## SAFETY CLIMATE, OCCUPATIONAL INJURY, AND PATIENT SAFETY IN NURSING UNITS

Jennifer Taylor,<sup>1</sup> Francesca Dominici,<sup>2</sup> Jaqueline Agnew,<sup>3</sup> Daniel Gerwin,<sup>1</sup> Laura Morlock,<sup>3</sup> Marlene Miller<sup>3</sup> <sup>1</sup>Drexel University, Philadelphia, USA; <sup>2</sup>Harvard School of Public Health, Boston, USA; <sup>3</sup>Johns Hopkins University, Baltimore, USA

10.1136/oemed-2011-100382.79

**Objectives** To examine the association of unit-level safety climate and specific nurse working conditions with injury outcomes for both nurses and patients in a single hospital. Safety climate and nurses' working conditions may have an impact on both patient outcomes and nurse occupational health. These injuries have rarely been examined concurrently.

Methods We conducted a cross-sectional study, using nursing-unit level and individual-level data at an urban, level-one trauma centre in the USA, with Magnet nursing status and approximately 1900 total beds, with 48 000 annual discharges. Safety Climate was measured in 2004 using the Safety Attitudes Questionnaire (SAQ). Working conditions were nursing hours per patient day (RNHPPD), and unit-turnover. Patient injuries included individual-level patient falls, pulmonary embolism/deep vein thrombosis (PE/DVT), and decubitus ulcers. Nurse injury was a reported needle-stick, splash, slip, trip, or fall. Working conditions and outcomes were measured in 2005.

**Results** Units with patient safety events tended to have lower average SAQ scores than units without patient safety events. RNHPPD showed a protective effect on patient falls and decubitus ulcers. Unit-turnover was positively associated with nurse injury and PE/DVT, but negatively associated with falls and decubitus ulcer.

**Conclusions** Nurses and patients share similar organisational risk factors for injury. The strength of evidence is most convincing from the SAQ Teamwork and Safety domains, each of which were negatively associated with decubitus ulcers

and nurse injuries. This study also suggests that unit-turnover should be among the working conditions considered a risk factor for nurse and patient injuries.