

Original Paper

Deprescription on oncological palliative care: an integrating review

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Abstract

Background: Patients on oncologic palliative care (OPC), due to diverse symptomatology and variable severity, tend to present polypharmacy that, although it seems justifiable in many cases, can pose health risks and negative consequences on patients' quality of life. Thus, it is necessary to evaluate the presence of possible therapeutic futilities, guiding the process of deprescription, in which there is a reduction in the amount of medication after reviewing the treatment objectives and assessing risks and benefits. **Aim:** The objective of this study was to identify the main classes of drugs that are candidates for the deprescribing for OPC patients by reviewing the literature of the last 8 years. **Methods:** The bibliographic search was performed in the Medline and LILACS databases. Inclusion criteria were articles published between 2010 and 2018, which dealt with the topic of deprescription in CPO. The publications were analyzed for Qualis and the level of scientific evidence, in order to identify the main drugs candidates for deprescription. **Results:** Twenty articles were evaluated, being only 4 randomized clinical trials (RCTs), with level II of scientific evidence. Among the classes of drugs that are candidates for deprescription, the following stand out: statins (20.37%) and antihypertensives (20.07%). ECRs that corroborate with scientific evidence of quality need to be developed for guidelines that make it possible to prescribe, especially for the population in CPO. **Conclusion:** We highlight the importance of the use of tools to identify inappropriate medicines, and the use of medication conciliation as a means of identifying them, as well as pharmacotherapeutic follow-up.

Keywords: Deprescriptions, Desprescribing, Palliative Care, Neoplasms, Long Term Care.

Desprescrevendo em cuidados paliativos oncológicos: uma revisão integrativa

Resumo

introdução: Os pacientes sob cuidados paliativos oncológicos (CPO), devido à sintomatologia diversa e de gravidade variável, tendem a apresentar polifarmácia que, apesar de parecer justificável em muitos casos, pode trazer riscos à saúde e consequências negativas na qualidade de vida dos pacientes. Dessa forma, torna-se necessária a avaliação da presença de possíveis futilidades terapêuticas, norteadora do processo de desprescrição, no qual há redução da quantidade de medicamentos após a revisão dos objetivos do tratamento e avaliação de riscos e benefícios. **Objetivo:** Identificar as principais classes de medicamentos candidatos à desprescrição para pacientes em CPO por meio de revisão da literatura dos últimos 8 anos. **Métodos:** A pesquisa bibliográfica foi realizada nas bases de dados *Medline e LILACS*. Os critérios de inclusão foram artigos publicados entre 2010 e 2018, que abordavam o tema desprescrição em CPO. As publicações foram analisadas quanto ao Qualis e ao nível de evidência científica, buscando identificar os principais medicamentos candidatos à desprescrição. **Resultados:** Foram avaliados 20 artigos, sendo apenas 4 estudos clínicos randomizados (ECR), com nível II de evidência científica. Dentre as classes de medicamentos candidatas à desprescrição destacam-se: estatinas (20,37%) e anti-hipertensivos (20,07%). Carecem ECRs que corroborem com evidência científica de qualidade para desenvolvimento de diretrizes que possibilitem a desprescrição, principalmente para a população em CPO. **Conclusão:** Destacamos assim, a importância da utilização de ferramentas para identificação de medicamentos inapropriados, e uso da conciliação medicamentosa, como meio de identificá-los, bem como do acompanhamento farmacoterapêutico.

Palavras-chaves: Desprescrição, Cuidados Paliativos, Neoplasias, Assistência Domiciliar.

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Introduction

The concept of palliative care (PC) includes approaches aimed at improving the quality of life of the patients and of their families against life-threatening diseases. Such approaches involve the prevention and alleviation of suffering through early identification, assessment and treatment of distressing symptoms such as pain and others of psychosocial and spiritual nature. PC requires a multidisciplinary team to meet the needs of the patients and of their families.¹

According to the definition of PC, cancer patients tend to use several drugs to relieve the most prevalent symptoms, as well as to manage their comorbidities and to promote quality of life.² According to the literature, polypharmacy, despite not having a consensus on its definition, has been understood as the situation in which patients use more than 5, 7 or 9 drugs for a considerably longer time to control different symptoms.³ The practice of polypharmacy reflects a paradox: when seeking to control all symptoms of the patient and their comorbidities, adverse drug events (ADEs) occur, such as increased risk of falls³ and medication errors,⁵ adverse drug reactions (ADRs), and drug interactions (DIs).^{2,3} In order to circumvent some of the negative effects of the therapy, new drugs are prescribed, resulting in an intensified polypharmacy, which culminates in a vicious cycle.³ In addition to these consequences, we can mention the increased frequency of hospitalizations³ due to the difficulty in controlling the symptoms¹⁰ and the overload for caregivers.⁵

The main comorbidities of the patients in palliative cancer care are the following: cardiovascular disease,^{2,4,6} pulmonary,^{2,4,6} gastrointestinal tract⁴ and hematological,⁴ diabetes,^{4,6} endocrine disorders,^{2,4} neurological/psychiatric⁴ and infections.⁴ The main symptoms are the following: pain,^{4,7} nausea,^{4,7} dyspnea,^{4,7} depression,⁷ anxiety,⁷ fatigue,⁷ poor appetite,⁷ constipation,⁷ drowsiness⁷ and delirium.⁷ And the main drugs are opioid^{2,4} and not opioid^{2,4} analgesics, psychoactives⁴ (antidepressants, anxiolytics, psychostimulants [methylphenidate]),² analgesics [gabapentin],² antipsychotics²), anticoagulants,^{2,4} antihypertensives,^{2,4} antiemetics,² corticosteroids,² antihistamines,² proton pump inhibitors,² laxatives,² hypoglycemic drugs,² and anti-dyslipidemics (statins),² in addition to concomitant antineoplastic therapies. Comorbidities, associated with changes such as a worsening in the liver and renal function, may promote problems in the pharmacokinetics and pharmacodynamics of drugs, further aggravating the consequences of polypharmacy.⁵

This is associated with the fact that a 50% increase of medications in the last year of life is recorded in the literature, especially in the last month, which raises concerns regarding the treatment of patients in OPC.^{8,9}

It is noteworthy that many of the medications being prescribed may be considered unnecessary (with low evidence for clinical application) or because they have duplicity of class or therapeutic indication. In this context, there is the concept of therapeutic futility, which can be understood as an intervention that does not provide prolongation of the patient survival and can even contribute to potential harm.¹¹

Currently, the discussion begins to gain importance about the discontinuation or deprescription of medications considered unnecessary, and which present therapeutic futility.⁷ Deprescription is the process of reducing the amount of medication after reviewing the treatment goals, assessing risks and benefits accordingly, individually, and according to medical ethics.¹² To perform the deprescription, it is important to evaluate the polymedicated patients in order to improve prognosis and quality of life against life-limiting diseases.⁹

Deprescription is already consolidated in geriatrics, but still lacks structuring in OPC,⁵ presenting some barriers, such as: difficulty in determining life expectancy; discussing the risks of polypharmacy with the patient and the family; suboptimal communication between specialist physicians and family physicians and about who should perform the deprescription; difficulty in assessing the benefit binomial *versus* life time for the use of drugs for chronic diseases such as hypertension, dyslipidemia and hypothyroidism; physicians' fear of discontinuing a drug as it may appear to the patients that they are giving up on treating them.^{5,9,13}

In order to assist in the process of deprescription, there is already a set of steps that guide these actions, namely: determination of life expectancy and treatment goals; review and evaluation of the prescribed medications; identification of the medications to be discontinued; creation of the deprescription plan and monitoring and review.¹³

When there is a question as to which professional should perform the deprescription process, the specialist doctor or family doctor, the transitions between the care modalities should be considered. With the crisis of the liberal hegemonic model, associated with the aging of the population and the increasing demand for comprehensive and continuous care, it is important to consider other modalities of care than just the hospital.¹⁴ PC can occur in outpatient, hospital and home care

(HC) settings.¹⁶ This latter is included in this scenario as an alternative to hospital care, in the form of a device for the deinstitutionalization of care, which reduces hospitalizations and their associated costs.¹⁵

A prominent component for PC in HC, especially in OPC, is the issue of death at home, which is a quality indicator for PC.^{16,17} In all areas the patient in OPC is polymedicated; however, when the patient is cared for at home, multiple medications may imply an overload for the caregivers, in addition to the consequences of polypharmacy, which are common to all modalities of OPC.⁵

Based on this explanation, the present study aims to integrate the literature data on the process of deprescription in OPC, in order to identify the main candidate drugs for discontinuation and the main strategies of deprescription of such drugs, as well as the main outcomes/consequences of polypharmacy in patients in OPC in order to propose the application of such process in OPC in HC.

Methods

A literature review was performed by searching scientific articles in the following databases: Medical Literature Analysis and Retrieval System Online using the PubMed interface, Latin American and Caribbean Health Sciences Literature (Literatura Latino-Americana e do Caribe em Ciências da Saúde, LILACS), Elsevier (Science Direct) and Scopus, using the descriptors "Deprescribing AND Palliative Care AND Cancer"; "Deprescribing AND Long Term Care AND Cancer" and "Deprescription AND Long Term Care AND Cancer", from June to July 2018. The criteria established by the Main Items for Reporting Systematic Reviews and Meta-analyses (Principais Itens para Relatar Revisões sistemáticas e Meta-análises, PRISMA) for preparing Literature Reviews were met. In this period 89 articles were found.

The inclusion criteria covered full articles addressing deprescription in OPC, articles published in English from 01/01/2010 to 07/31/2018, original articles, brief reports and comments. The exclusion criteria eliminated articles prior to 2010; articles that did not have the full version available and monographs, theses and literature reviews, thus excluding 69 articles.

In the screening and selection phase, 20 articles were evaluated according to their title and abstract, in order to define if they addressed the topic of deprescription in OPC. This procedure was performed by 2 researchers (peer review). In case of divergence, the inclusion or not of the abstracts was discussed in teams.

After selecting the articles, they were read in full and evaluated with regard to the Qualis assigned to the journal in which they were published in order to evaluate the quality of the publications, as shown in Table 1. The Qualis was obtained by searching the Sucupira Platform of the Coordination of Improvement for Higher Level Staff (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, CAPES). The quality of the journals, according to the Qualis classification, is rated from A to C, where A is the highest quality level, B is the intermediate quality level and C is the lowest quality.

The articles were classified according to the types of studies that were conducted as: randomized clinical trial (RCT); cohort study (prospective or retrospective); case-control studies; cross-sectional studies (prospective or retrospective); longitudinal studies and observational studies (prospective or retrospective). Such studies were assessed with regard to the level of evidence at: Level I - randomized controlled study with high statistical power; Level II - randomized controlled study with low statistical power; Level III - non-randomized observational studies using contemporary comparison; Level IV - non-randomized observational studies using historical comparison; Level V - case report,¹⁸ as shown in Table 1.

From each article, the following essential information was extracted for the construction of the discussion of this study: main prescribed medications; mean of medications per patient; candidate medications for deprescription and main outcomes/consequences of polypharmacy, as shown in Table 2. These were categorized into drug-related problems (DRPs) and characterized as health problems, understood as clinically negative outcomes derived from pharmacotherapy, with different causes that influence the achievement of the therapy objectives, as well as the appearance of unintended consequences.¹⁹

From the data extracted in Table 2, a graph was constructed which shows the percentages of the main classes of medications used in the OPC scenario, as well as the main candidates for the deprescription (Graph 1). The sum of how many times such class was cited in the total of articles was performed, as well as the sum of all cited classes, in order to calculate the percentage. This analysis was performed using Excel 2010[®].

From the data collected from Table 2, a synthesis matrix was built that includes items for improvement, strategies and barriers related to deprescription, presented in Table 1. A Severity, Urgency, and Tendency (SUT) matrix was constructed (Table 3) to assist in prioritizing the strategies to consolidate deprescription. The Severity, Urgency, and Tendency values were 1-5, with 1 being the least severe, urgent, and with a tendency of easier development, and 5 being the most severe, urgent, and with a tendency of more difficult development. After assigning the values, the 3 were multiplied to obtain a product, which the higher, the greater the need to prioritize that criterion.²⁰ The aim was to search for articles that contemplated an ethical approach in their research studies, although this work does not present scope of submission to the research ethics committee, because it is a literature review.

Results

Twenty articles were selected, of which 6 are from 2016, 3 for 2014, 2015, 2017 and 2018 each, 1 for 2011 and 2013 each and none for 2010 and 2012. These data show that the issue of deprescription is recent, and that its relationship with cancer and palliative care is even more recent.

Of the articles analyzed, 10 are rated as B1, 3 as A1, 3 as B2, 2 as A2, and 2 were not found in the Sucupira Platform for the Qualis assessment. Therefore, the articles in this review are at an adequate level of quality, with the 3 A1 articles being of the best quality.

Table 1 presents the citation of the articles, the Qualis, the type of study and the level of evidence of the articles in this review.

Figure 1 complements Table 2 by showing the percentages of the main classes of prescribed medications and the candidates for the prescription.

Table 1. Description of the articles selected for integrative review, with their Qualis classification, type of study and level of scientific evidence.

Citation	Qualis	Type of article	Level of evidence
10	B1	cross-sectional study	IV
11	B1	multi-center cross-sectional study	IV
23	B1	prospective cohort study	IV
21	A2	prospective observational study	IV
22	A2	cross-sectional study	IV
24	B1	RCT	II
8	B1	multi-center cohort study	IV
25	A1	retrospective cohort study	IV
26		retrospective cohort study	IV
27		retrospective cohort study	IV
28	B1	cross-sectional study	IV
5	A1	retrospective cohort study	IV
29	B1	RCT	II
30	B1	prospective cohort study	IV
31	B1	prospective cohort study	IV
35	B1	observational study	IV
34	B2	prospective cohort study	IV
32	B2	retrospective observational study	IV
34	A1	RCT	II
9	B2	RCT	III

Table 2. Content analysis of the selected articles. Source: Prepared by the authors.

Citation	Mean of medications per patient	Top candidates for deprescription	Main outcomes of polypharmacy	Type of DRP
10	No Information (NI)	antihypertensive, antimicrobial	reduced quality of death	1, 2, 4 and 6
11	8	statins, antihypertensives, proton pump inhibitors, vitamins	adverse drug events (ADEs) and drug interaction (DI)	1, 2, 3, 5 and 6
23	10	antihypertensive drugs, statins, herbal/homeopathic	ADE and DI	1, 2, 3, 5 and 6
21	5	psychoactive, antihypertensive, antacids, vitamins	ADE	1, 2, 3, 5 and 6
22	NI	statins	NI	NA
24	NI	reduced use of anticholinergic drugs such as opioids, atropine, scopolamine	drowsiness, fatigue, reduced quality of life	1, 2, 4 and 6
8	NI	antihypertensive, antineoplastic	reduced quality of life	1, 2, 4 and 6
25	NI	proton pump inhibitors, antihypertensives, statins, hypoglycemics	ADE and DI	1, 2, 3, 5 and 6
26	NI	proton pump inhibitors, statins, antihypertensives, anti-dementia, hypoglycemic agents, anticoagulants, bisphosphonates	ADE and DI	1, 2, 3, 5 and 6
27	1.8	proton pump inhibitors, statins, anti-platelets, antihypertensives, antidiabetics, vitamins	increased emergency home visits and hospitalization frequency, reduced quality of life, ADE	ss1211212
28	4	statins, proton pump inhibitors, antacids, antihypertensives, antidiabetics	ADE, high drug spending	1, 2, 3, 5 and 6
5	10	antihypertensives, statins, antidiabetics, levothyroxine, anti-Alzheimer	inappropriate use of medications, ADE and DI	1, 2, 3, 4, 5 and 6
29	10	NI	ADE and DI	1, 2, 3, 5 and 6
30	6	NSAIDs, tricyclic antidepressants	pain, fragility, falls, anguish	2 and 6
31	7	calcium supplements, calcium channel blockers, vitamin D, denosumab and bisphosphonates	ADE, DI and toxicity	1, 2, 3, 5 and 6
35	11	antihypertensive drugs	ADE and DI	1, 2, 3, 5 and 6
34	10	statins, antihypertensives, aspirin, proton pump inhibitors, bisphosphonates, vitamins	ADE and DI	1, 2, 3, 5 and 6
32	>6	antihypertensives, statins, aspirin, proton pump inhibitors, vitamins	ADE and DI	1, 2, 3, 5 and 6
33	11.6	statins and other medications to control the adverse events caused by statins	ADE, reduced quality of life, increased drug costs and hospitalizations	1, 2, 3, 4, 5 and 6
9	10.6	statins and other medications to control the adverse events caused by statins	ADE, reduced quality of life, increased drug spending	1, 2, 3, 4, 5 and 6

Figure 1. Profile of the main prescribed medications and of the main deprescription candidates according to the number of articles in which this class was cited, according to Table 2.

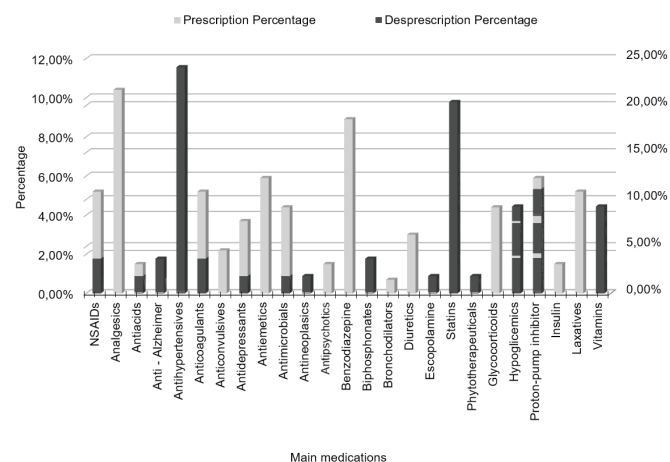


Figure 2- lists the items for improvement, the strategies and the barriers to deprescription identified in the analysis of the articles in this review.

From the strategies for performing the deprescription presented in Table 1, Table 3 presents a SUT Matrix as a way to prioritize which actions have the highest severity, urgency and tendency in order to consolidate the process.

Figure 2. Key items to improve, strategies and barriers to deprescription identified in the analysis of the articles. Source: Prepared by the authors.

Items to improve	Strategies	Obstacles
<ul style="list-style-type: none"> • Lack of Drug Conciliation [29] • Irrelevance or futility of the therapy[22,27,28] • Late deprescription[27] • The medication is prescribed without due reason, hindering the evaluation as to if it is necessary to maintain its prescription or not[36] 	<ul style="list-style-type: none"> • Performing drug conciliation [26,29] • Increase in the number of RCTs performed[24,28,29,34,35] • Deprescription plus <ul style="list-style-type: none"> • With the help of Pharmacy and Nursing[27] • Training of doctors in OPC[27] • Creation of Guidelines[35,36] • Adequacy of the Guidelines and tools for the Oncology and palliative population, not only for the Geriatric • Use of tools <ul style="list-style-type: none"> • STOPP/START[32] • OncPal[24] • Drug Adequacy Index[22] • Clinical Pharmacist's work[32] • Shared decision among doctor, patient and family to conduct deprescription[5,9,28,34] • Frequent drug assessment and conciliation in cancer patients[2] 	<ul style="list-style-type: none"> • Who should be responsible?[29] • Lack of technical knowledge[24,29,35] • Doctor feels uneasy about withdrawing medications of chronic use[29] • Fear of complications if discontinuing the medication[28] • Many doctors involved in the patient's care and none of them makes any decision with regard to deprescription[28] • Doctors and patients believe it is better to continue with a medication which can cause harms than to withdraw it and do nothing

Table 3. Prioritization of the strategies for performing OPC deprescription from the SUT Matrix, in accordance with the strategies presented in Figure 1. Source: Prepared by the authors

	SEVERITY	URGENCY	TENDENCY	SxUxT
Accomplishment of drug conciliation	5	5	4	100
Increased RCTs to provide better scientific evidence	5	5	5	125
Deprescription being performed at the earliest possible time and with the help of pharmacy and nursing	3	2	2	12
CPO physician training	5	3	4	60
Creation of guidelines	5	5	5	125
Adequacy of the guidelines and tools for the oncologic and palliative population, not only for the geriatric	4	3	4	48
Use of tools to identify potentially inappropriate medications to guide which drugs should be discontinued	5	5	4	100
Clinical pharmacist's role for the intervention and prescription reduction of potentially inappropriate medications	4	4	3	48
Shared decision between doctor, patient and family to lead to deprescription	3	2	2	12

Discussion

In order to provide a theoretical foundation for the procedures of deprescription, it is important to evaluate the type of study performed and the level of scientific evidence that these articles present. Of the 20 articles evaluated, 16 are Level IV of scientific evidence, mostly cohort (9 articles), observational (3 articles) and cross-sectional (4 articles). Only 4 articles are Level II, 4 being RCTs.

These data present a worrying scenario, since there are few studies that use the methodology of a clinical trial for the issue of deprescription, especially in OPC, resulting in studies that do not present a considerable level of evidence to support the decision to deprescribe the medications.

Analyzing the content of the articles, it was observed that there is no consensus on the mean number of prescribed medications per patient, as well as for the concept of polypharmacy.³⁴ The mean number of prescribed medications per patient ranges from 1.8 to 11, with 10 drugs being the most frequent mean quantity in the articles (5 articles).

Looking at Graph 1, in the gray columns (with reference to the left axis), it is clear that opioid analgesics (10.4% - cited 14 times), antihypertensive (9.6% - cited 13 times), benzodiazepines (8.9% - cited 12 times) and statins (8.1%

cited 11 times) are the most commonly prescribed drug classes, with opioid and benzodiazepine analgesics widely used in the management of pain and anxiety, and the antihypertensives and statins used in the management of hypertension and dyslipidemia, common comorbidities in patients in OPC.

The black columns (with the right axis as reference) of Graph 1 show the main candidate classes for deprescription, which are antihypertensives (24.07% - cited 13 times) and statins (20.37% - cited 11 times), with the possibility of considering the proton pump inhibitors (11.11% - cited 6 times) as well. These classes are used in chronic comorbidities, in which the patient makes continuous use, and it is important to evaluate the benefit of such medications in relation to the patient's limited life expectancy.

Table 2 also presents the outcomes/consequences of polypharmacy and classifies them into DRPs. DRP 2 is the most related to the process of deprescription, because it is about prescribed medications that the patient does not need, reflecting the inappropriate use of medications, which may result in an increased public health spending, drug interactions with other medications that are a priority for the patient, as well as in the occurrence of an ADE that may culminate in an increased frequency of hospitalizations. DRP 6 permeates most other DRPs, as each can result in DRP, which are one type of ADE. DRPs 1, 3 and 5 are also closely related to DIs and especially to the ADEs (which are the most cited outcomes in the articles).

In Chart 1 it is possible to see that the lack of RCTs to build strong scientific evidence for deprescription, as well as the need to create guidelines to support this process, is recurrent in the different articles evaluated. The creation of these, associated with the tools that assist in the decision-making at the time of deprescription, as well as the evaluation of the prescription with regard to the therapy inadequacy or futility, could provide the decisive basis for the conduct with such medications.

The STOPP criterion and START criterion tools, the *OncPal deprescription guideline and the Medication Suitability Index (MSI)* are already validated and used in the clinical practice and were cited in the articles found on the subject. Below is a brief explanation of how the above tools work: the START criterion is the acronym for "*Screening Tool to Alert doctors to the Right Treatment*". This is based on 22 prescription possibilities for commonly used medications for elderly patients, which were identified and organized according to the relevant physiological systems in a systematic list. This list is the START screening tool designed to alert physicians to the right treatment (i.e., indicated but not prescribed) for older individuals by detecting omissions at the time of prescription. The STOPP criterion is the acronym for "*Screening Tool of Older Persons' potentially inappropriate Prescriptions*". This has commonly found cases of potentially inappropriate prescription for older individuals, including drug-drug and drug-disease interactions, drugs that adversely affect elderly patients at risk of falling, and duplicate drug class prescriptions. The tool is organized according to the relevant physiological systems for ease of use, as is the case with most drug forms. Each criterion is accompanied by a concise explanation of why the prescription is potentially inappropriate. The *OncPal* deprescription guideline is a tool that lists medications without any clinical benefit regarding the prognosis of the palliative cancer patient. This is organized by drug class and helps highlight those that are suitable targets for discontinuation. Thus improving the rationalization of the prescription for these patients, reducing the adverse effects of the medications, their large amount used and the associated costs. Finally, the Medication Suitability Index (MSI) is a quantitative questionnaire that can assess therapeutic futility at the time of a first visit to a tertiary palliative care unit. It consists of 10 questions, for each of which the doctor assigns a score, ranging from 1 ("appropriate") to 3 ("inappropriate"), when analyzing each medication, thus guiding the possible prescription.

Another factor of great importance to the deconstruction is the accomplishment of the drug conciliation that must be performed continuously in the patient in OPC, the work of the clinical pharmacist being of utmost importance.

In accordance with the barriers presented in Figure 1, the limitation of the technical knowledge to perform OPC deprescription, the strategies to increase the number of RCTs to build better scientific evidence, and the creation of guidelines for OPC deprescription were identified as those that are more severe, as they are unusual for conducting the deprescription process. These factors greatly limit the process, and present a greater urgency for resolution, as they provide the scientific framework for the process, without which evidence-based medicine is impracticable. They also present greater difficulty in developing the strategy, as they require time and resources to be carried out. Therefore, these reasons would prioritize such strategies in order to be able to perform OCP deprescription.

Another strategy that could be prioritized next would be drug conciliation, performed during the pharmacotherapeutic follow-up, presenting the evaluation of the most serious drug associations in order to perform pharmaceutical interventions so as to avoid the occurrence of ADEs and DRPs. However, the greatest difficulty for developing this strategy lies in the clinical performance of a qualified pharmaceutical professional who is available for the clinical practice, moving away from administrative and management activities in their work routine. The prioritization of strategies through the use of the SUT Matrix is subjective and may vary by evaluator, but is useful when action priorities cannot be established.²¹

Although there are no guidelines for conducting the deprescription process, some criteria can be observed for its implementation: clear and defined treatment targets; patient history and prognosis; metabolism of the prescribed drugs; risk versus benefit of maintaining medication use; adjusting the therapy while considering that the medication will provide clinical benefit.²¹

Once based on scientific evidence and properly performed, deprescription can bring a number of advantages, such as: increased quality of life; reduction of adverse events; reduced frequency of hospitalizations; reduction in drug costs.²⁹

Resuming the idea of the HC as a form of dehospitalization, its importance is precisely to be a strategy of providing continued care for the health demands and increasing quality of life, since the patient in OPC receives the care of the multidisciplinary team at home, with the warmth of the family's proximity. This type of care contributes to reducing the frequency of hospitalizations, since minor

problems are managed during frequent home visits and hospitalization occurs only in emergency cases such as bleeding and pain that is difficult to control.

Since it is multidisciplinary care, the decision-making regarding the treatment of the assisted patients tends to be discussed in teams, being a conducive place for discussions on the process of deprescription to be held in order to reach consensus in this regard. However, despite the fact that in this reality there are specialists in OPC, the process of deconstruction is still uncommon and, precisely because of the lack of scientific evidence to support decision making, as evaluated by the authors cited in this review.

Conclusion

Considering what is discussed in this review, it is important that the process of deprescription is carried out through patient-centered decisions shared with the family, seeking to educate them and their families about the treatment options, including the risks and benefits with the practice of deprescription, always taking into account the patient's preference in order to ensure their safety first. For such a process to happen, it is essential to increase the scientific production of strong evidence, such as conducting randomized, multi-center clinical trials, since most studies have small samples and are limited to one or a few units. As a guiding source, further studies could focus on the effects of antihypertensives, hypoglycemics, and proton pump inhibitors, as there already exist studies for statins, and they should be performed not only for the geriatric population, but also for the oncology population.

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Contributors

APNA and MBFS collected the data and are responsible for all the information of the work, ensuring accuracy and integrity of any part of the paper. All the authors collaborated with conception and design, data analysis and interpretation, writing and critical review of paper and approved final version to be published.

Conflict of Interests

The authors declare no conflicts of interest.

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