

Screening for Pelvic Floor Muscle Dysfunction with a Primary Complaint of Low Back Pain in Outpatient Physical Therapy Settings

Introduction: In the United States between 25% to 33% of women will have at least one episode of pelvic floor dysfunction (PFD). Common pathologies include bowel dysfunction (25%), urinary incontinence (11%), and pelvic organ prolapse (5%) and the most common risks factors are older age, body mass index (BMI), and history of vaginal birth. But according to estimates, less than 20% of individuals seek medical care and over 40% of people reports symptoms greater than 5 years. The lumbar spine and pelvic floor muscles (PFMs) are both functionally and anatomically connected through the pelvis, sacrum, deep lumbar and abdominal muscles, as well as the abdominal and thoracolumbar fascia. Specifically, the PFMs play a critical role in the management of intra-abdominal pressure during functional tasks such as coughing, laughing, and lifting. However, it is unknown if clinicians routinely screen for PFD in patients who present with a primary complaint of low back pain (LBP). Therefore, the purpose of this review was to determine if physical therapists in an outpatient setting routinely screen for PFD when patients present with LBP.

Methods: The literature review was performed using the databases PubMed, EBSCO, and CINAHL with the keywords low back pain, physical therapy, and pelvic floor. The inclusion criteria included the following parameters: greater than age 18 years old, patients with a primary diagnosis of low back pain, male or female gender, and English language, peer-reviewed journals. Exclusion criteria included: vaginal birth in past year, C-section within 2 previous years, internal screens, known diagnosis of bowel and bladder dysfunction, pelvic floor prolapse, past history of cancer in pelvic region, prior evaluation by a pelvic floor physical therapist, and any pelvic surgeries in past year. The titles and abstracts from the initial search were screened by the authors for topic relevance.

Results: Although several studies examined the positive relationship between lumbopelvic dysfunction and the pelvic floor muscles, no study to date a priori included a formal screening tool for PFD in patients presenting to outpatient physical therapy with a primary complaint of LBP. Several screening tools and outcome measures exist for determining the presence of PFD, but they are not routinely being utilized by clinicians for patients with low back pain.

Discussion and Conclusion: Higher levels of disability and increased pelvic floor dysfunction, including pelvic muscle tenderness, weakness, and prolapse, may be related to LBP. Additionally, several studies have determined a relationship between diminished thickness of the transverse abdominus and pelvic floor muscles in people with chronic LBP. Given the potential for concomitant PFD and LBP, it may be beneficial for clinicians to screen for both instead of viewing each as a separate diagnosis. Although further research is needed to make a determination, including tools such as the Pelvic Floor Disability Index (PFDI-20) prospectively for patients with a primary complaint of LBP could lead to quicker identification and treatment of pelvic floor dysfunction.