PARALLEL SESSIONS: ORAL COMMUNICATIONS

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1. CHILD AND ADOLESCENT HEALTH

FACTORS AFFECTING THE BMI IN ADOLESCENTS ATTENDING THE 2ND AND 3RD CYCLES IN PORTUGUESE SCHOOLS FROM VISEU

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Introduction: Many studies show that the prevalence of overweight and obesity among children is rapidly increasing and developing into a major public health problem worldwide.

Objectives: To assess the Body Mass Index (BMI) in school children from 2nd and 3rd cycles in Viseu schools and identify the sociodemographic, behavioural and educational factors that are related to the BMI.

Methods: This is a quantitative descriptive and explanatory study with a convenience sample of 742 students attending schools of the 2nd and 3rd cycles in Viseu schools and identify the sociodemographic, behavioural and educational factors that are related to the BMI.

Results: It was found that some sociodemographic factors were associated with BMI, namely age, school year, practicing high competition sport, being federate in a sport or vegetarian diet. Regarding the educational factors associated with BMI these included only the seminars given at school by specialist in nutrition. Furthermore, a significant relation between BMI and SF was found, where SF represents the school sources of knowledge. Finally among the behavioural factors associated to BMI stood: learning in classes, playing in the open air, reading books and use of internet.

Conclusions: The results reinforce the need of adolescents to practice a healthy lifestyle and the role of family and school in providing the right information to help making right food choices. Finally in the sample at study the incidence of overweight and obesity was not at all preoccupying, thus indicating that the efforts to provide a good education both at home and at school are adequate and must be carried on.

Keywords: Body mass index. School children. Food education.

QUALITY OF LIFE OF CHILDREN AND YOUNG PEOPLE WITH DIABETES MELLITUS TYPE I

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Introduction: Diabetes Mellitus type I (DMTI) has become apparent in children/young people, a current and worrisome problem due to increasing incidence and prevalence. In addition to its consequences, it interferes with the quality of life (QOF), representing a public health issue.

Objectives: Characterize the QOL of children/young people with DMTI; identify factors influencing children/young people with DMTI QOL; check DMTI impact in the QOF of children/young people.

Methods: Systematic review of full text studies, published from January 2006 to June 2014 that included the QOF of children/young people with DMTI, children/young people with DMTI with no other pathology and their parents, consulting CINAHL, MEDLINE, MedicLatina, Academic Search Complete, Psychology and Behavioral Sciences Collection and Scholar Google, using "quality of life", "child***", "diabetes". Studies of children/young people with DMTI and other chronic illness were excluded. 546 articles have been identified, 11 selected and seven used.

Results: Parents perceive less QOL and greater impact in the life of children/young people than them. Children/young people QOL improve with the insulin pump and severe hypoglycemic crisis and ketoacidosis decrease. Gender and age group influence children/young people QOL. Severe hypoglycemic crisis are related to parents’ fear of hypoglycemia, affecting their and their children’s QOL. Young people using complementary and alternative Medicine have better QOL than those using stress relief activities. Children with DMTI have impaired school performance.
Conclusions: Four mat Pilates exercises immediately improved postural sway in young adults with LBP.

Keywords: Pilates. Low back pain. Health and exercise.

ETHICAL DECISIONS IN PORTUGUESE PALLIATIVE CARE UNITS: A BURNOUT RISK FACTOR? A MIXED METHODS MULTICENTRE STUDY IN PT

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Background: Ethical decision-making in end-of-life care is often perceived as stressful.

Aims: To identify the most common ethical decisions made by Portuguese palliative care teams and how the making of such decisions relates to burnout among these professionals.

Methods: A mixed methods study was performed in 9 palliative care teams. Data was collected through questionnaires, Maslach Burnout Inventory, interviews and observations. Quantitative data analysis included both descriptive, univariate and multivariate logistic regression analyses; qualitative data was analysed inductively with categories and themes being embedded in the data. Results were triangulated to ensure reliability of the findings.

Results: Communication issues caused the most common ethical decisions, followed by forgoing treatment and terminal sedation. Although perceived as a risk factor for burnout in the discourse of the participants, quantitative data showed that the need to make ethical decisions was not significantly associated with higher burnout levels. A possible explanation for these findings could be found through the analysis of the transcripts of interviews and field notes: the decision-making process, in which an interdisciplinary approach took place and ethical resources were used, was identified as a protective factor against burnout.

Conclusions: Making ethical decisions is not associated with burnout among professionals working in Portuguese specialised palliative care units. This might be explained by the ethical deliberation and decision-making process followed by these teams. Promoting palliative care skills among other professionals providing end-of-life care might be useful to diminish burnout and other work-related problems related to making ethical end-of-life decisions.

Keywords: Ethical decisions. Palliative care. Burnout.

CHARACTERIZATION OF ACCIDENTS AT WORK IN THE OPERATING ROOM SERVICES OF THE PORTUGUESE PUBLIC HOSPITALS

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Introduction: The care provided in Operating Room Services (ORS) are highly specific and using high and sophisticated technology, exposing the workers to increased risks.

Objectives: To characterize the accidents occurred in the ORS of Portuguese public hospitals.

Methods: Retrospective epidemiological study relating to accidents at work occurred in ORS of Portuguese public health institutions in the period of January 1, 2009 to December 31, 2010. The information was obtained using the computerised registration notification of work accidents from the ACSS, referring to 1201 workers.

Results: Work accidents occurred in the ORS represented 10.1% of the total accidents recorded. There were higher frequencies of accidents in 2010, 54.1%, in ARS of Lisboa e Vale do Tejo, 47.4%, in females, 77.2%, in the professional category of nurses, 41.6%, in the age group 25-29 years, 20.8%, with length of service more than 10 years, 45.3% and practice timetable for shifts, 59.0%. On average the accidents occurred at 12.5 hours, between the 3rd and 6th hour of the beginning of work, 37.6%, and in the 3rd day after weekly rest, 37.9%. The action of most prevalent lesion was the needlestick/object-cutting, 66.3%, the type of injury was wounds, 52.3% and the body part most affected were the hands, 66.2%. Used personal protective equipment 50.4% of workers. Absenteism resulted in 22.5% with a total of 7203 lost working days.

Conclusions: There was a high prevalence of needlestick injuries/cuts on nurses that could be preventable by which suggests the implementation of training measures and monitoring these situations in order to reduce them.

Keywords: Accidents. Occupational. Health. Operating rooms.

NURSES AND SUPERVISION OF CLINICAL TRAINING

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Introduction: Clinical supervision gains an important role, understood as a process of guidance, monitoring and support of students, that makes the learning process easier and promotes personal and professional skills. The objective of the study is to analyze the prespetiva nurses on the management of clinical education in undergraduate nursing, because they are the ones who daily deal with the problems of educational, organizational, functional, ethical and professional accountability in the supervision of Clinical Training students.

Methods: It's an explorative, descriptive, correlational and transversal study, with quantitative nature, that comes next to an inquiry of questions, using CICRS (Clinical Instructor Characteristics Ranking Scale).

Results: From the results, we point out the fact that supervisor nurses are mainly female, with ages between 30 and 39 years, with college degree, and professional experience between 10 and 19 years. The most valued aspects are Nurse and Human Being. To the Person dimension: be honest (9.19). For the Nurse dimension: to be competent as a nurse (9.92). To the Person dimension: be honest (9.19).

Conclusions: This study presents various important aspects to set the management of the supervising process, ensuring the responsibility of the participants and promoting the safety and the quality of performances in the Nurse Clinical Teaching.

Keywords: Clinical teaching. Clinical supervision. Skills.

BURNOUT IN PERIOPERATIVE CONTEXT

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Introduction: Companies in a global context are going through moments of great development of information and technologies. In these environments Burnout is highly prevalent, this syndrome is
considered as one of physical and emotional stress that leads to a lack of motivation to work, leading to a progressive sense of inadequacy and failure.

**Objectives:** What level of stress Perioperative nurses for nurses in the Region of Tras-os-Montes and Alto Douro.

**Methods:** Non-experimental study, quantitative character, descriptive and correlational a transverse plane. The sample consisted of 81 participants, 27 perioperative nurses of the Local Health Unit of the Northeast (ULSNE) and 54 of the Hospital of Tras-os-Montes and Alto Douro. Three assessment instruments were applied: Maslach Burnout Inventory (MBI) of Maslach and Jackson, Nurse Stress Index (NSI) Harris and Inventory Troubleshooting (IRP) Vaz Serra.

**Results:** According to the NSI, the sample exhibits a considerable degree of stress, presenting the equivalent values in stressful subscales Workload 1 (Quantitative), Organizational Climate and Dealing with patients and family.

**Conclusions:** The level of Burnout, the MBI scale, it was found that the correspondent sample has a low level of burnout and how the coping, through the IRP concluded that the sample globally, has reasonable coping mechanisms, showing effective strategies in terms of internal / external audit of problems in controlling the level and internalized / externalized aggression.

**Keywords:** Operating room. Stress. Burnout. Coping.

**PSYCHOSOCIAL FACTORS AND WORK ABILITY IN PORTUGUESE FIREFIGHTERS**

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**Introduction:** In recent decades there have been profound changes in the conditions and requirements of the job that inevitably brought implications for the health of workers. According to the annual report of the European Agency for Safety and Health at Work.

**Objectives:** In this study we try to understand the relationship between work ability and exposure to psychosocial risk factors in a sample of Portuguese firefighters.

**Methods:** This is a quantitative descriptive and explanatory cross-correlated study with 91 Portuguese firefighters were studied in order to analyze the psychosocial risks COPSOQ use, and ICT to assess the ability to work as well as the STAI and the BDI.

**Results:** The results obtained indicate that the ability to work in the firefighters decreases with age. We found that the greater the number of years of service, the greater the emotional demands and cognitive demands. There is a positive correlation between cognitive subscale requirements and levels of trait anxiety and depressed mood (p.000). Well as positive and statistically significant correlations between the subscales of “stress”, “Burnout” and “‘trouble sleeping” with levels of trait anxiety and depressed mood.

**Conclusions:** As in previous studies that also concludes that firefighters in the study have good capacity for work. Finding as possible high response levels of resilience of these professionals.

**Keywords:** Work ability. Psychosocial risks. Occup health.

**WORKPLACE HEALTH PROMOTION BY MODELLING POLLUTANT EXPOSURE RISK**

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**Introduction:** Indoor air quality (IAQ) is an important factor to be controlled for the occupants’ health and comfort. Indeed, indoor air pollutants are ranked among the top five environmental risks to public health.

**Objectives:** To alert to the problem of IAQ and its impact on health, particularly users of pollutants equipment, and to provide an effective IAQ assessment to prevent pollutant exposure.

**Methods:** A CFD (Computational Fluid Dynamics) model for indoor air pollution was used to analyze predictions of pollutants dispersion in ventilated room, considering different locations of a common pollutant source in workplaces (photocopier). For this purpose, a uniform contaminant emission (formaldehyde) was considered. The emission rate considered is in accordance with the European Commission recommendation EU 21500.

**Results:** The indoor air quality obtained by the different simulated conditions was analyzed and compared. Distinct poor occupation areas, perfectly identified by concentration fields, were given. Once the contaminant concentration fields depend on the source location, it is very useful to choose the best place to install any pollutant indoor equipment in order to preserve breathing zones.

**Conclusions:** There is a link between ventilation rates and concentration of air pollutants in indoor environment. To reduce laboratory costs, a CFD model approach was presented for assessing exposure risk to indoor air pollutants. The results would be useful for making decisions to optimize the design procedure, establishing the best location to install polluting equipment, healthy occupied areas and their interdependence with ventilation systems. This would prevent the cutaneous and upper and lower respiratory tract problems related to the sick building syndrome.

**Keywords:** Occupational health. Exposure risk. IAQ. CF D.

**DEVELOPING A PEDAGOGICAL LEARNING MODEL FOR THE TRAINING OF MINIMALLY INVASIVE SURGERY**

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**Introduction:** The progressive development and application of Minimally Invasive Surgery (MIS) implies the need to provide training opportunities to the health professionals working in this area, that promote the contact and training with the constant technical innovations. This was the main goal of this two cross-border Iberian partner organizations, the Jesús Usón Minimally Invasive Surgery Center, from Cáceres (Spain), and the Superior Health School from the Polytechnic Institute of Portalegre (Portugal), combining the most recent technologies with a Learning Model.

**Objectives:** This model intends to contribute to an appropriate set of learning plans on the MIS with a competency-based approach, providing a quality based training.

**Methods:** Pedagogical-based actions are supported on the knowledge of an activity and the perception of the difficulties expressed and manifested in the effectiveness of interventions, by all the components of the surgical team. So, the development on the pedagogical learning model for the training of MIS was based on an evidence-based experience, through a humanistic approach.

**Results:** The principal aim on this model is promote space to a Reflective Practice, focused in the theoretical learning model developed by Donald Schon (1983), based on the use of reflective techniques, as possibly one of the most pedagogical important elements in MIS training.