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Addressing Pelvic Floor Dysfunctions in Older Women

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Addressing Pelvic Floor Dysfunctions in Older Women

Abstract

Women's pelvic health has become an emerging practice area for occupational therapy in recent years. The National Institute of Health (NIH) reports that 24% of women in the United States are impacted by pelvic floor disorders (2008). As the general population ages, older women's health has become a pivotal topic for occupational therapists to include as part of a comprehensive plan of care. Occupational therapists must acquire deeper knowledge related to pelvic pain and urinary incontinence. Developing a deeper understanding of the types of pain and urinary incontinence in older women facilitates efficacy and efficiency in the delivery of occupational therapy services for these women. Evidence strongly supports the interdisciplinary approach between biomechanical and psychosocial interventions to address pelvic health issues in a holistic manner.

Comments

The authors declare that they have no competing financial, professional, or personal interest that might have influenced the performance or presentation of the work described in this manuscript.

Keywords

pelvic floor dysfunction, pelvic pain, urinary incontinence

Credentials Display

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The National Institutes of Health (National Institutes of Health [NIH], 2008) reports that pelvic floor disorders impact 24% of women in the United States. A study conducted by the NIH in 2008 indicated that the prevalence of pelvic floor disorders increases with age and that over 40% of women between the ages of 60 and 79 and 50% of women 80 years of age and older are affected. Pelvic floor disorder is an umbrella term that most commonly includes pelvic pain and urinary incontinence. Chronic pelvic pain (CPP) in women is defined as persistent, noncyclic pain perceived to be in structures related to the pelvis (Speer et al., 2016). Women's pelvic health has become a growing area of occupational therapy practice in recent years because of this alarming prevalence rate and the impact pelvic health has on a woman's quality of life. The purpose of this article is to explore components of a comprehensive occupational therapy plan of care related to pelvic pain in older women.

CPP in women is defined as persistent, noncyclic pain perceived to be in structures related to the pelvis. An arbitrary duration of 6 months is usually considered chronic. A systematic review found only seven studies that reported the prevalence of CPP among women worldwide, with rates of 6% to 27%, although there was a lack of consensus on the definition of CPP (Speer et. al, 2016). Prevalence of urinary incontinence (UI) peaks around menopause, with a steady rise thereafter into later life. Although the prevalence of stress and mixed (stress plus urge) UI is higher than urge UI, the latter is more likely to require treatment (Nitti, 2001). UI symptoms are highly prevalent among postmenopausal women and have a substantial effect on health-related quality of life. The most common types of UI are stress, urgency, and mixed. Stress UI is defined as urine leaks in association with physical exertion. Urgency UI consists of urine leaks in association with a sudden compelling desire to void. Women who experience both symptoms are considered as having mixed UI (Aoki et al., 2017).

UI often negatively impacts the physical and emotional wellbeing of clients. Frequently, clients will report limitations and deficits in task performance, social interactions, personal relationships, and sleep disturbances (Fitz et al., 2012). The National Association for Continence (NAFC) has conducted epidemiologic surveys and found that people with UI have compensated for the incontinent episodes. A few of the themes that the NAFC survey found were fear of job loss, psychological impact because of increased anxiety, and sleep disturbances (NAFC, 2018). UI causes a decrease in physical activity, which can lead to further muscle weakness, atrophy, and joint stiffness. UI can also lead to activities of daily living dysfunction, impaired skin integrity, urinary tract infections, urosepsis, and injuries from falls (NAFC, 2018).

Chronic UI is differentiated into stress, urge, mixed, overflow, or functional subtypes. Stress UI caused by urethral sphincter weakness or urethral hypermobility results in predictable loss of urine with activities that increase intra-abdominal pressure (e.g., exercising, sneezing, laughing, coughing). Stress UI affects 25% to 45% of women older than 30 years of age.

Urge UI related to detrusor overactivity causes involuntary loss of urine associated with urgency as well as increased urinary frequency or nocturia. Clients typically lose urine on the way to the toilet. Prevalence ranges from 9% of women in their forties to 31% of women in their seventies.

Mixed UI has components of stress and urge UI. The prevalence of mixed UI is 20% to 30%. Overflow UI accounts for 5% of chronic UI because of detrusor underactivity or bladder outlet obstruction, which leads to urinary retention and subsequent leakage. Clients may strain to pass urine or have a sensation of incomplete emptying.

Functional UI occurs when there are barriers to toileting, such as cognitive impairment, physical frailty, environmental barriers, or immobility. The number of clients affected by functional UI is unclear.

Role of Occupational Therapy

Occupational therapists have the knowledge to address pelvic pain in a holistic way by addressing the physical and psychosocial implications of pelvic floor dysfunction. Using the *Occupational Therapy Practice Framework*, occupational therapists address the multifaceted deficits and barriers, such as activities of daily living, health management, and health education (AOTA, 2020). Focusing on the client factors, performance skills, and performance patterns to address the physical and psychosocial impact of pelvic floor dysfunction creates a holistic approach to intervention. Pelvic floor dysfunction can impact myriad occupations, such as work, self-care, leisure, and engagement in sexual intimacy. Pelvic floor dysfunction often leads to anxiety, depression, and social isolation (Siqueira-Campos et al., 2019). Culturally, the topic of women's pelvic health has been taboo. This is especially true when women report dyspareunia.

Dyspareunia, or pain during sexual intercourse, is among the problems most frequently reported by postmenopausal women. The likelihood of health problems, pelvic floor muscle dysfunction, dermatological conditions, relationship factors, partner's health, and psychosocial stressors relevant to midlife can be oversimplified and create a one-dimensional view of dyspareunia negatively affecting sexual functioning in post-menopausal women (Ghaderi et al., 2019).

Depression and anxiety often coexist with CPP and overall pelvic floor dysfunction impacting the overall quality of life for the client. Studies have shown rates of depression ranging from 26% to 52% in clients with CPP as compared to only 5% to 10% in the general population. In the CPP population, anxiety rates range from 39% to 73% as compared to a mere 12% in the general population (Till et al., 2019).

Evaluation

Occupational therapists should create an occupational profile as part of the initial evaluation. Understanding the depth and breadth the condition has on the client's cultural, social, emotional, and physical well-being is key to developing a comprehensive plan of care. During the interview portion of the evaluation, the following are key questions to ask the client to determine the type and severity of impact pelvic floor muscle dysfunction (PFMD) has on the client's daily life.

- How has pelvic pain impacted life experience?
- What are the foreseeable barriers to occupational engagement?
- What are the client's goals for intervention?
- How many UI episodes occur per day?
- Does leakage occur when laughing, sneezing, or coughing?
- Is the urge to urinate overly persistent throughout the day?

Besides anamnestic interviews and clinical examinations, pain scales and questionnaires are useful and reliable tools to assess pain intensity. Questionnaires also allow the distinction between nociceptive and neuropathic pain in clients presenting with more complex painful syndromes (Passavanti et al., 2017). The initial exam should be based on a model of regional interdependence that assesses movement dysfunction, including impaired local or global relaxation.

A bladder diary is an informal questionnaire that can be used to obtain valuable information about the client's bladder habits. For many individuals, bathroom visits every 3 to 6 hr is desirable. For older women, every 2 to 3 hr is optimal. An effective bladder diary should contain the following elements.

- Create a starting point for a 7-day compilation of information.
- Record bathroom visits, urine leaks, and time of day each occur.
- Amount of urine passed with each voiding.

Postural assessment should be part of a comprehensive evaluation. Postural abnormalities, such as forward head, forward shoulders, increased lumbar lordosis, and anterior pelvic tilt contribute to UI and overall PFMD. The role of lumbopelvic posture influences both the contractility of the pelvic floor muscles and the amount of vaginal pressure generated during static postures and dynamic tasks. Pelvic floor muscle activity increases with more upright postures compared to slumped postures (Sapsford et al., 2006). The contractility of the pelvic floor muscles may be altered with postural changes because of changes in the length of pelvic floor muscle fibers. A hyperlordosis distorts the pelvic floor muscles by changing the orientation to their attachments to the sacrum, coccyx, and pubic symphysis. This decreases the ability of the pelvic floor muscles to generate contractility because of the length tension properties of the muscle. See Table 1 for areas of focus for evaluation of pelvic floor dysfunction.

Table 1

Areas of Focus for Pelvic Floor Dysfunction Evaluation

Areas of occupation	Client factors	Performance skills	Performance patterns	Context/ environment	Activity demands
– Bowel/bladder management – Hygiene – Functional mobility – Sleep – Sex – Toilet hygiene – Health management/ maintenance – Work – Play – Leisure – Social participation	– Sleep function – Temperament/personality functions – Experience of self and time functions – Sensory functions – Muscle functions – Movement functions – Urinary/reproductive functions – Religious beliefs/spirituality – Alertness levels	– Motor skills for posture – Coordination – Strength – Energy	– Habits – Routines – Roles	– Physical barriers	– Required body function

Note. From "Occupational Therapy Practice Framework: Domain and Process" (4th ed.), by AOTA, 2020, *American Journal of Occupational Therapy, 74*, 1–87.

Intervention

UI treatment is a multistage process in which we distinguish between conservative therapy, the cheapest and least invasive form, and surgical treatment, which is the last resort if a client does not consent to conservative treatment, or if the conservative measures do not produce the expected results for an extended period of therapy. Behavioral management requires significant commitment not only on the part of the client, but also on the part of therapist, because only systematic and conscientious work will bring the expected results (Kopańska, 2020). Table 2 provides a listing of indications and contraindications for UI intervention. Table 3 provides common CPT billing codes for treatment of PFMD.

Table 2

Listing of Indications and Contraindications

Indications For Intervention	Contraindications For Intervention
– Ability to follow 1-step commands – Ability to perform daily exercise program – Ability to maintain exercise diary – Ability to maintain bladder diary	– Active UTI is present – Severe cognitive impairment – Poor adherence to exercise program

Note. From "Continence Pessary Compared with Behavioral Therapy or Combined Therapy for Stress Incontinence: A Randomized Controlled Trial," by Richter et al., 2010, *Obstetrics and Gynecology*, *115*(3), 609–617.

Table 3

Common PFMD CPT Codes

Intervention	CPT Description	CPT Billing Code
Pelvic Floor Muscle Exercise	Therapeutic exercise, Neuro re-education	97110, 97112
Pelvic Electrical Stimulation	Electrical Stimulation	G0283
Myofascial Release	Manual Therapy	97140
Behavioral Modifications	Self-care retraining, Therapeutic activity	97535, 97530
Diet Modifications	Self-care retraining, Therapeutic activity	97535, 97530
Environmental Modifications	Self-care retraining, Therapeutic activity	97535, 97530
Biofeedback (for contraction or relaxation of muscles)	Biofeedback	90912, 90913
Home exercise program	Therapeutic exercise	97110

Note. From *National Coverage Determination (NCD) for Non-Implantable Pelvic Floor Electric Stimulator*, Centers for Medicare and Medicaid Services, 2006.

A key approach to improving function and decreasing disability from CPP is by combining a biopsychosocial approach with myofascial evaluation/treatment techniques. Interventions may include treatment of myofascial trigger points, neural glides, pain neuroscience education, graded exposure/graded activity, and cognitive functional therapy. Another key approach is to focus on the client factors, performance skills, and performance patterns to address the physical and psychosocial impact of pelvic floor dysfunction (see Table 1).

Pelvic Floor Exercise

Pelvic floor muscle exercise (PFME) is particularly beneficial in the treatment of stress UI in older women. Studies have shown up to 70% improvement in symptoms of stress UI following an appropriately performed pelvic floor exercise program. This improvement is evident across all age groups. There is evidence that women perform better with exercise regimes supervised by clinicians specializing in PFMD as opposed to unsupervised or leaflet-based care. There is evidence for the widespread recommendation that PFME helps women with all types of UI. However, the treatment is most beneficial in women with stress UI and who participate in a supervised pelvic floor muscle training program for at least 3 months (Price et al., 2010). See Appendix for a description and instructions for different types of PFME.

Electrical Stimulation

Electrical stimulation (ES) is a therapeutic option for patients with UI. It includes the suprapubical, transvaginal, sacral, and tibial nerves. Functional ES of the pelvic floor muscles was originally proposed by Caldwell in 1963 to address fecal incontinence and UI. Since then, clinical trials have reported some efficacy in treating stress UI, urge UI, and mixed UI. The electrodes can be implantable or not, and the ES can be of long or short duration. The exact mechanism involved in improvement of urinary symptoms through ES is not completely understood. Reorganization of spinal reflex and regulation of cortical activity are suggested as important outcomes of ES, which would be related to the mechanism of action of this therapy. The mechanism of action of ES was initially investigated in animal models where it caused bladder relaxation by inhibiting the parasympathetic motor neurons. Other studies showed that transvaginal ES causes contractions of the pelvic floor, increasing the number of muscle fibers with rapid contraction, which are responsible for continence in situations of stress. Tibial nerve ES is a peripheral non-implantable method that can be applied percutaneously with a needle or transcutaneously with a stick-on electrocardiograph-type electrode. It was described by Mc-Guire in 1983. Tibial-nerve stimulation delivers neuromodulation to the pelvic floor through the S2-S4 junction of the sacral nerve plexus via the less invasive route of the posterior tibial nerve. This anatomical area has projections to the sacral nerve plexus, creating a feed-back loop that modulates bladder innervations. Suprapubical ES aims for a direct stimulation of S3 nerve roots, in order to inhibit the detrusor activity, similarly to the sacral ES, but less invasive (Schreiner et al., 2013).

At this time parameters and methods for ES for the treatment of UI are varied. There is no standard protocol or "best" methodology. Studies offer a seemingly infinite combination of current-type waveforms, frequencies, and intensities. Some clinical trials suggest using 50 Hz for stress UI and 10 - 20 Hz for urge UI, and that mixed symptoms should be treated according to the predominant symptom (Schreiner et al., 2013).

Pelvic floor ES is covered for the treatment of stress and/or urge UI in cognitively intact clients who have failed a documented trial of pelvic muscle exercise (PME) training. A failed trial of PME training is defined as no clinically significant improvement in UI after completing 4 weeks of an ordered plan of PMEs designed to increase periurethral muscle strength.

Medicare's national coverage policy for electrical stimulation for the treatment of UI is found in Section 230.8 CIM 60-24 of the Medicare Coverage Issues Manual (CMS, 2006).

> Pelvic floor electrical stimulation with a non-implantable stimulator is covered for the treatment of stress and/or urge urinary incontinence in cognitively intact patients who have failed a documented trial of pelvic muscle exercise (PME) training. A failed trial of PME training is defined as no clinically significant improvement in urinary continence after completing 4 weeks of an ordered plan of pelvic muscle exercises designed to increase periurethral muscle strength. (para 3–4)

Myofascial Release

Myofascial release is an intervention that operates on the premise that trauma or inflammation of the fascia creates undo tension on the surrounding tissues and structures resulting in pain or loss of mobility (Barnes, 1997). Common myofascial pelvic pain-related therapy interventions may include treatment of myofascial trigger points using myofascial release, neural glides, pain neuroscience education, graded exposure or activity, and cognitive functional therapy (Chou et al., 2012). Using the biomechanical approach incorporates "the concept of regional interdependence in the allostatic or homeostasis of the musculoskeletal, somatovisceral, neurophysiological, and biopsychosocial process to elicit musculoskeletal changes in their clients" (Stephenson & Barreveld, 2019, p. 1). According to Pastore and Katzman (2012), a number of recent studies have demonstrated the existence of myofascial trigger points or hypertonic pelvic floor muscles in a variety of medical conditions of distinctly different origins (Bassaly et al., 2011; Bendaña et. al., 2009; Doggweiler-Wiygul & Wiygul, 2002; Gentilcore-Saulnier et.al, 2010). Myofascial release manual techniques require additional training prior to implementation as part of a comprehensive treatment plan.

Emotional Regulation

Cognitive behavior therapy (CBT) has been shown to be an effective intervention for chronic pain and depression. The governing principle of CBT is to increase the client's awareness of the thoughts and behaviors that impact pain and occupational engagement. This allows clients to adjust these thoughts and behaviors. Evidence supports that the altering of the client's thoughts and behaviors can create a positive impact on autonomic arousal, graded activity and pacing, sleep hygiene, problem-solving strategies, coping skills, and interpersonal skills. CBT typically involves increasing self-awareness; compensatory strategies, such as self-pacing; and the development of coping mechanisms (Till et al., 2019).

Pain neuroscience education (PNE), also known as chronic pain theory, consists of client education detailing the neurobiology and neurophysiology of pain and nervous system pain processing. Pain chronicity may not likely be caused by unhealthy or dysfunctional tissues but rather by brain plasticity

leading to hyper-excitability of the central nervous system. The goal of this method is to change a client's perception of pain. Many clients believe that damaged tissues are the main cause for their pain. After a comprehensive evaluation to determine that damaged tissues are not the cause, PNE aids clients' understanding that pain may not correctly represent the health of tissue but may be because of extra-sensitive nerves. Clients have been found to have reduced fear avoidance behaviors and increased mobility. PNE in conjunction with exercise therapy can be used to break down movement-related pain memories with graded exposure to exercise and decreased sensitivity of the nervous system (Louw et al., 2011).

Behavior Modification

Behavior modification consists of scheduled toileting with a systematic delay, education, and positive reinforcement. The information gathered with the initial evaluation bladder diary allows the occupational therapist to identify patterns that better facilitate behavior modification. Bladder diary-based interventions should be based on the devised schedule for the first week. However, if the urge to urinate is too strong, voiding is permitted but should then resume on the established schedule. This facilitates an increased time of 15–30 min between voids (Richter et al., 2010).

Bladder Retraining

Bladder retraining aims to lengthen the amount of time between bathroom visits. The client is encouraged to void on a schedule. The voiding schedule starts at a short interval, as per the frequency from the bladder diary. A typical program takes several weeks with the goal of progressively increasing the time between voids. Women with urge UI or mixed UI may benefit from bladder retraining and pelvic floor exercise as well as physiological quieting (Richter et al., 2010).

Bladder retraining focuses on instruction to resist the urge to void in-between scheduled voids; using distraction, relaxation and inhibition techniques and/or strengthening, and the intervals are progressively increased. Positive reinforcement for remaining dry between scheduled voids is used to strengthen the behavior. This approach is most appropriate for improving the symptoms related to urge UI and may improve stress UI. Bladder retraining also facilitates an increased amount of urine the bladder can comfortably retain. This will reduce the number of incontinent episodes and improve self-control (Richter et al., 2010).

Prompted Voiding

Prompted voiding is a technique that can be used with clients with cognitive impairments. This intervention involves recognizing some degree of bladder fullness and responding when prompted. Prompted voiding is similar to scheduled toileting and adds verbal prompting and reinforcement. This technique is often preferred as it reduces passivity and facilitates more independence. Once the initial training is complete, prompted voiding requires the same amount of time as scheduled toileting. Prompted voiding consists of monitoring the client on a regular schedule (hourly or more frequently initially) depending on the frequency of incontinence episodes on the bladder diary. A decrease in UI frequency typically occurs within the first 3–6 days. Prompted voiding involves five steps. They are check, talk, prompt, praise, and correct (Richter et al., 2010).

1. **Check**: Change the client's position and do a physical check for wetness.
2. **Talk**: Ask the client "are you wet or dry?" Ask up to 3 times and give accurate feedback.
3. **Prompt**: Ask the client if they will try to use the toilet or other device. The question should be repeated up to 3 times in a persuasive manner. The client is not toileted unless they answer in the affirmative.

4. **Praise**: Give positive feedback for making an effort to use the toilet or other device and for being dry.
5. **Correct**: This means making an appropriate corrective statement if the client is wet. For example, "You are wet, please try and tell me before you have to go next time." If the client is wet but tries to use the toilet or other device, give praise but no correction.

Scheduled Toileting

The goal of scheduled toileting is to anticipate wetness and "void to avoid" an accident. Toileting is performed at regular intervals based on current individualized toileting habits obtained from the bladder diary. There are no attempts to delay voiding or to resist urges with this approach. The goal is for regular voiding to become a routine, reducing incontinent episodes with typical voiding occurring every 3 to 4 hr. (Richter et al., 2010). An example of a scheduled toileting regime is listed below.

- Client's bladder diary indicates that she is wet ~ 2 hr after meals.
- Schedule created for the client to void within 1.5 hr of meals.

Environmental Modification

Occupational therapists must consider environmental factors that contribute to UI. Impaired mobility, low vision, and fine motor deficits can impact a client's ability to successfully execute toileting tasks. Many restrooms have light colored flooring and white toilets. For a person with low vision, this creates a barrier where the toilet is no longer discernible from the walls or floor. The addition of a black toilet seat creates visual contrast and minimizes the impact of low vision on functional UI. Impaired functional mobility is another contributing factor to functional UI. Limiting obstacles and proper lighting are imperative to ensure a clear path to the restroom. The addition of an elevated toilet or grab bars enable clients with functional transfer deficits to increase safety and independence during the toileting process. Clients with nocturia could benefit from the use of a bedside commode since the level of urgency is typically greater at night.

Clothing management plays a significant role in the bladder management process. Clothing that is restrictive can increase pressure on the lower abdomen resulting in elevated urgency sensation. Restrictive clothing also creates a barrier to efficiently and effectively lowering lower extremity garments. Clothing modifications that are beneficial include properly fitting lower extremity garments and elastic waist pants instead of zippers.

Diet Modification

Some foods and beverages are known to promote diuresis or bladder irritability, which in some people can exacerbate UI symptoms. Caffeine has been shown to have a diuretic effect and is a constituent of a variety of beverages and foods. Many foods, beverages, and medications contain significant amounts of caffeine. Caffeine-containing products may increase UI symptoms by increasing detrusor pressure and by promoting detrusor muscle excitability. Based on the amount of caffeine consumed, the client may be advised to replace caffeinated dietary intake with non-caffeinated alternatives and to note any changes in bladder symptoms. If bladder symptoms persist and the client wishes to continue to consume caffeine, they should be advised to restrict this to < 200 mg/day (or two cups of coffee) to decrease urgency and frequency. Other dietary factors that may contribute to UI symptoms include carbonated drinks. There is also evidence to suggest that aspartame and other artificial sweeteners induce detrusor contraction in rats and thus may contribute to UI symptoms (Wyman et al., 2009).

Excessive fluid intake can exacerbate UI symptoms. Fluid restrictions may result in an increase in urine concentration that can cause bladder irritation, promote urgency, frequency, and UTI. An appropriate

level of fluid intake is particularly important for older adults, for whom a strong relationship between evening fluid intake and nocturia has been reported. The daily volume of fluid intake should be approximately six 8-oz glasses per 24-hr period. To reduce nocturia, occupational therapists often advise clients to reduce fluid intake after 6pm (or approximately 3–4 hr before bedtime) and shift their intake to the morning and afternoon, which anecdotally appears to have good results (Wyman et al., 2009).

Discharge

Continuing and maintaining the progress made during a client's plan of care is imperative for wellness and prevention. Client education should consist of a home exercise program and compensatory strategies. Andragogical principles suggest that clients involved with the development and return demonstration of the overall home program are more likely to carryover the information into her daily routine (Proffitt, 2016). Practicing the home exercise program and creating clear expectations throughout the course of treatment allow for the client to seek clarification in a timely manner. The use of visual aids and handouts can be beneficial references to assist the client in internalizing the information and foster improved carryover.

Resources

For occupational therapists to be proficient in addressing PFMD in older women, advanced training is needed. Each of the interventions listed above are highly specialized and if done incorrectly, could result in a negative effect for the client. See Table 4 for additional training resources.

Table 4

Additional Training Resources

Specialty Certification or Training	Description	Website
Certification in Pelvic Floor Rehabilitation: A Guide for Occupational Therapists	A guide that provides an overview of the pelvic floor, occupational therapist's role, interventions, and certification options	https://www.myotspot.com/wp-content/uploads/2018/06/Final-Guide-5_2.pdf
Pelvic Rehabilitation Practitioner Certification	Herman Wallace offers certifications and continuing education courses on a variety of pelvic health topics	https://hermanwallace.com
PNE Training/ Therapeutic Pain Specialist Certification	Several continuing education organizations offer PNE training	https://evidenceinmotion.com https://www.physio-pedia.com https://www.purdue.edu/hhs/hk/therapeutic-pain-specialist/
How to Become Involved with Pelvic Health as an occupational therapist	Blog posts that describe the path to being involved in pelvic rehab as an occupational therapist	https://hermanwallace.com/blog/the-ot-s-path-to-pelvic-rehab https://otpotential.com/blog/pelvic-health-occupational-therapy
Cognitive Behavioral Therapy - Certified Cognitive-Behavioral Therapist (CCBT), the Diplomate in Cognitive-Behavioral Therapy (DCBT), the Certified Cognitive-Behavioral Group Therapist (CBGT) and the Certified Cognitive-Behavioral Group Facilitator (CBGF)	Several levels of certification that occupational therapists are eligible to attain based off of experience and additional criteria	https://www.nacbt.org/certifications-htm/

Conclusion

Pelvic floor dysfunction is very common in older women and often goes unaddressed by health care professionals. As occupational therapists, we have the opportunity to create a unique occupational profile for these clients to address the effects associated with pelvic floor dysfunction in a holistic way. Addressing the physical and psychosocial needs of these clients throughout the plan of care is essential for creating lasting results and fostering carryover of a home program.

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Appendix

Pelvic Floor Muscle Exercises (PFME)

Exercise	Description	Instructions
Assisted Pelvic Muscle Tightening	inner thigh muscle	Place ball between legs slightly above knee. Lifting pelvic muscle up while rolling knee against ball. Squeeze the anal and urethral and vaginal opening. This exercise should be initiated in a seated position and progress to standing, if able. Instruct the client not to hold their breath or bear down.
Assisted Pelvic Muscle Tightening	hip rotators	Put a theraband above knees. Roll knees against theraband while lifting muscles of the pelvic floor. Tighten the anal, urethral and vaginal area. This exercise should be initiated in a seated position and progress to standing if able. Instruct the client not to hold their breath or bear down. Exercise should be done three sets of 8-12 repetitions and performed twice daily. Contractions should be sustained for 1-12 s Recovery time between repetitions should be 6-10 s
Quick Flick	Quick Contract and Release of the Pelvic floor muscles/ Pelvic Floor Quick Contractions	Have the client tighten the urethral or vaginal and rectal opening and then release, quick contraction then release. Tell the client to "think tighten" and then relax. The contraction should be quick and forceful. Gluteal abdominal, adductors and obturator internus muscles are relaxed during this activity. This exercise should be initiated in a seated position and progress to standing, if able. Instruct the client not to hold their breath or bear down. Exercise should be done three sets of 8-12 repetitions and performed twice daily. Contractions should be sustained for 1-12 s. Recovery time between repetitions should be 6-10 s.
Standing Plie Exercise	hip external rotation/ hip flexion	Stand with toes pointing outward and hips apart. Bend knees one to two inches and tighten pelvic muscles. This exercise should be initiated in a seated position and progress to standing if able. Instruct the client not to hold their breath or bear down. Exercise should be done three sets of 8-12 repetitions and performed twice daily. Contractions should be sustained for 1-12 s Recovery time between repetitions should be 6-10 s
Isolated Pelvic Muscle Contraction in Standing	pelvic hold	Contact pelvic floor muscles without moving other abdominal muscles. Pull pelvic muscle up and in. This exercise should be initiated in a seated position and progress to standing if able. Instruct the client not to hold their breath or bear down. Exercise should be done three sets of 8-12 repetitions and performed twice daily. Contractions should be sustained for 1-12 s) Recovery time between repetitions should be 6-10 s
Perineal Lock	used for stress UI	This lock is a contraction of the muscles around the perineal body in men and the cervix in women. On the physical level this is simply the contraction of muscles. Give a quick squeeze of the bulbocavernosus muscle (perineal lock) just before any sudden increase in intra-abdominal pressure from a sneeze or a cough. That can be the most effective mechanism for maintaining long term success.

Note: From *Beyond Kegels, Book II: A Clinician's Guide to Treatment Algorithms and Special Populations* (2nd edition), Hulme, 2003, Phoenix Publishing.