



## **THE SELECTED ABSTRACTS**

*23rd Conference on Epidemiology in Occupational Health*

**EPICOH 2.0.13: IMPROVING THE IMPACT**

### 317 Estimation of the national incidence of needlestick injury in Taiwan healthcare workers

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Session: F. Health Care II

Session Date: 19/06/2013

Presentation Time: 13:30 - 15:00

#### Abstract

**Objectives :** The purpose of this study was to determine which of the following denominators, number of health care workers, number of hospital beds, and number of inpatient-days would predict best of the national number of needlestick injury (NSIs) and the national number of biological exposures to specific bloodborne pathogens.

**Methods:** Four years after our first attempt at calculating the national incidence of NSIs in Taiwan healthcare workers (HCWs) from 14 hospitals, using Exposure Prevention Information Network (EPINet) data, we are now able to analyze the much larger dataset reported from 49 hospitals that consist of 44,939 HCWs.

**Results:** A total of 1,837 NSIs were reported between Jan 1<sup>st</sup> and Dec 31<sup>st</sup> 2011. The annual number was estimated to be 5,663 NSIs per hospital size, 8,319 per HCWs, and 7,828 per inpatient-day; indicating similar estimates using different denominators. The estimated annual frequency of pathogen-specific NSIs was 970 for hepatitis B, 1,094 for hepatitis C, and 99 for HIV.

**Conclusions:** This study documents the annual incidence of NSIs among HCWs showing important potential exposure to viral hepatitis and HIV, as well as the improvement in needlestick prevention over the years in Taiwan. In addition, the provision of safety engineered devices became a law in December 2011 in Taiwan. It is worth observing the influence of the new act to HCWs' occupational health.

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### 396 Burnout syndrome and common mental disorders in pediatric nursing workers

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Session: F. Health Care II

Session Date: 19/06/2013

Presentation Time: 13:30 - 15:00

#### Abstract

##### Objectives

Burnout syndrome is characterized by chronic stress related to work, in which there has been a gradual physical and mental strain process. The consequences to workers are related to their professional, familiar and social relationship. The nursing care in pediatric cardiology has been reported as very painful and distressing, and thus generating mental disorders. Aimed to identify the presence of burnout and common mental disorders (CMD) in nursing workers of a pediatric cardiology unit.

##### Methods

This study was conducted with 92 nursing workers of a pediatric cardiology unit of a public Brazilian University Hospital. The Maslach Burnout Inventory (MBI), the Self Reporting Questionnaire (SRQ-20) and a questionnaire to characterize socio-demographic data were used to data collection. Data analysis considered chi-square test and Pearson correlation coefficient to associate the SRQ-20 and socio-demographic variables, and the SRQ-20 with the three dimensions assessed by the MIB.

##### Results

The results showed that the nursing workers have on average 31 years old, 93.5% were female, 3% worked less than 10 years in a pediatric and neonatal cardiology unit, and 79.3% have only one employment. It was observed burnout in 8 nursing workers (8.7%) and 41(45.0%) with CMD. Considering the socio-demographic variables, the chi-square test didn't show significant association with burnout and CMD. However, the chi-square test showed significant association between burnout e CMD ( $p<0.005$ ). The Pearson correlation coefficient showed an correlation between CMD and the three dimensions of burnout, Emotional Exhaustion ( $r=0.59$ ), depersonalization ( $r=0.44$ ) and Reduce Personal Accomplishment ( $r=-0.31$ ), a reverse score.

##### Conclusions

This study showed association between the burnout and CMD and correlation with the three dimensions of burnout with the CMD. Future research should focus upon identifying pediatric nurses with CMD earlier, avoiding the burnout syndrome and abandonment of profession.