USING THE NATIONAL HEALTH INSURANCE RESEARCH DATABASE TO ANALYZE THE RISK OF OCCUPATIONAL INJURIES/ DISEASES IN REGISTERED NURSES

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Background and Aims: As indicated by the National Occupational Hazard Survey conducted in the United States, registered nurses (RN) are of a high risk group for occupational injuries and illnesses, incurring an annual incidence rate as high as 10.9%. A complete investigative report on the occupational injuries and illnesses in RNs is yet lacking. Moreover, previous studies have mostly been based on questionnaire surveys whose results were very much influenced by recall bias of studied subjects. This may disallow interventions to be implemented within an accurate and proper timeframe. Hence, the National Health Insurance Research Database (NHIRD) was used in this study to comprehensively examine RNs for occupational injuries, and to infer the time frame of initial occupational injuries.

Methods: This study used a retrospective prospective study, using the NHIRD of National Health Research Institutes, including registry for medical personnel (PER), and ambulatory care expenditures by visits (CD) files. The data provided by the National Health Research Institutes in Taiwan, the International Classification of Diseases, 9th revision, clinical modification (ICD-9-CM) code of the disease diagnosed from 2002 to 2008.

The ID numbers in the PER file were linked to the CD file. In Taiwan, there were 156,881 RNs in 2008 according the PER file. The subjects served as nurses from 2002 to 2008 were selected in this study.

Results: There were 23,898 subjects. From 2002 to 2008, three thousand six hundred eighty (15.4%) of 23,898 suffered occupational injuries/diseases. The RNs had a higher cumulative incidence in the following systems: there were 2,671 (11.2%) in injury and poisoning (ICD-9-CM code: 800-999, E800-E999); three hundred and three in diseases of the musculoskeletal system and connective tissue (ICD-9-CM code: 710-739), two hundred twenty-four in infectious and parasitic diseases and late effects of infectious and parasitic diseases (ICD-9-CM code: 001-139, 7713, 320-322), one hundred seventy-six in diseases of the digestive system (ICD-9-CM code: 530-579).

Conclusions: The occupational injuries/diseases in registered nurses are a matter worthy of note.