16.4: Urinary Incontinence

Urinary incontinence is the involuntary loss of urine. Although abnormal, it is a common symptom that can seriously affect the physical, psychological, and social well-being of affected individuals of all ages. It has been estimated that 1 in 5 women develop urinary incontinence, but many are too embarrassed to discuss the condition with their health care providers. Some believe it’s a normal part of aging that they have to live with. The result can be isolation and depression when they limit their activities and social interactions because of embarrassment due to incontinence. Nurses can greatly improve the quality of life for these patients by assessing for incontinence in a sensitive manner and then providing patient education about methods to prevent and/or manage incontinence.

Types of Urinary Incontinence

Continence is achieved through an interplay of the physiology of the bladder, urethra, sphincter, pelvic floor, and the nervous system coordinating these organs. A disruption in any of these areas can cause several types of urinary incontinence.

- **Stress urinary incontinence** is the involuntary loss of urine with intra-abdominal pressure (e.g., laughing and coughing) or physical exertion (e.g., jumping). It is caused by weak pelvic floor muscles that is often the result of pregnancy and vaginal delivery, menopause, and vaginal hysterectomy.[2]

- **Urge urinary incontinence** (also referred to as “overactive bladder”) is urine leakage caused by the sensation of a strong desire to void (urgency). It can be caused by increased sensitivity to stimulation by the detrusor muscle in the bladder or decreased inhibitory control of the central nervous system.[3]

- **Mixed urinary incontinence** is a mix of urinary frequency, urgency, and stress incontinence.[4]

- **Overflow incontinence** occurs when small amounts of urine leak from a bladder that is always full. This condition tends to occur in males with enlarged prostates that prevent the complete emptying of the bladder.[5]
• **Functional incontinence** occurs in older adults who have normal bladder control but have a problem getting to the toilet because of arthritis or other disorders that make it hard to move quickly or manipulate zippers or buttons. Patients with dementia also have increased risk for functional incontinence.

It is important to understand the types of incontinence so that appropriate interventions can be targeted to the cause.

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**Assessment of Incontinence**

Assessment begins with screening questions during a health history, including questions such as, “Do you have any problems with the leakage or dribbling of urine? Do you ever have problems making it to the bathroom in time?” If a patient responds “Yes” to either of these questions, it is helpful to encourage them to start a voiding diary to record their urination habits and activities. The voiding diary should include the following:

- When and how much the patient urinates
- Urinary leakage and what the patient was doing when it happened (for example, running, biking, laughing)
- Sudden urges to urinate
- How often the patient wakes at night to use the bathroom
- Type and volume of food and beverages and the time of intake
- Medication use, such as diuretics, and the timing of administration
- Any pain or problems experienced before, during, and after urinating (for example, sudden urges, difficulty urinating, dribbling urine, feeling as if the bladder is never empty, weak urine flow).[6]

The provider will review information from the voiding diary, perform a physical assessment, and likely order diagnostic testing, such as a urine dip to check for a urinary tract infection, and urodynamic diagnostic testing that includes a variety of tests about bladder function, including filling, urine storage, and emptying.[7] Individualized treatment will be based on the assessment and tests to assess any structural abnormalities and bladder function.

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**Interventions**

Nurses should use therapeutic communication with patients experiencing urinary incontinence to help them feel comfortable in expressing their fears, worries, and embarrassment about incontinence and work toward improving their quality of life. Let them know they’re not alone and that urinary incontinence is not something they have to live with. Provide education about pelvic floor muscle training exercises, timed voiding, lifestyle modification, and incontinence products. Encourage them to learn more about their condition so they can optimally manage it and improve their quality of life.[8]

Nurses play an important role in educating patients about bladder control training to prevent incontinence. Bladder control training includes several these techniques:

- Pelvic muscle exercises (also known as Kegel exercises) work the muscles used to stop urination, which can help prevent stress incontinence. Learn more about pelvic floor exercises in the box below.
- Timed voiding can be used to help a patient regain control of the bladder. Timed voiding encourages the patient to urinate on a set schedule, for example, every hour, whether they feel the urge to urinate or not. The time between
bathroom trips is gradually extended with the general goal of achieving four hours between voiding. Timed voiding helps to control urge and overflow incontinence as the brain is trained to be less sensitive to the sensation of the bladder walls expanding as they fill.\[^9\]

- Lifestyle changes can help with incontinence. Losing weight, drinking less caffeine (found in coffee, tea, and many sodas), preventing constipation, and avoiding lifting heavy objects may help with incontinence. Limiting fluid intake before bedtime and scheduling prescribed diuretic medication in the morning or early afternoon are also helpful.\[^10\]
- Protective products may be needed to protect the skin from breakdown and prevent leakage onto clothing. Incontinence underwear has a waterproof liner and built-in cloth pad to absorb large amounts of urine to protect skin from moisture and control odor. It is available in daytime and nighttime styles (designed to hold more urine). A product resembling a tampon is another option for females. It is made of absorbent fibers that support the urethra and prevents accidental leaks but doesn’t inhibit urination and won’t move or fall out during bowel movements.\[^11\]

**Teaching Pelvic Floor Exercises**

Kegel exercises are designed to make your pelvic floor muscles stronger. Your pelvic floor muscles hold up your bladder and prevent it from leaking urine.

- Start by finding the right muscles. There are two easy ways to do this: stop the stream of urine as you are urinating or imagine that you are trying to stop the passage of gas. Squeeze the muscles you would use to do both. If you sense a “pulling” feeling, you are squeezing the right muscles for pelvic exercises. Many people have trouble finding the right muscles. A doctor, nurse, or therapist can check to make sure you are doing the exercises correctly and targeting the correct muscles.
- Find a quiet spot to practice so you can concentrate. Lie on the floor. Pull in the pelvic muscles and hold for a count of 3. Then relax for a count of 3. Work up to 10 to 15 repeats each time you exercise.
- Complete pelvic exercises at least three times a day. Try to use three different positions while performing the exercises: lying down, sitting, and standing. For example, you can exercise while lying on the floor, sitting at a desk, or standing in the kitchen. Using all three positions while exercising makes these muscles their strongest.
- Be patient. Most people notice an improvement after a few weeks, but the maximum effect may take up to 3-6 weeks.

**Note**

View a YouTube video about Kegel Exercises from Michigan Medicine.

Patient education regarding other treatment options may be provided:

- Biofeedback uses sensors to help a patient become more aware of signals from the body to regain control over the muscles in their bladder and urethra.\[^13\] Mechanical devices, such as pessaries, support the urethra and can support vaginal prolapse to prevent or reduce urinary leakage. They come in various sizes and are professionally fitted by trained health care providers. They should be removed, cleaned, and reinserted regularly to prevent infection. Some of the devices, such as ring pessaries, can be removed and reinserted by the patient. They are similar to a diaphragm and can be removed or left in place for sexual intercourse.\[^14\]
- Anticholinergic medications, such as oxybutynin, may be prescribed to treat urge urinary incontinence and mixed urinary incontinence. They block the action of acetylcholine and provide an antispasmodic effect on smooth muscle to relieve symptoms. However, side effects include dry mouth, constipation, dizziness, and drowsiness, which can
increase fall risk in older adults.

- If bladder training and medications are not effective, surgery may be performed, such as a sling procedure or a bladder neck suspension.  


