The Role of the Nurse Continence Advisor in A Urology Wellness Clinic

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Urinary incontinence (UI) is defined as the “involuntary loss of urine that is objectively demonstrable and a social or hygienic problem” (Abrams, Blaivas, Stanton, & Anderson, 1988). A recent national poll suggests that 1.5 million of community-dwelling Canadians (7%) had suffered from an incontinence episode during the previous year (Angus Reid Group, 1997). More women are affected than men, 12% versus 2.5%. Prevalence increases with age, from 2% in those under 35 years to 12% of those 55 years and over (Canadian Continence Foundation, 2000).

Urinary incontinence is both a social and a medical problem. It can affect an individual’s quality of life. Patients report feelings of embarrassment, shame, isolation, helplessness, and loss of self-esteem. It is considered by many to be an inevitable result of childbirth or an irreversible condition due to aging. Urinary incontinence is often a forbidden topic and many sufferers believe it unacceptable to discuss it openly. The problem belongs in the category of “things down there” (Ashworth & Hagan, 1993), such as defecation, sexual matters, and menstruation. Often even sexual partners have little or no inkling of the severity or even the existence of the problem. The prognosis is good once the condition is diagnosed. Urinary incontinence is often a remediable condition. It is transient in 50% of patients. In two-thirds of the remaining 50%, the condition can be cured or greatly improved.

The costs of UI in the community are high, even if indirect costs (for institutionalization triggered by incontinence) are excluded. Extrapolating from U.S. figures (Wagner & Hu, 1998), the total direct and indirect cost of UI in Canada is probably about $2.6 billion/year (Canadian Continence Foundation, 2000).

The Nurse Continence Advisor

The role of the nurse continence advisor (NCA) has the potential to contribute significantly to resolving incontinence and in decreasing the cost of incontinence management in home care programs (Skelly, 2000). A 6-month pilot study conducted by Skelly and Kenny (1998) examined the role of the NCA and estimated the cost of incontinence for 704 patients to be $1.9 million per year. The majority of this cost is related to nursing and homemaker hours providing incontinence care. The pilot study also showed that reducing incontinence by 42% with the services of NCAs would translate into a significant cost savings.

The role of the NCA is not a new one. It was first established in Great Britain in the early 1970s. Lengthy waiting lists to see urologic specialists deemed it necessary to create the NCA role. Implementing this role resulted in a conservative holistic approach to incontinence problems utilizing lifestyle changes, pelvic floor exercises, and biofeedback therapy. Patients often found that by the time they were seen by the urology specialist, their incontinence had improved to the point...
they required no further therapy.

The NCA role was first established in Canada in 1995-1996. The first program for training NCAs was started as a pilot project by the Ontario Ministry of Health, In Home Services Branch. The NCA education program was developed using a small-group, problem-based approach to learning. A group of 37 nurses was chosen from the Community Nursing Agencies across Ontario to participate in the program. The distance education program was first established in 1997. There are presently 88 certified nurse continence advisors across Canada with 41 enrolled in the program.

The NCA Distance Education Program on Continence Promotion and Management is designed to assist the experienced registered nurse in acquiring the knowledge and skills to become an NCA. The academic requirements of the course are the equivalent of 150 hours. The students complete the eight modules (usually one per month) and mail them in for marking. The clinical component includes 75 hours of clinical supervision and 75 hours of independent practice. It takes most students 1 year to complete the course. Further information about the program can be obtained from the Web site http://www.fhs.mcmaster.ca/nursing/ncac.

A NCA Program at Work

The Nurse Continence Advisor Program within the Atlantic Health Sciences Corporation at St. Joseph’s Hospital, Saint John, New Brunswick, has grown steadily over the last few years. The Urology Wellness Clinic now includes several exciting programs including Biofeedback and Stimulation Therapy, Nocturnal Enuretic Clinic, Continence Clinic, Prostate Clinic, and Educational Services. The program involves two nurse continence advisors in a job-sharing position. Their nursing background assists them in treating various types of UI in a holistic, conservative manner. Referrals come from urologists, pediatricians, gynecologists, and obstetricians.

The continence clinic has been open for over a year and helps patients in the following ways:
1. Determines the cause of an individual’s incontinence and assesses which treatment modality specifically suits that patient’s need.
2. Helps to strengthen the pelvic floor muscles using exercises and biofeedback techniques.
3. Helps the individual to establish healthy bladder habits with bladder training techniques.
4. Evaluates the patient’s diet and fluid intake to assess his/her potential impact on the patient’s incontinence.

Evaluation and History

Once a patient is referred to the continence clinic the NCA will perform a thorough evaluation. Evaluation of patients suffering from UI centers on the history, physical examination, and the development of a differential diagnosis. An incorrect diagnosis can lead to ineffective treatment. The Collaborative Continence Assessment Form is used to evaluate voiding habits, urine loss, fluid intake, caffeine intake, product use, bowel habits, past medical history, medications, and functional ability. A post-void residual and pelvic examination complete the assessment. Accurate measurement of post-void residual (PVR) can be accomplished either by catheterization or by pelvic ultrasound (Coombes & Millard, 1994). Before PVR is measured, the patient should void in the most comfortable and private environment possible. Voiding can be observed at this time to detect signs of hesitancy, straining, or slow or interrupted stream that may indicate urethral obstruction, a bladder contractility problem, or both (Fantl et al., 1996). In general, PVRs of less than 50 ml are considered adequate bladder emptying. Repetitive PVRs ranging from 100 to 200 ml or higher are considered significant, requiring further evaluation.

Certain conditions that are associated with or are known to contribute to UI (such as hematuria, glucosuria, pyuria, bacteriuria, and proteinuria) can be detected with urinalysis and microscopic examination. Dipstick methods are available for in-clinic testing although the diagnostic accuracy of these methods varies considerably (Lachs et al., 1992).

Therapeutic Strategies

After acquiring a detailed history from the patient, the NCA can immediately start with some simple lifestyle changes that will often improve bladder problems significantly. Increasing the patient’s bladder capacity can improve nocturia as well as daytime frequency and urgency. Most individuals drink only half the amount of fluid they should in a 24-hour period. Two liters of water daily is stressed as a “normal” or adequate amount of fluid intake. Often simple suggestions, such as carrying a water bottle to work, can help to gradually build up tolerance to larger volumes. Completing fluid intake 2 hours prior to bedtime is also stressed, particularly in the elderly and pediatric populations. This will help prevent nocturia and nocturnal enuresis.

Cardiac patients often find they will void larger amounts at night than they do during the day. Encouraging these patients to keep their legs elevated during the evening hours can help promote a shift of fluid (for example, edema in peripheries), causing diuresis during waking hours. This often reduces nighttime voiding significantly.

There are many myths and theories about bladder emptying techniques, such as “it’s bad to hold your bladder, go as soon as you get the urge,” or “push that last drop of urine out.” The rule of thumb is that it is acceptable to ignore your first urge but always ensure bladder emptying on the second urge. This will promote
an increase in bladder capacity as well as prevent hypotonic bladder. Straining to void is always discouraged except in the case of a neurogenic bladder. The bladder has a very strong muscle (detrusor muscle) that is capable of emptying its contents without straining maneuvers. Over time, straining can result in a weakened pelvic floor and bladder hypomobility, leading to stress incontinence.

Caffeine reduction is encouraged in any patient presenting with UI. Caffeine is a xanthine derivative and an irritant to the bladder. It also excites the bladder muscle (detrusor) causing urgency and frequency at smaller bladder volumes. Patients are encouraged to gradually eliminate caffeine from their diet and to switch to decaffeinated products. There have been numerous studies performed on these aspects of fluid intake and their effect on incontinence. Creighton and Stanton (1990) found that drinks containing caffeine (tea, coffee, chocolate, and cola beverages) had an irritant effect upon the unstable bladder in addition to the known diuretic effect.

Bowel management also plays an important role in urinary control. Because the bowel is in such close proximity to the bladder, decreased bladder capacity can result if the descending colon and rectum are full of stool due to compression of the bladder wall (Roberts, 1989). Patients are encouraged to take a “Get Up and Go Cookie” daily to promote healthy bowel routines and evacuation. This cookie consists of a combination of fruits and fibers and is extremely effective with bowel management. It was developed by a dietician in combination with the Continence Promotion Program in Hamilton, Ontario. Patients are also encouraged to “listen carefully to bowel signals” so as not to “miss the moment.” Insufficient fluid intake or a diet low in fiber may be the cause of constipation, or in extreme cases, fecal impaction (Beau, 1988).

Pelvic floor exercises are promoted for all patients suffering from UI (Kegel, 1948). An internal examination (vaginal or rectal) on initial evaluation determines the strength and endurance of the patient’s pelvic floor contraction. The patients are started on an easy exercise program conducive to their lifestyles. Specific exercises (for example, slow-twitch, fast-twitch, and submaximal contractions) are used for varying types of UI. One example is the use of fast-twitch exercises for patients suffering with “key in the door syndrome,” when the urge to void is so strong that an incontinence episode (or accident) can occur. Fast-twitch exercises are very beneficial for these patients. A reflex is triggered to settle down the unstable bladder contraction and enable the patient to get in the door and to the washroom on time.

Some patients are unable to locate their pelvic floor muscle. Biofeedback and stimulation therapy assists these patients by increasing their proprioception of the location of the muscle. Stimulation is performed via a vaginal or rectal probe and causes a reflex contraction of the pelvic floor muscle (PFM). This is performed for 15 minutes, after which the patient performs active contractions of the PFM using biofeedback therapy. Patients are able to visualize their contractions on a monitor as they perform their exercises. This assists them to exercise correctly without using their accessory muscles (for example, abdominal and gluteus), and encourages the specific use of the PFM only. Home exercise units are lent out for those patients who require them. Stimulation therapy has an initial cure rate of approximately 50%. When objective and subjective criteria are used, approximately 77% of patients remain symptom free 1 year after completion of therapy (Eriksen, Bergmann, & Eik-Nes, 1989).

Other Clinics and Programs

The continence clinic is available to patients of all ages with varying types and degrees of UI. Urologists, gynecologists, and obstetricians refer patients. The prostate clinic is available to patients who have undergone or are awaiting radical prostatectomy. Only urologists refer these patients. Pre-operative teaching is done with the patient using protocols specific to his urologist. Instructions include expected length of hospital stay, expected outcomes and possible adverse effects after surgery (such as urinary incontinence and erectile dysfunction). Patients are given time to view several videos on the topic of radical prostatectomy and also time to discuss any concerns. They are taught pelvic floor exercises which are encouraged pre-operatively and resumed once the catheter has been removed post-operatively. Patients are also taught basic catheter care and how to change to a leg bag for convenience during the daytime. They are taught many of the lifestyle changes mentioned previously in the event that UI occurs post-operatively. They are seen in followup 6 to 8 weeks after surgery when an assessment is performed.

Biofeedback and stimulation therapy are available to these patients if UI continues beyond 6 months after surgery. A study performed by Jackson, Emerson, Johnston, Wilson, and Morales (1996) showed a total improvement rate in 74% of patients having undergone biofeedback therapy for UI following radical prostatectomy.

The nocturnal enuretic program is available to children 5 years and over. Because nocturnal enuresis can continue into adulthood in 1% of the population, there is no age limit. Patients can access the clinic through urological or pediatric referral. An alarm system is used that will sound as the first few drops of urine come in contact with the wetness detector. The patient is then responsible for waking and emptying his/her bladder. “Listening to bladder” techniques and “brain to bladder” coordination plays a large part in this program. The child is
responsible for completing a graph that represents his/her accomplishments in achieving dryness, as well as most of the lifestyle changes mentioned previously. Typically the child is seen weekly for 6 weeks, biweekly for two visits, and monthly for one to two visits. Depending on the child’s progress, the alarm will gradually be removed and assessments will be made, until the patient no longer requires it.

With the diurnal enuretic a number of “listening to bladder” strategies are applied. Bladder capacity is measured to ascertain if it is within “normal” range. The rule of thumb is 30 ml per year (in age) plus 30 ml. A 4 year old should have a bladder capacity of 150 ml (4 x 30 = 120 ml + 30 ml = 150 ml). At 9 years old, most children should have the same bladder capacity as an adult. If bladder capacity is diminished, as is often the case in diurnal enuretics, patients are encouraged to increase their fluid intake to 1.5 to 2 liters daily depending on the child’s age. This will increase the bladder capacity in combination with strategies including ignoring the first urge to void. When treating pediatric patients with both nocturnal and diurnal enuresis, bladder drill therapies are effective.

A regimen of prompted or timed voiding (voiding according to a time schedule) can be beneficial in increasing bladder capacity, and is used both in the pediatric and adult population. The patient is started on a voiding schedule of 1.5-hour intervals during the daytime. The schedule is discontinued at night. As the patient becomes proficient at this interval, the time between voids is increased by 30 minute increments until the patient is voiding every 2 to 3 hours (Doughty, 2000). When these regimens are followed, bladder drill therapy is even more effective than pharmacologic therapy among woman with idiopathic detrusor instability (Fantl et al., 1988; Jarvis, 1981). Lifestyle changes and bowel management are also important factors.

The staff of the Urology Wellness Clinic firmly believes that urinary incontinence can always be managed and more often be treated, cured, or improved. Their nursing background helps to lend an empathetic ear so that patients will “open up” and discuss very private matters. The staff’s incontinence background helps them to assist and treat patients suffering with UI, using individualized programs specific to their needs. It is the meshing of these two backgrounds that nurse continuity advisors strive to bring to their practice.

References


