

Advancements in Dysmenorrhoea Management: Comprehensive Narrative Review of Perineometer-Assisted Pelvic Floor Rehabilitation

VINDHYA VIJIKUMAR^{1*}, POOJA SHARMA², DIVYA AGGARWAL³, NITESH MALHOTRA⁴

ABSTRACT

Introduction: Primary Dysmenorrhoea (PD) is defined by painful menstrual cycles in the absence of pelvic disease. It is characterised by recurrent cramps and lower abdomen discomfort during menstruation, affecting 50% to 90% of women. Adolescents with dysmenorrhoea had higher levels of anxiety and depression, and lower perception of their Quality of Life (QOL). Dysmenorrhoea among female students adversely impacted academic performance leading to absentism (Amza et al., 2024). Non-pharmacological therapies provide positive effective in reducing menstrual cramps in people with PD.

Aim: To assess the existing literature on the effectiveness of Perineometer assisted pelvic floor rehabilitation and Progressive Relaxation Technique (PRT) in managing dysmenorrhoea severity and associated psychological symptoms such as anxiety and depression in young women, identify the limitations of previous studies, and justify the need for further research.

Materials and Methods: A thorough search was done in PubMed, Scopus, and Google Scholar Library using keywords such as “pelvic floor rehabilitation,” “biofeedback,” “Perineometer,” “Progressive

Relaxation Technique,” and “dysmenorrhoea.” Studies published between 2014 and 2024 that focussed on women with PD, reported outcomes of PFMT with biofeedback, PRT, or combined interventions, and used validated measures such as the PERFECT score, Visual Analogue Scale (VAS), and psychological assessment tools were included, with only full-text articles.

Results: Evidence suggests that PFMT with biofeedback significantly enhances pelvic floor strength, as indicated by improved PERFECT scores and reductions in VAS pain scores. PRT consistently reduces anxiety and depression, improving psychological well-being. Combined interventions demonstrated superior outcomes, emphasising the synergistic effects of physical and psychological therapies.

Conclusion: Perineometer-assisted PFMT is more effective to traditional training due to precise feedback, enabling better adherence and outcomes. Combining with PRT addresses psychological distress, providing a holistic approach to managing Dysmenorrhoea.

Keywords: Biofeedback, Progressive relaxation technique, Quality of life

PARTICULARS OF CONTRIBUTORS:

1. MPT Student, Department of Physiotherapy, School of Allied Health Science, Manav Rachna Institute of Research and Studies, Faridabad, Haryana.
2. Associate Professor, Department of Physiotherapy, School of Allied Health Science, Manav Rachna Institute of Research and Studies, Faridabad, Haryana.
3. Assistant Professor, Department of Physiotherapy, School of Allied Health Sciences, Manav Rachna International Institute of research & studies, Faridabad, Haryana.
4. Associate Professor & Head of the Department, Department of Physiotherapy, School of Allied Health Science, Manav Rachna Institute of Research and Studies, Faridabad, Haryana.

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

*Vindhya Vijikumar

Department of Physiotherapy, School of Allied Health Science, Manav Rachna Institute of Research and Studies, Faridabad, Haryana.

E-mail: vindhyavs22@gmail.com