

Strengthen Teenage Girls' Awareness of Home Remedies for Menstrual Cramps or Pain Relief: A Study on Knowledge Level and Demographic Factors

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Abstract: *The menstruation cycle aids every girl to prepare their bodies for pregnancy every month. A lot of girls experience menstrual cramps or pain which is caused by the hormone called prostaglandins, a chemical a girl's body produces to allow muscles to help push the blood out through a girl's vagina at the time of her period. The study concluded that home remedies can help reduce the level of discomfort due to menstrual cramps or pain and implementing this knowledge regarding the home remedies is quite essential. The present study aimed to assess the knowledge of adolescent girls regarding home remedies to relieve Menstrual cramps or pain and to identify the association of knowledge of adolescent girls regarding home remedies to relieve Menstrual cramps or pain with selected demographic variables. A descriptive research design was adopted and purposive sampling was used to select 100 teenage girls from a selected intermediate college, Kanpur, U. P. After the data organization and analysis in terms of descriptive and inferential statistics, the finding revealed that 15 (15%) had low, 76 (76%) had moderate, and 9 (9%) had a high level of knowledge. The study concludes that a maximum number of teenage girls had sufficient knowledge but complete knowledge is always fruitful.*

Keywords: Knowledge, Home Remedies, Menstrual Cramps or Pain, and Teenage Girls

1. Introduction: Background of the Study

The word teenage signifies growing up. Teenage is the temporary phase of sexual, physical, & mental human improvement for the most part happening among pubescence & lawful adulthood, however, generally described as starting & finishing with the young stage. The beginning of teenage is generally connected with the initiation of pubescence & presence of auxiliary sexual qualities. The pituitary organ secretes chemicals that invigorate amplification and advancement of sex organs, which hence become equipped for propagation. In females' the conceptive pattern of ovulation & the monthly cycle starts, pubic hair shows up, and improvement of bosoms & other body forms happens. [1]

Menstrual cramps are one of the major physiological changes that happen in young adult ladies and are the beginning of menarche which is frequently connected with issues of the unpredictable feminine cycle, extreme draining & menstrual cramps are normal issues experienced by many teenage young ladies. Roughly half of the ladies experience menstrual cramps over half of the young people are impacted by menstrual cramps and 10% have serious side effects. This study offers a one-of-a-kind commitment to our calling regarding home cures for menstrual cramps.

A menstrual cramp is a dull, throbbing pain in the lower abdomen that occurs just before or during menstruation. Menstrual cramps are associated with prolonged and heavier than normal menstrual flow, low body weight, body mass index, inadequate physical exercise, genetic predisposition, active and passive cigarette smoking, low socioeconomic status, diet, stress, and mental illness. Studies around the

world have shown that a range between 20% to 90% of women suffer from menstrual cramps [2].

Menstrual cramps affect many people before and during their period. While some people only experience mild cramps, others aren't quite as lucky. In some cases, the pain from period cramps can be extreme and make a serious dent in your daily life. [3]

If period pain is cramping your style every month, there are steps you can take to gain back control. Here are many proven home remedies that may ease your discomfort, and help you get back on track with your busy life. [4]

Period cramps are caused by contractions in your uterus. These contractions are triggered by changes in your body's hormone levels, particularly prostaglandins. [5] When you menstruate, your uterus contracts and sheds its lining, which is released as blood through your vagina. Some people are more likely to experience period pain, particularly those who are younger than 30 years of age, bleed heavily during their periods, have irregular bleeding, have a family history of period pain, smoke, and start puberty early (age 11 or earlier). [6]

2. Need of the Study

Menstrual cramps are the commonest among teenagers and they don't cause other medical complications, but they can interfere with school, work, and social activities. [7] Certain conditions associated with menstrual cramps can have complications, though. For example, endometriosis can cause fertility problems. Pelvic inflammatory disease can scar your fallopian tubes, increasing the risk of a fertilized

egg implanting outside of your uterus (ectopic pregnancy). [8]

In a few females, the pain can be very unbearable, and due to these menstrual cramps, they even have to take medications and other treatments. Menstrual cramps or pain is an issue every month and not all women have a reach to medication. As already stated the cramps could be very intense for many women and taking medications could cause various problems as medications have their side effects and adverse effects. [9] In addition, medications directly affect our liver as all the metabolism takes the place of medications in our liver. Therefore, considering home remedies to relieve menstrual cramps or pain is cheaper than medicines and has no side effects. [10]

For centuries, people have used home remedies to treat a variety of conditions ranging from headaches to heartburn. These home remedies are gaining popularity once again as more people turn to non-traditional treatments. If we dig through the research that has been conducted, we can find mild support for using these home remedies as alternative therapies. [11]

This study focuses on obtaining the knowledge of teenage girls regarding the home remedies that can be used to reduce menstrual cramps or pain and their discomfort, which are very effective, money-free, and have no side effects.

Objectives:

- 1) To assess the knowledge of adolescent girls regarding home remedies to relieve Menstrual cramps or pain.
- 2) To identify the association of knowledge of adolescent girls regarding home remedies to relieve Menstrual cramps or pain with selected demographic variables.

Operational Definitions:

- 1) **Assess:** Based on an arbitrary set of criteria, it refers to the level of knowledge regarding the home remedies to relieve menstrual cramps or pain among teenage girls in selected intermediate college.
- 2) **Knowledge:** It refers to the ability of adolescent girls to respond to knowledge-based questions related to home remedies to relieve menstrual cramps as evident from the knowledge score measured by the structured knowledge questionnaire.
- 3) **Home Remedies:** These refer to treatment done at home with the available items for menstrual pain or cramps.
- 4) **Menstrual cramps or Pain:** These refer to the pain during periods (menstruation) caused due to normal uterine contractions which help expel the linings.
- 5) **Teenage girls:** This term in our study refers to girls aged 13-19 years who have regular menstruation with menstrual cramps or pain.

Hypothesis:

Null Hypothesis

H₀- There is no significant association between the knowledge score of teenage girls regarding home remedies to relieve menstrual pain or cramps.

H₁- There is a significant association between the knowledge score of teenage girls regarding home remedies to relieve menstrual pain or cramps.

Variables:

- **Research variables:** Knowledge regarding home remedies to relieve menstrual pain or cramps among teenage girls.
- **Demographic variables:** Age, Class, Religion, Age at Menarche, Duration of the Menstrual Cycle, Frequency of Menstruation, Family History of Menstrual Cramps or Pain, Self-Management During Menstrual Cramps or Pain, Class or Standard, Dietary Pattern, source of information, educational status of the mother, Known Diseases related to Menstruation, and Previous Knowledge regarding Menstrual Cramps or Pain

Assumptions:

Teenage girls may have little knowledge regarding home remedies to relieve menstrual pain or cramps.

Delimitations:

The study is delimited to

- The study sample is delimited to students who are not present at the time of data collection.
- Study is to be conducted in the school setting.
- Teenage girls who are willing to engage in the study.

Projected Outcome:

- The findings from the present study will highlight and strengthen the already tested theoretical literature that, menstrual cramps or pain varies from individual to individual.
- It will minimize the expenses for pain management during menstruation.
- It will reduce the side effects of medications that may be caused due to pain meds.
- It will provide information regarding awareness of teenage girls about home remedies to relieve menstrual cramps or pain.

3. Methodology

Material and Methods:

Source of Data: The data will be collected from teenage girls in a selected intermediate college, Kanpur, UP.

Inclusion Criteria:

- Teenage girls who attained menarche.
- Teenage girls in the age group of 13- 19.
- Teenage girls who are willing to participate in the study.
- Teenage girls who can read, write, and understand English.

Exclusion Criteria:

- Teenage girls whose age is below 13 years of age and 19 years of age.
- Teenage girls who are under hormonal therapy or taking any medications.
- Teenage girls who are unreachable at the time of the data collection.

Research Design: The design selected for the present study is a simple descriptive research design.

Setting of the Study: The study will be conducted at Gardenia Public School in Gooba Garden, Kanpur, UP. The setting of the study is completely based on the availability and feasibility of the sample.

Population: The study encompasses all teenage girls studying in the intermediate college of Kanpur, UP.

Target Population: In this study, the target population will be all teenage girls from selected intermediate college, Kanpur, UP.

Accessible population: In this study, the accessible population will be teenage girls of Gardenia Public School in Gooba Garden, Kanpur, UP.

Sample: In this study, the sample is girls aged 13-19 years who have regular menstruation with menstrual cramps or pain at Gardenia Public School, Kanpur, UP.

Sampling Technique: The sampling technique nominated for the study is a non-probability purposive sampling technique.

Sample Size: The sample size of the present study is 100 teenage girls.

Tools for Research: The tools used in the present study are:

- Section A: Demographic Data, which consists of demographic variables like age, class, religion, age of menarche, duration of menstrual cycle, frequency of menstruation, family history of menstrual cramps or pain, self-management during menstrual cramps or pain, source of information, educational status of the mother, known disease related to menstruation, and previous knowledge regarding menstrual cramps or pain.
- Section B: Structured multiple-choice questionnaire on knowledge regarding home remedies to relieve menstrual cramps or pain.

4. Results

Section A

Frequency and Percentage Distribution Wise Distribution of Socio-Demographic Variables of Teenage Girls, N=100

S. No.	Demographic Data	Frequency Distribution	Percentage Distribution
1.	Age in years:		
	a) 13-14	5	5%
	b) 15-16	8	8%
	c) 17-18	38	38%
	d) 19 or above	49	49%
2.	Class:		
	a) 8th-9th	6	6%
	b) 9th-10th	4	4%
	c) 10th-11th	3	3%
	d) 11th-12th	87	87%
3.	Religion:		
	a) Hindu	97	97%
	b) Muslim	3	3%
	c) Sikh	0	0%
	d) Christian	0	0%
4.	e) Others	0	0%
	Age at Menarche:		
	a) 10-11	10	10%
	b) 12-13	37	37%
	c) 14-15	40	40%
5.	d) 16 or above	13	13%
	Duration of Menstrual Cycle:		
	a) 3 days	15	15%
	b) 5 days	68	68%
	c) 7 days	15	15%
6.	d) More than 7 days	2	2%
	Frequency of Menstruation:		
	a) Less than 21 days	3	3%
	b) 21 days	12	12%
	c) 28 days	55	55%
7.	d) 35 days	30	30%
	Family History of Menstruation Cramps or Pain:		
	a) Yes	59	59%
	b) No	24	24%
8.	c) Not sure	17	17%
	Self-management during menstrual cramps or pain:		
	a) Yes	88	88%
9.	b) No	12	12%
	Source of information:		

	a) Newspaper	4	4%
	b) Magazine	0	0%
	c) School	36	36%
	d) Internet	60	60%
10	Educational status of mother:		
	a) Illiterate	10	10%
	b) Intermediate	38	38%
	c) Graduate	35	35%
11	Known diseases related to menstruation:		
	a) Yes	34	34%
	b) No	52	52%
	c) Not sure	14	14%
12	Previous knowledge regarding menstrual cramps or pain:		
	a) Yes	79	79%
	b) No.	21	21%

Section-B

Assessment of Knowledge Regarding Home Remedies for Relieving Menstrual Cramps or Pain Via Structured Multiple-Choice Questionnaire of Teenage Girls:

The pie diagram indicates that 15 (15%) have low knowledge, 76 (76%) have moderate knowledge and 9 (9%) have high knowledge.

Table 1 Grading of knowledge score, n=100

Level of knowledge	Score of range	Percentage
Low	<10	15%
Moderate	10-15	76%
High	>15	9%
Total	20	100%

Mean and Standard Deviation of Knowledge Score

Table 2: The mean knowledge score was 12.21 and the Standard deviation was 1,4908,

Category	Mean	Standard Deviation
Knowledge	12.21	1.4908

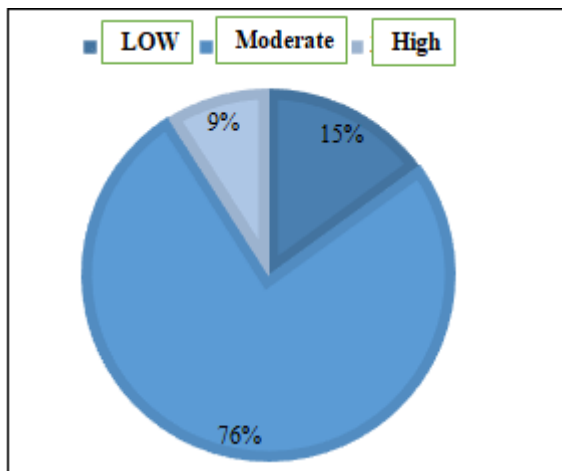


Table No. 2- The mean of knowledge is 12.21 and the standard deviation is 1.4908.

Section-C

Association between the level of knowledge regarding home remedies for relieving menstrual cramps or pain among teenage girls with their selected demographic variables:

Table 3: Here calculated chi-squared value was less than the tabulated value at 0.05 level of significance, so there is no significant association between the variables with their knowledge score except for the self-management of menstrual cramps or pain demographic variable. Hence the formulated research hypothesis H1 was rejected and H0 the null hypothesis was accepted.

S. No.	Selected Variable	Knowledge Level			Chi-Square Calculated Value	Degree of Freedom	Significant/ Not Significant
		Low	Moderate	High			
1	Age:	0	5	0	2.683	6	Not significant
	a. 13-14 years	1	6	1			
	b. 15-16 years	7	28	3			
	c. 17-18 years	5	37	5			
	d. 19 or above						
2	Class:	0	6	0	3.68	6	Not significant
	a. 8 th -9 th	1	3	0			
	b. 9 th -10 th	0	3	0			
	c. 10 th -11 th						
	d. 11 th -12 th	14	64	9			
3	Religion:				0.99	6	Not significant
	a. Hindu	14	74	9			
	b. Muslim	1	2	0			

	c. Christian	0	0	0			
	d. Others	0	0	0			
4	Age at Menarche:				9.68	6	Not significant
	a. 10- 11 years	0	2	1			
	b. 12- 13 years	9	30	2			
	c. 14- 15 years	2	34	5			
	d. 16 Or above	4	10	1			
5	Duration of Menstruation:				5.17	6	Not significant
	a. 3 days	3	10	2			
	b. 5 days	9	55	4			
	c. 7 days	3	9	3			
	d. More than 7 days	0	2	0			
6	Frequency of menstruation:				9.82	6	Not significant
	a. Less than 21 days	1	2	0			
	b. 21 days	0	12	0			
	c. 28 days	6	44	5			
	d. Not sure	8	18	4			
7	Family history of menstrual cramps or pain:	8	45	6	3.85	4	Not significant
	a. Yes	2	20	2			
	b. No	5	11	1			
	c. Not sure						
8	Self-management of menstrual cramps or pain:	10	71	7	9.44	2	Significant
	a. Yes	5	5	2			
	b. No						
9	Source of information regarding home remedies for menstruation:	4	29		4.521	6	Not significant
	a. School	9	45	3			
	b. Internet	2	2	6			
	c. Newspaper	0	0	0			
	d. Magazine			0			
10	Educational status of mother:				4.23	6	Not significant
	a. Illiterate	3	6	1			
	b. Intermediate	5	29	4			
	c. Graduate	3	30	2			
	d. Postgraduate	4	11	2			
11	Known diseases related to menstruation:				3.391	4	Not significant
	a. Yes	5	42	5			
	b. No	6	25	3			
	c. Not sure	4	9	1			
12	Previous knowledge regarding menstrual cramps or pain:				2.675	2	Not significant
	a. Yes	12	60	7			
	b. No	3	16	2			

5. Summary

A descriptive study was conducted to assess the knowledge of teenage girls regarding home remedies to relieve menstrual cramps or pain in a selected intermediate college, Kanpur, U. P., where the data was collected from 100 teenage girls through a self-structured questionnaire. From the data analysis, it was found that 9 (9%) had a high level of knowledge, 76 (76%) had a moderate level of knowledge, and 15 (15%) had a low level of knowledge.

Nursing Implications

- The research drew the following implication from the study which was of pressing concern in the area of missing service, nursing education, and nursing research.

Nursing Services

- Nurses play an important role in promotive, curative, and preventive aspects of the health care system. The nurses should provide a teaching program regarding home remedies for menstrual cramps or pain.

- The nurses working in college as teachers should provide health education to teenage girls, they should do several teaching programs in intermediate schools and colleges.
- The findings of the study can be disseminated to motivate nurses to plan for teaching programs regarding home remedies for menstrual cramps or pain.

Nursing Education

- Nursing curriculum provides clinical experience that can be conducted for nurses and teenage girls to gain knowledge and skills about home remedies for menstrual cramps or pain.

Nursing Research

- It has provided first-hand experience to the researcher who will be able to conduct and participate in future research projects.
- It has generated a piece of nursing literature for reference for future researchers.

6. Conclusion

The findings indicated that teenage girls required more knowledge regarding home remedies for menstrual cramps or pain. Majority of the teenage girls have a moderate level of knowledge yet proper knowledge is required. However, attempts should be made to educate and train teenage girls to gain complete knowledge regarding home remedies for menstrual cramps and pain.

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