



## Potentially Inappropriate Medication Use Among Brazilian Elderly: A Population-Based Pharmacoepidemiological Study

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**SUMMARY.** Potentially inappropriate medications (PIMs) for the elderly can be associated with greater risks than benefits and its use has been reported internationally. A cross-sectional study was performed based on data from a representative sample of the elderly population (60 years or older) living in the Metropolitan Region of Belo Horizonte (n=1,158). The dependent variable was PIM use (2012 Beers Criteria). The independent variables included sociodemographic characteristics, health status and use of health care services and medications. Analyses were performed using Poisson regression model at a level of significance of 5%. The prevalence of PIM use was 43.3% and a total of 694 PIMs were identified. After multivariate analysis, female gender, number of chronic conditions and number of medications were positively and independently associated with PIM use. The study revealed a high prevalence of PIM use, indicating the need for selection of safer therapeutic alternatives in this patient group.

**RESUMEN.** Los medicamentos potencialmente inapropiados (PIM) para personas mayores pueden estar asociados con mayores riesgos que beneficios y su uso se ha reportado internacionalmente. Se llevó a cabo un estudio transversal sobre la base de datos de una muestra representativa de la población de edad avanzada (60 años o más) que viven en la Región Metropolitana de Belo Horizonte (n = 1.158). La variable dependiente fue el uso de PIM (2012 Beers Criteria). Las variables independientes incluyeron características sociodemográficas, estado de salud y el uso de los servicios de salud y medicamentos. Los análisis se realizaron utilizando el modelo de regresión de Poisson a un nivel de significación de 5%. La prevalencia del consumo de PIM fue de 43,3% y se identificaron un total de 694 PIM. Tras el análisis multivariante, el sexo femenino, el número de enfermedades crónicas y el número de medicamentos fueron positiva e independientemente asociados con el uso de PIM. El estudio reveló una alta prevalencia del consumo de PIM, lo que indica la necesidad de una selección de alternativas terapéuticas más seguras en este grupo de pacientes.

**KEY WORDS:** aging health, drug safety, drug utilization, pharmacoepidemiology, potentially inappropriate medication.

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