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CHALLENGES AND STRATEGIES OF PHARMACISTS IN THE DISPENSATION OF MEDICATIONS FOR HYPERTENSIVE AND DIABETIC PATIENTS IN THE BRAZILIAN PUBLIC HEALTH SYSTEM (SUS): AN INTEGRATIVE REVIEW

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Resumo

A hipertensão e o diabetes são doenças crônicas que demandam acompanhamento contínuo e uso regular de medicamentos, o que torna importante a presença do profissional farmacêutico. Objetiva-se analisar os principais desafios e estratégias da atuação do farmacêutico na dispensação de medicamentos no SUS, com foco no cuidado aos pacientes hipertensos e diabéticos. Revisão integrativa, em que a busca de artigos foi realizada nas bases de dados Scielo, PubMed, *Science Direct* e *Google Scholar*. Foram analisados 15 artigos. O farmacêutico no Sistema Único de Saúde (SUS) desempenha papel crucial ao promover acompanhamento farmacoterapêutico, ações educativas e hábitos saudáveis. Sua integração às Redes de Atenção à Saúde (RAS) possibilita abordagens coordenadas que reduzem complicações das Doenças Crônicas Não Transmissíveis (DCNT). Assim, campanhas educativas, políticas preventivas e equipes multidisciplinares são fundamentais. Além disso, estratégias como tecnologias para monitoramento da adesão ao tratamento e maior articulação entre atenção primária e especializada são promissoras. Desse modo, a atuação do farmacêutico e a integração entre níveis de atenção são fundamentais para o cuidado das DCNT, promovendo adesão terapêutica, uso racional de medicamentos e qualidade de vida, enquanto reduzem custos e desigualdades no SUS.

Palavras-chave: diabetes, hipertensão, uso racional de medicamentos, farmacêutico.

Abstract

Hypertension and diabetes are chronic diseases that require continuous monitoring and regular use of medications, which make the presence of a pharmacist important. The objective of this study is to analyze the main challenges and strategies of the pharmacist's role in dispensing medications in the SUS, with a focus on the care of hypertensive and diabetic patients. This is an integrative review, in which the search for articles was carried out in the Scielo, PubMed, *Science Direct* and *Google Scholar* databases. Fifteen articles were analyzed. The pharmacist in the Unified Health System (SUS) plays a crucial role in promoting pharmacotherapeutic monitoring, educational actions and healthy habits. Their integration into Health Care Networks (RAS) enables coordinated approaches that reduce complications of Chronic Noncommunicable Diseases (NCD). Therefore, educational campaigns, preventive policies and multidisciplinary teams are essential. In addition, strategies such as technologies for monitoring adherence to treatment and greater coordination between primary and specialized care are promising. Thus, the role of the pharmacist and the integration between levels of care are fundamental for the care of NCD, promoting therapeutic adherence, rational use of medicines and quality of life, while reducing costs and inequalities in the SUS.

Keywords: diabetes, hypertension, rational use of Medications, pharmacist.

1 Introduction

On September 19, 1990, Law No. 8080 was enacted, establishing guidelines for the promotion, protection, and recovery of health, in addition to regulating the organization and operation of health services, giving rise to the Unified Health System (SUS). SUS is a landmark in Brazil's history, representing a societal achievement in promoting social justice through universal access to healthcare, serving as an example of an inclusive and accessible health policy, ensuring free and quality care for the entire Brazilian population, and being one of the largest public health systems in the world (Barboza *et al*., 2020).

The Brazilian health system offers a wide range of services, including promotion, prevention, treatment, and recovery, covering various health areas, such as that of adults. These services include the prevention of Non-Communicable Chronic Diseases (NCDs), medication administration, vaccination, laboratory tests, and transplants (Santos, 2018). In Brazil, there are two government programs for medication dispensation: the Popular Pharmacy Program (PFPB), which offers free medications for conditions such as hypertension and diabetes, and the Special Medication Dispensation Program (PDM), aimed at patients with rare or high-cost diseases who cannot access the necessary medications through the conventional market (Matta *et al*., 2023).

This system is essential due to natural aging, which leads many elderly people to use more medications to treat conditions such as Hypertension (HA) and Diabetes Mellitus (DM). Each professional group contributes with its expertise, promoting a multidisciplinary and interdisciplinary approach to analyze health problems from different perspectives. These approaches help meet the diverse health needs of the population (Costa *et al*., 2020).

Polypharmacy, common among the elderly, can lead to high healthcare costs and increase the risk of adverse effects. Therefore, the pharmacist plays an essential role in guiding patients on the correct use of medications, warning about possible adverse effects, and emphasizing the importance of proper treatment adherence. In SUS, pharmacists are fundamental in promoting public health by providing information on the safe use of medications and ensuring appropriate access to treatments. Their role is especially important in dispensing and properly storing medications for NCDs, such as HA and DM (Fantaus, 2023).

Hypertension, specifically, is a chronic disease characterized by the increased force with which blood circulates through the walls of the arteries. When uncontrolled, this elevated pressure can affect various organs, such as the kidneys, heart, eyes, and brain (Souza *et al*., 2023). A study from the National Institute of Cardiology (INC) points out that, in 2023, 27.9% of the Brazilian population had a confirmed diagnosis of HA, the highest rate since the beginning of the survey in 2006. Researchers highlight that hypertension raises the risk of serious diseases, such as heart attacks, strokes, and chronic kidney failure. The condition is more prevalent among women (29.3%) than men (26.4%) and affects 45.3% of people with low levels of education, i.e., up to eight years of formal schooling, corresponding to elementary school level I (Migowski; Costa, 2024).

On the other hand, in DM, the individual may develop insulin resistance and impaired secretion, contributing to the onset of signs and symptoms of the disease (Campos *et al*., 2020). In SUS, primary care and health promotion are fundamental in the treatment of these conditions, highlighting the importance of the system (Mendes *et al*., 2023). DM is a highly prevalent condition worldwide. In 2021, the Brazilian Diabetes Society (SBD) estimated a 50% increase in cases of the disease in South and Central America among people aged 20 to

79 years. In Brazil, approximately 15.8 million people live with diabetes. If current trends continue, the number of individuals with diabetes is expected to exceed 49 million by 2045 (Pititto; Bahia; Melo, 2018).

Thus, this study highlights the importance of pharmaceutical professionals in providing quality care for users who require continuous therapy. Their role is essential in medication selection, dose guidance, pharmaceutical service management, and promoting the appropriate use of medications. Pharmacovigilance and education on the risks of polypharmacy and its adverse effects are fundamental to promote Rational Use of Medicines (RUM). In this context, the pharmacist's role is indispensable at all levels of health care in SUS, overcoming stigmas associated with the profession and reaffirming its crucial role in public health.

Thus, the present study seeks to analyze the main challenges and strategies of the pharmacist's role in dispensing medications in SUS, focusing on the care of hypertensive and diabetic patients. Aiming to optimize care, promote treatment adherence, and contribute to the rational use of medications.

2 Methodology

This was a qualitative research study of the integrative review type, which allows for the synthesis of published studies on a specific topic, drawing conclusions that contribute to various decision-making processes (Andrade Júnior *et al*., 2021). This review was conducted according to the instructions outlined in the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA). According to Liberati *et al*. (2009), PRISMA is a methodology that ensures a complete and transparent verification of systematic reviews and meta-analyses, constituting an important tool to improve the quality of the reports obtained.

In this research, the systematically explored electronic databases were *Scientific Electronic Library Online* (Scielo), *National Library of Medicine* (PubMed), *Science Direct, Google Scholar*, and their respective journals. The electronic data searches were conducted through the combination of descriptors and keywords, SUS, Dispensing of medicines, hypertension, Diabetes, and pharmaceuticals, in English, with the Boolean operator *AND.*

Inclusion criteria were articles in the original category, available in full text, published in English and Portuguese, within the time frame of 2017 to 2024. Articles that did not meet the study's objective, those that did not adequately describe the data (i.e., did not present the desired variables for the study), as well as those published in formats such as theses, reviews, conference abstracts, case reports, literature reviews, and those duplicated in the databases, were excluded.

3 Literature review

In the aforementioned databases, the descriptors were entered along with filters related to the desired period and study type. This resulted in the identification of 125 articles. After removing duplicates, the abstracts of 119 studies were analyzed according to the inclusion and exclusion criteria established in the methodology. After this screening, 53 articles were selected for full-text reading. After a thorough reading, 15 articles were included in the review, as illustrated in Figure 1.

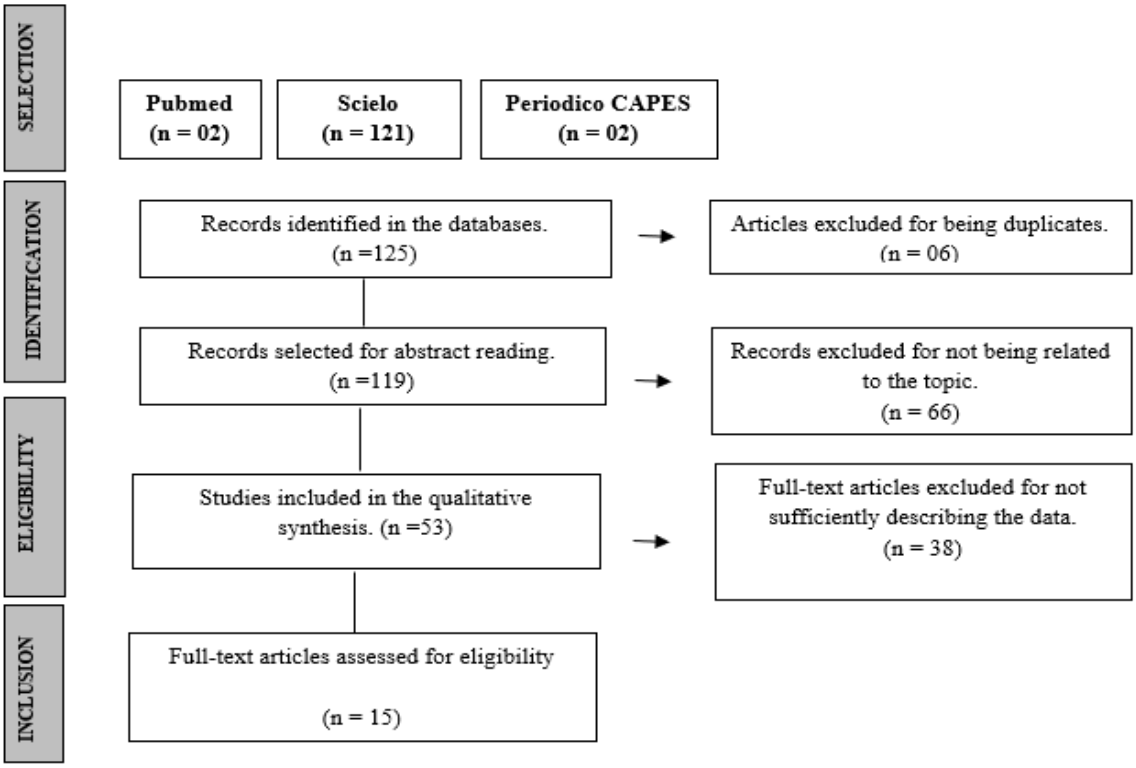

Figure 1: Flowchart demonstrating the article selection process in the databases used.

Source: Survey data, 2024.

Thus, Chart 1 presents the final composition of this review, including the titles of the works, authors, year, country, as well as the objectives and results of the selected studies.

Chart 1: Key information obtained from the 15 selected articles.

Title, author, year, and country	Study objectives	Results
Accessibility to hypertension and diabetes treatment and government spending after changes in the division of patient costs in the "Popular Pharmacy" program in Brazil: a study of interrupted time series. Emmerick *et al*., 2020. United States	Evaluate how sequential changes in the benefits of the Financing Program (FP) affect patient accessibility and government spending on the treatment of Hypertension (HA) and Diabetes Mellitus (DM).	The coverage for the FP increased by 13%, reflecting a growth of more than 15%, while the coverage for DM grew by over 60%. The cost per treatment also decreased significantly: for HA, from R$ 36.43 to R$ 18.74, and for diabetes, from R$ 33.07 to R$ 15.05, resulting in a reduction of more than 50% in the per capita cost.
Actionable Real-World Evidence to Improve Health Outcomes and Reduce Medical Spending Among Risk-Stratified Patients with Diabetes. Garry *et al*., 2019 United States	Produce actionable evidence by identifying effective antidiabetic treatments that can reduce the total cost of care across various risk groups of patients with diabetes mellitus (DM).	Among 115,308 members with diabetes mellitus (DM), the most common comorbidities were cardiovascular risk factors: hyperlipidemia (56%), hypertension (50%), and existing cardiovascular disease (55%). Among the 20,204 members who received dual antidiabetic therapy, metformin was the most commonly used medication.
Bike paths, physical activity in leisure, and arterial hypertension: a longitudinal study on bike paths and hypertension. Florindo *et al*., 2023. Brazil	It is important to highlight that encouraging physical activity and creating environments that support these actions are essential for promoting a healthy lifestyle and preventing arterial hypertension.	The analyses revealed that groups of people who had greater access to bike lanes within 1 km of their homes, between 2015 and 2020, had a higher likelihood of engaging in physical activities during leisure time.
The six pillars of lifestyle medicine in the management of non-communicable diseases – Gaps in current guidelines. Faria *et al*., 2024. Brazil	Analyze the absence of lifestyle pillars in the main Brazilian medical guidelines on NCDs and identify evidence in the literature that could justify their inclusion in the documents.	Six guidelines related to NCDs were identified, and all address aspects of lifestyle, but only one, regarding cardiovascular prevention, highlights all six pillars.
Complications of Diabetes	Estimate the prevalence of	Among the respondents in

Mellitus in Brazil: A National-Based Study, 2019 Brazil. Neves *et al*., 2023. Brazil	complications due to DM and assess the inequalities within the Brazilian population.	2019, 7,358 individuals reported a prior medical diagnosis of DM, representing approximately 8% of the sample. Of these, 6,317 had consulted in the past three years and answered the complications block, forming the sample for this study.
Structural aspects for Diabetes Mellitus in Primary Health Care Units in Brazilian capitals. Almeida *et al*., 2023. Brazil	Analyze the structural conditions of healthcare units and the guidelines, objectives, and goals of municipal management related to the quality of these services in capitals according to Brazilian regions, considering the care of individuals with DM.	The logical model considered the dimensions of management and care, with respective objectives, actions, and activities that ultimately result in the guarantee of access to and quality of healthcare for people with DM in primary healthcare (APS).
Analysis of the impact of a diabetes education program on glycemic control and prevalence of chronic complications. Silveira *et al*., 2023. Brazil	Evaluate the impact of strategic diabetes education actions on glycemic control and the prevalence of chronic complications in patients with diabetes mellitus.	There was a predominance of elderly individuals, low education levels, women, high rates of overweight and obesity, sedentary lifestyle, dietary errors, dyslipidemia, and type 2 diabetes (T2DM). More patients with T2DM than those with type 1 diabetes (T1DM) exhibited optimal glycemic control.
Evaluation of the Behavioral Program in Type 2 Diabetes Mellitus: Randomized Clinical Trial 2. Barbosa *et al*., 2023. Brazil	Evaluate the effect of the behavioral program, group education, and phone intervention on modifying psychological attitudes, improving empowerment, and self-care practices aimed at improving clinical control in DM.	For all four variables studied, the evolution of the measures between the initial and final times was considered different between the groups.
Time evolution of advice on healthy habits in Brazilians with hypertension and diabetes: National Health Survey diabetes. Flores *et al*., 2023. Brazil.	Evaluate the temporal evolution of receiving guidance on healthy habits among Brazilians with hypertension (HA) and diabetes mellitus (DM).	Of the 60,202 adults interviewed in 2013, 21.4% and 6.2% reported a medical diagnosis of hypertension and diabetes, respectively. Among the 88,531 individuals aged 18 or older interviewed in 2019, the percentage of individuals with hypertension was 26.9% and with diabetes was 8.8%.
Hypertension in incarcerated women in Brazil: much more than the biological. Silva *et al*., 2023.	Estimate the prevalence of arterial hypertension (AH) and associated risk factors in incarcerated women. Data from the National Health Survey of the Female Incarcerated Population	Of the 1,327 women participating in this study, 1,295 had information on hypertension, and a prevalence of 24.4% (95% CI = 22.9-26.9) was

Brazil.	were used.	estimated. The majority (31.5%) were between 31 and 40 years old, 51.5% self-identified as brown, and 34.7% had completed from 4th to 7th grade in elementary school. Only 28.7% studied in the prison environment, 41.4% had paid work in prison, and 40.6% reported receiving some assistance from government cash transfer programs.
The direct cost of hospitalizations for chronic non-communicable diseases sensitive to primary care in the elderly. Borges *et al*., 2023. Brazil.	Estimate the direct costs related to hospitalizations for NCDs (hypertension, heart failure, and diabetes mellitus) sensitive to primary care in elderly patients.	The total cost of hospitalizations during the analyzed period was approximately R$ 3 million, with an average of R$ 18,217 per hospitalization. Additionally, the average costs per hospitalization, considering the observed causes.
Time trend and costs of hospitalizations with diabetes mellitus as main diagnosis in the Brazilian National Health System, 2011 to 2019. Costa *et al*., 2023. Brazil.	Analyze the temporal trend of diabetes mellitus (DM) and hospitalization costs in Brazil, by region, Federative Units (UFs), and population characteristics, from 2011 to 2019.	The trend in hospitalization rates for DM was decreasing for both sexes and in most regions, while it was increasing in the younger population and for the length of stay (average of 6.17 days). The total expenditure was US$ 420,692.23 and showed an increasing trend.
The challenges of implementing a text message intervention to promote behavioral change in primary care patients with hypertension and diabetes. Oliveira *et al*., 2023. Brazil.	Evaluate the feasibility of implementing a text message intervention among low-income patients in primary care, as well as assess self-reported behavioral change.	Out of the 136 patients, 117 (86.0%) responded to the questionnaire. The majority reported that the messages were very helpful (86.3%), easy to understand (90.6%), and very useful for behavior change (65.0%); 84.6% reported that they started eating healthier.
Incidence of Hypertension is Associated with Adiposity in Children and Adolescents. Welser *et al*., 2023. Brazil.	Describe the incidence of hypertension and its relationship with the cardiometabolic and genetic profile in children and adolescents from a city in southern Brazil over a three-year period	After three years, the incidence of hypertension was 11.5%. Individuals with overweight and obesity had a higher likelihood of being classified as borderline hypertensive
Evaluation of the structure of pharmacies in Family Health Units for the care of patients with systemic hypertension and diabetes mellitus in Pernambuco.	Evaluate the structure of pharmacies in Family Health Units in the care of hypertension and diabetes mellitus in Pernambuco, 2016.	More than 90% of pharmacies operated in the morning and afternoon shifts. Only 5.7% in the capital and 2.7% in the countryside had a pharmacist responsible for

Costa *et al*., 2020. Brazil.		the service. The capital had a greater variety of medications, but they were not sufficient to meet the demand.

Source: Survey data, 2024.

Based on the data collected in this research, it is possible to calculate the number of articles published in the PubMed, Scielo, and Périodicos-CAPES databases from 2019 to 2023.

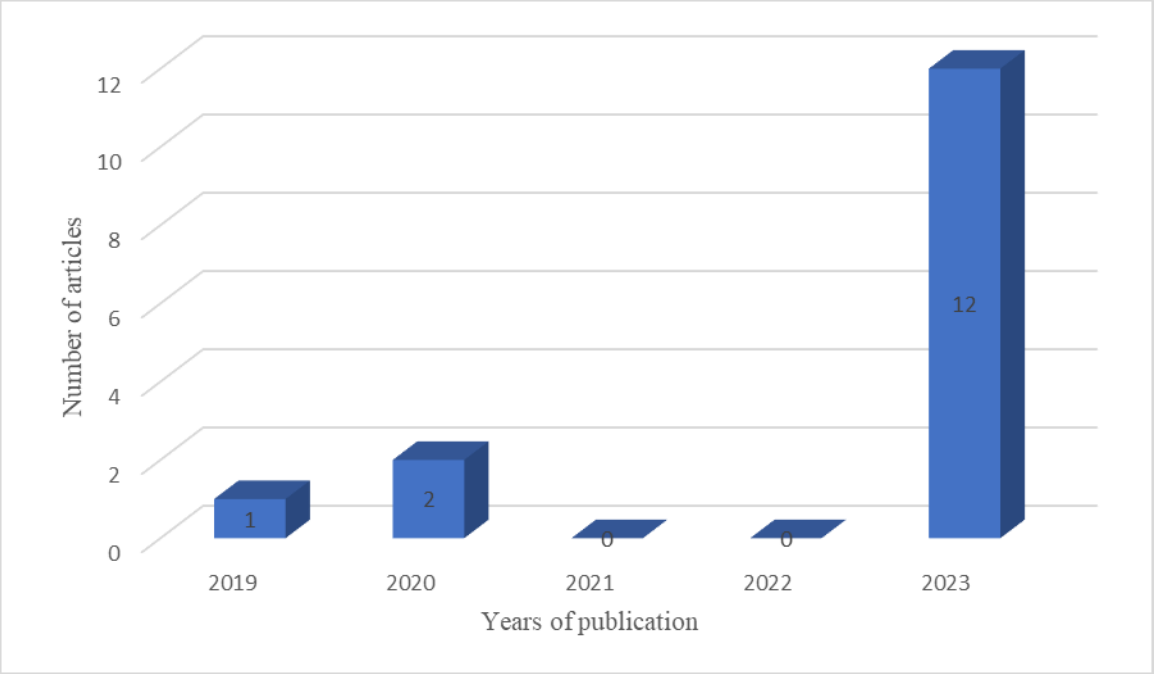

Figure 2: Number of articles published in the PubMed, Scielo, and Périodicos-CAPES databases with descriptors in the abstract, title, or keywords from 2019 to 2023.

Source: Survey data, 2024.

Highlighting the importance of controlling hypertension and diabetes, the challenges related to the treatment of these conditions, and their impact on public health. The analysis also addresses the role of the pharmacist in the SUS, preventive and educational strategies, including promoting healthy habits and educational programs focused on monitoring blood glucose and blood pressure. Additionally, public policies, necessary investments, and their economic impact are discussed, as well as the integration of RAS.

Hypertension and diabetes mellitus are two of the main NCDs that affect the global population. When not adequately controlled, these conditions can

result in severe complications, such as cardiovascular diseases (heart attack and stroke), chronic kidney diseases, eye problems (such as diabetic retinopathy), amputations, dementia, and an increased risk of early death. In the context of public health, NCDs, including hypertension and diabetes, represent a significant challenge for health systems, overloading medical services, raising treatment costs, and negatively impacting people's quality of life (Welser *et al*., 2023).

Hypertension is a chronic condition characterized by elevated blood pressure in the arteries, forcing the heart to work harder to pump blood throughout the body. Often, hypertension presents no visible symptoms, making regular monitoring essential to prevent serious complications such as cardiovascular diseases and strokes. On the other hand, poorly controlled diabetes can cause various complications affecting different organs and systems, as high blood glucose levels persist over time, causing damage to blood vessels (Neves *et al*., 2023).

Both conditions require continuous attention, including regular monitoring, to prevent serious complications. In this context, promoting healthy habits and systematic follow-up are indispensable, enabling both the prevention and effective management of these diseases. Measures such as periodic blood pressure measurement and blood glucose monitoring help detect early changes and adapt treatments, minimizing damage to blood vessels and other organs affected by these chronic conditions (Florindo *et al*., 2023).

According to Borges *et al*. (2023), despite the importance of regular monitoring, there are still significant gaps in its implementation. Many patients face difficulties maintaining continuous follow-up due to socioeconomic factors, such as lack of financial resources and limited access to healthcare services. Additionally, polypharmacy, which is the use of multiple medications, can result in complex interactions, making it harder to control the conditions and adhere to treatment. Cultural issues and lack of awareness about the need for regular monitoring also play an important role in adherence, as well as resistance to lifestyle changes. Uncertainty about the future and fear of possible complications can create a significant psychological impact, creating emotional barriers that hinder proper follow-up (Da Silva *et al*., 2020).

Therefore, pharmacotherapeutic follow-up performed by pharmacists is an essential tool in managing chronic diseases, with the goal of optimizing treatments, promoting therapeutic adherence, and improving patients' quality of life. The pharmacist's role ranges from research and development of new drugs to dispensing and continuous monitoring of pharmacotherapeutic treatment. Among their main responsibilities, ensuring the safe and effective use of medications is paramount, intervening in stages such as the development of new drugs, medication distribution, health education, managing treatment adherence, and promoting quality of life, both in hospital and community settings. Their work is crucial to public health, ensuring patient well-being and safety (Oliveira *et al*., 2023).

Being a professional who plays a fundamental role in pharmaceutical care, going beyond simple medication dispensing. In SUS, the pharmacist ensures the correct administration of treatments, promoting adherence, safety, and efficacy, and also acts in guidance and pharmacotherapeutic monitoring. Health technologies, such as monitoring apps, emerge as promising tools in the follow-up of patients with NCDs. However, their effectiveness depends on integrated public policies, training of professionals, and patient engagement, aiming for better clinical outcomes and reducing the burden on the healthcare system (Barbosa *et al*., 2023).

In the study by Faria *et al*. (2024), it was observed that, to improve treatment adherence and ensure more patients follow prescriptions correctly, effective communication among the healthcare team, continuous treatment adjustments, and close monitoring of patients are essential. These actions should include information on diet, physical activity, medication, and symptom monitoring. Such measures have shown significant progress in glycemic control, with a substantial reduction in hemoglobin A1c (HbA1c) levels. In addition to promoting a better understanding of the disease, these projects also encourage adherence to therapeutic and dietary practices, positively impacting comorbidities such as hypertension, weight control, and dyslipidemias, resulting in improved quality of life.

Adopting healthy habits is essential for preventing and controlling these diseases, contributing to better quality of life, well-being, and longevity. Regular physical activity, a balanced diet, adequate sleep, weight control, hydration,

limiting alcohol consumption, quitting smoking, and stress management are recommended, with guidance from healthcare professionals and participation in educational programs (Silva *et al*., 2023). Furthermore, educational strategies focused on these conditions, such as discussions on healthy eating, blood glucose and blood pressure monitoring, proper medication use, and mental health promotion, are effective in preventing complications. Additionally, regular meetings are essential to ensure the continuity of learning and monitoring of results (SIlveira *et al*., 2023).

All these actions have a direct impact on reducing the costs associated with chronic non-communicable diseases (CNCDs) and their complications, representing significant savings for the healthcare system. However, factors such as the type and severity of the disease, as well as the presence of comorbidities, result in a considerable increase in this economic scenario. Conditions like hypertension and diabetes mellitus incur high costs due to the complexity of treatment and the need for prolonged hospitalizations. Patients with complications or comorbidities face even higher costs, as the extension of hospitalization increases expenses with hospital stays, medications, supplies, and treatments. The performance of procedures, surgeries, and exams also contributes to the increase in total costs, which may vary depending on the hospital structure (public or private), geographic region, and service complexity (Borges *et al*., 2023).

In this context, estimating direct cost is easily identifiable and quantifiable expenses for a specific product or project is particularly relevant when analyzing healthcare expenditures related to hospitalizations due to CNCDs. This type of estimate is essential for enabling more efficient resource allocation, allowing investments to be directed toward priority areas such as prevention and treatment of these diseases. Furthermore, this estimate assists in the formulation of more effective public policies and health programs, while also allowing for the evaluation of the impact of interventions on reducing hospital costs. Raising awareness about the high social and economic costs of CNCDs is important and encourages the population to adopt preventive measures, thus reducing the financial burden on the healthcare system (Costa *et al*., 2023).

Moreover, the implementation of the Health Care Network (RAS) in healthcare units ensures that the population has access to integrated and

coordinated care. This network is a strategy to organize healthcare services more integrally and efficiently, aiming to provide broader, higher-quality care for all. This integration offers various benefits, such as health promotion, improved user flow, increased resolution capacity, and strengthening Primary Health Care (APS). Healthcare units, including Basic Health Units (UBS), specialized clinics, and hospitals, are key points of contact between the population and the healthcare system, playing an essential role in health promotion and continuous care. The RAS seeks to integrate different units and levels of care, providing more efficient, continuous, and humanized services (Pititto; Bahia; Melo, 2018).

The objective of these care networks is to improve treatment adherence and ensure that more patients follow prescriptions correctly, stimulating adherence to therapeutic and dietary measures, with positive impacts also on comorbidities such as hypertension and diabetes, weight control, and dyslipidemias, resulting in improved quality of life. These solutions have been well received, empowering patients to better manage their health. However, the extent of these benefits still needs further investigation, especially due to variations in patient characteristics (Faria *et al*., 2024).

According to Flores *et al*. (2023), monitoring the effectiveness of public health and education policies is important for promoting patient autonomy, making them more engaged in managing their health by providing clear and detailed information. The authors highlight that evaluating the evolution of guidelines on healthy habits for Brazilians with hypertension and diabetes is a challenge but indispensable for improving these patients' quality of life and health outcomes. This approach helps identify gaps in educational actions, contributing to better care and more effective meeting of the population's needs and expectations. Moreover, it allows for the adjustment of health promotion strategies, making them more suitable and aligned with local realities.

However, the high demand for care has made individualized monitoring difficult, compromising health outcomes. The lack of resources, such as equipment and limited supplies, impedes effective testing and pharmacotherapy monitoring. Additionally, many patients face difficulties in understanding medication instructions due to low literacy levels. The absence of integration among healthcare teams also hinders effective communication between doctors and other professionals. To improve outcomes and reduce health risks, it is

essential to implement strategies that prioritize patient education, expand access to resources, and promote collaboration among healthcare teams. These actions can help overcome current challenges and ensure more effective and safe care (Garry *et al*., 2019).

Emmerick *et al*. (2020) also emphasize that difficulty in ensuring adherence to prescribed treatment can be addressed with individualized care, prioritizing guidance on the correct use of medications and resolving doubts. Integration with doctors and other healthcare professionals is also essential for effective communication and comprehensive care, contributing to cost reduction, both in medications and hospitalizations, and promoting improved quality of life for hypertensive and diabetic patients.

Adherence to hypertension and diabetes treatment can be improved through an integrated approach that involves adequate infrastructure in pharmacies and collaboration among healthcare professionals in the Health Care Networks (RAS), with the pharmacist playing a central role. Proper medication delivery, continuous monitoring, and patient education are essential for optimizing results. Personalizing care, coupled with new technologies like remote monitoring, can also improve CNCD control. Furthermore, it is crucial that health policies prioritize equity, especially for vulnerable populations, to promote a fairer and more accessible healthcare model, reducing inequalities in access to care (Costa *et al*., 2020).

4 Final Considerations

The pharmacist, as an essential member of the multidisciplinary team, plays a strategic role in caring for these patients, contributing to Rational Use of Medicines (RUM), providing guidance on treatments, monitoring therapeutic adherence, and promoting healthy habits. Collaboration between the Health Care Networks (HCN) and pharmacies strengthens the effectiveness of services and expands access to comprehensive care. The challenges in controlling chronic diseases are diverse, covering issues such as treatment adherence, access difficulties, and health education.

At the same time, the economic impact of Chronic Non-Communicable Diseases (NCD) on public health highlights the urgency of investing in preventive strategies and resource optimization. Effective and sustainable

public policies are essential to reduce costs, decrease morbidity and mortality, and strengthen the healthcare system. Thus, this study emphasizes the importance of the pharmacist's role and the integration between levels of healthcare as pillars in addressing NCD. By implementing educational, preventive, and assistive practices, it is possible to promote health, reduce complications, and improve patients' quality of life, contributing to the sustainability and effectiveness of the Unified Health System (SUS).

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