night shifts in the current work schedule and the total duration of night shift work.

Results Chronic back pain, hypertension and thyroid disease were the most common diseases in the total population of nurses and midwives. The prevalence of thyroid disease was higher than in the general population of Polish women (21.2% vs. 10%) and the relative risk of this disease increased with increasing duration of night shifts work. The analysis did not show significantly higher frequency of any disease or symptom in the night shifts nurses compared to the day workers. The analysis showed significantly increased risk of feet swelling in women working 8 or more night shifts per month (OR = 8.55; 95% CI: 1.02–71.80).

Conclusions We did not find significant increased risk of any of the diseases or symptoms among night shifts nurses than among the women working only during the day. The increased prevalence of thyroid disease among the women with long duration of night shift work warrants further epidemiological studies.

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43 | **INCIDENCE OF SHARP-POINTED INJURIES IN PERSONNEL OF A HIGH SPECIALTY HOSPITAL FROM THE MEXICAN INSTITUTE OF SOCIAL SECURITY, 2004–2010**

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Objective To determine the incidence of sharp pointed injuries by working category and its characteristics.

Material and Methods Information of sharp pointed injuries from 2004 to 2010 was collected using EPINet, which registered: working traits, service, description of the accident, object, and anatomical part among others.

Results We recorded 181 injuries, with a mean (SD) [min-max] of: age 36 (8.5) [18–56] years; length of service in the hospital 10.6 (7.7) [0.5–27] years. The greatest proportions of injuries were in the departments of: Adolescents 31.5%, NICU 25% and Operating Room 16%. The first working shift had the largest amount of accidents with 71.7%. Moderate lesions were the most frequent with 64%, followed by superficial 21% and severe 15%. Of all the personnel, 55% didn't use gloves, 41% used one pair and 5% used double pair of gloves; 49% was injured in the right hand and 48.6 in the left hand. The main working categories injured were: nurses 48%, medical residents 23.2%, general services 16.6%, and physicians 6.6%. The incidences were: medical residents 31.5%, nurses 13.8%, general services 11.5% and physicians 7%. Taking into account the ones with lower risk, we observed a greater ratio of incidence in the medical residents: 4.5 vs physicians and 2.3 vs nurses.

Conclusions Medical residents are in greater risk of having sharp pointed injuries followed by nurses and general services. It is necessary to identify the causes and take preventive measures as well as developing permanent epidemiological surveillance of these risks.

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44 | **BURNOUT SYNDROME IN MEDICAL RESIDENTS OF A SCHOOL HOSPITAL AND THE ORGANISATIONAL ERGONOMY FACTORS**

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Objectives To describe the presence of Burnout syndrome among doctors in residency medical postgraduate and to evaluate in organisational ergonomics factors in the framework of a school hospital which predict that syndrome.

Methods Cross-sectional study performed in a school hospital in São Paulo, southeastern of Brazil. Participants were 24 doctors in two-years medical residency program of Internal Medicine. They answered questionnaire about sociodemographic data, clinical complaints, occupational informations and perception of work organisational predictors for Burnout Syndrome. The outcome was analysed by their response of Maslach Burnout Inventory (MBI).

Results Most of the participants were female (58.3%), single (91.7%), living alone (66.7%), being the first year of the program (54.2%), working 60 hours/week (83.3%), have another job (62,5%) and reported high number of complaints (54.2%). The mean age of participants was 26 years old. The Burnout Syndrome was characterised in 50% of participants. The frequence of perceived work organisation stressors were: excessive demands (66.7%) with high control at work (79.2%), low recognition by preceptors (87.5%), low valuation by the institution (79.2%) and low support from colleagues (62.5%). Most of them considered their work important (70.8%).

Conclusions These workers presented Burnout syndrome as reported in other studies with similar population. The perception of predictors for this condition in their postgraduate program shows a stressful situation. More than employees, they have a study bond with this program and negative impacts in their learning could happen. It is necessary to analyse organisational factors to create policies aimed to minimise occupational and psychosocial stressors.

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45 | **ESTIMATION OF THE NATIONAL INCIDENCE OF NEEDLESTICK INJURY IN TAIWAN HEALTHCARE WORKERS**

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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 analyse 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 1st and Dec 31th 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 HCW's occupational health.

46 BURNOUT SYNDROME AND COMMON MENTAL DISORDERS IN PEDIATRIC NURSING WORKERS

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Objectives Burnout syndrome is characterised 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 paediatric 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 paediatric cardiology unit.

Methods This study was conducted with 92 nursing workers of a paediatric cardiology unit of a publicBrazilianUniversityHospital. The Maslach Burnout Inventory (MBI), the Self Reporting Questionnaire (SRQ-20) and a questionnaire to characterise 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 paediatric 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 Exaustion ($r = 0.59$), despersonalisation ($r = 0.44$) 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 paediatric nurses with CMD earlier, avoiding the burnout syndrome and abandonment of profession.

47 PRELIMINARY STUDY OF OCCUPATIONAL STRESS IN A MOROCCAN HOSPITAL

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Background Occupational stress has an impact on health of medical and paramedical staff, on their productivity and on their relationship with the patients.

Aim The aim of this study is to evaluate stress among medical and paramedical staff and compare the degree of this parameter between these groups.

Methods The study is realised in hospital in Rabat, Morocco, among 20 doctors and 54 paramedical staff. The test used is a numeric test which consists on capacity of person to join 11 points for drawing 2 squares and 1 triangle in every 15 subtests. Every subtest remains 40 seconds; the totality of the test lasts 600 seconds. The tested person must put headphones linked to the laptop, and hears during the test different noises. The degree of this noise pollution increases from a subtest to another. Number of write response during each subtest and the total scores are calculated.

Results The preliminary results show that the mean score of write responses obtained under noises among doctors are 47/90, among nurses in anaesthesia and resuscitation are 44/90, among nurses of laboratory are 43/90, among polyvalent nurses are 32/90 and among radiology nurses are 30/90. These scores are significantly different between doctors and all specialties of nurses ($p < 0.01$). Moreover, the most affected groups by stress are polyvalent and radiology nurses compared to doctors ($p < 0.01$) and compared to nurses in anaesthesia and resuscitation ($p < 0.05$), and to nurse of laboratory ($p < 0.05$).

Conclusion Nurses are more affected by occupational stress than doctors, especially polyvalent and radiology nurses. Several factors could be involved in this occupational pathology. So, deeper investigations are needed.

48 HEALTH INDICATORS OF HEALTH WORKER IN A UNIVERSITY HOSPITAL: PRELIMINARY DATA

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Introduction Partial results of a dissertation of the Graduate Program in Nursing, Federal University of Parana - Brazil.

Objective To analyse the health indicators of a hospital worker in the year 2011.

Methods Retrospective epidemiological study conducted at a university hospital in southern Brazil whose data was collected through the database Monitoring System of Occupational Health Nursing (SIMOSTE) which consists of a technological tool developed by nursing researchers, with support from the Foundation to support research in São Paulo, aimed at monitoring the health of workers in a hospital environment.

Results Women (80.8%) and workers aged 31 to 40 years (34.2%) had more records of absences from work. The total absence corresponded to 2478 days, and 1526 (61.6%) relative to the nursing staff. The highest average absence was observed among nursing technicians (M = 2.63 days) and work sector with the highest proportion of registers was the Intensive Care Unit (23.2%). The workload was the biological prevalent (39.4%) and is also the main cause of attrition reported for 15 of the 23 occupational categories. Diseases of the respiratory system were the most away (19.62%) and also in higher frequency registries (19.62%). The highest number of days of sick leave (360 days) was due to diseases of the musculoskeletal system and connective tissue and the damage resulting from mental and behavioural disorders on average 5.76 days away. Nurses had 33 days of leave for respiratory diseases and an average of 4.71 days away from external causes. The nursing staff had more