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COMMENTARY

A commentary on "Effects of home-based stabilization exercises focusing on pelvic floor on postnatal stress urinary incontinence and low back pain: a randomized controlled trial"

Ghazaleh Rostaminia [1]

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This single-blind randomized controlled trial aimed to investigate the effect of combined pelvic floor and lumbar stabilization exercises on postnatal stress urinary incontinence (SUI) and low back pain (LBP) by using a new and innovative, home-based exercise program called "Stabilization exercises focusing on pelvic floor."

Eighty women with postnatal SUI and LBP who were referred for physical therapy by a urogynecologist were recruited to the study and were randomly assigned to control and intervention groups using random allocation software. Blinding was only possible for the assessor and statistician, not for the participants and physiotherapist. In the intervention group, women participated in a 12-week home-based program (3 days a week, 3 sets a day). Each set consisted of ten repetitions of three different types of exercise each week. Each contraction involved an 8–10-s hold time and the same rest time. The control group did not receive any intervention. The outcomes of LBP severity, disability, and SUI severity were measured using a visual analogue scale (VAS), Oswestry Disability Index questionnaire (ODI), and the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF UI), respectively. The transverse abdominis (TrA) muscle strength and pelvic floor muscle strength were measured with a STABILIZER-TM manometric biofeedback device and vaginal digital palpation, respectively. Thirteen (32.5%) women in the control group and 12 (30%) in the intervention group left the study. In the intervention group, PFM strength, TrA muscle strength, functional disability, and pain severity were significantly improved ($P < 0.05$), while in the control group only PFM strength and SUI severity had improved ($P < 0.05$).

In summary, this study showed that stabilization exercises focusing on pelvic floor muscles improved early postpartum low back pain, transverse abdominis muscle strength, and pelvic floor muscle strength. Stress urinary incontinence severity was not affected by this intervention, also improving in the control group, without any intervention, over the 12-week postpartum period. Pregnancy is one of the major risk factors for musculoskeletal problems in the lower back. It is multifactorial in nature, but hormonally induced hypermobility during pregnancy is likely a major contributor, resulting in decreased joint stability and pain. The current study suggests that home-based stabilization exercises are effective in reducing disability and subsequent lower back pain during the early postpartum period and can be offered to mothers who are already under tremendous pressure to cope with an increased workload related to newborn care.

✉ Ghazaleh Rostaminia
ghazalerostaminia@yahoo.com

[1] NorthShore University HealthSystem, Evanston, IL, USA