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A Study to Assess the Effectiveness of Nurse Led Structured Teaching Programme on Knowledge Regarding Lifestyle Change in Prevention of Premenstrual Syndrome among Adolescents Girls in Selected School of Jabalpur City

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Abstract

Premenstrual syndrome (PMS), any of various symptoms experienced by women of child bearing age in the days immediately preceding menstruation. It is most common in women in their twenties and thirties. Some 70%-90% of menstruating is having PMS on a cyclical basis. With a history of postpartum depression or an affective mood disorder. As many as 50%-60% of women with sever PMS have an underlying psychiatric disorder. The frequency of premenstrual syndrome is according to ICD-10 criteria, approximately 42% of women experience mild PMS and 31.7% experience moderate PMS, Samia Tabassum 2005. Epidemiological surveys have estimated that as many as 75% of reproductive age women experience some symptoms attributed to the premenstrual phase of menstrual cycle Johnson SR, It has been estimated from retrospective community surveys, Ramachandran S, Love E that nearly 90% of women have experienced at least one premenstrual syndrome as defined by ICD-10 criteria defined by WHO.

Keywords: Premenstrual syndrome, adolescent girls, planned teaching programme

Introduction

Premenstrual syndrome is characterized by the cyclic reoccurrence of certain physical, psychological and behavioral symptoms beginning the week before menses and disappearing within a few days after the onset of menses premenstrual syndrome can affect mood, cognition, physical wellbeing. Pre-menstrual syndrome has a wide variety of signs and symptoms including mood swings tender breast food cravings, fatigue, irritability and depression. For some the physical pain and emotional stress are severe enough to affect their daily lives. Regardless of symptom severity the sign and symptoms generally disappear after the start of menstrual period.

In developing countries like India there are many stigmas surrounding menstruation, these stigmas are big barrier for the women to seek help for their physical and mental discomfort. PMS is one of the common menstrual disorders, which is very common in college going girls affecting their relationships, activities of daily living, academics and cognitive functions.

Many studies have focused on menstruation and menstrual hygiene management but very few studies have been conducted on PMS which is more important.

As there is scarcity of studies on PMS, it is need of the hour to conduct more studies on PMS as these studies will help in easy diagnosis and improve knowledge about PMS and its risk factors. This will help in reducing the severity and prevalence of PMS and will also act as baseline data to conduct interventional studies. Therefore this study was conducted to estimate the prevalence of premenstrual syndrome among school going girls.

Need of the Study

Menarche is the first menstrual cycle or first menstrual bleeding in female humans. From both social and medical perspectives, it is often considered the central event of female puberty, as it signals the possibility of fertility. Premenstrual syndrome is defined as regular premenstrual physical or emotional symptoms that interfere with daily living and functioning at home and work places. PMS occur during the luteal phase of menstrual cycle.

The worldwide average age of menarche is very difficult to estimate accurately and it varies significantly by geographical region, race, ethnicity and other characteristics. Various estimates have placed it at 13. Some estimates suggest that the median age of Menarche worldwide is 14 and that there is a

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later age of onset in Asian populations compared to the West. PMS is one of the common menstrual disorders, affecting many young women. According to epidemiological survey 75% suffer from symptoms of PMS and 3-8% suffer from severe symptoms of PMS. The prevalence of PMS was found to be different in different countries, in China it was found to be 34%, 71% in turkey, 80% in Pakistan and 92% in Jordan. In India a range of 14.3%-74.4% is the reported prevalence estimate of PMS.

There are many non-prescribed alternative treatments and supplements that claim to help treat PMS that some women may find helpful in easing their symptoms. Exercise improves the overall health and can help alleviate depression tiredness. Stretching and breathing exercises such as yoga and Pilates, can help sleep better and reduce stress levels. If any psychological symptoms such as feeling depressed or emotional problems, have to talk to health professional. Cognitive behavioral therapy (CBT) is the term for a group of therapies designed to help solve problems such as anxiety and depression. However, there is no single treatment that works for everyone. The choice of treatment will be based on the symptoms and how severe they are and the possible side effects of the medication. It's found that PMS is a common problem in our part of the world affecting the quality of life of women significantly despite the growing awareness there remain a deficiency of knowledge about the necessity to seek for the symptoms and it's important that a healthy culture is promoted which is stress free in order to avoid symptom of PMS which tend to disturb normal routines and reduce productivity

Objectives

Assess the knowledge and create awareness of premenstrual syndrome among adolescent girls.

- Determine the pre-test knowledge of adolescent girls on life style changes in prevention of pre-menstrual syndrome.
- Evaluate the effectiveness of planned teaching programme on adolescent girls regarding premenstrual syndrome.
- To find the association between pretest score and selected demographic variables.

Hypothesis

- **H1:** The mean posttest knowledge scores will be significantly higher than the mean pre-test knowledge scores.
- **H2:** There is a significant association of the post-test knowledge scores with demographic variable.

Method

The study utilized a pre experimental pre-test post-test only research design was used to observe the effectiveness of planned teaching programme among adolescent girls regarding lifestyle changes in prevention of premenstrual syndrome in school. This study was conducted in selected school of Jabalpur city, Purposive sampling technique was selected for sample selection In the study, the sample comprised of 60 adolescent girls, The sample were selected using purposive sample technique. The investigator introduced herself and the purpose of study was explained and confidentiality of their responses was assured. After obtaining verbal consent, pretest was done on first day and planned teaching programme was administered on the same day, post test was conducted on the seventh day.

Result

The present study aimed to assess the knowledge level of adolescent girls regarding premenstrual syndrome and effectiveness of planned teaching programme. A structured teaching questionnaire was selected on the basis of objectives of the study that was considered to be most appropriate instrument for assessing the level of knowledge regarding premenstrual syndrome in school. Non probability convenient technique was used to select 60 adolescent girls.

The study shows that the maximum number of age group 11-16 year is 45% in terms of class and 58.3% from 8-9 standard, 75% accounted for nuclear family, the age at first menstruation started is maximum 50%,and in terms of family income <20000 46.67%, findings are found that majority of 83.3% are non-vegetarian, many of the students are not having previous knowledge about the premenstrual syndrome i.e. 73.33%, and students are having maximum knowledge from internet that is 41.67%. in pre-test knowledge 52(86%) are having average knowledge regarding pre-menstrual syndrome. After administrating planned teaching programme 52(86%) are now having goodknowledge.

Finding Related to Knowledge Score before Administrating Planned Teaching Programme: The result clearly indicated that 52(86%) had average knowledge regarding pre-menstrual syndrome in school before administrating planned teaching programme. The mean of the performance 12.83 and standard deviation is 2.001

Finding Related to Knowledge Score after Administrating Planned Teaching Programme: The finding show that 52(86%) adolescent girls had good knowledge score after administration of planned teaching programme on premenstrual syndrome in school and 8(13%) adolescent girls have average knowledge score. The mean of performance was 22.9 and standard deviation is 2.14

Major Finding of the Study Were

Demographic Description of Sample by Frequency and Percentage: In this study the demographic variable show that are age 45% from the age group of 11-16 years, 35% from the age group of 12-13 year and 20% from the age group of 18-20 year. In terms of class/standard 0% from 6-7th standard, 58.3% from 8-9 standard and 41.66% from 10-12 standard. The nuclear family accounted for 75% and joint family accounted for 25%, In terms of religion 11.67% are Hindu, 46.67% are Muslim and 41.67% are Christian. Findings shows that age at first menstruation started accounted 50% for 10-11 year, 20% for 11-15 year and 30% for 15-19 year. The family income 0% is accounted for the family income >6000, 20% accounted for in between 6000-10,000, 33.33% accounted for 10,000-20,000, and 46.6% for < 20,000. Findings are found that 16.67% are vegetarian and 83.3% are non-vegetarian. From the study the investigator get to know that 26.67% students are having previous knowledge and 73.33% are not having previous knowledge about the topic. In terms of source of knowledge 13.33% from book, 36.67% from magazines, 8.33% from newspaper, 41.67% from internet.

Table 1: Demographic Description of Sample by Frequency and Percentage

S. No.	Variable	Poor	Average	Good	DF	Chi-Value	p. Value	Inference
1.	**Age**							
	11-16yr	4	23	0	4	16.94	0.05	S
	12-13yr	2	19	0				
	18-20yr	2	10	0				
2.	**Class/standard**							
	6th-7th	6	22	0	4	1.715	0.025	NS
	8th-9th	2	16	0				
	10^{th}-12^{th}	0	14	0				
3.	**Type of family**							
	Nuclear	4	45	0	2	6.185	0.10	NS
	Joint	4	7	0				
4.	**Religion**							
	Hindu	0	7	0	4	29.4704	0.50	MS
	Muslim	4	24	0				
	Christian	4	21	0				
5.	**Age at first menstruation started**							
	10-11yr	6	24	0	4	181.71	0.3	MS
	11-15yr	2	10	0				
	15-19yr	0	18	0				
6.	**Family income**							
	<6000	2	10	0	4	1.54	0.25	NS
	6000-10000	0	20	0				
	10000-20000	0	28	0				
	>20000							
7.	**Diet**							
	Vegetarian	5	45	0	2	1.1	0.75	NS
	Non-vegetarian	5	5	0				
8.	**Previous knowledge regarding premenstrual syndrome**							
	Yes	8	8	0	6	31.95	0.05	S
	No	42	2	0				
9.	**Source of information**							
	book	2	6	0	9	26.978	0.01	NS
	Magazines	10	1	11				
	newspaper	0	5	0				

Abbreviation
MS= most signification S= significant
NS= not significant NP= not possible
Table reveals that the association between knowledge of girl regarding premenstrual syndrome with demographic variables statistically tested by applying chi-square test. The age of the adolescent girls significant and diet of the adolescent girl is significant, age at which the first menstruation was started is most significant or the religion of adolescent girls are most significant and another variables were not significant.

Finding Related to Knowledge Score before Administrating Planned Teaching Programme
The result clearly indicated that 52(86%) had average knowledge regarding premenstrual syndrome in school before administrating planned teaching programme. The mean of the performance 12.83 and standard deviation is 2.001

The Data Presented in the Table Clearly Indicates that 52 (86.7%) Students have Average Knowledge about Premenstrual Syndrome. The Mean Pre-Test Knowledge Score is 12.83 and the Dispersion of Pre-test Knowledge Score and SD was 2.001.

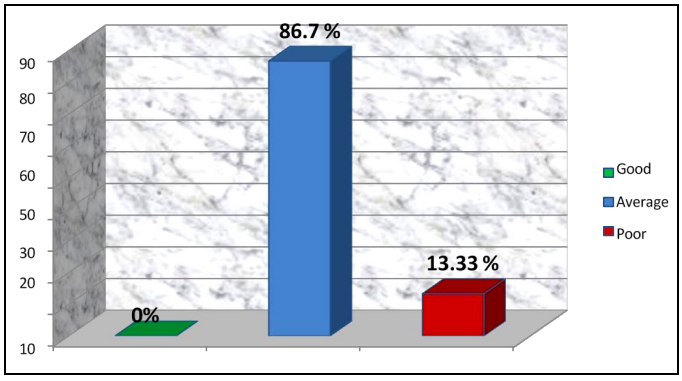

Fig 1: Knowledge Score before Administrating Planned Teaching Programme

Assessment of Pre-Test Knowledge
Finding Related to Knowledge Score after Administrating Planned Teaching Programme:

The finding show that 52(86%) adolescent girls had good knowledge score after administration of planned teaching programme on pre-menstrual syndrome in school and 8(13%) adolescent girls have average knowledge score. The mean of performance was 22.9 and standard deviation is 2.14

The data presented in the table clearly indicates that 52 (86.7%) have good knowledge regarding premenstrual syndrome.

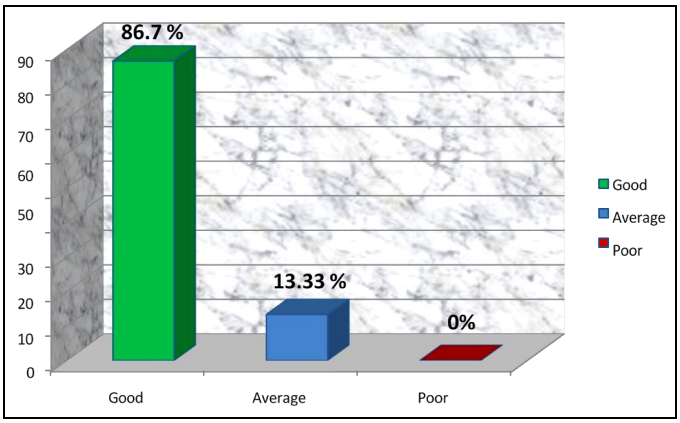

Fig 2: Knowledge Score after Administrating Planned Teaching Programme

Assessment of Pre-Test and Post-Test Knowledge Score

The finding of the study reveals that in pre-test only 8(13.3%) adolescent girls had poor knowledge, 52(86.7%) had average knowledge and 0(0%) had good knowledge level. From post-test, it was found that 8(13.3%) had good knowledge and not a single person was remained as having poor knowledge. In the pre-test mean knowledge score was 12.83, the post-t test mean score 22.95. This indicates the effectiveness of planned teaching programme.

Table 2: Correlation between pre and post knowledge of students (N=60)

S. No.	Description	Mean	SD	Correlation
1.	Pretest knowledge	12.83	2.001	0.09
2.	Posttest knowledge	22.95	2.14	

The Correlation between Pre and Post Knowledge Made by Correlation. Correlation is the Appropriate Statistical Method to Compare the Pre and Posttest Knowledge Score. The Result Showed Positive Correlation.

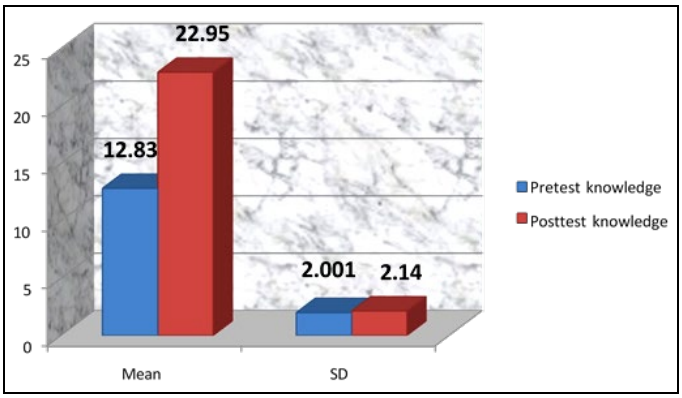

Fig 3: Comparison between pre and post knowledge of students (N=60)

The Mean Posttest Knowledge Score is 22.95 and the Dispersion of Posttest Knowledge Score and SD was 2.14.

Conclusion

The reason for taking this study was to assess the knowledge and creating awareness about premenstrual syndrome. The following conclusions were drawn from the findings of the study, It is concluded that the planned teaching programme was effective and the association findings was done to find out the relationship of knowledge with the selected demographic variables by using chi-square test and "p" value were used to calculate the effectiveness of planned teaching programme by comparing pretest and post test scores.

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