"A study to assess the effectiveness of structured teaching program on knowledge regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha"

(Phd Scholar) Mrs Jayashree Sahu

Assistant Professor

Mansarovar Global University

Sehore (Madhya pradesh)

ABSTRACT

Dysmenorrhoea is a common condition and refers to painful menses (menstruation) with severe cramping affecting the lower part of the abdomen which is a common complaint among adolescents and women of reproductive age. The pain is described as a sharp, intermittent and spasmodic pain and can be classified as mild,moderate or severe.Pain starts several hours before or with the onset of menses and lasts for1-3days.The pain and frequency there of might decrease with age or after childbirth.This study was conducted with 30 samples(2nd semesterB.Sc.Nursing students)in quantitative approaches, Quasi experimental with one group pre -test post-test design, sampling selection was done by purposive sampling technique. Structured questionnaire was used to elicit the knowledge of 2nd semester B.Sc. Nursing student.at IGKC College of Nursing, Bhubaneswar, Odisha. This study was revealed that nursing students according to the findings, in pretest 20% nursing students had poor knowledge and 80% had average knowledge, in post-test 33.33% had average knowledge and 66.67% had good knowledge. The mean knowledge score of pre -test is 11.1 and standard deviation was 2.07. the paired "t" value is 23.18 and "p" value is 0.05.

KEYWORDS:- Assess,Effectiveness,structured teaching programme,knowledge, Dysmenorrhea ,B.Sc. Nursing students.

TITLE:

"A study to assess the effectiveness of structured teaching program on "knowledge regarding Dysmenorrhea" among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha."

OBJECTIVES:

1.   To assess the pretest knowledge score regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

2.   To implement structured teaching program regarding the Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

3.   To assess the post-test knowledge score regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

4.   To find out effectiveness of structured teaching program between pretest and post-test knowledge regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

5.   To findout association between pretest knowledge regarding Dysmenorrhea among 2nd semester B.Sc.Nursing students of IGKC College of Nursing, Bhubaneswar with their selected socio demographic variable

INTRODUCTION

> **"A women's strength is not just in how she endures her cramps,but in how she rises above them with grace."**

A girl child, the future mother of the nation is a miracle that brings joy, dreams and the promise of a brighter future.

Despite the high prevalence and impact of Dysmenorrhea, many affected individuals do not seek medical attention, either due to lack of awareness, normalization of the pain or embarrassment.This highlights the urgent need for educational interventions,especially among young women in health sciences such as nursing students.Enhancing their knowledge can help them not only manage their own health better but also educate others and contribute meaningfully to menstrual health awareness in their future roles as healthcare providers.For students,especially future nurses,this monthly battle doesn't just affect their health, it affects learning, attendance and emotional well-being.

REVIEW OF LITERATURE

Swati R. Menon, Priya R. Singh (2025), conducted a quasi-experimental study to evaluate the effectiveness of a structured teaching program on knowledge regarding dysmenorrhea among adolescent girls in Mumbai. A total of 100 students aged 13-17 years were selected using purposive sampling.Pretest results indicated that 68%had inadequate knowledge,24% had moderate knowledge, and only 8% had good knowledge about dysmenorrhea, its causes and management. After the intervention, post-test scores revealed significant improvement 82% had good knowledge and 18% had moderate knowledge. The study concluded that structured teaching programs are highly effective in enhancing adolescent girls' awareness about dysmenorrhea and encouraging proper coping practices.

Mr. Arash Arashkia (2024), conducted a cross-sectional study to assess the awareness and practices related to primary dysmenorrhea among adolescent girls. The study included 100 participants aged 15-18 years from Tehran. Results showed that 62% of the girls experienced moderate to severe menstrual pain. Only 35% used proper pain management strategies. The study concluded that structured education programs significantly improved knowledge and self-care practices.

METHODOLOGY

APPROACH:

Quantitative research approach used in the study.

DESIGN:

Quasi-experimental one group pre-test-post-test design was choosen.

Table:1

Group	Pre test	Intervention	Post test
Study group	01	X	02

KEYS:

O1-Pre-test on knowledge regarding dysmenorrhoea.

X-Intervention-structured teaching programme regarding dysmenorrhoea among Adolescent girls.

O2-Post-teston knowledge regarding dysmenorrhoe.

SELECTION AND DEVELOPMENT OF THE STUDY INSTRUMENT

The researcher constructed the tool used on literature review and opinion from experts,which consisted of

DESCRIPTION OF TOOLS

The tool will be consisting of two sections:-

SECTION-A

DEMOGRAPHIC VARIABLES:

The demographic variables consisted of 5items which included age in years,education, residency, qualification of mother, type of family.

SECTION-B

STRUCTURED QUESTIONNARIES:

It consisted of menstruation, difficulty menstruation, causes of dysmenorrhea, types of dysmenorrhea, pathophysiology of dysmenorrhea, sign and symptoms, early detection of dysmenorrhea ,management of dysmenorrhea.

SECTION-A:

The numerical values were assigned for the demographic variables.

SECTION-B

It consisted of 30self administered multiple choice questions regarding introduction, menstruation,difficulty menstruation,causes,types,physiology,complication,management of dysmenorrhea.

Score	Level of knowledge in percentage	Category
<10	0%	Poor
10 – 20	33.3%	Average
>20	66.7%	Good

DATA COLLECTION PROCEDURE

The data collection procedure included the following steps-

- Collection of demographic variables by self administered questionnaire.
- Conduct of pretest by self administered multiple choice question of knowledge regarding dysmenorrhea.
- Administration of structured teaching programme.
- Conduct of post-test by self-administered multiple choice questions knowledge regarding dysmenorrhea.

The written permission was obtained from the principal of IGKC college of nursing, Bhubaneswar. The data collection was done for the main study on dt 04/09/2025from 1pm- 4pm. The participants for main study were selected by purposive non random sampling techniqueamongnursingstudentswhoarestudyingin2ndsemester.Total 30 nursing students were selected who fulfilled the inclusive criteria. Before giving the intervention, the investigator conducted pretest in the class as per the data collection schedule. The structured teaching programme regarding dysmenorrhea was given to adolescent girls, on same day and then post-test which was done by using same tool to assess the level of knowledge regarding dysmenorrhea among nursing students.

PLAN FOR DATA ANALYSIS

To establish the content validity of the tool, it will be reviewed by subject matter experts for their valuable feedback.Their agreement on the content will ensure its validity.Based on their suggestion, certain items and concepts will be revised for improved clarity.

TABLE:2(Plan for data analysis).

S no	Data Analysis	Statistical data	Objectives
1	Descripitive Statistics	Frequency, percentage,mean and standard deviation	Frequency and percentage distribution of demographic variable ,health related variables , level of knowledge regarding dysmenorrhea among study groups.
2	Inferential statistics	Paired "t" test	Comparison of pretest and post test knowledge regarding dysmenorrhea among nursing students

RESULTS

SECTION1-

Description of socio demographic data of nursing students.

The section 1 represents the frequency and percentage distribution of selected demographic variables of nursing students.

TABLE-3

The frequency and percentage distribution of nursing students according to age:
TABLE-

SL NO.	AGE IN YEARS	FREQUENCY	PERCENTAGE
1.	18-19	28	93.3%
2.	20-21	02	6.7%
3.	22-23	0	0
4.	>23	0	0

TABLE–4

The frequency and percentage distribution of nursing students according to their religion.

SL NO.	RELIGION	FREQUENCY	PERCENTAGE
1.	HINDU	100	100%
2.	MUSLIM	0	0
3.	CHRISTIAN	0	0
4.	ANYOTHERS	0	0

TABLE-5

The frequency and percentage distribution of the Nursing students according to their type of family.

SL NO.	TYPES OF FAMILY	FREQUENCY	PERCENTAGE
1.	NUCLEAR	13	43%
2.	JOINT	15	50%
3.	EXTENDED	02	7%
4.	OTHERS	0	0

TABLE:6

The frequency and percentage distribution of Nursing students according to the education of their mother.

SL NO.	EDUCATIONOF MOTHER	FREQUENCY	PERCENTAGE
1.	GRADUATE	14	46.7%
2.	UNDERGRADUATE	5	16.7%
3.	HIGHERSECONDARY	11	36.6%
4.	ILLITRATE	0	0

SECTION-II

Description of the overall knowledge of nursing students regarding dysmenorrhea.

TABLE-7

Overall knowledge distribution of nursing students based on criteria measure.

This column diagram representing the distribution of overall knowledge of the nursing students in pretest and post-test.

Sl no	Level of knowledge	Pretest		posttest	
		N	%	N	%
1	Poor	6	20%	0	0
2	Average	24	80%	10	33.33%
3	Good	0	0	20	66.67%
		30	100	30	100

The above table reveals that 24(80%), 0(0%) and 6 (20%) pre-adolescent girl's participants had average,good & poor knowledge in pretest and post-test 10(33.33%) and 20(66.67%) had average and good knowledge in post-test.

SECTION-III

TABLE:8

Comparison of pretest and post-test knowledge score so the pre-adolescent girls regarding menstrual hygiene.

Sl no	Observation	Mean	SD	Pair "t' test value	P-Value
1	Pre test	11.0	2.07	23.18	0.05
2	Post Test	21.17	2.36		

The above table reveals that there was a statistically significant difference between pre and post-test knowledge score regarding dysmenorrhea among nursing students

DISCUSSION

This chapter deals with the discussion which was based on the objectives, findings obtained from the data analysis and its relation to the subjects of the study and with the revealed literature. The aim of the study was to assess the effectiveness of structured teaching programme on knowledge regarding Dysmenorrhea among 2nd semester B.Sc.Nursing students of IGKC College of Nursing, Bhubaneswar,Odisha. The study findings are discussed based on the following objectives.

FIRST OBJECTIVE:

To assess the pretest knowledge score regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

To assess the pretest knowledge score regarding Dysmenorrhea among the Nursing students, an analysis of knowledge scores was conducted. The pretest mean score is 11.1(37%), indicating an average level knowledge, whereas the post-test mean score was 21.17(70%), indicating a good level of knowledge. The mean score of pretest knowledge was 11.1 which was increased to 21.17 in the post test.This shows that the knowledge regarding dysmenorrhea increased among Nursing students as a result of structured teaching programme. The above findings proved that structured teaching programme yielded a good outcome among Nursing students in terms of gain in post-test knowledge scores.

SECOND OBJECTIVE:

To implement structured teaching program regarding the Dysmenorrhea among 2nd semester B.Sc.Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

To implement structured teaching programme, we used lecture-cum-discussion method with the aid of audio visual material such as chart and power point presentation. The content covered definition, cause, types, clinical manifestation, pathophysiology, diagnostic evaluation, and management of dysmenorrhea. The session was interactive, encouraging students to ask questions and clarify their doubts.

THIRD OBJECTIVE:

To assess the post-test knowledge score regarding Dysmenorrhea among 2nd semester B.Sc. Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

The post-test knowledge regarding dysmenorrhea among the Nursing students increased to 70%.This indicates that the knowledge on dysmenorrhea improved among Nursing students as a result of structured teaching programme. The above findings proved that structured teaching programme yielded good results among Nursing students in terms of gain in post-test knowledge score.

FOURTH OBJECTIVE:

To find out the effectiveness of structured teaching programme between pretest and post-test knowledge regarding dysmenorrhea among2nd semester B.Sc.Nursing students of IGKC College of Nursing, Bhubaneswar, Odisha.

The comparison of pre and post-test knowledge and practice score regarding dysmenorrhea among Nursing students revealed that the mean post-test knowledge score was 21.17,whereas the pretest mean score was 11.1. This proved that the structured teaching programme on dysmenorrhea was effective.

The paired "t" value obtained from the comparison of pre and post-test knowledge score regarding dysmenorrhea was 23.1, which was statistically significant at $P < 0.05$. The comparison of pre and post-test practice score elicited that the"t"value was 23.17,which was statistically significance at $P < 0.05$. The comparison of pretest and post-test practice scores indicated that the knowledge scores improved because of the administration of the structured teaching programme on dysmenorrhea. Hence, H1 was accepted, showing a significant difference between the pretest and post-test knowledge scores among

nursing students. The Nursing students are receptive for structured teaching programme and that influences the knowledge regarding dysmenorrhea which will ultimately gain knowledge about the definition, causes, types, clinical manifestation, management and its consequences.

FIFTH OBJECTIVE:

To find out the association between pretest knowledge regarding Dysmenorrhea among 2nd semester B.Sc. nursing students of IGKC College of Nursing, Bhubaneswar with their selected socio demographic variables.

The paired T-test value for the association of demographic variables with level of knowledge revealed that there was a statistically significant association of age, religion, mother's education and type of family with the level of knowledge regarding dysmenorrhea among Nursing students, at level $P<0.05$. Hence, H2 was accepted, indicating a significant association between pretest knowledge scores and selected demographics variables among nursing students. Thus, it is the responsibility of the researcher to identify such problems and educate the adolescent nursing students to prevent-infection and promote good health.

CONCLUSION:

The study findings proved that the structured teaching programme administered by the researcher was effective in increasing the knowledge regarding dysmenorrhea among nursing students.

ACKNOWLEDGEMENT

ETHICAL CONSIDERATION

The study will be initiated after obtaining ethical approval from selected school. It will adhere to ethical standards by obtaining informed consent from all participants , ensuring that participation is voluntary and that they are fully aware of the study's purpose and procedures. Confidentiality will be maintained by anonymizing data and securely storing it to protect participant's privacy. Additionally, the study will be reviewed and approved by an ethics committee to ensure that it meets ethical guidelines for research involving human subjects.

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