



## The pharmacist and the challenges of self-medication for the elderly in Brazil

### O farmacêutico e os desafios da automedicação dos idosos no Brasil

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#### Fabiola Pereira dos Santos

Orcid: <https://orcid.org/0000-0001-5438-0713>

Lattes: <http://lattes.cnpq.br/9134548280306959>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: [fbsants@gmail.com](mailto:fbsants@gmail.com)

#### Tiago Souto Cardoso

Orcid: <https://orcid.org/0000-0002-1183-1366>

Lattes: <http://lattes.cnpq.br/2224345230658686>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: [tiago.cardoso@live.com](mailto:tiago.cardoso@live.com)

#### Fellipe José Gomes Queiroz

Orcid: <https://orcid.org/0000-0002-2268-4138>

Lattes: <http://lattes.cnpq.br/1939428749184971>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: [fellipegomes2008@gmail.com](mailto:fellipegomes2008@gmail.com)

#### Abstract

**Theme:** Self-medication in times of a pandemic. **Problem:** What are the reasons that induce the elderly in Brazil to self-medicate? **Hypothesis:** The elderly is the population with the highest rate of self-medication as a constant practice, this is due to many factors, including the difficulty of constant medical follow-up. **Objectives:** To describe the main reasons that lead the elderly to self-medicate in Brazil. **Justification:** It is clear that the proportionality of the growth of the elderly population in Brazil has not been accompanied by research and epidemiological studies, especially with statistics on the consumption of over-the-counter drugs in this age group. **Methodology:** This is a literature review. **Results.** Self-medication is a phenomenon known to be harmful to health. Thus, the indication of medication for the elderly requires special attention from the pharmacist, with professional assistance aimed at reducing the damage caused by the indiscriminate and improper use of non-prescription drugs.

**Keywords:** Self- medication. Pharmaceutical care. elderly \_

#### Resumo

*Tema: Automedicação em tempos de pandemia. Problema: Quais os motivos que induzem os idosos no Brasil a se automedicarem? Hipótese: Os idosos são a população com maior índice de automedicação como prática constante, isso deve-se*



*a muitos fatores, dentre eles a dificuldade de acompanhamento médico constante. Objetivos: Descrever as principais razões que levam os idosos a se automedicarem no Brasil. Justificativa: É notório que a proporcionalidade do crescimento da população idosa no Brasil não tem sido acompanhada, por pesquisas e estudos epidemiológicos, principalmente com as estatísticas sobre o consumo de medicamentos de venda livre nessa faixa etária. Metodologia: Trata-se de revisão bibliográfica. Resultados. A automedicação é um fenômeno reconhecidamente prejudicial à saúde. Assim, a indicação de medicamentos para idosos requer atenção especial do farmacêutico, com uma assistência profissional visando diminuir os danos causados pelo uso indiscriminado e indevido de medicamentos não prescritos.*

**Palavras-chave:** Automedicação. Assistência Farmacêutica. Idosos.

## Introduction

Self-medication is considered a public health problem in Brazil and, if practiced by the elderly, entails even greater risks and harm to health, and can even lead to death. In Brazil, among the various factors to be highlighted, the elderly deserve special attention, for example: the higher prevalence of chronic diseases in this age group, the difficulty in accessing health services and the low level of education of the population, in addition to the difficulty in memorization. of schedules and physiological peculiarities of the senile population. <sup>(1)</sup>

Let it be considered that self-medication among the elderly is a constant need in many cases, due to their physiological and neurological characteristics in general. Self-medication is not clearly defined in the globalized world and can be broadly described as actions carried out with the aim of choosing and deciding to consume over-the-counter medicines. <sup>(1, 2)</sup>

Self-medication has intrinsic principles, in which individuals voluntarily seek medicines that they deem appropriate to solve a health problem. Self-medication practices often occur when medications are also exchanged with family, neighbors or friends, and sometimes due to medication residue from other prescriptions, so it is suggested that you reuse old prescriptions or buy over-the-counter products. Self-medication, in which the product is purchased without a prescription, can also result from the extension of the indicated medication. <sup>(3)</sup>

In Brazil, more than 80% or about 24 million elderly people depend exclusively on the Unified Health System (SUS) for health care. According to the World Health Organization (WHO), elderly people are people over 60 years of age. There are more than 28 million people in this age group in Brazil, 13% of the country's population. In 2018, the Brazilian Institute of Geography and Statistics (IBGE) points out that in the coming decades in Brazil the number of elderly people will double. <sup>(4)</sup>

Thus, given the growing elderly population in Brazil, the role of pharmacists has very specific implications for serving the population aged 60 years and over. Pharmaceutical responsibility concerns the prerogatives of making the drug available to the elderly, always with ethics and professionalism. <sup>(5)</sup>

In this context, it is worth noting that the pharmacist's role is not only to implement medication administration, but also to carry out actions that constitute a



clinical service that favors the integral action of the citizen with all technical clarifications on the use of prescription or non-prescription medicines. doctor. Research indicates that many seniors feel comfortable self-medicating, and believe that it is a safe action. <sup>(5,7)</sup>

The choice of the topic in question is justified, since it is clear that the proportionality of the growth of the elderly population in Brazil has not been accompanied by research and epidemiological studies, mainly with statistics on the consumption of over-the-counter medicines, which creates a worrying picture for the health promotion of the adult population in Brazil. The health services of the Unified Health System (SUS) are widely used by the elderly population, even so, some factors make it difficult for medical surveillance in relation to the care of the elderly and favor self-medication in this age group. <sup>(6)</sup>

In this context, the problematization, which guides the research, can be understood as follows: what are the reasons that induce the elderly in Brazil to self-medicate? And what is the role of the pharmacist to minimize the harm of self-medication in the adult population?

The elderly are the population with the highest rate of self-medication as a constant practice. This is a reality in Brazil due to a series of factors, such as: difficulties with constant medical monitoring, not having the acquisition of a prescription prescribed in a timely manner, to solve moments of crisis in their health. <sup>(7)</sup>

In this context, the objective is to describe the main reasons that lead the elderly to self-medicate in Brazil. We also sought to conceptualize self-medication and analyze the role of the pharmacist in the face of self-medication and the issues associated with the practice of self-medication.

For the preparation of this study, publications were searched through the Google Scholar's Publish or Perish search tool and the SciELO database, using the descriptors: "elderly" AND "self-medication", "pharmaceutical assistance".

As inclusion criteria, those who best fit the theme and who had the most affinity with the objective proposed in this study were considered. The analysis of the relevance of the articles chosen for the review was carried out in an analytical way, based on encompassing various explanations and lines of research of full articles, in Portuguese between the years 2010 to 2021.

The exclusion criteria were: scientific works with only abstracts available, texts without declared authorship, editorials, incomplete articles, letters to the reader and those that did not fit the theme proposal.

55 articles relevant to the theme were selected for full reading. In the end, 18 articles were selected for review.

### **The Aging Process**

Population aging is associated with an increase in chronic degenerative diseases, an increase in drug use and, consequently, an increase in the demand for health services. This advancement is helping to increase treatment time and use of prescription and over-the-counter drugs. The elderly population in Brazil has grown rapidly due to the increase in life expectancy and aging is a complex phase that



includes many perspectives such as loss of functions, decreased autonomy and increased morbidity. <sup>(8)</sup>

The longevity of the Brazilian population requires assertive actions that provide quality of life for this population. Thus, there is a need for more health professionals who can serve the senile population. The problems of old age are many, as aging affects organs and tissues and increases the signs of chronic diseases (for example, systemic arterial hypertension, bone and joint diseases and diabetes mellitus). <sup>(8)</sup>

As can be seen, the definition of aging is very complex, and it is not possible to choose a single indicator, but rather an indicator that takes into account other aspects of the aging process. Aging is a lifelong process and the standard of living that promotes healthy aging is established from the start. <sup>(9)</sup>

In this context, pharmaceutical care is a major challenge, as the continuous monitoring of the use of over-the-counter medications by the elderly requires specialized guidance. <sup>(8,9)</sup>

It can also be said that old age is a process characterized by physiological, psychological and social factors specific to each person. There is, therefore, a difference in the reflection of the aging of individuals, some elderly people are older, others look younger and there are still those who feel useless, which confirms the complex heterogeneity of age. <sup>(9)</sup>

In Brazil, projections indicate that the Brazilian population will reach 253 million in 2050, and with that the increase in people with comorbidities will have significant consequences for the entire population. Thus, if self-medication in the elderly is intensified, this practice may represent a health risk, with the advent of adverse side effects, due to the organic changes that occur with age. <sup>(10)</sup>

### **Self-medication in old age**

Currently self-medication is considered one of the main public health problems due to the numerous factors that are present in this practice and put the health of the individual at risk. Elderly people need special attention in this context. This is justified, among other things, by the increase in the prevalence of chronic diseases, and various problems that end up encouraging immediate solutions, with self-medication being an easily used resource <sup>(11)</sup>

Changes in the body physiology of the elderly increase the risk of self-medication. In this age group, there is a decrease in blood flow and activity of hepatic enzymes, a decrease in the production of gastric juice and the rate of gastric emptying, an increase in total adipose tissue, loss of total water content and the amount of plasma proteins and renal lavage. <sup>(12)</sup>

People over 60 generally use more drugs than other age groups and tend to use therapy irrationally. For this reason, the indication of medication for the elderly requires special attention from the pharmacist, with professional assistance aimed at reducing the damage caused by the indiscriminate and improper use of non-prescription drugs. <sup>(13)</sup>

Brazil is one of the largest consumers of pharmaceutical products in the world. The pharmaceutical market reaches 22.1 billion per year. The sector is made up of around 480 companies directly involved in the production, distribution and marketing



of pharmaceutical products. Brazil has more than 65,000 pharmacies and drugstores or 3.3 pharmacies for every 10,000 people, three times the number recommended by the World Health Organization (WHO), which recommends one pharmacy for every 10,000 people. <sup>(13)</sup>

The irrational use of drugs causes several problems that can be reduced or eliminated through rational self-medication. The elderly population is more prone to self-medication, as it depends on different drugs and the importance of the pharmacist is indisputable. <sup>(10)</sup>

Given this reality, it is important to understand the parameters of the National Medicines Policy, which defines pharmaceutical care (PA) as a set of pharmacological activities aimed at facilitating health interventions in a community. It includes the availability of medicines at each of their essential stages, storage and quality control, the safety and therapeutic efficacy of medicines, the monitoring and evaluation of their use, the collection and dissemination of information on medicines and the continuing education of professionals. of health. <sup>(10)</sup>

Pharmacists can take measures to improve the health of the elderly through PA interventions in which they provide information about the disease and treatment, providing patients with safe and effective drug therapy. <sup>(10)</sup>

### **The pharmacist and the challenges to self-medication**

It is well known that medicines play an important role in health systems as they save lives and improve health. Drug use is the most common form of therapy in our society, but there are studies that show that there are health problems associated with the indiscriminate use of medication. <sup>(15, 16)</sup>

The most commonly cited factors that contribute to self-medication are the social pressures faced by prescribers to immediately solve the population's health problems. facilitate access to drugs. However, inadequate self-medication can lead to ineffective and unsafe treatments. <sup>(17)</sup>

Given this reality, it should be noted that the scientific community recognizes that adequate treatment, when necessary, reduces the incidence of health problems and provides quality of life for the elderly. Paradoxically, substance abuse can cause serious health problems, including mortality. <sup>(15)</sup>

Self-medication is a recognized and potentially harmful phenomenon to health. Abuse of drugs classified as "harmless" can lead to consequences such as bacterial resistance, hypersensitivity reactions, addiction, digestive bleeding, withdrawal symptoms and increased risk of cancer, in addition to the possibility of brain hemorrhage due to the combination of an anticoagulant with a simple pain reliever, for example. Relief of symptoms of short-term illnesses can mask the underlying illness, which goes unnoticed and, thus, can progress and cause health problems. <sup>(12)</sup>

### **pharmacist's role**

Many elderly people require appropriate treatments when necessary, in order to reduce the incidence of health problems, providing opportunities for improvements in physical and mental health. <sup>(15)</sup>

For the rational use of medicines to be effective, it is necessary, in addition to the correct diagnosis, the indication and selection of the most appropriate therapy





and preferably with the follow-up of the pharmacist. The information phase is very important for the patient to understand what is prescribed. In drug sales establishments, the indication and suggestion for the purchase of drugs is a factor that contributes to the indiscriminate consumption of drugs, since employees are usually responsible for the notification, even if it is not necessary for profit. <sup>(16)</sup>

Thus, drug dispensing among the elderly needs special attention in this context of exacerbated use by many adults. This is justified, among other things, by the increase in the prevalence of chronic diseases, the physiological consequences of the senile phase and the constant need for care and access to quality health services. Often, the biological, neurological and physiological characteristics of the elderly deserve personalized attention from health professionals in public services. <sup>(16)</sup>

It is observed that when used correctly, the drug ends up being a useful tool for health, but when used rationally, it can cause damage to health if used improperly. The use of prescription as the only decision base is directly related to patient/user protection. Rational drug prescription involves steps that go beyond diagnosis and selection of the most appropriate therapy. The information phase is very important for the patient to understand what is prescribed. <sup>(16,17)</sup>

In times of public health turmoil, information from pharmacies and parapharmaceuticals helps guide the dangers of indiscriminate drug use, whether the business is for-profit or not. The potential problems of drug demand and trade promotion in times of pandemics need to be addressed in an ethical and professional manner. <sup>(17)</sup>

In the Brazilian cultural context, the indiscriminate sale of over-the-counter medicines, that is, medicines that can be marketed without the need for a medical prescription, constitutes a bottleneck for the rational use of medicines. In Brazil, countless people of all ages admit to taking medicines without a prescription. <sup>(18)</sup>

### Final considerations

Studies have shown that there is a proven risk to health due to self-medication, and that this practice remains routine for most elderly people. In short, it is extremely important to have a multiprofessional follow-up, regarding the regular administration of medicines.

The pharmacist is fully able to carry out a continuous assessment of health risks, especially in terms of toxicity, secondary diseases and drug interactions among the elderly.

It was identified that the practice of self-medication can cause damage to health and hide more serious diseases that, depending on the type and dosage of drugs, can also lead to intoxication.

Currently, the drug is a means of cure and guarantee of quality of life, but there are risks that can be avoided in relation to its use and that can be minimized by rationalizing and sensitizing the consumption of these products.

It is noticed that, in general, attention to the prescription and management of medicines is important for public health, especially for the elderly, as these people are more prone to the use of medicines and, with increasing expectations, this group constitutes most of the population.



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