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A Study to Assess the Effectiveness of Planned Teaching Programme on Benefits of Ginger Tea on Dysmenorrhea among Adolescent Girls Studying in High School of Bagalkot

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Abstract **Original Research Article**

***Background*:** Dysmenorrhea is a common problem which can alter the daily routines of females. Primary dysmenorrhea affects 40 to 90% women. Dysmenorrhea sufferers account for 3 among 4 women as per evidences. Traditional remedies are chosen to get some relief because of their least side effects. These remedies have a favorable effect in reducing dysmenorrhea. Ginger is used since ancient times as various forms of alternative medicine. One of the traditional uses of ginger is for pain relief, including menstrual pain. The aim of this study was to identify the effectiveness of ginger tea in dysmenorrhea. ***Methods*:** A Pre-Experimental research design, was used for present study. The sample for the study consists of 60 Adolescent girls, selected by convenient sampling technique method. Data was collected by self-structured questionnaires for sociodemographic variables, planned teaching programme and was used to assess the level of knowledge regarding dysmenorrhea. The data analysis done by using descriptive and inferential statistics. **Results:** Findings of the study revealed that 11(37%) of Adolescents girls were having Poor knowledge, followed by 17(57%) of Adolescents girls were having moderate knowledge and 2(7%) of Adolescents girls were having Adequate knowledge. Where as in the post test majority 1(3%) of Adolescents girls were having Poor knowledge, followed by 11(37%) of Adolescents girls were having moderate knowledge and .18(60%) of adolescents girls were having Adequate knowledge. Findings reveal that highest pre-test mean Standard deviation was 94.62+/-13.23 where a sign post-test 96.46 ± 13.44, mean difference was .4.93, then the calculated paired t test value was 7.152 and p value was <0.00001*. Hence its clearly despites that there is significant difference in between pre-test and post-test scores of highest at the level of significance p<0.05. Demographic variable education status has shown significant association with level of knowledge regarding dysmenorrhea among adolescent girls, where the the calculated chi-square value was 4.01 with df=1 p=0.045, and other socio-demographic variables are did not shown the significant association. ***Conclusion*:** The study shows that the Adolescent girls who studying in BVVS high school Bagalkot deal with moderate levels of knowlegde, which has a negative effect on their quality of life. Hence, it's important concern to adopt different strategies and programs to reduce dysmenorrhea and improve the knowledge regarding dysmenorrhea among adolescent girls.

Keywords: Knowledge, Dysmenorrhea, adolescent girls, ginger tea, Effectiveness, Planned teaching programme, Level of knowledge.

INTRODUCTION

Adolescent as the period of transition from childhood to adulthood. WHO has defined adolescence as the age group of 10 to 19 yrs in which menstruation is a normal physiological phenomenon. However this normal phenomenon is not an easy one. It is often associated with some degree of sufferings and embarrassment. Most of the adolescent girls experience one or other type of menstrual problems in her lifetime. The prevalence of menstrual disorders has been recorded as high as 87% [1]. Adolescence is characterized by a spurt in physical, endocrinal, emotional and mental growth, with a change from complete dependence to relative independence. The period of adolescence for a

girl is a period of physical and psychological preparation for safe mother hood. As direct reproducers of future generations, the health of adolescent girls influences not only their own health, but also the health of future population. Almost a quarter of India's population comprises of girls below 20 years [2]. Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. This transitional period marked with the onset of menarche, an important milestone. In 60-90% of adolescent girls, dysmenorrhea is a major cause for absenteeism from school or restriction of activities of daily living or social interaction [3]. Dysmenorrhea is one of the commonest complaints among women, but the exact incidence is difficult to estimate. Pain is a subjective symptom and cannot be accurately estimated by an outside observer, and different women may perceive pain with different severity and tolerance. Now it is estimated that almost 50 % of all women experience some degree of dysmenorrhea while 10% [4]. Dysmenorrhea results from the withdrawal of progesterone near the peak of a menstrual cycle; this withdrawal has been shown to extend the synthesis of prostaglandins F2 (PGF2) and E2 (PGE2). Awed et al.'s study suggests that prostaglandins are released during menstruation because of endometrial cell destruction. PGE2 stimulates uterine contractions and increases vasopressin release, which ends up in ischemia and pain [5]. Found that the prevalence of dysmenorrhea is mentioned in many studies, and it varies between 50% and 90%. Non-steroidal anti-inflammatory medications are the standard medication for dysmenorrhea and have many side effects, such as headache, giddiness, dysuria, fatigue, anorexia, vomiting, skin inflammation, and gastric ulcer. Many studies have shown that herbal medication pain relief is much more practical than chemical drugs, and Rosenwaks and Seegar-Jones's study [6].

MATERIALS AND METHODS

The present study is Pre- experimental design. A purposive sample of 60 Adolescent girls were selected from BVVS High school Bagalkot. Written consent was taken from participants for the study. Socio demographic variables were used as tool for data collection. The data was analyzed by using descriptive and inferential statistical in terms of mean, frequency, distribution, percentage, chi square and **Paired "t" test.**

Study Design: The study design adopted for this study was convenient sampling technique.

Setting of the Study: The present study was conducted at BVVS High school, Bagalkot.

Participants:

In the present study participant were Adolescent girls who are studying in the BVVS High school, Bagalkot and. who met the inclusion criteria were selected as sample for the study.

Instruments:

The study was conducted using a Structured Questionnaires with items related socio demographic data of Adolescent girls to assess the level of knowledge regarding dysmenorrhea, to measure knowledge regarding dysmenorrhea.

Description of data Collection Instruments

Part I: Questionnaires to assess socio-demographic data of adolescent girls.

PART II: Questionnaires to assess the knowledge regarding dysmenorrhea.

Data Collection Procedures:

The data collection was carried out from 24-10-2024 to 1-11-2024, among Adolescent girls who are studying in the BVVS high school Bagalkot. Permission was obtained from the Principal of Shri BVVS Sajjalashree institute of nursing sciences Bagalkot, and The Headmaster of Shri BVVS high school Bagalkot. Data was collected from Adolescent girls by explaining the purpose of this study. Written consent was obtained from the study participants. According to the convenience of Adolescent girls data was collected.

Sampling Technique:

Sampling is a process of selecting a part of the assigned population to represent the entire population. Convenient sampling technique was used to select the schools and simple random technique was used to select the study samples. In this study first researcher selected Bagalkot city, there are more than 20 schools in city. from that Schools researcher has selected one school ie; B.V.V.S High School of Bagalkot. Then researcher selected adolescent girls those who are studying in BVVS High School of Bagalkot and using convenient sampling technique. **Variable under study:** Study variable for the present study were the dysmenorrhea among Adolescent girls and the level of knowledge regarding dysmenorrhea among adolescent girls.

Dependant Variable: Knowledge regarding dysmenorrhea.

Independent Variable: Planned teaching programme.

Socio Demographic Variables: Age, Gender, Religion, Education, occupation, Type of family, dietary pattern, Monthly income of family.

Statistical Analysis:

The obtained data were statistically examined in terms of the objectives of the study using inferential statistics. A master sheet was prepared with responses given by the study participants. Frequencies Percentage was used for the analysis of demographic data, and

Paired t test to determine significance of difference between pre-test and post test score of pain among adolescent girls, and The Chi square(x^2) test to find out the association between socio demographic variables and post test level of pain among adolescent girls.

Ethical Approval: A certificate of ethical permission was obtained from ethical committee of the institution and written consent was taken from each participant.

RESULTS

A. Socio- Demographic Variables

In this study, Majority 19(63%) adolescent girls were in the age group of 14-15 years, Majority 29(97%) girls were studying in the 9th standard ,Majority 28(93%) girls were belongs to Hindu, Majority 19(63%) girls were belongs to nuclear family, Majority 14(47%) of fathers were Non formal education, Majority 11(37%) are mother Non formal education, Majority 14(47%) were having 5000-10000 rupees, Majority 7(23%) fathers are coolie. Majority 13(43%) mothers are others, Majority 16(53%) were mixed dietary pattern, Majority 18(60%) were living in urban, Majority 23(77%) were having no family history of dysmenorrhea followed. Majority 25(83%) don't seeks medical assistance to dysmenorrheal. Majority 19(63%) haven't done physical exercise.

Section II: Assessment of level of knowledge regarding dysmenorrhea among adolescent girls.

Table no.01: level of knowledge regarding dysmenorrhea among adolescent girls N =60

		Pre test		Post test	
Level of knowledge	Scores	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Poor	0-7	11	37%	1	3%
Moderate	8—15	17	57%	11	37%
Adequate	16—23	2	7%	18	60%

Table no.01 indicates that, in the pretest majority 11(37%) of Adolescents girls were having Poor knowledge, followed by 17(57%) of Adolescents girls were having moderate knowledge and 2(7%) of Adolescents girls were having Adequate knowledge. Where as in the post test majority 1(3%) of Adolescents girls were having Poor knowledge, followed by 11(37%) of Adolescents girls were having moderate knowledge and .18(60%) of adolescents girls were having Adequate knowledge.

Section III: Assessment of pretest and posttest knowledge scores among adolescent girls.

Table no.02: mean standard deviation and mean difference of pretest and posttest knowledge scores among adolescent girls N=60

Observation	Mean	Standard deviation	Mean diff	Standard deviation difference
Pre test	9.6	3.233446	4.9333333	0.982561
Post test	14.53333	4.216007		

***Significant P < 0.01, SD=Standard deviation**

In the pre test mean standard deviation of adolescent girls regarding knowledge on dysmenorrhea was 9.6±3.23 where as in post test mean standard deviation of adolescent girls regarding knowledge on dysmenorrhea was 9.6±3.23. Mean difference was 4.93 and standard deviation difference was 0.98.

Section IV: Evaluation of effectiveness of planned teaching Programme on dysmenorrhea.

Table NO.03: mean standard deviation and mean difference of of planned teaching Programme on dysmenorrhea N=60

observation	mean	standard deviation	mean diff	Standard deviation difference	% of effectiveness	paired t test value	p value
pre test	9.6	3.233446	4.9333333	0.982561	40.84%	7.152	<0.00001*
post test	14.53333	4.216007					
SD: standard deviation, *: significant at P<0.05							

S = significant.
NS = Not significant.
DF = Degree of freedom

The table no.03 Shows that highest pretest mean standard deviation was 94.62+13.23 where a sign posttest 96.46 ± 13.44, mean difference was .4.93, then the calculated paired t test value was 7.152 and p value

was <0.00001*. Hence its clearly despites that there is significant difference in between pretest and posttest scores of highest at the level of significance p<0.05.

Section V: Finding out the association between pre test level of knowledge among adolescent girls with their selected socio demographic variables

Table NO.04: Chi square value mean difference and p value of pre test level of knowledge among adolescent girls with their selected socio demographic variables N=60

Association between knowledge and sociodemographic variables					
sl no	**Sociodemographic variables**	**df**	**chI Square**	**p value**	**Interpretation**
1	Age in year	1	0.03	0.862	NS
2	Education	1	**4.01**	**0.045***	**S**
3	Religion	1	2.93	0.086	NS
4	Type of family	1	2.26	0.132	NS
5	Educational status of father	1	0.78	0.377	NS
6	Educational status of mother	1	3.28	0.194	NS
7	Family monthly income	1	0.22	0.639	NS
8	occupation of father	1	0.05	0.823	NS
9	Occupation of mother	1	1.09	0.296	NS
10	Dietary pattern	1	0.01	0.92	NS
11	Place of residence	1	0.36	0.58	NS
12	Family history of dysmenorrheal	1	3.44	0.063	NS
13	Medical assistance for dysmenorrhea	1	2.34	0.31	NS
14	Physical exercise	1	0.02	0.887	NS
Df: Degree of freedom, *: significant at P<0.05, NS: Not significant S: significant					

S = significant.
NS = Not significant.
DF = Degree of freedom.

The table no.04 shows that the Findings of the study shown that demographic variable education status has shown significant association with level of knowledge regarding dysmenorrhea among adolescent girls, where the calculated chi-square value was 4.01 with df=1 p=0.045, and other socio-demographic variables are did not shown the significant association.

DISCUSSION

The findings of the present study are discussed in light of previous scientific studies in this chapter and discussion regarding findings of the study is presented in accordance with the objectives of the study and hypothesis. The current study aims at evaluating the benefits of ginger tea on reduction of dysmenorrhorea among adolescent girls studying in BVVS high school Bagalkot. The study found that the there is benefits of ginger tea during the dysmenorrehea among the adolescent girls. Finding of the present study shows that level of knowledge among adolesent girls in pre-experimental group depicts that majority 11(37%) of Adolescents girls were having Poor knowledge, followed by 17(57%) of Adolescents girls were having moderate knowledge and 2(7%) of Adolescents girls were having Adequate knowledge. Where as in the post test majority 1(3%) of Adolescents girls were having Poor knowledge, followed by 11(37%) of Adolescents girls were having moderate knowledge and .18(60%) of adolescents girls were having Adequate knowledge [7].

The present study results are support with a pre-experimental was conducted at BVVS HIGH school Bagalkot. Total 60 students were selected by using convenient sampling technique. Written consent was taken from participants of study menstrual profile were used as tool for data collection. Finding of my study shows that Majority 11(37%) of Adolescents girls were having Poor knowledge, followed by 17(57%) of Adolescents girls were having moderate knowledge and 2(7%) of Adolescents girls were having Adequate knowledge. Where as in the post test majority 1(3%) of Adolescents girls were having Poor knowledge, followed by 11(37%) of Adolescents girls were having moderate knowledge and 18(60%) of adolescents girls were having Adequate knowledge.

Findings of study supported and compared with study conducted by. **SATEESH** and its health-seeking behavior. Out of 100 respondents, only 6% had adequate knowledge whereas 59% had adequate knowledge and 35% had poor knowledge regarding dysmenorrhea and its health-seeking behaviour [8] Finding of the study shows that pre test mean Standard deviation of adolescent girls regarding knowledge on dysmenorrhea was 9.6±3.23 where as in post test mean Standard deviation of adolescent girls regarding knowledge on dysmenorrhea was 9.6±3.23 mean difference was 4.93 and standard deviation difference was 0.98.Findings of study supported and compared with study conducted by [9].

Findings of the study shown that demographic variable education status has shown significant association with level of knowledge regarding dysmenorrhea among adolescent girls, where the the calculated chi-square value was 4.01 with df=1 p=0.045, and other socio-demographic variables are did not shown the significant association [10].

Hence **H2 is accepted** for the demographic variable education and it depicts that there is significant association with level of knowledge regarding dysmennorhea among adolescent girls.

Limitations

The study limited to the sample of 60 adolescent girls studying in BVVS High school of Bagalkot, were Assessment of dysmenorrhoea among adolescent girls and Adolescent girls aged between 12 to 16 years.

Recommendations:

1. A comparative study can be conducted to assess the benefits of ginger tea with other alternative therapies for dysmenorrhea.
2. An exploratory study can be conducted to identify the causes of dysmenorrhea.
3. Similar study can be conducted with large sample size to generalize the findings.
4. A study can be conducted to assess the attitude of adolescent girls about ginger tea for the management of dysmenorrhea.

CONCLUSION

The main focus of this study was to assess the benefits of ginger tea on reduction of dysmenorrhorea among adolescent girls studying in bvvs high school bagalkot the data was collected from 60 adolescent girls. The study proved that administration of ginger tea on reduction of pain among adolescent girls was very effective, scientific, logical, and cost-effective strategy.

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