Effectiveness of Aerobic Training in Improving Symptoms of Premenstrual Syndrome in Young Females: A Review

Yuvakshi Bhatnagar, Undergraduate Student, Department of Physiotherapy, MMIPR, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

Manu Goyal, Professor, Department of Physiotherapy, MMIPR, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

Kanu Goyal, Assistant Professor, Department of Physiotherapy, MMIPR, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Kanu Goyal,

Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India

E-mail: kanu.goyal@mmumullana.org

ABSTRACT

Premenstrual Syndrome (PMS) is a set of repetitive symptoms that begin at the end of the secretion phase of the menstrual cycle and ends in the follicular phase which are commonly seen in young females, affecting their daily life, and showing dominant emotional fluctuations. PMS affects women's mental and physical health, with a prevalence of approximately 48% among women of reproductive age. Studies has shown that consistent aerobic exercise lessens the severity of PMS. The present study is aimed to determine the effect of aerobic training in improving pre-menstrual symptoms among young females. A systematic search from various databases like PubMed, PEDro, Cochrane, and Scopus were used which was published from 2012 to 2024 to evaluate the effectiveness of aerobic exercise regimens in relieving premenstrual symptoms in young females, using PRISMA guidelines to assess methodological quality.

A total of five studies were determined to be eligible for inclusion. All together, these studies included 307 participants, with intervention periods varying from 6 to 12 weeks and sessions occurring one to three times per week. The outcome measures were; Premenstrual Syndrome Scale (PMSS), Visual Analogue Scale (VAS), and Beck Depression and Anxiety Questionnaire. Young females who participated in aerobic training reported significantly improved premenstrual symptoms (p<0.05). Mechanisms include decreased headache, nausea, low back pain, weakness, bloating, and better psychological and premenstrual symptoms. This review shows that aerobic training could potentially alleviate the psychological and physical symptoms of PMS in females.

Keywords: Aerobic exercise, Females, Physiotherapy, Visual anloque scale.