

**Title:**

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

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3:15 PM

**Keywords:**

Intention to leave, Nurses and Work-related hazards

**References:**

Chiou, S. T., Chiang, J. H., Huang, N., Wu, C. H., & Chien, L. Y. (2013). Health issues among nurses in Taiwanese hospitals: National survey. *International journal of nursing studies*, 50(10), 1377-1384.

Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Laschinger, H. & North, N. (2012). Nurse turnover: a literature review—an update. *International journal of nursing studies*, 49(7), 887-905.

Liu, Y., Wu, L. M., Chou, P. L., Chen, M. H., Yang, L. C., & Hsu, H. T. (2016). The Influence of Work-Related Fatigue, Work Conditions, and Personal Characteristics on Intent to Leave Among New Nurses. *Journal of Nursing Scholarship*, 48(1), 66-73.

**Abstract Summary:**

Musculoskeletal symptoms, workplace violence, and percutaneous injuries are common health problems among hospital nurses. This nationwide survey showed that 74.8% nurses reporting high exposures to at least one of the 3 health hazards. These work-related health hazards significantly increased leaving intention among hospital nurses.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to understand the common types and percentage of work-related health hazards among hospital nurses.	1. The health hazards related to musculoskeletal problems (low back pain, and sprain or strain muscles at hospital). 2. The health hazards related to workplace violence (threatened or intimidated on personal safety as well as verbal or sexual

	harassment/violence). 3. The health hazards related to percutaneous injuries (sharps injuries).
The learner will be able to realize the relationships between work-related health hazards and leaving intention among hospital nurses.	1. The relationship between musculoskeletal problems and leaving intention. 2. The relationship between workplace violence and leaving intention. 3. The relationship between percutaneous injuries and leaving intention.

**Abstract Text:**

**Purpose:** 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. 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:** 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. 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). 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:** 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). LCA results showed that 4 patterns of health hazards among hospital nurses, including high exposure group (25.5%; high exposure to musculoskeletal problems, violence, and percutaneous injuries), low exposure group (25.2%; low exposure to musculoskeletal problems, violence, and percutaneous injuries), high exposure to musculoskeletal disorder (27.6%; high exposure to musculoskeletal disorder but low exposure to other hazards), and high exposure to workplace violence group (21.7%; high exposure to workplace violence but low exposure to other hazards). 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.

**Conclusion:** 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.

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.