with significantly improved memory, possibly by improving insulin sensitivity and reducing inflammation.[4] We agree with Aziz and colleagues that future clinical trials involving weight loss in elderly patients should include an assessment of the effect of intentional weight loss on cognitive performance.

Krupa Shah, M.D., M.P.H.
University of Rochester School of Medicine and Dentistry
Rochester, NY
Dennis T. Villareal, M.D.
New Mexico Veterans Affairs Health Care System
Albuquerque, NM

Since publication of their article, the authors report no further potential conflict of interest.

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Nurse Staffing and Inpatient Hospital Mortality

TO THE EDITOR: Needleman and colleagues (March 17 issue)[1] provide compelling evidence that nurse staffing matters. Although the hazard ratio was small (1.02 for increased mortality per nursing shift that was 8 hours or more below target), the argument could be sufficiently compelling to support mandatory staffing ratios and similar public policy interventions.

Unfortunately, such approaches, and this study, omit the potential consequences. Patients require care and do not arrive so conveniently as to match the current floor staffing. Mandated limits on hospital floors may simply push care elsewhere, particularly to the emergency departments and postoperative care units that already provide much of the flexible capacity in hospitals.[2]

Researchers already know that crowded emergency departments increase the risk of illness and death and that emergency departments are frequently crowded because of an inability to move patients to hospital floors.[3,4] If studies such as that by Needleman et al. provide an excuse to exacerbate this situation, then the result could prove more deadly.

Stephen Schenkel, M.D., M.P.P.
University of Maryland School of Medicine
Baltimore, MD
sschenkel@mdmercy.com

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TO THE EDITOR: "It was an especially busy day." These were invariably the first words I would hear while investigating a serious adverse event in my former role as the vice president of medical affairs of a large community teaching hospital. The article by Needleman and others confirms what those of us on the front lines of patient safety have known for some time: peaks in patient flow and times of high patient census are significant risk factors for patient harms.

As health care reforms increase patient access to many already overloaded hospitals and health care systems, the application of proven operations-management techniques, such as smoothing the variability in schedules for elective surgery, will be essential to avoid coupling increased patient volumes with an increased risk of patient harm.[1-4]

Ellis M. Knight, M.D., M.B.A.
Palmetto Health
Columbia, SC
ellis.knight@palmettohealth.org

Dr. Knight reports receiving consulting fees from the Institute for Healthcare Optimization for advising health care organizations on ways to implement changes to their operations that will alleviate the risks of high patient flow and census. No other potential conflict of interest relevant to this letter was reported.

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THE AUTHORS REPLY: Schenkel characterizes the hazard ratio we found as "small." We actually found a strong dose–response relationship to exposure to below-target shifts, and the cumulative impact can be substantial. In the hospital we studied, with high conformity of staffing to targets, the average patient had three below-target shifts, for an increase in the risk of death of approximately 6%. Physicians, nurses, and policymakers should be very concerned about the effect of staffing shortfalls in hospitals that are less successful in matching staffing to patient needs. We fully agree with Schenkel that efforts to ensure adequate staffing in inpatient units should not be achieved by increasing pressure on or encouraging backups in emergency departments.

Schenkel expresses concern that our results could be "sufficiently compelling to support mandatory staffing ratios." Fixed staffing ratios can be too inflexible to protect patients when acuity or turnover is high. Our study indicates a need for systems and processes that can flexibly manage nursing workloads on inpatient care units.

Knight's comments on the safety and quality risks associated with high patient flow and an "especially busy day" are similar to comments we hear from many nurses. This is precisely the reason we quantified patient turnover in our study.

Marcelline Harris, Ph.D., R.N.
Mayo Clinic
Rochester, MN
harris.marcelline@mayo.edu

Peter Buerhaus, Ph.D., R.N.
Vanderbilt University
Nashville, TN

Jack Needleman, Ph.D.
University of California, Los Angeles
Los Angeles, CA

Since publication of their article, the authors report no further potential conflict of interest.

Prevalence of Smoking in China in 2010

TO THE EDITOR: The Global Adult Tobacco Survey (GATS) is a cross-sectional survey of tobacco use among adults that is carried out by individual countries in collaboration with the U.S. Centers for Disease Control and Prevention and the World Health Organization. From December 2009 through March 2010, the Chinese Center for Disease Control and Prevention conducted the GATS China; all noninstitutionalized persons 15 years of age or older ("adults") who resided in China at the time of the survey were considered eligible to participate. A stratified, multistage cluster-sampling design was used to select 15,000 adults in 100 counties or districts in China to take the survey. In all, 13,354 participants completed the survey.

In 2010, an estimated 28.1% of adults in China (52.9% of men and 2.4% of women) were current smokers — a prevalence ratio of 22 to 1 (Table 1). Among men, the prevalence was highest among those 45 to 64 years of age (63.0%) and lowest among those 15 to 24 years of age (33.6%). The prevalence of smoking among men was significantly higher among rural residents (56.1%), as compared with inhabitants of urban areas (49.2%). In terms of education level, the prevalence in men was highest among those who attended secondary school (63.2%) and lowest among those who were college graduates or postgraduates (44.0%). Of the occupations included, male machine operators had the highest prevalence of smoking (67.0%).

Of all current smokers, 85.6% smoked daily. Smokers of manufactured cigarettes smoked an average of 14.2 cigarettes per day (14.3 for men and 10.6 for women). GATS China also showed that among those in China who had smoked at some time, 57.5 million (16.9%) had quit smoking and were not smoking currently, while 112.8 million (33.1%) had quit smoking in the past but were currently smoking. Among those who had smoked at some time who had attempted to quit during the 12 months before the survey, 91.8% did not use any method to assist with smoking cessation and the rest relied on medications, counseling, and other methods.