

Pelvic Physical Therapy Distance Journal Club

May 8, 2024

Danielle Wissink, PT, DPT

Barriers and facilitators of the implementation of the application of pelvic floor muscle training in patients with prostate cancer: a scoping review. Wang L, Li Y, Qi Z, et al. Front Pub Health 2023;11:1191508. Doi:10.3389/fpubh.2023.1191508.

Introduction: The primary complication of a radical prostatectomy are urinary incontinence and erectile dysfunction which effect quality of life. Urinary incontinence is treated with conservative treatment in most cases through pelvic floor muscle training.

Aim/Primary Aim: perform a review of promotion, motivations, preferences, and barriers of conservative treatment participation after radical prostatectomy.

Study Design/Study Format: literature review

Methods: Studies must include pelvic floor exercises including PFMT, PFMT with biofeedback, PMFT with estim and biofeedback and education. Databases included PubMed, CINAHL, Embase, PsycINFO, and Web of Science including RCT, cross sectional studies and mixed methods studies. Articles were reviewed by 3 authors.

Results: 53 articles selected after going through inclusion and exclusion criteria
Guideline factors.

- Barriers
 - Many inconsistencies between studies including definitions, ways of measuring UI, and treatment techniques.
 - PFMT did not change UI in 8 studies, ED in 4 studies.
 - Lack of long term follow up.
- Facilitators
 - PFMT is very practical given that it is non-invasive, and exercises are simple
 - PFMT was effective for UI in 35 studies, for ED in 3 studies, and QoL in 6 studies.

Individual health professional factors

- Barriers
 - There is limited knowledge about PFMT especially in urologists, specifically about programing of training.
 - There were issues with experimental setup including sample size and length of follow up.
 - Lack of individualization of treatment to the patient due to the nature of the experiment.
 - Varying levels of incontinence at baseline.
- Facilitators

- Practitioners with knowledge and experience in this field can improve symptoms quicker by appropriately training PFMs.
- Well-designed randomized control trials using validated outcome measures with long period of follow up.
- Early intervention and longer intervention period after surgery.

Patient factors, patient motivation, and patient behavior

- Barriers
 - Lack of compliance to the exercise program was a large barrier.
 - Difficulties with transportation to sites
- Facilitators
 - Higher self-efficacy and low dropout rate
 - Supervised programs improve outcomes.

Incentive and resources

- Barriers
 - Lack of professionals to implement PFMT.
 - Individual factors and support for older individuals all hindered access to care.
- Facilitators
 - PMFT requires minimal technology and equipment making it easy to perform.
 - Supervision of the program.
 - Pt education improves participation and adherence.

Professional interactions

- Barriers
 - Lack of teamwork among healthcare professionals.
 - Lack of knowledge by staff that have the closest contact with pts, for example, nurses.
- Facilitators
 - Patient education by PTs pre and post op and relationship between pt and health care providers

Capacity for organizational change

- Barriers
 - Lack of support via rules and regulations in healthcare.
- Facilitators
 - None.

Social, political, and legal factors

- Barriers
 - Lack of consistency between insurance in what is covered.
- Facilitators
 - PFMT is relatively inexpensive.

Discussion:

- There are many barriers and facilitators and some of these factors fall into both categories.
- These patients face challenges similar to other older adults with cancer with regard to treatment.
- Having a well-rounded healthcare team improve effectiveness of PFMT.
- There is a lack of consistency of PFMT and outcome measures between studies and therefore need standardization in a large study to determine true effectiveness.
- Implementing a training plan also requires skill to implement on the healthcare providers part and should include individualization of the plan to fit the patient and try to limit barriers to patient participation and adherence.
- There needs to be cohesiveness between different providers and levels of care for optimal outcomes.
- Self-efficacy and motivation are critical factors in PFMT.

Strengths

- Large search and number of studies included using a variety of databases.
- Variety of interventions and outcome measures used.

Weaknesses

- Lack of consistency between studies regarding intervention period and actual interventions performed.
- Various levels of evidence included in the review.
- Not all articles were screened by multiple people.
- Inconsistency of outcome measures between studies.
- Studies performed globally which may have variety of access to healthcare.
- No definition of what the standard of care is randomized control trial studies.

Conclusion/Summary: This study helps progress towards developing programs for urinary incontinence in patients with prostate cancer post- prostatectomy.

Clinical Application: Ensuring that we are taking care of patients through the continuum of their treatment and recovery and identifying any barriers at the individual and institutional level and how we can overcome them to get the best outcomes possible.

List discussion questions

- What treatments have you found to be most effective in this patient population?
- How long do you typically follow up with these patients?
- Are you seeing these patients preoperatively?
- What outcome measures do you typically use and why do you think this does/doesn't need to be standardized?
- What barriers and facilitators have you noticed in your own patients?