

# Effects of Combined Pelvic Floor Muscle Exercise and a Support Group on Urinary Incontinence and Quality of Life of Postprostatectomy Patients

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**Purpose/Objectives:** To examine the effect of combined pelvic floor muscle exercise (PFME) and a support group on postprostatectomy urinary incontinence and quality of life.

**Design:** Pilot study of a randomized, controlled clinical trial.

**Setting:** Two metropolitan hospitals in northeastern Ohio.

**Sample:** 29 men with postprostatectomy urinary incontinence.

**Methods:** The participants learned PFME through biofeedback and were randomized to the control group ( $n = 15$ ) or the support group ( $n = 14$ ). The control group practiced PFME at home, whereas the support group attended six biweekly group meetings facilitated by a health psychologist. Assessment of urinary incontinence and quality of life was conducted at baseline and three months.

**Main Research Variables:** Urinary incontinence and disease-specific quality of life.

**Findings:** Eighty-six percent of the support group participants versus 46% of the control group participants practiced PFME four to seven days per week. The support group had a lower rating of urinary incontinence based on a 0- to 10-point visual analog rating scale than the control group ( $\bar{X} = 3.2$  versus 4.7), and fewer support group participants used pads (50%) than control group participants (85%) at three months. The support group also scored significantly lower on the severity of incontinence problems than the control group at three months, especially in relationship with spouse and social outing, despite no group difference in these areas at baseline.

**Conclusions:** The study provided promising evidence regarding the effect of the proposed intervention on adherence to PFME, urinary incontinence, and quality of life.

**Implications for Nursing:** Reports regarding nursing practice are lacking with respect to PFME. This study suggests that practicing PFME in a group with patients with incontinence who have undergone prostatectomy can be a useful nursing intervention.

## Key Points . . .

- ▶ Practicing pelvic floor muscle exercise (PFME) in a group setting likely increases patients' motivation to maintain PFME on a daily basis as compared to practicing PFME individually.
- ▶ Patients who practice PFME in a group setting are likely to experience fewer incontinent symptoms and use fewer pads over time than patients who practice PFME individually after biofeedback PFME training because of increased muscle strength.
- ▶ The proposed intervention that combines PFME with a support group significantly improved disease-specific quality of life among patients, perhaps because of enhanced urinary continence and social support.

## Background

### Physiology

Men's continence is guarded by internal and external sphincters. When the prostate is resected surgically, the continence mechanism has to rely solely on the external sphincter. An external sphincter weakened by surgery leads to sphincter insufficiency and **stress incontinence**—urinary leakage during stressful events such as coughing or heavy lifting. Furthermore, patients with prostate cancer tend to compensate with more frequent bladder contractions to overcome the obstruction caused by malignant prostatic enlargement. After the prostate is removed surgically, bladder contractions may persist and result in **urge incontinence**—the frequent urge or

Urinary incontinence, defined by the International Continence Society as any involuntary leakage of urine (Abrams et al., 2002), is estimated to occur in 25%–70% of patients who have undergone radical prostatectomy (Grise & Thurman, 2001). Although most patients regain urinary continence at least partially a year after surgery, many continue to experience incontinence (Little, Kuban, Levy, Zagars, & Pollack, 2003). Urinary incontinence reduces patients' ability to attend family and social gatherings and makes patients feel burdened, shamed, or even depressed (Broome, 2003). The symptom clearly constitutes a significant source of reduced quality of life (QOL) for patients with prostate cancer (Miller et al., 2005).

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