Background & Objectives

Nowadays, the phenomenon of population ageing represents an worldwide problem, which assumes particular significance in Portugal (figure 1).

As they get older, individuals present more comorbidities and consequently consume an increasing number of drugs, which contributes to a growing drug therapy complexity. The institutionalized elders are particularly affected by this occurrence.

Drug therapy complexity is defined as the conciliator of several characteristics of the pharmacotherapy and can affect patient’s safety and medication adherence. It can be measured with Medication Regimen Complexity Index (MRCI), a scale published by George J et al (2004) (2).

This study aims to determine the drug therapy complexity of institutionalized elders in order to assess the need of pharmacotherapeutic follow-up.

Methods

Study design | Descriptive and cross-sectional
Year of study | 2009
Setting | Retirement homes in mainland Portugal
Sample size | 415 institutionalized elders
Scale | Medication Regimen Complexity Index (MRCI) (table 1)
Statistical analysis | Descriptive and comparative statistics with SPSS v.17

Results

The studied sample presented a mean age of 83.9 (±6.6) years old, with a range between [65 – 98] years. About 60.2% of sample are women.

The more frequently consumed drugs belonged to the follow three ATC groups:

- Cardiovascular system with 30.8%
- Nervous system with 27.7%
- Food tract and metabolism with 16.4%

Acetylsalicylic acid in low dosages (100 and 150mg) was the active substance more consumed with a representativeness of 31.8% of total consume. The more consumed dosage forms were tablets and capsules with 84.5%.

The MRCI presented an average value of 18.2 (±SD=9.6) with a range of [2–53.5]. The most determinant factors that contributed to the drug therapy complexity were the number of consumed drugs and dosing frequency.

The drug therapy complexity evaluated by MRCI was related to the drugs number, but also to dosing frequency. If high, the MRCI can have a negative impact in medication adherence and expected results of treatment, and these cases needs a regular follow-up in order to simplify the therapeutic scheme.

Conclusion

The drug therapy complexity evaluated by MRCI was related to the drugs number, but also to dosing frequency. If high, the MRCI can have a negative impact in medication adherence and expected results of treatment, and these cases needs a regular follow-up in order to simplify the therapeutic scheme.

References