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Increased Bed Alarm Use Does Not Decrease Falls in Hospitalized Patients

Clinical Question

Does nursing education to promote the use of bed alarms prevent falls in hospitalized patients?

Bottom Line

In this underpowered study, nursing education to encourage increased use of bed alarms did not lead to fewer falls in hospitalized patients. (Level of Evidence = 1b-)

Synopsis

These investigators studied the effect of increased bed alarm use on the rate of patient falls. Sixteen medical, surgical, and subspecialty units at the study hospital were paired on the basis of similar fall rates during a baseline period of eight months and then randomly assigned, using concealed allocation, to the intervention or usual care for a study period of 18 months. The intervention consisted of extensive educational sessions on bed alarm use delivered by a study interventionist to the unit staff. The study interventionist also rounded every weekday on these units to promote bed alarm use and to assist with setting up the devices and addressing technical issues. In the control group, usual care consisted of daily fall assessments by staff and general fall prevention measures based on the assessed risk

level. In addition, the study interventionist rounded on these units one or two times per week to promote general fall prevention measures but did not specifically encourage bed alarm use.

The eight intervention units and eight control units had similar staffing and patient demographics, as well as similar mean fall risk scores at baseline. As expected, bed alarm use was greater in the intervention units (64.41 versus 1.79 days per 1,000 patient-days in the control units; $P = .004$). However, there was no significant difference detected in the primary outcome of change in overall fall rates from the baseline period to the study period between the two groups. The study, however, was underpowered to detect such a difference because of a larger than expected number of falls during the baseline period.

Reference

Shorr RI, Chandler AM, Mion LC, et al. Effects of an intervention to increase bed alarm use to prevent falls in hospitalized patients: a cluster randomized trial. *Ann Intern Med.* 2012;157(10):692-699.

Study design: Randomized controlled trial (nonblinded)

Funding source: Government

Allocation: Concealed

Setting: Inpatient (any location)

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