# IDENTIFICATION OF DRUG-RELATED PROBLEMS IN ELDERLY POLYMENDICATED PATIENTS

Ferreira, C.E.<sup>1\*</sup>; Barreto, E.S.<sup>2</sup>; ; Calil-Elias, S.<sup>3</sup>

<sup>1</sup>UFF Faculty of Pharmacy/Graduate Program in Sciences Applied to Health Products - PPG-CAPS – Address: 523, Mário Viana street - Santa Rosa - Niteroi, Rio de Janeiro, Brazil

<sup>2</sup>UFF Faculty of Pharmacy/Graduate Program in Administration and Management of Pharmaceutical Assistance (PPG-GAFAR)

<sup>3</sup>UFF Faculty of Pharmacy, Address: 523, Mário Viana street - Santa Rosa - Niteroi, Rio de janeiro, Brazil \*carolinaesper@id.uff.br

## Introduction

The prevalence of clinical manifestations and chronic diseases from aging contribute to the practice of polypharmacy, which is the use of five or more medications<sup>1</sup>. The utilization of multiple drugs contributes to the risk of loss of quality of life and negative health outcomes, interfering with the efficacy and safety of treatment, as well as reducing therapy adherence. In addition, the consumption of many medications can make the elderly more susceptible to drug interactions, cause adverse drug reactions and lead to failure in the treatment of therapy<sup>2,3</sup>. This study aimed to identify the prevalence of drug-related problems in elderly patients who use polypharmacy.

## **Material and Methods**

This is an excerpt from the project: "Pharmacoeconomic evaluation of pharmacotherapeutic follow-up of elderly patients" (CAAE: 47742521.5.1001.5243), a randomized clinical trial on the pharmacoeconomic evaluation of pharmacotherapeutic follow-up of elderly patients polymedicated in a geriatric clinic. In this study, the participants were randomly divided into the control and intervention groups and evaluated regarding their knowledge of prescription, adherence to treatment, quality of life, and identification of drug-related problems. Pharmacotherapeutic follow-up was performed based on the Dáder methodology<sup>4</sup> and a Pharmaceutical Care Protocol was established and applied in the intervention group.

## **Results and Discussion**

Fifty-two participants were selected for pharmaceutical follow-up, of which 27 belong to the control group and 25 to the intervention group. They received the first pharmaceutical appointment, where: sociodemographic data on the patient, health information, and drug therapy were collected and questionnaires were applied on the Level of information regarding prescribed drugs<sup>5</sup> (to measure knowledge about the prescription); Brief Medication questionnaire (BMQ)<sup>6</sup> questionnaire (to assess the treatment of medication); Instrument for Assessing attitude towards drug taking (IAAFTR)<sup>7</sup> (also for measuring the following) and the EQ-5D<sup>8</sup> quality of life questionnaire. The mean age of the participants is 76.19 years, 75% are female, 57.18% have a complete elementary school and the most prevalent chronic disease is Systemic Arterial Hypertension (HAS), present in 79.2% of participants. After applying the questionnaires regarding adherence to drug treatment, the BMQ observed that 65.64% of the participants had a low adherence or probable low adherence and in the IAAFTR instrument, 53.78% of the participants had negative attitudes regarding adherence. Regarding the level of knowledge about medications, 19.26% scored poorly, 55.93% regular, and 24.81% good. Together with this, the most prevalent drug-related problem (PRM) was the omission of doses (48%), followed by the frequency or

incorrect administration time, without changing the daily dose (40%), and undue discontinuation of the drug by the patient (36%).

#### Conclusion

The most prevalent drug-related problems characterize low drug therapy among polypharmacy elderly patients. This demonstrates the importance of pharmacotherapeutic follow-up to optimize therapy and promote rational use.

#### Acknowledgments

We are grateful to the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES, Finance Code 001) and the Fundação de Amparo à Pesquisa do Rio de Janeiro (FAPERJ, E-26/210.068/2021) for financial support.

#### **Bibliographic References**

- [1] Organização Mundial Da Saúde OMS. Medication Safety in Polypharmacy. Geneva: World Health Organization, 2019, p. 1-62.
- [2] Manso, M.E.G.; Biffi, E.C.A.; Gerardi, T.J. Prescrição inadequada de medicamentos a idosos portadores de doenças crônicas em um plano de saúde no município de São Paulo, Brasil. Rev bras geriatr gerontol., 2015, 18 (1), p.151-164..
- [3] Instituto Para Práticas Seguras No Uso De Medicamentos. Desafio Global De Segurança Do Paciente Medicação Sem Danos. Boletim ISMP Brasil, Minas Gerais, 2018, 7 (1), p. 1-6
- [4] Machuca, M.; Fernández-Llimós, F.; Faus, M.J. Método Dáder. Guía de Seguimiento Farmacoterapêutico. Granada: Universidad de Granada, 2003, p. 1-128.
- [5] Silva, T.; Schenkel, E. P.; Mengue, S. S. Nível de informação a respeito de medicamentos prescritos a pacientes ambulatoriais de hospital universitário. Caderno de Saúde Pública., 2000, 16 (2), p. 449-455.
- [6] Svarstad, B.L.; Chewning, B.A.; Sleath, B.L.; Claesson, C. The Brief Medication Questionnaire: a tool for screening patient adherence and barriers to adherence. Patient Educ Couns., 1999, 37 (2), p.113-24.
- [7] Strelec, M.A.A.M.; Pierin, A.M.G.; Mion Júnior, D.A. A influência do conhecimento sobre a doença e atitude frente à tomada de remédios no controle da hipertensão arterial. Arq. Bras. Cardiol., 2003, São Paulo, 81 (4), p. 343-348.
- [8] Veras, B.D., Magliano, C., Silva, M.D., Santos, Duarte, E.D., Blatt, C.R., & Stein, A.T. Health-related quality of life in elderly: a review of the EQ-5 D use. Jornal Brasileiro de Economia da Saúde., 2017, 8 (3), p.227-233.