

Delivering a Tele-Rehabilitation Based Exercise Programme to Promote Fitness in Perimenopausal Women: A Randomised Control Trial

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ABSTRACT

Introduction: Healthcare systems have been swiftly adopting the use of tele-rehabilitation systems for health promotion. Indian women have a relatively earlier onset of menopause, but do not seek healthcare due to social inhibitions. Hence, reaching to them proactively through delivery of a tele-rehabilitation fitness program as against in-person health services may offer a solution towards enhancement of health related fitness and quality of life in perimenopausal women.

Methods: A randomised, single blinded, active control trial was conducted with 55 perimenopausal women (mean age 50.5 ± 3.5 years). A six week home-based exercise programme was delivered and monitored through tele-rehabilitation systems (group 1), and in-person (group 2). Outcome measures included body composition, cardiovascular endurance, muscular endurance, flexibility, and menopause specific quality of life. For intra-group analysis, paired t-test for parametric data and Wilcoxon signed rank test for non-parametric data was used while unpaired t-test and Mann Whitney-U test were used respectively for inter-group analysis with α set at $p \leq 0.05$ at 95% confidence interval.

Results: Both groups showed enhancement in body fat percentage, VO_2 max, curl up, modified push up, squat, sit and reach test scores, and also reported an improved quality of life ($p < 0.05$). Inter-group analysis of the outcome measures was not significant ($p > 0.05$).

Conclusion: Tele-rehabilitation is an effective mode of delivering a proactive home based exercise programme to improve fitness and quality of life in perimenopausal women.

Keywords: Tele-rehabilitation, Perimenopausal women, Exercise program

