



“A Study To Assess The Effectiveness Of Self Instructional Module On Knowledge Regarding Management Of Dysmenorrhea Among The Adolescent Girls In Selected Colleges Of Udupi District, Karnataka”

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Abstract: Dysmenorrhea is a painful menstruation that is characterized by pain that occurs shortly before the onset or during the menstrual flow persisting for one to several days during the menstruation. Dysmenorrhea (period pain) affects around three-quarters of adolescent girls under the age of 25 worldwide. An evaluate approach with pre experimental one group pretest posttest design was used to evaluate the effectiveness of self-instructional module on knowledge regarding management of dysmenorrhea among the adolescent girls in selected colleges. The objectives of the study were to assess the knowledge regarding the management of dysmenorrhea among adolescent girls, to evaluate the effectiveness of a self-instructional module on knowledge regarding the management of dysmenorrhea among adolescent girls and to determine the association between pre-test knowledge scores regarding the management of dysmenorrhea among adolescent girls and selected demographic variables. . Total 60 adolescent girls were selected by purposive sampling technique. The data was collected by using structured knowledge questionnaire on management of dysmenorrhea and was analysed by using descriptive and inferential statistics. . The result of the study reveals that during the pretest majority, 54 (90%) adolescent girls had poor knowledge levels and 6 (10%) had moderate knowledge of management of dysmenorrhea. During the post-test majority of 38 (63%) gained excellent knowledge and 22 (37%) got good knowledge. Area-wise analysis of pretest and posttest knowledge of adolescent girls regarding management of dysmenorrhea shows that the overall pretest knowledge mean was 9.33 with a mean percentage of 31% and the posttest knowledge mean was 28 with a mean percentage of 85%. The variables such as age, gender, religion, educational qualification, occupation, marital status, place of residence, type of diet, family history, duration of illness and source of information does not show any significant association.

Index Terms - Dysmenorrhea, Self-Instructional Module.

I. INTRODUCTION

Dysmenorrhea can be translated as “difficult monthly flow”. Although it’s normal for most women to have mild abdominal cramps on the first day or two of their periods, about 10% of women experience severe pain.¹ Dysmenorrhea is a painful menstruation that is characterized by pain that occurs shortly before the onset or during the menstrual flow persisting for one to several days during the menstruation. Because of this problem, many young adolescent girls are absent from school and disturbed in their daily activities. Dysmenorrhea is a common problem among adolescent girls.²

Dysmenorrhea (period pain) affects around three-quarters of adolescent girls under the age of 25 worldwide. Primarily dysmenorrhea is defined as menstrual pain in the absence of underlying pathology and is the most common cause of dysmenorrhea in adolescent girls under the age of 25. In addition to painful cramps, many women with dysmenorrhea experience other menstrual-related symptoms including back and thigh pain, headaches, diarrhea, nausea, and vomiting. Dysmenorrhea or its associated symptoms often results in a reduction in classroom performance and increases absenteeism at school and tertiary education. Despite this negative impact, most young women frame period pain as part of being women, a common theme across varying geographic and ethnic boundaries.³

The prevalence of dysmenorrhea in adolescent girls was found to be 79.67%, most of them 37.96% suffered regularly from dysmenorrhea severity. The three most common symptoms present on both days, that is the day before and the first day of menstruation were lethargy and tiredness(first), depression(second), and inability to concentrate at work(third). The home remedies for dysmenorrhea include hot application, exercises, diet, herbs and rest and sleep. Dysmenorrhea is the leading cause of short-term school absenteeism. It is associated with a negative impact on the social, academic, and sports activities of many female students.⁴

The management of dysmenorrhea is multifaceted and depends on the severity of the problem and individual women’s responses. In addition to drug therapy, other management includes nutritional supplements, acupressure, warm application, massage, yoga, and aerobic exercises. Significant home care treatment helps to reduce the pain of dysmenorrhea. These measures are more effective than medication and give pain relief benefit.⁵

Many research studies state that medical and nonmedical remedies used in pain are the best treatment for cramps. There is substantial heterogeneity in forest plots and the statistic was 98%. Socioeconomic losses and perceived quality of losses are more prevalent among girls in urban areas than girls in rural areas.⁶

A descriptive cross-sectional study was conducted 389 schoolgirls on their menstrual experiences. It shows that used negative words like “disgusting”, “painful”, “bad”, “I hate it”, “It's hard”, “depressing”, “like a disease”, “tiring”, “I wish I never had it”, “ridiculous”, “like a virus”, “embarrassing” and others . The findings indicate that dysmenorrhoea is higher among the girls having negative menstrual experiences. This shows that even though menstruation is a blessing most of the girls are not able to perceive it and consider it as a curse for throughout their life due to the pain associated with it.⁷

A cross-sectional study was conducted in ten randomly selected private and government high schools. The Study reveals that percentage of students who experienced menstrual pain with micturition or defecation. None of the participants reported the use of hormonal agents. The unexpectedly high number of female adolescents who reported symptoms of primary dysmenorrhea necessitating treatment, as well as subsequent school absenteeism, calls for the implementation of a screening questionnaire for early detection of persistent primary dysmenorrhea. Moving from surgical to clinical diagnosis of endometriosis can contribute greatly to improving the quality of life.⁸

II. CONCEPTUAL FRAMEWORK

A conceptual framework is a theoretical approach to the study of problems that are scientifically based, which emphasizes the selection, arrangement and classification of its concepts. The conceptual framework states functional relationships between events and is not limited to statistical relationships. The concepts are taken from a general system model by Ludwig Von Bertalanffy (1969). According to General System Theory, “science of wholeness and its purpose is to unite scientific thinking across the discipline, and which provide a framework for analyzing the whole of any system”. The General System Theory consists of a set of interacting components within a boundary that filters the type and rate of exchange within the environment.

In all the systems activity can be resolved into an aggregation of feedback circuits such as

- Input
- Throughput
- Output

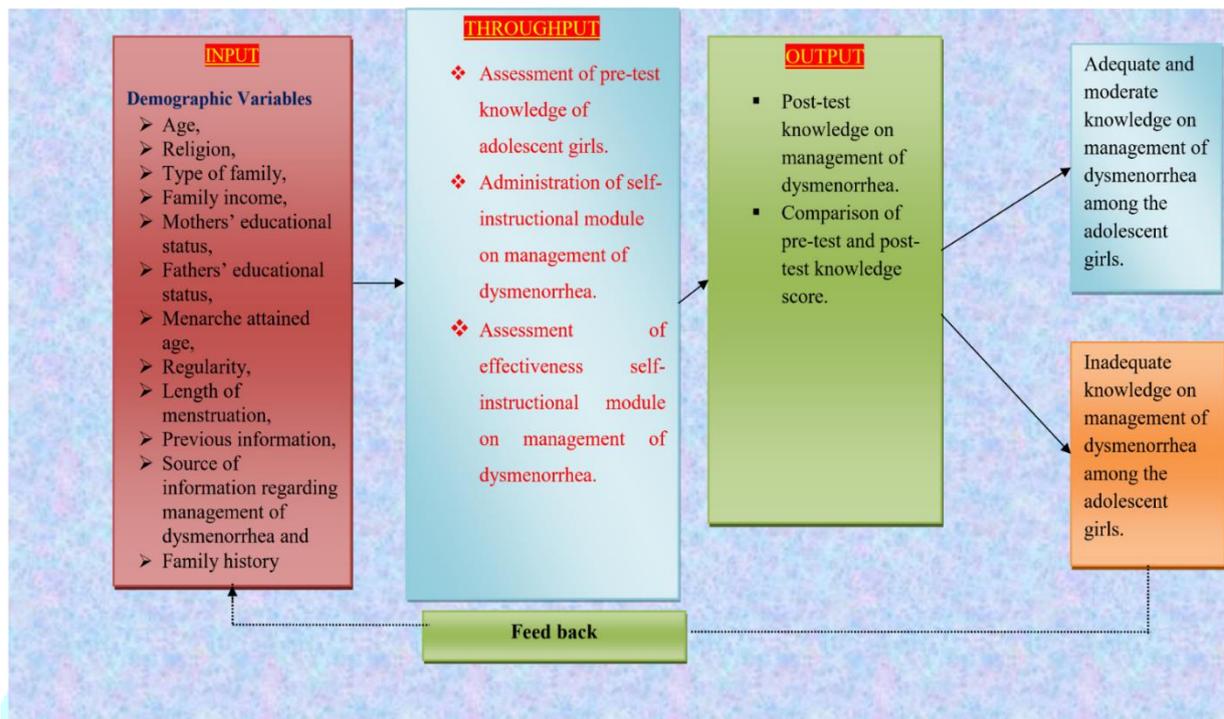


Figure 1: modified conceptual frame work of general system theory modelled by ludwig von bertalanffy (1969)

.....not included in the study

III. MATERIALS AND METHODS

Pre-experimental one group pretest posttest design with evaluative approach was used in this study to assess the effectiveness of self-instructional module on knowledge regarding management of dysmenorrhea among adolescent girls. In the view of nature of the problem and accomplish the objectives of the study, a structured knowledge questionnaire was prepared to assess the effectiveness of self-instructional module on knowledge regarding management of dysmenorrhea and 60 adolescent girls were selected by purposive sampling technique. The tool for data knowledge questionnaire which consist of two parts. First part (A) consist of consists of 12 questions related to selected demographic variables. And the second part (B) consists of structured knowledge questionnaire which was consisting 29 questions on management of dysmenorrhea. The stability of the tool is found to be 0.82 and internal consistency found to be 0.89; which indicate the tool is stable and reliable, and feasible. The total possible score of the structured knowledge questionnaire was 29. The data was collected and tabulated in MS Excel and analysed with descriptive and inferential statistics using IBM SPSS Version 22.

IV. RESULT AND DISCUSSION

The demographic variables of adolescent girls concerning age, religion, type of family, family income, mother's educational status, father's educational status, menarche attained age, regularity, length of menstruation, previous information, source of information regarding the management of dysmenorrhea and family history.

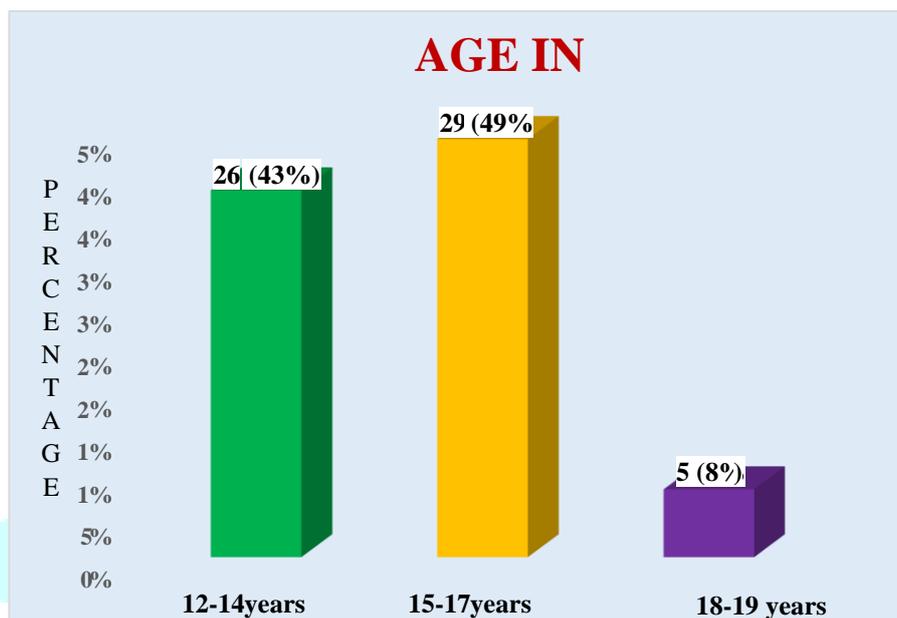


Figure 2: shows that the majority of subjects 29 (49 %) belonged to the age group of 12-14 years, then 26 (43 %) belonged to the age group of 15-17 years and 5 (8 %) were 18-19 years.

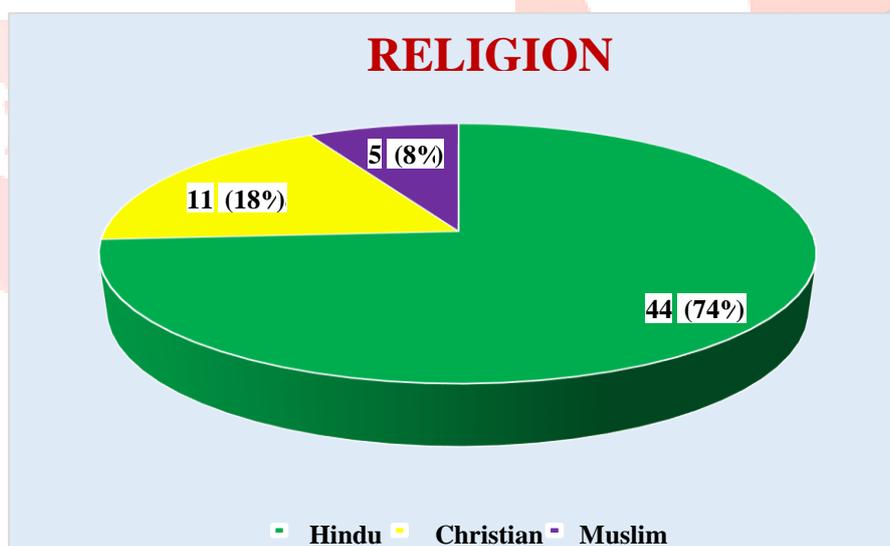


Figure 3: shows that among the sample 44 (74%) of the samples were Hindu, 11 (18%) were Christian, and the remaining 5 (8 %) were Muslim.

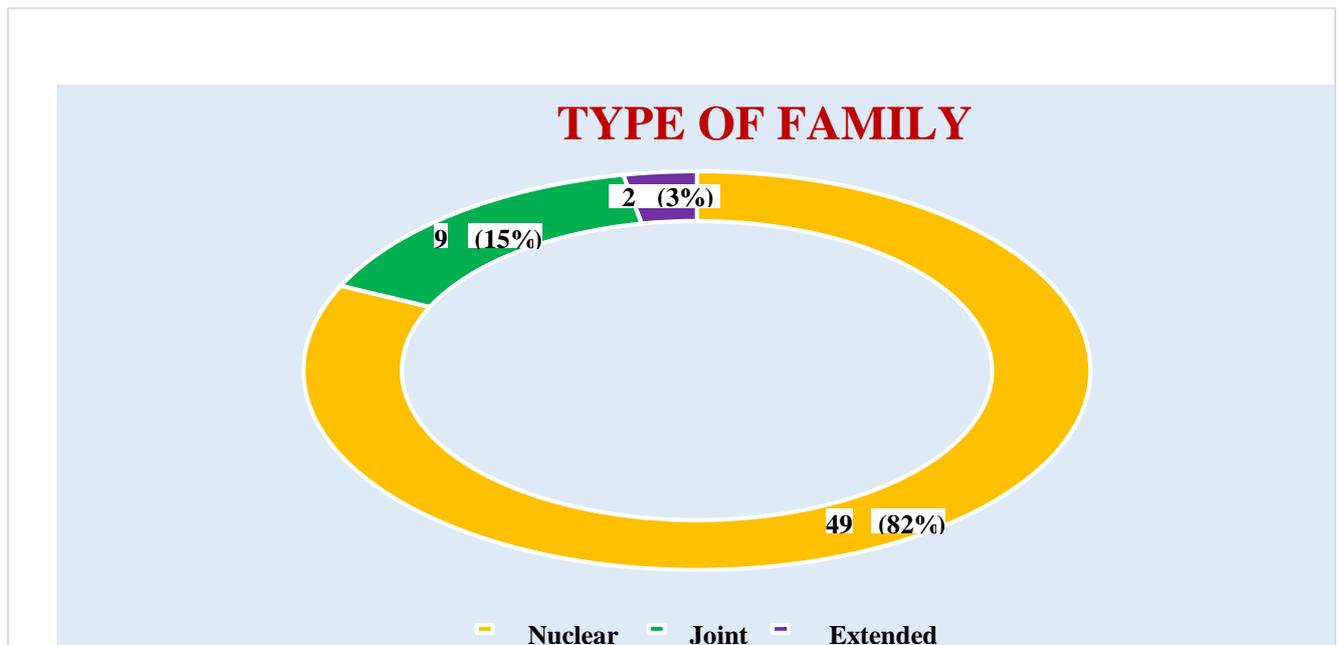


Figure 4: shows that the majority of the 49 (82%) were residing in a nuclear family, 9 (15%) were residing in a joint family and 2 (3%) were residing in extended family.

n=60

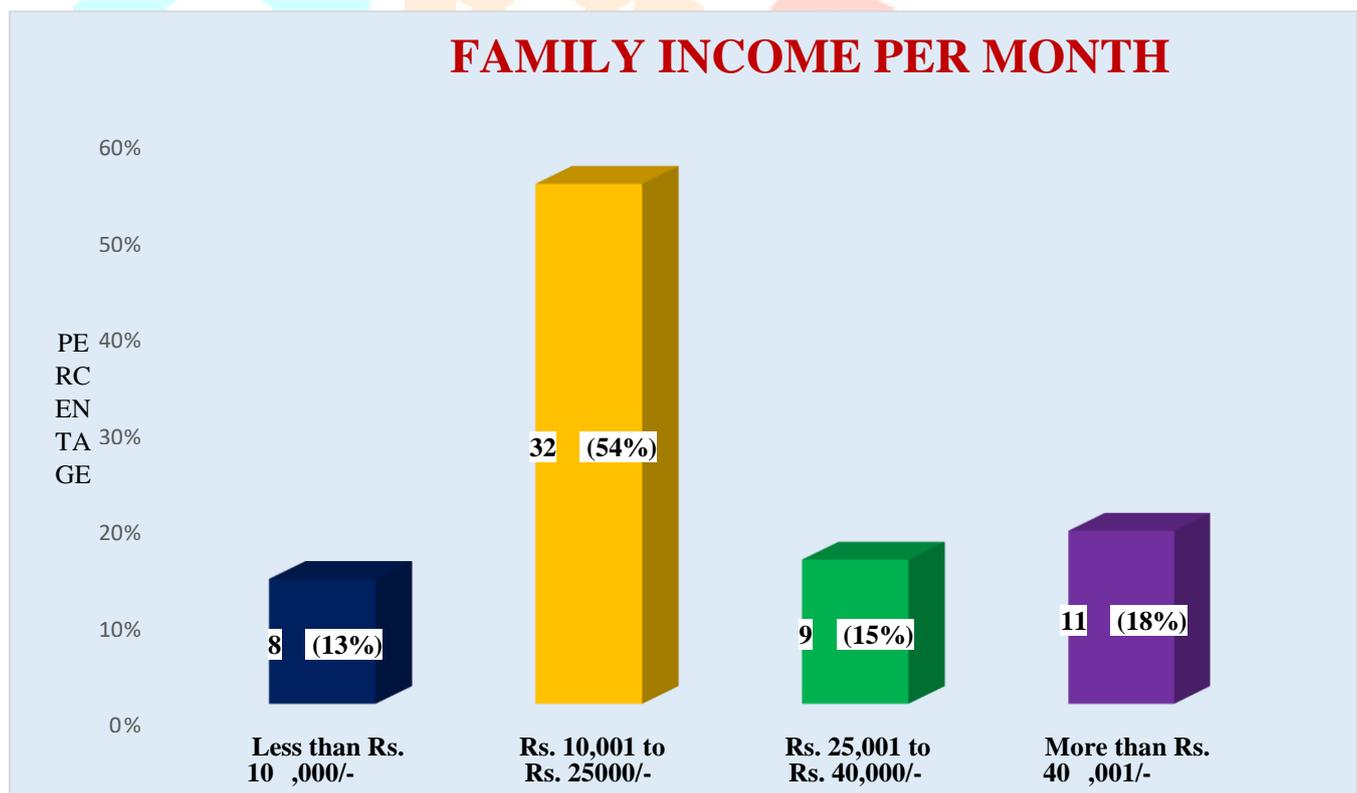


Figure 5: shows that the majority of the 32 (54%) had Rs. 10,001-25,000/- monthly income, 11 (18%) had more than Rs. 40,001/-, 9 (15%) had Rs. 25,001 to 40,000/- and only 8 (13%) had less than Rs. 10,000/-.

n = 60

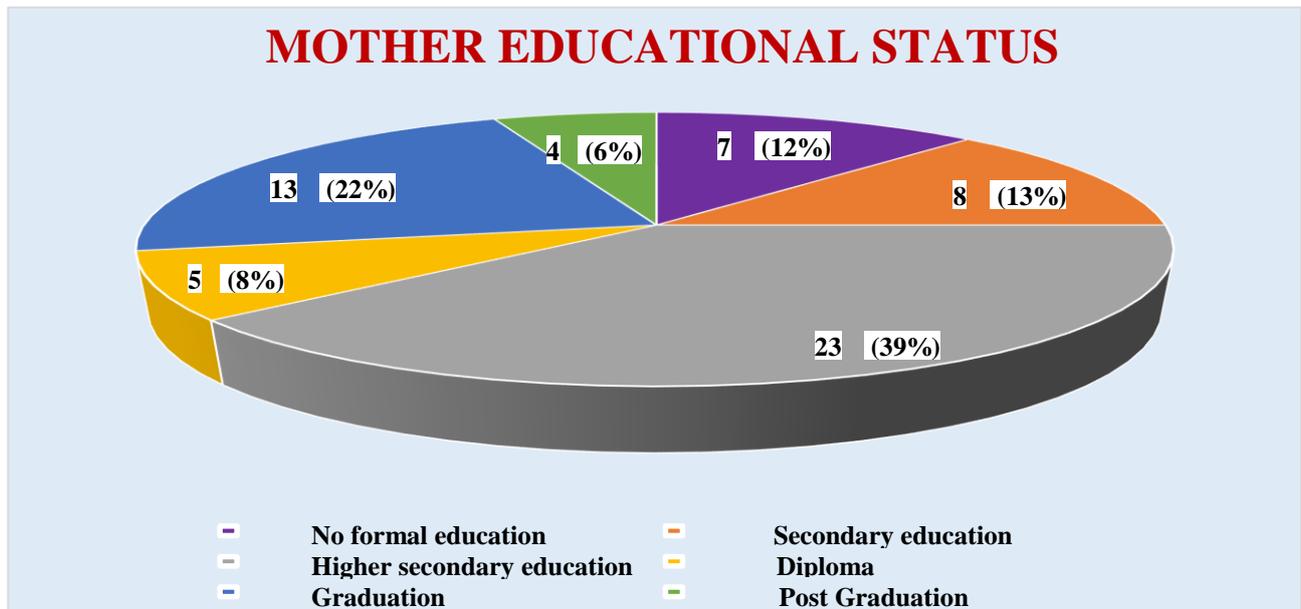


Figure 6: shows that the majority of the 23 (39%) had higher secondary education, 13 (22%) had graduation, 8 (13%) had secondary education, 7 (12%) had no formal education, 5 (8%) had diploma and 4 (6%) had post-graduation.

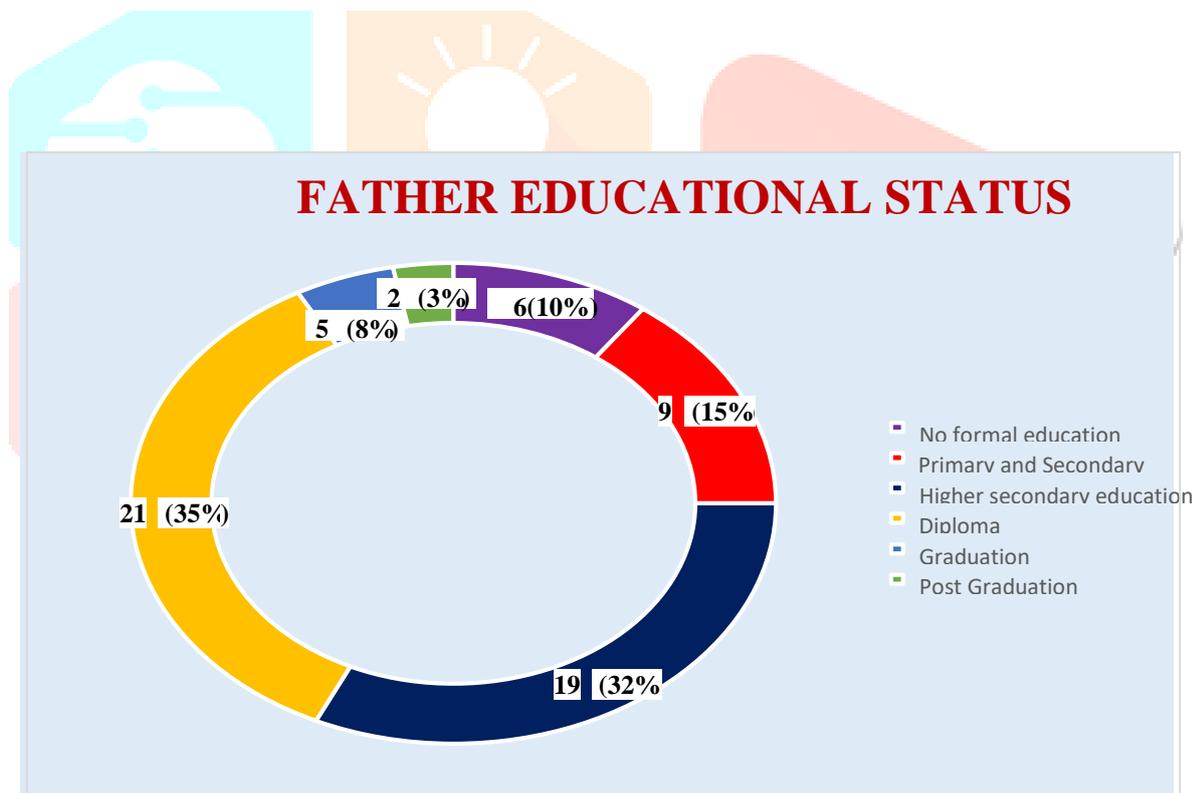


Figure 7: shows that the majority of the 21 (35%) had a diploma, 19 (32%) had higher secondary education, 9 (15%) had secondary education, 6 (10 %) had no formal education, 5 (8%) had graduation and 2 (3 %) had post-graduation

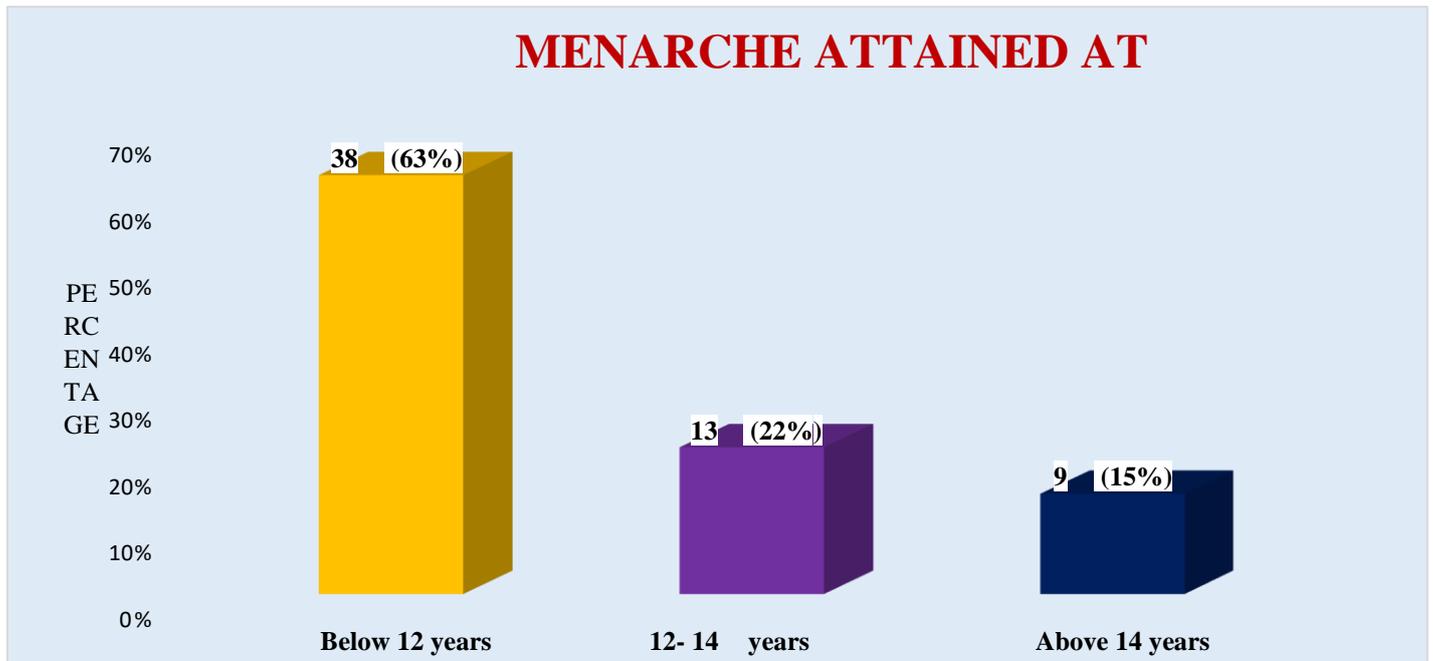


Figure 8: shows that the majority of the 38 (63%) got menarche at the age of below 12 years, 13 (22%) at 12-14 years, and 9 (15%) above 14 years.

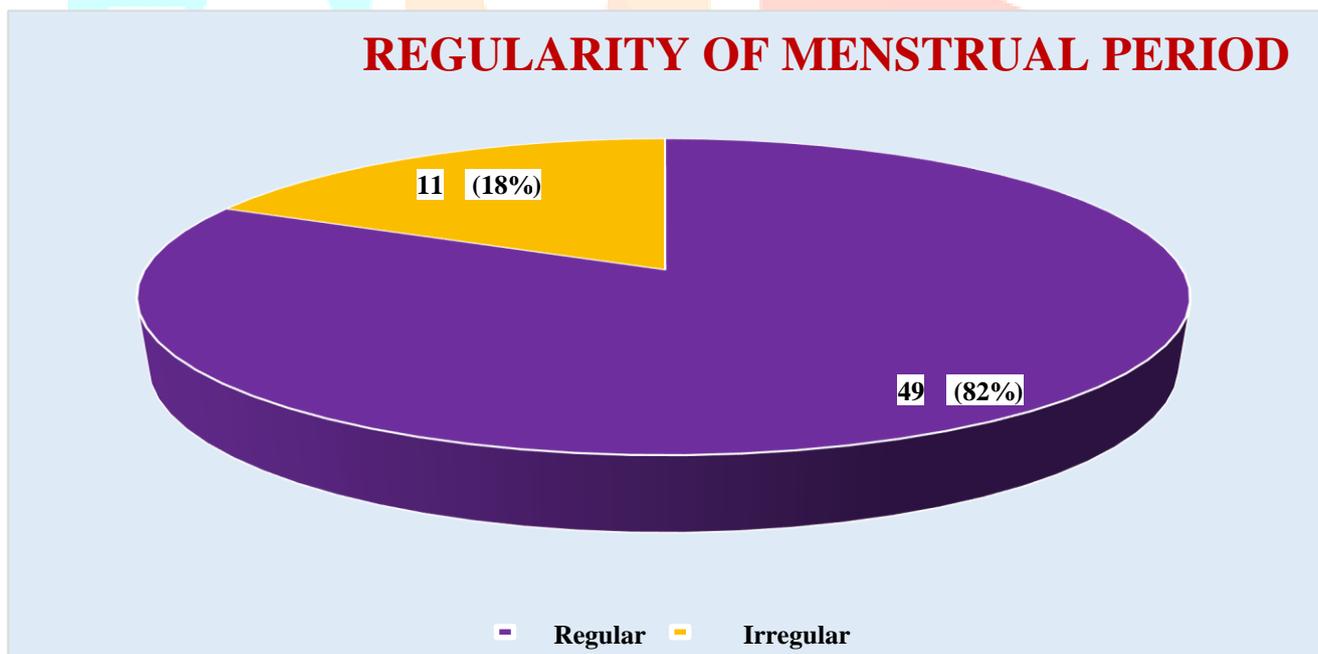


Figure 9: shows that the majority of the 49(82%) had regular menstrual periods and 11(18%) had irregular periods

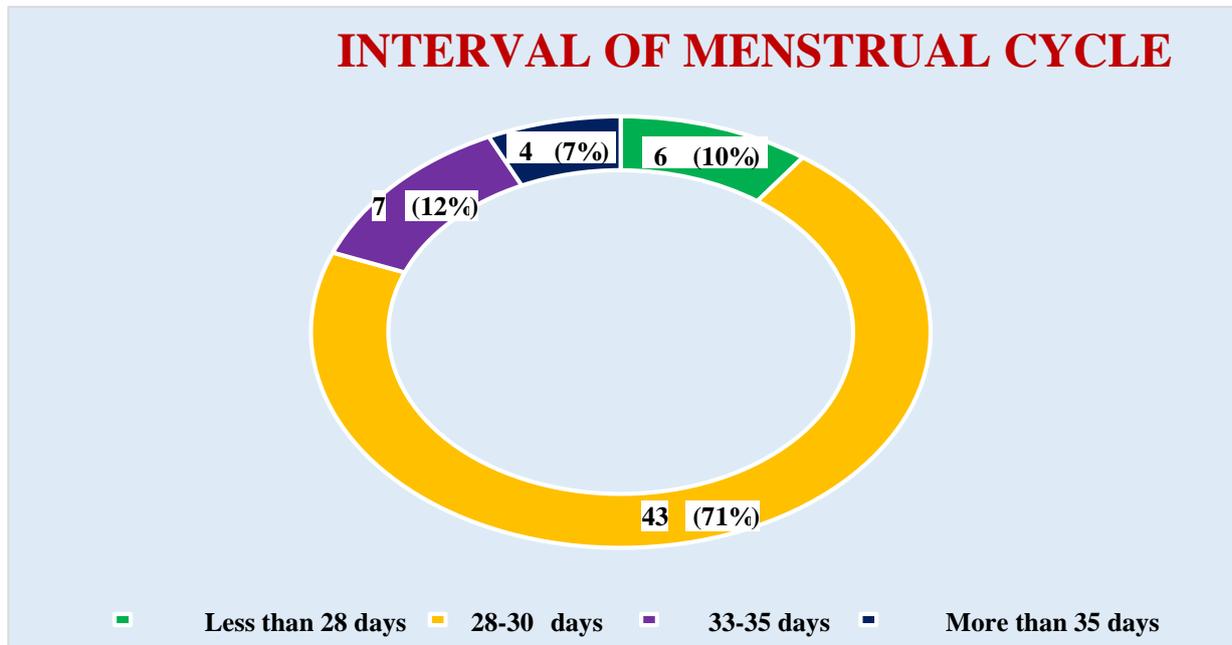


Figure 10: shows that the majority of the 43 (71%) were 28-30 days, 7 (12%) 33-35 days, 6 (10%) less than 28 days and only 4 (7%) got more than 35 days.

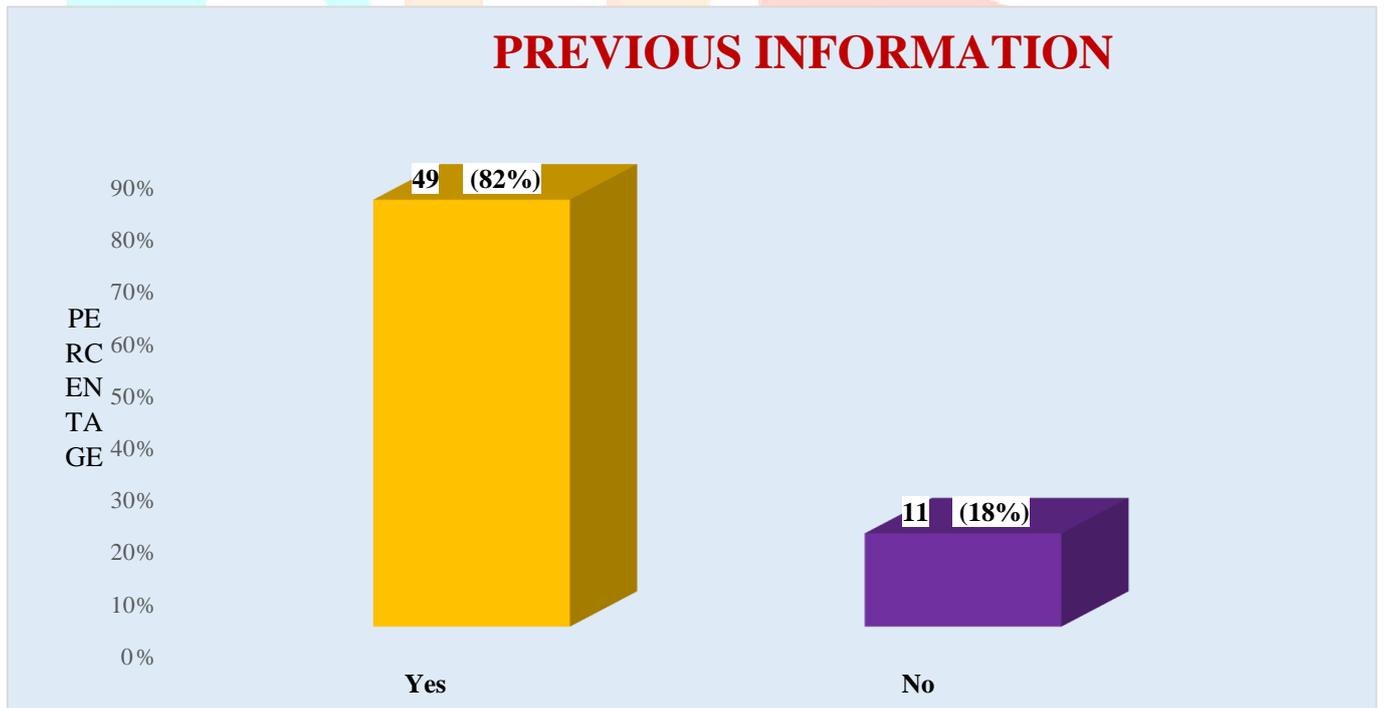


Figure 11: shows that the majority of the 49 (82%) had information about dysmenorrhea and 11 (18%) did not have information about dysmenorrhea.

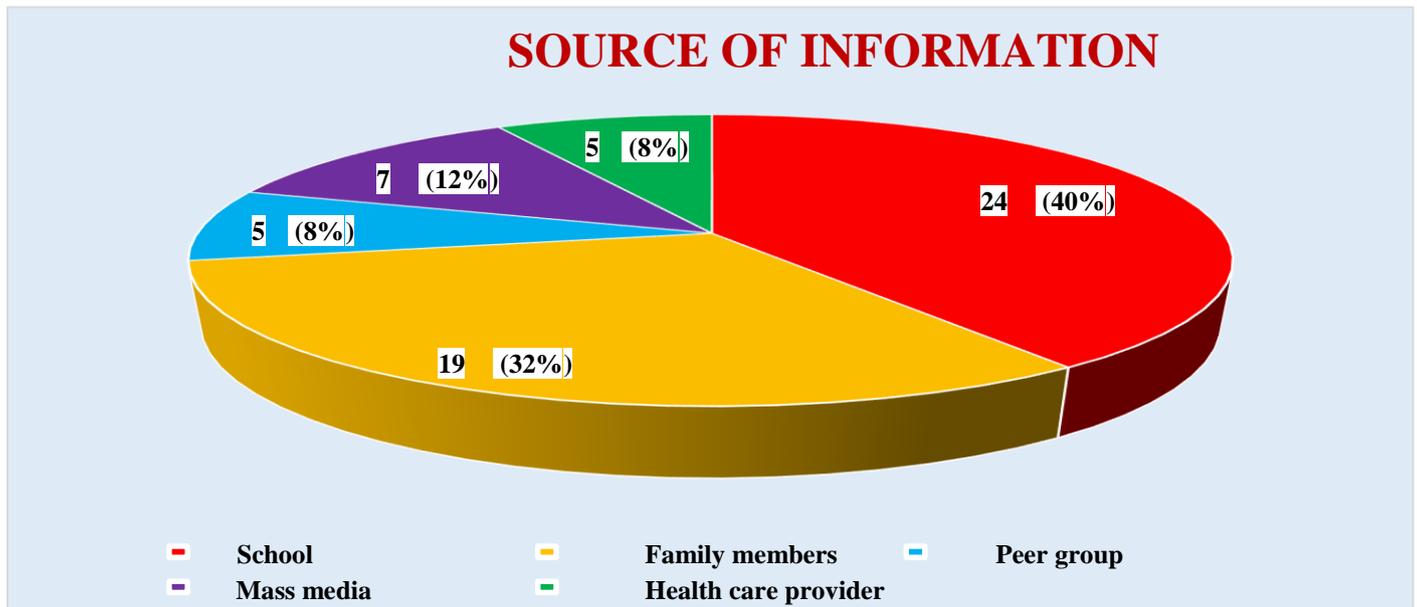


Figure 12: shows that the majority of the 24 (40%) got information from school, 19 (32%) family members, 7 (12%) got information from mass media and 5 (8%) got information from peer groups and health care providers.

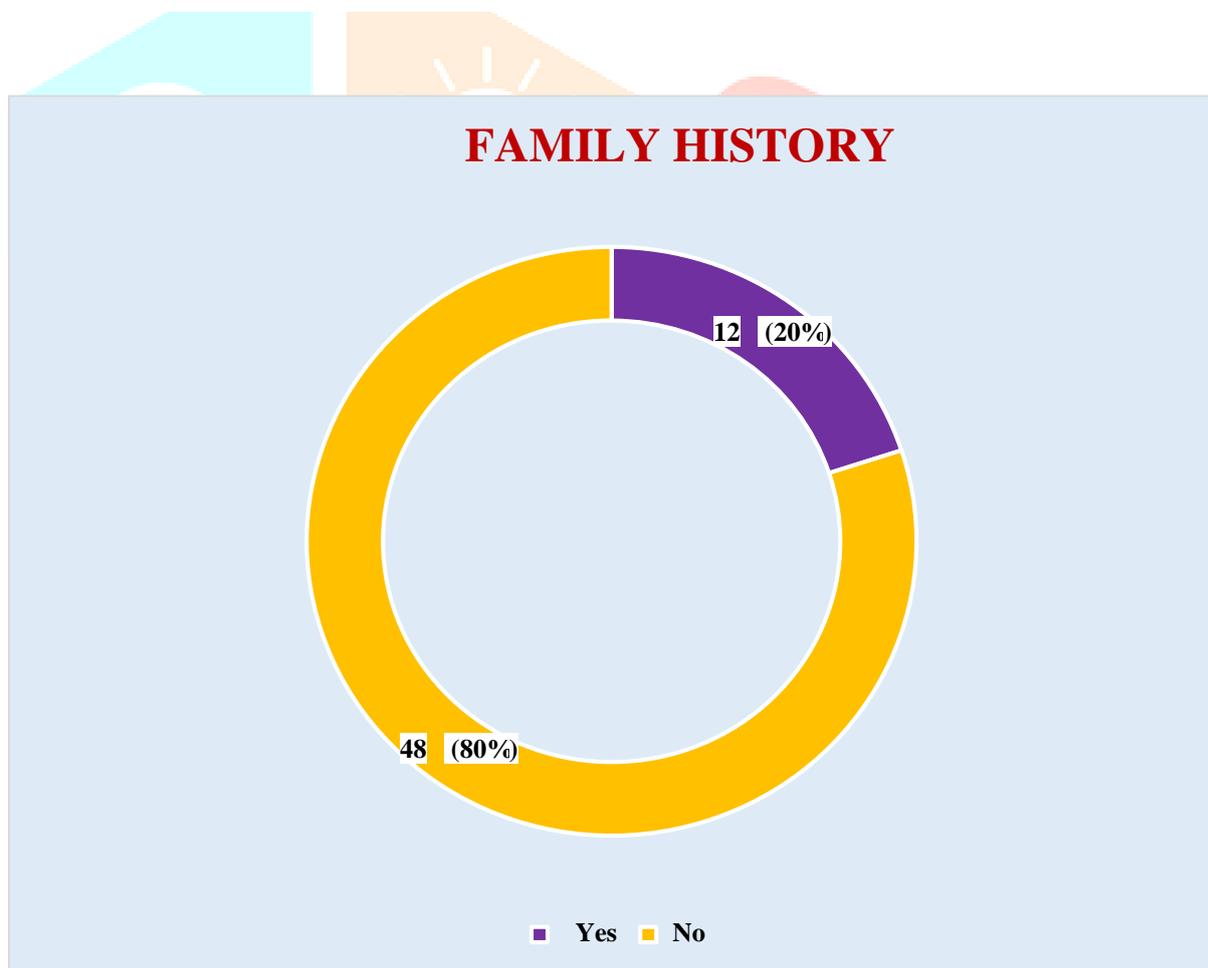


Figure 13: shows that the majority of the 48 (80%) did not have a family history and only 12 (20%) had a family history of dysmenorrhea.

Table 1: shows that 22 (37%) adolescent girls had good knowledge and 38 (63%) had excellent knowledge on management of dysmenorrhea.

Sl. No	Overall knowledge	Frequency (f)		Percentage (%)	
		Pre Test	Post Test	Pre Test	Post Test
1	POOR	54	00	90 %	00 %
2	MODERATE	06	00	10 %	00%
3	GOOD	00	22	00%	37%
4	EXCELLENT	00	38	00%	63%
TOTAL		60	60	100%	100%

Table 2: shows area-wise analysis of pretest and posttest knowledge of adolescent girls regarding management of dysmenorrhea

Sl. No	Area	Max. score	Mean		Mean percentage	
			Pre	Post	Pre	Post
1	Meaning and Definition	05	1.98	3.92	40	79
2	Causes & Risk Factors	03	0.78	2.44	26	81
3	Clinical manifestation	03	0.6	2.62	20	87
4	Anatomy & physiology	01	0.41	0.89	41	89
5	Management	21	5.56	18.2	26	87
Total		33	9.33	28	31	85

Table 3: Association of pretest level of knowledge with selected demographic variables

Sl.NO	Demographic Value	Chi-Square Value	Df	P Value	Significance
1	AGE IN YEARS	3.101	1	0.211	NS
2	RELIGEON	0454	1	0.796	NS
3	TYPE OF FAMILY	1.234	1	0.539	NS
4	FAMILY INCOME PER MONTH	1.666	1	0.644	NS
5	MOTHER'S EDUCATIONAL STATUS	0.461	1	0.977	NS
6	FATHER'S EDUCATIONAL STATUS	2.611	1	0.624	NS
7	MENARCHE ATTAINED AT	0.467	1	0.791	NS
8	REGULARITY OF MENSTRUAL PERIOD	0.445	1	0.504	NS
9	INTERVAL OF MENSTRUAL CYCLE	0.941	1	0.815	NS
10	PREVIOUS INFORMATION	0.445	1	0.504	NS
11	SOURCE OF INFORMATION	1.385	1	0.846	NS
12	FAMILY HISTORY	0.75	1	0.386	NS

The data gathered were summarized in the master sheet and both descriptive and inferential statistics were used for analysis and interpretation of the findings. The analysis and interpretation of the data focuses on the results of the study. The findings revealed that there was no significant association between existing practices and demographic variables.

V. LIMITATIONS OF THE STUDY

- The study is done only on 60, adolescent girls. Hence generalization is possible only for the selected participants.
- The study was confined to adolescent girls studying in the selected college, Udupi.
- Only knowledge was considered in the present study.
- The study was conducted in one college, which restricts the generalization.

VI. RECOMMENDATIONS

- A similar study may be conducted on a larger sample spread over a community in different areas.
- A study can be conducted among adolescent girls in different aspects of health promotion.
- A study can be conducted among adolescent girls to explore the knowledge, attitude, and practices regarding the management of dysmenorrhea.
- A comparative study can be conducted to compare the knowledge and practices of rural and urban areas.
- A similar study can be replicated on a large sample to generalize the findings.
- A similar study can be conducted in different settings.
- A study can be conducted to assess the effectiveness of innovative teaching methods.

VII. REFERENCES

1. Rashmi Barua. Adolescence – A Period That Really Matters.2008. Available from: ezinearticles.com
2. Aggarwal K, Kannan AT, Puri A, Sharma S. (1997). Dysmenorrhea in adolescent girls in rural area of Delhi. Indian journal of public health. 41(3):84- Retrieve from <http://www.popline.org/node/279139>.
3. Armour, M., Parry, K., Al-Dabbas, M.A., Curry, C., Holmes, K., MacMillan, F., Ferfolja, T. and Smith, C.A., 2019. Self-care strategies and sources of knowledge on menstruation in 12,526 young women with dysmenorrhea; A systematic review and metanalysis. Plos one, 14(7), p.e0220103
4. Armour M., Parry K., Manohar N., Holmes K., Ferfoljia T., Curry C., et.al 2019. The [revelence and academic impact of dysmenorrhea in 21,573 young women: a systematic review and metanalysis. J women's health (Larchmt). Epub 2019/06/07. <http://doi.org/10.1089/jwh.2018.7615> PMID:31170024
5. Down CS. Textbook of gynaecology, contraception and demography. 14th edition. Kolkata. Dawn books;2003
6. Wong CL, Farquhar C, Roberts H, Proctor M. 2009. Oral contraceptive pill for primary dysmenorrhea. Cochrane database Syst Rev. (4): CD002120.Epub 2009/10/13. <http://doi.org/10.1002/1465858.CD002120.pub3> PMID;1921293
7. Amal Al Mulla, Ghassan Lotfi. Prevention of dysmenorrhea among female adolescent in dubai: 2022:12(8);101.
8. Thusharie Sukanandhika Suresh. Knowwledhe and attitudes towards dysmenorrhea among adolescent girls in an urban school Srilanka. Nursing and health services. 15(1).58-64.