

Conclusions

In Portugal, the prevalence of supplementation consumption is still unknown, so it becomes necessary to raise awareness among the population, about potential risks associated with improper supplementation, special diets and unbalanced exercise.

Keywords

Vitamins supplements, Food supplements, Consumption, Knowledge.

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Stability of paediatric oral diazepam suspensions

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Background

Currently, hospital pharmacies prepare formulations that aim to adjust the medication to the needs of each patient when the pharmaceutical industry is not able to respond to those needs [1]. One of the formulations produced in the hospital pharmacy is the diazepam suspension 0.4 mg/ml for paediatric use, obtained from diazepam tablets. However, the use of tablets or powders in oral liquid formulations may alter the stability of the active ingredients. Therefore, these formulations should be submitted to stability studies [2]. Nevertheless, the information on the stability of manipulated oral suspensions is scarce [3], so this study is relevant.

Objective

The main goal of this study is to validate a method of diazepam quantification in suspensions. Additionally, we aim to evaluate the stability of diazepam in suspensions during 30 days, after the suspension preparation, establishing an expiration date.

Methods

The quantification method of diazepam in oral suspensions arose from the adaptation of the method described in Portuguese Pharmacopoeia [4], for the same active ingredient in tablets. After the method's validation, the stability of diazepam was evaluated weekly, during 30 days, and the first analysis was done immediately after the preparation of the suspension. During the study period, suspensions were stored under suitable cold conditions (4°C).

Results

With an accuracy, evaluated by the mean recovery of 80%, and a precision, evaluated by the variation coefficient, varying between 6.1 and 11.5%, the method proved to be practicable. Two suspension's samples were prepared with a similar diazepam concentration (0.43 mg/ml). The stability study of those suspensions showed that diazepam concentration decayed linearly, and that diazepam suspensions lose about 70% of their active principle within 30 days. Moreover, given the limits indicated by the Portuguese Pharmacopoeia [4] for diazepam tablets, it was verified that these suspensions only comply with these limits after 7 days, and that within the established period of validity these limits are no longer met.

Conclusions

Despite all limitations, the adapted method proved to be practicable and the results that followed have pointed to the possible instability of diazepam, when included in this oral suspension formulation. Given the dosage limits set for diazepam tablets [4] and knowing in advance that the validity period usually attributed to the suspension is 15 days, the results point to a new shelf-life of approximately 7 days. However, for a more consistent period of validity to be established, a more detailed stability study is required.

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Keywords

Diazepam suspensions, Chemical stability, Validation tests, Dosing method, Expiration date.

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First-time grandparents and transition to grandparenthood: integrative review of the literature

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Background

Nowadays families become smaller but at the present time a family involves several generations (even if they do not live together). The family members' roles change and the role of the grandparents in the transition of first-time parents to grandparenthood needs to be understood.

Objective

To systematize an integrative review of the literature related to the transition to grandparenthood in contemporary Western societies.

Methods

We conducted an integrative review of the literature, in electronic databases (EBSCO®, b-On® and Web of Knowledge®) in order to answer the question: "How is experienced the transition to grandparenting?" The search was limited to articles published between 2006-2016 years, with the descriptors "grandparents" and "transition" in English, French, Portuguese or Spanish.

Results

After analysing the abstracts of 179 articles, excluding repetitions, and those who did not respond to the original question, we obtained 13 articles to include in the integrative review. The level of the methodological approach was level 4. Only descriptive and qualitative studies (non-experimental) were included. The results of the literature review on the topic were grouped into five themes: grand-parenting and gender; become a grandfather/grandmother; parenting and the transition process; role and health; parenting and intergenerational relations.

Conclusions

It was found that the transition to Grandparenthood is studied in risk situations, and more studied in women than in men. Grandparenthood can be seen as a transition or as an adaptive process; as the search for the meaning of life; opportunity for personal growth; a normative event that has emotions and positive and negative cognitions. The process of becoming a grandparent can be considered an event of great social impact. Grandparents see their grandchildren as their extension in time and this gives them a more positive view of aging. The perception that grandparents have of themselves may be important in promoting a positive and healthy aging.

Keywords

Grandparenthood, Grandparents, Transition.

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Intestinal microbiota - impact on host health

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