

Elizabeth Capezuti: Improving Bed Safety



Elizabeth Capezuti, PhD, RN, FAAN, is an associate professor and co-director of The John A. Hartford Foundation Institute for Geriatric Nursing at the College of Nursing. Her research exposing the dangers of hospital and nursing home bed rails was instrumental to the Centers for Medicaid and Medicare Services' development of new interpretive guidelines for those who survey nursing homes. Her work was also quoted in a sentinel alert on bed-rail-related entrapment issued by JCAHO in 2002.

a rail in their way and that they should call the nurse; they decide to climb through it.

The good news is that manufacturers no longer produce unsafe beds. But for nursing homes that have a lot of old beds, there is a lag. The biggest issue, which the FDA has not adequately addressed, is that beds are of all different sizes, so even though there are kits available to retrofit the beds, there is no standard-sized bed, and many are not compatible with the retrofit kit. Nursing homes should use their newest beds for the most high-risk residents.

Q How did you get involved in studying the dangers of bed side rails?

A I was always fascinated by the misconception that restraints prevent falls. From my own nursing experience, I knew that if someone wanted to get out of a restraint, they would. So, as a doctoral student at University of Pennsylvania, I worked with two of the leading researchers on physical-restraint reduction, Neville Strumpf '82 and Lois Evans, and managed the first National Institutes of Health grant to test an intervention to reduce physical restraints. My contribution was my interest in falls, and I added the variable of falls to the study, which became the basis for my dissertation. A paper I published in the *Journal of the American Geriatrics Society* was the first major paper to report that side rails do not prevent falls from bed.

Q How serious a problem is bed rail entrapment?

A Hundreds of people have died this way. The people most at risk for becoming entangled or stuck between the rail and mattress are those who are confused and lack safety judgment. They don't realize that there is

Q With such compelling evidence, why are side rails still in use?

A It is like any entrenched practice: Staff have been told that the devices are safe, and it's a one-size-fits-all approach. Beyond that, these physical barriers also serve as mental barriers for nurses, because they keep them from providing more care and from thinking of more solutions.

Q Now that we know bed rails are unsafe, how can a hospital or nursing home protect patients?

A There are two ways: appropriate equipment and nursing interventions. In terms of equipment, beds need to be positioned low enough that people who are able to stand on their own can easily get out. Our research showed that some facilities' beds were as high as 25 inches at their lowest levels, when some of these five-foot ladies' lower leg length was 16 inches, so they were literally jumping off the bed. For those who can't stand up, we have beds that go all the way down to the floor. A mat next to the bed reduces the impact if someone does get out of bed. A bed alarm can inform the staff that a patient is trying to get up. And there are even hip protector pads that people wear to reduce injury.

For nurses, much of the work needs to be done before bedtime, through restorative nursing and, at times, through physical therapy. We can teach many patients to get out of bed safely, and clear signage

can help direct people to where they need to go. Some people are simply spending too much time in bed. A number of studies have shown that nursing home residents are put in bed at 8:00 p.m. and are expected to stay there for 10 or 12 hours. None of us wants to be in bed that long. People may want to get up or need to go to the bathroom. Again it calls for more individualized attention. Protecting patients and residents really takes a major commitment; this is not a quick fix.

Q What else can a nursing intervention accomplish?

A Treatment of incontinence, sores, depression, and aggression must be considered with a patient who is trying to get out of bed frequently. The chance of someone getting hurt by jumping out of bed, however, is increased when someone is restrained by a side rail and can't let anyone know they have a problem. We need to ask: Why is the person agitated? Maybe they're wet. Maybe we need to put a commode next to the bed. I have a new paper that was published this March in the *Journal of the American Geriatrics Society* that shows how intervention by an advanced practice nurse, to address the underlying problems, can reduce side-rail use without any increase in falls.

Q What is your next project?

A At the Hartford Institute, we have just been awarded a \$5 million grant from The Atlantic Philanthropies USA, Inc., to expand the NICHE program. That is our nationwide program to help hospitals make system-wide changes to improve care for older adults. Marie Boltz, who just received her doctorate at NYU College of Nursing, was involved in our intervention to reduce side rails and will be working with me on the NICHE project. ♣