



Wolters Kluwer | Lippincott
Health Williams & Wilkins

Research for Practice

Author(s): Katharine Kolcaba, Thérèse Dowd, Elizabeth H. Winslow, Ann F. Jacobson

Source: *The American Journal of Nursing*, Vol. 100, No. 11 (Nov., 2000), p. 59

Published by: Lippincott Williams & Wilkins

Stable URL: <http://www.jstor.org/stable/3522265>

Accessed: 17/08/2010 11:16

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=lww>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Lippincott Williams & Wilkins is collaborating with JSTOR to digitize, preserve and extend access to *The American Journal of Nursing*.

<http://www.jstor.org>

Kegel Exercises

Strengthening the weak pelvic floor muscles that cause urinary incontinence.

By Katharine Kolcaba, PhD, RN,C, and Thérèse Dowd, PhD, RN

Coordinated by Elizabeth H. Winslow, PhD, RN, FAAN, and Ann F. Jacobson, PhD, RN

Have you ever noticed an accidental loss of urine after a hefty sneeze? This is common among active adults, regardless of age or sex, and can be remedied without much pain or effort—while driving, lying on a couch, or waiting in line.

Stress urinary incontinence (SUI) is caused by a sudden increase in abdominal pressure that overcomes the ability of the pelvic floor muscles to keep the bladder outlet closed. It's often associated with coughing, straining, or other involuntary movements. *Urge incontinence* (also referred to as *detrusor instability*) is caused by the hyperactivity or sensitivity of the bladder muscle, the detrusor, and is associated with aging, birth trauma, or collagen defects. *Mixed incontinence*, the most prevalent type, is a combination of stress and urge incontinence.¹ Many women with incontinence have weak pelvic floor muscles because of hereditary predisposition and several vaginal childbirths.

In 1951, Arnold Kegel, a gynecologist at the University of Southern California, published a landmark study of the effect of pelvic floor muscle exercises in 500 women with urinary incontinence. He instructed his patients to contract their pelvic muscles against a "perineometer," a cone-

shaped balloon inserted into the vagina. They were instructed to alternately contract and relax the pubococcygeus muscles for 20 minutes, three times a day, for a total of 300 contractions. Kegel reported an 84% success rate.²

In "Kegels," as the exercises have come to be called, the correct muscles are identified by pretending to stop urine flow; they can be done quickly or slowly. "Slow Kegels" are performed by tightening the muscles and holding the contraction for three to 10 seconds and "quick Kegels" for one second. Patients should alternate sets of quick and slow Kegels.³ The exercises don't require instruments and can be done anywhere.

Numerous controlled studies have supported Kegel's findings.⁴ For example, in a recent randomized clinical trial, researchers compared behavioral treatment with drug therapy in a sample of 197 women between 55 and 92 who had urge or mixed incontinence.⁵ Subjects were randomly assigned to four sessions of biofeedback-assisted behavioral treatment, which included daily pelvic floor exercises, a drug treatment (oxybutynin chloride), or a placebo drug. Behavioral treatment yielded a mean 81% reduction in incontinence episodes and was significantly more effective than was drug treatment.

The following can enhance the effectiveness of Kegels:

- Drink plenty of water.
- Void no more often than once every two hours.

- Eat high-fiber foods (using stool softener as needed).
- Avoid alcohol and caffeine.
- Take a cough suppressant when needed.
- Avoid heavy lifting.⁶
- Use audiotaped affirmations to replace self-defeating thoughts about incontinence.⁷

Refractory cases may require referral to a urinary specialist who may suggest vaginal weights, pessaries (uterine supports), electrical stimulation, biofeedback, and collagen implants or prescribe anticholinergics, antispasmodics, or estrogen vaginal cream. Pelvic floor surgery may be a last resort. Treatment for incontinence must be individualized after a careful assessment of urinary history.^{1,6} ▼

REFERENCES

1. Elia G. Stress urinary incontinence in women: removing the barriers to exercise. *Physician Sportsmed* 1999;27(1):39-52.
2. Kegel AH. Physiologic therapy for urinary stress incontinence. *JAMA* 1951;146(10):915-7.
3. Johnson ST. From incontinence to confidence. *Am J Nurs* 2000;100(2):69-74, 6.
4. Wyman JF, et al. Comparative efficacy of behavioral interventions in the management of female urinary incontinence. Continence Program for Women Research Group. *Am J Obstet Gynecol* 1998;179(4):999-1007.
5. Burgio KL, et al. Behavioral vs drug treatment for urge urinary incontinence in older women: a randomized controlled trial. *JAMA* 1998;280(23):1995-2000.
6. Kulpa P. Conservative treatment of urinary stress incontinence. *Physician Sportsmed* 1996;24(7):51-61.
7. Dowd T, et al. Using cognitive strategies to enhance bladder control and comfort. *Holist Nurs Pract* 2000;14(2):91-103.

Katharine Kolcaba and Thérèse Dowd are assistant professors at University of Akron College of Nursing, Akron, OH. Elizabeth H. Winslow is a research consultant at Presbyterian Hospital of Dallas. Ann F. Jacobson is an assistant professor at Kent State University College of Nursing, Kent, OH.