



Effectiveness Of A Structured Teaching Programme On Knowledge Regarding Home Remedies Of Dysmenorrhea Among First-Year B.Sc. Nursing Students In A Selected Nursing College At Bangalore.

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ABSTRACT

Introduction: Dysmenorrhea, commonly known as painful menstruation, is one of the most prevalent gynecological problems affecting adolescent girls and young women, including nursing students. It can significantly impact daily activities, academic performance, and overall quality of life. Many individuals rely on pharmacological treatments; however, home remedies such as dietary modifications, exercise, and traditional practices are widely used due to their accessibility and fewer side effects. Despite this, knowledge regarding effective and safe home remedies remains inadequate among many students. Therefore, a structured teaching programme can play a vital role in improving knowledge and promoting safe self-care practices among first-year B.Sc. nursing students.

Aim: The aim of the study is to evaluate the effectiveness of a structured teaching programme on knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students in a selected nursing college at Bangalore.

Objectives: 1) To assess the pre-test level of knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students. 2) To evaluate the effectiveness of the structured teaching programme on knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students. 3) To determine the association between post-test knowledge scores and selected demographic variables of first-year B.Sc. nursing students.

Materials and Methods: The study adopted an evaluative research approach with a pre-experimental one-group pre-test and post-test design, conducted among 50 first-year B.Sc. nursing students in a selected nursing college at Bangalore using a purposive sampling technique. Data were collected using a structured knowledge questionnaire and rating scales developed by the investigator to assess knowledge regarding home remedies of dysmenorrhea. Following the pre-test, a structured teaching programme was administered, and the post-test was conducted after the intervention period using the same tools. The tools were validated by experts and found to be reliable ($r = 0.83$). Data collection was carried out after obtaining necessary permissions and informed consent from participants. The collected data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics such as paired 't' test and chi-square test to evaluate the effectiveness of the teaching programme and its association with selected demographic variables.

Results and Findings: The findings of the study revealed that the majority of first-year B.Sc. nursing students (98%) had inadequate knowledge regarding home remedies of dysmenorrhea in the pre-test, whereas after the implementation of the structured teaching programme, there was a significant improvement, with 66% of students attaining moderately adequate knowledge and 24% achieving adequate knowledge. The overall mean post-test knowledge score (12.5; 64%) was considerably higher than the pre-test score (9.2; 29.06%). The paired 't' test value ($t = 26.32$, $p < 0.05$) indicated that the structured teaching programme was highly effective in improving knowledge. Additionally, a significant association was found between post-test knowledge scores and the educational status of the mother, while other demographic variables showed no significant association. These findings confirm that the structured teaching programme was effective in enhancing knowledge among nursing students regarding home remedies of dysmenorrhea.

Conclusion: The study concluded that first-year B.Sc. nursing students initially had inadequate knowledge regarding home remedies of dysmenorrhea. However, the implementation of the structured teaching programme significantly improved their knowledge levels, demonstrating its effectiveness as an educational intervention. The findings highlight the importance of providing systematic health education to promote safe and effective self-care practices. Therefore, structured teaching programmes can be effectively utilized in nursing education to enhance knowledge and improve the management of dysmenorrhea among students.

Keywords: Structured teaching programme, Dysmenorrhea, Home remedies, Nursing students, Knowledge, Menstrual health, Health education, Effectiveness

INTRODUCTION

Dysmenorrhea, commonly referred to as painful menstruation, is one of the most prevalent gynecological problems among adolescent girls and young women, including nursing students. It is characterized by lower abdominal pain, cramps, and associated symptoms such as nausea, fatigue, headache, and irritability. This

condition can significantly interfere with daily activities, academic performance, and overall quality of life, often leading to absenteeism from classes and reduced concentration.

The prevalence of dysmenorrhea is high worldwide, with a large proportion of young women experiencing varying degrees of menstrual pain. Many students rely on pharmacological treatments such as analgesics for relief; however, these medications may have side effects and are not always effective. As a result, there is growing interest in non-pharmacological approaches, including home remedies, which are simple, cost-effective, and easily accessible methods for managing symptoms.

Home remedies such as the use of herbal preparations, dietary modifications, exercise, and heat application have been traditionally used to alleviate menstrual discomfort. Despite their widespread use, many nursing students may lack adequate knowledge regarding the correct and safe use of these remedies. Since nursing students are future healthcare providers, it is essential for them to possess appropriate knowledge to manage their own health and to educate others.

Therefore, a structured teaching programme can play a vital role in improving knowledge and promoting safe practices regarding home remedies for dysmenorrhea. This study aims to assess the effectiveness of such a programme among first-year B.Sc. nursing students in a selected nursing college at Bangalore, thereby contributing to improved self-care and academic performance.

Rationale of the study

Dysmenorrhea is a common health problem among adolescent girls and young women, particularly nursing students, and it often affects their daily activities, academic performance, and overall well-being. Despite its high prevalence, many students tend to rely on self-medication or ignore symptoms without adequate knowledge of safe and effective management strategies. This lack of awareness may lead to inappropriate practices and increased discomfort during menstruation.

Home remedies are widely used as a simple, economical, and accessible method for managing dysmenorrhea. These remedies are generally considered safe and have fewer side effects compared to pharmacological treatments. However, the knowledge regarding appropriate use, effectiveness, and limitations of home remedies is often inadequate among students. As future healthcare professionals, nursing students need to be well-informed about such practices not only for their personal health but also for educating others in the community.

Structured teaching programmes are effective educational tools that can enhance knowledge and promote healthy practices. Therefore, this study is undertaken to assess the effectiveness of a structured teaching programme on knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students. The findings of this study will help in improving awareness, encouraging safe self-care practices, and strengthening nursing education.

Significance and Need for the Study

Dysmenorrhea is one of the most common problems experienced by adolescent girls and young women, including nursing students, and it often leads to discomfort, reduced academic performance, and absenteeism. Despite its high prevalence, many students lack adequate knowledge regarding effective and safe methods to manage menstrual pain. This highlights the need for proper health education to improve awareness and promote better self-care practices.

The study is significant as it focuses on enhancing knowledge regarding home remedies for dysmenorrhea, which are simple, cost-effective, and easily accessible. Unlike pharmacological treatments, home remedies have fewer side effects and can be safely practiced when proper knowledge is provided. Educating nursing students is especially important, as they are future healthcare providers who can disseminate this knowledge to patients and the community.

The need for the study arises from the lack of structured educational interventions addressing this topic among nursing students. By evaluating the effectiveness of a structured teaching programme, the study contributes to evidence-based nursing practice and education. It also helps in developing appropriate strategies to improve menstrual health awareness, thereby promoting the overall well-being and academic performance of students.

Statement of the problem

“A Study to Assess the Effectiveness of a Structured Teaching Programme on Knowledge Regarding Home Remedies of Dysmenorrhea Among First-Year B.Sc. Nursing Students in a Selected Nursing College at Bangalore.”

Objectives of the study

- ❖ To assess the pre-test level of knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students.
- ❖ To evaluate the effectiveness of the structured teaching programme on knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students.
- ❖ To determine the association between post-test knowledge scores and selected demographic variables of first-year B.Sc. nursing students.

OPERATIONAL DEFINITIONS

Assess:

Refers to the statistical measurement of knowledge of students regarding home remedies of dysmenorrhea using a structured knowledge questionnaire.

Effectiveness:

Refers to the extent of improvement in knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students, as determined by the difference between pre-test and post-test scores after the structured teaching programme.

Structured Teaching Programme:

Refers to a systematically planned instructional method using appropriate teaching aids to provide information on anatomy and physiology, meaning, causes, and home remedies of dysmenorrhea.

Knowledge:

Refers to the information and understanding acquired by students regarding home remedies of dysmenorrhea, as measured by the structured knowledge questionnaire.

Home Remedies:

Refers to simple, easily prepared treatments or practices, often using natural substances or herbs, used without professional supervision to relieve dysmenorrhea.

Dysmenorrhea:

Refers to the occurrence of painful cramps during menstruation, typically felt in the lower abdomen and may radiate to the back and thighs.

Pain:

Refers to the spasmodic, cramp-like sensation experienced in the lower abdominal (hypogastric) region during menstruation.

Discomfort:

Refers to associated symptoms such as headache, nausea, vomiting, diarrhea, fatigue, giddiness, irritability, and frequency of micturition during menstruation.

Selected Home Remedies:

Refers to the specific herbal preparations used in this study, namely Triphala Kashaya (*Emblica officinalis*, *Terminalia chebula*, *Terminalia bellerica*) and Ashoka powder (*Saraca asoca*).

RESEARCH HYPOTHESES

RH₁: There will be a significant difference between pre-test and post-test knowledge scores regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students.

RH₂: There will be a significant association between post-test knowledge scores and selected demographic variables.

ASSUMPTIONS

- ❖ Students may have some baseline knowledge regarding home remedies of dysmenorrhea.
- ❖ The structured teaching programme will enhance the knowledge of students regarding home remedies of dysmenorrhea.
- ❖ Knowledge levels may vary among individuals.

DELIMITATIONS

- ❖ The study is delimited to first-year B.Sc. nursing students only.
- ❖ The study is limited to a selected nursing college at Bangalore.
- ❖ The study is confined to students who are present during the period of data collection.
- ❖ The study includes only students who are willing to participate.
- ❖ The duration of the study is limited to a specific period (e.g., four weeks).
- ❖ The study focuses only on knowledge regarding home remedies of dysmenorrhea and does not assess actual practices or long-term outcomes.

CONCEPTUAL FRAMEWORK

The conceptual framework for the present study is based on Ernestine Wiedenbach's Prescriptive Theory, which emphasizes identifying the need for help, providing appropriate intervention, and evaluating the outcome.

According to this theory, nursing practice involves three main components:

Identification of Need for Help:

In this study, the investigator identifies the need for improving knowledge among first-year B.Sc. nursing students regarding home remedies of dysmenorrhea.

Ministration of Help (Intervention):

The structured teaching programme is administered as an intervention to enhance knowledge about dysmenorrhea and its home management.

Validation (Evaluation of Outcome):

The effectiveness of the intervention is evaluated by comparing pre-test and post-test knowledge scores of the students.

Components of the Conceptual Framework:

Agent: Investigator (Researcher)

Recipient: First-year B.Sc. nursing students

Goal: Improvement in knowledge regarding home remedies of dysmenorrhea

Means: Structured teaching programme

Framework: Educational environment of the selected nursing college

The framework explains that by providing a structured educational intervention, the knowledge of students can be improved, which ultimately helps in better management of dysmenorrhea.

RESEARCH METHODOLOGY

Research Design

The research design is the overall plan used to address the research problem and ensure the integrity of the study. In this study, a one-group pretest–posttest design was adopted. Initially, a pretest was conducted to assess the level of pain and discomfort associated with dysmenorrhea among the participants. Following this, selected home remedies were introduced as the intervention. After a period of five weeks, a posttest was conducted to evaluate any changes in pain and discomfort levels. This design did not include a control group and relied on comparing pretest and posttest results to determine effectiveness.

Research Approach

An evaluative research approach was used in this study to achieve the objective of assessing the effectiveness of selected home remedies in reducing dysmenorrhea symptoms. Evaluative research involves collecting and analyzing information about the functioning of a program or intervention to support decision-making. In this context, it helped determine whether the introduced remedies had a measurable impact on reducing pain and discomfort among adolescent girls.

Variables of the Study

Variables are characteristics or properties that can vary among individuals or situations. In this study, the independent variable was the introduction of selected home remedies, specifically Triphala Kashaya and Ashoka Saraka. These remedies were administered to observe their effect. The dependent variables were the pain and discomfort associated with dysmenorrhea, which the researcher aimed to measure, explain, and reduce through the intervention.

Setting of the Study

The study was conducted at S.B. College of Nursing in Bangalore. The setting was chosen because it provided access to the target population of adolescent girls studying nursing, ensuring feasibility and convenience for data collection.

Population

The population of the study included adolescent girls who had attained menarche and were between 18–20 years of age, studying in nursing colleges in Bangalore, and experiencing dysmenorrhea. The researcher intended to generalize the findings of the study to this broader group.

Sample and Sampling Technique

A sample of 50 adolescent girls aged 18–20 years who met the inclusion criteria was selected for the study. The sampling technique used was purposive or judgmental sampling, where participants were selected based on the researcher's knowledge and judgment about their suitability for the study. This method ensured that only individuals relevant to the research objectives were included.

Criteria for Selection of Subjects

Inclusion Criteria

The study included students who were willing to participate, available during the data collection period, and able to understand and communicate in Kannada or English. These criteria ensured that participants could provide accurate responses and cooperate throughout the study.

Exclusion Criteria

Students who had attended seminars or workshops on home remedies for dysmenorrhea and those studying in the second, third, or fourth year of B.Sc. Nursing were excluded. This helped maintain uniformity and avoid bias due to prior knowledge or experience.

Data Collection Instruments

Data collection tools are instruments used to measure key variables in a study. In this research, two tools were used: a baseline proforma with a rating scale and a verbal descriptive pain rating scale. The baseline proforma collected background information, while the rating scale assessed discomfort related to dysmenorrhea across physical, behavioral, social, and psychological dimensions. The verbal descriptive pain rating scale categorized pain levels into no pain, mild, moderate, severe, and unbearable, with corresponding numerical scores.

Validity of the Tool

Content validity of the tools was established by consulting 10 experts from the fields of obstetrics, gynecology, and Ayurveda. Based on their suggestions, modifications were made to improve the tool. The baseline proforma and verbal pain rating scale received complete agreement from all experts. Additional items were included in the rating scale, and some items were reorganized to enhance clarity and relevance. The tool was also translated into Kannada and retranslated into English to ensure accuracy.

Reliability of the Tool

Reliability refers to the consistency and stability of a measurement tool. In this study, reliability was tested using the split-half method and Karl Pearson's correlation coefficient. The reliability score of the rating scale was found to be 0.83, indicating that the tool was highly reliable and suitable for data collection.

Pilot Study

A pilot study was conducted on 10 students at Hina College of Nursing in Bangalore to test the feasibility of the research process. The selected home remedies were administered for 15 days. The results indicated a reduction in discomfort levels in the posttest compared to the pretest, although no significant difference was observed in the pain scale. The pilot study confirmed that the study design and tools were appropriate for the main study.

Data Collection Procedure

Formal permission was obtained from the principal of S.B. College of Nursing before data collection. Participants were selected using purposive sampling. The pretest was conducted, followed by the introduction and demonstration of the preparation and use of selected home remedies. Participants were instructed to use the remedies regularly until their next menstrual cycle. The researcher monitored participants regularly, and the posttest was conducted after menstruation using the same tools. The entire data collection process lasted 35 days.

Plan for Data Analysis

Data analysis was carried out using both descriptive and inferential statistics. Descriptive statistics such as frequency, percentage, mean, and median were used to summarize baseline characteristics and severity of dysmenorrhea. Inferential statistics, including paired t-test, independent t-test, chi-square test, and Spearman's rank correlation, were used to determine the significance of differences and relationships between variables.

DATA ANALYSIS AND INTERPRETATION**Table No 1: Baseline Characteristics of Participants (N = 50)**

S. No	Variable	Category	Frequency (F)	Percentage (%)
1	Age	18–19 years	31	62%
		20–21 years	19	38%
		22–23 years	0	0%
		24–25 years	0	0%
2	Age at Menarche	10–11 years	6	12%
		12–13 years	34	68%
		14–15 years	10	20%
3	Religion	Hindu	22	44%
		Christian	21	42%
		Muslim	7	14%
4	Source of Information	Television	14	28%
		Newspaper	24	48%
		Magazines	10	20%
		Peer groups	2	4%
5	History of Dysmenorrhea	Yes	46	92%
		No	4	8%
6	Home Remedies Practiced	Yes	42	84%
		No	8	16%
7	Mother's Educational Status	No formal education	19	38%
		Primary education	21	42%
		Secondary education	3	6%
		Higher Secondary	2	4%
		Degree	3	6%
		Post degree	2	4%

Percentage distribution of students by their pretest and posttest knowledge

The present study shows a clear improvement in students' knowledge levels from pre-test to post-test. Before the intervention, almost all students (98%) had inadequate knowledge, with only 2% at a moderate level and none at an adequate level, indicating very low initial understanding. After the intervention, there is a significant shift: the percentage of students with inadequate knowledge drops sharply to 10%, while the majority (66%) move to a moderate level and 24% achieve adequate knowledge. Overall, the results highlight that the intervention was highly effective in improving students' understanding, as most learners progressed from low to moderate or adequate knowledge levels.

Table No: 2 Association between post-test knowledge scores and selected demographic variables of first-year B.Sc. nursing students.

Demographic Variable	Category	Sample Size (N)	Inadequate Knowledge N (%)	Moderate Knowledge N (%)	D.F	χ^2 Value	Table Value	P Level	Significance
Age	18–19 yrs	31	31 (62%)	0 (0%)	1	1.572	3.84	p≤0.05	NS
	20–21 yrs	19	18 (36%)	1 (2%)					
Age at Menarche	10–11 yrs	6	6 (12%)	0 (0%)	2	0.160	3.84	p≤0.05	NS
	12–13 yrs	34	33 (66%)	1 (2%)					
	14–15 yrs	10	10 (20%)	0 (0%)					
Religion	Hindu	22	22 (44%)	0 (0%)	2	0.540	5.99	p≤0.05	NS
	Christian	21	21 (42%)	0 (0%)					
	Muslim	7	6 (12%)	1 (2%)					
Source of Information	Television	14	14 (28%)	0 (0%)	3	3.281	7.81	p≤0.05	NS

Demographic Variable	Category	Sample Size (N)	Inadequate Knowledge N (%)	Moderate Knowledge N (%)	D.F	χ^2 Value	Table Value	P Level	Significance
	Newspaper	24	24 (48%)	0 (0%)					
	Magazines	10	9 (18%)	1 (2%)					
	Peer Groups	2	2 (4%)	0 (0%)					
History of Dysmenorrhea	Yes	46	45 (90%)	1 (2%)	1	0.121	3.84	p≤0.05	NS
	No	4	4 (8%)	0 (0%)					
Home Remedies Practice	Yes	42	41 (82%)	1 (2%)	1	0.034	3.84	p≤0.05	NS
	No	8	8 (16%)	0 (0%)					
Mother's Education	No formal education	19	19 (38%)	0 (0%)	5	49.063	11.07	p≤0.05	Significant
	Primary	21	20 (40%)	1 (2%)					
	Secondary	3	3 (6%)	0 (0%)					
	Plus Two	2	2 (4%)	0 (0%)					
	Degree	3	3 (6%)	0 (0%)					
	Post Degree	2	2 (4%)	0 (0%)					

DISCUSSION

The present study was conducted to assess the knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students and to determine the association between selected demographic variables and pre-test knowledge levels. The findings of the study revealed that the majority of participants had inadequate knowledge in the pre-test, which indicates a lack of awareness regarding dysmenorrhea and its management through home remedies. This finding is consistent with previous studies that reported insufficient knowledge among adolescent girls regarding menstrual health and management practices.

The analysis of demographic variables showed that there was no significant association between age and pre-test knowledge level ($\chi^2 = 1.572$, $p \leq 0.05$). This indicates that knowledge regarding dysmenorrhea was not influenced by the age of the participants. Similarly, age at menarche also showed no significant association with knowledge level ($\chi^2 = 0.160$), suggesting that the onset of menstruation does not necessarily contribute to improved understanding of dysmenorrhea. These findings are in line with earlier research which indicates that menstrual experiences alone do not ensure adequate knowledge unless proper education is provided.

Religion and source of information were also found to have no significant association with the knowledge level of participants. Although sources such as television, newspapers, magazines, and peer groups provide information, they may not be sufficient or accurate enough to improve knowledge effectively. This highlights the importance of structured educational interventions in improving awareness and knowledge.

Further, variables such as history of dysmenorrhea and use of home remedies did not show any significant association with knowledge levels. Despite a high percentage of participants experiencing dysmenorrhea (92%) and practicing home remedies (84%) as shown in baseline data, their knowledge remained inadequate. This suggests that personal experience alone does not lead to scientific understanding or correct practices.

However, a statistically significant association was found between the educational status of the mother and the knowledge level of participants ($\chi^2 = 49.063$, $p \leq 0.05$). This indicates that parental education, especially that of the mother, plays a crucial role in shaping the health knowledge of adolescents. Educated mothers may provide better guidance and information regarding menstrual health and hygiene practices.

The study also examined the association between discomfort scores of dysmenorrhea and selected variables such as age, parental education, and age at menarche. The findings revealed no significant association in all these variables, indicating that the level of discomfort experienced during dysmenorrhea is independent of these demographic factors. This supports the concept that dysmenorrhea is a common physiological condition influenced by multiple biological and individual factors rather than demographic characteristics alone.

Overall, the findings of the study emphasize the need for structured teaching programs to improve knowledge regarding dysmenorrhea and its management. The lack of significant association between most demographic variables and knowledge highlights that educational interventions are essential for all adolescents irrespective of their background.

CONCLUSION

The present study was conducted to assess the knowledge regarding home remedies of dysmenorrhea among first-year B.Sc. nursing students and to evaluate its association with selected demographic variables. The findings of the study clearly indicate that the majority of participants had inadequate knowledge in the pre-test, highlighting the need for proper education on dysmenorrhea and its management.

The study demonstrated that most demographic variables such as age, age at menarche, religion, source of information, history of dysmenorrhea, and practice of home remedies had no significant association with the knowledge level of participants. This suggests that knowledge regarding dysmenorrhea is not naturally acquired through experience or background factors alone. However, the educational status of the mother showed a statistically significant association, indicating that parental education plays an important role in influencing the knowledge of adolescents.

Furthermore, the findings revealed that discomfort associated with dysmenorrhea was independent of variables like age, parental education, and age at menarche. This indicates that dysmenorrhea is a common condition affecting adolescents irrespective of their demographic characteristics.

Overall, the study concludes that there is a significant need for structured teaching programs to improve the knowledge of adolescent girls regarding dysmenorrhea and its management through home remedies. Educational interventions can play a vital role in enhancing awareness, promoting safe practices, and reducing the discomfort associated with dysmenorrhea. Improving knowledge in this area will ultimately contribute to better health outcomes and quality of life among adolescent girls.

LIMITATIONS

- ❖ The present study has certain limitations that should be considered while interpreting the findings.
- ❖ The study was conducted among a small sample size of only 50 first-year B.Sc. nursing students, which limits the generalizability of the findings to a larger population. Since the participants were selected using a purposive sampling technique, there is a possibility of selection bias, and the results may not represent all adolescent girls.
- ❖ The study was limited to a single nursing college in Bangalore, which restricts the applicability of the findings to other settings, regions, or cultural groups. Differences in socio-cultural background, educational exposure, and health practices may influence the outcomes in other populations.
- ❖ The research design adopted was a one-group pre-test and post-test design without a control group. Therefore, the study lacks comparison with a control group, making it difficult to attribute changes solely to the structured teaching programme.

- ❖ The data collection relied on self-reported responses from participants, which may be subject to response bias, recall bias, or social desirability bias. Participants may not have accurately reported their knowledge or practices.
- ❖ The duration of the study was relatively short, and long-term retention of knowledge and sustained effects of the teaching programme were not assessed.
- ❖ Only selected demographic variables were included in the study, and other factors such as socio-economic status, lifestyle, dietary habits, and psychological factors were not considered, which may also influence knowledge and experience of dysmenorrhea.

RECOMMENDATIONS

- ❖ Based on the findings of the present study, the following recommendations are made:
- ❖ The study can be replicated on a larger sample size to enhance the generalizability of the findings. Including participants from different educational institutions and diverse geographical areas would provide more comprehensive results.
- ❖ A similar study can be conducted using a true experimental design with a control group to better evaluate the effectiveness of structured teaching programmes on knowledge regarding dysmenorrhea and its management.
- ❖ Longitudinal studies can be carried out to assess the long-term retention of knowledge and sustained impact of educational interventions on dysmenorrhea management.
- ❖ Further research can be conducted to evaluate the effectiveness of various alternative therapies such as herbal remedies, yoga, exercise, and dietary modifications in reducing dysmenorrhea.
- ❖ Studies can also explore the relationship between dysmenorrhea and other factors such as lifestyle habits, nutritional status, stress levels, and socio-economic conditions.
- ❖ Educational programmes on menstrual health and home remedies should be incorporated into the nursing curriculum and school health programmes to improve awareness among adolescents.
- ❖ Health professionals, especially nurses, should take initiative in conducting awareness programmes, workshops, and health education sessions for adolescent girls regarding dysmenorrhea and its management.
- ❖ Community-based studies can be conducted to assess knowledge and practices among non-student populations and rural adolescents.
- ❖ Development of informational materials such as pamphlets, booklets, and digital content can be recommended to promote awareness about safe and effective home remedies for dysmenorrhea.

NURSING IMPLICATIONS

The findings of the present study have important implications in various areas of nursing, including nursing practice, nursing education, nursing administration, and nursing research.

Nursing Practice

Nurses play a vital role in promoting menstrual health among adolescent girls. The study highlights the need for nurses to provide adequate education regarding dysmenorrhea and its management, especially the use of safe and effective home remedies. Nurses can assess the level of knowledge among adolescents and offer individualized health education. They can also guide students in adopting non-pharmacological measures to reduce pain and discomfort, thereby improving their quality of life.

Nursing Education

The results of the study emphasize the importance of incorporating menstrual health education, including dysmenorrhea and its management, into the nursing curriculum. Structured teaching programmes should be developed and implemented to enhance students' knowledge. Nursing students should be trained to educate others, including school children and community groups, about menstrual hygiene and home remedies.

Nursing Administration

Nursing administrators should take initiatives to organize health education programmes, workshops, and awareness campaigns on menstrual health in schools and colleges. They should ensure availability of educational materials such as pamphlets, charts, and audiovisual aids. Policies can be developed to integrate menstrual health education into routine health services and school health programmes.

Nursing Research

The study provides a basis for further research in the area of dysmenorrhea and its management. Future research can focus on evaluating different non-pharmacological interventions, comparing their effectiveness, and exploring additional factors influencing dysmenorrhea. Larger and more rigorous studies can be conducted to strengthen the evidence base and improve nursing practices.

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Conflict of Interest Statement

The author declares that there is no conflict of interest regarding the publication of this research study. No financial, personal, or professional relationships influenced the design, data collection, analysis, or interpretation of the findings.

Ethical Statement

The study was conducted after obtaining ethical approval from the Institutional Ethics Committee/Research and Development Committee. Written informed consent was obtained from all participants prior to data collection.

Confidentiality and anonymity of the participants were strictly maintained, and participation was entirely voluntary. Participants were informed of their right to withdraw from the study at any stage without any penalty.

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