



“Effectiveness of structured teaching programme on knowledge regarding selected home remedies for relieving dysmenorrhea among adolescent girls in selected higher secondary schools of district Ganderbal Kashmir”.

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ABSTRACT

Introduction: Dysmenorrhoea may begin soon after the menarche, after which it often improves with age, or it may originate later in life after the onset of an underlying causative condition. Dysmenorrhoea is common, and in up to 20% of women it may be severe enough to interfere with daily activities.

This study aims to evaluate the effectiveness of structured teaching programme on knowledge regarding selected home remedies for relieving dysmenorrhea among adolescent girls in selected higher secondary schools of district Ganderbal Kashmir.”

Material and Methods: A pre-test post-test design was adopted. The study was conducted on 79 adolescent girls of Government Higher secondary school Korhama Ganderbal, Government girls higher secondary Ganderbal and Government Higher secondary Nunar Ganderbal J&K (India), who were selected by stratified disproportionate Simple Random sampling technique. Data was collected by administering structured knowledge questionnaire. The content validity of the tool was established. The reliability of tool was established by testing the internal consistency by using Test - retest method.

Results: Result of study indicate that total among 79 subjects, (40.50%) of the study subjects had moderately adequate level of knowledge regarding selected home remedies for relieving dysmenorrhea, (59.50%) of subjects had inadequate level of knowledge and none of the subjects had adequate level of knowledge before administration of structured teaching program. Where as in post-test, majority of the subjects (68.36%) of study subjects had adequate, were as (31.64%) of the study subjects had moderate and none (0%) of the study subjects had inadequate knowledge. This shows

that there is improvement in knowledge after structured teaching program. The mean of pre-test knowledge score was (17.63%) which improved to (30.38%) in post-test ($p < 0.001$).

Conclusion: Structured teaching program improved the knowledge of adolescent girls regarding selected home remedies for relieving dysmenorrhea. Improvement in knowledge was assessed by taking post-test after 7 days. This study concluded that structured teaching program is effective tool to improve the knowledge of adolescent girls regarding home remedies for dysmenorrhea.

Key words

Structured teaching program – dysmenorrhea – Knowledge – adolescent girl

1. Introduction:-

Changes make life more beautiful and worth living, if one knows how to adopt oneself and adjust to the challenges presented by the situation, he or she can face any challenge in life. The changes are more frequent in girls than boys, girls mature earlier, reach the period of rapid growth earlier than boys. The rapid growth and change in the physical structure is after the attainment of puberty.

Adolescence is a time of moving from the immaturity of childhood into the maturity of adulthood. Period of life from puberty to adulthood is characterized by marked physiological changes, development of sexual feelings, efforts toward the construction of identity, and a progression from concrete to abstract thought¹

Many women experience menstrual problem especially adolescent girls. After the menarche the period may be irregular. . Systemic symptoms of nausea, vomiting, diarrhoea, fatigue, [fever](#), uterine cramps and [headache](#) are fairly common. The uterine cramps, also referred to as dysmenorrhea²

The word Dysmenorrhea is derived from the word “DYS” meaning difficult/ painful /abnormal, “MENO” meaning month and “rhea” Meaning flow. Approximately 50% of all women experience dysmenorrhea. More than 50% of teenagers are affected by Dysmenorrhea and 10% have severe symptoms. This study offers a unique contribution to our profession regarding home remedies of dysmenorrhea and its discomfort³

Dysmenorrhea is defined as difficult menstrual flow or painful menstruation. Dysmenorrhea is classified as primary or physiological and secondary or pathological. Primary dysmenorrhea is defined as menstrual pain not associated with microscopic pelvic pathology. Secondary dysmenorrhea is defined as menstrual pain resulting from anatomic and / or macroscopic pelvic pathology. This condition is most often observed in aged women⁴

The WHO estimated that 80% of the population in developing countries uses traditional treatment for their primary health care needs. Modern drugs and conventional medicine are often viewed as impersonal emphasizing crisis intervention, it is not only expensive but also bring side-effects which are sometimes more dangerous than the disease itself. However, remedies are the commonly used treatment for dysmenorrhea.⁵

Most of the woman's used home remedies for relieving the dysmenorrhea. Therefore, most of the home remedies for menstrual cramps are centred around dilating the blood vessels and easing the muscles. The home remedies for dysmenorrhea includes, hot application measures, exercise, diet, herbs and rest&sleep.⁶

2. Objectives of the study

- To assess the pre-test knowledge regarding selected home remedies for relieving dysmenorrhea among adolescent girls. (Before implementation of structured teaching programme).
- To assess the post-test knowledge regarding selected home remedies for relieving dysmenorrhea among adolescent girls. (After implementation of structured teaching programme).
- To compare the pre and post-test knowledge scores of adolescent girls regarding selected home remedies for relieving dysmenorrhea.
- To determine the association of pre-test knowledge score of adolescent girls with their selected demographic variables. (Age, education, monthly income, type of the family, place of residence and age at menarche and duration of menstrual cycle).

3. Hypothesis:

All hypotheses are tested at **0.05** level of significance.

H1: There is significant difference between the mean pre-test and post-test knowledge scores of adolescent girls regarding selected home remedies for relieving dysmenorrhea at $p \leq 0.05$ level of significance.

H2: There is significant association of pre –test knowledge scores of adolescent girls regarding selected home remedies for relieving dysmenorrhea with their selected demographic variables.

4. Materials and Methods

4.1 Research Approach: Quantitative research approach was used.

4.2 Research Design: study Pre-experimental one group pre-test post-test design was used.

4.3 Setting of the Study: The present study was conducted at Government Higher secondary school KorhamaGanderbal, Government girl's higher secondary school Ganderbal and Government Higher secondary school NunarGanderbal.

4.4 Population: Adolescent girls of Government Higher secondary school Ganderbal, Government Higher secondary school NunarGanderbal and Government Higher secondary school KorhamaGanderbal.

4.5 Sample: sample consists of 79 adolescent girls of Government Higher secondary school KorhamaGanderbal, Government girls higher secondary Ganderbal and Government Higher secondary NunarGanderbal. (In pre-test researcher selected 80 adolescent girls but in post-test one selected adolescent girl was not available that reduced the sample size from 80 to 79 and analysis was done only for 79 adolescent girls).

4.6 Sampling technique: In the present study stratified disproportionate Simple Random sampling technique was used to select the sample.

4.7 Development of tool for Data Collection: The tool for data collection had three sections – Section A, B, C

4.7.1 Section A: -It includes demographic variables of adolescent girls like age, education, income per month, type of family, place of residence, age at menarche and duration of menstrual cycle. It has 7 items.

4.7.2 Section B: -Structured knowledge questionnaire on menstruation and dysmenorrhea had 17 items .The subjects were instructed to tick (✓) the correct response .The scoring was done by allotting 1 mark to correct response and then count them.

4.7.3 Section C: -Structured knowledge questionnaire on home remedies for dysmenorrhea had 21 items. The subjects were instructed to tick (✓) the correct response .The scoring was done by allotting 1 mark to correct response and then count them.

(√) the correct response .The scoring was done by allotting 1 mark to correct response and then count them.

4.8 Validity of instrument:The prepared instrument along with objectives, blueprint, and answer key was submitted to panel of experts to establish content validity. These includes : Seven nursing experts (senior faculty members) from Madre -Meharban Institute of nursing Science And Research ,one nursing expert from nursing administration and one statistician from SKIMS Soura Srinagar and one gynaecologist.(DR.ShameemaParveen,HOD gyne and obst.) SKIMS Soura Srinagar Kashmir.

4.9 Reliability:The reliability of the tool was calculated by using test-re test method. In order to establish the reliability, tool was administered to 4 adolescent girls of Government higher secondary school Ganderbal at two different occasions. Scores obtained at two different occasions was compared and computed by using Karl Pearson s correlation coefficient.

4.10 Data collection procedure:

- The data collection was scheduled from 25th of May 2015 to 20th of June -2015. Before the data collection, the investigator obtained permission from the selected institutions, introduced her to the study subjects and explained the purpose of the study. Participants were assured of confidentiality and anonymity.
- The investigator introduced herself to the authority and explained the purpose of the study. All the concerned principals were co-operative along with other teaching and non-teaching staff.
- 79 adolescent girls were selected from selected higher secondary schools, (25, 27 and 27 from Government higher secondary school KorhamaGanderbal, Government girl's higher secondary school Ganderbal and Government higher secondary school NunarGanderbalrespectively).
- The investigator first approached to higher secondary school KorhamaGanderbal. 25 adolescent girls by stratified simple random technique were selected.09, 07 and 09 students were included for the study from the classes of 10th, 11th and 12th respectively. With the permission of the concerned teachers, all the selected students (25) were assembled in one class room. The purpose of the study was explained to each subject and a written consent was obtained from them. Pre-test was done by using a structured knowledge questionnaire to assess the pre-test knowledge regarding selected home remedies for dysmenorrhea. Pre-test along with intervention was carried on day 1.It took about 30-35 minutes for each adolescent to complete the knowledge questionnaire on pre-test.
- Intervention (Structured teaching programme) was carried with the help of power point presentation and blackboard. It took about 45- 50 minutes to give structured teaching programme on knowledge regarding selected home remedies for relieving dysmenorrhea.
- Post test was carried on 7th day by administering the same knowledge questionnaire to the adolescent girls. It took again 30-35 minutes to complete the knowledge questionnaire in post- test.
- Same procedure was repeated for other two selected higher secondary schools for all the adolescent girls (Government Higher secondary school Ganderbal and Government higher secondary school NunarGanderbal).
- Data collected was analyzed and tabulated by using both inferential and descriptive statistics.

4.11 Analysis of data:

Both descriptive and inferential statistics analyzed on the basis of the objectives and hypotheses of the study. Mean, median, range and standard deviation calculated. Paired test' was used to determine the significant difference between the pre-test and post-test knowledge scores. To determine the association of pre-test knowledge scores with the demographic variables of clients, chi test was used.

The findings were interpreted and presented with the help of tables and graphs. The level of significance was set at the conventional level of 0.05% to test the hypotheses.

5. Results:

The analysed data has been organized and presented in the following sections.

Section 1: distribution of study subjects according to demographic variables.

Section 2: distribution of study subjects by their pre-test and post-test knowledge score on selected home remedies for relieving dysmenorrhea.

Section 3: comparison of pre and post-test knowledge score of study subjects regarding selected home remedies for relieving dysmenorrhea.

Section 4: Association of pre-test knowledge score of study subjects with their selected demographic variable.(Age,educational status, monthly income, type of family, place of residence, age at menarche and duration of menstrual cycle).

SECTION I:

This section deals with the distribution of study subjects according to their demographic variables. The data obtained on the demographic variables are described in terms of age, educational status, income per month, type of family and place of residence, age at menarche and duration of menstrual cycle.

According to age: study subjects were categorized in two age groups, age ≤ 15 years and age > 15 years

- The data showed that majority of study subjects 54(68.4%) belonged to age group of >15 years and only 25(31.6%) of the study subjects belonged to the age group of ≤ 15 years.

According to educational status: study subjects were categorized into three classes i.e. 10th, 11th and 12th

- . Out of 79 study subjects, majority 29 (36.7%) of the study subjects were studying in class 12th, whereas 27(34.2%) of the study subjects were studying in 10th class and only 23(29.1%) of the study subjects were studying in class 11th.

According to monthly income: study subjects were divided into three group's i.e. monthly income of ≤ 5000 , 5,000-15,000 and monthly income of $>15,000$

- Most of the study subjects 52 (65.8%) had monthly income of $\leq 5,000$, whereas 12(15.2%) of the study subjects had monthly income of 5,000-15,000 and only 15(19.0%) of study subjects had monthly income of $> 15,000$.

According to type of family: study subjects were categorized into two groups i.e. Nuclear and joint

- Majority 46(58.2%) of study subjects were from nuclear family and 33(41.8%) of study subjects were from the joint family.

According to place of residence: study subjects were categorized under two headings i.e. urban and rural

- The data reveals that most 69(87.3%) of the study subjects were from rural area and only 10(12.7%) of the study subjects were from urban area.

Age at menarche: study subjects were categorized into three groups i.e. age between 11-12 years, 13-14 years and 15 years

- The data shows that majority 50(63.3 %) of the study subjects had attained their menarche at 13-14 years of age, where as 24(30.4 %) of the study subjects had attained their menarche at 11-12 years, and only 5 (6.3%) of study subjects had attained their menarche at the age of 15 years and above.

Duration of menstrual cycle: study subjects were categorized into three groups according to their duration of menstrual cycle

- The data depicts that majority 44 (55.7%) of the study subjects had duration of menstrual cycle for 3-5 days, where as 21(26.6%) of the study subjects had duration of menstrual cycle above 5 days and only 14(17.7%) of study subjects had duration of below 3 days of menstrual cycle.

SECTION II: Assessment of knowledge scores of study subjects regarding selected home remedies for relieving dysmenorrhea before and after implementation of structured teaching programme.

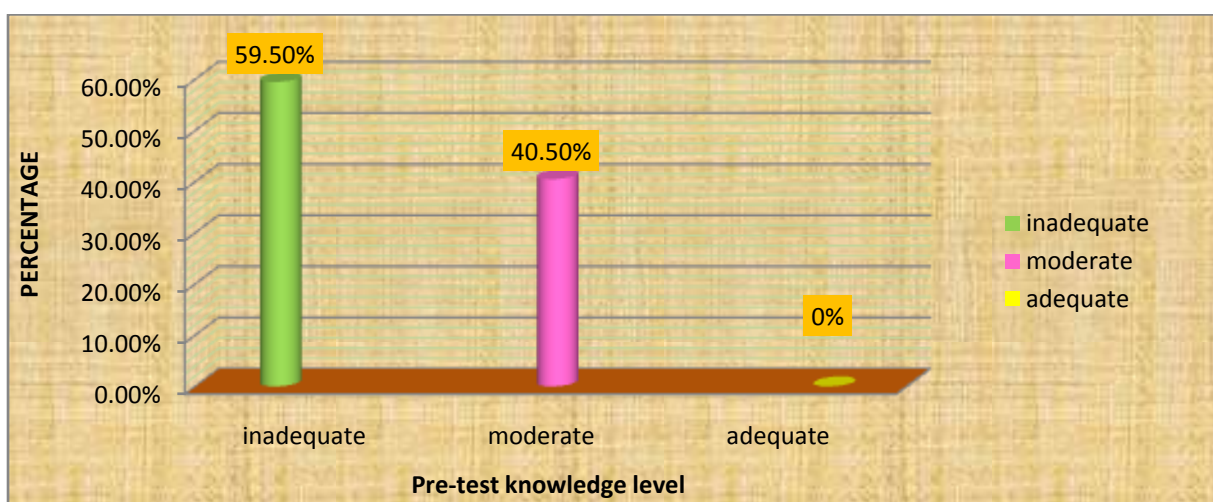


Figure 1:Pre- test knowledge score of study subjects on selected home remedies for relieving dysmenorrhea.

The data in the table 10 and figure 12 reveals the percentage distribution of study subjects in relation to their pre-test knowledge. The data reveals that in pre-test majority (59.50%) of the study subjects had inadequate knowledge, while as (40.50%) of study subjects had moderate knowledge and none of the study subjects had adequate knowledge regarding selected home remedies for dysmenorrhea.

SECTION III: Comparison of pre-test and post-test knowledge scores of study subjects on selected home remedies for relieving dysmenorrhea.

In pre-test majority (59.50%) of the study subjects had inadequate knowledge, were as (40.50%) of the study subjects had moderate knowledge and none of the study subjects had adequate knowledge, were as in post-test majority (68.36%) of study subjects had adequate, were as (31.64%) of the study subjects had moderate and none (0%) of the study subjects had inadequate knowledge. This shows that there is improvement in knowledge after structured teaching programme.

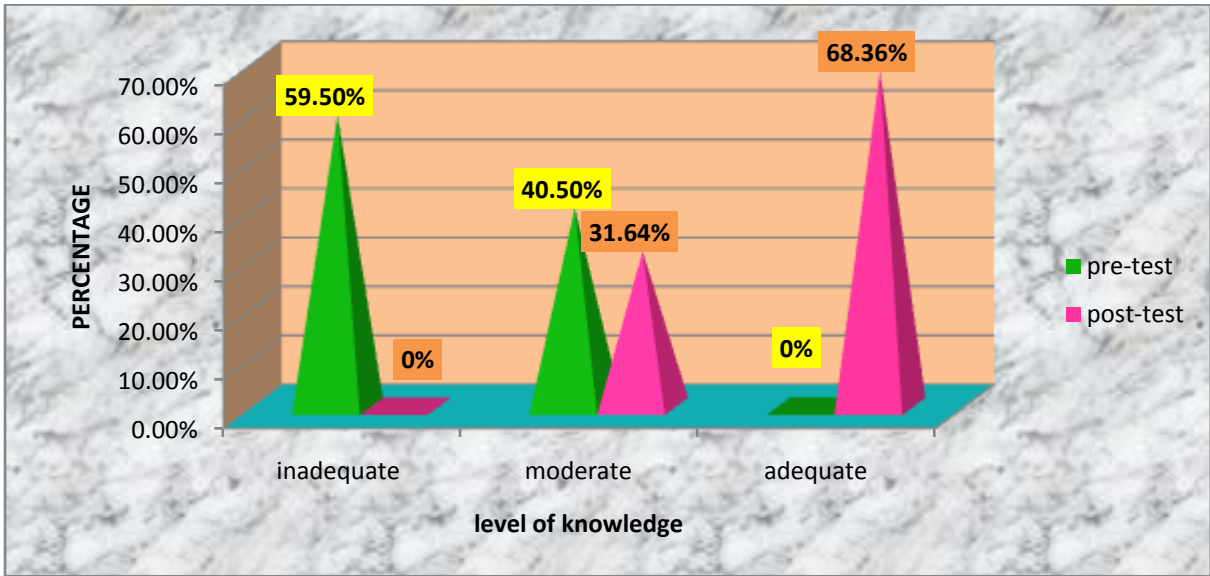


Figure 2: Bar diagram shows Percentage distribution of pre-test and post-test knowledge level of study subjects.

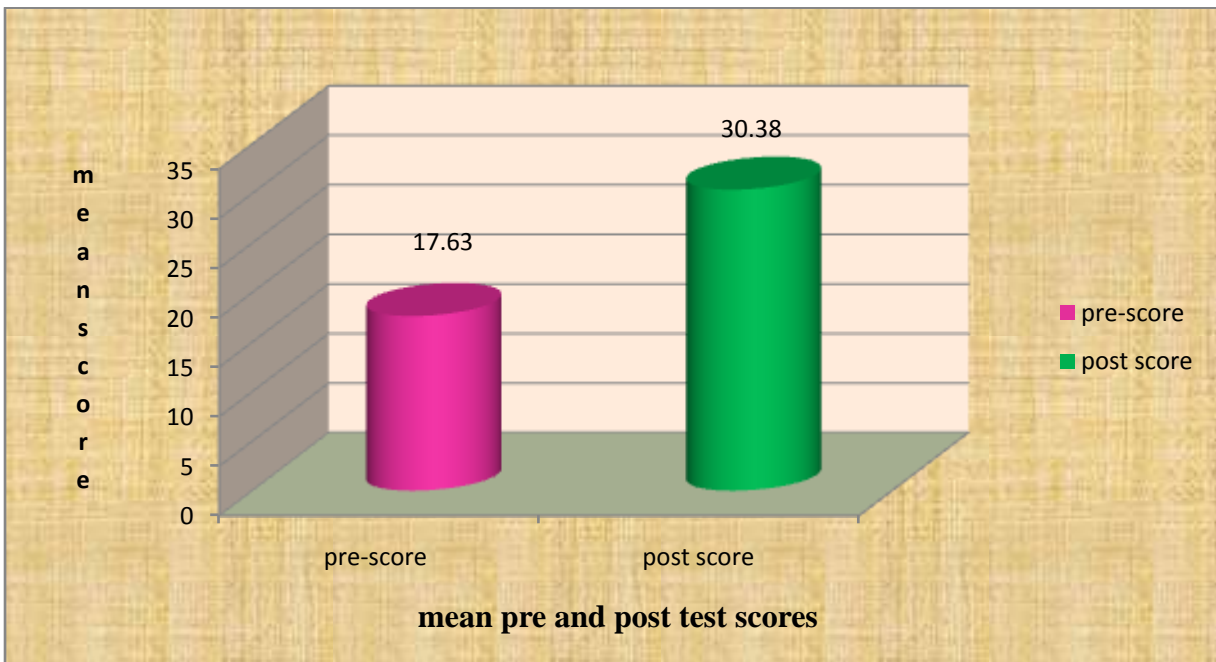


Figure 3: Diagram Showing Pre and Post Mean & SD score.

SECTION IV: Analysis and interpretation of data to find out an association of pre –test knowledge scores of study subjects regarding selected home remedies for relieving dysmenorrhea with their selected demographic variables.

Variables	Knowledge score Mean±S.D	Mean difference	P-value	Inference
Age in years <=15y >15y	14.96±3.272 18.87±3.582	3.91	<0.001	S
EDUCATIONAL STATUS 10 TH 11 TH 12 TH	15.07±3.931 18.48±3.691 19.34±2.794	3.41 4. 1	<0.001	S
INCOME PER MONTH (IN INDIAN RUPEES) <=5,000 5,000-15,000 >15,000	16.46±3.868 19.67±2.774 20.07±3.173	3.21 3.61 0.4	0.001	S
TYPE OF FAMILY Nuclear family. Joint family.	16.50±3.834 19.21±3.516	2.71	0.002	S
PLACE OF RESIDENCE URBAN RURAL	14.50±3.472 18.09±3.791	3.59	0.006	S
AGE AT MENARCHE 11-12 years 13-14 years. 15 and above.	15.38±3.657 18.54±3.600 19.40±3.715	3.16 4.02 0.86	0.002	S
DURATION OF MENSTRUAL CYCLE BELOW 3 DAYS 3-5 DAYS ABOVE 5 DAYS.	14.57±3.298 19.57±3.030 15.62±3.748	5 1.05 3.95	<0.01	S

S: (Significant at ≤ 0.05)

6. Discussion:

- While comparing the knowledge scores of subjects regarding selected home remedies for relieving dysmenorrhea among adolescent girls in selected schools of District Ganderbal Kashmir. The mean post-test knowledge scores (30.38 ± 2.984) of the study subjects on selected home remedies was significantly higher than that of the mean pre-test knowledge scores (17.63 ± 3.920) $t = 34.47, p < 0.05$. This indicated that structured teaching programme was effective in enhancing the knowledge of adolescent girls on selected home remedies for relieving dysmenorrhea.

The study findings are similar to the findings of a study conducted by Vattodi and D'Souza (2013)⁷ on effectiveness of structured teaching programme regarding home management for dysmenorrhea among adolescent girls in selected PU colleges at Mangalore, Karnataka. Pre-test was conducted by using structured knowledge questionnaire. After collecting data, structured teaching programme was administered on home management for dysmenorrhea. Analysis of pre-test knowledge revealed that (50.8%) of adolescent girls had moderate knowledge and none of them had adequate knowledge. Post-test was conducted on 7th day by using same questionnaire. Analysis of post-test knowledge revealed that (50.6%) of adolescent girls had adequate knowledge and none of them had inadequate knowledge. This shows that structured teaching programme was effective.

7. Conclusion:

Knowledge score of adolescent girls in different schools of district Ganderbal was found inadequate regarding selected home remedies for relieving dysmenorrhea in the pre-test. (40.50%) of the study subjects had moderately adequate level of knowledge regarding selected home remedies for relieving dysmenorrhea, (59.50%) of subjects had inadequate level of knowledge and none of the subjects had adequate level of knowledge?

There was evident increase in knowledge score of subjects after the implementation of structured teaching programme regarding selected home remedies for relieving dysmenorrhea. The mean of pre-test knowledge score was (17.63%) which improved to (30.38%) in post-test ($p < 0.001$).

The socio demographic variables Age, Educational Status, Income, type of family, place of residence, age at menarche, duration of menstrual cycle were found to have significant association with the pre-test knowledge score.

Structured teaching programme improved the knowledge of adolescent girls regarding selected home remedies for relieving dysmenorrhea. Improvement in knowledge was assessed by taking post-test after 7 days.

8. Acknowledgement

I express my gratitude and thanks towards all who have directly or indirectly helped me to complete this study and their support in each major step of the study

Limitations of the Study:

- As the study was conducted only on 79 adolescent girls which Imposed limits in generalization of findings.
- The study was limited to those adolescent girls who were studying in selected Schools of Ganderbal.
- The study was limited to the adolescent girls who were willing to participate in the study.

9. Recommendations:

Based on the results of the study, the following recommendations are proposed:

- ✓ Health education programs should be conducted on menstruation, dysmenorrhea and home management in schools, colleges and in all community settings.
- ✓ School health nursing should be promoted to create health awareness among young generation.
- ✓ Replication of the study can be conducted among other illiterate female groups in the community.
- ✓ A comparative study can be conducted to find out the knowledge difference between the students of private and government schools.
- ✓ A study can be conducted to find the prevalence rate of dysmenorrhea in a particular community.
- ✓ A similar study can be conducted on knowledge regarding home remedies for dysmenorrhea among staff nurses.

- ✓ A study can be conducted to find out the practices of adolescent girls regarding home management of dysmenorrhea.
- ✓ A quasi-experimental study can be conducted with control group.

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