

EVALUATING PHYSICAL THERAPY EFFICACY IN MANAGING PREGNANCY-RELATED LOW BACK PAIN

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Background and Aims

Pregnancy-related lower back pain (LBP) is a prevalent condition affecting functional mobility and quality of life. Effective management strategies are essential to mitigate pain and improve overall well-being. This study aimed to evaluate the impact of a structured physical therapy program, "Prenatal-Mix," on functional limitations and pain intensity in pregnant women with LBP.

Methods

A total of 42 pregnant women (mean age: 28.7 ± 4.3 years) in their second trimester with LBP participated in the study. Participants underwent the "Prenatal-Mix" physical therapy program, which combined core strengthening exercises, pelvic floor muscle training, gentle stretching routines (including Pilates and Yoga), and Prenatal aqua therapy. The Oswestry Disability Index (ODI) and Numeric Rating Scale (NRS) were used to assess functional disability and pain intensity before and after the intervention. Statistical analysis was conducted using SPSS version 19.0, employing Student's t-test and chi-square (X^2) analysis to determine significance.

Results

Pre-intervention, the mean ODI score was 23.95 ± 8.7 , which significantly reduced to 8.95 ± 5.7 post-intervention ($t=9.4$, $p<0.001$). Pain intensity showed a gradual reduction over time, with 9.5% of participants reporting decreased pain after two weeks, 31% after one month, 55% after three months, and 4.5% after five months. Irregular attendance correlated with delayed pain relief. Initially, 45.2% of participants exhibited minimal disability (ODI 0-20), increasing to 95.2% post-intervention ($p<0.001$). Chi-square analysis indicated a statistically significant association between training and reduced disability ($X^2=28.17$, $p=0.0001$) as well as pain intensity ($X^2=48.9$, $p=0.0001$).

Conclusion

A structured physical therapy program significantly reduces functional limitations and pain intensity in pregnant women with LBP. Regular participation enhances outcomes, underscoring the importance of integrating targeted physical therapy into prenatal care to improve maternal health and quality of life.

Keywords: back pain, pregnancy, physical therapy