

## A STUDY TO ASSESS EFFECTIVENESS OF INFORMATION BOOKLET IN TERMS OF KNOWLEDGE GAIN REGARDING, PRE-MENSTRUAL SYNDROME AMONG MIDDLE SCHOOL GIRLS

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**DOI No. – 08.2020-25662434**

### Abstract

*Premenstrual syndrome (PMS) is a recurrent luteal-phase condition characterized by physical, psychological, and behavioral changes of sufficient severity to result in deterioration of interpersonal relationships and normal activity. The definitive cause of PMS is unknown. Incorrect older theories about the causes of PMS include estrogen excess, estrogen withdrawal, progesterone deficiency, pyridoxine (vitamin B6) deficiency, alteration of glucose metabolism, and fluid-electrolyte imbalances.*

**Keywords:** Assess, Knowledge, Effectiveness, Booklet Information, Middle school girls.

### INTRODUCTION

Premenstrual syndrome (PMS) is a recurrent luteal-phase condition characterized by physical, psychological, and behavioral changes of sufficient severity to result in deterioration of interpersonal relationships and normal activity. The definitive cause of PMS is unknown. Incorrect older theories about the causes of PMS include estrogen excess, estrogen withdrawal, progesterone deficiency, pyridoxine (vitamin B6) deficiency, alteration of glucose metabolism, and fluid-electrolyte imbalances. Current research provides some evidence supporting the following etiologies:

- Serotonin deficiency is postulated because patients who are most affected by PMS have differences in serotonin levels; the symptoms of PMS can respond to selective serotonin reuptake inhibitors (SSRIs), which increase the amount of circulating serotonin.
- Magnesium and calcium deficiencies are postulated as nutritional causes of PMS; studies evaluating supplementation show improvement in physical and emotional symptoms.
- Women with PMS often have an exaggerated response to normal hormonal changes; although their levels of estrogen and progesterone are similar to those of women without PMS, rapid shifts in levels of these hormones promote pronounced emotional and physical responses.
- Other theories under investigation include increased endorphins, alterations in the gamma-aminobutyric acid (GABA) system, and hypoprolactinemia.
- The results of a large longitudinal study carried out by Bertone-Johnson et al suggest that the experience of abuse (emotional, sexual, or physical) in early life places women at higher risk for PMS in the middle-to-late reproductive years.

### REVIEW OF LITERATURE

Section I: Review of literature related to information regarding premenstrual syndrome.

Section II: Review of literature related to effectiveness regarding premenstrual syndrome.

### OBJECTIVES OF THE STUDY

- To assess the pretest and posttest knowledge score regarding pre menstrual syndrome among middle school girls in Jain Public School, Deopuri, Raipur Chhattisgarh.
- To determine the effectiveness of information booklet regarding pre-menstrual syndrome among middle school girls in Jain Public School, Deopuri, Raipur Chhattisgarh.
- To find the association between pretest knowledge score regarding pre menstrual syndrome with selected socio demographic variables.

### METHODOLOGY

The study was pre experimental study with an quantitative approach and research design was one group pre test and post test research design . The study was conducted in selected middle school girls in Jain public school, Deopuri, Raipur (c.g.).

Data collection period was one month. non probability convenient sampling technique was used in this study . Sample size was 60. The tools used for data collection were demographic variables and self structured questionnaire.

### DEVELOPMENT & DESCRIPTION OF THE TOOL

Data collection tools are the procedures or instruments used by the researcher to observe or measure the key variables in the research problem (Burns.N,Grove. K,2002).

After wide reading, the researcher developed the tool as per the following:-

**SECTION-A:** deal with socio demographic variables .

**SECTION B:** structured teaching program me .

### CRITERION MEASURE

There are 30 questionnaires in the data collection instrument. Each correct response scores 1 mark & wrong response 0 mark.

S.NO.	CRITERIA	SCORE	PERCENTAGE
1.	POOR	0-10	0-35%
2.	AVERAGE	11-20	36-69%
3.	GOOD	21-30	70-100%

- Maximum score – 30
- Minimum score – 0

### RELIABILITY

According to Wood & Haber, (1994), “reliability is defined as the extent to which the instruments yield the same result on repeated measures. It is then concerned with consistency, accuracy, stability and homogeneity”. After the tryout on 6 middle school girls, reliability was calculated by using split half method. The Procedure for calculating reliability of research instrument formula used is Karl Pearson correlation coefficient. The reliability co-efficient for knowledge was found to be **1.33** This lies within the acceptable range of Reliability of tool that is **0.7-1.0**. The score that indicate perfect reliability. These indicate tool is highly reliable.

### PILOT STUDY

The pilot study was conducted from 03/08/2019 to 09/08/2019.The purpose of the study was

explained to 6 middle school girls and informed consent was obtained. Pre test was done to assess the knowledge regarding premenstrual syndrome among middle school girls by using self structured knowledge questionnaires and administered information booklet post test is done after one week. The data analysis was done using descriptive and inferential statistics. After pilot study the tool was found feasible, practicable and acceptable. The analysis of the pilot study should be fulfilled. Based on this information, data collection for the main study was preceded.

#### **DATA COLLECTION PROCEDURE**

Data collection is a precise, systematic method of gathering information relevant to the research to conduct the main study in Jain Public School, Deopuri, Raipur, Chhattisgarh; a formal written permission was obtained from the concerned authorities before data collection. Data collection period was from 14/08/2019 to 28/08/2019. The procedure was the same as the pilot study. Valid and reliable self structured knowledge questionnaires were used for data collection. The sample of 60 middle school girls was selected on the basis of inclusion criteria by using purposive sampling technique. The investigator introduced her and develops rapport with the subjects. Then the purpose of the study was explained and the subjects were reassured that the data collected would be kept confidential. The investigator obtained consent from the subject's prior to the study.

#### **PLAN FOR DATA ANALYSIS**

Analysis of the data was planned on the basis of objectives and hypothesis. The data plan to be analysis by using both descriptive and inferential statistics and the following plan for analysis would be worked out.

- Organize the data in master sheet.
- Data on the background variable will be analyzed by frequency and percentage distribution to describe sample characteristics.
- Calculating average score, mean, mean percentage and standard deviation.
- T-test was used to assess the effectiveness of information booklet regarding pre menstrual syndrome among middle school girls.
- Computing the chi-square method to establish the association between pre – test knowledge with selected demographic variables.
- Value to be compared at 0.05 level of significant for corresponding degree of freedom.

#### **RESULT**

The data collected from the study subjects were analyzed and interpreted in terms of the objectives and hypothesis of the study. The descriptive and inferential statistics were used for data analysis; the level of significance was at 0.05%. that analysis of pre test and post test knowledge score to find out the effectiveness of information booklet regarding premenstrual syndrome among middle school girls, pre test mean score was 9.18, mean percentage score was 30.6% and SD1 was 1.44, analysis of post test knowledge mean score was 22.55, mean percentage 75.16% and SD2 was 0.76, and standard error was 0.26, paired't' value was 28.09 that was found to significant at 0.01 level. Hence, it is interpreted that the information booklet was effective on various area of knowledge regarding premenstrual syndrome.. Hence research hypothesis H1 is accepted. And shows that analysis of association between pre-test knowledge

score regarding premenstrual syndrome, with selected sociodemographic variables and reveals that the findings with regard to association of knowledge with Age, the  $\chi^2$  value was 5.12,  $df = 4$ , which was not significant at  $p \leq 0.05$  level. With regard to religion, the  $\chi^2$  value was 0.65,  $df = 4$  which was not significant at  $p \leq 0.05$ . With regard to Class, the  $\chi^2$  value was 8.67,  $df = 4$ , which was not significant at  $p \leq 0.05$ . With regard to Are you getting menarche, the  $\chi^2$  value was 1.48,  $df = 2$ , which was not significant at  $p \leq 0.05$ . With regard to Occupation of father, the  $\chi^2$  value was 3.48,  $df = 6$ , which was not significant at  $p \geq 0.05$ . With regards to Father's income,  $\chi^2$  value was 10.71,  $df = 6$ , which was not significant at  $p \leq 0.05$ . With regards to Types of family,  $\chi^2$  value was 4.84,  $df = 4$ , which was not significant at  $p \leq 0.05$ . With regard to Area of Residence,  $\chi^2$  value was 0.8,  $df = 2$ , which was not significant at  $p \leq 0.05$ . With regard to Previous knowledge,  $\chi^2$  value was 4.85,  $df = 2$ , which was not significant at  $p \leq 0.05$ . With regards to Source of

Information,  $\chi^2$  value was 12.31,  $df = 6$ , which was not significant at  $p \leq 0.05$ . The chi square test was done to find out the association between the pretest knowledge score with their sociodemographic variables. No significant association was found between the pretest knowledge score when compared with the demographic variables age, religion, class, are you getting menarche, fathers, father's occupation, father's income, and types of family, area of residence, previous knowledge, and source of knowledge. Hence hypothesis (H2) is rejected. Implication of the present study as finding of this study have the implication for general implication, nursing practice, nursing education, nursing administration and nursing research.

## DISCUSSION

The study concluded that the increases level of knowledge regarding premenstrual syndrome among middle school girls and post test mean of knowledge is high as compare of pretest mean that mean information booklet was effective regarding premenstrual syndrome.

## RECOMMENDATIONS

Based on the findings the following recommendation have been made for further study -68  $\cong$  Similar study can be undertaken for large samples to generalize the findings.  $\cong$  The study can be conducted in the different set ups like all hospital and college.  $\cong$  An experimental study can be carried out with different teaching methods to know the effectiveness of each teaching method on premenstrual syndrome among the middle school girls.  $\cong$  A pre experimental study can be carried out to assess the knowledge on premenstrual syndrome among the middle school girls.  $\cong$  Same study can be undertaken with control group.  $\cong$  A self-instruction module can be prepared and tested for its effectiveness.  $\cong$  The similar study can be conducted to assess the rate of premenstrual syndrome among the middle school girls.  $\cong$  A similar study can be conducted to assess the knowledge and attitude of the adolescent girls regarding premenstrual syndrome.  $\cong$  A similar study can be conducted to assess the prevalence of menstrual & premenstrual among the family members of the middle & adolescent girls.  $\cong$  A comparative study may be conducted to assess the practice of middle school girls regarding premenstrual syndrome and prevention of menstrual irregularity & diseases.

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