

pre-school and 1st cycle of basic education in the city of Bragança, in the academic year 2014/2015. Statistical analysis was performed on the SPSS program, v. 20.0. It was used descriptive statistics; correlations were accessed using Spearman and qui-square tests, considering the significance level of 5%.

#### Results

The results revealed that 86% of parents use drugs without prescription, of these 49% resort to this practice under the influence of ancient medical guidelines and 28% under the influence of information transmitted in the pharmacy. Mostly parents (53%) resort to self-medication to relieve fever or treatment of influenza symptoms (14%) of their children. No statistically significant factors related to the use of non-prescription medication in children were found.

#### Conclusions

Paediatric self-medication is a common practice, especially made based on old medical guidelines. No explanatory factors have been found for this paediatric self-medication.

#### Acknowledgements:

The authors thank Fundação para a Ciência e a Tecnologia (FCT, Portugal) and the infrastructure FEDER under the PT2020 program for financial support to CIMO (UID/AGR/00690/2013).

#### Keywords

Children, Pediatric medicines use, Pediatric self-medication, Pre-school children, Primary school children.

### O156

#### Sleep and perimenopause: contributions to its management

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BMC Health Services Research 2018, 18(Suppl 2):O156

#### Background

There are large geographical differences in the prevalence of menopausal symptoms. Given the differences in study methodologies, it has been difficult to establish comparisons. In middle-aged women, sleep disorders are quite prevalent problems and are sometimes attributed directly to the menopausal transition. Based on the conceptual framework proposed by Meleis and Schumacher, we consider that recent changes in the sleep pattern are an indicator of the transition process, assuming that they can interfere with quality of life, and that we can try to identify the conditions/factors associated with this change.

#### Objective

To evaluate sleep disorders and related factors in perimenopausal women.

#### Methods

This was a cross-sectional study, correlational; with a non-probabilistic convenience sample, in which 600 Portuguese perimenopause women (45–55 years) were requested to complete: the Menopause Rating Scale (MRS), Scale of attitudes and beliefs about menopause and the Satisfaction Scale Social Support; Self-Esteem Scale. Semi-structured interviews collected: socio-demographic and socio-economic data; lifestyle data; psychological data - global health perception; stressful life events; perception of the recent change of body image; have life projects and data on health history. Physical examination included: blood collection for determination of follicle stimulating hormone (FSH) and estradiol (E2), weight, height, and abdominal measurements. Women signed informed consents after exhibition of the study objectives and after guaranteeing anonymity and confidentiality.

#### Results

In this study 43.5% of the women reported having no problems with sleep; 18.2% light intensity problems; 10.2% moderate intensity and 28.2% very intense problems. In relation to the influence of the different factors included in the final model on the probability of a woman having reported uncomfortable sleep problems, the logistic regression Forward: LR revealed that the conditions of socio-

demographic and socioeconomic factors: level of education ( $b_{\text{basic education}}=0.933$ ,  $X^2_{\text{wald}(1)}=4.386$ ,  $p=0.035$ ,  $OR=2.222$ ), the conditions of the psychosocial factor: attributed meaning menopause ( $b_{\text{positive meaning}}=-0.504$ ;  $X^2_{\text{wald}(1)}=6.262$ ;  $p=0.012$ ;  $OR=0.604$ ), satisfaction with social support ( $b_{\text{family support}}=-0.154$ ,  $X^2_{\text{wald}(1)}=10.849$ ,  $p=0.001$ ,  $OR=0.857$ ), attitudes and beliefs regarding menopause ( $b_{\text{changes health aging}}=-0.207$ ;  $X^2_{\text{wald}(1)}=10.634$ ,  $p=0.001$ ,  $OR=0.813$ ), attitudes ( $b_{\text{physical changes}}=-0.130$ ,  $X^2_{\text{wald}(1)}=5.282$ ;  $p=0.022$ ;  $OR=0.878$ ); have projects ( $b_{\text{do not have projects}}=-0.662$ ;  $X^2_{\text{wald}(1)}=9.907$ ;  $p=0.002$ ;  $OR=0.516$ ) and the condition of the lifestyle factor: number of feed ( $b_{\text{number of feed}}=-0.285$ ,  $X^2_{\text{wald}(1)}=10.658$ ,  $p<0.001$ ,  $OR=0.752$ ), presented a statistically significant effect, significant difference on the Logit of the probability of a woman having referred problems, according to the adjusted Logit-model ( $G^2(10)=173.916$ ;  $p<0.001$ ;  $X^2_{\text{wald}(8)}=6.484$ ;  $p=0.593$ ;  $R^2_{CS}=0.252$ ;  $R^2_N=0.342$ ;  $R^2_{MF}=0.218$ ).

#### Conclusions

Problems with sleep can be considered a negative indicator of processes in perimenopausal women. The model suggests some modifiable factors, specifically: eating habits, attitudes, beliefs and meaning attributed to menopause, and importance of satisfaction with family social support. These aspects should be included in the initial nursing assessment and risk evaluation of women who cross this period, in the sense of adequately managing nursing interventions.

#### Keywords

Problems, Sleep, Menopause.

### O157

#### Preschooler's executive and socio-emotional functioning: effects of two intervention programs- Psychomotor therapy and Creative Dance

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BMC Health Services Research 2018, 18(Suppl 2):O157

#### Background

The preschool years represent a critical time period for the development of children's executive functioning and socio-emotional competences [1] and therefore it is the ideal period for the stimulation of these competencies [2, 3]. Interventions with children in preschool age should privilege spontaneity, creativity and play as a method of learning and stimulation [4, 5]. Psychomotor therapy and Creative Dance are two therapeutic approaches based on these principles [5, 6]. However, to date, no research has been done comparing the effects of Psychomotor therapy and Creative Dance.

#### Objective

The aim of this study was to examine the feasibility and the impact of two intervention programs, Psychomotor therapy versus Creative Dance, on the executive and socio-emotional functioning of preschoolers.

#### Methods

Fifty preschool children ( $M = 4.04$  years;  $SD = 0.67$ ) were divided into two intervention groups and a control group. An experimental group participated in 24 Psychomotor therapy sessions, mainly involving sensorimotor activities and games with rules. The other experimental group participated in 24 Creative Dance sessions. The control group maintained daily life activities. Cold executive functions, hot executive functions, externalized and internalized behaviours and aggressiveness were evaluated.

#### Results

The intervention programs were well tolerated by pre-school aged children. No significant differences were found in terms of intra- and inter-observer comparisons, except in the control group ( $p < 0.05$ ). Cold executive functions were negatively correlated to reactive aggressiveness ( $r = -0.408$ ,  $p = 0.003$ ).

## Conclusions

The results suggest that both programs were feasible and well tolerated in this age group, but their benefits were not evident. Increased working memory was associated with decreased levels of reactive aggression. This study alerts to the need for further research focused on pre-schoolers' executive and socio-emotional functioning, particularly on the effects of interventions programs.

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## Keywords

Executive functions, Mental health, Mind-body therapies, Psychomotor intervention.

## O158

### Impact of a 10 km race on inflammatory and cardiovascular markers: comparison between trained and untrained recreational adults

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*BMC Health Services Research* 2018, **18(Suppl 2)**:O158

## Background

Previous studies have found that trained athletes had lower changes in circulating levels of inflammatory biomarkers and cardiovascular stress than untrained athletes, upon prolonged or exhausting exercise. Particularly, recreational runners with less training showed higher risk of cardiac injury and dysfunction after a marathon. Presently, we are observing a steadily growing number of young and older adults engaging in running events without having a professional orientation or training, emphasizing the need to assess biochemical markers that allow the evaluation of the acute changes imposed in these recreational athletes.

## Objective

To compare the immediate and 24-hour effects of a 10-km run on inflammatory and cardiovascular biomarkers between recreational athletes, with and without specific running training.

## Methods

18 recreational athletes (38.5 ± 14.5 years), 10 men and 8 women, were recruited and divided in a trained and untrained group. Venous blood samples were taken prior to the 10km race (48 hours before),

immediately after (within 30 minutes), and 24 hours after the race. The following biomarkers were analysed by slot blotting assay: vascular endothelial growth factor (VEGF), interleukin 6 (IL-6), high sensitive C-reactive protein (hsCRP), ghrelin, matrix metalloproteinase-2 (MMP-2) and MMP-9.

## Results

The trained group completed the race in 50.3 ± 13.0 minutes *per* comparison to the 66.8 ± 5.6 minutes of the untrained group ( $p = 0.003$ ). A significant increase in circulating levels of hsCRP, ghrelin, VEGF and MMP-9 was observed immediately after the race in both groups; the levels of these biomarkers returned to baseline 24h post-race. A significant increase in IL-6 was also detected after the race in both groups, which returned to baseline levels at 24 hours post-race in the untrained group. Regarding MMP-2 levels, a significant increase was detected after the race only in the untrained that returned to baseline levels at 24 hours post-race.

## Conclusions

The impact of a 10-km race in the inflammatory and cardiovascular markers assessed in this study was different between recreational athletes, with and without specific training.

## Keywords

Biomarkers, Cardiovascular system, Exercise, Inflammation, Running.

## O159

### The health of the informal caregiver of dependent person in self-care

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*BMC Health Services Research* 2018, **18(Suppl 2)**:O159

## Background

Caring for a caregiver should be a constant concern and a responsibility of all health professionals, so that those who give care do not end up being uncared-for.

## Objective

This correlational study had the following main aims: to assess the level and prevalence of burden of the informal caregiver of a person dependent in self-care; to determine the relationship between the levels of burden and the informal caregiver's perception of their level of competence to be a caregiver.

## Methods

Participants in this study were 33 informal caregivers of self-care dependent-persons in at least one activity of daily living, to whom a structured interview was performed at the time of hospital discharge. The interview included socio-demographic and professional data, perception of the informal caregiver on their level of competence to be a caregiver, and the Portuguese version of the Zarit Burden Interview [1]. This study was approved by the National Data Protection Commission and the ethics committee of the hospital where the study was conducted (n° 24/2017).

## Results

The majority of dependent-persons were female (60.6%) with a mean age of 81.6 ± 11.3 years old, with the majority being dependent on all self-care activities. The mean age of caregivers was 61.4 ± 12.1 years old, mainly females. The family relationship was mostly a son/daughter (39.4%) or a spouse (33.3%), taking care of the patient on average at 63.9 ± .93 months. It was possible to verify that all caregivers had previous experience of caregiving to a family dependent. We also verified that the 33 caregivers presented a mean of 53.9 ± 15.8 on the emotional burden scale (maximum possible value of 110) which corresponds to little burden. We can also mention that 30.3% of the caregivers present no burden, 30.3%, present mild burden and 39.4% present intense burden. Regarding the relationship between caregiver burden, we verified that higher levels of informal caregivers