

O218**Preventive and corrective treatment of drug-induced calcium deficiency: an analysis in a community pharmacy setting**

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Background

Drug-nutrient interactions are not always valued in clinical practice. These interactions may result in drug-induced nutrient deficiency and therefore preventive and corrective treatments may be necessary. Pharmacy Technicians play an important role in identifying patients at risk. Objectives: To determine and characterise the values of the bone mineral density of patients using quantitative ultrasonic measurements of the calcaneus; to analyse the use of preventive or corrective treatment of drug-induced nutritional deficiencies and their consequences.

Methods

Observational analytic cross-sectional study performed in a Community Pharmacy in Porto with 103 individuals (82.5 % female) over the age of 40. Data collection was obtained through a structured questionnaire. Bone mineral density of the participants was quantitatively assessed by ultrasound of the calcaneus. Data were analysed using SPSS.

Results

Bone mineral density values were significantly lower in women ($0.405 \pm 1.07 \text{ g/cm}^3$ vs. $0.510 \pm 0.142 \text{ g/cm}^3$). There was also a more pronounced decrease with age. Sixty-six per cent of the patients were being medicated with at least one drug that could induce calcium deficiency. Of the patients at risk, only 24.5 % take any sort of oral supplementation. About 30% of patients at risk were never screened or treated for osteoporosis.

Conclusions

The quantitative assessment of bone mineral density by ultrasound of the calcaneus in the pharmacy, allows the tracking of high-risk individuals. Pharmacy Technicians and other health professionals must provide a greater awareness of drug-induced nutritional deficiencies and adopt measures to prevent and avoid negative effects on patient health.

Keywords

Food-Drug Interactions, osteoporosis, calcium, community pharmacy services

O219**Profile of mood states in physically active elderly subjects: Is there a relation with health perception?**

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Age-related psychological changes frequently express an increase in depressive symptoms and loss of vigour. A wide literature describes the benefits of regular physical exercise in mental health. However, concerning the elderly, the results are scarce. This study aimed to characterize the Profile of Mood States (POMS) in regular physically active elderly people. Moreover, we also intended to verify how the perception of

health status was associated with POMS and whether there are differences between the sexes.

The survey sample was composed by 279 elderly people (237 females and 42 males), aged between 65 and 92 years, practitioners of physical exercise. The POMS questionnaire was used to measure positive (vigour) and negative (tension, depression, hostility, fatigue and confusion) variables. A case history questionnaire was used to measure the perception of their state of health. The t-test and Mann-Whitney test were used to compare variables by sex. A Spearman test was used to test association of variables. The significance level was set at 0.05.

According to POMS, the results revealed that the typical positive iceberg profile exists in this sample, with higher values obtained in vigour and lower values in negative variables. This profile was even better in men compared to women ($p < 0.05$). The perception of health was higher in men and was positively associated with the vigour scale of POMS and negatively associated with negative variables of POMS.

These results suggest that regular physical activity may contribute to maintaining elderly psychological well-being which proved to be related with health perception.

Keywords

Elderly, physical exercise, POMS, health

O220**(Un)Safety behaviour at work: the role of education towards a health and safety culture**

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Work accidents are a constant and fatal reality in all countries. The main causes are related to precarious working conditions and to workers' inadequate behaviour. There is an obvious connection between behaviour and risk prevention at work. However, behaviour is not always the most important element in preventing labour accidents. Therefore, to promote a culture of health and safety among workers, it is fundamental to understand not only the role of education in fostering a conscientious behaviour prone to following safety procedures, but also the individual characteristics of each employee. In Portugal, work related accidents occur frequently among workers with low levels of education and training.

The objective of this paper is to explore the correlation between education and training programmes and the prevention strategy regarding labour risks in Portugal. Since the early 1990s, several national plans have been designed and implemented in order to assure the effective integration into school curricula of contents related to labour risks and health and safety at work. The National Programme for Education on Safety and Health at Work (PNESST) implemented in 2000 is the main example of the national strategy for education and training towards a culture of health and safety.

By examining the implementation of the PNESST and analysing the statistics of occupational accidents in Portugal, it is possible to determine that safety behaviour at work is related to the workers' level of information and training in safety and health. Undoubtedly, this approach can contribute to reduce the number of labour accidents.

Keywords

work accidents, workers' behaviours, education and training, health and safety culture

O221**Analysis of the entrepreneurial profile of students attending higher education in Portugal: the Carland Entrepreneurship Index application**

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