

MEETING ABSTRACTS

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Proceedings of the 3rd IPLeiria's International Health Congress

Leiria, Portugal. 6-7 May 2016

Published: 6 July 2016

Session 1: Citizenship in health

S1

Health literacy and health education in adolescence

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BMC Health Services Research 2016, **16(Suppl 3):S1**

Health literacy, a more complex concept than knowledge, is a required capacity to obtain, understand, integrate and act on health information [1], in order to enhance individual and community health, which is defined by different levels, according to the autonomy and personal capacitation in decision making [2].

Medium levels of Health literacy in an adolescent population were found in a study conducted in 2013/2014, being higher in sexual and reproductive health and lower in substance use. It was also noticed that the higher levels of health literacy were in the area adolescents refer to have receipt more health information. The health literacy competence with higher scores was communication skills, and the lower scores were in the capacity to analyze factors that influence health. Higher levels were also found in younger teenagers, but in a higher school level, confirming the importance of health education in these age and development stage. Adolescents seek more information in health professionals and parents, being friends more valued as a source information in older adolescents, which enhance the importance of peer education mainly in older adolescents [3].

As a set of competences based on knowledge, health literacy should be developed through education interventions, encompassing the cultural and social context of individuals, since the society, culture and education system where the individual is inserted can define the way the development and enforcement of the health literacy competences [4]. The valued sources of information should be taken into account, as well as needs of information in some topics referred by adolescents in an efficient health education.

References

1. Borzekowski D. Considering Children and Health Literacy: A Theoretical Approach. *Pediatrics*. 2009; 124: S282-S288.
2. Nutbeam D. The evolving concept of health literacy. *Soc Sci Med*. 2008; 67: 2072-2078.
3. Tomás C. Literacia em Saúde na Adolescência [Doctoral Thesis]. Oporto: Abel Salazar Institute of Biomedical Sciences of Oporto University; 2014.
4. Committee on Health Literacy. *Health Literacy: A Prescription To End Confusion*. Washington, D. C.: The National Academies Press, 2004.

Session 2: Evaluation & intervention in health

S2

The effect of a walking program on the quality of life and well-being of people with schizophrenia

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BMC Health Services Research 2016, **16(Suppl 3):S2**

Schizophrenia is a serious and chronic mental illness which has a profound effect on the health and well-being related with the well-known nature of psychotic symptoms. The exercise has the potential to improve the life of people with schizophrenia improving physical health and alleviating psychiatric symptoms. However, most people with schizophrenia remains sedentary and lack of access to exercise programs are barriers to achieve health benefits. The aim of this study is to evaluate the effect of exercise on I) the type of intervention in mental health, II) in salivary levels of alpha-amylase and cortisol and serum levels of S100B and BDNF, and on III) the quality of life and self-perception of the physical domain of people with schizophrenia. The sample consisted of 31 females in long-term institutions in the Casa de Saúde Rainha Santa Isabel, with age between 25 and 63, and with diagnosis of schizophrenia according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Physical fitness was assessed by the six-minute walk distance test (6MWD). Biological variables were determined by ELISA (Enzyme-Linked Immunosorbent Assay). Psychological variables were assessed using SF-36, PSPP-SCV, RSES and SWLS tests. Walking exercise has a positive impact on physical fitness (6MWD – $p=0.001$) and physical components of the psychological tests ([SF-36] physical functioning $p < 0.05$; [PSPP-SCV] functionality $p < 0.05$ and SWLS $p < 0.05$ of people with schizophrenia. The walking program enhances the quality of life and self-perception of the physical domain and physical fitness of people with schizophrenia.

S3

Diagnosis and innovative treatments - the way to a better medical practice

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BMC Health Services Research 2016, **16(Suppl 3):S3**

O36**Sleep problems among Portuguese adolescents: a public health issue**

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BMC Health Services Research 2016, **16(Suppl 3):O36**

Background

Recent studies have shown that sleeping problems, particularly during adolescence, are an important public health problem. During adolescence many biological, psychological and social factors interact, resulting in shortening of sleep duration, excessive sleepiness, insomnia and delayed sleep phase syndrome. The aim of this study was to determine the prevalence of sleep problems in adolescents.

Methods

In a cross-sectional approach we assessed 7,354 students (3944 females), aged 11 to 20 years from twenty-six schools of the district of Viseu, Portugal. Data was collected using a self-administered questionnaire answered by the students in the classroom. Insomnia was defined based on the Diagnostic and Statistical Manual of Mental Disorders IV criteria. Daytime sleepiness was assessed by the Epworth Sleepiness Scale and we considered as "insufficient" less than 8 hours of night sleep.

Results

The prevalence of "insomnia" was 8.3 % and of "insomnia symptoms" 21.4 %. The prevalence of "difficulty initiating sleep", "difficulty maintaining sleep", "early morning awakening" and "non-restorative sleep" was 8.9 %; 8.2 %; 6.1 % and 5.6 %, respectively. The prevalence of insomnia and symptoms of insomnia were higher among the female gender ($p < 0.001$). Each symptom was more prevalent among the female gender ($p < 0.001$). The prevalence of daytime sleepiness was 33.1 % and of insufficient sleep 29.0 %. Both were higher among the female gender ($p < 0.001$). Only 6.4 % of the adolescents reported to lie down every night at the same hour.

Conclusions

Sleep problems in Portuguese adolescents are common. The results of this study suggest the need for comprehensive programs to prevent sleep problems in Portuguese adolescents.

Keywords

Sleep problems, Insomnia, Daytime sleepiness, Insufficient sleep, Adolescents

O37**Association between body fat and health-related quality of life in patients with type 2 diabetes**

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BMC Health Services Research 2016, **16(Suppl 3):O37**

Background

There is increasing evidence that obesity is associated with a decline in health-related quality of life (HRQOL). Objective: This cross-sectional

study aimed to analyse the relation between body fat and HRQOL in patients with type 2 diabetes.

Methods

The SF-36v2 questionnaire was administered to 95 individuals with type 2 diabetes (47 women and 48 men; 66.23 ± 6.34 years old; 10.55 ± 7.55 years of diabetes; 37.47 ± 8.19 % of body fat) candidates to Diabetes em Movimento®, a community-based lifestyle intervention program developed in Vila Real, Portugal (NCT02631902). Body fat was assessed by bioelectrical impedance analysis technique (Tanita, BC-418 MA). Pearson's correlation coefficients were used to evaluate the associations between each SF-36v2 scale (physical functioning, PF; role physical, RP; bodily pain, BP; general health, GH; vitality, VT; social functioning, SF; role emotional, RE; mental health, MH) and summary scales (physical component score, PCS; mental component score, MCS), and patient's body fat.

Results

Negative and significant correlations were observed between body fat and PF ($r = -0.331$; $p = 0.001$), BP ($r = -0.324$; $p = 0.001$), VT ($r = -0.336$; $p = 0.001$), SF ($r = -0.231$; $p = 0.025$), RE ($r = -0.280$; $p = 0.006$), MH ($r = -0.310$; $p = 0.002$), PCS ($r = -0.234$; $p = 0.023$), and MCS ($r = -0.230$; $p = 0.026$), respectively.

Conclusions

High levels of body fat are associated with impaired HRQL in patients with type 2 diabetes, possibly compromising the individuals' ability to perform daily activities.

Keywords

Health-related quality of Life, obesity, type 2 diabetes

O38**Therapy adherence and polypharmacy in non-institutionalized elderly from Amares county, Portugal**

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BMC Health Services Research 2016, **16(Suppl 3):O38**

Background

Polypharmacy is frequent in elderly, and therapy adherence is a crucial component to achieve the effectiveness of treatment, although the complex therapies in elderly can lead to therapy non-adherence, increasing costs and several health risks. Objective: To estimate the prevalence of therapy adherence, polypharmacy and associated factors in elderly.

Methods

This cross-sectional study was based on a questionnaire, with the MAT scale (Measure of Adherence to Therapy) validated for the Portuguese population [1], applied to 159 elderly (≥ 65 years) living in their home in Amares county, in the north of Portugal. To assess therapy adherence, those whose average adherence levels were ≥ 5 were called "adherent", and considered as polymedicated seniors taking ≥ 5 drugs. It was used descriptive statistics, correlations were accessed using the qui-square test and adjusted residuals (AdR) for variables categories, with a significance level of 5 %.

Results

The sample consisted mainly of females (54.7 % vs. 45.3 %), aged between 65 and 96 years old (mean 74.6), while 50.3 % was between 65-74 years old. The participants show good therapy adherence (69.8 %), being highly polymedicated (58.5 %) with an average of 5.5 different drugs administered per day. Non-adherence was associated with having mental disorders ($p = 0.002$) and respiratory system diseases (AdR = 2.0), and seems to be related with being polymedicated (AdR = 1.7) and bad health perception (AdR = 1.3). Having hypertension,

cholesterol, depression, mental disorders ($p=0.001$), pain ($p=0.003$) and diabetes ($p=0.014$) were also related to polypharmacy.

Conclusions

This study shows a considerable prevalence of therapy adherence and polypharmacy, being several factors associated with these phenomena.

References

1. Delgado A, Lima M. Contributo para validação concorrente de uma medida de adesão aos tratamentos. *Psicologia, Saúde & Doenças*. 2001; 2(2): 81-100.

Keywords

Elderly, non-institutionalized elderly, polypharmacy, therapy adherence, therapy non-adherence

O39

Prevalence of surgical site infection in adults at a hospital unit in the North of Portugal

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BMC Health Services Research 2016, **16(Suppl 3):O39**

Background

Infection of the surgical site is one of the most frequent infections associated with health care. Objective: To identify the prevalence of surgical site infection in adults at a hospital in the North of Portugal.

Methods

A prospective study carried out at a hospital in the north of Portugal in 2015. Inclusion criteria: having been hospitalized in surgical and obstetrics services in the past 24 hours, aged 16 years or more, undergoing colon surgery, gallbladder and caesarean section. A sample of 579 participants was obtained. The characterization of the patient and the surgery was performed using an inquiry application in the first 24 hours after surgery, and the registration of the infection at the time of occurrence within 30 days following the procedure.

Results

Among the 579 participants 53.4 % were females, with an average age of 57.1 years (17-97 years), 64.1 % underwent prophylactic antibiotic therapy, in 52.7 % the surgery was urgent, 6.6 % underwent surgery laparoscopically, 70.0 % of the surgeries occurred in the surgery department, of which 33.3 % were cholecystectomy. Predominantly the wounds were clean (62.0 %). The average wait for surgery was 7 days, for admission 12 days and average surgical time 59 minutes. There was a 6.0 % prevalence of surgical site infection and *Escherichia coli* accounted for 47.8 % of them. The average time of onset was 9 days and the organ/space was the most affected site (48.6 %).

Conclusions

Prevalence of infection was 6.0 %. It is suggested to carry out further studies that show factors associated with this type of infection.

Keywords

Surgical Wound Infection, *Escherichia coli*, Prevalence

O40

Frailty phenotype in old age: implications to intervention

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BMC Health Services Research 2016, **16(Suppl 3):O40**

Background

The Frailty Phenotype is a syndrome composed of five criteria: weight loss, endurance, physical activity, slowness and weakness. An older person is considered to be frail if being impaired in three of these domains. This study aims to identify predictive factors of the frailty condition that may be considered for intervention.

Methods

A representative sample, stratified by age group, of elders living in the community ($n=339$) was assessed and logistic regression models conducted.

Results

Predictive factors were gender (woman) OR 1.7, 95 % CI 1.0 – 2.8), age (more advanced) (OR 2.8, 95 % CI 1.6 - 4.9) and educational level (no schooling) (OR 2.6, 95 % CI 1.1 – 6.0). The bio behavioural variables and the low respiratory flow predicted the frailty condition (OR 3.3, 95 % CI 1.9 – 6.0). Geriatric indicators as falls (OR 3.3, 95 % CI 1.5 - 5.6), changes in sensorial processes (OR 2.1, 95 % CI 1.2 -3. 8; OR 2.1, 95 % CI 1.1 - 4.0 respectively), comorbidity (OR 1.8, 95 % CI 1.0 - 3.2) were also predictors of frailty. Impairment in ADL increases the risk of frailty (OR 2.1, 95 % IC 1.2 -3.5). The presence of depressive symptomatology (OR 4.2, 95 % IC 1.9-9.2) and cognitive deterioration (OR 2.9, 95 % IC 1.6 -5.3) are equally predictive of this condition.

Conclusions

These biopsychosocial predictors were all considered in an intervention program.

Keywords

Elders, frailty, predictive factors, intervention

O41

Portuguese women: sexual symptoms in perimenopause

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BMC Health Services Research 2016, **16(Suppl 3):O41**

Background

Cultural differences in sexual symptoms exist, and should be measured in perimenopause, including the following symptoms: loss of interest in sex, vaginal dryness, satisfaction and pain during intercourse. The measurement of these symptoms provides a comparison between studies.

Methods

A cross-sectional study, correlational; with a non-probabilistic convenience sample ($n=600$ Portuguese women perimenopause, 45 - 55 years) was performed. Protocol included: Menopause Rating Scale; attitudes and beliefs before menopause (built and validated by us); Social Support Satisfaction Scale, Scale, levels E2; FSH, sociodemographic; lifestyle and projects, perception of subjective well-being and stressful events.

Results

Regarding the influence of different factors included in the final model on the probability of a woman having reported uncomfortable sexual