



# Atención Primaria

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## PARALLEL SESSIONS: POSTERS

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### 1. CHILD AND ADOLESCENT HEALTH

#### MANDATORY REPORTING OF CHILD AND ADOLESCENT ABUSE BY GENERAL PRACTITIONERS IN A STATE OF BRAZILIAN NORTHEASTERN

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**Introduction:** Violence against children and adolescents is an unequal power relationship. The Brazilian Child and Adolescent Act adopt a strategy of safety and protection of all suspected cases of abuse.

**Objectives:** The aim of this paper is to analyze the system of general practitioners (GPs) notification for child and adolescent mistreatment throughout Ceará State, Brazil.

**Methods:** A structured questionnaire was given to 227 general practitioners in 85 cities across the state. A quantitative analyze was done. The research was conducted in accordance with recognized ethical standards and national/international laws.

**Results:** The professional average age is 35.7 years (Standard Deviation = 12.2). The GPs have been working on primary healthcare less than 05 years (51.5%). The results illustrate that the majority of GP had no training on child/adolescent mistreatment notification (73.6%), but knew the Child and Adolescent Act (72.7%). GPs that trust in protection agencies of child and adolescent are the majority (70.8%) and do not feel under threat by the State (75.8%), for this reason they know how to forward the child/adolescent mistreatment cases (64.2%). Among 227 GPs participants, 53,1% affirmed that they had identified cases of child abuse in their careers (53.1%), nevertheless, just 52.6% of these occurrences of abuse had notified.

**Conclusions:** These findings show that as less training GPs are, less notification of abuse problem they do. This is under the Brazilian National Health System (SUS) expectation and an abuse notification system on the SUS must to be done, looking for changes on the GPs notification.

**Keywords:** Child abuse. Notification. Primary healthcare.

#### INVESTIGATION AND ANALYSES OF THE CAUSES OF INFANTILE DEATHS IN THE CITY OF MANAUS, AMAZONAS-BRAZIL, IN 2012

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**Introduction:** Data of the United Nations for the Childhood Fund (UNICEF) demonstrate a reduction in the infant mortality taxes in Brazil in the last two decades. However the monitoring of this indicator is necessary, because this translates the situation of health of a população.

**Objectives:** In this work, academics and tutors of the nursing and medicine courses of the University of the State of Amazonas-Brazil (UEA) accompanied the professional work of the Municipal General office of Health of Manaus/Amazonas-Brazil (SEMSA-Manaus), with the objective of living actions related to the surveillance in health in the scope of the infant mortality.

**Methods:** This project makes part of the “Pró-Saúde”, that is the Reorientation Program of the Professional Formation in Health in Brazil, being a report of the work process of professionals of SEMSA-Manaus and academics of UEA in the investigation and analysis of infantile deaths during 2012.

**Results:** 1.061 infantile deaths were investigated and analyzed. Of these, 46% corresponded to fetal deaths and 54% to no fetal. 96% of the fetal deaths presented as cause the affections originated in the perinatal period, being the maternal affections responsible for 22.3% of these deaths. These affections were also responsible for most of the no fetal deaths (48.2%), being that the breathing discomfort of the newborn represented 11.7% of these deaths.

**Conclusions:** Ministry of Health of Brazil points that these affections are responsible for till 60% of the infantile deaths in the country. In this work this date was also confirmed in Manaus/ Amazonas, demonstrating the need of the enlargement of health politics that can improve the access of pregnant women to the services of health since the prenatal till the attendance to the newborn.

**Keywords:** Investigation. Analysis. Death. Infantile. Fetal.

## HURTS MY THROAT! DO I NEED ANTIBIOTICS? CLINICAL AND TREATMENT RESEARCH OF ACUTE TONSILLITIS IN PEDIATRIC AGE

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**Introduction:** In Portugal the Health Authority (HA) recommends the laboratory diagnosis of acute tonsillitis in children. In most Health Units this is not available, and the diagnosis is mostly clinic. So it was decided to portray the diagnostic and therapeutic reality of this disease.

**Objectives:** Characterization and adequacy of the prescribed therapy conforming to HA.

**Methods:** Study observational, descriptive, cross-sectional. Population: Unit's pediatric patients with episodes of acute tonsillitis in 2013. Were excluded hospital diagnosis and incomplete clinical records.

**Results:** Of 3538 pediatric patients of Unity, 3.14% (n = 111) had episode(s) of tonsillitis, 55% ♀. 8.16 years average age. There were 3.22% (n = 114) episodes of tonsillitis, excluding one, for a total sample of 113 cases. In 113 episodes, 62.3% have clinical records consistent with bacterial infection and 36.8% as viral infection. In all bacterial cases (62.3%), were treated with antibiotics (ATB). In 36.8% viral episodes, 69% were treated with ATB (48.3% had in the physical examination (PE) tonsil exudate) and 31% (n = 13) treated with NSAIDs. Of 62.3% with bacterial clinic: 64.8% were treated with Amoxicillin + Clavulanic Acid; 16.9% (n = 12) with Macrolide; 15.5% (n = 11) with Amoxycillin and 2.8% with Cephalosporin. There were 2.7% (n = 3) cases of penicillin allergy.

**Conclusions:** It's important to realize that the exudate to the PE is interpreted as pathognomonic of bacterial infection, so the high prescribing ATB (48.3%) in viral episodes with this exudate. In the overall, therapeutic suitability occur in 23.0% episodes (n = 26): 11 bacterial cases with Amoxicillin, 13 viral episodes treated with NSAIDs, and 2 bacterial events with penicillin allergy treated with macrolide. **Keywords:** Acute tonsillitis. Pediatric age. Amoxicillin.

## PREVALENCE AND DETERMINANTS OF OVERWEIGHT AND OBESITY IN A SAMPLE OF PORTUGUESE CHILDREN

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**Introduction:** Child overweight and obesity is a major public health issue and, in Portugal, the prevalence has been increasing in the last years.

**Objectives:** The aim of this study was to determine the prevalence of overweight and obesity in childhood and its association with socio-demographic, dietary habits and sedentary activities.

**Methods:** A cross-sectional study was designed with a sample of 1362 children aged between 3 and 10-years-old (47.9% female). Data collection was accomplished through a questionnaire applied to the children's parents and the Body Mass Index was used to determine overweight and childhood obesity considering the percentiles as cut-off points. Prevalences were expressed as percentages and to compare proportions the Chi-square test was used.

**Results:** The prevalence of overweight was 10.0% and of obesity 4.8%. Childhood obesity was associated with age ( $\geq 7$  years = 6.4% vs  $< 7$  years = 2.4%,  $p < 0.001$ ), parents' educational level ( $\leq 9$ th grade = 5.6% vs  $> 9$ th grade = 3.4%,  $p = 0.01$ ), monthly income ( $\leq 1000$  euros = 6.6% vs  $> 1000$  euros = 3.1%,  $p = 0.02$ ), sedentary activities (yes = 8.0% vs no = 3.3%,  $p = 0.01$ ) and consumption of sugary drinks (yes = 5.7% vs no = 4.4%,  $p = 0.04$ ). Also 19.6% of parents report that their children do physical/daily sports activities, while 39.5% have daily sedentary activities (watching TV/playing videogames), 28.9% consume sugary drinks, 83.7% reported daily consumption of sugary food and sweets and 18.8% reported consumption of fastfood.

**Conclusions:** Childhood obesity is linked to socio-demographic factors, sedentary activity and poor dietary habits. Health education focused on healthy lifestyles to ensure a better quality-of-life among the young should be considered.

**Keywords:** Childhood obesity. Children. Eating habits. Sedentary activities.

## PARENTAL SATISFACTION ABOUT THE PROMOTION OF PARENTING HELD BY FAMILY NURSE

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**Introduction:** In order to promote the autonomy of the family structure, the nursing intervention must be based on the partnership with the family, in order to enable it of skills and independence.

**Objectives:** To assess parental satisfaction about the promotion of parenthood carried out by family nurse; to determine the influence of sociodemographic variables and parents' family members; to determine if the influence of health surveillance of newborns affects parental satisfaction, concerning parenthood's promotion.

**Methods:** A cross-sectional study of a descriptive nature, performed in a non-probabilistic convenience sample, consisting of 62 parents of children up to 6 months old, supervised in the first month of life, in the healthcare visit attendance in infants at the USFIDH, consisting mainly of female individuals (88.7%). The Parental Satisfaction Questionnaire on Promoting the Parenthood was built upon the literature review.

**Results:** The study suggests that in a global way, parents have been very satisfied with the promotion of parenthood. To this fact, significantly contribute monitoring of pregnancy at USF, to assist the lessons of childbirth preparation at USF and the number of nursing consultations, carried out. 83.9% of postpartum women interviewed, did monitoring of the pregnancy at USF, 85.5% of which were always attended by the family nurse. Of these, 98.4% considered this personalized attendance important.

**Conclusions:** The evidences found, emphasizes the need to invest in training and awareness of nurses about the importance of promoting parenthood, enabling them for the adoption of good practices, with the creation and development of a program, directed towards the promotion of positive parenthood.

**Keywords:** Parenthood. Family nurse. Parental satisfaction.

## LIFESTYLES IN STUDENTS OF A PROFESSIONAL SCHOOL OF VISEU

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**Introduction:** The lifestyles have assumed a vital role in our society. The changes that have occurred in our habits of life have implicated a constant change of health standards and wellness of children and young people.

**Objectives:** The aim of this study was to identify the lifestyles of the students of a professional school of Viseu.

**Methods:** In a cross-sectional approach we assessed 317 students of a professional school of Viseu (37.9% female) between 15 and 22 years. A self-administered questionnaire about socio-demographic factors, alimentation, physical activity, sleeping habits, smoking, alcohol and sexuality was answered by young people in the classroom. Data analysis was carried out using SPSS and prevalence was expressed in proportions.

**Results:** Eighty-five point one percent of students reported consuming refrigerants, 78.1% consumed fried foods, 17.1% were overweight and 17.2% obese. Forty-eight point one percent practiced physical exercise, 69.4% consumed coffee, 66.7% consumed alcohol and 66.4% drank until they were drunk already; 38.2% of students smoked, 80.4% leave at night, 66% of young people have had sex and 25% of girls said to have already taken the pill the next day. Girls have more sleep problems ( $p < 0.05$ ).

**Conclusions:** The results show that it is necessary to involve young people and the school in adopting healthy lifestyles. It is essential to promote healthy lifestyles in young people to prevent future.

**Keywords:** Young people. Lifestyle. Epidemiology.

## KNOWLEDGE AND PRACTICE OF PROFESSIONAL NURSING IN THE ADMINISTRATION OF DRUGS IN PEDIATRICS

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**Introduction:** The role of health professionals on preparation and administration of medications is extremely important, especially when it is directed to pediatric patients, since it is an audience that has distinct physical and morphological characteristics of the

adult, where adverse events are more aggressive to the body and may cause him to death more quickly.

**Objectives:** To investigate knowledge and practices concerning the administration of medications to nurses and nursing in pediatrics active sector of the Lower Amazon River Regional Hospital, in the municipality of Santarém, Pará, Brazil practices.

**Methods:** Field research, the quantitative type, in which 30 professionals were interviewed. To collect data we used a structured questionnaire containing questions about the topic.

**Results:** Despite the knowledge towards the safety measures, has not the habit of implementing them correctly; on the implementation of the seven "certain" the majority recognizes and affirms that must be implemented throughout the process ensuring safety during the procedure; on the occurrence of errors, most professionals admitted that they had already practiced some kind, but none resulted in serious harm to the patient.

**Conclusions:** The study demonstrated professional interest in improving the medication administration process in the pediatric sector, through the assistance of excellence consisting in offering assistance to safe nursing.

**Keywords:** Pediatric nursing. Technical staff health. Medication systems. Hospital.

## 2. SEXUAL AND REPRODUCTIVE HEALTH

### PRENATAL CARE AND BRAZILIAN WOMEN HEALTH POLICIES

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**Introduction:** In Brazil, women of childbearing age account for more than 61 million and the estimated pregnant women is more than 7.5 million (Brazil, 2014). This study aimed to analyze the prenatal care in primary healthcare with a focus on the perception of pregnant women, postpartum women and health professionals, and the relation with the Brazilian women health policies.

**State-of-the-art:** Bibliographical study (integrative review) conducted by the search for articles indexed in national databases for the period 2004-2013 published in Portuguese.

**New perspectives:** It is possible to discuss findings by the women health policies the themes below. Profile of prenatal care: filling the information on the cards was inadequate and most deaths occurred hypertension, complications in labor, haemorrhage and puerperal infection. Perception of pregnant and postpartum women: difficult access, the importance of multidisciplinary effort, weaknesses in the host and humanization. Perception of professionals: nurses' interest in learning more, targeting the health of pregnant woman and the baby with the enhancement of the performance of obstetric nurse.

**Theoretical and practical implications:** Prenatal care allows the observation of a lower reality to what is proposed, because there are public health problems due to underreporting, high-risk issues, lack of resources and excessive demand.

**Conclusions:** It was observed that prenatal care should compose a multidisciplinary effort with family participation. Are expected that this study will contribute to improved prenatal care in Brazil, because it points the strengths and weaknesses of care, enabling basis for conducting future research.

**Keywords:** Prenatal care. Health policies. Healthcare.

## KNOWLEDGE OF YOUNG PEOPLE ABOUT SEXUALLY TRANSMITTED INFECTIONS: INFLUENCE OF ATTITUDES CONCERNING SEXUALITY

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**Background:** Adolescence and youth are phases of life in which intimate relationships are characterized by being short with frequent change of partners which, associated with lack of protection, can increase the risk of sexually transmitted infections. **Objectives:** To analyze the influence of sociodemographic, academical and sexual variables as well as their attitudes on sexuality in accessing the knowledge of teens regarding sexual transmitted infections.

**Methods:** Quantitative, descriptive, correlational, explanatory and cross-sectional study. Non-probabilistic sample consisting of 809 youngsters in vocational schools all over the central region of Portugal. The instrument for data collection: sociodemographic questionnaire, Knowledge on Sexually Transmitted Infections Scale and the Attitude regarding Sexuality Scale.

**Results:** Sample with 343 girls and 466 boys between 14 and 23 years old. Mostly single (96.9%), Portuguese (84.5%), living in villages (61.6%), Caucasian (83.2%) and catholic (91.4%). The age in which they started having sexual intercourse varies between 12 and 20 years old among girls and between 10 and 21 among boys. Gender, year of schooling, the course they attend, pressure towards starting sexual intercourse, being in love with the person with who they had their first sexual relation and the attitudes of young people concerning sexuality can influence their knowledge about STI ( $p \geq 0.000$  e  $p \leq 0.003$ ).

**Conclusions:** STI constitute a public health concern. The results point to the need to extend the sexual education programs for professional organizations schools considering variables that influence the knowledge of young people and consequently their decisions in the context of sexual and reproductive health.

**Keywords:** Young. Sexuality. Sexually transmitted infect.

## KNOWLEDGE OF ADOLESCENTS ABOUT AIDS – VALIDATION OF MESEARUNG INSTRUMENT

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**Framework:** Researchers have invested in the construction of instruments capable of assessing the proper knowledge about HIV/AIDS, especially in adolescents and heterosexual young adults. The adaptation of tools is a complex task requiring planning and rigor to the maintenance of its content, its psychometric properties and validity for the intended population.

**Objectives:** Validation of the Knowledge of Adolescents about AIDS of Zimet et al. (1989) in the Portuguese population.

**Methods:** Cross sectional study, of quantitative nature, descriptive and correlational with a non-probability convenience sample, we applied a sociodemographic questionnaire and the Knowledge of Adolescents about AIDS scale. This instrument has 22 items, each of which has the shape of a question, with three alternative answers (Yes, No, I do not know). The items range over the different thematic about AIDS: Transmission, Transmission of HIV without AIDS, low risk behaviours, high risk behaviours, effective and ineffective protection; Mortality associated with AIDS; Time in which there will be a cure for AIDS.

**Results:** The sample consists of 971 adolescents in the Portuguese secondary education, and is mostly male (50.77%) with an average of 16.80 years. In the study of the reliability the Pearson coefficient correlation showed correlations between each item and the overall value oscillating between 0.367 and 0.690. The Cronbach Alpha values ranged between 0.865 and 0.867 for an overall alpha of 0.875. The split-half test was 0.817 for the first half and 0.752 in the second half.

**Conclusions:** The scale is a robust instrument, with good internal consistency proving to be a valid instrument for the assessment of knowledge about AIDS in studies with samples similar to ours.

**Keywords:** Knowledge. AIDS. Adolescents.

## EVALUATING SUITABLE CONTRACEPTIVE METHODS IN WOMEN OF 35 TO 50 YEARS OF AGE WITH SMOKING HABITS

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**Introduction:** In Portugal the prevalence of smoking in women with ages between 35 and 54 years is 33.4%. The use of combined hormonal contraception (CHC) associated with tobacco increases the risk of cardiovascular disease (CVD), so its use is contraindicated in this context in women over 35 years. It is the General Practitioner (GP) responsibility to advise and assess the appropriate contraception for these women, altering whenever necessary.

**Objectives:** Characterize and evaluate the suitability of the contraceptive method used by women aged 35 to 50 years old with smoking habits.

**Methods:** Study observational, descriptive, cross-sectional. Data was collected from Family Planning Consultations in 2012 in the healthcare units where the authors work.

**Results:** The study identified 53 women with smoking habits but one was excluded. The average age was 43.12 years old. The women were divided in 2 groups according to the numbers of cigarettes per day: 71% smoked < 15 cigarettes/day (group A) and 29% smoked  $\geq 15$  cigarettes/day (group B). The contraceptive methods used in group A were oral CHC (45.9%); intra-uterine device (IUD) (16.2%); progestogen oral contraception (10.8%); sterilization (2.7%); natural barrier methods (13.4%) and no method (10.8%). In group B, 46.6% used oral CHC; IUD (6.7%); oral CP (13.3%); sterilization (6.7%); natural barrier methods (13.4%) and no method (13.3%).

**Conclusions:** The contraceptive method used by most smoking women, in the 2 groups, is CHC. Regardless the number of cigarettes, the risk is higher than benefits when using CHC in smoking women. The GP should have an active role in the prevention of CVD by having the initiative to encourage women to stop smoking and suggest alterations in the contraception that these women use.

**Keywords:** Contraceptive methods. Smoking habits.

### 3. ADULT HEALTH

#### WHAT'S THE PERCEPTION ABOUT DIGNITY DURING A DISEASE SITUATION? – SYSTEMATIC REVIEW OF LITERATURE

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**Introduction:** Although there exists much literature that refers to the term dignity, the common use of this concept seems confuse and does not clarify its meaning (Gallagher et al, 2008) (Jacelon, Connelly, Brown, & Proulx, 2004).

**Objectives:** So, based on the initial search about the studied variables in previous works, it was outlined the next main question: What's the perception about your dignity during a disease situation?

**Methods:** The systematic review is a method that has being used incrementally in scientific studies, evaluating an existing dataset so it obtains scientific information that is synthetic and rigorous about a given topic according to a set of defined criteria (Munoz et al, 2002).

**Results:** Three studies were found, these studies share the qualitative method, which proved the most adequate to the exploitation of a reality influenced by the experimentation of each person. The communication is very important in the caretaking process. The sick person realizes both verbal and nonverbal communication and it interferences with the efficiency of the therapeutic process. It is important that the sick person realizes that the practitioner is with him and plays a crucial part in the care process. Indeed, it is clear that patients' allocate their "dignity guardian" to the nursing staff. Dignity is a person's fundamental right.

**Conclusions:** As a conclusion of this systematic review, it appears that the maintenance of the patient's dignity is crucial in the care process. It interferes with the patients' health. The patient demands that the role he plays as a patient doesn't overlap, the role he plays as a person. The sick person may be vulnerable; however it is the nurse's job to promote its dignity, reflecting with the patient about the best way to be taken care of.

**Keywords:** Dignity. Patient. Concept.

#### CHARACTERIZATION OF THE LIPID PROFILE OF PATIENTS POST-ACUTE MYOCARDIAL INFARCTION

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**Introduction:** The high LDL-cholesterol (LDL-C) is major risk factor for Coronary Artery Disease. As secondary prevention, the European Society of Cardiology, advocate LDL-C levels < 70 mg/dl in post-Acute Myocardial Infarction (AMI). Thus it was considered appropriate characterize the lipid profile of patients who have suffered AMI.

**Objectives:** 1) Characterize the lipid profile of patients post-AMI; 2) determine patients % with LDL-C < 70; 3. Determine patients % with statin prescription.

**Methods:** Study: observational, descriptive, cross-sectional; Population: Unit's patients who diagnosed AMI; Inclusion Criteria: medical contact ≥ 1 in 2013; AMI until 31/12/2012; Exclusion Criteria: lipid data outdated.

**Results:** Of 15677 Unit's patients, 0.57% (n = 90) had AMI, 58 users (72.4% ♂) were included, with average age of 65.9 (± 12.8) years.

**Objetive 1:** Total Cholesterol (TC) (mg/dl): CT > 190-24,1%; CT between 155-190-44,8%; CT < 155 - 31,0%; LDL-C (mg/dl): LDL-C > 115-20,7%; LDL-C between 100-115-17,2%; LDL-C between 70-100-41,4%; LDL-C < 70-20,7%; HDL-cholesterol (HDL-C) (mg/dl): HDL-C ♀ > 45-62,5%; HDL-C ♂ > 40-59,5%; Triglyceride (TG) (mg/dl): TG <150-65,5%. **Objetive 2:** 20,7% has LDL-C < 70, all patients medicated. Of 79.3% with LDL-C > 70 6.5% (n = 3) have not prescribed statin. **Objetive 3:** 94,8%. The statin more prescribed was Rosuvastatin 10 mg (29,1%).

**Discussion:** The majority of the sample has CT between 155-190 (44.8%), HDL-C ♀ > 45 (62.5%), HDL-C ♂ > 40 (59.5%) and TG < 150 (65.5%). The LDL-C reduction, namely < 70, is the most notable factor in secondary prevention, however, only 20.7% do that. Despite the benefits of statins in post-AMI secondary prevention, they are not prescribed in whole sample (94.8%).

**Keywords:** Acute myocardial infarction. LDL-C. Statin.

#### ATTITUDES TOWARDS DISEASE SYMPTOMS: PROCESS OF HEALING AND DOCTOR/PATIENT RELATIONSHIP

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**Introduction:** In this communication we present the results of an investigation which aimed to build a typology of attitudes towards disease symptoms and the identification of symbolic references involved in the process of healing and doctor/patient relationship.

**Methods:** For the construction of this typology we used the results of the second edition of the European Social Survey. The samples used are representative of 26 European countries. We used different statistical techniques: Cluster Analysis, in order to identify different profiles of behaviour in relation to a set of symptoms of disease, and Principal Component Analysis to analyse the symbolic references for the process of healing and doctor/patient relationship.

**Results:** [Profile 1] This profile includes 23.2% of the sample, and it is constituted by people who consult exclusively a doctor when confronted with disease symptoms. [Profile 2] The second profile, corresponding to 39.5% of respondents, consists of individuals who show a more moderate demand for medical care, compared to the previous profile. When facing disease symptoms, these individuals rely mostly on the physician, but also recourse to other health professionals, with particular relevance to the pharmacist. [Profile 3] Individuals who are classified in this profile tend to look for advice, in most situations, with friends or family, and corresponds to 18.6% of respondents. [Profile 4] This is a profile which involves 18.7% of respondents and comprises individuals who reveal an attitude of passivity against the symptoms.

**Conclusions:** The results demonstrate the existence of different patterns of behaviours associated with social and cultural factors related to the condition of individuals.

**Keywords:** Attitudes. Illness. Doctor. Symptoms.

#### PRACTICES AND ATTITUDES TOWARDS MEDICINE CONSUMPTION AMONGST THE PORTUGUESE POPULATION

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**Introduction:** The way different social groups interpret disease status constitutes a determinant factor of differentiation in the demand and consumption of drugs. In this communication we

define a typology of attitudes towards symptoms of disease as well as different practices in the consumption of drugs in each of the profiles.

**Methods:** This is a quantitative descriptive and explanatory study with a probability sample of the Portuguese population (2050 cases) based on the results of the European Social Survey (round 2).

**Results:** We have identified four groups of attitudes towards disease status. The comparison between the four groups showed the existence of statistically significant differences respecting the agreement with the use of drugs by healthy people ( $\chi^2$  KW(3) = 66.217;  $p < 0.001$ ). We have also found the existence of statistically significant differences regarding the regular use of previously prescriptive drugs to herself/himself in each of the profiles of attitudes towards disease ( $\chi^2$ (3) = 8.13;  $p = 0.043$ ). Respecting to self-medication practices (consumption of medication prescribed for others), we observed that it is most common among individuals who tend to use informal support networks when facing disease symptoms ( $\chi^2$  KW(3) = 65.278;  $p < 0.001$ ).

**Conclusions:** The results show that self-medication practices in Portugal are relatively common, although it may vary according to the profile of attitudes towards the disease symptoms. The results demonstrate the existence of an individual appropriation of expert logical therapeutic management. However, this trend assumes different proportions depending on how one interprets disease.

**Keywords:** Attitudes. Illness. Medication. Symptoms.

## EVALUATION OF HEART FAILURE'S THERAPY IN THE PATIENTS OF OUR FAMILY HEALTH UNIT (FHU)

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**Background:** The European Society of Cardiology created a guideline for the treatment of Heart Failure (HF). Due to this importance, was decided to study our patients' medication, based on this guideline.

**Objectives:** Patients with HF: 1-Under adequate therapy with ACEinhibitor/ARB+BB; 2-With ACEinhibitor+digoxin and AF; 3-With ACEinhibitors/ARB+BB+mineralocorticoid receptor antagonist (MRA); 4-With ACEinhibitor/ARB+BB+MRA+Ivabradine.

**Methods:** Study observational, descriptive, cross-sectional in patients  $\geq 18$  years old from our FHU, with  $\geq 1$  consultation since 2012, HF in class II-IV and ejection fraction (EF)  $\leq 40\%$ . Exclusion criteria: patients without ECG, ionogram or renal function values.

**Results:** From 12224 adult patients, 1.12% have HF and we included 125 patients (64% ♀). Mean age of 77.59 years. 36% have Atrial Fibrillation (AF). 29.6% of the patients meet the 1st goal. The others (70.4%): 9.09% are without ACEinhibitor/ARB; 62.5% (n = 55) without BB (from these 36,36% have COPD); 20.45% are without ACEinhibitor/ARB and BB (from these 16.67% have COPD); 5.68% are medicated with ACEinhibitor, but have contraindication (CI) (20% have Creatinin  $> 2.5$ , 80% have K<sup>+</sup>  $> 5$ ); 2.27% are medicated with BB, despite CI (50% have asthma, 50% have FC  $< 60$  bpm). 20% of the patients meet the 2nd goal. 5.6% meet the 3rd, but in 16% the MRA was introduced early. None of the patients meet the 4th objective, despite of 4.8% are medicated with Ivabradine.

**Conclusions:** 29.6% have adequate therapy. In 20% of AF patients (7.2% of the sample), the therapy is also appropriate. From the patients without adequate therapy, 92.05% haven't started the

recommended therapy yet (ACEinhibitors/ARB+BB), the others started but with CI. In 20.8% of the sample the medication (MRA and Ivabradine) was introduced early.

**Keywords:** Heart failure. Digoxin. Ivabradine. Beta blocker.

## INFORMAL CAREGIVING IN EXTREME OLD AGE: A UNIQUE EXPERIENCE?

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**Introduction:** The increasing number of old people, particularly of centenarians, has enhanced the attention of health professionals to study their specific care needs. Caregiving can be a positive experience but also a straining one with negative impact on the caregivers' health.

**Objectives:** This study aims to explore differences between family carers of individuals aged 100+ yrs (group 1) and family carers of younger individuals aged  $< 90$  yrs (group 2).

**Methods:** A sample of 106 informal caregivers was considered (48 caregivers of old people from the Caring at Home project and 58 caregivers of centenarians from the Oporto Centenarian Study). Information on sociodemographic aspects, on the caregiving experience (e.g. length of care, relationship with person), and the caregivers' mental health (selected items from the SF-12v2) were obtained.

**Results:** Informal caregivers of group 2 were younger (Mage 52.0 yrs; SD = 9.9 vs Mage 65.6 yrs; SD = 7.2), both groups were mostly constituted by women (93.1% in group 1, 91.7% in group 2), married (63.8% in group 1, 77.1% in group 2) and had the support of a secondary caregiver (91.4% in group 1, 70.2% in group 2). Significant differences between groups were only found for "vitality" ( $\chi^2 = 13.267$ ;  $p = 0.01$ ), with group 1 showing better results.

**Conclusions:** This is a preliminary comparison of informal caregivers of centenarians with informal caregivers of younger individuals. More research is needed to deepen these findings, namely the reasons that might be under the observed differences and its potential consequences for the care provided.

**Keywords:** Informal caregiving. Centenarians. Mental health.

## SELF-MEDICATION IN A NORTHERN TOWN OF PORTUGAL

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**Introduction:** Self-medication is defined as the consumption of a drug without guidance or prescription of competent professionals, in which the patient decides that the product will be used.

**Objectives:** To determine the prevalence and frequency of self-medication; characterize the therapy used, reasons, verify the occurrence of undesirable effects and knowledge about the risks; and to determine associated factors.

**Methods:** This cross-sectional and correlational study, had a sample of 330 individuals, 57.0% females and 43.0% males, aged between 18 and 88 years (mean 41.3). Data collection was carried out through a self-administered questionnaire. Statistical analyses were applied measures of central tendency and dispersion, and the chi-square considering a significance level of 5%.

**Results:** The prevalence of self-medication was 87.6%, of which 78.2% self-medicated in the last year, the majority only a few times per year (81.2%), with a minority that makes daily (0.9%). The drugs most frequently used are Paracetamol (75.8%) and Ibuprofen (61.2%), headaches (67.0%) and colds (65.2%) being the main reasons. Among individuals who self-medicate, 52.1% admit to inform physician of non-prescribed drugs used and 83.0% reported not having noticed the occurrence of undesirable effects. Of all individuals surveyed, 88.2% claim that self-medication is dangerous for health. Gender and educational level appear to be associated with self-medication ( $p < 0.001$  and  $p = 0.01$ , respectively).

**Conclusions:** Self-medication is highly prevalent, but infrequent over the year. The analgesics and anti-inflammatories are the most used due to headaches and colds. Self-medication is considered risky to health and appears to be linked to gender and education level.

**Keywords:** Self-medication. Drugs not subject to prescription.

### PERCEPTION OF USERS ABOUT THE PRESCRIBED DRUG THERAPY AFTER MEDICAL CONSULTATION AND AFTER PHARMACY DISPENSING

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**Introduction:** Promoting rational use of medicines is crucial to ensure therapeutic efficacy. Many users do not understand prescribed treatment, often for lack of information during the medical consultation and pharmacy dispensing, which results in difficulties for correct drug therapy.

**Objectives:** Determine the perception of knowledge about the drug therapy, after medical consultation and after Pharmacy dispensing, and identify related factors.

**Methods:** This cross-sectional and study, had a sample of 150 users of health centers and pharmacies in the north of Portugal, 64% females and 36% males, aged between 18 and 90 years (mean 57). A self-administered questionnaire was applied, including knowledge perception scale (Frohlich'10). In data analysis was used descriptive statistics and t-student test (significance level 5%).

**Results:** The perception of knowledge about drug therapy is insufficient either after medical consultation (70.7%) or after pharmacy dispensing (70.7%), only a minority of users had a good knowledge after medical consultation (5.3%) and after dispensing in community pharmacy (2.7%). The lowest knowledge was related with forgetting doses, drugs/food interactions and side effects. No differences were found between the perceptions of users of medical centers and pharmacy ( $p = 0.191$ ), neither between the educational level (health center  $p = 0.842$ ,  $p = 0.307$  pharmacy).

**Conclusions:** The perception of knowledge about drug therapy is quite insufficient both after medical consultation and after pharmacy dispensing. There were no found differences between the perceptions of users of medical centers and pharmacy, probably due to the limited sample size. Contrary to expectation, the education level is not associated with the perception of knowledge about drugs therapy.

**Keywords:** Drugs therapy. Perception of knowledge. Pharmacy.

### FLOWCHART FOR THE TREATMENT OF VENOUS LEG ULCERS – A BEST PRACTICE GUIDELINE

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**Context:** Leg ulcers are a major health problem with a great impact on patients quality of life and the work of nurses, particularly at the level of primary health care and differentiated services. In the clinical practice health professionals should evaluate the etiology typology, aggravating risk factors and select the appropriate treatment that the evidence points as compression therapy. Thus, when combined with the appropriate dressings and therapeutic options, compression therapy improves the rate of healing. However, in the absence of best practice guidelines health professionals tends not to apply the best available evidence.

**Objectives:** To present the flowchart for the treatment of venous leg ulcers.

**Methods:** Based on a review of guidelines and systematic reviews performed on several scientific databases (CINAHL with Full Text, MedLatina, MEDLINE with Full Text, Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials and JBI Library), we created a best practice guideline for the Treatment of Venous Leg Ulcers. Prior to inclusion all studies were submitted to critical appraisal.

**Results:** Data collected from studies suggest that a correct evaluation of the patients with venous ulcers needs a focal physical exam, anamnesis and vascular assessment. Current knowledge shows that should be implemented the recommendations for treatment into clinical practice like the wound bed preparation, right dressings choose and correct compression therapy use.

**Conclusions:** The Flowchart for the Treatment of Venous Leg Ulcers allows a sustained practice on the best available evidence, ensuring the effectiveness of treatment, standardizing the practice of nursing teams and improving healing rates.

**Keywords:** Leg ulcer. Compression bandages. Wound healing.

### INVESTIGATION AND ANALYSES OF THE CAUSES OF MATERNAL DEATHS IN MANAUS, AMAZONAS-BRAZIL, BETWEEN 2010 TO 2012

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**Introduction:** The World Health Organization (WHO) estimates that in 2010 287.000 maternal deaths happened in the mundo<sup>1</sup>. The maternal death is a concern all over the world for managers of health, because it translates the social inequalities of a country and the quality of services health offered in a place.

**Objectives:** In this work, academics and tutors of the nursing and medicine courses of the University of the State of Amazonas-Brasil (UEA) accompanied the work process of professionals of the Municipal General office of Health of Manaus, Amazonas-Brazil (SEMSA-Manaus), with the objective of living actions related to the surveillance in health in the scope of the maternal mortality.

**Methods:** This project makes part of the “Pró-Saúde”, that is the National Program of Reorientation of the Professional Formation in Health in Brazil, being a report of the work process of professionals of SEMSA-Manaus and academics of UEA in the investigation and analysis of maternal deaths between 2010 to 2012.

**Results:** Fourth-one maternal deaths were investigated of a total of 78 deaths (52,56%). Of these women, 68% were between 19 and 34 years old. Most (97,56%) had attendance of prenatal or delivery in units of health. Seventh four percent of the deaths happened during the gestation, followed by the puerperium (23%) and in the moment of the childbirth (3%). The direct obstetric causes were responsible for 66% of the deaths.

**Conclusions:** The experience lived by academics of UEA increased the formation of those future professionals and it demonstrated that actions related to the obstetric complications in the pregnancy, childbirth or due to puerperium interventions, omissions, incorrect treatment should be part of a public health politics in any Country, State or area.

**Keyword:** Investigation. Analysis. Death. Maternal.

#### CHARACTERIZATION OF KNOWLEDGE AND CONSUMPTION OF ACETYLSALICYLIC ACID IN USERS OF COMMUNITY PHARMACIES

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**Introduction:** Acetylsalicylic acid (ASA) is one of the drugs most used by the Portuguese population for its anti-inflammatory, analgesic, antipyretic and antiplatelet effect. Thus, this study aimed to characterize the knowledge and the consumption pattern of ASA in users of community pharmacies of three locations in the district of Porto.

**Methods:** The investigation was achieved by application of a questionnaire to 390 users of community pharmacies of three locations in the district of Porto (Lousada, Paços de Ferreira e Porto).

**Results:** The dosage of ASA most known and consumed was of 500mg (28.2 and 53%, respectively). Individuals considered having a level of knowledge “Reasonable” about this substance (47.8%). As regards the frequency of use, the most reported by respondents was once per year (48.3%), and time-consuming 1 to 3 days (37.8%). A considerable percentage of respondents indicating that ASA was prescribed by the doctor (36.4%) and on his own initiative (36.4%). The main reasons of use of AAS are flu (41.2%), pain head (40%) and fever (10.7%), have been noted adverse effects in 4.1% of consumers. It was found that the level of knowledge is higher in middle age (40-60 years) ( $p = 0.220$ ) and in individuals with qualifications of 6-9th year.

**Conclusions:** The present study denotes the existence of gaps of consistent, coherent and updated information about ASA drug.

**Keywords:** Acetylsalicylic acid. Consumption. Knowledge.

#### CHARACTERIZATION OF PATIENTS WITH COPD FROM 3 HEALTH CARE CENTERS IN VISEU

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**Introduction:** Chronic Obstructive Pulmonary Disease (COPD) is a major cause of chronic morbidity, premature mortality and health resources expenditure. It is a condition related to exposure to risk factors and the spirometry is required to make a clinical diagnosis. The comorbidities contribute to its severity.

**Objectives:** Identify the population of three Health Care Centers in Viseu diagnosed with COPD and characterize their smoking habits, occupational risks, registration of spirometry, comorbidities and therapy.

**Methodology:** Observational, cross-sectional and descriptive study, by retrospective analysis of clinical records of patients diagnosed with COPD until June 2014. The data was collected through the software SAM® and then processed in Excel®2010.

**Results:** 228 patients were studied, of whom 62.3% were male and 37.7% female, aged between 35 and 98 years (mean 71.5 years). 9.2% had occupational risk with exposure to dust and/or inhaled gases and 65.8% had no computer record of their profession. 52.6% were non-smokers, 12.3% smokers, 10.5% ex-smokers and 24.6% had no record of smoking. 35.5% of patients had spirometry requested, of which 61.7% was consistent with the diagnosis. Regarding comorbidities, 49.6% had hypertension, 36.4% dyslipidemia, 18.4% diabetes, 15.4% were obese and 18.9% had anxiety and depression. The majority (32%) were treated with an inhaled corticosteroid combined with a long-acting beta2-agonist.

**Conclusions:** This study highlights the role of GP in controlling multiple comorbidities and in patient education for the avoidance of risk factors such as smoking. It is worth noting the lack of required spirometry, important to confirm the diagnosis as well as in the monitoring of the disease, and the lack of medical records that should be improved.

**Keywords:** Chronic obstructive pulmonary disease. Smoking.

## 4. ELDERLY HEALTH

#### DETERMINANTS OF ACTIVE AGING AMONG THE ELDERLY PORTUGUESE POPULATION

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**Introduction:** Our aim in this communication is to contribute to the characterization of motor skills of the Portuguese elderly population, determining their relationship with age and with the subjective health status. We characterized the capabilities of gross motor skills (GMS) and fine motor skills (FMS) based on two indices that aggregate various indicators.

**Methods:** The analysis is based on the results obtained in the Survey of Health, Aging and Retirement in Europe (wave-4) constituted by a representative sample of the Portuguese individuals over 64 years. From the data obtained, the GMS have been assessed through an index which includes the ability to: walk one hundred meters; cross a room; climb a flight of stairs and bathing. The evaluation of FMS



was based on an index comprising the following capabilities: pick a coin that is placed on top of a table; eating and dressing.

**Results:** GMS index varies between 0 and 4 and FMS index varies between 0 and 3, higher values correspond to greater difficulties. The results obtained in GMS ( $n = 931$ ,  $M = 0.69$ ) and FMS ( $n = 931$ ,  $M = 0.31$ ) showed a low level of functional disability among the elderly. We found statistically significant differences regarding gender in GMS ( $t(929) = -5,753$ ;  $p = 0,000$ ), revealing that women ( $n = 510$ ,  $M = 0.88$ ) have greater limitations than men ( $n = 421$ ,  $M = 0.47$ ). There is a similar situation in FMS ( $t(929) = -4,993$ ;  $p = 0,000$ ) (women,  $n = 510$ ,  $M = 0.41$ ; Men,  $n = 421$ ,  $M = 0.19$ ). We also identified the existence of correlation between age and GMS ( $r = 0.302$ ) and FMS ( $r = 0.232$ ). The health status has significant correlations with the GMS index ( $r = 0.408$ ) and the FMS index ( $r = 0.318$ ).

**Conclusions:** There seems to be evidence that the capacity for mobility correlates with increasing age and deteriorating health perception.

**Keywords:** Active aging. Functional capability. Life quality.

### SUBJECTIVE WELL-BEING AMONG OLDER PEOPLE IN SOUTHWESTERN EUROPE

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**Introduction:** In this communication we analyze the level of happiness of the elderly population as an important dimension of the concept of quality of life, correlating it with the subjective assessment of health status. We focus on the characterization of the Portuguese and Spanish realities.

**Methods:** It is a quantitative research based on the analysis of the European Social Survey (round 5) data. Only the answers of respondents over 65 years of age living in Portugal and Spain were considered.

**Results:** The results show that the level of happiness (measured on a scale of 11 values) is higher among the Spanish elderly ( $n = 725$ ,  $M = 7.18$ ) when compared with the Portuguese ( $n = 270$ ,  $M = 6.20$ ). In the Portuguese sample, we find the existence of statistically significant differences between gender ( $t(268) = 3.20$ ,  $p = 0.002$ ), being men ( $M = 6.68$ ) happier than women ( $M = 5.88$ ). With regard to household size ( $F(4) = 3.213$ ,  $p = 0.013$ ) and marital status ( $F(5) = 3.711$ ,  $p = 0.003$ ), there are statistically significant differences that reveal greater vulnerability of the elderly widowed that live alone concerning the feeling of unhappiness. We also identified differences in the perception of the level of happiness related with the level of limitations in daily living activities ( $F(2) = 13.57$ ,  $p = 0.000$ ). The analysis of relation between the level of happiness and health status reveals a positive correlation between the variables ( $r = 0.339$ ).

**Conclusions:** The general conclusion of the research points out a group of factors that enhance the decline of happiness among the elderly in Portugal and Spain: being a woman; the situation of widows or divorced, the fact of living alone, limitations in activities of daily living and financial difficulties.

**Keywords:** Aging. Wellbeing. Life quality.

### PERCEPTION OF HEALTH STATUS AMONG THE ELDERLY POPULATION LIVING IN THE HISTORIC CENTER OF PORTALEGRE

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**Introduction:** In this communication we present the results of an research that aimed to assess the state of health, the feeling of loneliness and quality of life of Portalegre (Portugal) senior

population. Our aim is to characterize the perception of health status among the elderly population based on three indicators: self-assessment of health status; self-assessment of the existence of changes in health status and autonomy in performing everyday tasks.

**Methods:** This is a quantitative descriptive and explanatory study with a non-probability sample. All data was collected through a questionnaire to 123 elderly residents in Portalegre historical area.

**Results:** Of the 123 elderly respondents, 69.9% were female, and 30.1% male. The average age stood at 77 years. Most elderly men are married and the status of widowhood affects mainly women. The results are in conformity with those found in other studies that identify statistically significant differences between men and women perception of health status. In fact women tend to have a worse account of their state of health when compared with men. However, there are no differences in terms of functional limitations on autonomy in performing daily life activities. Regarding the increase of age we have find a decreased of autonomy ( $\chi^2(3) = 10,644$ ;  $p = 0,014$ ) and a deterioration of the perception of health status ( $\chi^2(3) = 6,775$ ;  $p = 0,080$ ).

**Conclusions:** Knowing the impact that the loss of autonomy has on the quality of life of the elderly population, we recommend greater attention to the importance of maintenance activities for seniors.

**Keywords:** Aging. Health status. Functional capability.

### IN THE ELDER ABUSE

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**Introduction:** The progressive aging of the population, its feminization, the increasing number of elderly people living alone and, in parallel, the weight of potential forms of discrimination based on age are aspects to take into account when (re) define policies public in order to tailor interventions to the specific needs and characteristics of this population group (Quaresma, 2012).

**Objectives:** Identify (evidence) abuse and discrimination for the elderly in the municipality of Guarda.

**Methods:** A descriptive, cross-sectional and quantitative study; non-probability sample of convenience, 135 elderly (65 or +years) residents in the municipality of Guarda. Application of instruments for collecting data through semi-structured interview, conducted at the Center for Health and Centers days; instruments: Scale Evaluación de Apoyo Social Funcional; La social discriminación Personas Mayores against them (ageism survey); elicitação abuse neglects the personas mayores (questions to elicit elder abuse).

**Results:** Of the 135 elderly women were the majority -79, 56.7% were married and living with spouse and own home (83.7%). It was concluded that most 61.4% apreentam low yields. Receive visits < 5 times per month, most are independent in their AVD and AIVD, 46.7% had mild depression and 90.7% have normal social support. Noting that 60 seniors recognized between 1-5 episodes of discrimination, 102 relate suffer from emotional abuse and 98 neglect.

**Conclusions:** The results indicate that the elderly of the study are mostly low-income women suffer from abuse and emotional abuse, followed by neglect.

**Keywords:** Elderly. Discrimination. Evidence of abuse.

## HEALTH IN ELDERLY: AN INTERGENERATIONAL APPROACH

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**Introduction:** The health in elderly is not only a problem, but also a question of social and familiar integration and its relationships management, between them. In fact, to the successful ageing, it seems crucial the development of good and healthy interactions between grandparents and grandchildren.

**Objectives:** To assess the relationship between grandparents and grandchildren's to achieve well-being and health in familiar context.

**Methods:** This is a quantitative, descriptive and exploratory cross-correlated study, with a probability convenience sample of 426 respondents (57.5% females, 42.5% males), made during 2012-2014 school years. The evaluation protocol includes sociodemographic questions, the scale of interaction between grandparents and grandchildren (Castañeda et al 2004) and the functions of grandparents (Rico et al 2001).

**Results:** We found that the relationships between grandparents and grandchildren may influence significantly the information exchanged ( $p = 0.000$ ). However, this does not apply to functions and characteristics of grandparent's roles ( $p = 0.069$ ). Nevertheless, the perception of well-being seems to be higher in those who extendedly interact with regularity with grandchildren ( $p = 0.000$ ), consolidating their role and its own existence.

**Conclusions:** The results enhance the need to be involved. In fact, the interaction and dependence on one another emotional and instrumental contribute to a fulfilled life, with positive consequences on the psychological well-being and health of the intervenients.

**Keywords:** Health. Elderly. Well-being. Successful ageing.

## POLYPHARMACY IN INSTITUTIONALIZED ELDERLY IN NURSING HOMES OF NORTHERN PORTUGAL

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**Introduction:** The polypharmacy is a growing problem, especially in the elderly population due to chronic diseases requiring the simultaneous use of drugs. This issue has become worse due to the increasing aging of the world population.

**Objectives:** To characterize drug therapy, polypharmacy and possible interactions in institutionalized elderly, as well as polypharmacy associated factors.

**Methods:** This cross-sectional and correlational study, had a sample of 155 elderly ( $\geq 65$  years) polymedicated ( $\geq 3$  drugs) and institutionalized in nursing homes in northern Portugal districts (Porto, Vila Real and Viseu). Data were obtained by consulting the clinical files. Beers list and the Delafuente classification were used to evaluate the therapeutic and possible interactions. It was used descriptive statistics, the Kolmogorov-Smirnov and ANOVA tests, with a significance level of 5%.

**Results:** The sample consisted mainly of females elderly (69% vs 31%), aged between 65 and 99 years (mean 83.73), while 34.2% was between 85-89 years old. On average, 6.85 different drugs are administered per day, and antihypertensives are the most prescribed (71.0%). According to the list of Beers, 0.6% of seniors take drugs that should be avoided wherever possible and 10.3% takes drugs rarely appropriate. According Delafuente, we find 13 possible drug interactions. Only age seems to be associated with the number of drugs administered daily ( $p = 0.017$ ), older between 80-84 years are those who consume more.

**Conclusions:** Regarding polypharmacy there was an average of about 7 different drugs per day, antihypertensives the most prescribed. We identified 13 possible drug interactions and about 10% of elderly taking drugs rarely appropriate. Age seems to be associated with polypharmacy.

**Keywords:** Beers L. Drug interactions. Elderly. Polypharmacy.

## ASSESSMENT OF DAILY LIVING ACTIVITIES IN A GENDER PERSPECTIVE: A STUDY OF OLDER PEOPLE FROM LOUSÁ

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**Introduction:** The silent transformation in the demographic system is considered to be a strong threat to public health, because of its economic costs. Although the association recurrently made between the loss of functional capacity and aging, studies have emerged reporting that the life expectancy without disability presents a wide variability in the world, including by gender. The existence of inequalities in socioenvironmental scenarios is indicated as responsible for the variability in how populations are aging. There are significant differences in the way men and women experience and perceive their aging process.

**Objectives:** To evaluate daily living activities in a gender perspective.

**Methods:** The current study has a cross-sectional design. Participants were men and women ( $N = 300$ ) and inclusion criteria were age equal or higher than 60 years old ( $M = 74.03$ ;  $SD = \pm 8.5$ ) and the absence of cognitive impairment. The Portuguese version of the OARS (2009) was used for data collection. Preliminary checks were conducted to ensure that there was no violation of ANCOVA assumptions.

**Results:** AVD's differences for gender were analyzed controlling for age with one-way analysis of covariance. It was concluded that there are significant differences on the level of independence between gender (FANCOVA = (1.294); 10.271;  $p = 0.001$ ) and between age groups (FANCOVA = (2.294); 43.021;  $p < 0.001$ ).

**Conclusions:** Although women live longer, they experience higher levels of dependence and needs of care and support. Since quality of life depends on trails we cross throughout our life, we suggest social and health strategies that ensure the empowerment of citizens in order for them to benefit from a better quality of life regardless of gender.

**Keywords:** AVD. Gender. Aging.

## 5. OCCUPATIONAL HEALTH

### EVALUATION OF STUDY ON THE PROMOTION OF HEALTH AND QUALITY OF LIFE AT WORK

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**Introduction:** Health promotion is currently one of the strategies of intervention in enterprises for improving individual performance, productivity and corporate image and for reducing absenteeism. Programs aiming at the quality of work life, with emphasis on health promotion, lead workers to a healthier life style. Therefore, the objective of this work was to evaluate studies of interventions on quality of life and health promotion at work and the benefits of such interventions on promoting quality of life in the workplace.

**State of the Art:** This is an integrative review study conducted in the Lilacs, Medline and PubMed database in the period 2003-2013, published in Portuguese and English, resulting in 229 papers, among which seven were selected.

**New perspectives:** Three categories of analysis were revealed after analyzing the papers: use of physical activities and guidelines for health promotion and quality of life on work, highlighting the importance of physical activity to increase mental resources and educational activities in disease control; interventional proposals for prevention and control of diseases underscoring the commitment of the institutions; and preventive intervention proposals demonstrating the importance of promotion and prevention in the workplace in order to minimize future pathologies.

**Theoretical and practical implications:** Physical activities, educational programs for health promotion, lectures, bodily practices are interventions that have been successful and should be replicated by the institutions.

**Conclusions:** Interventions on the quality and health promotion in the workplace should be encouraged because they bring benefits to the individual and to the collectivity.

**Keywords:** Quality of life. Work. Health promotion.

### HEALTH AND WORK ABILITY IN NURSES WORKING IN SHIFTS

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**Introduction:** Nurses belong to an occupational category which work processes exhausting both physically and mentally that can change the ability to work and contribute to sleep disturbances, psychological, cardiac and digestive as well as family and social changes.

**Objectives:** Assess the ability to work in nurses working in shifts; check whether nurses who reported higher prevalence of diseases had lower capacity to work, sleep disorders, chronic fatigue, personality changes, interference in social life, domestic and non-domestic activities, cardiovascular symptoms and changes in health in general.

**Methods:** This is a quantitative descriptive and explanatory cross-correlated study. We used the questionnaire "Work Ability Index" to determine the work ability, to determine the consequences of shift work used the Portuguese version of "Survey of Shiftworkers". We resorted to a non-probability convenience sample of 343 nurses to perform duties on health units in Nordeste Transmontano region.

**Results:** The sample is composed of 287 female and 56 male. The minimum age of respondents is 22 years and maximum is 61, the average age is  $36.73 \pm 8.54$  years. Determined the work ability, we found that 84.3% of respondents have good (42.3%) or excellent capacity (42%). On average, when increasing the number of injuries/illnesses decreases the work capacity ( $p = 0.000$ ), increase: sleep disturbance ( $p = 0.038$ ); chronic fatigue ( $p = 0.000$ ); personality changes ( $p = 0.000$ ); interference in social ( $p = 0.014$ ) and domestic life ( $p = 0.011$ ); cardiovascular symptoms ( $p = 0.000$ ) and worsening general health ( $p = 0.001$ ).

**Conclusions:** The results of this study reinforce the importance to implement surveillance and health promotion programs in order to reduce or avoid the harmful consequences of shift work.

**Keywords:** Work ability. Nurses. Health. Shift work.

### THE WORK ABILITY AND THE EXECUTIVE COGNITIVE FUNCTIONS IN HEALTH PROFESSIONALS

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Executive functioning (EF) refers to the set of neurocognitive processes that facilitate novel problem solving, planning and generating strategies for complex actions. All these skills are important to purposeful and goal-directed behavior as determinants dimensions in the work ability process. So, this raise the possibility that the integrity of these cognitive abilities could have a significant impact in subject's working performance (work ability), as well as they can be a determinant factor in clinical performance, namely, in clinical making decision. In this sense, the aim of this study was to analyze the impact of the deterioration of planning and abstract reasoning's in work ability. With a sample of 93 nurses (mean age 40.3 years, 30 % male and 70% female), it was administered the Portuguese version of Work Ability Index, the Halstead Category Test (HCT) (a well-established neuropsychological measure that assess multiple domains of non-verbal abstract reasoning) and the Tower of Hanoi (TH), (a well established neuropsychological measure that assess the abilities of problem-solving and planning). Considering the analysis of the results, we found that the work ability index showed a significant negative correlation with the measure of preservation (HCT) ( $r = -320$ ,  $p < 0.01$ ), total number errors (HCT) ( $r = -2.75$ ,  $p < 0.01$ ) and performance timing (TH) ( $r = 0.202$ ,  $p < 0.05$ ). This way, these results may suggest that the decline of executive cognitive functions, namely the ability to planning, problem-solving and abstract reasoning exert a detrimental effect in work ability in nurses, been possible to cause errors in the preparation of clinical diagnosis, slips of action in clinical performance that could have an adverse impact on the provision of health clinical care.

**Keywords:** Work ability. Executive cognitive function.

### WORKING CONDITIONS IN THE FEMINISED PRIVATE HEALTH SECTOR

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**Introduction:** The health sector is one of the most segregated professional areas by gender across Europe.

**Objectives:** To assess the gendered conditions of work in a health organizational environment, assuming that occupational

segregation that exists in the sector produces both the invisibility of gender inequalities, and problems in terms of working conditions, as shown in the literature (EASHAW, 2013).

**Methods:** This is a case study about the working conditions in a feminised working environment, and how they are perceived by workers and managers. The study took place in a private health clinic, and the methodology included semi-structured interviews and direct observation.

**Results:** We observed the initial exploratory proposition that sex segregation of work explains the working conditions in feminised sectors, as well as the perceptions of stakeholders about them. The main effects are the invisibility of inequalities and the psychosocial risks associated with working conditions. Those were marked by the amount of hours worked and the workload, the precariousness and nonparticipation in decisions, requirement of extra tasks, exposure to aggression and harassment, emotional intensity, non-recognition of their competences, and corresponding devaluation of wages.

**Keywords:** Working conditions. Health. Psychosocial risks.

## 6. CARDIOVASCULAR HEALTH

### CARDIOVASCULAR AND METABOLIC RISK IN PORTUGUESE WOMEN

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**Background:** Overweight and increased waist circumference are early markers of cardiovascular and metabolic disease. The current obesity context recommends the assessment of individual risk factors as predictors of future comorbidities.

**Objectives:** Assess body mass index (BMI), blood pressure (BP) and waist circumference values and analyze its relationship with nutritional status in young Portuguese women.

**Methods:** Cross-sectional/observational study conducted in 2012 with 1424 Portuguese women, Mean age 34.47 years (SD = 5.29), mothers of preschool children also under study. Performed anthropometric and waist circumference measures, BMI classification based on WHO (2000) referential and Portugal norms, (DGS, 2004). The BP was classified according to the European Heart Journal (2007) recommendations.

**Results:** Overall, 31.9% of women were overweight (obesity 12.1%), significantly higher in women with low literacy, low-income, and from rural areas, while the high blood pressure (HBP) and metabolic risk associated with waist circumference were significantly higher only in those with low literacy. Metabolic risk appeared in 60.8% and women with overweight and obesity, significantly associate increased risk of metabolic disease ( $\chi^2 = 212.37$ ,  $p = 0.000$ ), with a probability greater than 8 (OR = 8.158; CI = 6.024-11.048). Globally had normal-high and hypertension 22.8% of women, while 31.8% associated obesity and hypertension ( $\chi^2 = 31.466$ ,  $p = 0.000$ ) and 27.6% increased waist circumference ( $\chi^2 = 16.769$ ,  $p = 0.000$ ) with a risk about twice (OR = 2.447; CI = 1.781 - 3.362; OR = 1.990; CI = 1.427- 2.775 respectively).

**Conclusions:** Results showed the association between overweight, metabolic and cardiovascular risk, who reinforces the importance of promoting women's health early.

**Keywords:** Cardiovascular risk. Metabolic risk. Young women's health.

### METABOLIC SYNDROME IN USERS OF A COMMUNITY PHARMACY

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**Introduction:** Metabolic syndrome (MetS), a set of several cardiovascular risk factors such as obesity, high fasting blood glucose, dyslipidemia and hypertension, affects various regions of world, constituting a worrying public health problem worldwide. Due the lack of portuguese data in this area, the aim of the present study was to determine the prevalence of MetS in a pharmacy in the district of Bragança.

**Methods:** Total sample involved 80 adults > 18 years, randomly selected, 38.8% men and 61.2% women, mean age 60 years. Diagnosis was based on the «Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults» (APT-III).

**Results:** Globally, the prevalence of MetS was 7.5%, higher in men (9.7%) than in women (6.1%) and more elevated among individuals with age > 40 years (8.5%). Moreover, most have reported not make any kind of diet, about half ingests alcohol and about a third is smoking.

**Conclusions:** The high prevalence of MetS found in this study allerts the attention for the treatment of the MetS, retarding or preventing future consequences, like diabetes and cardiovascular disease.

**Keywords:** Metabolic syndrome. Prevalence. Risk factors.

### EVALUATION OF SERUM CONCENTRATIONS OF TOTAL CHOLESTEROL IN PHARMACY STUDENTS OF INSTITUTO POLITÉCNICO DE BRAGANÇA

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**Introduction:** Hypercholesterolemia is a factor involved in the development of atherosclerosis, which is related to cardiovascular and cerebrovascular diseases, the two main causes of death in the world. The aim of the study was determined the prevalence of hypercholesterolemia in Pharmacy students from the Instituto Politécnico de Bragança (IPB) and described and analyze the risk factors associated.

**Methods:** From a random sample of four classes of the course of Pharmacy from IPB, were selected for this study two years (1<sup>o</sup> and 4<sup>o</sup> years), with 32 students in each class. The descriptive, cross-sectional and quantitative study was carried out by application of a screening of cholesterol levels, and with a self-completion questionnaire. The data were subjected to statistical treatment through the program SPSS 16.0.

**Results:** This study found that the average of total cholesterol (TC) was  $197.06 \pm 43.542$  mg/ dL. The men had lower levels of cholesterol (174.33 mg/ dL) than females (200.78 mg/ dL) indicating the sex has influence on the levels of cholesterol. Hypercholesterolemia was more prevalent at ages  $\geq 20$  years, with higher average for students attending the 4th year (203.53 mg/ dL) than those attending the 1st year (190.59 mg/ dL). Concerning food, only the consumption of sausages showed association with serum concentrations of TC. Additionally, students who make meals at home have higher CT than those who make their meals elsewhere (200.49 and 183.62 mg/dL, respectively), allowing to conclude that the lack of time for meals provides a power based on fast food, rich in cholesterol.

**Conclusions:** The high levels of TC obtained in young students alert the need for control the cholesterol levels and also take action with regard to food and physical exercise.

**Keywords:** Cholesterol. Students. Food consumption.

## 7. ORAL HEALTH

### TEMPOROMANDIBULAR DISORDERS PREVALENCE IN RHEUMATOID ARTHRITIS PATIENTS

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**Introduction:** Rheumatoid Arthritis is a chronic disease, believed to be auto immune, affecting several systems. Being a synovial articulation, the temporomandibular articulation is also affected by rheumatoid arthritis.

**Purpose:** Assess the prevalence of Temporomandibular Disorders in patients with rheumatoid arthritis, rate the most common Temporomandibular Disorders and determinate which are the main signs and symptoms.

**Methods:** The present study as a observational feature, descriptive and transversal, with a non probabilistic sample, obtained by convenience, of 30 patients being followed by the Unity of Rheumatology techniques of the Santa Maria's hospital. Data were collected through the application of an adapted version of the "Research Diagnostic Criteria for Temporomandibular Disorders – RDC/TMD" questionnaire, and then, they were analysed using the Statistical Package for Social Sciences, version 22.

**Results:** It was diagnosed the presence of Temporomandibular Disorders in 43.3% of the observed patients, being arthralgia the most common. The most common symptoms were the presence of pain in the face, jaw, pain during the maximum unassisted opening and mandibular function limitation. On the other hand, the most observed signs were the presence of joint sounds like click and crepitus, limitation of the maximum vertical and horizontal mouth opening and sensibility to palpation of intra and extra oral muscles and the temporomandibular joint.

**Conclusions:** It becomes essential to sensibilizate health professionals in terms of the existence of this kind of oral disorders and their relationship with other pathologies, like the Rheumatoid Arthritis, as a way of ensuring a premature diagnosis and a more effective treatment.

**Keywords:** Rheumatoid arthritis. Temporomandibular disorders.

### THE EVALUATION OF KNOWLEDGE AND STATE OF ORAL HEALTH OF VISUALLY IMPAIRED PEOPLE

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**Introduction:** Visual impairment is a global or partial damage in visual system, varying in cause and/or nature. Visual impairment can affect access to dental care and oral health information. Currently it has been highlighted the need to provide oral health education for the visually impaired.

**Objectives:** Relate knowledge of oral health in patients with visual impairment and relate it to their oral health state.

**Methods:** The population consisted of a convenience sample of 80 participants, institutions of support the visually impaired, in the municipality of Lisbon. Participants underwent a 10 minutes long questionnaire with 23 multiple response items, which was completed through interview technique. We then proceeded to the observation of the oral cavity of each participant, in order to evaluate caries rates, oral hygiene index, and gingival bleeding index. The data collected were processed with Microsoft Excel 2007<sup>®</sup> and IBM<sup>®</sup> SPSS Statistics software 22<sup>®</sup>.

**Results:** Of the observed visually impaired individuals, 55% had dental carie and an average of 5.68 missing teeth. Individuals with congenital blindness had better results in the questionnaires, improved levels of oral hygiene and periodontal health status.

**Conclusions:** There are no differences of blind individuals oral health knowledge, when compared with other studies of knowledge in sighted individuals. However, visually impaired individuals have a high number of teeth with caries in active level, and poor oral hygiene and periodontal health. These data helps to conclude that the visually impaired have difficulty in accessing dental care and that it is essential to develop oral health programs in this population.

**Keywords:** Visual impairment. Oral health.

### ORAL HEALTH EDUCATION: COMMUNITY AND INDIVIDUAL LEVELS OF INTERVENTION

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**Introduction:** Oral health education is an important issue that should be discussed with children and adolescents, promoting the acquisition of correct oral health behaviors.

**Objectives:** Characterize the oral health behaviors among a sample of Portuguese adolescents and introduce different strategies that enable the accomplishment of collective programs appropriate for the promotion of oral health at individual and community levels.

**Methods:** A cross-sectional study was designed with a sample of 447 adolescents aged 12 to 19 years old, attending a public school in Sátão, Portugal. An interview was made questioning about socio-demographic factors and oral health behaviors to each adolescent. Considering the obtained results, a revision of the literature was made in order to define oral health promotion strategies to be applied among children and adolescents to improve oral health behaviors in a specific Portuguese community.

**Results:** The prevalence of toothbrushing (twice-a-day or more) was 90.6%, while 5.8% of adolescents reported daily flossing and 67.0% had at least one dental appointment in the previous twelve months. Considering the results obtained, various oral health promotion strategies should be developed based on the following topics: oral health education for children and adolescents in schools and public institutions; oral health promotion for teachers and parents; technology application in oral health education; education and motivation for oral health behaviors given by health professionals.

**Conclusions:** Community programs should be considered in order to improve knowledge and behaviors related to adolescents' oral health, giving special attention to the intervention of various health professionals, teachers and parents in the oral health education field.

**Keywords:** Oral health education. Oral health promotion. Community. Oral hygiene.

## 8. HEALTH AND PHYSICAL ACTIVITY

### POTENTIALITIES OF TRAMPOLINE TRAINING FOR CHILDREN WITH AUTISM SPECTRUM DISORDERS

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**Introduction:** Trampolines training (TT) present several potentialities to improve motor proficiency, such as improvement of balance (both static and dynamic) and multifunctional motor characteristics (Atilgan, 2013), and may develop motor performance of children with learning disabilities (Giagazoglou, 2013). In spite of all TT potentialities, it has not been demonstrated conclusively the positive effects of this training in children with Autism Spectrum Disorders (ASD).

**Objectives:** This study evaluated the efficacy of a twenty-weeks trampoline training program in the development of communication, socialization, sensory and behavior in children with autism spectrum disorders.

**Methods:** Seventeen children (5 girls and 12 boys, age 4-10) were assigned to either a supplemental training (TG) or control group (CG). Both groups continued to participate in their regular education curriculum. Group results were compared using multivariate analysis of variance (ANOVA). The groups were evaluated in the beginning (baseline) and in the end of program (after 20 weeks). Parents completed the Autism Treatment Evaluation Checklist (ATEC) for value the development of communication, socialization, sensory and behavior.

**Results:** The TG program resulted in significant decrease on the ATEC total score ( $p < 0.005$ ): TG children evolved from a total ATEC score of  $41.67 \pm 15.201$  (baseline) to  $21.67 \pm 11.147$  after 20 weeks, while control group evolved from a total ATEC score of  $39.09 \pm 26.262$  to  $35.82 \pm 23.181$ .

**Conclusions:** Trampoline exercise was effective in the ATEC total scores for children with autism spectrum disorders, meaning an effective development of communication, socialization, sensory and behavior.

**Keywords:** Trampoline training. Autism spectrum disorders.

### TRAMPOLINE TRAINING IN THE DEVELOPMENT OF COMMUNICATION, SOCIALIZATION, SENSORY AND BEHAVIOR IN CHILDREN WITH ASD

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**Introduction:** Trampolines training potentially contributes to improve static and dynamic balance, as well as multifunctional

motor characteristics (Atilgan, 2013), and may develop motor performance of children with learning disabilities (Giagazoglou, 2013). In spite of all TT potentialities, it has not been demonstrated conclusively the positive effects of this training in children with Autism Spectrum Disorders (ASD).

**Objectives:** This study aims to evaluate the efficacy of a trampoline training program (TT) in the development of communication, socialization, sensory and behavior in children with autism spectrum disorders.

**Methods:** Seventeen children (5 girls and 12 boys, age 4-10) were assigned to either a supplemental training (TG-6 children) or control group (CG-11 children). Both groups continued to participate in their regular education curriculum. The groups were evaluated in the beginning (baseline) and in the end of 20-weeks program. Development of communication, socialization, sensory and behavior were evaluated using Autism Treatment Evaluation Checklist (ATEC), scored with parents' help. Group results were compared using multivariate analysis of variance (ANOVA).

**Results:** The TT program resulted in significant decreases on the ATEC total score ( $p < 0.005$ ): TG children evolved from a total ATEC score of  $41.67 \pm 15.201$  (baseline) to  $21.67 \pm 11.147$  after 20 weeks, whereas CG evolved from a total ATEC score of  $39.09 \pm 26.262$  to  $35.82 \pm 23.181$ .

**Conclusions:** Trampoline training decreases ATEC total scores for children with ASD, meaning an effective development of communication, socialization, sensory and behavior.

**Keywords:** Trampoline training. ASD. Socialization. Sensory.

### MOTOR INTERVENTION BASED ON TRAMPOLINES FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

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**Introduction:** It is generally agreed that regular physical exercise promotes several benefits in people with Autism Spectrum Disorders (ASD) (SOWA, 2012). Children with autism spectrum disorders present hence a weaker motor performance (Pan, 2009), problems in maintaining balance and in motion planning (Vernazza-Martin et al. 2005). The use of trampolines potentially improves balance and motor proficiency of children with learning disabilities (Giagazoglou, 2013). This study aims to evaluate the efficacy of a twenty-weeks trampoline training (TT) program on motor proficiency and body mass index (BMI) for children with ASD.

**Methods:** Seventeen children (5 girls and 12 boys, age 4-10) were assigned to either a supplemental trampoline training (TG) or control group (CG). Both groups continued to participate in their regular education curriculum. The groups were evaluated in the beginning (baseline), after 10 weeks and in the end of program (after 20 weeks). BMI was evaluated by height and weight measurement and motor proficiency used the Bruininks-Oseretsky Test of Motor Proficiency (2nd ed.), (BOT). Group results were compared using multivariate analysis of variance (ANOVA).

**Results:** The TT program resulted in significant increases motor proficiency ( $p = 0.000$ ): TG children evolved from a total BOT score of  $21.33 \pm 17.682$  (baseline) to  $35.17 \pm 17.747$  after 20 weeks, while

control group evolved from a total BOT score of  $28.27 \pm 10.001$  to  $30.27 \pm 7.55$ . No statistical differences were found on BMI.

**Conclusions:** Trampoline training is an effective option to develop motor proficiency for children with ASD.

**Keywords:** Trampoline training. ASD. Motor proficiency.

## PHYSICAL ACTIVITY AND WEATHER FACTORS – EXPLORATORY DATA FROM A LONGITUDINAL STUDY

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**Introduction:** Weather variables have been suggested to be a barrier to participation in physical activity (PA). However, cross-sectional design studies concluded that the association of weather factors and PA is weak. Very few researchers have addressed the subject by means of longitudinal designs.

**Objectives:** To examine if there's an association between weather variables and PA, and if the behaviors are sustained over time.

**Methods:** The sample included 14 women and 6 men (mean age 37.20, SD 8.25 years) who wore an accelerometer, for four to seven days. Participants were evaluated at baseline, after six months, and after one year. Changes in PA across time were analysed using a repeated measures analysis of variance to assess the effect of time on PA. Huynh-Feldt correction was used for non sphericity covariance structure of contrast variables.

**Results:** Results showed no statistical evidence of the association between weather factors and PA. After four months from baseline, sedentary behaviour has increased (p-value = 0.023) and at the end of one year significant decreases were observed in the vigorous (p-value = 0.032), very vigorous intensity categories (p-value = 0.000), and in the average daily count (p-value = 0.02). Regardless the small sample and the need to explore further the data; these results seem to find agreement in previous studies that found weak, or no relationship between weather factors and physical activity. Also, active behaviours seem to decrease over time.

**Conclusions:** Results showed no evidence that support the association between weather factors and PA. More longitudinal studies, at population level would be advisable to further understand this subject.

**Keywords:** Physical activity. Weather. Longitudinal study.

## IMPACT OF HEALTH LITERACY IN HEALTH-PROMOTING BEHAVIORS RELATED TO PHYSICAL EXERCISE

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**Introduction:** Although there is been proved the influence of health literacy in health-promoting behaviors, there are many other factors that influence those same behaviors, reducing this impact.

**Objectives:** To know the levels of health-promoting behaviors and health literacy in a sample of Portuguese teenagers and to know the impact of health literacy on health-promoting behaviors in physical exercise.

**Methods:** This study is quantitative, descriptive–corelacional and transversal, with a non probabilistic convenience sample of 1215 Portuguese teenagers attending the secondary education in Portugal. The questionnaire was consisted by social demographic

questions, the Adolescent Health-promoting Scale (Chen, Wang, Yang & Liou, 2003) and the assessment tool of health literacy (Tomás, Queirós & Rodrigues, 2014).

**Results:** It were found good levels of health literacy, being the highest values in females (p = 0.000) and younger adolescents (p = 0.004), increasing this value with the grade level (p = 0.001), and decreasing with the age of the teenagers (p = 0.001). Levels of health-promoting behaviors found are good, but higher in males (p = 0.006), decreasing this values with age (p = 0.000) and grade level (p = 0.000). The concepts are very tenuously related in the selected sample, existing a correlation between them and the prediction of the health-promoting behaviors by health literacy statistically significant, only in young females (p = 0.008).

**Conclusions:** It were found good levels of health literacy and health-promoting behaviors in physical exercise in the sample, but no correlations or significant predictions among the concepts, concluding the no confirmation of the exposed information in the literature.

**Keywords:** Health literacy. Health behavior. Exercise. Teens.

## 9. OTHERS

### PSYCHOLOGICAL MORBIDITY, DAYTIME SLEEPINESS AND SLEEP QUALITY IN ADOLESCENTS

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**Introduction:** Adolescence is marked by dramatic changes in the adolescent's life. Studies have found a relationship between psychological morbidity and sleep, that have an impact on the development of the adolescent.

**Objectives:** To analyse the relationship between psychological morbidity, daytime sleepiness and sleep quality and the potential role of psychological morbidity as a mediator in the relationship between excessive daytime sleepiness and sleep quality

**Methods:** 272 adolescents participated in the study, aged between 12 and 18 years old. The instruments answered were: Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983), Modified Epworth Sleepiness Scale (Billings & Berg-Cross, 2010), Pittsburgh Sleep Quality Index (Buysse et al, 1989).

**Results:** Adolescents who presented more psychological morbidity, presented more excessive daytime sleepiness and lower sleep quality. Psychological morbidity mediated the relationship between excessive daytime sleepiness and sleep quality.

**Conclusions:** The results showed psychological morbidity as an important variable in adolescents' sleep that should be targeted in intervention programs to promote sleep quality in adolescents.

**Keywords:** Psychological morbidity. Sleepiness. Sleep quality. Adolescents.

### VACCINATION OF PATIENTS UNDERGOING ALLOGENIC STEM CELLS TRANSPLANT

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**Introduction:** The draft vaccination of patients submitted to Allogeneic stem cell of hematopoiesis arose from the need for vaccination of these patients, since the process of transplantation

causes the loss of immunization provided through vaccines administered before and are highly susceptible to infection (Ljungman, et al, 2009; PNV, 2012). The draft vaccination of patients undergoing allogeneic hematopoietic stem cells transplant (HSCT) involves the following activities: inform the patient about the vaccination for patients undergoing HSCT; organize the implementation of vaccination after HSCT; liaise with the Health Center in order to provide continuity of care at the level of vaccination; validate compliance with the vaccination schedule.

**Objectives:** Evaluate the effectiveness of the draft vaccination of patients undergoing SCT.

**Methods:** After one year of implementation of the project the effectiveness of the same was assessed by analyzing the rate of patients vaccinated through the National Immunization Program (NIP) with vaccination to prevent infection by Pneumococcus.

**Results:** After one year of one year of project implementation it was achieved a vaccination coverage rate of 81% of patients. Analyzing the performance of the PNV, 74% of patients are following it and this process is influenced by the clinical status of the same.

**Conclusions:** This project innovates in the approaching of the vaccination of these patients in connection with the health center nurses of the residence area, ensuring continuity of care.

**Keywords:** Vaccination. Patients. HSCT.

## STATE ANXIETY IN SURGICAL PATIENTS

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**Introduction:** The state anxiety is an emotion commonly experienced by surgical patients and documented in the literature as a determinant of their well-being, arrogating to preoperative visit as protector of its occurrence and an important indicator of patient satisfaction.

**Objectives:** Explain the influence of socio-demographic variables in state anxiety and determine the influence of preoperative visit at the level of state anxiety.

**Methods:** The transversal observational study was conducted in a non-probabilistic sample of 180 pre-surgical patients, on Tondela - Viseu Central Hospital, admitted for programmed surgery (55.6% women and 44.4% men) with mean age of 57.25 years, using the Zung Anxiety Scale.

**Results:** The level of anxiety is high in 51.7% patients (worse in women), mild in 39.4% and moderate in 8.9%. The anxiety state is higher in women ( $M = 37.39$ ) than in men ( $M = 34.01$ ) ( $U = 2852.5$ ,  $p = 0.001$ ), and also more severe in the less educated ( $H = 12,949$ ,  $p = .024$ ) and older ( $r = 0.233$ ,  $p = 0.002$ ). Age explains 5.4% of the variability in state anxiety. Patients who received preoperative visit were less anxious but without statistical significance ( $\chi^2 = 0.756$ ,  $p = 0.685$ ).

**Conclusions:** It is inferred that sex, age and education influence the anxiety state, determinant factors at the planning of the preoperative visit to pre-surgical patients.

**Keywords:** State anxiety. Surgical patient. Visiting nurse preoperative.

## INTIMACY EXPERIENCE IN SCHOOL CONTEXT

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**Introduction:** Intimacy is sharing experiences and emotions generating reciprocity in partnership in order to promote wellness. The student is confronted with people that need care providence

however, simultaneously, should respect factors of individual matter (prudence or complexes), cultural, social and moral, taking conscience that each person is unique, what makes complex the intimacy question.

**Objectives:** Knowing the school context contributes and teaching/learning dimensions (clinical learning; group relationships; subjects and scientific/pedagogical resources), as conditions that promote scientific knowledge at the development and construction of the identity and intimacy of nursing students.

**Methods:** Descriptive-Correlational study, developed in a non-probabilistic intentional and accidental sample, with 131 students of the 4th grade, from 2 Nursing Schools. The data collect focused in the Inventário de Avaliação dos Contributos do Currículo e Contexto Escolar para o Desenvolvimento e Capacitação dos Estudantes de Enfermagem na Área da Sexualidade, (Rodrigues, Antunes, Loureiro, 2003).

**Results:** The most part of the inquires said that the clinical teaching had gave them experience to know how to care and invest in the patients and as a way of health and well-being, considering that, at the intimacy development, the relation with other peoples takes a primordial role, giving importance to the clinical learning in intimacy contexts, allowing them to face the patient's body without constraints.

**Conclusions:** Predominates a model of teaching less relational, without the opening to the diversity of sexual education, mainly at intimacy, it does not promotes personal and interpersonal relationship skills.

**Keywords:** Intimacy. School context. Nursing students.

## VULNERABILITY TO STRESS OF THE SURGICAL PATIENT ON THE PREOPERATIVE PERIOD

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**Introduction:** The well-being of the patient should constitute the main goal of the professionals that take care of the surgical patient, because on the pre-operative period may present stress levels, as well as develop feelings that could negatively act on their emotional state, making them vulnerable.

**Objectives:** Explain the influence of socio-demographic variables in the patients' stress; infer the influence of pre-operative visit in the vulnerability of patients' stress.

**Methods:** The study is quantitative, transversal and descriptive. The sample is non-probabilistic, constituted by 180 patients, on Tondela - Viseu Central Hospital, admitted for programmed surgery (55.6% women and 44.4% men) with mean age of 57.25 years, using the Vulnerability to Stress Scale - 23 QVS.

**Results:** There are 55.6% patients vulnerable to stress and 44.4% not vulnerable. Vulnerability to stress is higher in men (57.5%) than in women (54%), individuals living alone ( $H = 16,349$ ,  $p = 0.000$ ), in the less instructed ( $H = 18,023$ ,  $p = 0.003$ ), those living in rural areas ( $U = 301.0$ ,  $Z = -2,336$ ,  $p = 0.020$ ) and older ( $r = 0.287$ ,  $p = 0.000$ ). Age explains 8.2% of the variability in vulnerability to stress and it is also independent of the preoperative visit, ( $U = 3452.0$ ,  $p = 0.186$ ).

**Conclusions:** It was found that age, education and cultural background, influence vulnerability to stress, having to consider them when planning good practice in healthcare of pre-surgery patients.

**Keywords:** Stress vulnerability. Visiting nurse preoperative.



## THE INCLUSION OF PALLIATIVE CARE IN BRAZILIAN UNIFIED HEALTH SYSTEM (SUS)

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**Introduction:** In a country where noncommunicable diseases (NCD) has increased and patients have been lately diagnosed, is necessary to learn how to care for individuals with terminal illnesses and their families. This healthcare model is called Palliative Care. This study identifies how Palliative Care is inserted in Brazilian health policies through the Unified Health System (SUS). To this end, official documents and articles related to the topic were analyzed.

**State-of-the-art:** Officially, Palliative Care were standardized in Brazil from ordinance (ord) n. 3535/98, which established the registration of health centers in oncology. Years later, ord. n. 19/02 inserted in the SUS a National Program of Assistance for Pain and Palliative Care. In 2002, ord. n. 1319/02 established the Centers of Excellence in Pain Management. The ord. n. 2439/05 established the National Oncological Care Policy, where Promotion, Prevention, Diagnosis, Treatment, Rehabilitation and Palliative Care were guiding care in low, medium and high complexity. The last ordinance was n. 874/13 establishing the National Policy for Prevention and Cancer Control in Healthcare Network of People with NCD in SUS.

**New perspectives:** The evolution of health policies designed to palliative care follows a trend of integrality. In the future, it's expected that there are more involvement in this care, mainly of primary care workers.

**Theoretical and practical implications:** Although the actions are focused in health policies, they should be more present in practical services at all levels.

**Conclusions:** It's understood that the government has a role in ensuring the comprehensive care for patient, including palliatives through the implementation of programs and policies and health workers training.

**Keywords:** Palliative care. Health policies. Healthcare.

## NURSING CARE IN REINTRODUCTION OF DIET TRACHEOSTOMIZED PATIENTS

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**Introduction:** The tracheotomy consists of making an opening into the trachea, which is inserted into the tracheotomy tube. When performed on the patient in serious situations it may affect some functions such as swallowing, which should be restored as the grievance reduces, requiring professional nurse with theoretical and practical capacity to minimize the risks of reintroduction.

**Objectives:** Evaluate the knowledge of practicing of clinical nurses in a hospital regarding the reintroduction of feed in patients with tracheotomy.

**Methods:** A descriptive, quantitative, prospective cross-sectional study in which an instrument consisting of 20 closed questions, divided into two parts applied to a sample of 41 nursing assistants was used.

**Results:** The sample consisted of 90% of female nurses with an average age of 35.4 years. 37% of the sample had more than ten years of practice and 83% had never been asked about the subject. Also, none of the participants were able to tell the clinical conditions for which the oral feeding of the patient should be restarted. With respect to the professional who must indicate the beginning of the reintroduction of diet orally, 47% of nurses considered that the initial indication should be conducted by a

multidisciplinary team and reassessment after starting the diet should always happen prior to bidding each diet.

**Conclusions:** Lack of approach on the subject during the undergraduate reflecting on professional unpreparedness the presence of the multidisciplinary team reveals a change of structure within units where decisions are currently taken after consensus of the team and not just a single member.

**Keywords:** Nursing care. Tracheotomy.

## TURKISH NURSING STUDENTS' VIEWS TOWARD ORGAN DONATION

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**Introduction:** Health care professionals are the most important role in the organ procurement process, as they are the first individuals to establish close relationship with the potential donor's family (Goz et al, 2006). The carry out this role, nursing students and new graduates with little or no experience of the organ donation process, should be educated and prepared (Kim et al, 2006).

**Objectives:** To determine nursing students' views toward organ donation.

**Methods:** This study was done at Mugla Sıtkı Kocman University School of Health Sciences in the Nursing Department (n: 261 nursing students) in 2013 and 2014. The questionnaire form was used for collecting data.

**Results:** 62.5% were female, 90.8% were Muslim. 85.4% of them said that they could receive organ if it were needed to maintain life. 5.0% of them donated their organs after death. The participants declared the following reasons for organ donation: saving to life of others 66.7%, being useful after death 8.3%. for using educational purposes 8.3%, for being charitable 8.3%). They did not want to donate their organs their religious concerns (4.6%). 32.2 percent of the participants were informed about organ donation, but 28.0% of them thought that their information was insufficient. 61.3% of them did not think that organ donation was not adequate in Turkey because of lack of knowledge 48.1% and religious beliefs 19.4% and lack of cadaver. Participants obtained knowledge about it through courses (44.4%), mass media and the internet.

**Conclusions:** Nursing students did not have sufficient knowledge about organ donation. Organ donation topic should be integrated in nursing curriculum.

**Keywords:** Nursing student. Organ donation. View.

## IMPACT OF TRAINING IN FORENSIC SCIENCES

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**Introduction:** The forensics sciences include a set of scientific disciplines that working together in unisons and joining his body of knowledge's help the justice solving situations of medical-legal character.

**Objectives:** Evaluate the impact of the training on the level of knowledge about forensics practices of the participants of a Brief Course of Forensics Sciences.

**Methods:** The transversal, analytical and correlational study uses a quantitative methodology in order to test the hypothesis of the investigation, was performed in a non-probabilistic sample by convenience, and constituted by 72 participants on the first

moment of evaluation and by 51 participants on the second moment of evaluation. The samples are mainly constituted by female individuals 84.7% and 82.4% respectively, presented a mean average of 28.62 and of 30.23 years old, on the second moment.

**Results:** After the attendance of the Brief Course of Forensics Sciences the students increased the level of knowledge in the dimensions of Concepts of Forensics Nursing, Forensics Situations, Forensics Vestiges, Communications and Documentation in Forensics Sciences, General Nursing Care and Vestiges Preservation, and in the global score of the Knowledge's about Forensics Nursing Practices. It's verified a greater increase of the level of knowledge giving the dimension Vestige Preservation (Before:  $M = 15.94$  vs After:  $M = 18.55$ ), and the dimension Concepts of Forensics Nursing (Before:  $M = 6.93$  vs After:  $M = 8.20$ ).

**Conclusions:** The results found show the importance of the frequency of specific training by increasing the flow of knowledge in the forensics sciences area.

**Keywords:** Forensics practices knowledge. Forensics sciences.

### RECOMMENDATION OF MEASUREMENT UNCERTAINTY MODELS COMPLYING GUM AND ALTERNATIVE FOR BLOOD BANK SCREENING TESTS RESULTS

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**Introduction:** The blood bank virology laboratory with screening tests accredited by ISO 15189 must determine the measurement uncertainty of the results. The model should be selected by the blood bank laboratory staff. Apart from ISO, the measurement uncertainty is recognized as critical to the laboratory results' risk evaluation.

**Objectives:** Recommendation of a set of measurement uncertainty models complying the Guide to the expression of uncertainty in measurement (GUM) and alternative (to GUM), fulfilling ISO 15189 requirements. Presentation of the mathematical models as well as the pros and cons of each one, considering the impact of clinical decision on post-transfusion safety.

**Methods:** 1) GUM models: modeling (partial derivative, and Monte Carlo) and empirical (intralaboratory, interlaboratory, and external quality assessment (EQA)/proficiency testing (PT)); 2) alternative models (sensitivity, specificity, agreement, and area under receiver operating characteristic (ROC) curve). The measurement uncertainty was computed for an anti-hepatitis C virus (HCV) screening immunoassay results on a commercial spreadsheet software.

**Results:** All the models proved to be practical for blood bank screening results, however the GUM modeling models are intended for reagent manufacturer due to be focused on uncertainty components. The GUM empirical, as well as the alternative models demonstrated to be critical for the determination of uncertainty in blood bank, focused, respectively, on the results close to the clinical decision point and on the probability of true and false results.

**Conclusions:** The presented models fulfill ISO 15189, meanwhile the blood bank staff must recognize the practical and relevant models for their field.

**Keywords:** Blood bank. GUM. ISO. Screening test. Uncertainty.

### MEDICAL GRADUATION IN HEALTH EDUCATION: AN OBSERVATIONAL STUDY

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**Introduction:** Health Education is a well studied aspect of health promotion and prevention in order to impact health behavior, and the doctors' performance in it is fundamental to the process of consolidation.

**Objectives:** Assess the relationship between doctors' formation and their performance while conducting health promotion groups in primary care context.

**Methods:** This is a qualitative study with the observation of health group performance, with a Dermatologist, a Family Doctor and a doctor that attends a governmental post graduation course for human resource formation in the Brazilian Health System-SUS. All professionals work in the Brazilian Family Health Strategy, in the State of Rio Grande do Sul - BR. The observation focused on doctors' choice for health behavior model (individual, interpersonal or community models) and methods of issue selection.

**Results:** We found that the professionals worked on Health Education through the models of individual health behavior, mainly the health belief model and the transtheoretical model and stages of change, with the subjects/ clients as merely receiving information, selecting topics of discussion following the Ministry of Health's priorities, instead of using local diagnosis/problems.

**Conclusions:** The results show no difference among the doctors' performance, despite of the difference among their formation. Besides, they used a model of health behavior that is less effective according to the literature and didn't base the issue selection in local diagnosis/ problems, a nowadays worldwide recommendation. We consider that is necessary and critical to implement doctors' formation on Health Education recommendations, through changing aspects in graduation and through Continuing Education in theirs services.

**Keywords:** Health education. Health behavior. Medical formation. Primary care system.

### SHELTERED ADOLESCENTS: OCCUPATIONAL HISTORY AND PERSPECTIVES TO THE FUTURE

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**Introduction:** The shelters entities are an interim resource that aims to safeguard the lives and wellbeing of children and adolescents at risk. The shelter is the ultimate measures proposed by the Brazilian Child and Adolescent Act. The conviviality and concern for the shutdown of adolescents after losing legal support, was the reason for conducting the research.

**Objectives:** The aim of this paper is to investigate life histories and occupational history, from significant experiences during their life trajectories, finding out they prospects to the future.

**Methods:** The methodological approach included a mix interview, focus group and oral history with 13 adolescents, aged 11-14 years, in a capital of northeastern Brazil. The research was conducted in accordance with recognized ethical standards and national/international laws.

**Results:** The analysis was supported on ethnography and have pointed reasons for sheltering situations of abandonment, such as, living on the streets and hunger, alcoholism and drug addiction by guardians, orphanhood, domestic violence, conflicts and family separation. While the future prospects are directly related to

parental figures, we identified socio-historical context and affective relationships, especially family breakdown as important factors. **Conclusions:** It is considered that, with the occupational history, it is possible to obtain an occupational profile, adapted to the reality of these adolescents as a great transformative potential. **Keywords:** Adolescent. Institutionalized. Ethnography.

### KNOWLEDGE OF STUDENTS OF THE 3RD CYCLE ON HEALTHY EATING HABITS

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**Introduction:** The eating habits of adolescents are influenced by early independence and filled schedules. Healthy eating habits require continuous work for the prevention of obesity.

**Objectives:** 1) Identify the dietary patterns of adolescents; 2) identify knowledge and attitudes of adolescents in relation to healthy food; 3) intervening in school aged adolescents, enhancing the acquisition of healthy lifestyles.

**Methods:** This was a comparative descriptive study. Data collection was done through a questionnaire that was administered to 7th grade students (2011) and later to the same students in the 9th grade (2013) of the schools in the city of Castelo Branco.

**Results:** It was found that the 9th grade students increased the number of daily meals over the 7th grade (10.4%). Breakfast ingestion increased (6.7%). The soup consumption increased in both main meals (12%) as well as water intake (22.6%). "Fast food", had their intake reduced considerably (26%). Regarding knowledge about healthy eating habits over the initial study, it is found that students demonstrated the importance of breakfast, and eating soup (4%) and vegetables (6%).

**Conclusions:** It was found that the actions of health education in the context of the classroom about healthy eating habits in 7th grade brought some changes in your eating habits that was found with the results of the questionnaire completed in 9th grade.

**Keywords:** Eating habits. Adolescent.

### DETERMINANTS OF SMOKING INITIATION

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**Introduction:** The chronic noncommunicable diseases occupy the first places in the rates of morbidity and mortality in developed countries. Tobacco consumption is the major lifestyles factor causing chronic diseases and the vast majority begins consumption in adolescence.

**Objectives:** To understand the smoking habits of adolescents and to identify factors associated with their consumption.

**Methods:** Transversal and quantitative study in school adolescents in the Viseu with a sample stratified proportional sharing for each school year, a total of 1390 students.

**Results:** The age was between 12-22 years old, 58.8% girls, 24.5% were smokers. The highest prevalence is between 17-19 years and the greater percentage of smokers jump stood from 12 (2.4%) for 13 (12%). At age of 15, 1 in 4.4 adolescents and at age 19, 1 in every 2.5 adolescents were smokers. We observed relationship ( $p < 0.001$ ) between the smoking habits of parents and friends with the smoking habits of teenagers. Being informed about the dangers of smoking does not influence the smoking habit. We observed relationship ( $p < 0.001$ ) between the attitude of parents permissiveness and children smoking habits. The lower satisfaction with school and family, the higher percentage of smokers. It was at school where they had the first contact with cigarettes (33.2%) and the reason

mentioned was curiosity (54.1%). The vast majority smokes on the sly of the parents (81.1%).

**Conclusions:** Preventing initiation of tobacco use among adolescents and young people is crucial. Mindful of the incidence and prevalence of smoking as well the factors associated with its consumption, we recommend programs in Schools with involvements peers, family, media and legislative measures in order to reduce consumption and prevent the initiation of habit.

**Keywords:** Tobacco. Smoking. Adolescents. Health promotion.

### SUBJECTIVE WELL-BEING OF HEMODIALYSIS PATIENTS

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**Introduction:** For hemodialysis patients, the treatment process has a significant impact on their well-being, thus influencing the different contexts experienced by them.

**Objectives:** To investigate the relationship between socio-demographic variable with subjective well-being of hemodialysis patients; to analyze the influence of the economic context in subjective well-being of hemodialysis patients; determine the influence of the family context in subjective well-being of hemodialysis patients; analyze the importance of social support on subjective well-being of the patient dialysis; check the impact hemodialysis treatment has on their well-being subjective.

**Material and methods:** This was a descriptive-correlational quantitative study. Covers a sample of 100 patients on hemodialysis clinic in the municipality of Viseu. As an instrument of data collection used the questionnaire.

**Results:** By analyzing subjective well-being of hemodialysis patients was found that the majority is satisfied with life (73%), whereas the female patients are those who feel more satisfied (73.2%). Given the characterization of subjective well-being most (average ranking = 57.22) shows a difference of affect.

**Conclusions:** In this study it was found that subjective well-being of hemodialysis patients is statistically significantly influenced by: marital status, employment status, literacy, information about treatment, number of constituents of household income monthly household, life satisfaction, disease interference in personal life.

**Keywords:** Hemodialysis. Hemodialysis patients. Subjective well-being.

### PREGNANCY AFTER KIDNEY TRANSPLANTATION: COMPLICATIONS AND NEONATAL OUTCOMES

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**Introduction:** Chronic Kidney Disease in advanced stages can have a devastating effect on the quality of life and often involves changes in the plans of education, work and family. Renal transplantation restores fertility but when pregnancy occurs, there is increased susceptibility to complications for both the pregnant woman and the newborn.

**Objectives:** Analyze the implications of renal transplantation in the pregnant woman and fetus.

**Methods:** A retrospective, descriptive and analytical study done with a sample of 37 cases that occurred between 1989 and 2010 in a Portuguese maternity.

**Results:** The average age of women was 27.3 ( $\pm 5.17$  sd) years, ranging between 18 and 37. The 37 pregnancies in 32 renal transplanted women resulted in 32 newborns. One twin pregnancy was registered. We recorded 78.38% live births and 5.40% stillbirths. The most frequent maternal complications were hypertension (21.62%), gestational

diabetes (8.10%), urinary tract infections (16.21%), anemia (10.81%) and preeclampsia (5.40%). As for newborns, restriction of intrauterine growth was found in 15.63%, 77.42% were born prematurely and 62.49% underweight. Hospitalization in neonatal intensive care was required in 40.63% of cases.

**Conclusions:** Although pregnancy in renal transplanted women is possible, particular attention should be given to maternal and neonatal complications. Surveillance of pregnancy must be carried out by a multidisciplinary team in order to minimize the risk, protecting the pregnant women and the fetus.

**Keywords:** Chronic disease. Renal transplantation. Pregnant.

## HABITS AND KNOWLEDGE IN NUTRITION AND ORAL HYGIENE IN CPLP POPULATION IN THE DISTRICT OF LISBON

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**Introduction:** The promotion of health behaviors within different population groups is of major importance. Improving knowledge about healthy eating and oral hygiene plays a key role both individually and in the surrounding community.

**Objectives:** Evaluate a set of healthy behaviors in immigrant CPLP communities residing in the Metropolitan Area of Lisbon.

**Methods:** 395 individuals from 11 CPLP community associations of PALOPS participated in the study. Questionnaires assessing nutrition and oral hygiene knowledge and habits were collected and also evaluation of anthropometric and biochemical data.

**Results:** Of the participants involved in the project 56.2% were female, 38% were from Cabo Verde and 20.3% did not study or have incomplete 1st cycle. Regarding oral hygiene 53% of participants brush their teeth in the morning and before bedtime with toothbrush and 97.5% used toothpaste. The habit of brushing teeth was associated to education with a statistically significant level ( $p = 0.011$ ). In addition to brushing 71.9% use toothpaste with fluoride and 49.4% did not use rinses regularly. With regard to healthy eating habits, only 10.6% of participants reported making five meals a day, and 24.5% don't make breakfast meal and 11.4% skip lunch. The analysis of anthropometric data shows 34.7% are overweight and 30.9% are obese, with female participants presenting higher BMI index compared to males. There was no statistically difference between the number of meals with nutrition.

**Conclusions:** With this project it was found that although there are different cultures and different habits CPLP population worries about their food and oral hygiene habits.

**Keywords:** Alimentation. Oral hygiene. CPLP community.

## THE MIND AND THE SKIN: ETIOPATHOGENY AND CLINICAL RELEVANCE

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**Introduction:** Skin diseases may lead to psychiatric problems and can worsen due to emotional factors as well. Being the interface

between the inner and the outer, the skin suffers the impact of many stress factors, including psychological stress.

**Objectives:** To compile and analyze data on the etiopathogeny of psychodermatologic diseases.

**Methods:** A systematic review of the literature was conducted, using the “55” levels of organization of evidence from healthcare research, based on the model proposed by Haynes.

**Results:** For a long time, the link between mind and skin diseases had little attention in the clinical practice. However, the prevalence of psychodermatologic diseases is high and the relevance of this topic in mental health has been better considered nowadays. Psychological factors seem to have a role in the etiology and may worsen several dermatologic pathologies. Indeed, psychological stress has been related to the damage in the epidermis and aging skin. Moreover, in some dermatologic patients we can find an important psychiatric background. There is also evidence that the correlation between psychopathology and skin disease may involve a vicious cycle. The etiopathogeny of the connection between mind and skin and, thereby, the etiopathogeny of psychodermatologic diseases involves the fields of embryology, immunology, neurology and endocrinology.

**Conclusions:** The results of this qualitative systematic review point out the high prevalence of psychodermatologic diseases and the growing evidence of the mind-skin correlation both at biological and clinical levels. That correlation should be remembered and explored in the clinical practice. All in all, this knowledge could improve the treatment of many patients.

**Keywords:** Skin. Psychological stress.

## ADOLESCENT TOBACCO CONSUMPTION

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**Framework:** During the development of the adolescent identity, habits normally associated with adulthood tend to be imitated, namely tobacco consumption. Studies have shown that during this stage the majority of adolescents consume tobacco with their peers, therefore feeling more independent, with an increased feeling of satisfaction, self-affirmation and social acceptance.

**Goal:** Develop a profile of the adolescent smoker.

**Methods:** Descriptive, correlational and transversal study, based on a sample of 971 students with ages between 14 and 21 following the Sociodemographic Characterization Questionnaire as well as the Tobacco Consumption Scale (Precioso, 2007).

**Results:** The results revealed 62.0% of the adolescents are or were smokers (63.0% female vs 60.6% male). The highlighted reasons to smoke the first cigarette were “wanting to know it felt” (74.3%), “the friends offered” (9.3%), “saw my friends smoking” (6.7%) and “wanting to be like the other smokers” (0.5%). Daily smokers (13.4% female; 21.9% male). The cigarettes were purchased in a tobacconist or in a café (60.0%). Mothers (63.6%), teachers (63.0%), fathers (58.6%), best friends (49.2%) and brothers (37.3%) talk more about the disadvantages of tobacco. About 60% of adolescents decline a cigarette offered by his friends, but 27.8% accept it due to the persistence from his peers.

**Conclusions:** Smoking is a global and complex phenomena whose repercussions reflect on individual and public health. The profile presented for the adolescent smoker provides clues on how to tackle this global problem.

**Keywords:** Adolescent. Consumption. Tobacco.

## THE ASSOCIATION BETWEEN INFANT DEVELOPMENT AND MOTHER-INFANT QUALITY OF INTERACTION IN FREE PLAY ACTIVITIES

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**Introduction:** The mother-infant quality of interaction may influence the infant development in different levels.

**Objectives:** To assess mother-infant quality of interaction, infant development and family resources and their interactions.

**Methods:** Descriptive, correlational study including a random sample of 42 Portuguese healthy infants and their parents. At 11 months, mothers described their infants' temperament using the Temperament Scale (Lopes dos Santos, Fuertes & Sanches-Ferreira) and identified their family resources with Family Support Scale Family Inventory (Dunst, Jenkins & Trivette); Family Needs Survey (Bailey & Simeonsson) and Parent Responsibility Scale (McBride & Mills). Child development was assessed using The Schedule of Growing Skills II (Bellman, Lingam & Aukett). At 12 months, mothers were observed and taped playing with their infants; videos were scored with Care-Index (Crittenden) to assess mothers's sensitivity.

**Results:** The quality of mother-child interaction was strongly related with infant development outcomes. The infants with better development indicators (e.g., manipulation, vision, speech-language, hearing, language, social interaction and cognition) tended to be more cooperative and had more sensitive mothers. Autonomy was negatively correlated with maternal control and social interaction. Speech-language was negatively associated with maternal passivity. Mothers with higher education levels received more help from fathers and exhibited higher scores on maternal sensitivity.

**Conclusions:** Maternal sensitivity is associated with infant development. In turn, infants with better developmental outcomes were more cooperative, engaged and reciprocal when playing. Infant development and mother-infant quality interaction are mutual affected.

**Keywords:** Infant development. Mother-infant interaction.

## FACTORS ASSOCIATED WITH PHYSICAL, EMOTIONAL AND SOCIAL STRAIN ON INFORMAL CAREGIVERS

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**Introduction:** The assumption of the role as a caregiver has an impact on life that interferes with the welfare of caregiver.

**Objectives:** Identify the factors associated with physical, emotional and social strain on informal caregivers.

**Methods:** A quantitative and descriptive study with a sample of 139 informal caregivers. The evaluation form includes Socio-Demographic Questionnaire, Instrumental and Expressive Social Support Scale (Paixão & Oliveira, 1996) and Zarit Scale.

**Results:** 25.2% of participants were male and 74.8% were females aged between 32 and 90 years. Most caregivers are married (81.3%), have low literacy (74,1%) and are professionally inactive (69.8%).

They are mostly spouses / partners of the dependent person (48.9%) or son (33.8%), 30.9% do not have any care support, spend an average of 19.14 hours per day on caring, since the household consists of only one element (66.4%) and most (87.1%) coexist or cohabit with the dependent person. There is an influence of kinship, number of members of the household, the number of hours spent in care and type of support for the burden on the informal caregiver.

**Conclusions:** It is essential for the understanding of the burden to know the reasons that trigger this situation, what the negative impact is on the welfare of the caregiver, which can jeopardize the continuity and quality of care provided to patients.

**Keywords:** Informal caregiver. Overload. Zarit Scale.

## THE INFLUENCE OF ALCOHOL CONSUMPTION IN SUICIDAL IDEATION

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**Introduction and objectives:** The presence of suicidal ideation is an important predictor of suicide attempts in young people and is therefore associated with suicide risk. Several studies point to significant associations between suicidal ideation and alcohol consumption in young people. The objectives of our study are to deepen knowledge about the concepts related to alcohol consumption and suicidal ideation; identify the influence of alcohol and suicidal ideation in students of SVPC. This research is based on a model of quantitative, analytical cross-sectional, descriptive and correlational research. 260 students participated in the School of Health of Viseu. The assessment protocol includes sociodemographic questionnaire, the Involvement Scale for Adolescents with Alcohol Filstead & Mayer (1979) adapted by Source & Alves (1999) and the Suicidal Ideation Questionnaire - QIS - Reynolds (1988) adapted for Portuguese population by Ferreira and Castile (1999).

**Results:** When analyzing the influence of alcohol in suicidal ideation We noticed that 69.9% of students began drinking after age 15. The reason for this is linked to early onset curiosity (61.3%). Yet we found that 87.2% of the total sample are habitual drinkers without problems and 3.3% problem drinkers. Through this study found that 3.1% of young people had suicidal ideation.

**Conclusions:** With this study it was found that the consumption of alcohol in suicidal ideation is a factor to be taken into account since, found problem drinkers and young people with suicidal ideation, a small percentage. We can thus conclude that the rate of mental health in our school is very positive.

**Keywords:** Suicidal ideation. Alcohol consumption. Young people.

## SEX EDUCATION IN SCHOOLS: WHAT TEENAGERS REALLY KNOW?

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**Introduction:** In the current framework of guidance considers the obligation to address sexual education in schools in Portugal (Law No. 60/2009 of 6 August, Order No. 196-A/2010 of 9 April).

**Objectives:** To identify students knowledge in relation to new legislation and basics of sex education.

**Methods:** Cross-sectional study with a sample with 530 students from secondary schools of a northern region of Portugal. The assessment protocol includes sociodemographic questionnaire (Correia 2004) and it was applied from October to December of 2011. Data analysis was performed using SPSS. The informed consent was obtain from schools.

**Results:** The proportion of students who know the current law on sex education in schools is 37.4%, the proportion of female students who know this law is greater than that of males (41.3% vs. 32.2%). Exist a statistical significant association between this knowledge and sex ( $p = 0.037$ ), continuing the girls the most informed group. About 30% of students in this sample doesn't identify basic concepts of sexual and reproductive health and family planning neither sexually transmitted infections. In relation to knowledge about contraception also found a statistical significant association with sex ( $p < 0.000$ ), with a higher proportion of knowledge for the female group who also knows more than a contraceptive method (78.7% vs 55.7%).

**Conclusions:** The weak information of adolescents knowledge about sex education and gender differences still seem to persist in spite of the existence of sex education in schools from Portugal. Maybe sex education should be a subject in a curriculum from a school, being responsible for this subject a teacher that must be specialized in the area of sexuality.

**Keywords:** Teenagers. Sex education. knowledge.

## APPETITE, EATING AND SMOKING HABITS: A STUDY IN BRAGANÇA

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**Introduction:** The literature indicates a strong relationship between smoking habits and food choices (Chatkin et al, 2007). We conducted a cross-sectional study with the aim of studying the relationship between smoking habits with appetite, consumption of coffee, alcohol, energy consumption, energy balance and macronutrient distribution.

**Methods:** A questionnaire was sent to employees in the region of Bragança (Portugal), for institutional e-mail. It was questioned about their lifestyles, food intake through three days food recall, using photography to estimate the portion size. Each participant took photographs of all meals and beverages (one before and another after consumption) during two weeks and one weekend days. The portions size were estimate by dietitians and calculate the energy and macronutrients consumption and energy balance. The data were analyzed using SPSS through Chi-square, Fisher's Exact, Kruskal-Wallis and Mann-Whitney Tests.

**Results:** 129 individuals answered the questionnaire, but only 20 participated in the photographic food recall. It was found that 20% were smokers with an average caloric intake of  $2192.2 \pm 317.4$  kcal, 60% of non-smokers with  $2168.6 \pm 635.4$  kcal and 20% of ex-smokers with  $2166.9 \pm 292.5$  kcal. It was found an association between smoking habits and coffee consumption ( $p = 0.020$ ,  $\Phi = 0.206$ ), alcohol ( $p = 0.005$ ,  $\Phi = 0.250$ ) and appetite ( $p = 0.028$ ). No association was found between smoking habits and total energy, energy balance and macronutrient distribution.

**Conclusions:** Dietary intake and macronutrient distribution were not related to the smoking habits. However, it was found a weak association between coffee and alcohol consumption and smoking habits. Also, it was found that ex-smokers have increased appetite.

**Keywords:** Smoking habits. Eating habits. Appetite.

## DETERMINATION OF ASCORBIC ACID AND ACETYSALICYLIC ACID IN COMMERCIAL PREPARATIONS USING AN ELECTRONIC TONGUE

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**Introduction:** The electronic tongue is a multi-sensors system used to identify the basic standards of taste, such as sweet, salty, sour and bitter, at levels not detectable by humans. Although the main purpose of electronic tongue is the qualitative analysis, the quantitative analysis of substances in a liquid matrix is also possible, having been the subject of these preliminary studies the application of electronic tongue to pharmaceutical products. In this way, the aim of the current study was the quantitative analysis of ascorbic acid (AA) and acetylsalicylic acid (ASA) in several commercial preparations using an electronic tongue.

**Methods:** For that, solutions of standard compounds or of commercial preparations contain ascorbic acid and acetylsalicylic acid were analizes by an electronic tongue. The obtained data were using to determine the concentrations of the solutions thought através do multiple linear regression method.

**Results:** The preliminary tests showed that it is possible to quantify the ascorbic acid in effervescent formulations of vitamin C, using the predictor model obtained by multiple linear regression. In the case of acetylsalicylic acid it was verified that the matrix of the analgesics or antipyretics drugs significantly affect the signs of the electronic tongue.

**Conclusions:** The electronic tongue can be used determined ascorbic acid in effervescent formulations while it is necessary developed more selective sensors to acetylsalicylic acid in order to improve the predictive power of electronic tongue quantification of this compound.

**Keywords:** Electronic tongue. Quantitive analysis. AA. ASA.

## THE STUDY OF SLEEP QUALITY AND DAYTIME SOMNOLENCE IN THE STUDENTS OF ESCOLA SUPERIOR DE TECNOLOGIA DA SAÚDE DE LISBOA

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**Introduction:** The higher education students are known by their variable schedules. Due to this, they are one of the populations more susceptible to the sleep quality changes. These changes belong to a range of emergent concerns from our society, mainly because they are related with mental, cognitive and behavioral problems.

**Objectives:** The main objective of this study is characterizing the quality of sleep and the daytime somnolence in the ESTeSL's students (undergraduate degrees).

**Methods:** There was made a descriptive, quantitative and transverse study through a survey. This instrument was sent by email for all the students.

**Results:** We noticed that after students' admission in the university: they sleep fewer hours and they go to bed later. 60.3% of students has a poor sleep quality and 51.5% has a grade of excessive daytime somnolence. The comparisons between social habits and the student's residence area with the sleep quality don't have statistically significant differences. In relation to the students with

an excellence academic profile, they have a better sleep quality and a higher grade of daytime somnolence.

**Conclusions:** The majority of the included students in this study have a poor quality of sleep and a higher daytime somnolence. The sleep quality is influenced by the entrance of the students to the university, by the residence area during the school year and with the consumption of tobacco, alcoholic drinks, coffee and with other stimulating drinks. We even conclude that the sleep quality influences the academic profile.

**Keywords:** University students. Sleep quality. Somnolence.

## THE RESEARCH ON DEVELOPMENTAL DISABILITIES AND FRAGILE X SYNDROME IN LIFE COURSE PERSPECTIVE

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**Introduction:** The "Life-Course Perspective", assuming that the course of life and development of each individual are strongly linked and marked by the historical, social and cultural moment in which he lives, has been increasingly used to study the life path of people in particular situations, such as disability.

**Objectives:** Evaluate the usefulness of the Life Course Perspective studying the FXS families and children and its pathway: a) family inclusion; b) inclusive education; c) social inclusion.

**Methods:** This is an exploratory qualitative study, conducted in a Grounded Theory approach, based in 60 interviews with parents of boys aged between 4 and 31 years old, with Fragile X Syndrome full mutation.

**Results:** Emerged from the data a central category on the path of development and inclusion that organizes and deploys six other categories that are major milestones in the path of inclusion of children with FXS: a) first signs; b) diagnosis; c) early childhood education; d) 1st cycle of basic education; e) school transitions f) leaving the education system.

**Conclusions:** A Life Course Perspective seems to be an approach potentially useful in the planning and organization of studies about the population with developmental disabilities. Studies in this perspective can be used to place individuals in the here and now, combining a bio-psycho-social perspective and a contextual perspective. The results of the studies in this perspective can have a good applicability since identifying and understand the more outstanding moments, processes and factors.

**Keywords:** Fragile X syndrome. Disability. LC perspective.

## PHYSICAL EXERCISE, SATISFACTION WITH LIFE AND PSYCHOLOGICAL WELL-BEING IN PORTUGUESE WOMEN

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**Introduction:** The promoting the practice of physical exercise, associated to important implications of physical order and psychological health, has been of concern for institutions and professionals in the health and education. The study has as main purpose the evaluation of the effect of the practice of exercise upon satisfaction with life and psychological well-being, in a sample of Portuguese women.

**Methods:** The sample was constituted by 102 women, in which 48 practice and 54 do not practice physical exercise, with ages between 18 and 60 years of age. The variables were measured by Portuguese valid scales: Physical Activity Measures, to evaluate the practice of physical exercise; Scale of satisfaction with life (SWLS) used to evaluate the satisfaction with life and Scale of well being (EBEP) used to evaluate psychological well being.

**Results:** There are significant influences the practice of physical exercise on the psychological well being. The ones who practice show a larger rate of well being (in the domains of the environment and objectives of life) compared to the women that do not practice physical exercise; there is a significant effect of the practice of physical exercise in the perception of affects. Women that do not practice physical exercise present a larger level of negative affects. Also there is a significant association between satisfaction with life and the age; there are statistically significant differences in satisfaction with life due to the civil state, where it was found that married and unmarried women compared to unmarried, have better life satisfaction regardless of practice or not practice physical exercise.

**Conclusions:** This study reinforces the importance of the practice of physical exercise for a positive psychological function.

**Keywords:** Physical exercise. Psychological well-being. Women.

## IN VITRO DISSOLUTION STUDY IN PREDICTING ORAL ABSORPTION OF DRUGS CONTAINING PARACETAMOL USING AN ELECTRONIC TONGUE

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**Introduction:** The bioavailability of drugs is essential for the therapeutic efficacy of medicines, and it is therefore essential to conduct dissolution studies of drugs. The electronic tongue has been demonstrating potential usefulness in this area.

**Objectives:** Verify the potential of electronic tongue in the analysis of paracetamol in different drugs; verify the ability to cross-sensitivity sensors in dissolution studies; selecting a lipidic polymer membrane electrode with good performance in monitoring of samples dissolution.

**Methods:** Four samples of medicines containing 500 mg of Paracetamol: unbranded uncoated pill, branded uncoated pill, unbranded coated pill and branded coated pill have been used. We used a dissolution medium simulating the gastric fasting conditions. The polymer membranes were formed by mixing: 4 lipidic additives, 5 plasticizers and polymer polyvinyl chloride. After stabilization of the potential signals from all electrodes, each sample was placed in a metal tube in contact with the dissolution medium. The experiment ended when the tablet was fully dissolved. The assays were repeated three times for each sample.

**Results:** Yielded consistent dissolution profiles between repetitions of the same sample for some 40 tested sensors, including the 34 sensor which showed a similar behavior for both formulations. The uncoated pills obtained a dissolution profile of quick release (30'-unbranded; 25'-branded). The lengthy dissolutions resulted in different dissolution profiles between repetitions of the same sample of coated pills and capsules.

**Conclusions:** The dissolution profile of drugs containing acetaminophen was followed through 40 potentiometric sensors having cross-sensitivity is selected sensor 34, which allow obtaining reproducible results.

**Keywords:** Drug dissolution. Electronic tongue. Paracetamol.

## THE ISOLATION OF PATIENTS WITH TUBERCULOSIS (TB): A REFLECTION ON THE PLACE OF THE OTHER IN SOCIETY

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**Introduction:** The isolation room under negative pressure is adequate to the person with contagious TB environmental control measure. In this study, we chose to discuss the context of isolation for TB, grounded in philosophical and social concepts of Michel Foucault (1975, 1984).

**State of the Art:** The concept of the "Other" can be addressed in different levels, but when Foucault describes heterotopias of crisis, changes in health were factors in his isolation in places that can be understood as "the Other Place". We identify this logic the "I" in all other members of a society considered normal. The "Place of the Other" as an identifiable space is described by a physical place.

**New Perspectives:** A person with TB in isolation takes the transient identity of the "Other" in society by stereotypical reclusive be accurate due to poor health situation and the risks assumed transmission and exposure of society. The existence of a space of isolation enables other existing spaces in a culture are represented, contested and opposed.

**Theoretical and practical implications:** Isolation for TB is a relationship between space and power, recreating an architectural device a social model, where one can observe the presence of those who watch and those who are watched, in the context of similar disciplinary system heterotopia of crisis and deviation.

**Conclusions:** Isolation is not comparable to a penitentiary institution. It is an architectural space designed to accommodate a particular kind of sick at the same time, where a service of the collective good, the maintenance of order in the current disciplinary biopower system.

**Keywords:** Isolation. Tuberculosis. Architecture.

## ACUTE CHAGAS DISEASE IN BRAZIL: AN EPIDEMIOLOGICAL STUDY BETWEEN 2007 AND 2011

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**Introduction:** The epidemiology associated with Chagas disease is well known in its chronic form. The acute phase still little discussed presents diagnostic difficulties.

**Objectives:** To identify the clinical and epidemiological features of acute Chagas disease.

**Methods:** The study is cross-sectional and descriptive. Data were collected in the Information System for Notifiable Diseases in Brazil, in December 2013 The sample consisted of 791 new cases of Chagas disease with definitive laboratory diagnosis between 2007 and 2011 As new cases reported in the years 2012 and 2013 were not definitive, were excluded from this study. The indicators were described by descriptive statistics on two axes: risk and disease-disease-death, supported by SPSS 22.0 software.

**Results:** Men (51%) had the highest frequency of the disease. Infected women, 6% were pregnant. Most patients (31%) was 20-39 years. 81.2% had brown race. The primary site of infection was the household (89%). Most cases (94%) was located in the North, the Northeast, with 4.5% and the Midwest region 1.5% of cases. The South and Southeast regions had no cases in the period. The state of Pará had 80% of cases of the northern region, the State of Maranhão 83% of the Northeast and the State of Goiás 67% of cases the Midwest region. The forms of transmission were vertically (from 0.2%), through accidental (0.3%), blood transfusion (1%), vector form (8.5%) and oral (90%). The clinical evolution to death because mortis-Chagas was 2.5%.

**Conclusions:** It is important to emphasize the high clinical probability of death and the change to the oral route of transmission. More studies in acute Chagas Disease allow better diagnosis and prognosis.

**Keywords:** Chagas disease. Epidemiology.

## ACUTE CHAGAS' DISEASE IN BRAZIL: IMPLICATIONS FROM THE BRAZILIAN EPIDEMIOLOGICAL CONTEXT

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**Introduction:** Chagas disease is a trypanosomiasis caused by *Trypanosoma cruzi* common in South America In Brazil, the main cause related to this disease has been eradicated cycle. *Triatoma infestans*, but remains *Panstrongylus megistus*. In this study we chose to discuss the implications of acute Chagas disease, from Brazilian epidemiological framework.

**State of the art:** Watching the few articles related to this disease is not perceived consensus morbidity and the profile of those diagnosed, not having a real agreement as to age and disease prognosis.

**New perspectives:** The route of vector transmission is most historically relevant. However, it was noted that currently the mouth is the main way of transmission. This relates accidental ingestion of contaminated transmitting agent. It is noteworthy that the elimination of *Triatoma infestans* in Brazil and the recognition of how important oral transmission related to this epidemiological shift of the transmission channel causes.

**Theoretical and practical implications:** Not having the local evidence of inoculation, Romaña, depending on the ingested parasite load and immune status of the person, one perceives a greater or lesser degree of symptoms presented and hence morbidity. Establishes itself as major symptoms: fever, headache, myalgia, facial edema initially progressing to anasarca, lingual paresthesia, vomiting, abdominal pain and hepatosplenomegaly. The clinic for pericardial effusion and acute myocarditis are related to a worse prognosis of the case.

**Conclusions:** We highlight the lack of information for professionals and suggest guidelines guides that relate to the early symptoms associated with Acute Chagas, thus minimizing the risk of chronicity and morbidity.

**Keywords:** Chagas disease. Epidemiology. Oral transmission.