

IMPACT OF PELVIC FLOOR MUSCLE TRAINING IN THE POSTPARTUM PERIOD

Hypothesis / aims of study

Accumulating evidence suggests that damage to the perineum during labour and delivery is associated with pelvic floor dysfunction and increases the risk of pelvic pain, sexual dysfunction, urinary and fecal incontinence (1, 2). Pelvic Floor Muscle Training (PFMT) is commonly recommended during pregnancy and after birth both for the prevention and treatment of incontinence (3). Our study piloted a novel two-tiered approach to delivering PFMT to a mixed population of women (women with and without incontinence) in the postpartum period. All women who delivered in a tertiary care centre were invited to attend a standardized 2 hour group instruction in a workshop format, followed by an opportunity to then self-select for further one-on-one physiotherapy sessions.

The aim of the study was to evaluate the outcomes of those women who chose to self-select to continue with the one-on-one physiotherapy sessions.

The primary objective of our study was to evaluate changes in pelvic floor function, as measured by the validated Pelvic Floor Distress Inventory-20 (PFDI-20). Secondary objectives included: measuring changes in pelvic floor function using the Pelvic Floor Impact Questionnaire-7 (PFIQ-7) and the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire-12 (PISQ-12); measuring changes in pelvic floor strength with the Modified Oxford Scale (MOS) and, assessing women's satisfaction with the program. All measures were performed prior to beginning and at the completion of the physiotherapy program.

Study design, materials and methods

This was a single-center prospective pilot cohort study conducted in a tertiary care hospital. All women who delivered between December 2013 and September 2014 were given information on the program and the opportunity to enroll in the group workshop, with the option of continuing with four sessions of one-on-one physiotherapy after the workshop.

All data were analyzed using SAS version 9.3 (SAS Institute Inc., Cary, NC, USA). Descriptive statistics were calculated for subject demographics, with means and standard deviations reported for continuous variables and proportions reported for categorical variables. The change from baseline to post-intervention PFDI-20 and PFIQ-7 quality of life scores and MOS scores were tested using the Wilcoxon Signed-Ranks Test.

Results

During the study period, a total of 218 women attended the workshop. Of these women, 54 women chose to attend the PFMT sessions and all enrolled in the study. 50 of these 54 women completed follow-up.

Significant improvements were seen in the PFDI-20 (mean change in score -41.8, $p < 0.001$) and PFIQ-7 questionnaires (mean change in score -23.0, $p < 0.001$). Results for the PISQ-12 questionnaire could not be tabulated as there were too many missing responses. The MOS score was significantly improved at the fourth program visit (4; Range 0 to 5) compared to the recorded strength at the first visit (3; Range 0 to 4) $p < 0.001$. 49 out of 50 women reported that their expectations for the program were met (mean score 9 out of 10, SD 1.4).

Interpretation of results

Our study confirms the benefit of administering PFMT to a self-selected population of women in the postnatal period. The results suggest that using a two-tiered, self-selection approach to administering PFMT contributes to significant improvements in pelvic floor function and quality of life. In addition, a larger group of women were provided education on postnatal pelvic floor care.

Concluding message

Our exploratory study with a two-tiered program shows promising results in terms of enhancement of quality of life, improvement in MOS scores and satisfaction rates. Randomized controlled and longer term studies are needed to further explore the benefits of such a program.

References

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Disclosures

Funding: The study was supported by a grant provided by the Canadian Foundation for Women's Health and the Canadian Continence Foundation sponsored by Watson Pharma Company. **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** The Conjoint Health Research Ethics Board (CHREB) **Helsinki:** Yes **Informed Consent:** Yes