONCLUSION

Female undergraduate students in Southwest Nigeria employ a combination of pharmacological and non-pharmacological coping strategies to manage dysmenorrhea, with non-pharmacological methods being more commonly used. While these strategies may provide symptomatic relief, the reliance on self-care highlights gaps in access to professional menstrual health support.

VI. RECOMMENDATIONS

Universities should strengthen campus health services to provide evidence-based counseling and management of dysmenorrhea. Menstrual health education programs should promote safe and effective coping strategies while discouraging harmful self-medication practices. Further research using longitudinal and interventional designs is recommended.

REFERENCES

- [1] Amena A., Abuzer A., Najla S. A., Munirah S. A. and Amjad J. A. (2022) Prevalence, impact, and management perception of dysmenorrhea among university students: A cross-sectional study *Brazilian Journal of Pharmaceutical Sciences* <https://doi.org/10.1590/s2175-97902022e20458>
- [2] Cherenack E. M., Jennifer R., Abraham M., Nada E., Aisha K., Maria L A., Patricia R., Lydia A F., and Kathleen J. S. (2023). Adolescent girls' descriptions of dysmenorrhea and barriers to dysmenorrhea management in Moshi, Tanzania: A qualitative study. *Glob Public Health journal* 6;3(7): e0001544. doi: 10.1371/journal.pgph.0001544.
- [3] Eunice O., Oluebubechukwu A. U., Glad S. and Florence M. (2024). Non-pharmacological interventions and coping mechanisms during dysmenorrhea among female undergraduates in a tertiary institution in Nigeria.

<https://www.urogynaecologia.org/uij/article/view/310>

- [4] Mihaela A., Sebastian F., Bashar H. H., Romina-Marina S., Mircea-Octavian P., Mihai P. and Liana P. (2024). Dysmenorrhea and Its Impact on Patients' Quality of Life—A Cross-Sectional Study. *Stomatology (Multidisciplinary Digital Publishing Institute)* - Vol. 13, Iss: 19, pp
- [5] Mandana M. G., Tayebe S., Seyed M. A. G. and Katayoun H. (2020). Knowledge and Practice toward Dysmenorrhea in Female Students of Guilan University of Medical Science. *Caspian Journal of Health Research* 5(2):45-49 DOI:10.29252/cjhr.5.2.45
- [6] World Health Organization. (2020). *Adolescent health and development*. WHO Press.
- [7] Yasir K., Mariah A., Fatima A., Salihah A., Fathia A., Marwan A A., and Renad A. M. (2024). Prevalence of Primary Dysmenorrhea and Its Effect on the Quality of Life Among Female Students at Umm Al-Qura University. <https://pubmed.ncbi.nlm.nih.gov/39575031/> doi: 10.7759/cureus.72136