

#### AWARENESS REGARDING PREMENSTRUAL SYNDROME AMONG ADOLESCENT GIRLS IN A SCHOOL OF RUPANDEHI

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## **ABSTRACT**

#### INTRODUCTION

Premenstrual syndrome is common condition that affects adolescent girl's emotions, physical health and behavior during certain days of menstrual cycle, generally just before menstruation. The present study aims to identify awareness regarding premenstrual syndrome among adolescent girls of a school.

## MATERIAL AND METHODS

A descriptive cross sectional study was conducted to assess awareness regarding premenstrual syndrome among 236 adolescent girls in a school of Rupandehi by using non-probability purposive sampling technique. Self-administered questionnaire was used to collect the data and collected data were analyzed by using descriptive and inferential statistics.

### RESULTS

The findings of the study revealed that 53.4% of the respondents had low level of awareness. There was statistically significant association between mother's occupation and awareness level (p=0.024).

#### CONCLUSION

Based on the study findings, it is concluded that more than half of the adolescent girls had low level of awareness so; it is recommended for promoting and upgrading girl's awareness for effective coping and management in school.

#### KEYWORDS

Awareness, Adolescents girls, Premenstrual syndrome

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#### INTRODUCTION

Premenstrual syndrome is defined by the cyclical occurrence of emotional and physical symptoms that are unrelated to any organic disease usually starting five days before menstruation in each of the three previous menstrual cycles and disappearance within four days after menstruation begins, without recurrence until at least 13 day of cycle day.<sup>1</sup>

Adolescents currently account for 1.2 billion of the world's population.<sup>2</sup> In Nepal, adolescents comprise more than one fifth (22%) of total population.<sup>3</sup> The menstrual abnormalities are common concerns of adolescent girls which includes premenstrual syndrome, dysmenorrhea, amenorrhea, menorrhagia etc. Among these, premenstrual syndrome is a prevalent health issue among adolescent.<sup>4</sup>

Although the precise etiology of premenstrual syndrome is unknown, it is thought to be caused by nutritional inadequacies and hormonal imbalances. The primary cause of premenstrual symptoms is progesterone. Serotonin and other neurotransmitters may be at play.<sup>5</sup> Premenstrual syndrome is linked to a number of conditions, including obesity, smoking, stress, genetics, other health issues, a history of depression, anxiety disorder, or other psychiatric disorders, a family history of the condition, domestic violence, substance abuse, physical and emotional trauma, coffee consumption, menarche age, long menstrual cycles, and sexual activity.<sup>6</sup>

The signs and symptoms of PMS includes; emotional (affective) symptoms (depression, angry outbursts, irritability, crying spells, anxiety, confusion, social withdrawal, poor concentration, insomnia, increased nap taking, changes in sexual desire) and Physical symptoms (thirst and appetite changes (food cravings), breast tenderness, bloating, weight gain, headache, swelling of the hands or feet, aches and pains, fatigue, skin problems, gastrointestinal symptoms, abdominal pain.<sup>1</sup>

The first step in preventing and managing PMS is to lead a healthy lifestyle that includes a balanced diet and appropriate exercise. The premenstrual syndrome may be managed by changing one's lifestyle to include regular aerobic exercise (brisk walking, running, cycling and swimming), avoiding stressful situations, maintaining healthy sleeping patterns, and making dietary changes. Premenstrual syndrome is a common health problem among adolescents. It disturbs the daily lives of adolescence girls and can deteriorate their quality of life and social life. It is most common reason for adolescence girls to recurrently miss classes and exams, scoring of low grades which impair learning. Awareness regarding premenstrual syndrome is still inadequate in researcher knowledge. So, researcher is interested to conduct research on this topic.

#### MATERIAL AND METHODS

Descriptive cross-sectional study was conducted to assess awareness on premenstrual syndrome among adolescent girls in Shree Shanti Namuna Secondary School, Tilottama Municipality ward no. 6, Rupandehi from 30th Baishak 2081 to 31st Jestha 2081. The school was selected purposively for the study. Sample size was calculated by using formula: n=N/1+N (e2) with margin of error 5% with total population being 576 adolescent girls studying in Grade 9 and 10. Using

this formula sample size was calculated as 236 school going adolescents. Non- probability purposive sampling technique was used to select the sample. Those adolescent girls willing to participate were included in the study. Pretested self-administered semi structured questionnaire was developed and used by reviewing literature and consulting with the subject experts. The research instrument consists of two parts; part I is related to socio-demographic variables and part II is related to awareness. Total 12 questions were included from part II in which each correct answer carries 1 mark. The tool consisted of 3 dictomonus questions and 9 multiple choices. The level of awareness was calculated based on mean score (22.23). The respondents with score above 22.23 had high level of awareness and below or equal had low level of awareness. Anonymity was maintained by giving the code number to each questionnaire and time duration was 15-20 minutes for each respondent.

Ethical approval was obtained from Institutional Review Committee from Universal College of Medical Sciences with reference number 028/24. Administrative approval was obtained from concerned school. Written informed consent from parents and assent consent from respondents was obtained voluntarily by clarifying the objectives of the study. The collected data was analyzed by using descriptive and inferential statistics with SPSS version 20.

#### RESULTS

Table 1. Socio-demographic variables

Variables	Frequency	Percentage
Age in years		
14-15	216	91.5
16-17	20	8.5
Mean age±SD=14.55±0.698		
Grade		
9	129	54.7
10	107	45.3
Mothers' Education		
Cannot read and write	29	12.3
Primary	69	29.2
Secondary	116	49.2
Above secondary	22	9.3
Mother's Occupation		
Homemaker	196	83.1
Service	27	11.4
Labor	8	3.4
Skilled worker	5	2.1
Father's Education		
Cannot read and write	16	6.8
Primary	58	24.6
Secondary	120	50.8
Above secondary	42	17.8
Father's Occupation		
Unemployed	11	4.7
Service	54	22.9
Self employed(Business)	71	30.1
Labor	38	16.1
Skilled worker	18	7.6
Foreign Employment	32	13.6
Agriculture	12	5.0

Table 1 shows 91.5% of the respondent belongs to age group of 14-15 years and 54.7% study in grade 9. It also depicts 49.2% of respondent's mother and 50.8% of the respondent's father had secondary education, where as

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83.1% of respondent mothers are homemaker and 30.1% of respondent fathers are self employed.

Table 2. Respondents' overall awareness regarding premenstrual syndrome

Level of Awareness	Frequency	Percentage	
High	110	46.6	
Low	126	53.4	
Total	236	100	

Table 2 shows 46.6% of the respondent had high level of awareness and 53.4% of respondent had low level of awareness.

Table 3. Association between socio-demographic variables and awareness regarding premenstrual syndrome

Variables	Level of Awarness		$X^2$	<i>p</i> -value
	High (%)	Low (%)		-
Age in years				
14-15	98 (45.37)	118 (54.63)	1.574	0.246
16-17	12 (60.00)	8 (40.00)		
<b>Education Level</b>				
Grade 9	64 (49.61)	65 (50.39)	1.031	0.359
Grade 10	46 (43.00)	61 (57.00)		
Mothers' Education				
Cannot read and write	15 (51.72)	14 (48.28)	0.347	0.559
Formal Education	95 (45.89)	112 (54.11)		
Mothers' Occupation				
Homemaker	98 (50.00)	98 (50.00)	5.340	0.024*
Employed	12 (30.00)	28 (70.00)		
Fathers' Education				
Cannot read and write	7 (43.75)	9 (56.25)	0.056	1.000
Formal Education	103 (46.81)	117 (53.19)		
Fathers' Occupation				
Unemployed	6 (54.54)	5 (45.46)	0.292	0.589
Employed	104 (44.22)	121 (53.78)		

Table 3 represent awareness level with socio-demographic variables which shows that there is significant association between mother occupation and level of awareness (p=0.024).

#### **DISCUSSION**

This study aimed to find out awareness regarding premenstrual syndrome among adolescent girls. The finding of the study showed that 53.4 % of the respondents had low level of awareness regarding premenstrual syndrome which is inconsistent with study conducted in Morang district, Nepal which shows 90.5%. This variation might be due to the study population and area.<sup>8</sup>

There is no significant association between respondent's age and education level with level of awareness which is consistent with the study conducted in Assam, India which shows no statistical association between age and level of awareness regarding premenstrual syndrome. Respondent's parental education shows no significant association with level of awareness which is inconsistent with the study conducted in Maharastra, India which shows significant association of mother's education with awareness level. 10

The study showed that there is significant association between respondent's mothers occupation and level of awareness which is inconsistent with the study conducted in Assam, India which shows no statistical association between mothers occupation and level of awareness regarding premenstrual syndrome.<sup>9</sup>

#### **CONCLUSION**

It can be concluded that more than half of the adolescent girls have low level of awareness regarding premenstrual syndrome. The level of awareness of respondent is associated with the mother's occupation of the respondent. The school should focus on upgrading the awareness by implementing teaching program, organizing periodic health checkup and provide counseling.

#### **ACKNOWLEDGEMENTS**

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## **CONFLICT OF INTEREST**

None

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## **ORIGINAL ARTICLE**

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