EDITORIAL

Physiotherapy following pelvic organ prolapse surgery: Addressing the unmet needs

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Pelvic organ prolapse (POP), affects a significant proportion of women, particularly in low and middle-income countries. In the Eastern Mediterranean region, it has a prevalence of 39%,[1] highlighting the scope of the problem and the likely healthcare burden it imposes. With regional patterns of persistently high fertility levels and large family sizes, the number of affected women is also expected to increase in the future.

POP is not only an anatomical disorder, but it also has significant functional and psychosocial consequences. Women with POP frequently report symptoms such as pelvic pressure, vaginal bulging, urinary dysfunction, bowel disturbances, and sexual difficulties. These symptoms can impair quality of life, influencing daily activities, productivity, and social participation. In low- and middle-income countries, women may delay seeking medical attention due to stigma, limited access to specialized care, or lack of awareness regarding treatment options. This is the reason why a large proportion of cases remain underreported and untreated, which further contributes to the overall disease burden.

Another factor that contributes to the rising prevalence of POP is the increasing life expectancy of women. Age-related weakening of pelvic connective tissues, multiparity, and obstetric trauma remain major risk factors for the development of POP. In regions where high parity remains common, the cumulative strain on the pelvic floor over the reproductive lifespan may significantly increase the risk of prolapse later in life. Consequently, healthcare systems in these regions are likely to face an increasing demand for both surgical and non-surgical management of POP in the coming years.

Surgery is frequently used for managing POP. Standard surgical methods involve native tissue repair, mesh-augmented repair, and abdominal or vaginal procedures. Even with advances in surgery, recurrence and suboptimal functional results are not uncommon. These issues have evoked increasing interest in complementary therapeutic measures that may aid recovery and improve long-term results. Although surgical repair remains the mainstay of treatment for moderate to severe prolapse, it primarily addresses the anatomical component of the disorder. Restoration of anatomical support does not necessarily guarantee complete recovery of pelvic floor function. Many patients continue to experience urinary symptoms, pelvic discomfort, or functional limitations even after surgery. These observations highlight the importance of addressing functional rehabilitation in addition to anatomical correction.

Postoperative recovery also involves behavioural and lifestyle modifications aimed at reducing strain on the pelvic floor. Activities that increase intra-abdominal pressure, such as heavy lifting or chronic straining, may compromise surgical outcomes and increase the risk of recurrence. Therefore, comprehensive postoperative care may benefit from structured rehabilitation strategies that guide patients in restoring pelvic floor strength and improving functional control.

Physiotherapy, in particular pelvic floor muscle training (PFMT), has been seen as a promising adjunct to surgery. PFMT consists of targetted exercises for the strengthening of pelvic floor muscles, sometimes aided by biofeedback or supervised clinical visits. Although PFMT is well established as a conservative treatment in early POP, its place in the postoperative context is less clear, with different recommendations and practices worldwide. In addition to supervised PFMT, physiotherapy interventions may include patient education, bladder and bowel training, posture correction, breathing techniques, and strategies to optimize pelvic floor activation during functional activities. These approaches aim not only to strengthen pelvic floor muscles but also to improve coordination, endurance, and overall pelvic floor function.

Despite these potential benefits, the integration of physiotherapy into postoperative care remains inconsistent across healthcare systems. In many clinical settings, patients undergoing prolapse surgery are discharged with limited guidance regarding pelvic floor rehabilitation. Referral pathways between urogynecologists and

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physiotherapists are established and access to specialized pelvic health physiotherapy services can be limited, particularly in resource-constrained environments.

According to a systematic review and meta-analysis published in 2023, the prevalence of POP in the Eastern Mediterranean region ranged from 5% to 92%. Meta-analysis of 12 studies, including more than 9,000 participants, estimated the pooled prevalence of POP to be 39% (95% Confidence Interval: 21–57), although heterogeneity was high (I^2=99.8%).[1]

Multiple systematic reviews have explored the role of PFMT following POP surgery compared to POP surgery alone, with varying findings. According to our umbrella review,[2] Albela et al. reported that 2/8 randomized controlled trials (RCTs) showed significant improvements in POP symptoms and 1/5 RCTs showed significant improvement in quality of life at 12 months with PFMT, while the remaining RCTs did not demonstrate additional benefit compared to surgery alone.[3] Basnet et al. reviewed four RCTs and found that 1/4 RCTs showed significant improvements in quality of life and pelvic floor muscle strength while none reported significant improvements in prolapse symptom scores.[4] Zhang et al. analyzed 5 RCTs, out of which 2 reported a significant benefit of PFMT on pelvic floor muscle strength post-surgery. No significant improvements were found in POP symptoms and quality of life.[5] Li et al. reported significant improvements in quality of life in one RCT. No significant advantage of PFMT as an adjunct to surgery was found in terms of POP symptoms improvement.[6] Haya et al. reviewed two RCTs and noted that one trial showed significant improvements in POP symptoms at 12 months following surgery, while the other trial found no significant difference. Significant improvement in quality of life was observed.[7] Doaee et al. evaluated one RCT and reported favourable outcomes with PFMT in terms of quality of life.[8] Hagen et al. reported 1/2 RCTs showed significant results in terms of pelvic floor muscle strength.[9] Lakeman et al. reported that one RCT showed significant improvements in quality of life and pelvic floor muscle strength, but no supportive evidence was found in terms of POP symptoms improvement.[10]

In short, POP is a prevalent problem.[1] Overall, the findings across these reviews concerning PFMT were inconsistent, with only a few RCTs demonstrating a potential benefit after POP surgery. The heterogeneity in interventions, outcome measures, and follow-up durations limits the comparability of results.

Although evidence is weak and inconsistent, the role of physiotherapy, particularly PFMT, in enhancing recovery after surgery appears to be important. PFMT, under the supervision of qualified physiotherapists, is a low-risk intervention and can potentially provide functional gains in the postoperative setting. With POP being a chronic condition and treatment aiming at functional objectives, incorporating physiotherapy into standard postoperative care may address unmet patient needs. Increased cooperation between physiotherapists and urogynecologists, both in research and clinical practice, will be required. Formulation of region-specific guidelines, physiotherapy training investment, and patient education will be crucial to achieve the utmost potential of postoperative rehabilitation. Subsequent research should include high-quality, appropriately powered RCTs that compare standardized physiotherapy protocols after operation. Definite outcome measures, extended follow-up, and stratification by POP stage or surgical method will assist in providing more actionable evidence.

Strengthening multidisciplinary collaboration may help bridge this gap. Integrating physiotherapists within urogynecology care teams can facilitate early assessment of pelvic floor function and individualized rehabilitation planning for women undergoing prolapse surgery. Such collaboration may also promote consistent messaging regarding postoperative precautions, exercise adherence, and lifestyle modifications.

Another important consideration is patient education. Many women remain unaware of pelvic floor muscle training or may perform exercises incorrectly without proper supervision. Educational initiatives, including counseling before and after surgery, can improve patient understanding of pelvic floor health and encourage long-term adherence to rehabilitation strategies. Community-based awareness programmes may also help reduce stigma and encourage women to seek early care.

From a health system perspective, physiotherapy represents a relatively low-cost intervention that could potentially improve functional outcomes and patient satisfaction following surgery. Investing in training programmes for pelvic health physiotherapists and developing structured referral pathways may therefore represent a practical step toward improving postoperative care.

Another factor that needs to be taken into consideration is the difference in the postoperative care process in various healthcare systems. In many cases, postoperative care for patients who have undergone POP surgery mainly deals with the healing process of the surgical wound, while functional recovery is not given much attention. By including physiotherapy/PFMT in the regular postoperative visits, it is possible to identify the pelvic floor muscle

weaknesses, poor coordination, and abnormal movement habits that may contribute to the symptoms experienced by the patient. This can bring about positive outcomes in the functional recovery process. In addition, including a rehabilitation process in the postoperative period can bring about many advantages not only to the patients but also to the healthcare providers by creating a framework for multidisciplinary care.

In conclusion, physiotherapy after POP surgery is a promising but under-explored option for enhancing patient outcomes. Although current evidence remains limited and heterogeneous, structured pelvic floor rehabilitation has the potential to improve functional recovery, support pelvic floor strength and enhance quality of life for many women following surgery. Greater recognition of physiotherapy as part of postoperative care may help bridge the existing gap between anatomical correction and functional restoration. With the closure of knowledge gaps and stronger interdisciplinary collaboration between urogynecologists and physiotherapists, healthcare systems can move toward more holistic, evidence-informed, and patient-centered management of pelvic organ prolapse.

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