“A PREVALENCE STUDY ABOUT DYSMENORRHEA AND PRE-MENSTRUAL SYNDROME AMONG SCHOOL GOING ADOLESCENT GIRLS”

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Abstract:

Premenstrual syndrome (PMS) is a disorder affecting large number of population in terms of their physical and psychological well-being, which can interfere with normal activity. It significantly affects the health-related quality of life and can result in decreased performance in academic. The aim of the study was to find out the prevalence of different symptoms of Dysmenorrhea, Pre-Menstrual Syndrome and menstrual Hygiene practices among the adolescent school going girls and effect of nutrition education was assessed. This study was conducted in Kovai Vidiyha Manthir School and CRI Matriculation Higher Secondary School, Coimbatore under the age group of 13-17 years girls students of 100 were conveniently selected by providing them a questionnaire regarding the presence of different symptoms of PMS and Dysmenorrhea. A pre-tested self-structured questionnaire was used for pre and post-test; and nutrition education was given after 15days and their impact of knowledge was assessed among them. Age wise distribution of the subjects revealed that 61% percent were belonging to the age group of 15-16years. 42% percent of the subjects attained their menarche at the age of 14years. Following that 57% of the girls having their menstrual bleeding for 5-6days. About 82% of girls have discomfort during their menstruation. So the study has been initiated, the study has highlighted that intervention in the form of menstrual health education that can significantly improve knowledge about menstrual discomfort like Dysmenorrhea, Pre-Menstrual Syndrome and menstrual hygiene during menstruation among adolescent girls. The study has been concluded that 11.2% of significant increase in knowledge of menstrual discomfort like Dysmenorrhea. Pre-Menstrual Syndrome and Dysmenorrhea it is important to have this kind of health education at early stage of reproductive life to mitigate the suffering of womenfolk. The nutrition education program led to the improvement among the girl’s students about the symptoms on Dysmenorrhea, Pre-Menstrual Syndrome and menstrual Hygiene practices and diet to be followed during the condition.

INDEX TERMS: Dysmenorrhea, Premenstrual syndrome, menstrual hygiene, Diet and Nutrition Education
INTRODUCTION

Adolescence is one of the stages of physical growth of a child. Adolescence is described as the period of life when an individual is no longer a child, but not yet an adult. The term “adolescence” and “young people” are defined by World Health Organization (WHO) as the age group 10-19 years and 10-24 years respectively. Adolescents comprise a significant part of today’s population. Adolescents constitute about 23% of population in India. Adolescents are not a homogenous group. Their needs vary with their gender, stage of development, life circumstances and the socioeconomic conditions of their environment. (WHO, 2012)

Challenges to adolescent health and development include problems related to growth and development, puberty, endemic infections, substance abuse, nutritional deficiencies, reproductive health problems, reproductive tract infections, mental health problems like behavioral disorders, stress and anxiety, depression, suicide, inadequate education about reproduction and gender roles. (Ghai O.P, 2010)

Menstrual periods become regular only after 1-2 years after menarche. Puberty is the stage of life at which secondary sex changes begin. These changes are stimulated when the hypothalamus synthesizes and releases gonadotropin - releasing hormone, which in turn triggers anterior pituitary to begin the release of follicle stimulating hormone (FSH) and luteinizing hormone (LH). FSH and LH initiate the production of androgen and estrogen, which in turn initiate secondary sex characteristics, the visible signs of maturity. (Daley A.J, 2008)

Menstrual dysfunction is a common accusation amongst girls. Menstrual cycles can be irregular and periods can be painful (Dysmenorrhea) or heavy (Menorrhagia). Serious pathology is uncommon and menstrual cycles do enhance with age. The onset of menarche is often associated with problems of irregular menstruation, excessive bleeding, premenstrual syndrome and dysmenorrhea. There are several discomforts such as backache, constipation, abdominal cramps, nausea and vomiting that may be associated with the pre-menstruation period or during menstruation. Yet many women, across a range of different cultures, experience menstrual problem that range from mild discomfort to acute pain, it is termed as dysmenorrhea. (Bobak Lowdermilk, 2001)

Premenstrual syndrome (PMS) is a major clinical problem distressing a large number of women populations. It refers to a group of physical and psychological symptoms occurring during the luteal phase (7-14 days prior to menstruation) of menstrual cycle and relieved by the onset of menstruation. The diagnostic definition for PMS established by the American College of Obstetricians and Gynecologists states that a woman’s symptoms must be present in the 5 days before her period for at least three menstrual cycles in a row, end within 4 days after her period starts and interfere with some of her normal activities.

Menstrual disturbances particularly irregularities in timing of periods and amount of flow, dysmenorrhea or discomfort during the menstrual flow are very common during adolescence. Many females experiencing cramping abdominal pain, back ache and leg ache. The pain may be mildly discomforting or intolerable and incapacitating. Dysmenorrhea is the leading cause of recurrent school absenteeism, among the adolescent girls. Treatment of dysmenorrhea consists of medications (usually prostaglandin inhibitor), application of heat to the painful area, and exercises such as assuming knee chest position and breathing

OBJECTIVES OF THE STUDY

- To assess the prevalence of Dysmenorrhea & Pre-Menstrual Syndrome among adolescent school going girls.
- To formulate the educational tool and to educate about Dysmenorrhea & Pre-Menstrual Syndrome among the adolescent school going girls.

RESEARCH APPROACH

This is based on quantitative research approach. The quantitative research approach means which emphasis objective measurement and statistical mathematical or Analysis of data collecting through survey questionnaires or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across group of people or to explain a particular phenomenon.
SETTING OF THE STUDY
Setting is the physical location and condition in which data collection takes place. The female students from Kovai Vidhya Manthir School and CRI Matriculation Higher Secondary Schools at Coimbatore district were selected.

SELECTION OF SAMPLE AND SAMPLING TECHNIQUES
Sampling means selecting the group that researchers will actually collect data from in research. The subjects were selected based on convenient sampling method. The convenience sampling is a type of non-probability sampling that involves the sample being drawn from the part of population that is close to hand. Since the adolescent girls have less prevalence of dysmenorrhea and pre-menstrual syndrome, so this group of subjects were selected for study. The permission was taken from the principal of the schools and the total sample size of about 100 analyzing girls within the age group of 13 to 17 years with selected and questionnaire distributed accordingly. There are certain inclusion and exclusion criteria while selecting the sample.

DATA COLLECTION METHOD
For the present study the data was collected by using questionnaire which consists of Socio Demographic profile, gynecological profile and knowledge questionnaire which includes the question about, female reproductive system, puberty, mensuration, menstrual discomfort, nutrient intake, diet and menstrual hygiene.

PRE ASSESSMENT AND POST ASSESSMENT
The validated question of administered to the participating subjects the willingness of the participants were enquired before proceeding. A total 20 -30 minutes was given to each participant to record their response. The participant marked their response and return the filled questionnaire. After conducting education program the post assessment was conducted to Assess level of knowledge gained. The same questionnaire (knowledge part) is distributed. A total 20-30 minutes was given for each participant to record their response the mark response were collected.

The data was analysed by using descriptive and inferential statistics with the help of software (SPSS V2.0)

RESULTS AND DISCUSSION:
In this present study it is inferred the school going adolescent girls from coimbatore district, Adolescent girls from kovai vidhya Manthir, CRI Matriculation Schools of Coimbatore where 61% belonging to the age group of 15-16 years, and least group of girls 1th belonging to age group of 17 - 18 years, most of the girls 89% from all age groups belong to urban area whereas least of girls 5%. Among 100 subjects the majority of the subjects, non-vegetarian, and 23% are Vegetarian, whereas the minority of 2% ova-Vegetarians, and all the 100 subjects were having discomfort during their menstruation. Most of adolescent girls 42% attain there menarche at the age of 13-14 years and least 26% attain at the age 15- 16years. The data collected from the adolescent girls, about 67% of girls are not aware of dysmenorrhea. 75% of girls were absent to school during their menstruation due to discomforts and Pain. The study was consolidated based on pretest Knowledge assessment and post is knowledge assessment by means of paired "t"test. The mean and standard deviation values are calculated for pre and post assessment. The values seems to be 34.23±12.50 for pre knowledge assessment and 56.63 ± 19.80 for post knowledge assessment. The t value is also calculated for the assessment the obtained t value is -6.0208 at significance of 5(>5). Thus the percentage difference between the assessments was 11.2% this shows the significant increase in knowledge at post assessment.
OVERALL ASSESSMENT RESULT

<table>
<thead>
<tr>
<th>Knowledge criteria</th>
<th>Mean ± S.D</th>
<th>‘t’ value</th>
<th>Percentage difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- test</td>
<td>34.23±12.50</td>
<td>-6.208</td>
<td>11.2%</td>
</tr>
<tr>
<td>Post – test</td>
<td>56.63±19.80</td>
<td></td>
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</tbody>
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Table 1

The table 1 reports the overall result obtained due to the survey the study was done among 100 school going adolescent girls. The study was consolidated based on pretest Knowledge assessment and post is knowledge assessment by means of paired "t" test. The mean and standard deviation values are calculated for pre and post assessment. The values seems to be 34.23±12.50 for pre knowledge assessment and 56.63 ± 19.80 for post knowledge assessment. The t value is also calculated for the assessment the obtained t value is -6.0208 at significance of 5(>5). Thus the percentage difference between the assessments was 11.2% this shows the significant increase in knowledge at post assessment.

CONCLUSION

The findings led to the conclusion that the students have deficient knowledge, various misconceptions and inadequate practices regarding menstruation and its pain management at baseline assessment. The positive results of this study demonstrate the feasibility of implementing a health education programme on menstrual discomfort management at schools especially age group of 13, 14 and 15 years. The intervention produced significant positive changes in Knowledge and Menstrual hygiene practices among adolescent girls. This concludes that educational intervention can bring about many changes.

REFERENCE