Research Article

Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Home Remedies in Reducing Dysmenorrhea Among Adolescent Girls Studying at MMINSR SKIMS, Soura

Danishta Malik[1], Munira Kachroo[2], Khurshida Akhtar[3]

[1] M.Sc Nursing Student, Mader-E-Meharban Institute of Nursing Sciences and Research, SKIMS, SOURA, Srinagar, Jammu and Kashmir.
[2] Principal and Guide, Mader-E-Meharban Institute of Nursing Sciences and Research, SKIMS, SOURA, Srinagar, Jammu and Kashmir.
[3] Tutor and Co-guide, Mader-E-Meharban Institute of Nursing Sciences and Research, SKIMS, SOURA, Srinagar, Jammu and Kashmir.

I N F O

Corresponding Author:
Danishta Malik, M.Sc Nursing Student, Mader-E-Meharban Institute of Nursing Sciences and Research, SKIMS, SOURA, Srinagar, Jammu and Kashmir.
E-mail Id:
danishtamalik1997@gmail.com
How to cite this article:
Malik D, Kachroo M, Akhtar K, Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Home Remedies in Reducing Dysmenorrhea Among Adolescent Girls Studying at MMINSR SKIMS, Soura. Ind J Holist Nurs. 2023;14(4):28-35.

A B S T R A C T

The study was conducted with the aim to assess the knowledge of adolescent girls regarding home remedies in reducing dysmenorrhea so that awareness programme could be formed to make adolescents girls aware about it.

Title of the study: "A study to assess the effectiveness of video assisted teaching programme on knowledge regarding home remedies in reducing dysmenorrhea among adolescent girls studying at MMINSR SKIMS, Soura Srinagar."

Objectives: To assess the pre-test and post-test knowledge of adolescent girls regarding home remedies in reducing dysmenorrhea, to compare the pre-test and post-test knowledge scores and to find the association between pre-test knowledge scores and their selected demographic/clinical variables (age, residence, type of family, fathers education, fathers occupation, mothers education, mothers occupation, age at menarche, duration of menstrual periods, type of menstrual flow, pattern of menstrual cycles, whether a case of dysmenorrhea).

Methodology: Pre experimental one group pre-test post-test design was used in the present study on 50 B.Sc. Nursing 3rd semester and 2nd year female students of MMINSR, SKIMS, selected by purposive sampling technique. A Self-structured questionnaire was used to collect data. Pre-test was conducted on day one followed by the administration of intervention on the same day using video assisted teaching programme regarding home remedies in reducing dysmenorrhea. Post-test was conducted on day four.

29

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

Results

Findings related to demographic and clinical variables.

The findings of the present study revealed that Majority (80%) of the study subjects were in the age group of <22 years. Maximum (68%) of subjects belonged to rural areas. Majority (84%) number of study subjects belonged to nuclear families. About half (48%) of the study subjects had fathers' educational status of graduation and above. Maximum (60%) of the subjects had their father's occupation as Government employees. About half (50%) of the study subjects had mothers with primary education. Majority (88%) of the mothers of study subjects are homemakers. Maximum (72%) of the study subjects attained menarche before age of 14 years. About half (54%) of study subjects had menstrual periods lasting for 3-5 days. Maximum (74%) of the study subjects were having moderate menstrual periods. Majority (84%) of the study subjects were having regular menstrual periods Half (42%) of the study subjects complained of dysmenorrhea

Findings related to knowledge level: On pre-test scores, maximum (64%) of the subjects had poor knowledge, whereas only 36% had average knowledge and none of the study subjects had good knowledge. On posts test scores all (100%) of the subjects had good knowledge and none of the subjects had poor or average knowledge.

Keywords: Knowledge, menarche, Dysmenorrhea, Video Assisted Teaching programme, Adolescent girls, Heat application, Ginger tea, Turmeric milk.

Introduction

Life is a cycle from birth to death. Todays adolescent is yesterdays girl and tomorrow's mother. In a woman's journey of life, many important changes occur, mainly at adolescent stage. It is a period of development and transition of childhood into adolescence. The significant events include development of secondary sexual characteristics and menarche along with lots of physical and psychological stress resulting from changes taking place in the body[1].

Adolescent girls are subjected to certain social problems like academic challenges, facing difficulties with social interactions, low self-esteem and psychological conditions such as depression, anxiety, mood swings and physical problems like Endocrine disorders, urinary tract infections, iron deficiency and menstrual abnormalities. One of the major common problems is the menstrual problems which constitutes around 78% of the total issues faced by adolescent girls.[2]

One fifth of the world's population includes adolescent girls. Whose reproductive health needs are poorly understood, adolescents often have poor knowledge regarding reproductive changes, sexuality, and a very little access to reproductive health services [3].

Menarche is the normal, regular menstruation lasting for few days, 2 to 8 days being considered as normal. The terms "menstruation" and "menses'' are derived from the Latin word menses (month), which in turn refers to the Greek mene (moon) and roots of the English word's month and moon. It is the regular discharge of blood along with mucosal tissue from the innermost lining of the uterus through the vaginal canal. A single menstrual cycle is measured from the first day of the period to the first day of the next period. The average length of a menstrual cycle is 28 to 29 days, but every woman has a different cycle[4].

Menstrual period is usually painless but some females experience pain and cramps during menstruation when it is called as dysmenorrhea. Dysmenorrhea, also known as period pain, painful periods or menstrual cramps, is the pain experienced during menstruation. Its usual onset occurs around the time of menstruation. Symptoms usually last less than three days. The pain is felt in the pelvis or lower abdomen. Most of the females face a certain amount of pain or cramps during periods which is normal. However, if the cramps become extremely strong it is called dysmenorrhea. Younger females are prone to experience more cramps. Dysmenorrhea accounts for one of the most common gynaecological conditions, regardless of age or race. It is one of the most frequently identified aetiology of pelvic pain in menstruating females. Dysmenorrhea can occur without an underlying disease. Typically, dysmenorrhea begins within one year of the first Menstrual period in the absence of any underlying cause. Often the pain improves with age or following childbirth, but this does not always occur.[4]

The outcomes of untreated dysmenorrhea are loss of work hours, college hours and personal family disruption. Therefore, dysmenorrhea not only affects the untreated women but also affects their personal, social, family and economic issues as well.[2]

A desire to be free from menstrual pain is an everlasting wish in the minds of females. Menstrual cramps don't have a set pattern or same intensity every month. Irrespective of the severity, the uneasiness associated with it makes those few days difficult.[1]

Dysmenorrhea is medically managed by many ways to reduce painful menstrual cramps. The most common remedy adapted universally, to get instant pain relief, is by taking non-Steroidal anti-inflammatory drugs (NSAIDS) which included drugs like aspirin, brufen, naproxen, etc. These reduce the pain by prostaglandin inhibiton. But common side effects include nausea, severe diarrhoea, dyspepsia, flatulence, etc. These are also costly and it is also not recommend to continue for long duration. Alternative

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

30

method is particularly important for women showing adverse effects to medical therapy and may be beneficial as complementary therapy. Therapies such as acupuncture, massage, exercise and some home remedies have been used to manage pelvic pain. There are several home remedies to reduce menstrual cramps and its associated symptoms. Usually, women start using these remedies few days before the cycle starts and continue till it ends. These are totally natural and do not result in any unwanted side effects.[1]

Most of the women use home remedies for relieving dysmenorrhea and most of these are centred around dilation of blood vessels and relaxing the muscles. These are more effective than medication and provide pain relieving benefits [3].

A variety of folk medicines has been used in India to treat minor disorders such as dysmenorrhea. Among various folk medicines ginger and turmeric are known to have outweighing benefits[2].

Need For the Study

Everyday women of all age groups, through the changes of life experience many kinds of pain like, premenstrual syndrome, dysmenorrhea and labour. Dysmenorrhea being common, limits activities for one to three days per month in females who experience it.[1]

The most common problems in adolescent girls is painful menstruation. The pain is crampy usually located in lower abdomen. Pain usually starts just before or as menstrual bleeding begins and gradually diminishes over 3-4 days. Pain is intermittent ranging from mild to severe. [4]

Dysmenorrhea is a debilitating condition among women with main impact on health-related quality of life, work productivity, or absenteeism in schools. It is estimated that annually worldwide it results in a loss of 600 million work hours & 2-billion-dollar loss in productivity. A study was conducted by Johnson among 182 adolescents showed the impact of dysmenorrhea on daily activities,27% reported pain or discomfort during their periods,58.9% reported reduced activity and 45.6% reported work or school absenteeism and most of them taking at least one medication.[1]

A pre-experimental study was conducted by Gayathri (2021)[5] on knowledge regarding home remedies of dysmenorrhea among 50 nursing Students of Sri Devaraj College of Nursing, Kolar, Karnataka, India. Results revealed that on pre-test all the study subjects had inadequate knowledge on home remedies of dysmenorrhea. In post-test, majority (58%) had moderate knowledge ,22% had adequate knowledge and 20% had inadequate knowledge. There was significant change in knowledge level before and after administration of intervention as indicated by the use of paired 't' test.

A quasi-experimental study conducted by Kour, Kaur, Garg, Kaur (2020)[6] to evaluate the effectiveness of structured teaching programme regarding home remedies on dysmenorrhea among 60 adolescent girls of senior secondary school Hoshiarpur, Punjab, India, with 30 subjects in experimental and control group each. Experimental group was subjected to intervention (structured teaching programme) whereas control group was not subjected to any intervention. Data was gathered using a standard questionnaire. Results of the study showed that in control group mean pre-test knowledge score was 14.20 and mean post-test knowledge score was 15.23. In experimental group mean pre-test knowledge score was 14.43 and mean post-test knowledge score was 30.17. The mean pre-test and post-test knowledge score of experimental groups was statically significant at p<0.05 level.

Keeping in view the findings and experienced of above studies, dysmenorrhea is viewed as a prevalent problem affecting the daily activities of adolescent girls. Dysmenorrhea pain can be reduced to a greater extent using home remedies.

After doing the extensive review of literature, regarding use of home remedies in reducing dysmenorrhea and because of investigators personal experiences and experiences of friends, she got motivated to undertake the study to assess the knowledge of adolescent girls regarding home remedies in reducing dysmenorrhea.

Methodology

The research design used in the present study was "Pre experimental One Group Pre-test, Post-test design. Permission was obtained from the concerned authorities to conduct the final study. Ethical clearance was obtained from Institutional Ethical Committee (IEC) to conduct the study using purposive sampling technique to select 50 adolescent girls of B.sc Nursing 3rd semester and 2nd Year studying at MMINSR, SKIMS, Soura. Feasibility of the study was checked with the help of Pilot study.

A self-structured questionnaire was administered to study subjects as a pre-test on day one and intervention was provided in the form of Video Assisted Teaching Programme. Post-test assessment was done on day four by using the same self-structured questionnaire.

Assessment of knowledge scores was categorised into various levels based on the scale developed by Skaria[1] in her study effectiveness of ginger tea upon dysmenorrhea. Knowledge score of less than 50 % showed poor knowledge, 51-75% showed average knowledge and >75% showed good knowledge.

31

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

Results and Discussion

Findings Related to the Demographic and Clinical Variables

Majority (80%) of the study subjects were in the age group of <22 years. Maximum (68%) of study subjects belonged to rural areas. Majority (84%) number of study subjects belonged to nuclear families. About half (48%) of the study subjects had father's educational status of graduation and above. Maximum (60%) of the study subjects had their father's occupation as Government employees. Half (50%) of the study subjects had mothers with primary education. Majority (88%) of the mothers of study subjects are homemakers. Maximum (72%) of the study subjects attained menarche before the age of 14 years. About half (54%) of the study subjects had menstrual periods lasting for 3-5 days. Maximum (74%) of the study subjects were having moderate menstrual periods. Majority (84%) of the study subjects were having regular menstrual periods Half (42%) of the study subjects complained of dysmenorrhea (table 1 and 2).A similar study was conducted by Pathania, Sheikh, Farooq (2021)[7].The results of the study showed that 43.3% were in the age group of 21 years, 28.3% were in the age group of 20 years 21.7% in the age group of 19 years.88.3% belonged to nuclear families and 11.7% belonged to joint families.40% of the study subjects had menarche at the age of 13 years,30% had at 14 years,11.7% had at above age of 15 years and 18.3% had menarche at less than 12 years of age.88% of the study subjects had regular menstrual cycles and 11.7% had irregular cycles. Another similar study was conducted by Gayathri (2021)[8] revealed that 92% of the study subjects were in the age group of 18-19 years,6% were in the age group of 17-18 years and 2% were in the age group of 16-17 years. 52% belonged to urban areas and 48% belonged to rural areas.84% of the subjects had no history of dysmenorrhea and 16% had dysmenorrhea.38% of the study subjects used home remedies to relieve dysmenorrhea.

Findings related to level of knowledge of study subjects.

On pre-test, maximum of the study subjects (64%) had poor knowledge, only 36% had average knowledge and none of the study subjects had good knowledge whereas on post-test all (100%) the subjects had good knowledge and none of the subjects had poor or average knowledge (table 3). Similar results were conveyed from a study conducted by Savitha, Roopa, Sridhara (2016)[9] .Findings showed that on pre-test 73.3% of the subjects had moderate knowledge, 1.7% had adequate knowledge and 25% had inadequate knowledge regarding home remedies on dysmenorrhea. Post-test results showed that majority i.e,56.6% of the study subjects had adequate knowledge,41.6% had moderate knowledge and only 1.8% of the study subjects had inadequate knowledge regarding home remedies on reducing dysmenorrhea.

While comparing the pre-test and post-test knowledge scores, the mean post-test knowledge scores of the study subjects was significantly higher (37.3$\pm$1.82) than the mean pre-test knowledge scores (18.54$\pm$3.52) at 0.05 level of significance. This showed effectiveness of the intervention (Video assisted teaching programme) (table 4). A similar study was conducted by Sheikh, Cherain, Gavande, Hussain (2022)[10]. The findings showed that mean post-test knowledge score (24.9$\pm$2.54) was significantly higher than the mean pre-test knowledge score(12.7$\pm$2.51) which indicated that video assisted teaching programme was highly effective in improving the knowledge of adolescent girls.

Findings related to association of knowledge level of study subjects with selected demographic and clinical variables.

The results showed that there was no statistical significant association between the pre-test knowledge scores of study subjects and demographic/clinical variables (age, residence, type of family, fathers' education, fathers' occupation, mothers' education, mothers' occupation, age at menarche, duration of periods, type of flow, pattern of cycles, whether a case of dysmenorrhea) (table 5 and 6).A similar study was conducted by Kaur, Garg, Kaur,(2020)[6].Study results revealed that age, education of mother, occupation of mother, regularity of menstrual cycle, case of dysmenorrhea, had no influence on the knowledge of adolescent girls regarding home remedies for dysmenorrhea in both the control and experimental group.

Table 1.Frequency and percentage distribution of study subjects according to their demographic variables

[N=50]

Demographic Variables	Category	Frequency (f)	Percentage (%)
Age in years	<22	40	80
	>22	10	20
Residence	URBAN	16	32
	RURAL	34	68

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

32

Type of family	NUCLEAR	42	84
	JOINT	8	16
Fathers Education	PRIMARY	8	16
	SECONDARY	13	26
	HIGHER SECONDARY	5	10
	GRADUATE and ABOVE	24	48
Fathers Occupation	PRIVATE EMPLOYEE	20	40
	GOVT EMPLOYEE	30	60
Mothers Education	PRIMARY	25	50
	SECONDARY	9	18
	HIGHER SECONDARY	11	22
	GRADUATE and ABOVE	5	10
Mothers Occupation	HOME MAKER	44	88
	PRIVATE EMPLOYEE	4	8
	GOVT EMPLOYEE	2	4

Table 2.Frequency and percentage distribution of study subjects according to their clinical variables

[N=50]

Clinical variables	Category	Frequency (f)	Percentage (%)
Age at Menarche	<14	36	72
	>14	14	28
Duration of menstrual periods.	3-5 DAYS	27	54
	5-7 DAYS	21	42
	>7DAYS	2	4
Type of menstrual flow	Scanty (Less than 2 pads in 24 hours)	9	18
	Moderate (2-4 pads in 24 hours)	37	74
	Heavy (more than 4 pads in 24 hours)	4	8
Pattern of menstrual cycle.	Regular (21-35 days).	42	84
	Irregular (less than 21 days or above 35 days).	8	16
whether a case of dysmenorrhea	YES	21	42
	NO	29	58

33

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

Table 3.Frequency and percentage distribution of Pre-test and post-test knowledge scores regarding home remedies in reducing dysmenorrhea.

[N=50]

Level of knowledge	Knowledge Scores.	PRE-TEST Score		POST-TEST Score	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Poor knowledge	<20	32	64	0	0
Average knowledge	20-30	18	36	0	0
Good knowledge	>30	0	0	50	100

Table 4.Comparison of pre-test and post-test knowledge scores regarding home remedies in reducing dysmenorrhea.

[N=50]

Knowledge score	Mean + SD	Mean %	Mean Difference	p-value
Pre-test	18.54+3.52	46.50	18.66	0.001**
Post-test	37.2+1.82	92.95		
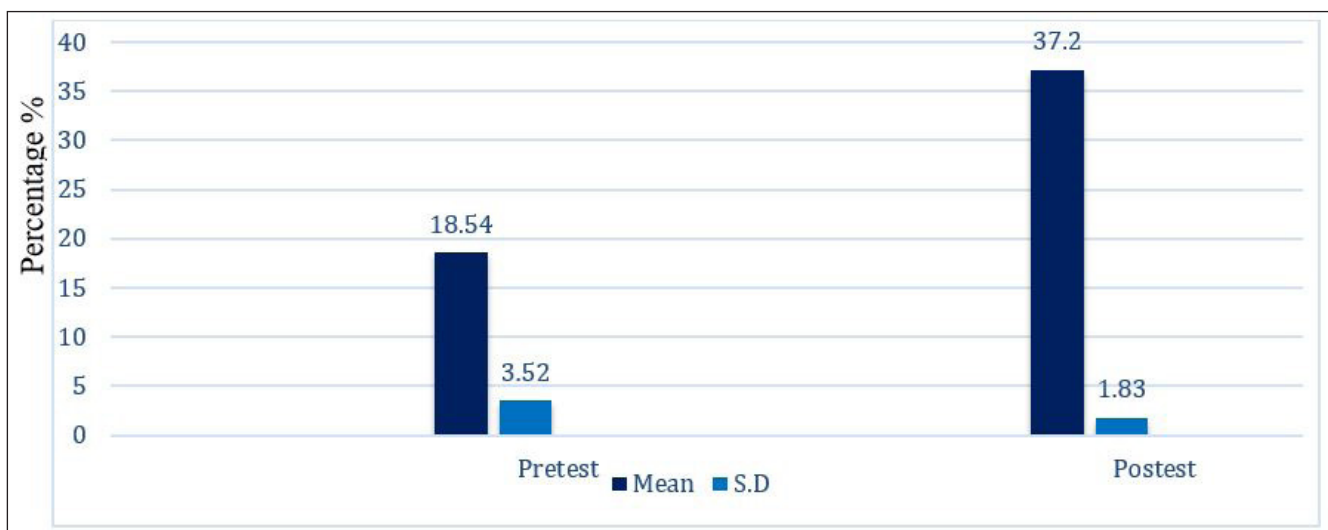
Figure 1.Bar diagram showing comparison between mean scores of pre-tests and post-test.

Table 5.Association between pre-test knowledge score regarding home remedies in reducing dysmenorrhea and their selected demographic variables.

[N=50]

Demographic variables.	Category	Poor knowledge.		Average knowledge.		Good knowledge.		p-value
		f	%	f	%	f	%	
Age in years.	<22	27	54	13	26	0	0.0	0.302 NS
	>22	5	10	5	10	0	0.0	
Residence	Urban	11	22	5	10	0	0.0	0.631 NS
	Rural	21	42	13	26	0	0.0	

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

34

Type of family	Nuclear	26	52	16	32	0	0.0	0.479 NS
	Joint	6	12	2	4	0	0.0	
Fathers Education	Primary	3	6	5	10	0	0.0	0.08 NS
	Secondary	10	20	3	6	0	0.0	
	Higher secondary	5	10	0	0.00	0	0.0	
	Graduate and above.	14	28	10	20	0	0.0	
Fathers Occupation	Private employee	12	24	8	16	0	0.0	0.63 NS
	Govt Employee	20	40	10	20	0	0.0	
Mothers Education	Primary	15	30	10	20	0	0.0	0.813 NS
	Secondary	7	14	2	4	0	0.0	
	Higher secondary	7	14	4	8	0	0.0	
	Graduate and above	3	6	2	4	0	0.0	
Mothers Occupation	Home maker	29	58	15	30	0	0.0	0.748 NS
	Private employee	2	4	2	4	0	0.0	
	Govt. Employee.	1	2	1	2	0	0.0	

NS=Nonsignificant

Table 6.Association between pre-test knowledge score regarding home remedies in reducing dysmenorrhea and their selected clinical variables

[N=50]

Clinical Variables	Category	Poor knowledge		Average knowledge		Good knowledge		p-value
		f	%	f	%	f	%	
Age at menarche	<14	23	46	13	26	0	0.0	0.979 NS
	>14	9	18	5	10	0	0.0	
Duration of menstrual periods.	3-5 Days	19	38	8	16	0	0.0	0.13 NS
	5-7 Days	13	26	8	16	0	0.0	
	>7 Days	0	0.00	2	4	0	0.0	
Type of menstrual flow	Scanty.	6	12	3	6	0	0.0	0.826 NS
	Moderate	24	48	13	26	0	0.0	
	Heavy	2	4	2	4	0	0.0	
Pattern of menstrual cycle.	Regular	29	58	13	26	0	0.0	0.088 NS
	Irregular	3	6	5	10	0	0.0	
whether a case of dysmenorrhea	Yes	14	28	7	14	0	0.0	0.738 NS
	No.	18	36	11	22	0	0.0	

NS=Nonsignificant

35

Malik D et al.
Ind. J. Holist. Nurs. 2023; 14(4)

Conclusion

On the basis of findings of the present study following conclusions were drawn

Findings of the Pre-test assessment have indicated that maximum of study subjects had poor knowledge and none of the study subjects had good knowledge. So, there was a need to educate them regarding home remedies in reducing dysmenorrhea.

Post-test findings showed that all of the study subjects had good knowledge after implementation of video assisted teaching programme on knowledge regarding home remedies in reducing dysmenorrhea. So, showed its effectiveness.

No significant association was found between pre-test knowledge score of study subjects regarding home remedies in reducing dysmenorrhea and their selected demographic and clinical variables. Probably these variables do not affect the level of knowledge among subjects.

Source of funding: None

Conflict of Interest: None

References

1. Skaria.A pre-experimental study to assess the effectiveness of Ginger Tea upon Dysmenorrhea. Unpublished thesis. Apollo College of Nursing. Chennai;2012.
2. Amuthavam. A study to assess the effectiveness of ginger tea on dysmenorrhea among college students. Unpublished Thesis. Mookambika College of Nursing. TamilNadu;2016.
3. Rani A, Effectiveness of hot application on abdominal pain in dysmenorrhea among adolescent girls. Unpublished These. Cherraan's College of Nursing. Coimbatore;2013
4. Menstrual Cycle and menarche. https://en.m.wikipedia.org/wiki/Menstrual.Cited on Feb.2023.
5. Gayathri, Effectiveness of Planned Teaching programme on Home Remedies of Dysmenorrhea. WJOPR.Aug.2021 7(1):552 DOI:10.20959/wjpr20181-10253
6. Kaur R, kaur M, Garg A, Kaur D. Effectiveness of STP on knowledge regarding selected home remedies for dysmenorrhea among adolescent girls. IJAR. Aug 2020;(8);1150-1154.
7. Pathania, Farooq, Sheikh, Effectiveness of self-Instructional Module on Knowledge regarding Non-Pharmacological Management of Dysmenorrhea. IJCRT. July 2021:9(7) ;2320-2882.
8. Gayathri, Effectiveness of Planned Teaching programme on Home Remedies of Dysmenorrhea. WJOPR.Aug.2021 7(1):552 DOI:10.20959/wjpr20181-10253
9. Savitha, Roopa, Sridhara. A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Home Remedies on reducing Dysmenorrhea among Adolescent girls at St. Paul's Girls High school, Davangere. AJNEAR. 2016; 6(3): 327-330. doi: 10.5958/2349-2996.2016.00061.6
10. Sheikh, Cherian, Gavande, Hussain. Effectiveness of Structured Teaching Programme on Knowledge Regarding home remedies used in dysmenorrhea among Adolescent girls in a selected higher secondary school district Kishtwar. IJAR.2022.10 (02).263-271.