



**A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENSTRUAL SYNDROME AND ITS MANAGEMENT AMONG ADOLESCENT GIRLS IN KERALA WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET.**

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**ABSTRACT**

The research project undertaken was “A study to assess the knowledge regarding premenstrual syndrome and its management among adolescent girls in Kerala”. The objective of the study was to assess the knowledge regarding premenstrual syndrome and its management among adolescent in Kerala, to find out the association between the knowledge regarding and selected demographic variables such as age, education, religion, type of family, age of attainment of puberty, duration of menstrual period, measures adopted to reduce premenstrual syndrome, family history of menstrual problem, dietary pattern. Non experimental design (descriptive study) was adopted for this study. The study was conducted among 100 adolescent girls in Kerala. In order to assess the knowledge of premenstrual syndrome and its management the study sample was selected by non-probability convenient sampling technique. The tool used for the data collection consisted of demographic Performa and structured questionnaire. The result showed that 17% of adolescent girls have good knowledge regarding premenstrual syndrome and its management, 41% have average knowledge and 42% have poor knowledge regarding premenstrual syndrome and its management. In this study there is association found between knowledge and demographic variables such as age, measures adopted to reduce premenstrual syndrome, family history of menstrual problems. There is no association between knowledge and other demographic variables like education, religion, type of family, age of attainment of puberty, duration of menstrual period and dietary pattern. Based on the findings the investigator has drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing pattern, nursing education for future development.

**KEYWORDS:** Assess, knowledge, premenstrual syndrome, adolescent girls, information booklet and management.

**INTRODUCTION**

Menstruation is a normal physiological phenomenon in a woman's reproductive life. Among the gynecological problems, menstrual problems are said to be the major ones especially among the adolescent females. Premenstrual syndrome is a collection of physical and emotional symptoms related to a woman's menstrual cycle. While most women of child-bearing age (up to 85%) report having experienced physical symptoms related to normal ovulatory function, such as bloating or breast tenderness, medical definitions of PMS are limited to a consistent pattern of emotional and physical symptoms occurring only during the luteal phase of the menstrual cycle that are of “sufficient severity to interfere with some aspects of life”. In particular, emotional symptoms must be present consistently to diagnose PMS.<sup>[1]</sup> The specific emotional and physical symptoms attributable to PMS vary from woman to

woman, but each individual woman's pattern of symptoms is predictable, occurs consistently during the ten days prior to menses, and vanishes either shortly before or shortly after the start of menstrual flow.<sup>[2]</sup>

PMS affects not only women but also families and societies, as it causes purposeful impairment in efficiency at school/work, impaired relations with friends, colleagues and family members, poor social life activities and home responsibilities. This syndrome in young women is a significant public health problem, as increased incidence of depression and anxiety disorders were found in women suffering with PMS, which could economically burden the society indirectly in the form absenteeism at work, frequent hospitalization and suicides when it is severe.<sup>[3]</sup> Moderate to severe symptoms are present often in adolescents, 14-88% of adolescent girls are affected, with younger adolescents

less likely to have PMS symptoms than the older adolescents. The symptoms must adversely affect social or work related activities. These conditions are not life threatening but they can seriously decrease the quality of life of many women and affect their mental health and their productivity.<sup>[4]</sup>

The recent global statistics of prevalence of premenstrual syndrome is 47.8%. The PMS symptoms could impact an individual's interpersonal relationships, social interactions, occupational activities and productivity for her entire reproductive age life.<sup>[5]</sup> Especially for young women, premenstrual symptoms can be related to academic performance impairments including poor grades and absenteeism. This disorder in young women is a significant public health problem, as increased incidence of depression and anxiety disorders were found in women suffering with PMS, which could economically burden the society indirectly in the form of absenteeism at work, frequent hospitalization and suicides.<sup>[6]</sup> Students are the promising group to country's development. Therefore the investigator felt a strong need to take up this study to assess the knowledge on PMS and its management among adolescent girls.<sup>[7]</sup>

#### STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding premenstrual syndrome and its management among adolescent girls in Kerala with a view to develop an information booklet.

#### OBJECTIVES

- To assess the knowledge regarding premenstrual syndrome and its management among adolescents girls in Kerala.
- To find out the association between knowledge and selected demographic variables.
- To prepare an information pamphlet.

#### OPERATIONAL DEFINITION

- **Assess:** It is to estimate the knowledge regarding premenstrual syndrome and its management among adolescent girls in Kerala.
- **Knowledge:** It refers to the level of understanding awareness regarding premenstrual syndrome and its management among adolescent girls in Kerala.
- **Premenstrual syndrome:** A group of symptoms that occurs in women typically between ovulation and a period. The symptoms such as mood swings, anger, tender breast, food cravings, fatigue, irritability and depression.
- **Management:** Is the measure or the step taken to relieve or reduce the premenstrual problems such as mood swings, tender breast, food craving, fatigue, irritability, anger and depression.
- **Adolescent girls:** Refers to girls between 12-19 years of age attained puberty in Kerala.
- **Information booklet:** A book consisting of printed material containing information related to premenstrual syndrome, the definition, cause, signs and symptoms, diagnosis and treatment.

#### MATERIALS AND METHODS

The research design adopted in this study was non experimental design (Descriptive study). The population of the present study consisted of adolescent girls in Kerala. The study was conducted in online platform through google form. In this study the sample consisted of 100 adolescent girls in Kerala in the age group of 12-19 years in Kerala. Non probability convenient sampling technique was used to select the subjects for the present study.

<b>Research approach</b>	Quantitative research.
<b>Research design</b>	Descriptive research design.
<b>Variables</b>	<ul style="list-style-type: none"> <li>• Demographic variables Comprised of age, education, religion, type of family, age of attainment of puberty, duration of menstrual period, measures adopted to reduce premenstrual problems, family history of menstrual problem, dietary pattern.</li> <li>• Research variables knowledge of adolescent girls regarding premenstrual syndrome and its management.</li> </ul>
<b>Setting of the study</b>	Online platform through google form.
<b>Population</b>	Adolescent girls in Kerala.
<b>Sample</b>	Adolescent girls (12-19 years) in Kerala.
<b>Sample size</b>	100 adolescent girls in Kerala.
<b>Sampling technique</b>	Non probability convenient sampling technique.

#### DESCRIPTION OF THE TOOL

**Section A:** Socio demographic performa: Age, education, religion, type of family, age of attainment of puberty, duration of menstrual period, measures adopted to reduce premenstrual problems, family history of menstrual problem, dietary pattern.

**Section B:** Structured knowledge questionnaire: Knowledge Questionnaire consisted of 20 multiple choice questions to collect data. Each right answer was given a maximum score of 1 mark. The total mark was 20. No negative mark for wrong answers.

The knowledge score was categorized as.

- Good: 15-20
- Average: 10-14
- Poor: < 10

## RESULTS AND DISCUSSION

### Section A: Description of demographic variables of students.

N= 100

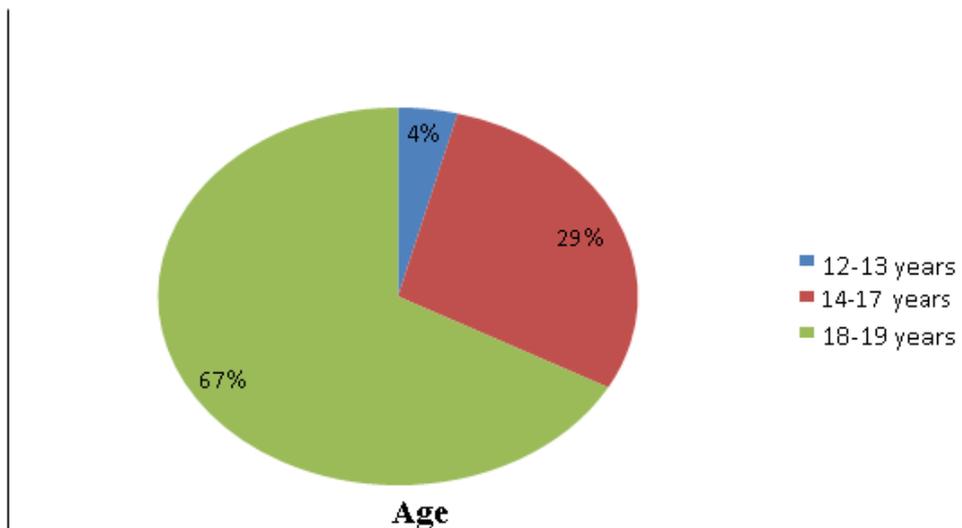


Figure 1: Percentage wise distribution of the sample according to age.

The data presented in fig 1 shows that out of 100 sample, 67% were in the age group of 18-19 years, 29% were in the age group of 14-17 years and 4% were in the age group of 12-13 years.

N=100

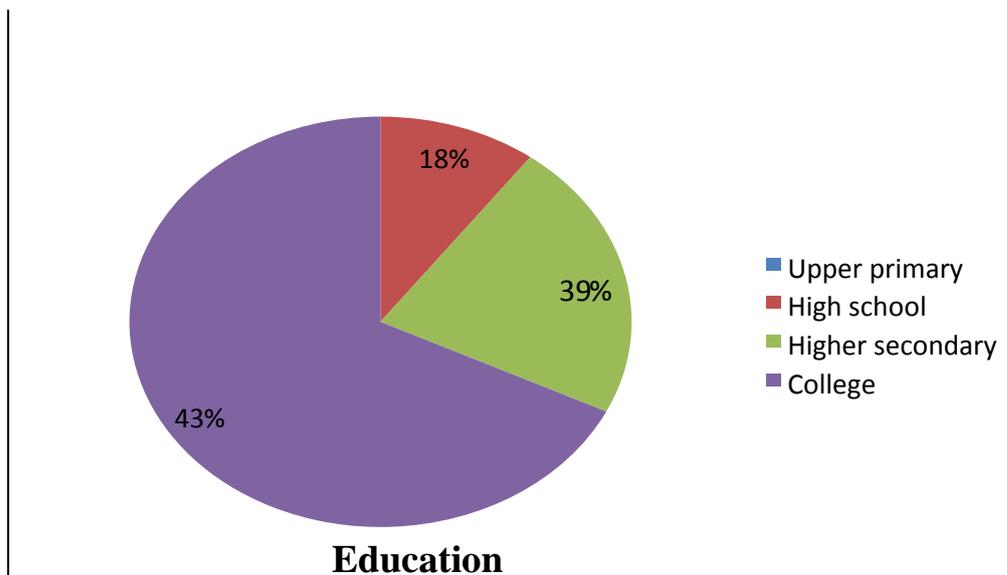
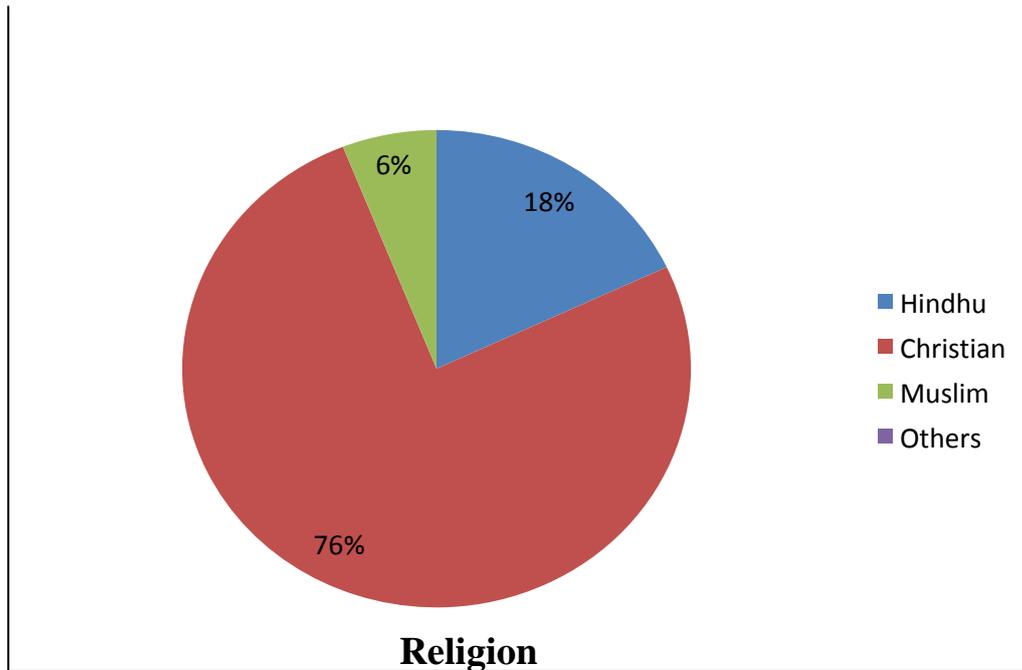


Figure 2: Percentage wise distribution of sample according to education.

The data in the fig 2 shows that out of 100 samples, 43% were college students, 39% were higher secondary students and 18% were high school students.

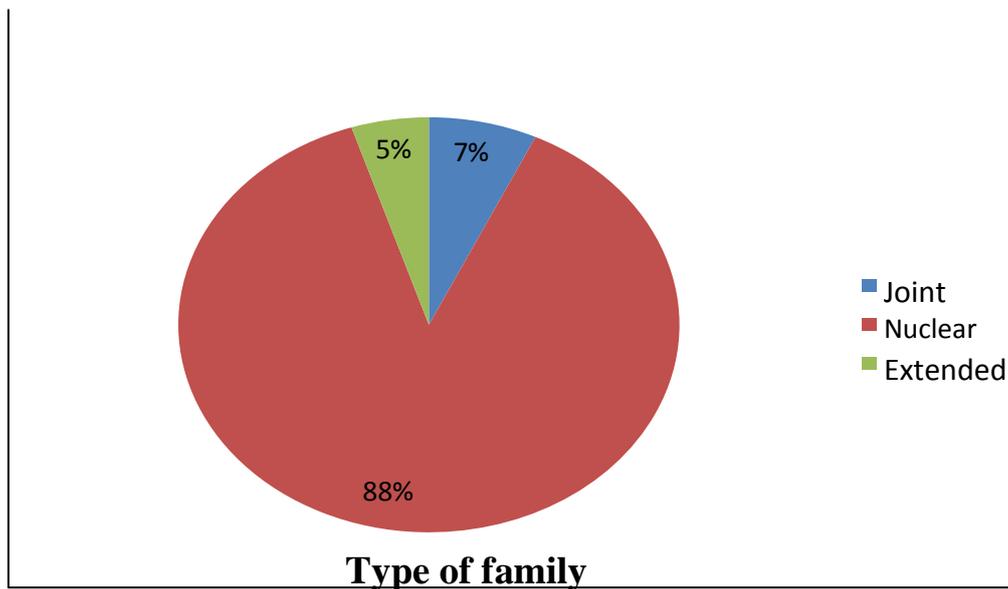
N=100



**Figure 3: Percentage wise distribution of the sample according to religion.**

The data in the Fig 3 shows that 76% were Christians, 18% were Hindu and 6% were Muslims.

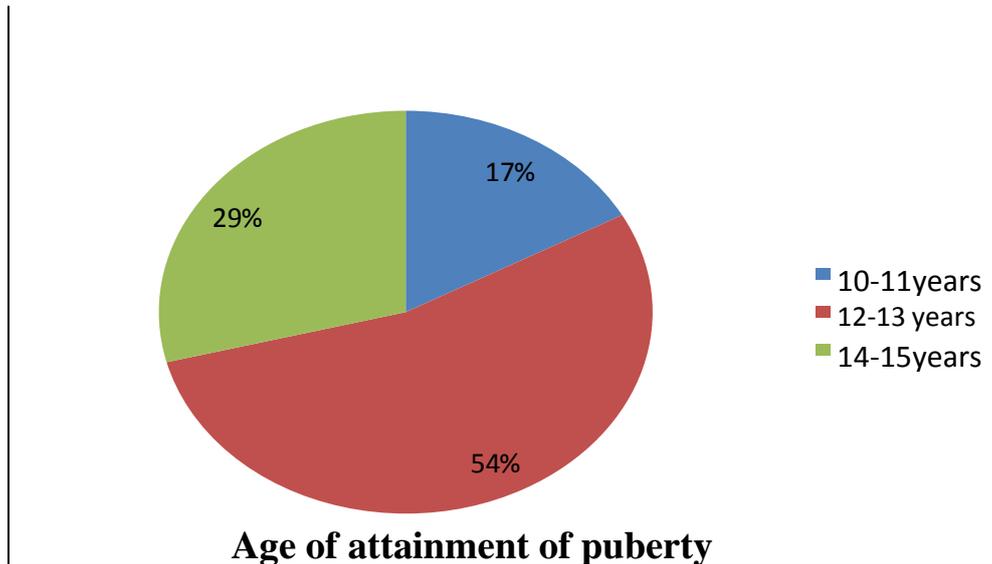
N=100



**Figure 4: Percentage wise distribution of the sample according to type of family.**

The data presented in fig 4 shows that 88% were belonged to nuclear family, 7% were belonged to joint family and 5% were belonged to extended family.

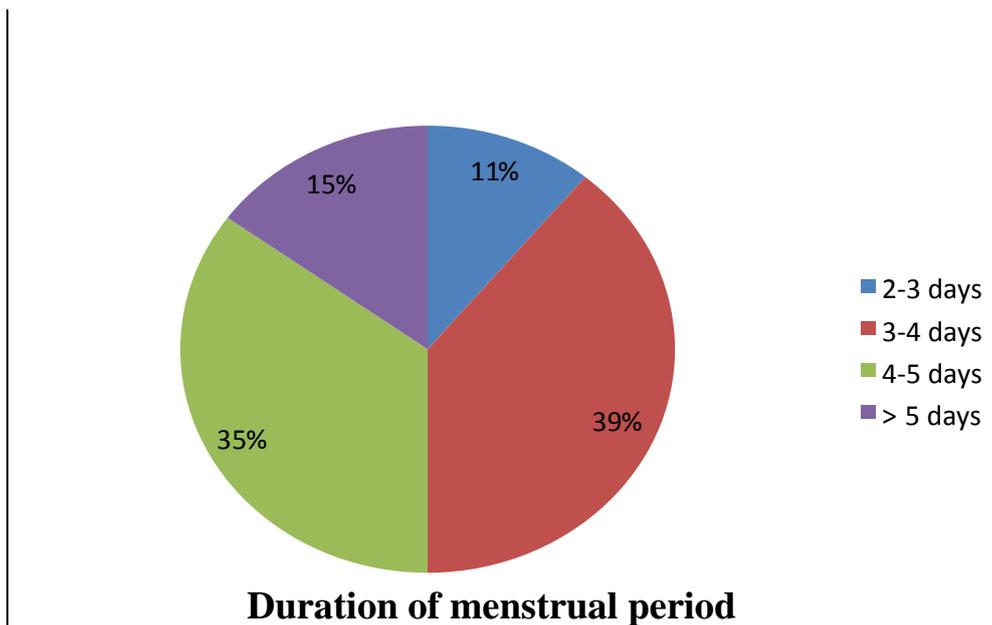
N=100



**Figure 5: Percentage wise distribution of the sample according to the age of attainment of puberty.**

The data in the fig 5 shows that 54% adolescent girls attained puberty at the age of 12-13 years, 29% of adolescent girls attained puberty at the age of 14-15 years, 17% adolescent girls attained puberty at the age of 10-11 years.

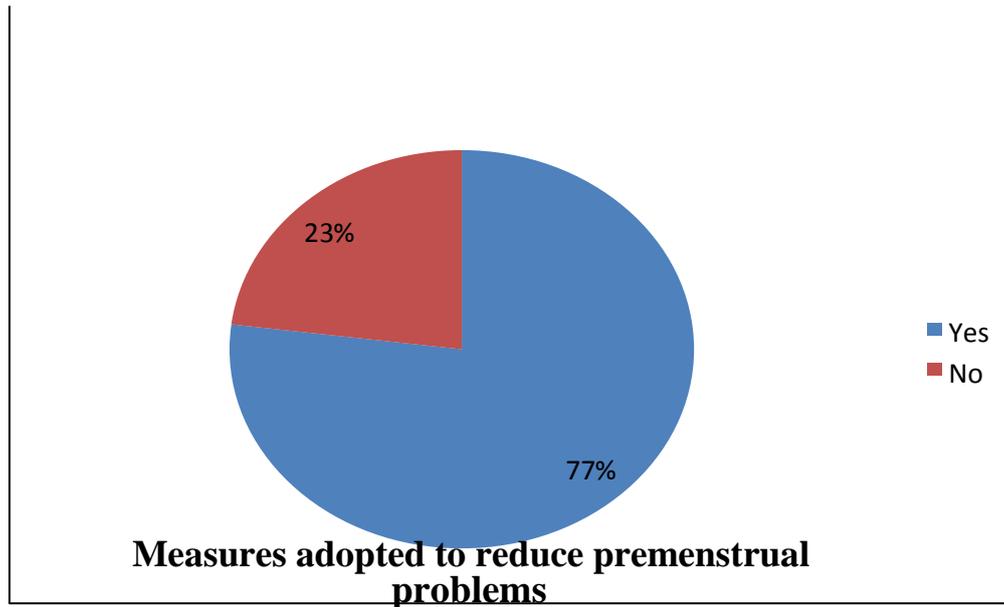
N= 100



**Figure 6: Percentage wise distribution of samples according to duration of menstrual period.**

The data in the fig 6 shows that 39% of adolescent girls have 3-4 days length of menstrual period, 35% adolescent girls have 4-5 days length of menstrual period, 15% of adolescent girls have > 5 days length of menstrual period and 11% adolescent girls have 2-3 days length of menstrual period.

N= 100



**Figure 7: Percentage wise distribution of samples according to measures adopted to reduce menstrual syndrome.**

The data in the fig 7 shows that 77% of adolescent girls adopt measures to reduce premenstrual problems and 23% of adolescent girls do not adopt measures to reduce premenstrual problems.

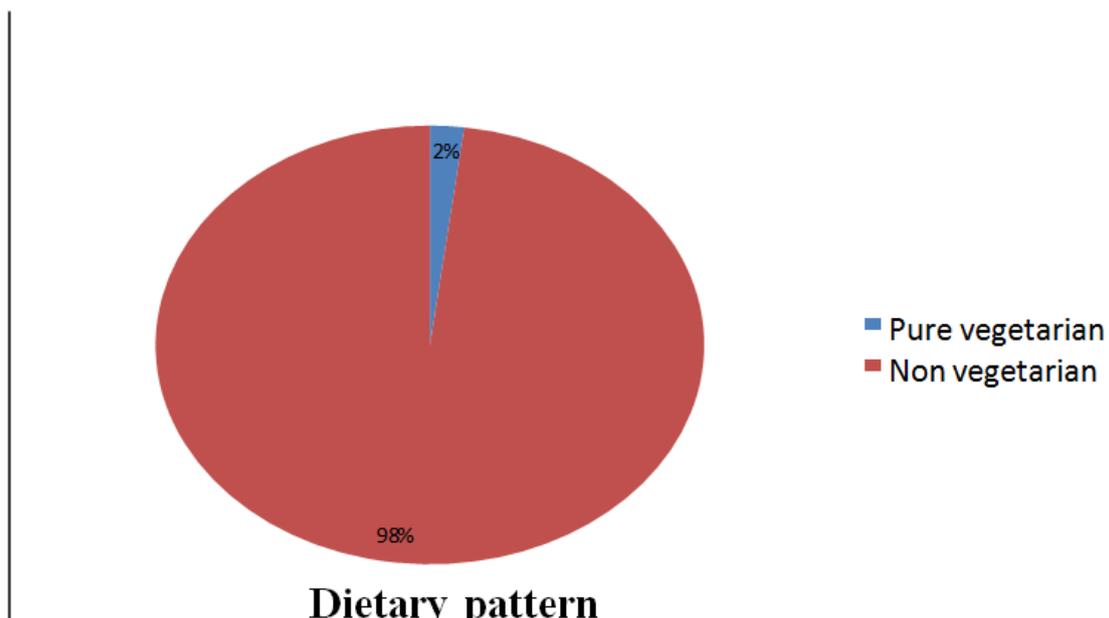
N=100



**Figure 8: Percentage wise distribution of sample according to family history of menstrual problems.**

The data in fig 8 shows that 97% of adolescent girls do not have family history of menstrual problems and 3% adolescent girls have family history of menstrual problems.

N=100



**Figure 9: Percentage wise distribution of sample according to dietary pattern.**

The data in fig 9 shows that 98% of adolescent girls were non vegetarian and 2% adolescent girls were pure vegetarian.

#### **Section B: Description of knowledge scores of students regarding premenstrual syndrome and its management.**

**Table 1: frequency and percentage distribution of pretest score on knowledge regarding premenstrual syndrome and its management.**

Score	Score range	Frequency	Percentage
15-20	Good	17	17%
10-14	Average	41	41%
<10	Poor	42	42%

Table 1 shows that 17% of adolescent girls had good knowledge regarding premenstrual syndrome and its management, 41% had average knowledge and 42% had poor knowledge regarding premenstrual syndrome and its management.

#### **Section C: Association between knowledge of adolescent girls regarding premenstrual syndrome and its management with selected demographic variables.**

**Table 2: Association between knowledge and selected demographic variables.**

Sl. no	Variables	Good	Average	Poor	df	Chi value	Table value	Level of significance
<b>1</b>	<b>Age</b>							
	12-13 yrs	0	1	3				
	14-17 yrs	4	13	12	4	14.19	9.49	S
	18-19 yrs	13	27	27				
<b>2</b>	<b>Education</b>							
	Primary	0	0	0				
	High school	2	7	9	6	4.28	12.59	NS
	Higher secondary	5	20	14				
	Degree	10	14	19				
<b>3</b>	<b>Religion</b>							
	Christian	12	31	33				
	Hindu	5	6	7	6	3.71	12.59	NS
	Muslim	0	4	2				
	Others	0	0	0				
<b>4</b>	<b>Type of family</b>							
	Joint	1	2	4				

	Nuclear	16	37	35	4	2.307	9.49	NS
	Extended	0	2	3				
<b>5</b>	<b>Age of attainment of puberty</b>							
	10-12 yrs	3	5	9				
	12-13 yrs	11	22	21	4	2.66	9.49	NS
	14-15 yrs	3	14	12				
<b>6</b>	<b>Duration of menstrual period</b>							
	2-3 days	1	5	5				
	3-4 days	5	15	19	6	7.28	12.59	NS
	4-5 days	7	16	12				
	>5 days	4	5	6				
<b>7</b>	<b>Measures adopted to reduce premenstrual problems</b>							
	Yes	4	8	11				
	No	3	33	31	2	6.17	5.99	S
<b>8</b>	<b>Family history of menstrual problem</b>							
	Yes	2	1	0				
	No	15	40	42	2	2.93	5.99	S
<b>9</b>	<b>Dietary pattern</b>							
	Pure vegetarian	1	0	1				
	Non vegetarian	16	41	41	2	2.93	5.99	NS

NS\*\*- Not significant at 0.05 level of significant

S\*\*-Significant

## DISCUSSION

The present study was conducted to assess the knowledge regarding premenstrual syndrome and its management among adolescent girls in Kerala. In order to achieve the objectives of the study non experimental research design was adopted. The Sample was selected by the non probability convenient sampling. The sample consisted of 100 adolescent girls in the age group of 12-19yrs. The finding of the study has been discussed in relation to objectives and other similar studies.

A study was conducted to assess the knowledge regarding prevalence and knowledge regarding premenstrual syndrome among adolescent girls in selected school. The data were collected using semi structured questionnaire of about knowledge regarding premenstrual syndrome. 109 samples were included in the study who fulfilled inclusive criteria. Analysis work was done by using descriptive and inferential statistics. The findings showed that out of 109 respondents, 66.97% of respondents had average knowledge, 30.27% respondents had good knowledge and 2.75% of students had poor knowledge regarding premenstrual syndrome. The study concluded that knowledge regarding premenstrual syndrome was adequate among adolescent girls, the knowledge have to be improved by conducting awareness programs at regular intervals.<sup>[8]</sup>

## CONCLUSION

The present study was aimed to assess the knowledge regarding adult premenstrual syndrome and its management among adolescent girls in Kerala. The study showed that there is association found between knowledge and demographic variables such as age,

measures adopted to reduce premenstrual problems, family history of menstrual problems. An information booklet regarding premenstrual syndrome and its management was given to the adolescent girls after the pretest. There is no association between knowledge and other demographic variables like education, religion, type of family, age of attainment of puberty, duration of menstrual period, dietary pattern as the calculated value is less than the table value at 0.05 level of significance. There is association found between knowledge and demographic variables such as age, measures adopted to reduce premenstrual problems, family history of menstrual problems as the calculated value is greater than table value at 0.05 level of significance.

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