Needlestick injuries and work schedules in registered nurses

Author Information:
Authors List:
Presenting Author: Alison Trinkoff
Additional Author: Jeanne Geiger Brown
Additional Author: Jane Lipscomb

Presenting Author: Alison Trinkoff
Address: 655 W Lombard St, Ste 625
Baltimore, MD 21201
US
Ph: 410-706-6549
Fax:
Email: trinkoff@son.umaryland.edu
Institution: University of Maryland Baltimore

Additional Author: Jeanne Geiger Brown
Address: 655 W Lombard St, Ste 575
Baltimore, MD 21201
US
Ph: 410-706-5368
Fax:
Email: jgeiger@son.umaryland.edu
Institution:

Additional Author: Jane Lipscomb
Address: 655 W Lombard St
Baltimore, MD 21201
US
Ph: 410-706-6002
Fax:
Email: lipscomb@son.umaryland.edu
Institution:

Abstract Information
Presentation Preference:
SNRS Symposium
Willing To Submit Podium?
Yes
Willing To Submit Poster?
No
Abstract Categories:
Interest Group: Community/Public Health
Thematic Areas: Health System

Introduction:
Purpose/Aims: To examine the relationship of work schedules to needlestick injury in registered nurses (RNs).
Research Question/Hypotheses: Do adverse work schedules increase the risk of incident needlesticks? Is this relationship explained by increased exposure to job demands? Significance: Although adverse schedules increase the risk of musculoskeletal injuries (Van der Hulst, 2003) the relationship of work schedule to other injuries has been less explored. Because nurses incur one of the highest rates of needlesticks (ICN, 2000) it is critical to identify risk factors for these injuries.

Method(s):
Methods: A three-wave longitudinal survey was conducted with a probability sample of RNs (n=2273) from two states between 2002 and 2004. Baseline data on needlestick injury in the prior year was followed by measurement of incident needlestick injury occurring since baseline in subsequent surveys. Variables also included
daily needle use, type of needle involved in injury, work schedule variables, and job demands. Logistic regression was used to estimate the risk of needle use on past year needlesticks. Regression was also used to compute work schedule factor scores, which were then regressed on prevalent and incident needlesticks.

Results:

Findings: The reported prevalence of needlestick injury prior to Wave 1 was 15.6% with cumulative incidence by Wave 3 was 16.3%. Needlestick risk increased significantly for nurses working more hours/day, more weekends/month, other than straight day shifts, and working 13+ hour days at least weekly. Schedule variables were significantly related to needlesticks after adjustment for psychological job demands, though this relation was somewhat explained by exposure to physical job demands (Trinkoff et al., 2007).

Discussion:

Discussion: Evidence indicates that adverse work schedules significantly increase needlestick injury risk. To prevent these injuries, attention should be paid to reducing needle exposures, improving safer needle designs, and designing healthier work schedules. Modification of schedules should contribute to further reduction of needlestick injuries.

Research Completed: Yes

Abstract History: NA

Financial Disclosure: Have a financial arrangement or affiliation with commercial companies whose products may be mentioned in this material? No

FDA Disclosure: Cleared: Yes

Non-Exclusive License: Accepted Terms: Yes

Submitted By: jgeiger@son.umaryland.edu