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An Experimental Study to Assess the Effectiveness of Planned Teaching Program Regarding Pelvic Rocking Exercise and Dry Ginger on Knowledge and Attitude Regarding Dysmenorrhea

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Abstract

Objective: *Dysmenorrhea is characterized by painful menstrual cramps originating from the uterus and is a common gynaecological condition affecting women of all ages and nationalities. Primary dysmenorrhea refers to menstrual pain without any underlying organic disease, while secondary dysmenorrhea occurs due to an identifiable medical condition. Common causes of secondary dysmenorrhea include endometriosis, fibroids, adenomyosis, endometrial polyps, pelvic inflammatory disease, and the use of intrauterine contraceptive devices.* ***Methodology:*** *Experimental research design was employed involving 60 girls aged 17–35 year from nursing college. Data regarding their knowledge and attitude towards menstrual cramps were collected through standardized questionnaires and analyzed using "t" test and correlations.* ***Results:*** *The findings indicate a significant study knowledge of respondents was assessed regarding dry ginger and pelvic rocking this study Dysmenorrhea in student with pre-test analysis knowledge 47% had poor knowledge regarding dry ginger and pelvic rocking exercise on Dysmenorrhea After administration planned teaching programmed post test scores 81% had good knowledge. In pre-test analysis attitude 44% had negative attitude regarding Dysmenorrhea. After administration planned teaching program. Post-test scores 70 % had positive attitude. Planned teaching programme dry ginger and pelvic rocking exercise and attitude regarding Dysmenorrhea.70% had positive attitude. Planned teaching programmed provided the complete increase of knowledge level and positive attitude towards ginger and pelvic rocking exercise.* ***Conclusion:*** *The study concludes that use of ginger and pelvic rocking exercise, leading enhancing the knowledge and positive attitude on the Dysmenorrhea.*

Keywords: Adenomyosis, endometrial polyps, fibroids, hometriosis, pelvic inflammatory disease

INTRODUCTION

Dysmenorrhea is the medical term for painful menstrual periods caused by uterine contractions as the body sheds its lining. The pain usually starts just before menstruation and subsides within a few days. Primary dysmenorrhea refers to recurring menstrual cramps without an underlying medical condition, often beginning one or two days before the period starts or when bleeding begins. Secondary dysmenorrhea, on the other hand, is linked to conditions like endometriosis or infections in the reproductive organs [1].

Mild to moderate cramping is normal, but pain from secondary dysmenorrhea often starts earlier in the cycle and lasts longer than typical cramps. This pain, which can range from mild to severe, is commonly felt in the lower abdomen, back, or

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thighs and usually improves within two to three days. In some cases, symptoms may lessen after childbirth [2, 3].

Menstrual cramps are triggered by prostaglandins, chemicals that cause the uterus to contract. Prostaglandin levels are higher just before menstruation begins, resulting in stronger contractions to help expel the uterine lining. As prostaglandin levels drop after menstruation starts, the cramping tends to ease over a few days [4].

REVIEW OF LITERATURE

- *Section 1.* Review of Literature Related to Dysmenorrhea.
- *Section 2.* Review of Literature Related to Ginger.
- *Section 3.* Review of Literature Related to Pelvic Rocking Exercise.

OBJECTIVES

- To find out the knowledge of pelvic rocking exercise and dry ginger powder among B.Sc. nursing student.
- To assess the attitude of Dysmenorrhea among B.Sc. nursing student.
- To evaluate effectiveness of plan teaching programmed some knowledge regarding pelvic rocking exercise and dry ginger regarding Dysmenorrhea among B.Sc. nursing student.

METHODOLOGY

This experimental study utilized a one-group pre-test and post-test research design. It was conducted among nursing students experiencing dysmenorrhea at the Government College of Nursing, Raipur, Chhattisgarh. Data collection spanned one month, and a purposive sampling technique was employed to select a sample size of 60 participants. The data collection tools included a demographic questionnaire and a self-structured questionnaire [5, 6].

DEVELOPMENT AND DESCRIPTION OF THE TOOL

Data collection tools are the methods or instruments used by researchers to observe or measure the key variables related to the research problem.

- *Section A:* Deal with Socio Demographic Variable.
- *Section B:* Deal with the Knowledge Related Questionnaire on Dry Ginger and Pelvic Rocking Exercise.
- *Section C:* Deal with the Attitude Questionnaire on Dysmenorrhea.

CRITERION MEASURE

There are 24 Questionnaires in the Data Collection Instruments. Each correct response scores 1 marks & wrong response 0 marks.

Knowledge Assessment Regarding Dysmenorrhea

The knowledge regarding dysmenorrhea was assessed using a total of 24 items. The scoring and categorization criteria are as follows (Table 1):

- *Poor Knowledge:* A score below 15, corresponding to 0%–35%.
- *Average Knowledge:* A score between 15 and 20, corresponding to 36%–69%.
- *Good Knowledge:* A score between 21 and 24, corresponding to 70%–100%.
- These categories help in identifying the level of awareness among participants based on their scores.

Attitude Assessment Regarding Dysmenorrhea

The attitude towards dysmenorrhea was measured using seven items. The responses were classified as follows (Table 2):

- *Correct Response:* A score ranging from 1 to 4, representing 0%–50%.
- *Incorrect Response:* A score ranging from 5 to 8, representing 51%–100%.

This classification provides insight into participants' attitudes based on their responses to the assessment items.

Table 1. There is total 24 items to assess knowledge regarding Dysmenorrhea.

S.N.	Criteria	Score	Percentage
1	Poor	Below 15	0%–35%
2	Average	15–20	36%–69%
3	Good	21–24	70%–100%

Table 2. There is total 07 items to assess Attitude regarding Dysmenorrhea.

S.N.	Criteria	Score	Percentage
1	Correct response	1–4	0%–50%
2	Incorrect response	5–8	51%–100%

RELIABILITY

According to Karl Pearsons "Reliability as The Extent to Which the Instruments the Same Result on Repeated Measures". The Reliability Co-Efficient Was Found 0.96.

PILOT STUDY

A pilot study is a smaller-scale version of a proposed study, designed to test and refine the methodology, including treatments, instruments, or data collection methods. In this case, the pilot study was conducted with B.Sc. Nursing students, following specific inclusion and exclusion criteria. On the first day, six students were selected using a probability purposive sampling method. The investigator then collected the data using a self-structured questionnaire. Pre-test was conducting by using a structure questionnaire and the student of B.Sc. nursing student was given 20 minutes to answer the question. A planned teaching program was conducted by researchers to evaluate its effectiveness in enhancing participants' knowledge about study. The researchers used a combination of experimental and inferential statistical methods to analyze the data collected during the study. To ensure the reliability of the knowledge questionnaire utilized as the assessment tool, the reliability coefficient was calculated using Karl Pearson's coefficient of correlation formula. The calculated value of "r" indicated that the tool designed to assess knowledge was reliable and suitable for the study [7–9].

The effectiveness of the teaching program was determined by comparing the mean scores of participants in the pre-test and post-test phases. The mean post-test score of 25.28 was significantly higher than the mean pre-test score of 15.36, demonstrating a substantial improvement in the participants' knowledge after undergoing the teaching program. This finding suggests that the planned teaching program was effective in achieving its educational objectives.

The study design and the assessment tool were found to be both feasible and practical for the purposes of the research. Based on this evaluation, the investigators determined that no modifications were necessary to either the study design or the tool. The research thus confirmed the efficacy of the planned teaching program and validated the reliability of the assessment method used [10].

DATA COLLECTION ANALYSIS

Instruments selected in research should as far as possible be a vehicle that would be the best obtaining data for drawing conclusion pertinent to study add to the body of knowledge in a discipline "for the study the technique for data collection was structured knowledge questionnaires and checklist for attitude".

DATA COLLECTION PROCEDURE

- A planned teaching program was held to educate participants about the use of dry ginger and pelvic rocking exercises for managing dysmenorrhea.

- Pretest on knowledge and attitude regarding Dysmenorrhea was conducted.
- A post test was conducted on 7th and attitude observed by using checklist.

PLAN FOR FINAL DATA ANALYSIS

Data would be analyzed using both one group pre-test and post-test pre-experimental and inferential statistics.

- Organizing data on a master sheet.
- Frequency and percentage of B.Sc. nursing student to describe sample characteristics.
- Total score percentage and standard deviation of the pre-test and post-test score.
- Calculating test to evaluate the effectiveness of the planned teaching programme on regarding dry ginger and pelvic rocking exercise on Dysmenorrhea.
- The data will be presented in tables and figures for clearer understanding.

RESULT

The assessment of knowledge level regarding dry ginger and pelvic rocking exercise on Dysmenorrhea revealed that the mean pre-test was 15.36 and standard deviation was 2.47 and mean post-test 25.28 and standard deviation was 2.16 this shows that with the application of planned teaching programmed knowledge level regarding dry ginger and pelvic rocking exercise on Dysmenorrhea and attitude regarding Dysmenorrhea in B.Sc. nursing student was improved there was significance difference between pre-test and post-test knowledge and attitude score regarding dry ginger and pelvic rocking exercise on Dysmenorrhea.

DISCUSSION

Knowledge of Respondent was Assessed Regarding Dry Ginger and Pelvic Rocking Exercise on Dysmenorrhea after the Post Test Scores 81% had Good Knowledge and 70% had Positive Attitude.

CONCLUSIONS

The assessment of knowledge level of students regarding dry ginger and pelvic rocking exercise on Dysmenorrhea revealed that mean pre-test 15.36 and standard deviation was 2.47 and mean post-test 25.28 and standard deviation 2.16.

Recommendation

A similar study can be replicated with a control group and on a larger population as an experimental study:

a. A study can be carried out to identify the educational needs of student's knowledge regarding dry ginger and pelvic rocking exercise on Dysmenorrhea and attitude regarding Dysmenorrhea.
b. Dry ginger and pelvic rocking exercise is important method to reduce severity of Dysmenorrhea among females and its treatment effectiveness over pharmacology.

Nurse should actively participate in conductive research to develop strategies to train the students regarding advance techniques and studies in reducing Dysmenorrhea.

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