Pharmaceutical care for people with depressive disorders: A description of academic production in the context of Brazilian Graduate Studies

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ABSTRACT

Depressive disorder is a globally prevalent multifactorial condition that affects millions of people, significantly compromising their quality of life and well-being, and resulting in significant biopsychosocial distress. For those living with this disorder, different strategies are employed, both pharmacological and non-pharmacological. During drug treatment, Medication-Related Problems may arise, including situations in which patients in mental distress use their home medications as a suicide tool. From this perspective, pharmacists play an increasingly important role in the management of mental health conditions, assisting in the safety and effectiveness of treatment. This study aimed to review the available literature to analyze the importance of pharmaceutical care for people with depressive disorders. This was a descriptive and observational study of the State of Knowledge. Data were collected from the Catalog of Theses and Dissertations of the Coordination of Superior Level Staff Improvement (CAPES), without temporal limitation, to identify patterns, trends and gaps. The documents included needed to contain information pertinent to pharmaceutical care provided to individuals diagnosed with depressive disorder, written in Portuguese, English or Spanish, with the participation of Brazilian people. Pertinent information included activities such as health education, pharmaceutical guidance, dispensing, pharmaceutical care or consultation, pharmacotherapeutic follow-up, systematic recording of activities, measurement and evaluation of results. After the identification, selection and eligibility processes, two productions for the quantitative-qualitative synthesis were included for reading and analysis, addressing central themes such as pharmaceutical consultation and pharmacotherapeutic follow-up. It is suggested that this research enabled the visualization of pharmaceutical care activities and services for patients with depressive disorders, identifying potentialities for optimizing pharmacotherapeutic effectiveness, both pharmacological and non-pharmacological, and identifying strategies to minimize the impacts of therapeutic decision-making, including pharmaceutical, pharmacological and non-pharmacological interventions.

Keywords: Mental health, Pharmaceutical care, Graduate Education in Pharmacy.

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INTRODUCTION

Depressive disorder (DD) is a prevalent mental health condition, significantly compromising the quality of life and well-being of people with depression, and is recognized as one of the leading causes of work disability worldwide. During depression, the individual presents significant biopsychosocial suffering, of multifactorial origin, associated with different signs and symptoms. Due to the potential for morbidity and mortality and secondary diseases, for several countries there is a substantial financial cost for the development of care and health care for patients with depression (WHO, 2017).

DD comprises a range of clinical signs and symptoms of depression, and is one of the most prevalent mental health conditions, affecting millions of people globally, and encompasses many aspects of life, including quality of life, social relationships, work performance, and general well-being. It is recognized that the high incidence of suicide places DD in a position of priority in collective and public health, and it is therefore essential to understand this condition in order to optimize the approach to the patient and make effective the treatment and follow-up of people living with DD, with different criteria for each type of depression, following the Diagnostic Manual in Mental Health (DMH-5) – the gold standard for defining diagnoses in mental health) (Rufino et al., 2018).

The incidence of DD can comprise a frequency between 5-6% of the population, with a lifetime prevalence of 5-11%. The likelihood of the disease occurring is twice as high in women as in men, with the usual peak onset being between the ages of 20 and 40. In Europe, the first report related to the epidemiology of depressive disorders was developed by the ODIN study, which sought to know the prevalence and risk factors of depression in urban and rural areas of different parts of Europe. The overall prevalence found was 8.5%, with twice the frequency in women than in men. The prevalence of intense episodes of depression is as high as 17% and, in the case of recurrent brief depression, 11%. All studies agree that the incidence is twice as high in women and that it easily develops as a chronic disease. (Lindell et al., 2018).

The lifetime prevalence of DD in Brazil is around 15.5%. This number highlights the significant burden that depression imposes on the country's public health. The World Health Organization (WHO) estimates that the prevalence of depression in the Primary Health Care (PHC) network reaches 10%, either as an isolated condition or associated with other psychiatric and/or physical disorders. This high frequency highlights the importance of effective strategies for diagnosing, treating, and preventing depression within the context of PHC, aiming to mitigate its impacts on patients' quality of life and well-being (WHO, 2017).

These are long-term episodes, with 50% recurrences after a single episode, and even higher if there have been several previous episodes. Morbidity is similar to that of angina pectoris or

atherosclerotic disease and more socially debilitating than diabetes or arthritis. Only one-third of patients are on treatment. Suicide attempts affect 10% of depressed patients. Fifteen percent of severely depressed people end up committing suicide, and of those, 70% visit their general practitioner about 6 weeks before suicide (Peixoto, 2021).

Currently, the Unified Health System (SUS) seems to understand the urgency of understanding and planning actions to combat depression. In the year 2023, the Ministry of Health announced the creation of the National Department of Mental Health (DEME). An investment of R$ 200 million was also applied to the Psychosocial Care Network (RAPS), also focusing on teaching and research to recompose the cost of the Psychosocial Care Centers (CAPS) and Therapeutic Residential Services (SRT) (Brasil, 2023).

In this sense, different pharmacological and non-pharmacological strategies are used for the treatment of depression, including the assistance of the multidisciplinary health team. Considering non-pharmacological treatments, there are interventions and strategies for reception and permanence in the service, such as health education, psychotherapeutic and neurological rehabilitation, therapeutic workshops, assisted medication, home care, and other actions, activities, and services (Jacka et al., 2017; Brasil, 2023).

Regarding pharmacological treatments, there are different drug alternatives and therapeutic regimens. One of the main pharmacological classes used are Monoamine Oxidase Inhibitors (MAOIs), atypical antidepressants and Selective Serotonin Reuptake Inhibitors (SSRIs), among others.

Pharmacotherapeutic follow-up in depressed patients can be challenging, given that they are people with whom communication can be difficult and tend not to have adherence to treatment, which can be complicated to assess the effectiveness and safety of treatment due to the lack of measurable parameters and the presence of other concomitant diseases. This guidance aims, in the following points, to delve into each of the types of Medication-Related Problems (MRP) that can be encountered when studying the patient's antidepressant medication, in terms of need, efficacy, and safety, to facilitate and support this pharmaceutical work (Buist, 2019).

The *Pharmaceutical Care Network Europe* (PCNE) (Cipoli, Strand and Morley, 1998), during the European Conference on Pharmaceutical Care, defines MRPs s as: "*the occurrence of problems in an individual's pharmacotherapy, which causes or may cause interference with therapeutic outcomes".* On the other hand, the Granada Consensus (2002) defines that *"MRPs are health problems understood as negative clinical results, derived from pharmacotherapy that, produced by various causes, interfere with the therapeutic result or lead to unwanted effects*".

In Brazil, problems related to the nervous system are among the eight most frequent types of consultations in the community pharmacy. In the United States, aspects related to depression are

among the five most common visits to the pharmacist, including effectiveness and adverse events of antidepressant medications. Once the Clinical Pharmacy and Pharmaceutical Care service is implemented, with the development of pharmacotherapeutic follow-up activities for patients with DD, 32% of patients consider that the pharmacist is a good help to solve problems related to the proper use of medications, since 83% recognize that they forget or add doses of the treatment or even abandon it. and that the pharmacist helps them to adhere better to the treatment and to feel more satisfied with the medication (Berlin; Turecki, 2018).

From this perspective, the pharmacist can play an important role in the follow-up of antidepressant therapy from the beginning of treatment, helping to resolve MRPs, increasing patient satisfaction with their medication, and collaborating in therapeutic adherence, going beyond the private act of dispensing (Fang; Chen, 2018). Pharmaceutical care, as part of a multidisciplinary and interprofessional approach to health, represents a fundamental part in the prevention of mental health problems in the effective therapeutic response.

In view of this reality, it is imperative to explore all the potential of pharmaceutical care in the management and treatment of this severe mental condition (Berlin; Turecki, 2018; Ayre; Lewis; Keers, 2023), identifying which roles are essential for health promotion, disease prevention, and support for people with depressive disorders. This includes assisting in the appropriate selection of pharmacological therapy, monitoring its effectiveness, safety, and adherence, and providing health education for patients and/or their caregivers and families about the appropriate use of medications and providing continuous and integrated support throughout treatment (Kamusheva et al., 2020).

This study aimed to review the literature in order to identify the potential of pharmaceutical care in relation to the health monitoring of people with depression, through a review of the available literature, in order to identify the direction of postgraduate research on pharmaceutical care for people with depressive disorders (Fang; Chen, 2018).

METHOD

This was a descriptive and observational study, characterized as a State of Knowledge literature review, which allows the consolidation of specific information in the health area, providing recommendations based on research for clinical practice. In addition, it has the following features:

> "[...] map and discuss a certain academic production in different fields of knowledge, trying to answer what aspects and dimensions have been highlighted and privileged in different times and places, in what ways and under what conditions certain master's dissertations, doctoral theses, publications in periodicals and communications in conference and seminar proceedings have been produced" (Ferreira, 2002, p. 258)

For data collection, a search was carried out in the CAPES Catalog of Theses and Dissertations. The search was conducted using a combination of descriptors and alternative terms

according to the guidelines of the Health Sciences Descriptors (DeCS). The Boolean operators "*AND"* and "*OR*" were used, giving rise to the following search strategy: *"*pharmaceutical care" *AND* "depressive disorder" *OR "*depression"

The inclusion criteria that guided the selection of theses and dissertations comprised the following specification: at least their abstracts were available in electronic format and in Spanish, English or Portuguese, with Brazilian patients. There was no delimitation of a temporal interval to highlight patterns, trends and gaps. In addition, the documents needed to contain information pertinent to pharmaceutical care provided to individuals diagnosed with depression. Pertinent information is understood as the following activities: i) Health education (including promotion of the rational use of medicines), ii) Pharmaceutical guidance, iii) Dispensing, iv) Pharmaceutical care, v) pharmacotherapeutic follow-up, vi) Systematic recording of activities and vii) measurement and evaluation of results.

Documents that did not discuss pharmaceutical care activities considering people with depression were not included. Any document that did not meet these criteria, as well as duplicate publications, were not included.

After inclusion, a quantitative-qualitative perspective of the research was adopted. Quantitative data were analyzed descriptively using Excel (Microsoft ®) software, only absolute and relative frequency. The WebQDA® software was used as a tool for qualitative analyses, considering three phases of analysis, as proposed by Minayo (2001) and Bardin (2011), where 1) there was a thorough reading of the selected documents, followed by 2) coding and extraction of information according to the previously established inclusion criteria and 3) critical analysis of the data found.

During stage 1, the texts were examined in their entirety in an exhaustive manner. The pharmaceutical activities were categorized according to the thematic analysis, and comprised the following categories: a) implementation of pharmaceutical care services, b) performance of pharmaceutical consultations, c) telepharmacy activities, d) pharmacotherapeutic follow-up, e) methods and instruments for pharmacotherapeutic follow-up and f) instruments and evaluation of health indicators and Drug-Related Problems, thus offering a comprehensive overview of the landscape of depression-related pharmaceutical care.

The variables of interest for analysis comprised the following bibliometric indexes: a) time flow, b) large area of knowledge, c) area of knowledge, d) area of evaluation, e) area of concentration, f) name of the Program, g) regions, h) institutions, i) specification of the graduate work, j) methodologies used, k) objective and l) activity or service of pharmaceutical care reported.

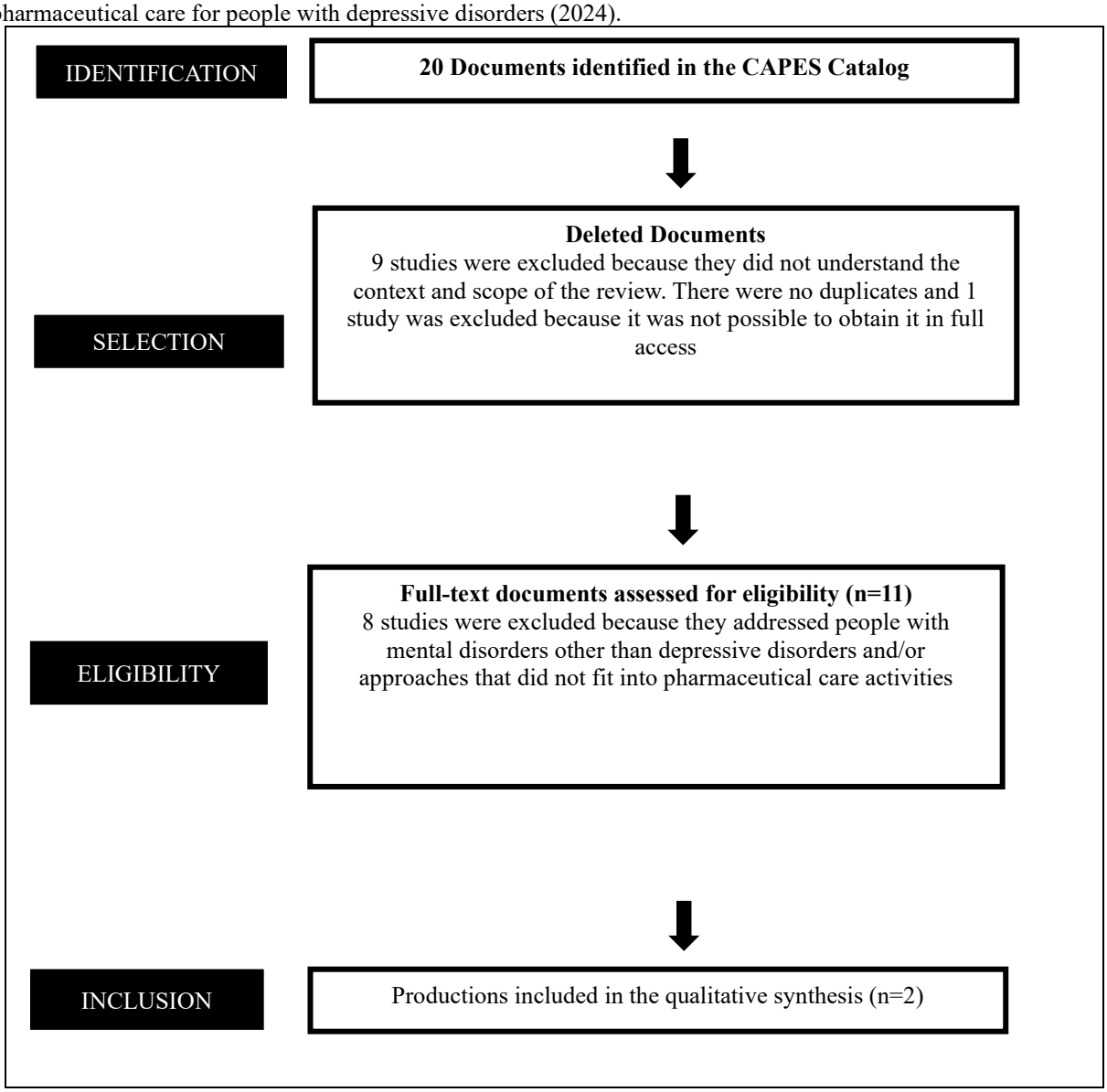
The data obtained by the thematic analysis are presented in tables and narratively presented grouped by the bibliometric indexes used in this study and other characteristics of the pharmaceutical activities performed. All the bibliography investigated and used during the data search was included

in the review, writing of the text and is cited in the references. Considering the type of study, there was no need to request authorization from the Research Ethics Committee (REC).

RESULTS AND DISCUSSION

Initially, 20 documents were found in the CAPES-CNPQ catalog. However, 45% (n=9) of the documents were excluded because they did not understand the scope of the review regarding pharmaceutical care and 5% (n=1) because they did not have full access to the CAPES catalog. After assessing the eligibility of the full text, 40% (n=8) of the studies were excluded because they addressed mental and psychiatric disorders that were different from those of DD and/or because they presented approaches that did not fit the activities of the clinical pharmacy and pharmaceutical care service (Figure 1).

Figure 1. Flowchart regarding the processes of identification, selection, eligibility, and inclusion of academic productions on pharmaceutical care for people with depressive disorders (2024).



Source: Prepared by the authors.

Finally, 10% of the general sample (n=2) was included for the quantitative-qualitative analysis of these documents, as shown in figure 1 and presented in terms of title and authorship in chart 01.

Table 1. Characterization of the title and authorship of academic productions on pharmaceutical care for people with depressive disorders found in the CAPES/CNPQ Catalog (2024).

Study title	Reference
Pharmacotherapeutic follow-up of patients with depression and/or anxiety disorders in a psychosocial care center: from the clinical trial to the implementation of the service	Fernandes, 2020.
Pharmaceutical care in people with depressive disorder: analysis of treatment effectiveness	Nunes, 2021.

Source: Prepared by the authors.

Considering the characterization of the bibliometric indexes, it was possible to notice a break in the continuity of the theme over a period of 8 years. In addition, the major areas of knowledge and evaluation included the multidisciplinarity and interdisciplinarity of health sciences. Most of the publications (66%) were doctoral theses. Other details are presented in Table 1.

Table 1. Characterization of bibliometric indexes of academic productions on pharmaceutical care for people with depressive disorders found in the CAPES/CNPQ Catalog (2024).

Bibliometric index	n	%
Year		
2020	1	50
2021	1	50
Great area of knowledge		
Health Sciences	2	100
Field of knowledge		
Pharmacy	1	50
Public Health	1	50
Depreciation area		
Pharmacy	1	50
Interdisciplinary	1	50
Area of concentration		
Biological assays	1	50
Pharmacy	1	50
Academic Degree		
Academic Master's Degree	1	50
Doctorate	1	50
Program Name		
Pharmaceutical Sciences	1	50
Health Sciences	1	50
Institution		
Federal University of Amapá	1	50
Federal University of Ceará	1	50
Region		
North	1	50
Northeast	1	50
Total	**2**	**100%**

Source: Prepared by the authors.

Objectives were observed both for the implementation of pharmaceutical services and the evaluation of the impact of pharmaceutical care, with the use of study designs for clinical intervention (longitudinal and prospective study and randomized controlled clinical trial), as described in chart 2.

Table 2. Description of the objectives and study designs of academic productions on pharmaceutical care for people with depressive disorders found in the CAPES/CNPQ Catalog (2024).

Study	Objective	Study method/design
Fernandes, 2020.	Implement a pharmaceutical care service, based on the Pharmacotherapeutic Follow-up (AFT) provided to patients with depression and/or anxiety disorders in a Psychosocial Care Center (CAPS)	This is a randomized controlled clinical trial involving 70 adults at the Psychosocial Care Center (CAPS II) in Mossoró-RN. Participants in the Intervention Group (IG) received Pharmaceutical Follow-up Services (TFA) over four months, in parallel to the Control Group (CG). After this period, some CG patients were invited to participate in another four months of intervention with AFT, forming the Post-Control Intervention Group (GIPC). Primary outcomes, such as treatment adherence, rates of anxiety and depression, and quality of life, along with their variations between groups, were compared. Qualitative content analysis, following Bardin's approach, was applied to interviews with patients and the CAPS health team. The objective was to explore their perceptions about the role of the pharmacist in mental health and the provision of Pharmaceutical Follow-up.
Nunes, 2021.	OBJECTIVE: To analyze the impact of Pharmaceutical Care on the effectiveness of treatment of users of the Psychiatry Outpatient Clinic of the Hospital de Clínicas Dr. Alberto Lima, diagnosed with depressive disorder.	This is a longitudinal and prospective study, characterized by an analytical-descriptive and intervention approach. Thirty-five participants underwent pharmaceutical care and were assessed by the pharmacist using the Beck Depression Inventory before and after the intervention. The consultations were conducted according to the Dáder methodology, consisting of four pharmaceutical sessions, the first in person and the subsequent sessions carried out by telepharmacy (telephone) at intervals of 30, 60 and 90 days, respectively.

Source: Prepared by the authors

As noted, there is a break in the historical series, even if in a low number of identified works. The findings raise reflections on the factors that may have contributed to this pattern. It is suggested that aspects such as health education and professional education can influence the development of potentialities and barriers in the face of the need for pharmacy to be understood and act, both in undergraduate and graduate programs, as a point of care within the Health Care Network (RAS), breaking with the biomedical model centered on medicine (Brasil, 2020).

It is noteworthy that after Resolution No. 6/2017, which instituted new National Curriculum Guidelines (DCNs) for the undergraduate pharmacy course, health care began to represent 50% of the scope of the DNC (Brasil, 2017), with emphasis on the insertion of Active Teaching-Learning Methodologies, with encouragement to critical-reflective training for health care and reduction of knowledge fragmentation. Another aspect to be considered is the low stimulus to the continuing

education of these professionals, which can hinder the understanding and development of clinical practice and rational decision-making during the care process (Andréa; Wagner; Scheveitzer, 2022).

The hypothesis is that in this context, the drug-centered model seems to influence understandings of fragmented, organicist and individualized mental health care models, which influence the non-perception of gaps in this area, highlighting the need for an expansion and redirection of scientific interest. It was also possible to observe the important role of federal universities. Oliveira and Bastos (2014) discuss the political and ethical role of public institutions in the development of research.

Considering the types of documents (thesis or dissertation) found, it is possible to recognize the level of training in which pharmaceutical care has been approached. In addition, there is the observation that the major areas of knowledge and evaluation cover health sciences, especially pharmacy, mental health and public health. Both data highlight the links between the relationship between pharmaceutical care and the health of populations and communities, pointing to a transdisciplinary interest in the theme. This fact may indicate a comprehensive approach in the conduct of studies, as an effort to integrate different perspectives and knowledge, which may result in practical and innovative solutions and benefits in the area of pharmaceutical care. Giacomini and Rizzoto (2022, p.261) state that the interdisciplinarity perspective "represents an opportunity to overcome the biomedical model of care" in mental health, with the potential to understand subjects and collectives in an integral way, as guided by the principles of the Unified Health System (SUS).

It was possible to observe similar activities present in the academic productions, as presented in chart 03 and detailed in table 2, with a frequency of complementary clinical activities regarding the activity of pharmaceutical care. In general, a higher frequency of pharmacotherapeutic follow-up is observed in clinical management and care planning for patients with mental disorders.

Table 3. Description of the activities carried out in the studies of academic productions on pharmaceutical care for people with depressive disorders found in the CAPES/CNPQ Catalog (2024).

Study	**Description of the activities carried out in the study**
Fernandes, 2020	➢ Implementation of the clinical pharmacy and pharmaceutical care service ➢ Pharmaceutical consultation ➢ Pharmacotherapeutic follow-up
Nunes, 2021	➢ Pharmaceutical consultation ➢ Pharmacotherapeutic follow-up ➢ Use of the Dáder Method ➢ Application of the Beck Depression Inventory ➢ Evaluation of Drug-Related Problems (MRPs) ➢ Telepharmacy

Source: Prepared by the authors

Table 2. Categorization and frequency of reporting of the different pharmaceutical care activities of academic productions on pharmaceutical care for people with depressive disorders found in the CAPES/CNPQ Catalog (2024).

Categorization	n	%
Pharmacotherapeutic follow-up	2	22,2
Evaluation of Pharmacotherapy-Related Problems	1	11,1
Pharmaceutical consultation	2	22,2
Implementation of pharmaceutical services	1	11,1
Telepharmacy	1	11,1
Using the Dáder Method	1	11,1
Use of instruments for the assessment of health problems	1	11,1
Total	**9**	**100**

Source: Prepared by the authors

The studies found are complementary and cover similar themes. Although they have played a role in public health for a long period, the inclusion of pharmacists in Primary Health Care (PHC) health teams is a recent trend (Manzini et al., 2020). Legal, political, and educational changes have allowed pharmacists to face new perspectives in healthcare (Bates; Bader; Galbraith, 2020; Goode et al., 2019). These changes reflect the evolution of health care, with patient-centered medicine replacing the reactive and curative model, influenced by scientific, technological, and economic progress and advances in health systems (Bragazzi et al., 2020), which highlights the potential of mental health care.

Also considering the themes identified in the documents produced by the graduate programs, clinical pharmaceutical services are frequent. These can be presented and developed in a variety of ways, including individualized and regular pharmaceutical consultations, as well as group educational activities, such as lectures, community campaigns, focused on the prevention of chronic diseases (Feitosa et al., 2020).

Before starting the pharmaceutical care process in a concrete way, it is possible to understand the individual needs of patients during the dispensing of medications, through the analysis of prescriptions, direct interactions with patients, and review of medical records and records of PHC Units (Sá et al., 2020). The pharmacist's clinical role develops in an organized manner, starting with direct contact with the patient to identify their health conditions, drug history, allergies, adverse reactions, lifestyle habits, treatment adherence, monitoring of therapy results, and other relevant factors (Wang et al., 2020; Dilles et al., 2021).

From this perspective, the studies found demonstrate that patient-centered care, personalized according to each individual's health condition, responding to their specific needs (Amu et al., 2021), seems to be developing, although incipient – compared to the size of the national health system. This individualization of care requires patient education, which allows them to acquire knowledge about their health condition and the available treatments, promoting their safety and self-care capacity. This collaborative approach between patients and healthcare professionals positively promotes health promotion (Heggdal et al., 2021).

Around the world, there is a shift in the approach to the role of the pharmacist, which is evolving from a focus primarily focused on the drug and its dispensing as a *commodity*, to a patient-centered approach (Pol et al., 2021). With a clear understanding of their duties, roles, and responsibilities, the pharmacist is no longer limited to the pharmacy environment, but expands their services to include patient guidance and counseling on non-pharmacological issues (Nussbaumer-Streit et al., 2020). According to Lula-Barros and Damascena (2021), pharmaceutical services play a crucial role in disseminating evidence-based information, which contributes to comprehensive, effective, and problem-solving health interventions.

It is also noted in the results found that there are several forms of pharmaceutical action, each bringing its own specificity to the context. This change in the role of the pharmacist allows him to know the health conditions, habits, and individual needs of patients, intervening in a personalized way to promote their access to health services (Navarrete et al., 2021). Additionally, by adopting a patient-centered approach, the pharmacist can contribute to easing the burden on the public healthcare system and improving users' access to these services. The availability, easy access, and ability to establish relationships of trust with the multidisciplinary team highlight the pharmacist as a strategic component in patient care (Pfaff; Rafie, 2020).

It is also possible to identify pharmaceutical performance from the perspective of identifying and resolving MRPs. The inappropriate use of a wide variety of medications by the population can result in MRPs. These are common, occurring in about half of the patients seen in community pharmacies, with at least one event per patient. The pharmacist plays a crucial role in identifying and resolving these issues, which can compromise treatment results and cause unintended unwanted effects. Adverse events associated with MRPs increase hospitalizations, healthcare costs, and morbidity and mortality (Paulino et al., 2021).

Pharmaceutical care in CAPS requires adequate planning, in general, so that it is possible to comply with care plans, considering comprehensive and longitudinal therapeutic care, stimulating the bond between patients and professionals. In this aspect, it is considered that professionals who provide therapeutic care, health promotion and recovery can become a reference for dispensing in mental health, also under the aspect of pharmaceutical care. Models of mental health care in collaboration with the multidisciplinary team are fundamental, as the pharmacist is able to establish a link between other professionals, and participate in strategies for adherence to mental health care with patients with depression and/or other psychiatric disorders or common mental problems (Silva; Lima, 2017).

The process of personalizing and optimizing pharmacotherapy for each patient is highly complex, aiming to achieve therapeutic results with no or few adverse events (Dilles et al., 2021). To exercise an effective clinical role in mental health, the pharmacist must be involved in identifying

and resolving problems related to pharmacotherapy. This allows the pharmacist to provide precise guidance to the patient on the correct use of medications, contributing positively to the therapeutic effect on the patient's health (Wang et al., 2020). In addition to guiding and educating the patient, when acting clinically, the pharmacist trains the multidisciplinary health team and health service managers on the rational and safe use of medicines (CFF, 2020; Brazil, 2020; Tritany, 2020; Rubert; Deuschle, 2021).

During this process, especially in the context of drug therapy of patients with mental disorders, the pharmacist evaluates the prescription of medications, including their indication, possible interactions, route of administration, dosage, and other aspects, aiming to prevent and solve problems related to pharmacotherapy. Then, pharmaceutical interventions are implemented as needed, as part of the individualized care plan (Wang et al., 2020; Dilles et al., 2021).

The documents address the recent practice of telepharmacy. Recently, the first regulation of telepharmacy was published, through Resolution No. 727, of June 30, 2022). The Federal Council of Pharmacy (CFF) defines telepharmacy as the practice of Clinical Pharmacy mediated by Information and Communication Technology (ICT), performed remotely and in real time or asynchronously. This modality aims to promote, protect, monitor and recover health, prevent diseases, solve pharmacotherapy problems and promote the rational use of medicines, in addition to being applicable to health education and research. Forms of care include pharmaceutical teleconsultation, teleinterconsultation, telemonitoring or telesurveillance, and teleconsulting. To work in telepharmacy, pharmacists must use platforms or software registered with the Regional Pharmacy Councils (CRFs) and represented in Brazil. Companies that provide these platforms or perform services must have established representation in the country and a pharmacist in charge of the technical (Brasil, 2022).

Telepharmacy is considered an extension of clinical pharmacy, offering pharmaceutical services digitally in response to the needs of new social and economic contexts, driven by the advent of Health 4.0 or Digital Health, especially accelerated in Brazil due to the COVID-19 pandemic. Like telemedicine, telepharmacy is a part of telehealth, utilizing digital means to provide remote assistance. In addition to facilitating dialogue, telepharmacy assists with treatment adherence, patient education, and support for other pharmaceutical professionals. Studies have shown the benefits of this model for treatment adherence and improved health in chronic patients (Crilly; Kayyali, 2020).

The Dáder method, a systematic and documented model of pharmacotherapeutic follow-up, was frequently used among the documents included. The Pharmacotherapeutic Follow-up Method is a simple and systematized surgical procedure that allows recording, monitoring and evaluating the effects of pharmacotherapy in patients. It is based on obtaining information about the patient's health problems and treatments to elaborate a pharmacotherapeutic history and status states. Based on this

assessment, an intervention plan is established, recording all pharmaceutical interventions to improve the patient's health status. The method is flexible and adaptable to the needs of different care environments, evolving with clinical practice and the experiences of professionals. Its usefulness is evidenced by its wide adoption by pharmacists around the world and its ability to be applied in various care contexts (Brasil, 2020).

Pharmacotherapeutic follow-up by the Dáder Method comprises several stages. Initially, there is the Pharmaceutical Interview, which consists of a combination of open-ended and closed-ended questions to explore the patient's main concerns, review ongoing drug therapy, and analyze the results of laboratory tests. This stage also encompasses the assessment of treatment adherence, including the comparison between the medical prescription, the patient's report, and the medications he or she brought with him, whether prescribed or not (De lima et al., 2021).

After the interview, a summary of the patient's health conditions is made, along with the medications used and the treatment history. This phase is called State Situation and serves as the basis for structuring the patient's pharmacotherapeutic history. Then comes the Study Phase, in which the pertinence, efficacy and safety of the drugs in use are analyzed. This step involves dialogue with the multidisciplinary health team and the formulation of an action plan to optimize therapy (Júnior et al., 2021).

Finally, there is the Intervention/Evaluation of Results, in which intervention suggestions are presented to patients and their families. At this point, therapeutic goals, laboratory test requirements, home monitoring, and therapy adjustments as needed are defined. Outcomes are assessed by comparing laboratory tests and vital signs at the beginning and end of the rehabilitation plan (Brasil, 2020; Oliveira et al., 2020).

There are some limitations in this study, such as the absence of a significant sample size, which may have been influenced by the search strategy, only by performing counter-evidence to increase the number of studies to be explored. Some studies have also not been fully evaluated. Even so, it was possible to notice a similar profile of clinical activities, especially for mental health. We suggest further research that makes it possible to indicate relationships regarding the measures of transformation of graduate programs that comprise pharmaceutical care in mental health.

FINAL THOUGHTS

The results provide a similar view of the current scenario of pharmaceutical care, especially in the context of mental health and the expansion of clinical services, despite the limited results. Although a significant portion was excluded because it did not fit within the scope of the research, the careful selection allowed for a more objective analysis of the included studies. An important finding is the trend towards interdisciplinarity and multidisciplinarity in the health sciences,

especially in the context of pharmaceutical care. Still, it is possible to observe that there is a recent interest in this area of research, although a break in continuity in the theme over a period of time has been observed, raising questions about the factors that may have contributed to this pattern.

The studies analysed demonstrate an evolution in the approach to the role of the pharmacist, moving from a drug-centred to a patient-centred approach. This change is reflected in the growing practice of clinical pharmaceutical services, especially with the adoption of the Pharmacotherapeutic Follow-up Method. Also noteworthy is the emergence of telepharmacy as an extension of clinical pharmacy, driven by digital progress and the need for accessibility and efficiency in health services. The recent regulation of telepharmacy opens up new opportunities for the delivery of remote and personalized care, although operational and implementation challenges still need to be overcome.

It is clear that the role of the pharmacist is constantly evolving, and the integration of interdisciplinary approaches, the adoption of systematic clinical methods, and the exploration of new modalities of service delivery are key to driving significant advances in pharmaceutical care. These findings provide a solid foundation for future research and for enhancements in clinical practices and health policy related to the role of the pharmacist in health promotion and patient care.

REFERENCES

1. Amu, H., Darteh, E., Tarkang, E. E., & Kumi-Kyereme. (2021). Gestão de doenças crônicas não transmissíveis em Gana: um estudo qualitativo utilizando o modelo de atenção crônica. *BMC Public Health, 21*(1), 11200.

2. Ayre, M. J., Lewis, P. J., & Keers, R. N. (2023). Understanding the medication safety challenges for patients with mental illness in primary care: a scoping review. *BMC Psychiatry, 23*(471), 1-17.

3. Bates, I., Bader, L. R., & Galbraith, K. (2020). Uma pesquisa global sobre tendências na prática avançada e especialização na força de trabalho da farmácia. *International Journal of Pharmacy Practice, 28*, 173-181.

4. Berlim, L. V., & Turecki, G. (2018). What is the meaning of treatment resistant/refractory major depression (TRD)? A systematic review of current randomized trials. *European Neuropsychopharmacology, 28*(12), 1415-1426.

5. Bragazzi, N. L., Mansour, M., Binsignore, A., & Ciliberti, R. (2020). O papel dos farmacêuticos hospitalares e comunitários no gerenciamento do COVID-19: em direção a uma definição expandida dos papéis, responsabilidades e deveres do farmacêutico. *Pharmacy (Basileia, Suíça), 8*(3), 140.

6. Brasil. Ministério da Saúde. (2023). Ministério da Saúde amplia em R$ 414 milhões por ano os recursos para custeio dos serviços da Rede de Atenção Psicossocial - 2023. Recuperado de https://www.gov.br/saude/pt-br/assuntos/noticias/2023/julho/com-foco-em-atendimento-humanizado-e-cuidado-integral-ministerio-da-saude-fortalece-assistencia-para-saude-mental-no-sus

7. Brasil. Secretaria de Estado de Saúde do Maranhão. Secretaria Adjunta da Política de Atenção Primária e Vigilância em Saúde. Superintendência de Vigilância Sanitária. (2020). Nota Técnica n. 004/2020/SUVISA/SES/MA. Orientação para farmácias e drogarias no enfrentamento ao coronavírus (COVID-19).

8. Brasil. Secretaria de Atenção Primária à Saúde; Departamento de Promoção da Saúde. (2020). *Cuidado Farmacêutico na Atenção Básica: aplicação do método clínico*. Brasília: Ministério da Saúde.

9. CFF. Conselho Federal de Farmácia. (2020). *Serviços farmacêuticos diretamente destinados ao paciente, à família e à comunidade: contextualização e arcabouço conceitual*. Brasília: Conselho Federal de Farmácia.

10. Cipolle, R. J., Strand, L. M., & Morley, P. C. (1998). *Pharmaceutical care practice*. New York: McGraw Hill.

11. Comitê de Consenso. (2002). Segundo Consenso de Granada sobre Problemas Relacionados a Medicamentos. *Ars Pharm*, 43, 179-87.

12. D'Andréa, R. D., Wagner, G. A., & Schveitzer, M. C. (2022). Percepção de farmacêuticos na implantação do Cuidado Farmacêutico na Atenção Básica. *Physis: Revista de Saúde Coletiva, 32*(2), e320212. https://doi.org/10.1590/S0103-73312022320212

13. Dilles, T., Heczkóva, J., Tziaferi, S., Helgesen, A. K., Grøndahl, V. A., Rompaey, B. V., ... & Jordan, S. (2021). Nurses and Pharmaceutical Care: Interprofessional, Evidence-Based Working to Improve Patient Care and Outcomes. *Research in Public Health, 18*.

14. Fang, C. K., & Chen, W. Y. (2018). The impact of pharmacist's interventions on depression-related outcomes: A systematic review. *Journal of Affective Disorders, 238*, 194-203.

15. Feitosa, C., Rodrigues, R. L. A., & Silva, T. P. (2020). Avaliação da utilização do programa "Aqui tem farmácia popular" pelos pacientes atendidos na atenção básica do Município de Tremedal-Bahia. *Brazilian Journal of Health Review, 3*(3), 6191-6200.

16. Ferreira NSA. (2002). As pesquisas denominadas "estado da arte". *Educ Soc, 79*, 257-272. https://doi.org/10.1590/S0101-73302002000300013.

17. Giacomini, E., & Rizzotto, M. L. F. (2022). Interdisciplinaridade nas práticas de cuidado em saúde mental: uma revisão integrativa de literatura. *Saúde em Debate, 46*(spe6), 261–280.

18. Goode, J. V., Owen, J., Página, A., et al. (2019). Inovação da prática de farmácia de base comunitária e o papel do farmacêutico de base comunitária nos Estados Unidos. *Farmácia, 7*(106).

19. Heggdal, K., Mendelsohn, J. B., Stepanian, N., Offedal, B. F., & Larsen, M. H. (2021). Avaliação dos profissionais de saúde sobre uma intervenção centrada na pessoa para capacitar a autogestão e a saúde em doenças crônicas: resultados qualitativos de um estudo de avaliação de processo. *Expectativas de saúde, 24*(4), 1367-1377.

20. Hofmann, S. G., et al. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. *Cognitive Therapy and Research, 36*(5), 427-440.

21. Jacka, F. N., et al. (2017). A randomised controlled trial of dietary improvement for adults with major depression (the 'SMILES' trial). *BMC Medicine, 15*(1), 1-17.

22. Brasil. (2022). Resolução nº 727, de 30 de junho de 2022. Dispõe sobre a regulamentação da telefarmácia. Recuperado de https://in.gov.br/en/web/dou/-/resolucao-n-727-de-30-de-junho-de-2022-416502055

23. Kamusheva, M., Ignatova, D., Golda, A., & Skowron, A. (2020). The Potential Role of the Pharmacist in Supporting Patients with Depression - A Literature-Based Point of View. *Integr Pharm Res Pract., 26*(9), 49-63.

24. Lula-Barros, D. S., & Damascena, H. L. (2021). Assistência farmacêutica na pandemia da Covid-19: uma pesquisa documental. *Trabalho, Educação e Saúde, 19*.

25. Manzini, F., et al. (2020). Analysis of a Blended, In-Service, Continuing Education Course in a Public Health System: Lessons for Education Providers and Healthcare Managers. *Frontiers in Public Health, 8*.

26. Navarrete, J., Yuksel, N., Schindel, T. J., & Hughes, C. A. (2021). Serviços de saúde sexual e reprodutiva prestados por farmacêuticos comunitários: uma revisão de escopo. *British Medical Journal, 11*(7).

27. Nussbaumer-Streite, B., Mayr, V., Dobrescu, A. I., Chapman, A., Persad, E., Klerings, I., ... & Gartlehner, G. (2020). Quarentena isoladamente ou em combinação com outras medidas de saúde pública para controlar o COVID-19: uma revisão rápida. *Cochrane Revista, 4*.

28. Oliveira, A. A. S. de, & Bastos, J. A. (2014). Saúde mental e trabalho: descrição da produção acadêmica no contexto da pós-graduação brasileira. *Cad. psicol. soc. trab., 17*(2), 239-254. Recuperado de <http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1516-37172014000300007&lng=pt&nrm=iso>

29. Organização Mundial da Saúde (OMS). (2017). Depression and Other Common Mental Disorders: Global Health Estimates. Genebra.

30. Paulino, R. A., Sousa, M. N., & Torres, C. R. (2021). Fatores Relacionados à Polimedicação e o Impacto na Qualidade de Vida dos Idosos: Uma Revisão Integrativa da Literatura. *Id on Line Revista Multidisciplinar e de Psicologia, 15*(54), 183-196.

31. Pfaff, A., & Rafie, S. (2020). Expandindo a capacidade da farmácia para serviços de saúde reprodutiva centrados no paciente. *Farmácia, 8*(236).

32. Rubert, C., Deuschle, R. A. N., Deuschle, V., & Cecilia, K. N. (2021). Assistência Farmacêutica durante a pandemia da COVID-19: Revisão da literatura. *Revista Interdisciplinar de Ensino, Pesquisa e Extensão, 8*(1), 255-268.

33. Silva, S. N., & Lima, M. G. (2017). Assistência Farmacêutica na Saúde Mental: um diagnóstico dos Centros de Atenção Psicossocial. *Ciência & Saúde Coletiva, 22*(6), 2025–2036.

34. Wang, X., Pang, Y., Wang, M., Jing, J., & Tang, J. (2020). Clinical practice and teaching of pharmaceutical care procedures for obstetric diseases. *European Journal of Hospital Pharmacy, 28*, 8-12.