PARALLEL SESSIONS: ORAL COMMUNICATIONS

3rd World Congress of Health Research
Viseu - Portugal, 29-30 September 2016

1. ADULT HEALTH

CHARACTERIZATION OF PATIENTS UNDERGOING NONINVASIVE VENTILATION ADMITTED IN UNIT INTERMEDIATE CARE

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Introduction: Non-invasive ventilation (NIV) is the application of a ventilatory support without resorting to invasive methods. Today it’s considered a credible therapeutic option, with enough scientific evidence to support its application in various situations and clinical settings related to the treatment of acute respiratory disease, as well as chronic respiratory disease.

Objectives: Characterize patients undergoing NIV admitted in Unit Intermediate Care (ICU) in the period from October 1st 2015 to June 30th 2016.

Methods: Prospective study conducted in ICU between October 2015 and June 2016. In this study were included all patients hospitalized in this unit (ICU) and in that time period a sample of 57 participants was obtained. As data collection instruments we used a questionnaire for sociodemographic and clinical data and the Braden scale.

Results: Participants were mostly male 38 (66.7%), the average age 69.5 ± 11.3 years, ranging between 43 and 92 years. They weighed on average 76.6 kg (52 and 150), with an average body mass index of 28.5 kg/m² (20 to 58.5). With skin intact 28 (49.1%) with abnormal perfusion 12 (21.1%), with altered sensitivity 11 (19.3%) and a high risk of ulcer on the scale of Braden 37 (65%). The admission diagnosis was respiratory failure 33 (57.3%) and had different backgrounds. We used reused mask 53 (93.0%), the average time of NIV was 7.1 days (1-28), 4.8 days of hospitalization (1-18) and an average of 7.8 IPAP pressure. 11 (19.3%) of the participants developed face ulcer pressure.

Conclusions: The NIV is used in patients with advanced age, obesity, respiratory failure and high risk of face ulcer development.

Keywords: Patients. Noninvasive ventilation.

TELEPHONE SUPPORT LINE OF RHEUMATOLOGY DEPARTMENT: A 4.5 YEARS EXPERIENCE

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Introduction: In many health services in developed countries, the telephone support has been used as an innovative approach to providing care and answering questions by nurses, developing especially in specific areas such as rheumatology (Brown et al., 2006).

Objectives: To analyze the profile of users and the main reasons of patients that uses the Telephone Support Line of Day Hospital and early arthritis consultation of the CHUC Rheumatology Department, EPE.

Methods: This is a retrospective descriptive-correlational study with a convenience sample of 448 calls. For continuous variables we used the t-student test, for dichotomous variables the χ² test and, finally, we performed a cluster analysis by the TwoStep Cluster method through the log-likelihood distance.

Results: Users have an average age of 44.8 years being predominately male (58%). The cluster analysis allowed to create three groups whose profile shows that the cluster 1 (n = 96/21.4%) are formed by “older” adults that need to clarify mainly doubts about the results of auxiliary examinations tests (AET)/prescriptions and side effects/complications; the cluster 2 (n = 232/51.8%) are formed by young adults that call to change appointments and mainly to clarify doubts on the results of AET/prescriptions; finally, the cluster 3 (n = 120/26.8%) are formed by “middle age” adults that want to clarify doubts about medication and disease management.

Conclusions: Incoming calls cover a wide range of ages and all kinds of rheumatic diseases. This study allows us to identify in which groups it is necessary to make a more detailed educational
which aimed to collect work life history and unemployment experiences. Participants had in average 32 years old, 9 years of professional experience after graduation and have experienced an average of 6 different types of work relations in their careers. Interviews were audiotaped, transcribed and coded in Nvivo Software, using qualitative data analysis.

**Results:** Forty-eight categories emerged and were regrouped into four major categories of employment effects: Quality of work life (248 coding references [CR]), Quality of life (64 CR), Vulnerabilization (48CR) and Uncertainty towards the future (24 CR). The five most coded effects were: Payments degradation (42 CR), Added Taxes and expenses and Loss of social benefits (28 CR), Obtaining Satisfaction and recognition (27 CR), Depending on others (20CR), Economic instability (18CR) and Worsening of Mental Health (17 CR).

**Conclusions:** The majority of the employment effects found are of negative nature and the few positive effects found are related to obtaining some income, satisfaction and recognition. Careers in health are becoming unstable and unpredictable, which urges researchers to rethink employability in the Portuguese health sector.

**Keywords:** Unemployment. Effects. Health professionals. Career.

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ARE HEALTH PROFESSIONALS BECOMING PRECARIOUS WORKERS?: A QUANTITATIVE DESCRIPTIVE STUDY ABOUT WORK RELATIONS TYPES

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**Introduction:** Precarious work relations and unemployment are becoming a reality in higher education graduates careers and the health sector (HS) has been no exception, with health graduates experiencing precarious/atypical work arrangements.

**Objectives:** In this paper, which is part of a larger study, we aim to obtain detailed quantitative descriptive data on work relations types that health professionals (HP) are experiencing in Portugal, throughout their careers.

**Methods:** An electronic questionnaire was answered by 170 graduates, from which 45 are Health Professionals and the focus of this paper. Participants from several scientific areas of HS were essentially female (86.6%), single (60.0%), childless (82.2%) and with a mean age of 30.36 years (± 5.64). Additionally, 37% had a Master’s degree and 22% had a PhD.

**Results:** HP in this sample have experienced 3.4 ± 2.03 different types of work relations. Fixed-term contracts (53.3%) and traineeships (53.3%) are the most experienced work relations, followed by independent work (46.7%). Furthermore, 42.2% of health graduates in this sample have experienced overqualified work, 33.3% have been without work bond (unemployment) and 20.0% have worked with no remuneration. Significant statistical differences were found [χ² (1) = 4.30, p = 0.038] concerning fixed-term contracts between the single and married participants: Married participants experienced more fixed-term contracts than single.

**Conclusions:** Portuguese graduate HP are becoming precarious workers, which might in risk job security, commitment to work and quality of work life. These possible outcomes of precarious work in HP represents a risk to the quality of Portuguese healthcare and so, this matter deserves urgent consideration, intervention and juridical regulation.

**Keywords:** Precarious work. Unemployment. Health professionals.

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WORKPLACE HEALTH PROMOTION BY MONITORING INDOOR AIR QUALITY

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**Introduction:** Most people spend approximately 80% to 90% of their time indoors. Thus, indoor air quality (IAQ) has a large impact on health and work efficiency. Actually, indoor air pollutants have been ranked among the top five environmental risks to public health. This work aimed to present an effective indoor air quality monitoring system to prevent exposure risk.

**Methods:** The system consists of a low cost indoor air quality monitoring wireless sensor network system, developed using micro sensors, for storage and availability of monitoring data on a web portal in real time. Five micro sensors of environmental parameters (air temperature, humidity, carbon monoxide, carbon dioxide and luminosity) were used in each module, but other sensors can be added as needed. The system was tested by monitoring the IAQ in two classrooms.

**Results:** The results reveal that the system can provide an effective indoor air quality assessment to prevent exposure risk. In fact, the indoor air quality may be extremely different compared to what is expected for a quality living environment. Nevertheless, the system needs further experimental validation in real environments, in particular with the assembly of more than two remote modules as used in laboratory tests, in order to verify and calibrate the system more accurately. In addition to this validation study, physical system and web portal improvements have been planned with a view to adapt the system to specific cases or problems.

**Conclusions:** Systems like this would have benefit as public health interventions. It can be used to help the building manager for proper operation and maintenance to provide not only a safe and healthy workplace, but also a comfortable and productive one.

**Keywords:** Occupational health. Exposure risk. IAQ. Sensors.

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ENGAGEMENT AND LABOUR STRESS IN NURSING

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**Introduction:** Engagement is a useful concept in the profession of nursing as it focuses on the positive dimension of human behaviour and visualizes the work context as a positive situation.

**Objectives:** Evaluate the stress and engagement levels on Portuguese and Spanish nurses and analyse the factors related to the stress and engagement levels in the two sample groups.

**Methods:** Comparative exploratory study in a quantitative paradigm. Sample of 867 nurses (504 Portuguese, 363 Spanish), female 93.6% (78.6% Portugal, 90.6% Spain) and average age of 37. Portuguese (77.2%) and Spanish nurses (39.4%), work on average 40 hours per week. 60.6% and 57.7% of the Spanish and Portuguese respectively exercise their profession for 10 years. Sociodemographic questionnaire, the Pamela Gray-Toft's Nursing Stress Scale (1981) and Schaufeli & Bakker’s Utrecht Work Engagement Scale (2003) were used.

**Results:** In what concerns Engagement there are statistically significant differences in the three dimensions, the p-value of the t-Student test were under 5%, highlighting the Spanish nurses...
for being more vigorous, dedicated and absorbed by their work: vigour, dedication and absorption. The sample of Portuguese nurses experience higher stress levels although the difference with Spanish nurses isn’t statistically significant. There are statistically significant differences between Portugal and Spain in “Lack of help from colleagues” and also in the psychological domain in general.

Conclusions: The Spanish nurses feel more vigorous, dedicated and absorbed by their work. The Portuguese nurses perceive more psychological stress and mention having less help from colleagues.

Keywords: Nurses. Engagement. Work stress.

**OCCUPATIONAL HEALTH OF HEALTHCARE PROVIDERS: AN ORGANIZATIONAL CLIMATE STUDY IN RESIDENTIAL STRUCTURES FOR THE ELDERLY**

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Introduction: Life expectancy increase is one of the greatest human achievements, however, proves to be simultaneously a huge challenge, leading to the growth of official regulated social responses such as Residential Structures for the Elderly (RSE’s). Regarding RSE’s, there is scarce research on healthcare providers organizational climate (OC) perception.

Objectives: This study aims to analyze the OC in five RSE’s, including dimensions of occupational health of healthcare providers.

Methods: 108 workers participated in the study, mostly women (73%), with an average age of 39.76 (± 10.57), married (60%) and with permanent employment contract (88%). The instrument that was built specifically for this study (based on previous validated instruments on OC) revealed \(\alpha = .90\) and included 50 items organized in ten dimensions: respect for others; satisfaction and recognition; teamwork; leadership; communication; physical environment; ethics and professionalism; decision making; pressure of the musculoskeletal system and stress.

Results: Results showed that although in general the OC perception could be considered moderately satisfactory, healthcare providers reported high levels of dissatisfaction about pressure on the musculoskeletal system and with reward system. Some socio-demographic (age, education and gender) and professional variables (employment contract and longevity in the RSE), were significant in OC (p ≤ 0.05), particularly in stress levels, that nonetheless proved to be low.

Conclusions: Strategies to organizational intervention in the five RSE’s emerged from these results, were then presented to the board of direction and some were implemented with success. RSE’s in Portugal should include OC in their annual plan, especially concerning occupational health practices.

Keywords: Health providers. Elderly. Organizational climate.

**JOB SATISFACTION IN CIVIL SERVICE WORKERS: A GENDER ISSUE?**

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Introduction: Job satisfaction has been widely studied to be understood as an important component of productivity and stay in work, for absenteeism reduction in organizations. It can be understood as an emotional state of pleasure that results from the relationship between the individual with his work. Among the determinants of job satisfaction, gender appears as one of the pre-established determinants (Sloan and Williams, 2000). The job satisfaction is a variable that influences the success of organizations and takes particular interest in occupational health services, so their assessment goes beyond the research interests and has applicability practice.

Objectives: To evaluate the relationship between job satisfaction and gender issues of civil service workers.

Methods: Quantitative, descriptive and exploratory study, with data collection conducted through structured questionnaire with job satisfaction scale (S20/23). The population are employees of a municipality of Portugal. The sample consisted of 604 participants, 1,343 workers, with a sampling error of 4% and 99% confidence interval, represented 45.86% of the total.

Results: Considering the satisfaction components: satisfaction with hierarchical relations; Satisfaction with the physical work environment and the conditions intrinsic to the work, it was found that the distribution of the overall job satisfaction, satisfaction with the physical working environment, with hierarchical and satisfaction relations with the intrinsic conditions to work is same for men and women.

Conclusions: Although there are differences between the average in overall satisfaction between men and women, the difference is not significant, which allows to affirm that gender does not influence job satisfaction.

Keywords: Job satisfaction. Gender and health.