



## Potential Risks in Drug Prescriptions to Elderly: a Cross-Sectional Study in the Public Primary Health Care System of Ourinhos Micro-Region, Brazil.

Paulo R. OBRELI NETO <sup>1\*</sup>, Jessika C. VIEIRA <sup>2</sup>, Dalva R.A. TEIXEIRA <sup>2</sup>, Francisco P. SILVA <sup>3</sup>,  
Walderez P. GAETI <sup>4</sup>, & Roberto K.N. CUMAN <sup>1</sup>

<sup>1</sup> Graduate Program in Health Sciences; <sup>3</sup> Department of Surgical Clinic. Universidade Estadual de Londrina - UEL Avenida Robert Koch, 60 – 86038-440, Londrina, PR, Brazil.

<sup>4</sup> Department of Pharmacy and Pharmacology. Universidade Estadual de Maringá-UEM. Av. Colombo, 5790 – 87020-290, Maringá, PR, Brazil.

<sup>2</sup> Faculdades Integradas de Ourinhos – FIO. Rodovia BR 153, Km 338, 19909-100, Ourinhos, SP, Brazil.

**SUMMARY.** This research aimed to assess the occurrence of potential risks in drug prescriptions to elderly at the Brazilian public primary health care. A cross-sectional, multicenter research was carried out at the pharmacies of public primary health care in five cities of the Ourinhos Micro-region, Sao Paulo, Brazil. Potential drug-drug interactions (DDIs) (according to three DDIs investigation software programs), drugs that act on cytochrome P450 system (CYP450) and potentially inappropriate medications (PIM) for elderly people (according to the Beers criteria (2003)) were selected as indicators of potential risks. A total of 2,627 prescriptions were collected and evaluated. Major DDIs were found in 2.6 % to 3.4 % of the prescriptions, depending on the software used. The prevalence of prescriptions containing drugs that acted on CYP450 was 50.9 %. PIM were found in 26.9 % prescriptions. These data indicate high prevalence of potential risks in drugs prescriptions to elderly at Ourinhos Micro-region public primary health care.

**KEY WORDS:** Beers criteria, Cross-sectional study, Drug-drug interactions, Drugs-to-avoid criteria, Elderly, Primary health care.

\* Author to whom correspondence should be addressed. *E-mail:* paulorobreli@yahoo.com.br