

Effectiveness of Planned Teaching Programme on Knowledge of Dysmenorrhoea among Nursing Students

Rachana Pandya¹, Vruti Patel¹, Meshva Patel², Twinkle Rathod², Payal Ahir², Ashish Bhadak²

¹Assistant Professor, Department of OBG Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth deemed to be university, Vadodara, Gujarat.

²Undergraduate Nursing students, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat.

Corresponding Author

Rachana Pandya,

Assistant Professor, Department of OBG Nursing,

Sumandeep Nursing College,

Sumandeep Vidyapeeth deemed to be university, Vadodara, Gujarat,

ABSTRACT

BACKGROUND OF THE STUDY: Dysmenorrhoea, also known as a painful period or a menstrual cramps, is pain during menstruation cycle. The researcher during her service in college found that many adolescent girls are suffering badly due to dysmenorrhoea cause, it restricts their daily lifestyle. However one key barrier in managing the menstrual pain whether it can be pharmacological or non pharmacological treatments is that the intervention needs to be an affordable both in terms of time and cost for reducing all symptoms of dysmenorrhoea among adolescent girls. Non pharmacological self care technique or life style interventions, either physical or psychological, that can be practiced by girls themselves such as a exercise, heat application, self massage or acupressure. Investigator strongly believes that, knowledge of the student regarding dysmenorrhoea management, can alleviate the severe symptoms associated with the menstrual pain and improves their quality of life during those days. Thus Plan teaching programme is the only best option to increase their knowledge.

AIMS: This study was done with the goal to improve the knowledge regarding Non pharmacological self care technique and life style modifications for managing symptoms associated with dysmenorrhoea.

OBJECTIVES: To assess pre existing knowledge of students regarding dysmenorrhoea and to evaluate the effectiveness of plan teaching programme for students on dysmenorrhoea.

MATERIAL AND METHODS: A Pre experimental study in which 60 nursing students were selected. Data were collected using self structured questionnaire tool. The collected data was tabulated and analyzed

by using descriptive and inferential statistics.

RESULTS: The result revealed that, out of 60 samples, in pre-test- 51.66% of the samples had Inadequate, 48.33% of the students had moderate and 0% of them had adequate knowledge, whereas in post-test- 56.66% of the samples had adequate, 43.3% of the students had moderate and 0% of them had inadequate knowledge. Thus there is an increment of 9.92 % mean difference between pre-test and post-test which shows that the PTP was effective in teaching non pharmacological measures for treating Dysmenorrhoea symptoms.

CONCLUSION: Results revealed that, there is increase in knowledge regarding Dysmenorrhoea after implementation of Planned Teaching Programme. Thus, these types of plan teachings are playing an important role in improving knowledge on non pharmacological measures for treating Dysmenorrhoea symptoms.

KEYWORD: *Knowledge, Plan teaching Programme, Dysmenorrhoea, Non pharmacological Management, Lifestyle Modification*

INTRODUCTION

“Dysmenorrhoea is derived from a Greek root translating to difficult menstruation.” Dysmenorrhoea, also known as a painful periods or menstrual cramps. Its usual onset occurs at the time that menstruation begins. Symptoms typically last less than three to four days with pain in pelvis / lower abdomen. Other symptoms may include intense back pain, diarrhoea and nausea.¹

In young women, painful period often occur without an underlying problems.² in older women, it is more often due to an underlying issues such as uterine fibroids, endometriosis or adenomyosis.² It is more commoner among those with irregular- heavy periods, whose periods started before twelve years of age or who have a low body weight¹. Primary dysmenorrhoea tends to occur within the onset of ovulatory cycles and usually improves with the time, frequently is associated with other prostaglandin-mediated symptoms such as vomiting, nausea, diarrhoea, and dizziness. The pain is sharp and cramp full, and is located in the lower midline. Secondary dysmenorrhoea which means pelvic pain caused by disorder or a disease. Secondary dysmenorrhoea most commonly begins in the women who are in their late teen ages or early twenties and it progressively goes worsens. The pain begins long before menses and continues during and even after menses.³ Study conducted on dysmenorrhoea had proved that the dysmenorrhoea not only causes physical and physiological pain, but it also psychological discomforts such as anxiety, stress, irritability, loneliness, depression etc.⁴

According to world health organization (WHO), 40-45% of adolescent girls are having different menstrual problems. These are mainly due to psychological stress, anxiety and emotional changes.⁵ According to Johnson in his study, among 182 adolescent girls he found that 73% had pain or discomfort during their periods, 59% reported decreased activities in their lifestyle and 45.6% reported about school or work

absenteeism. The increased prevalence of school and work absenteeism provides evidence for the continuing importance of dysmenorrhoea as a public health problem of this age group women ⁶.

AIMS: This study was done with the goal to improve the knowledge regarding Non pharmacological self care technique and life style modifications for managing symptoms associated with dysmenorrhoea.

OBJECTIVES: To assess pre existing knowledge of students regarding dysmenorrhoea & to evaluate the effectiveness of plan teaching programme for students on dysmenorrhoea.

MATERIAL AND METHODS:

The study design was pre experimental research design with 60 samples studying in the graduate nursing course in a nursing institute. Sample selected by using non-probability convenient sampling technique. Samples include those who were studying collegiate program and aged between 18-19 years. Those who are diagnosed with menstrual abnormality were excluded. Self structured knowledge questionnaire was used to collect the data, in which there were 30 questions to choose the right option to assess the knowledge regarding dysmenorrhoea and its management. The total score was calculated by summing up the answers given to the questions and categorised as inadequate, moderate & adequate knowledge. However after obtaining formal administrative approval from concerning authorities, informed consent was taken from the samples. Where the investigator personally collects the data and after that data collection, it is explained in 3 phases:

Phase 1: To all samples the data collection tool was distributed and from that the socio demographic data collected & pre test was conducted to evaluate the level of knowledge regarding dysmenorrhoea amongst girls by the self structured questionnaire.

Phase 2: Administration of plan teaching programme regarding non pharmacological treatments for dysmenorrhoea was administered on the same day.

Phase 3: After the intervention of the plan teaching programme, post test was taken to assess level of knowledge.

Data collection process was extended up to one week and completed when the desirable samples were obtained. Data were analysed by using descriptive & inferential statistics

FINDINGS:

Distribution of demographic variables: In this study all samples were falling between the age group 18-19 years. About their dietary pattern, majority (63.3%) of girls were vegetarian, 28.3% were Non Vegetarian & very few (8.3%) girls were Ovo vegetarian. When samples were asked about having knowledge regarding dysmenorrhoea than only few, 11 samples out of 60 knew and the source is from various ways like from friends, parents, & mass Medias. Majority of the girls achieved their menarche at the age of 13 or 14 years. Out of 60 samples 40 girls were having pain during their menstruation; among

them half of samples were already using different pain relieving measures like heat application, exercise & pain killers.

Comparison of Pre Test and post Test Knowledge score according To Percentage of

Dysmenorrhoea: Out of 60 samples, in pre-test- 51.66% of the samples had Inadequate, 48.33% of the students had moderate and 0% of them had adequate knowledge, whereas in post-test- 56.66% of the samples had adequate, 43.3% of the students had moderate and 0% of them had inadequate knowledge.

Sr. No.	Categories of knowledge score	Range of score	Pre test	Post test
1	Inadequate	1-10	51.66%	00
2	Moderate	11-20	48.33%	43.3%
3	Adequate	21-30	00	56.6%

Over all Pre test and Post test Mean Knowledge scores, standard deviation & t- value: Among the respondents, mean value in pre-test was 10.58 which was increased to 20.50 in post-test after implementation of planned teaching programme regarding non pharmacological management of dysmenorrhoea. The mean difference between pre-test and post-test were 9.92. Standard deviation found as 3.66 & 3.20 in pre-test and post-test respectively. The calculated “t” value (15.84) was greater than the tabulated “t” value at 0.05 levels. Data represent that there was significant difference between pre test and post test level of knowledge score and shows that the PTP was effective in teaching non pharmacological measures for treating Dysmenorrhoea symptoms.

Variable	Pre test	Mean	Mean difference	Std. Deviation	t - value
Knowledge regarding dysmenorrhoea	Pre-test	10.58	9.92	3.66	15.84
	Post-test	20.50		3.20	

DISCUSSION:

Shabnamomidvar, Fatemeh, et al in 2015 conducted a cross sectional survey which is on 1000 healthy females who were between the age 11-28 years. Findings revealed that, 70.2% dysmenorrhoea is prevailing in them, majority of them experienced pain during first two days, most commonly occurring symptom was tiredness and back pain was second most commonly occurred. Only few girls (25.5%) sought medical treatments and majority (83.2%) of them having non pharmacological management based on approach. Study concluded that planned health education on puberty and menstruation is inadequate for majority Indian girls.⁷ whereas in present study all samples were falling between the age group 18-19 years.

Majority of the girls achieved their menarche at age 13 & 14 year. Out of 60 samples 40 girls were having pain during their menstruation. Majority of girls were having 2-3 days pain during menstruation, half of samples were already using different pain relieving measures like heat application, exercise and pain killers but they lack in knowing how to treat dysmenorrhoea symptoms.

Noorbakhsh Mahvash, Alijani Eidy, et.al conducted a study in 2012 and the findings revealed that the exercise positively affects on reducing symptoms. The results revealed that while performing a regular physical activity it reduces type & number of drugs consumed, volume & rate of bleeding, length of pain.⁸ The same exercise protocols were included in planned teaching programme of present study which can reduce the detrimental effect of primary dysmenorrhoea symptoms in females.

Similar findings were reported by different studies done in the various Western countries which lend support to the findings of the present study. Esimai O. and Esan reported that the Nigerian student's awareness regarding menstrual abnormalities was found poor (29%).⁹ The Indian studies also concur with the same findings of the present study which is on related to knowledge of adolescent girls about menstruation and its management. Sharma M. and Gupta S had carried out a study to find out the awareness of the abnormalities which is in menstrual pattern among school going girls in Nepal and found that minority (8.0%) knew about the menstruation abnormalities, rest were very ignorant about it.¹⁰ Angeline A conducted a experimental research in a higher secondary school in Coimbatore to assess knowledge regarding the menstruation and menstrual hygiene among adolescents. She found out that 76% of the samples had inadequate knowledge and 24% knew little things.¹¹ In present study, similar findings were observed, while assessing their pre existing knowledge about menstruation, dysmenorrhoea and its controlling measures, were inadequate in majority (51.66%) of the girls and a few students had moderate knowledge (48.33%) and none of them knowing adequately.

Mandal conducted an experimental research to see the effect of planned teaching programme on menstruation among adolescent girls from schools of Delhi and reported that knowledge regarding menstrual hygiene and menstruation process has improved after implementing the teaching programme¹². In present study as well level of knowledge, it was found to be increased in post test. Majority of the participants 56.6% got adequate knowledge and 43.3% got moderately adequate knowledge after PTP. The post test mean score on knowledge increased from 10.58 to 20.5. The paired t- test showed that there is a highly significant improvement in the knowledge level in post test ($P < 0.05$). This reveals that planned PTP or health education on menstruation, dysmenorrhoea and its controlling measures was found to be effective in improving the knowledge of adolescent girls.

CONCLUSION

This study was undertaken to assess the knowledge of girls regarding Dysmenorrhoea and its management. Results revealed that, there is increase in knowledge regarding Dysmenorrhoea after implementation of Planned Teaching Programme. Thus, these types of plan teachings are playing an important role in improving knowledge on non pharmacological measures for treating Dysmenorrhoea symptoms.

Ethical approval

Since the study involved human subjects, a formal ethical approval received from Sumandeep Vidyapeeth

institutional ethical committee.

Conflict of interest

The authors declare no conflict of interest.

Funding

The study is not funded by any external sources and all expenses were borne by the investigators.

REFERENCES:

- 1) Osayande AS, Mehulic S (March 2014). "Diagnosis and initial management of dysmenorrhoea ". American Family Physician. 89 (5): 341–6. PMID 24695505.
- 2) The menstrual cycle fact sheet". Office of Women's Health. December 23, 2014.
- 3) Cleveland Clinic: <https://my.clevelandclinic.org/health/diseases/4148-dysmenorrhoea>
- 4) Sundell G, Milsom I and Andersch B. Factors influencing the prevalence and severity of dysmenorrhoea in young women. British Journal of Obstetrics and Gynaecology. July 2000; 97(7): 588-94.
- 5) WHO, The World Health report 2000 - Health systems: measuring performance. Geneva, World Health Organisation.
- 6) Johnson J. Level of knowledge among adolescent girls regarding effective treatment for dysmenorrhoea. Journal of Adolescent Health care. Sep 1988; 9(5): 398-402.
- 7) Omidvar, Shabnam et al. "Primary Dysmenorrhoea and Menstrual Symptoms in Indian Female Students: Prevalence, Impact and Management." Global journal of health science vol. 8,8 53632. 1 Aug. 2016, doi:10.5539/gjhs.v8n8p135
- 8) Karampour E, Khoshnam E, Poordast T. The influence of stretch training on primary dysmenorrhoea. Advances in Environmental Biology.2012 Nov 1:3069-72.arampour E,
- 9) Esimai O, Esan GO. Awareness of menstrual abnormality among college students in urban area of Ile-Ife, Nigeria. Indian Journal of Community Medicine. Jan 2010; 35(1): 63-6.
- 10) Sharma M, Gupta S. Menstrual pattern and abnormalities in the high school girls of Dharan: a cross sectional study in two boarding schools. Nepal Medical College Journal. Jun 2003; 5(1): 34-6.
- 11) Angeline A. A study to evaluate the effect of STP on menstruation and menstrual hygiene in terms of knowledge and attitude among adolescent girls who are studying in the Higher Secondary Schools of Madurai. Unpublished Master of Nursing Thesis. University of Chennai, 2004.
- 12) Mandal K. Teaching adolescent school girls about menstrual hygiene. The Indian Journal of Nursing and Midwifery. 1998; 1(2): 19- 26.