



The Association Between Work-Related Health Hazards and Leaving Intention Among Hospital Nurses in Taiwan.

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Purpose (1/2)

- Musculoskeletal symptoms, workplace violence, and percutaneous injuries are common health problems among hospital nurses.
- Studies have noted that a healthy workplace could increase staff retention and decrease occupational hazards.

Purpose (2/2)

- The objectives of this study were to examine patterns of work-related health hazards and their association with leaving intention among hospital nurses in Taiwan.

Methods (1/3)

- This analysis included 19,196 full-time bedside nurses working in the outpatient clinic, general wards, emergency room, intensive care unit, operating room, and delivery room of 104 hospitals across Taiwan.
- Participants filled out an anonymous questionnaire from July to September 2014.

Methods (2/3)

- Work-related health hazards were measured by yes/no items to musculoskeletal problems (low back pain, and sprain or strain muscles at hospital), workplace violence (threatened or intimidated on personal safety as well as verbal or sexual harassment/violence), and percutaneous injuries (sharps injuries).
- Intention to leave the hospital was measured by a 5-point Likert scale ranging from 1 (not at all) to 5 (very strong).

Methods (3/3)

- Latent class analysis (LCA) was used to identify patterns of health hazards among hospital nurses.
- Linear regression model were applied to examine the effects of different pattern of work-related health hazards on leaving intention, given with control for sex, marital status, educational level, age, years of practice, work units, and hospital level in the model.
- Maximum likelihood (ML) was used to deal with missing data.

Results (1/4)

- There were 62.9%, 41.3%, 35.6%, 45.9%, and 38.8% hospital nurses reporting that they had experienced low back pain, sprain or strain muscles at hospital, threatened or intimidated on personal safety, verbal or sexual harassment/violence, and sharps injuries during the past year, respectively.
- The mean scores indicated that nurses had nearly medium intention to leave the hospital (2.69, SD=1.25).

Results (2/4)

- LCA results showed that 4 patterns of health hazards among hospital nurses, including
 - (1) High exposure group (25.5%; high exposure to musculoskeletal problems, violence, and percutaneous injuries).
 - (2) Low exposure group (25.2%; low exposure to musculoskeletal problems, violence, and percutaneous injuries).

Results (3/4)

- LCA results showed that 4 patterns of health hazards among hospital nurses, including
 - (3) High exposure to musculoskeletal disorder (27.6%; high exposure to musculoskeletal disorder but low exposure to other hazards)
 - (4) High exposure to workplace violence group (21.7%; high exposure to workplace violence but low exposure to other hazards).

Results (4/4)

- After adjusting for potential confounders, linear regression results showed that nurses who belonged to the high exposure group had significantly higher leaving intention (standardized $\beta = 0.27$, 95% C.I. = 0.25-0.29), followed by high exposure to workplace violence group (standardized $\beta = 0.15$, 95% C.I. = 0.14-0.17) and high exposure to musculoskeletal disorder group (standardized $\beta = 0.11$, 95% C.I. = 0.09- 0.13) in reference to the low exposure group.

Conclusions (1/2)

- This nationwide survey showed that high rates of work-related health hazards persist in hospital nurses in Taiwan, of which 74.8% nurses reporting high exposures to at least one of the 3 health hazards. Work-related health hazards increased leaving intention among hospital nurses.

Conclusions (2/2)

- Awareness among hospital managers on the importance of employee health, its related factors and impact on leaving intention should be raised to foster a safer and healthy work environment. Further studies on effective strategies in controlling workplace hazards among nurses are urgently needed.



Thank you for your listening