



## A STUDY TO ASSESS THE EFFECTIVENESS OF MENTAL HEALTH TRAINING PROGRAMME REGARDING PREMENSTRUAL SYNDROME FOR THE PROMOTION OF HEALTH AMONG TEENAGE GIRLS IN SELECTED SCHOOLS OF B G NAGARA

Kavitha N. K.\* and Chethan B. S.

Asst-Professor, Adichunchanagiri College of Nursing, Adichunchanagiri University B. G. Nagara Nagamangala (tq), Mandya (Dist.), Karnataka, India.



\*Corresponding Author: Kavitha N. K.

Asst-Professor, Adichunchanagiri College of Nursing, Adichunchanagiri University B. G. Nagara Nagamangala (tq), Mandya (Dist.), Karnataka, India.

Article Received on 16/02/2024

Article Revised on 06/03/2024

Article Accepted on 26/03/2024

### ABSTRACT

Mental health is one of the most important issues in psychology and psychiatry and mental illness is rising dangerously. Worldwide research indicates that the prevalence of mental and emotional disorder and behaviour in adolescents, especially girls, has been increased significantly in recent years. While emotional disorders have been more in girls than boys, which may be due to the high record of limitations emerge from gender stereotypes.

**Objectives:** To assess the pre-test knowledge level of teenage girls regarding premenstrual syndrome. To assess the post-test knowledge. To find the effectiveness of mental health training programme by comparing pre-test & post-test knowledge score. To find the association between pre-test knowledge scores with selected socio demographic variables. **Methods:** A Pre experimental one group pertest - post-test deign was used to assess the effectiveness of mental health training programme regarding premenstrual syndrome. Non-probability convenient sampling technique used to select 50 teenage girls age between 13 – 16 years by using the tool structured knowledge questionnaire. **Results:** The result showed that there was a significant difference between the mean post-test knowledge score (18.32) & mean pre-test knowledge score (8.12). The computed 't' value 87.12 showed a significant difference between the mean post-test knowledge score & pre-test knowledge score at 5 % level of significance ( $t_{(49)}=1.676$ ), hence  $H_1$  was accepted, there was significant association between gain in knowledge score with the demographic variables like stay in hostel, religion, education, residing area & occupation of mother at 5% level of significance, hence  $H_2$  was accepted. **Conclusion:** The study's findings concluded that the mental health training programme regarding premenstrual syndrome was effective in increasing the knowledge of teenage girls.

**KEYWORDS:** Mental health training programme, Premenstrual syndrome, Teenage girls.

### INTRODUCTION

Premenstrual syndrome is a day-to-day disorder among girls and young women occurred repeatedly during the luteal phase of menstrual cycle linked with disorders of mood, such as anger, anxiety, and irritability leading to interference in social and family activities.<sup>[1]</sup>

The reported prevalence estimates of Premenstrual syndrome in India have ranged from 14.3% to 74.4%. Similarly, the reported prevalence of PMDD in India has varied widely between 3.7% to 65.7%.<sup>[2]</sup> Premenstrual syndrome is the most common cause for mental disturbance among adolescent and young adult females. In some area or in some geographical area teenage girls are not much knowledge regarding premenstrual syndrome and its management and also, they are unable to solve their psychological discomforts during premenstrual syndrome.<sup>[3]</sup>

### Statement of the problem

A Study to assess the effectiveness of mental health training programme regarding premenstrual syndrome for the promotion of health among teenage girls in selected school of B G Nagara.

### OBJECTIVES

To assess the pre-test knowledge level of teenage girls regarding premenstrual syndrome. To assess the post-test knowledge level of teenage girls regarding premenstrual syndrome after administration of mental health training programme. To find out the effectiveness of mental health training programme by comparing pretest and post-test knowledge score regarding premenstrual syndrome. To find the association between pretest knowledge scores and selected demographic variables.

## METHODS AND MATERIALS

### Hypothesis

There will be a significant difference between pre-test and post-test knowledge scores regarding premenstrual syndrome among teenage girls those who are in between the age 13 – 16 years. There will be significant association between the pre-test knowledge scores with their selected socio demographic variables.

**Research approach:** An evaluative approach was used to achieve the objectives of the study.

**Research design:** - Pre experimental one group per test - post-test only design

**Population:** - In this study population consist all teenage girls.

**Sample:** - Sample selected for this study are 50 teenage girls.

**Sample size:** - A total of 50 teenage girls

**Sampling technique:** - In this study non-probability convenient sampling technique was used.

**Independent variables:** - Mental health training programme

**Dependent variables:** - Knowledge on premenstrual syndrome.

### METHOD OF DATA COLLECTION

The data collection was scheduled from 21<sup>st</sup> august to 28<sup>th</sup> September prior permission was obtained from concerned authority. The investigator established good rapport with samples. Oral consent from each participant was obtained after collecting background data and pre-test was conducted on knowledge on minor discomforts of puerperium and relief measures. After the pre-test, mental health training programme was conducted for the teenage girls with the help of flash card, pamphlet and

chart. With an interval of one week post test was conducted using the same tool to determine the effectiveness of mental-health training program.

**Tool used for the study:** - The investigation developed the tool as follows

Part 1- consists of socio demographic profile of the subject.

Part 2- multiple choice questions regarding menstruation and premenstrual syndrome.

### Plan for data analysis

Demographic proforma was analysed in terms of frequency and percentage. The knowledge score was analysed by using frequency, percentage, mean, mean percentage and standard deviation. Effectiveness of mental health training programme was analysed by using paired 't' test. Association between gain in knowledge scores with selected demographic variables was calculated by using chi- square test.

## RESULTS

**Analysis of the study finding are categorized and presented under the following headings**

Section I: Description of the demographic variables of teenage girls under study (Table 1).

Section II: Distribution of samples according to their level of knowledge scores of the higher primary school children. (Table 2)

Section III: Data on effectiveness of mental health training programme (Table 3)

Section IV: Association between pretest knowledge score with selected demographic variables. (Table 4)

**Table 2: Distribution of the subjects according to socio-demographic variables.**

Demographic variables	Category	Number of teenage girls	Percentage
Age	a. 13	4	8%
	b. 14	30	60%
	c. 15	14	28%
	d. 16	2	4%
Do you stay in hostel?	a. Yes	0	0%
	b. No	50	100%
Religion	a. Hindu	47	94%
	b. Muslim	3	6%
	c. Christian		
Residing area	a. Urban	15	30%
	b. Rural	35	70%
Type of the family	a. Nuclear family	35	70%
	b. Joint family	15	30%
Education of the Father	a. Illiterate	4	8%
	b. S.S.L.C	27	54%
	c. Higher secondary	11	22%
	d. Degree	8	16%
Occupation of the father	a. Unemployed	7	14%
	b. Self-employee	19	38%
	c. Daily wages	13	26%
	d. Private	3	6%
	e. government	8	16%

Education of the mother	a. Illiterate	7	14%
	b. S.S.L.C	35	70%
	c. Higher secondary	5	10%
	d. Degree	3	6%
Occupation of the Mother	a. Home maker	43	86%
	b. Self-employee	1	4%
	c. Daily wages	4	8%
	d. Private	2	2%
	e. Government	0	0%
Family monthly income	a. Below 5000	14	28%
	b. 5001- 10000	25	50%
	c. 10001 – 20000	4	8%
	d. Above 20000	7	14%
Source of previous knowledge about premenstrual syndrome?	a. Family members	27	54%
	b. Friends	4	8%
	c. Mass media	5	10%
	d. School coaching	14	28%

**Table 2: Frequency and Percentage distribution of pre-test and post-test level of knowledge of teenage girls N=50.**

Level of Knowledge	Pre-test level of knowledge		Post-test level of knowledge	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate	44	88.0	0	0.0
Moderately adequate	06	12.0	27	54.0
Adequate	0	0.0	23	46.0

**Table 3: Overall mean, standard deviation (SD), mean percentage, paired t value between pre-test and post-test N=50.**

Aspects	Teenage Girls			Significant difference in level of knowledge	Student's paired t-test
	Mean	SD	Mean (%)		
Pretest	8.12	2.82	32.48	40.8%	t=87.12
Posttest	18.32	2.68	73.28		

$t_{(49)} = 1.676$  significant at 0.05 level of significance

**Table 4: Association between pretest level of knowledge of teenage girls regarding premenstrual Syndrome and Demographic variables.**

Sl. No.	Chi Square analysis						Cal value	Tab value
	Observed frequency(O)	Expected frequency(E)	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E			
1	Age in years						$X^2 = 0.037$	d.f=1   3.84
	20	20.24	0.24	0.05	0.002			
	3	2.76	0.24	0.05	0.018			
	24	23.76	0.24	0.05	0.002			
	3	3.24	0.24	0.05	0.015			
			$\Sigma$		0.037		N.S	
2	Do you stay in hostel						$X^2 = 5.95$	d.f=1   3.84
	2	3.36	1.52	2.31	0.68			
	2	0.48	1.52	2.31	4.81			
	42	40.48	1.52	2.31	0.05			
	4	5.52	1.52	2.31	0.41			
			$\Sigma$		5.95		S	
3	Religion of teenage girls						$X^2 = 0.93$	
	20	21.12	-1.12	1.25	0.05			
	4	2.88	1.12	1.25	0.43			

	24	22.88	1.12	1.25	0.05		
	2	3.12	-1.12	1.25	0.40	d.f=1	3.84
				$\Sigma$	0.93	N.S	
4	Residing area						
	11	13.2	2.2	4.84	0.36		
	4	1.8	2.2	4.84	2.68	$X^2=4.34$	
	33	30.8	2.2	4.84	0.15		
	2	4.2	2.2	4.84	1.15	d.f=1	3.84
				$\Sigma$	4.34	S	
5	Type of family						
	30	30.8	0.8	0.64	0.02		
	5	4.2	0.8	0.64	0.15	$X^2=0.56$	
	14	13.2	0.8	0.64	0.04		
	1	1.8	0.8	0.64	0.35	d.f=1	3.84
				$\Sigma$	0.56	N.S	
6	Education of father						
	3	3.52	0.52	0.27	0.07		
	1	0.48	0.52	0.27	0.56		
	25	23.76	1.24	1.53	0.06		
	2	3.24	1.24	1.53	0.47		
	10	9.68	0.32	0.10	0.01		
	1	1.32	0.32	0.10	0.07	$X^2=2.51$	
	6	7.64	-1.04	1.08	0.15		
	2	0.96	1.04	1.08	1.12	d.f=3	7.81
				$\Sigma$	2.51	N.S	
7	Occupation of father						
	7	6.16	0.84	0.70	0.11		
	0	0.84	-0.84	0.70	0.83		
	17	16.72	0.28	0.07	0.00		
	2	2.28	-0.28	0.07	0.00	$X^2=8.6$	
	12	11.44	0.56	0.31	0.02		
	1	1.56	-0.56	0.31	0.19		
	1	2.64	-1.64	2.68	1.01		
	2	0.36	1.64	2.68	7.44		
	7	7.04	0.04	0.00	00		
	1	0.96	0.04	0.00	00	d.f=4	9.488
				$\Sigma$	8.6	N.S	
8	Education of mother						
	5	6.16	1.16	1.34	0.21		
	2	0.84	1.16	1.34	1.59		
	33	30.8	2.2	4.84	0.15		
	2	4.2	2.2	4.84	1.15	$X^2=7.17$	
	3	4.4	1.4	1.96	0.44		
	2	0.6	1.4	1.96	3.26		
	3	2.64	0.36	0.12	0.04		
	0	0.36	-0.36	0.12	0.33	d.f=3	7.81
				$\Sigma$	7.17	N.S	
9	Occupation of mother						
	40	37.84	2.16	4.66	0.12		
	3	5.16	2.16	4.66	0.90		
	1	1.76	0.76	0.57	0.32		
	1	0.24	0.76	0.57	2.37		
	2	3.52	-1.52	2.31	0.65		

	2	0.48	1.52	2.31	4.81	$X^2=9.26$		
	1	0.88	0.12	0.01	0.01			
	0	0.12	0.12	0.01	0.08	d.f=3	7.81	
				$\Sigma$	9.26	S		
10	Family monthly income							
	13	12.32	0.68	0.46	0.03			
	1	1.68	0.68	0.46	0.27			
	22	22	0	00	0			
	3	3	0	00	0			
	3	3.52	0.52	0.27	0.07			
	1	0.48	0.52	0.27	0.56	$X^2=0.95$		
	6	6.16	0.16	0.02	0.00			
	1	0.84	0.16	0.02	0.02	d.f=3	7.81	
				$\Sigma$	0.95	N.S		
11	Source of health information							
	25	23.76	1.24	1.53	0.06			
	2	3.24	1.24	1.53	0.47			
	3	3.52	-0.52	0.27	0.07			
	1	0.48	0.52	0.27	0.56			
	4	4.4	-0.4	0.16	0.03			
	1	0.6	0.4	0.16	0.26	$X^2=1.5$		
	12	12.32	-0.32	0.10	0.00			
	2	1.68	0.32	0.10	0.05	d.f=3	7.81	
				$\Sigma$	1.5	N.S		

## DISCUSSION

The findings of the study has lead the conclusion that that mental health training programme was effective in increasing the knowledge of teenage girls regarding premenstrual syndrome.

## ACKNOWLEDGEMENT

This research was self-funded, and I am grateful for the financial support that made this work possible.

I extend my thanks to Adichunchanagiri college of nursing for providing the necessary resources and facilities to carry out this study. I am grateful to the participants of this study for their time, cooperation, and willingness to contribute to this research.

## REFERENCE

1. van Droogenbroeck F, Spruyt B, Keppens G. Gender differences in mental health problems among adolescents and the role of social support: Results from the Belgian health interview surveys 2008 and 2013. *BMC Psychiatry*, 2018; 18: 6.
2. Bhuvanewari K, Rabindran P, Bharadwaj B. Prevalence of premenstrual syndrome and its impact on quality of life among selected college students in Puducherry. *Natl Med J India*, 2019; 32(1): 17–9. Doi: 10.4103/0970-258x.272109.
3. Premenstrual syndrome (PMS) among high school students. Buddhabyakan N, Kaewrudee S, Chong Somchai C, et al. *Int J Women's Health*, 2017; 9: 501–505.