

## SYSTEMATIC REVIEW: EFFECT OF PREMENSTRUAL SYNDROME AMONG WOMEN

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### ABSTRACT

Woman is the companion of man gifted with equal mental capacity. Women constitute half of the population of the world. They had a number of different roles in society. Women strengths include good listening and communication skills, flexibility to compromise, extensive experience in practical problem solving and caring for people. The presence of women seems to be potent ingredient in fostering and maintaining local population. Elevating the health status of women is essential to improving the health of the entire community. PMS is debilitating and consists mainly of affecting symptomatology that interferes with quality of life (QOL). The most common physical symptoms are headaches, breast tenderness, swelling, abdominal bloating, heaviness, low energy, Fatigue, back and muscle pain and many more.

Its believed that relaxing one's muscles does greatly reduce Anxiety "Jacobson: 1929, Lang, Melamed, Hart, 19701. Mohan and Chopra ^19851 found that certain personality dimensions "Neuroticism and Anxiety I which can create stress in women suffering from premenstrual tension could be successfully reduced with the help of relaxation therapy. It is important as being an occupational therapist to help them to conserve there energy and physical, mental fitness with Proper occupational Therapy Intervention.

**KEYWORDS:** PMS (Premenstrual Syndrome), Occupational Therapy Intervention, Relaxation Techniques

### INTRODUCTION

#### Background of the Study

Adolescence is a very important and sensitive period of one's life. According to the World Health Organization's Expert Committee (WHO, 2003), adolescence is defined as the period between 10 and 19 years, the second decade of life and account for more than one-fifth of the world's population. India's population of young people is approximately 327 million, which comprises 30% of the population of the country. The number of adolescents is projected to continue growing over the coming years (National Commission on Population, 2007). A general lack of understanding about the particular needs of Indian adolescents, specifically adolescent girls, persists in India and the wider global community. Adolescent girls constitute a vulnerable group, particularly in India where female child is a neglected one, as well as inaccessibility to basic health care, education, sexual and reproductive health needs, rights, age old traditions and misconceptions about menstruation that commonly prevail in this cohort. Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to menstruation depends upon awareness and knowledge about the subject.

Mahajan and Sharma (2004) conducted a study to assess the knowledge level of adolescent towards reproductive system and reproductive organs among 400 adolescent girls, 200 from rural areas and 200 from urban areas of Jammu. Urban adolescent girls had comparatively better knowledge regarding reproductive issues, than rural adolescent girls. Similarly, Bhan et al. (2004) in his study on awareness regarding reproductive knowledge among adolescent girls (16-20 years) found that awareness was very low. Additionally Gupta, Sadhna, Sinha and Achala (2006) stated that the majority of girls had only partial or incomplete knowledge of facts on menstruation and about physiological changes.

As adolescent girls may have poor knowledge about reproductive health aspect it is essential to empower them. A path towards empowerment is through education, as appropriate education should aim at developing the skills and abilities of adolescents, which enable them to deal effectively with the demands and challenges of everyday life, in positive and beneficial ways. However, adolescents are not incorporated into the realm of health education in a large number of developing countries, where theory-based behavior change strategies are rarely imparted (KamlaRaj, 2008; SinhaAchala, 2006; population and health Indoshare, 2006). Hence the researcher decided to empower adolescent girls about menstrual problems especially on menstrual hygiene, premenstrual syndrome and its management through theory based yoga intervention, as they are a promising group to the country's development.

## **MENSTRUATION**

Menstruation, also called menses, is a sequence of events that occurs once in a month in a sexually mature female (Muktananda, 2003). A menstrual cycle (MC) is counted from the first day of one period (the first day of bleeding) to the first day of the next period. An average cycle is 28 days, but generally 23-35 days is normal. The menstruation is bifurcated into pre and post ovulatory periods. However, MC lasts for 28 days and occurs in three phases Viz:- 1) Follicular phase, that lasts for 10-14 days from day one of cycle before 22-36 days of ovulation triggered by Follicular Stimulating Hormone (FSH). 2) Luteal Phase – Associated with peak progesterone (PG) secretion after 8 days of ovulation i.e. on 18th and 22nd of cycle. 3) The post ovulatory period with fixed duration of 14 days. The pre ovulatory stage varies between 2-3 days and may get further delayed due to complex psycho physiological dysfunctions.

The symptoms of menstrual dysfunctions are referred as premenstrual syndrome being prevalent in early stage of adolescence. The process of menstruation involves rupturing of uterine walls followed by healing action in later process. This usually affects the normal and routine uterine functions such as urine formation etc. This stage of MC causes severe pain of organic nature and added to the disturbed mental state, further worsens leading to PMS (pre menstrual syndrome) problems. The epidemiological surveys have also pointed out that around 75% in reproductive age experience some symptoms attributed to the premenstrual phase of the menstrual cycle (Johnson et al, 1988). In fact, PMS is the term for a group of emotional, mental, and physical symptoms that affect women during the days leading up to menstrual period. The symptoms are various such as fluid retention, mood changes, depression, weight gain, urinary tract infection, breathlessness ,nasal congestion, headaches, susceptibility to conjunctivitis, etc. The exact cause of PMS is unknown, but it is thought to be related to hormonal imbalances.

According to the World Health Organization, International Statistical Classification of Disease and Related problems, 10th revision (ICD-10).Geneva: WHO: 1992. Premenstrual syndrome is often classified under the generic term Premenstrual syndrome which is listed in the International Statistical Classification of diseases and Related Health Problems, 10th revision (ICD-10).

PMS might be a socially constructed disorder and PMS is a collection of symptoms more than 200 different symptoms have been identified but three most prominent symptoms are irritability, tension and dysphonia [Rodin et al 1992].

Health personal can help to create awareness among women on comprehensive measures to reduce the PMS in their child bearing age. This is in turn helps to prevent the negative impact on the quality of life of women.

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## Methods

Qualitative studies were included in the review. Based on the objectives of the current review, inclusion and exclusion criteria were prepared, and based on that, various data base was used in the selection of studies. The collected studies were checked for clarity and content and then used for the review.

## Criteria for Sample Selection

Two criteria, via inclusion and exclusion criterion were used for the selection of the sample.

**Table 1: Highlights the Criteria for Selection of Participants**

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> <li>• Adult women of reproductive age (20-45 years).</li> <li>• Willing to participate and extend their co-operation for the study.</li> <li>• Who are literates</li> <li>• Ready to give written consent for the intervention.</li> </ul>	<ul style="list-style-type: none"> <li>• Adult women above the age of 45years and less than 20 years.</li> <li>• Pregnant and lactating mothers .</li> <li>• Who have undergone hysterectomy.</li> <li>• Who are illiterates .</li> <li>• Who have not given the written consent .</li> <li>• Who are severely anaemic.</li> </ul>

## Electronic Database Searching

### The Databases Searched

PubMed, online journal, Access open, Google Scholar

### Keywords Used

Premenstrual syndrome, occupational therapy intervention, mechanism Relaxation techniques, qualitative Research.

### Data Extraction and Quality Assessment

PRISMA flow diagram was used to select the articles. Eligibility criteria were assessed for extracted data. Included studies were evaluated on the basis of relevance, appropriateness clarity and methodology.

Those studies that were not meeting the criteria were excluded. Articles selected for review were assessed by two independence reviewers. The data extracted included participant, year of publication, study method, type of intervention and outcome.

## ANALYSIS

### Steps in the analysis

- **Step I:** Obtain data were tabulated and classified as author. Study design, year of publication, setting, method, sample size, type of intervention, components of intervention and outcome.
- **Step II:** Identifying the findings of the studies. The studies were identified with their setting, method, and sample size, type of intervention and component of intervention.
- **Step III:** Categorizing the findings. Finding were categorized under the headings of coping education coping on autistic parents or mothers only.

## RESULTS

The review study included 250 potentially relevant articles. Out of which 200 studies were excluded as duplicate, 25 articles were excluded as they did not meet the inclusion criteria, 13 articles did not mention the intervention, and 5 studies were included for the review.

### Characteristic of the Articles

Out of the 5 studies included in the review. All review was qualitative study. Majority of the study were conducted in the hospital setting. These studies were published between 2010 to 2020.

Table 2

Study/author	Year of publication	Research Design	No. of Participant	Sample Characteristic	Theme	Sub-theme
1. Karthiga, Abhijit Boratne	2010	Cross-sectional	1.193 girls with dysmennorrh ea..	Girls in pondicherry.	1.Study on menstrual problems and pattern of consultation among adolescent school girls in Pondicherry,	<p><b>Subtheme</b></p> <p>1.1. There is an urgent need for strong health educational activities among the adolescent girls,</p> <p><b>Subtheme</b></p> <p>2.1. urgent need for strong health educational activities among their parents and teachers for effective management of menstrual problems among all adolescent girls.</p> <p>3.2</p>
2. Patil and Wasnik Wadke	2014	OBSERVATI ONAL	61	females with dysmennorrh ea	1.Health problems amongst adolescent girls in rural areas of Maharashtra 2. majority of the girls had one or the other problems related to their menstrual problems	<p>Subtheme</p> <p>1. adolescent girls and more than 50% of the study subjects had one or the other symptoms of PMS.</p>

Table 2: Contd.,

3. Choi, Lee, Leher	2014	Review	80	23 females documented symptoms, the most predominant symptoms were joint-muscle-back pain, abdominal pain and irritability.	1. Impact of premenstrual symptoms on activities of daily life in Korean women  2. ADL were significantly associated with the severity of PMS	<b>Subtheme</b>  1. Most of the women (91.5%) had no knowledge regarding terminology pertaining to PMS.  2. There was a high correlation between the duration and severity of symptoms
4. Heinemann, Minh	2016	A Brief Review	N - 60	Review based study	1. Impact of severe premenstrual disorders on work absenteeism and productivity  2. Employed women with moderate-to-severe PMS/PMDD had higher rate of productivity impairment	1. Outcomes were obtained for impairment of working productivity or efficiency using the premenstrual symptoms screening tool.
5. Dennerstein, Leher	2014	cross sectional study	59	59 Females with menstruation related issues.	1. Problem related to menstruation among medical students at Rewa.  2. Maximum number of student does not seek medical advice and self treatment	1. These condition influence women's lives, relationships, work and is the most common reason for absenteeism for women younger than age 30

## CONCLUSIONS

It is evident that 30-87% adolescent girls are prone to prevalence to menstrual disorders. The treatment methods for such cases include medical (hormonal, anti depressant and pain killers), surgical (hysterectomy and salpingo-oophorectomy) and alternative medical treatments. Obviously, these medical and surgical therapies come with side effects. Hence, alternative therapies especially exercise or physical activities are suggested (Stevinson and Ernst, 2001; Rapkin, 2003).

It's clear that women suffering from PMTS produce psychological and behavioural changes in their personality and this situation leads to the importance of psychological treatment for the women sufferers. Over the years literature is growing with number of studies indicating the usefulness of psychotherapeutic techniques to treat women with PMTS.

From the above discussion it is suggested that the orders of frequency of symptoms were anger, irritability, anxiety, tiredness, difficult concentration and we concluded that PMS is a common problem in women which affect their daily living activities, and require proper attention and treatment protocol with less side effects and easy to implement.

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