

## DEPRESCRIPTION AS A TOOL OF PHARMACEUTICAL CARE FOR THE ELDERLY

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According to the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística, IBGE), Brazil has about 22.8 million people over 60 years old, representing 13% of the Brazilian population. It is estimated that by the year 2060 the country will have more than a quarter of its population over 65, surpassing the percentage of the elderly projected to the world that same year.<sup>1</sup>

The high burden of diseases in the elderly, characterized by multimorbidities and hidden conditions, is often accompanied by polypharmacy, which in turn is also motivated by a medicalization culture. Among the elderly who consume at least one medication of chronic use in Brazil (93%), polypharmacy was registered to 18%.<sup>2</sup>

The risks associated with the use of medications by the elderly are documented in the literature. Polypharmacy is associated with greater occurrence of adverse reactions, drug interactions and problems with adherence to pharmacotherapy.<sup>2,3</sup> In addition, it is necessary to consider the impact of the aging process on the effect of the medication,<sup>3,4</sup> such as the increased risk for development of functional disability and dependence, geriatric syndromes and the increase in mortality rate.

The physiological modifications of the aging process are multifactorial and individualized, influencing pharmacokinetics and pharmacodynamics.<sup>4</sup> In addition, there are limitations of clinical trials, whose verification of clinical efficacy and safety are restricted to certain groups, pointing to the challenge of prescribing medications for this population.<sup>5</sup>

In the care of the elderly, knowledge of their overall functionality will support the clinical reasoning for the definition of appropriate pharmacotherapy, whose benefit will be able to overcome the possible risks. Considering that functional decline is directly related to the clinical repercussions of pharmacological changes, the choice of the medication will be based on the degree of frailty of the elderly.<sup>4</sup>

In the analysis of pharmacotherapy, all the medications in use will be evaluated, checking the need for dose adjustment, dosage or indication for the prescribing. Deprescription is a planned and individualized act that considers the safety of the prescribed medication, possible associated risks and the peculiarities of the patient.<sup>4,7</sup>

Fragile elders, more susceptible to adverse drug effects, are strong candidates for deprescription.<sup>4</sup> In the decision-making process for the deprescription in the elderly, the literature indicates the hierarchical sequence: medications (a) that cause adverse effects; (b) duplicates; (c) not currently used; (d) without indication; (e) irregularly used for non-life-threatening processes; (f) to treat adverse effects of medications that have already been discontinued (g) at high risk and that do not improve health; (h) which require a treatment time to achieve a benefit greater than the patient's life expectancy—for example, the use of protocols for the prevention of antithrombotic events in patients with a high degree of frailty—and finally, (j) for which there is some scientific evidence of a safe prescription.<sup>7</sup> Patient preferences and adherence, however, are aspects to be considered.<sup>6</sup>

A study using a modified Delphi Approach to identify medication classes indicated for deprescription in the elderly pointed out five priority classes based on evidence to be evaluated according to each patient, benzodiazepines, atypical antipsychotics, statins, tricyclic antidepressants and proton pump.<sup>8</sup>

The practice of deprescription, although still guided by an intuitive process and with few protocols, counts on instruments that help in the definition of the withdrawal of the candidate medications: the implicit and the explicit criteria.<sup>9</sup> The former constitute individualized therapeutic reviews and the latter are represented by lists of medications classified as inappropriate for the elderly, such as the Beers Criteria (BEERS),<sup>3</sup> among others.

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According to the recommendations for sensible choices in the health care of the elderly, elaborated by the Brazilian Society of Geriatrics and Gerontology (SBGG) with Choosing Wisely, we must avoid administration of unnecessary medications that may cause falls and cognitive and functional decline.<sup>10</sup>

The improvement in longevity promoted by individualized depression was evidenced through a systematic review, in which the authors report the scarcity of publications that seek to evaluate the outcomes of such clinical practice with the elderly.<sup>5</sup>

The nature of deprescription on hospital admission for the elderly was analyzed in the United Kingdom, with a rate of 22% of deprescription, of which 84.1% were reactive, that is, motivated by the identification of diseases related to the use of medications, and only a minority, of the proactive type, with preventive intent. The authors emphasized that hospital admission may present an opportunity to deprescribe, but that such practice is still not well accepted.<sup>9</sup>

The health care model in force in the country has an emphasis on medicalization.<sup>2</sup> The professionals are not stimulated to discontinue treatments whose risk-benefit has a negative or neutral potential, implying in diversion of health resources in the maintenance of useless, if not dangerous, treatments.<sup>6</sup>

It is important to emphasize that the prescribing is part of the prescription process, which involves decision making for the beginning of treatment, dose adjustment, the changes that are necessary during the course of the treatment or its interruption.<sup>6,9</sup> The preservation of treatments that are not beneficial and present risks to those who use it is an ethical challenge for the professionals that work in the health system and the deprescription seeks to reduce this damage.<sup>6</sup>

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