

Reviews of Articles

Back Belts Pay Off for Nurses

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"Bedside nursing. . .renders nurses highly susceptible to back injuries," write authors Dr. Sandra K. Allen and Kevin Eilder, both of whom are or were associated with Indiana State University.

"The primary cause of back injuries among nursing personnel is lifting and transferring patients," they say. "The typical hospital staff nurse lifts 20 patients into bed and assists five to 10 patients with transfers from bed to chair during a shift."

In this study, 47 employees of the Veterans Administration Hospital in Fort Wayne, IN, were studied over a six-month period. They were divided into groups--one receiving training in safe lifting practices and one receiving training plus back support belts.

Training included biomechanics and proper lifting techniques; the experimental group also received training in the correct way to wear their back supports. Back supports were to be worn whenever the subjects were on duty and lifting patients.

The back belts used in the study were similar to ones commercially available.

"When used correctly, the back support belt helps to maintain proper curvature of the spine during lifting," say the authors. "The belt applies intra-abdominal compression on the lumbar section of the spine. A better alignment provides better posture and less muscle fatigue."

Total hours worked in six months by the control group were 23, 109 and three separate back supports were reported. The group wearing support belts worked 22, 243 hours and reported no back injuries.

"The study also suggests the use of back support belts reduces the injury incident rate, at least in the short term. . .The use of back support belts warrants further study with a larger sample size and a longer monitoring period to determine whether the incident rates and time lost from work due to back injuries are reduced over an extended time period."