



Practice of pharmaceutical care in pharmacies and drugstores in the North zone of the city of Rio de Janeiro

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ABSTRACT

Pharmaceutical care consists of a patient-centered practice model that emerges as an alternative in the search for improving quality of life through the rational use of medications, aiming to achieve concrete results through pharmacotherapy. The implementation of pharmaceutical care in different care service contexts has gained prominence throughout Brazil, aiming to optimize drug therapy and promote health. However, studies carried out in the city of Rio de Janeiro have brought some challenges, which tend to impact the full implementation of these practices. In view of the above, the objective of this study is to analyze the practice of pharmacists regarding the pharmaceutical care provided in drugstores in the Madureira neighborhood in the city of Rio de Janeiro. This is an exploratory, descriptive study, with a quantitative approach, carried out from April to November 2021. The data was collected from pharmacists working in drugstores and pharmacies in the Madureira neighborhood, in the city of Rio de Janeiro. 36 pharmacists were interviewed, the majority of whom were female (75%), graduated from private institutions (83%) and did not own the establishment (94%). More than half of the participants held the role of technical manager (69%) who carried out administrative activities in the pharmacy, user/client care techniques, in particular, guidance and dispensing of medicines. The understanding that 66% had about the provision of pharmaceutical care was related to the quality of the service that the pharmacist provides at the counter. It is concluded that the practice of pharmaceutical care, as recommended in the literature, was not observed in those drugstores, because during the dispensing of medicines, the pharmacist does not have sufficient knowledge, employing behaviors which are not consistent with adequate pharmaceutical care, such as the rational use of medicines, for instance.

Keywords: Pharmaceutical Services, Pharmacies, Licensure Pharmacy.

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INTRODUCTION

Pharmaceutical care (FC) is a patient-centered practice model that emerges as an alternative in the search for improving quality of life through the rational use of medications, aiming to achieve concrete results through pharmacotherapy.

The term pharmaceutical care emerged in Brazil from discussions led by the Pan American Health Organization (PAHO), World Health Organization (WHO), Ministry of Health (MS), among others. From these meetings, pharmaceutical care was defined as a model of pharmaceutical practice, developed in the context of Pharmaceutical Assistance. This term encompasses attitudes, ethical values, behaviors, skills, commitments and co-responsibilities in preventing diseases, health promotion and recovery, with direct interaction between the pharmacist and the user, aiming at a rational pharmacotherapy (Consenso Brasileiro de Atenção Farmacêutica, 2002).

Pharmaceutical care and assistance plays a vital role in improving patient care by providing expert support and guidance in medication management. This approach should involve trained pharmacists to ensure optimal medication use, mitigate potential risks, and resolve any concerns or questions related to your medication therapy. Through services such as medication counseling, dose adjustments and monitoring of adverse effects or interactions, pharmaceutical assistance contributes to improving treatment results and patient well-being. In a recent study by Smith et al. (2022), pharmaceutical assistance has been shown to significantly improve medication adherence and patient satisfaction, ultimately leading to better overall health outcomes (Smith et al., 2022).

The implementation of pharmaceutical care and assistance, despite its potential benefits, faces several obstacles that may hinder its widespread implementation, adoption and effectiveness. One of the main challenges is the lack of standardized protocols and guidelines for the provision of pharmaceutical care services, leading to variations in practice and in the outcomes. Additionally, inter-professional collaboration and limited communication between healthcare providers can make it difficult to integrate pharmaceutical care into patients' treatment plans. Lack of time and resources in busy environments can also prevent pharmacists' ability to provide comprehensive medication assessments and advice, and these barriers have been identified in studies such as the one by Brown et al. (2019).

Among other obstacles to the effective implementation of pharmaceutical care, there is the lack of interest on the part of owners of community pharmacies and pharmacists themselves (Santos & Lima & Vieira, 2005), pharmacists with an accumulation of bureaucratic functions



(Vidotti & Silva, 2006), factors related to the employment relationships of the pharmaceutical professional, rejection of the program by managers and owners, insecurity and lack of motivation on the part of pharmacists due to excessive work and lack of time to dedicate themselves to providing care services (Oliveira et al., 2005).

The patient must have access to a specific prescribed treatment that meets therapeutic rationality, together with the assessment of factors that may interfere with your treatment, ensuring greater security in the prevention and resolution of your problems (Vieira, 2007). However, pharmacists often do not have a prominent role in monitoring the use of medicines, preventing and promoting health, and are still little recognized as health professionals both by society and by other professionals in the field (Ivama et al., 2002).

The practice of pharmaceutical care and assistance in Rio de Janeiro has evolved over the years, reflecting efforts to improve the quality of patient care through the safe and effective use of medicines. The implementation of pharmaceutical care in different care service contexts has gained prominence all over the region, aiming to optimize drug therapy and promote health. However, studies in this region have brought some challenges, which tend to impact the full implementation of these practices (Silva et al., 2021).

In view of the above, it is essential to analyze the practice of pharmacists regarding the pharmaceutical care provided in drugstores in the Madureira neighborhood in the city of Rio de Janeiro.

METHODOLOGY

This is a descriptive, exploratory and cross-sectional study. Tal metodologia apresenta suporte metodológico com abrangência conceitual fornecida por autores como Pereira et al. (2018) e Estrela (2018). The research universe comprised all pharmacists who work as technical managers of pharmacies and drugstores in the Madureira neighborhood, in the city of Rio de Janeiro, and who were duly registered with the Regional Pharmacy Council of the State of Rio de Janeiro (CRF-RJ). The neighborhood called Madureira is located in the north of the City of Rio de Janeiro, it has around 38,029 thousand inhabitants (IBGE, 2010), approximately 80 drugstores, of which 58 were visited.

To know all the pharmacies and drugstores in the Madureira neighborhood, and the pharmacists who worked in these locations, lists of establishments provided by the Federal Pharmacy Council (CRF) of the state of Rio de Janeiro were used.

Although there is a legal distinction between pharmacy and drugstore established by article 4 of Law 5991 of December 17, 1973, which provides for the Sanitary Control of the Trade of Drugs, Medicines, Pharmaceutical Inputs and Related Products (Brazil, 1973), in the present study, the name drugstores was used for both establishments.

Professionals who were not present or who did not signed the Free and Informed Consent Form (TCLE) were excluded from this study. For data collection, a questionnaire composed of 21 closed questions was applied, divided into four sessions: 1) information regarding the identification of the establishment and personal data; 2) professional training and qualification; 3) professional performance; and 4) information related to the structure and resources of the establishment.

Data collection was carried out through interviews, from April to November 2021 by a single researcher, taking place from Monday to Saturday (except holidays) and during business hours.

A pre-test was carried out with the collaboration of five professionals who work in drugstores in neighboring neighborhoods. Modifications were made to some questions. These pharmacists were excluded from the research.

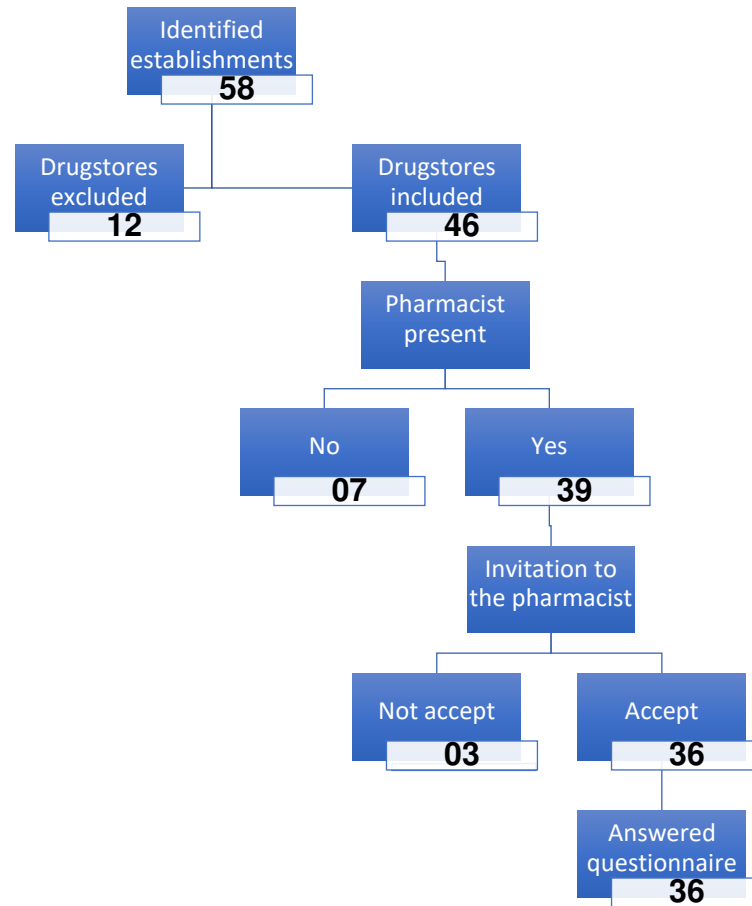
The quantitative data collected were tabulated using Microsoft Excel® 2010 edition and presented in tables and graphs using absolute numbers and percentages.

This study was approved by the Research Ethics Committee of the Universidade Salgado de Oliveira – UNIVERSO under opinion number 4,770,065.

RESULTS AND DISCUSSION

According to Figure 1, presented below, that represents the data collection steps, 58 drugstores were visited in the Madureira neighborhood, where 39 pharmacists were present, and of these, 36 agreed to participate in the study. Seven pharmacists were not present and three did not agree to participate in this study, justifying that they were ending their working hours, lack of time, being alone at the counter, or not being interested in participating.

Figure1: Data collection steps



Source: Prepared by the Author

Despite law 13,021 of August 8, 2014 determining the presence of pharmacists throughout the opening hours of pharmacies and drugstores, on average 20.69% of the establishments found did not have the presence of professionals at the time of the visit, this many times happens, due to the high turnover of these professionals in retail, who are generally dissatisfied with their work hours and role deviations, and almost always change establishments, causing vacancies, similar to what was observed in other studies (Baldon et al., 2006; Farina & Romano-Lieber, 2009; Lucchetta & Mastroianni, 2010; Tomassi & Ribeiro; 2012; Marques; 2012).

Regarding the profile of the pharmacists (36 in total), 75% are female, 16.3% are male and 8.8% of respondents did not respond. The average age that prevailed was 40 years old (11.08%). In similar surveys, a percentage of pharmacists' participation occurred in the same way, with the majority of participants being female (62.4%), with an average age of 31.7 years (Farina, 2005) and 72.3% female and an average age of 33.4 years (Reis, 2013).

As for the institution where they studied, 16.62% studied in public institutions and 83.1% studied in private institutions, corresponding to more than half of those interviewed. In previous studies, the same data was found, where pharmacists graduated from private institutions prevailed in the majority, corresponding to 90.1% (Farina, 2005) and 72.8% (Reis, 2013). A possible explanation for this finding may be due to the need to work to finance college and then not being available to study Pharmacy at a public institution, which normally tends to require greater availability of free time.

When asked about their academic training, 63.71% of those interviewed indicated that they were generalists, that is, they will have to search throughout their professional lives, through their experiences, for the specialty they will pursue in the future.

The Ministry of Education implemented generalist training through the National Education Council through Resolution CNE/CES-2/2002. This document reports the training of Pharmacists must address the social needs of health, comprehensive health care in the regionalized and hierarchical system of reference and counter-reference and teamwork, with an emphasis on the Unified Health System (SUS). The generalist training introduced in the Pharmacy course curricula in 2002 appears to be a change not only in concept, but also in the structure and philosophy of pharmaceutical professional training (Oliveira et al., 2005).

When asked about the resources used to consult information related to medicines on a daily basis, 36.01% of pharmacists reported consulting sources such as Bulário Eletrônico da Anvisa and Martindale, sources that seem more viable to them. This is different from what happens in the study by Reis (2013), where the alternative of consulting sources such as Bulário Eletrônico da Anvisa and Martindale was mentioned by 60% of those interviewed. Also in this study, consultation in books such as Guide to Medicines, PR Vademécum and Dictionary of Pharmaceutical Specialties (DPE) was cited by 80% of those interviewed.

It was observed in this study, that pharmacists do not have adequate sources of information for the practice of pharmaceutical care, as it is known that technical and scientific books have always been the best option. According to the pharmacists interviewed, this happens because the establishments do not physically have those books and almost always internet connections are not providing for them. So, as pharmacists have to use their own internet, they choose ways that will cost less, viewing easily accessible materials that are faster than downloading books.

Regarding the need for professional training, 55.40% of those interviewed reported having some deficiency in clinical and pharmaceutical pharmacology. A possible explanation for

this could be the fact that there was a deficiency in taking this subject in academic training. It is important to emphasize that 22.16% say they have difficulty carrying out the administrative management of the company. A possible explanation could be the fact that the degree does not focus on this type of service.

Little by little, the pharmacist is losing his identity, as it is observed that he needs to do everything within the establishments, including sales services, the bureaucratic part of the pharmacist such as issuing prescriptions, filling out the National Controlled Products Management System (SNGPC), thus becoming , compromised the adequate pharmaceutical care.

When asked about their role as a pharmacist, 63.71% said they were technically responsible. In a similar study, more than half of the participants (55.4%) held this role (Reis, 2013).

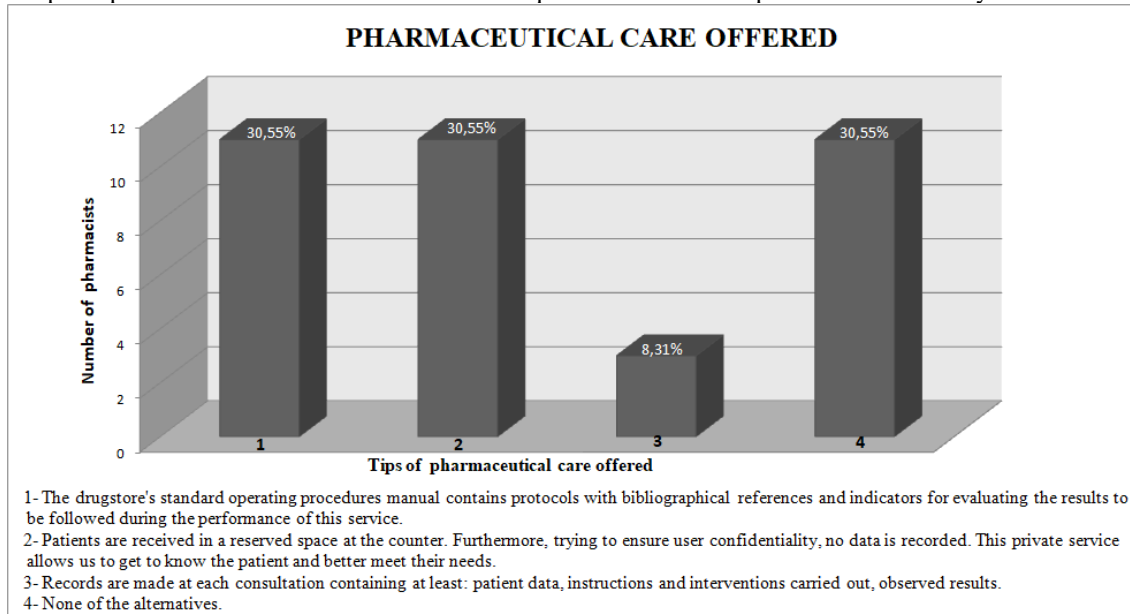
When asked about working hours, 49.86% of respondents responded that they work more than forty hours a week. Similar hours were found in other studies, such as Farina (2005), where 55.9% of pharmacists also worked more than 40 hours a week, and Reis (2013), where 38.7% worked more than 44 hours a week.

This workload is very exhausting for a professional, leading to physical and psychological exhaustion, which can compromise the dispensing of medication and can compromise the interpersonal relationships of those who work in the establishment.

Of those interviewed, 60.94% said they provided pharmaceutical care. This data is lower than that of the study by Reis (2013), where the majority of participants (70.5%) stated that they receive pharmaceutical care in drugstores. Providing pharmaceutical care goes far beyond being behind the counter at pharmacies and drugstores, as this practice would be essential for pharmacists. However, it would be extremely important to have a reserved place to receive the user, make records of each consultation and provide necessary information for the correct, safe and effective use of medications.

When they answered about the pharmaceutical care offered by them, 30.55% said it is included in the pharmacy's Standard Operating Procedures Manual (SOP) and 30.55% marked none of the alternatives (Graph 1). This is different from previous studies where the procedures, protocols and evaluation indicators for this pharmacotherapeutic monitoring carried out are included in the drugstore's SOP manual in 36.6% of the responses (Reis, 2013).

Graph 1- pharmaceutical care offered. Interview question: what is the pharmaceutical care you offer like?



Source: Prepared by the Author

Observe in the graph above that there was no predominance concerning the type of pharmaceutical care offered by the interviewee. However, note that only about 8.31% of pharmacists keep records of each consultation.

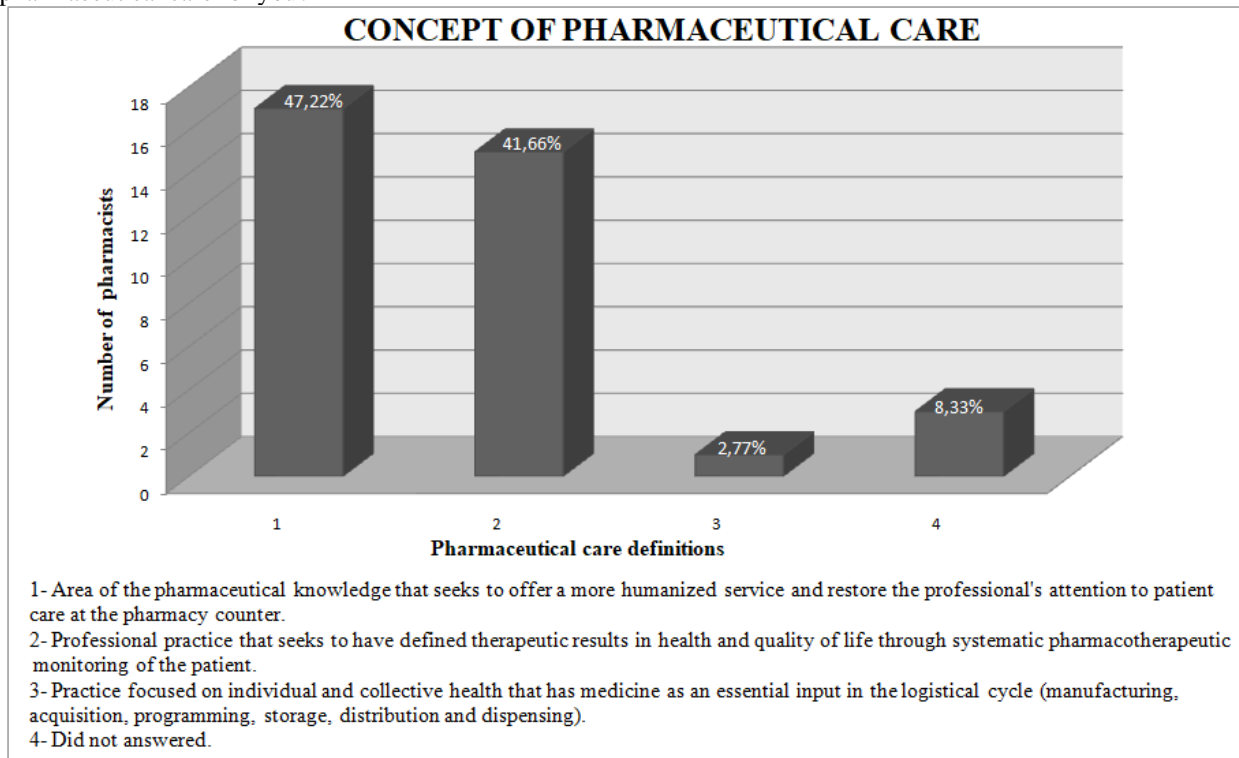
The question remains, if it is included in the SOP, why don't pharmacists practice? A possible explanation could be the fact that they are overloaded with management services, or even because they are mistaken in defining the real meaning of pharmaceutical care.

Those who selected none of the alternatives are the more cohesive ones and perhaps have in mind in a more organized way the real meaning of pharmaceutical care, greater control over this topic and how these concepts could reflect on their patient-related practice.

When asked which of the concepts best defines pharmaceutical care, 47.22% responded that it is the area of pharmaceutical knowledge that seeks to offer amore humanized service and rescuing the professional's attention to patient care at the pharmacy counter, and 41.66% indicated professional practice that seeks to obtain defined therapeutic results in health and quality of life through systematic pharmacotherapeutic monitoring of the patient (Graph 2).

Unlike the results of the research by Reis (2013), where the concept of pharmaceutical care being the professional practice that seeks to obtain defined therapeutic results in health and quality of life through systematic pharmacotherapeutic monitoring of the patient, was highlighted by 46 participants (59, 0% of respondents).

Graph 2- concept of pharmaceutical care. Interview question: which of the concepts below best define pharmaceutical care for you?



Source: Prepared by the Author

Note in the graph above that the majority of pharmacists have convictions about pharmaceutical care and assistance and sought to answer this question. However, these results confirm the mistaken way in which most pharmacists understand pharmaceutical care and consequently inaccurately think they are practicing it. In pharmaceutical care, the pharmacist's responsibility is towards the user, detecting, preventing and resolving problems related to their medication. As discussed by Ivama et al. (2002b), pharmaceutical care refers to activities related to the practice of the professional pharmacist with a focus on actions related to the patient.

When asked about their perceptions regarding the pharmaceutical care which is provided in pharmacies and drugstores, 47.09% of those interviewed stated that this action favors an increase in sales. Close to the results of the study by Reis (2013) where 50% of those interviewed also declared that pharmaceutical attention can increase sales in drugstores. But this will improve when pharmacies and drugstores actually really implement the practice of pharmaceutical care.

For the fact mentioned above to occur, it is essential to be clear about what the Brazilian Consensus on Pharmaceutical Care proposed in 2002, in order to promote the practice of pharmaceutical care in Brazil (PAHO/WHO, 2002c). In this Consensus proposal, the concept of pharmaceutical care is understood as a model of pharmaceutical practice, developed in the

context of the implementation of the Practice of Pharmaceutical Care, which must attribute new dimensions to pharmacies and drugstores, through a process of evolutions and changes in paradigms, removing the focus of the medicine and placing it on the user.

When asked about dispensing, what they inform the patient at the time, 44.32% stated that they inform the dosage, the same is verified in the studies by Reis (2013) where 96.4% also inform the dosage. A possible explanation could be the fact that the majority of users do not have good interaction with a doctor at the time of the consultation or do not understand handwriting, leaving doubts to be resolved later in pharmacies and drugstores, especially with the pharmacist. It is up to the pharmacist to take ownership of this moment of dispensing medications and be able to provide relevant information to the user such as times, dosage, drug interactions, adverse reactions, routes of administration, storage conditions, etc., so that the use of the same occurs in a rational manner.

When asked about the pharmaceutical indication, 52.63% stated that they only perform it when the patient presents minor disorders (minor ailments that do not require medical diagnosis), indicating over-the-counter medications. In the Reis study (2013), many participants made pharmaceutical recommendations during the service to drugstore users, but the precise amount of this information was not provided. Thus, inadequate pharmaceutical indication practice can contribute to the masking of evolutionary diseases and the development of bacterial resistance (Lucchetta & Mastroianni, 2010)

The statement “I do not recommend” obtained 24.93% of affirmation, which is more viable, as the user can have side effects so complex that they can lead to death.

The pharmacist has legal authorization to only indicate non-prescription medications in situations where the patient presents minor disorders, which means that medications like antimicrobials could not be among the items recommended by professionals (Reis, 2013).

When asked about the type of establishment they work in, 60.94% answered pharmacy chains with centralized administration. This is different from what happened in previous studies where 54.2% of participants with satisfactory knowledge worked in drugstore chains with centralized administration, while 63.6% of those with unsatisfactory or regular knowledge worked in independent drugstores (Reis, 2013). Farina (2005) showed in his study that the majority of pharmacies in Jundiaí/SP were independent (87.5%), meaning that, they did not belong to any chain. This demonstrates a large number of drugstores and great growth in pharmaceutical retail, leading to an increase in jobs.

When asked about how long the establishment remains open, 33.24% responded 15



hours. This shows that drugstores remain open for a good amount of time daily, and have two work shifts. Unlike the research by Farina (2005) where of the 80 pharmacies surveyed, 82.4% remained open for around 12 hours a day.

Regarding the human resources that these pharmacies and drugstores have in their organization, 44.32% did not respond, 5.44% administrative, 11.08% clerks, 2.77% assistant managers and 8.31% motorcycle couriers. This option makes it difficult to provide individualized care to patients as there is no room or space reserved for providing pharmaceutical care.

Having a private environment where the patient can feel free to clarify their doubts and obtain guidance in order to solve problems related to pharmacotherapy would be ideal for doing a good job. Galato et al. (2008) argue that the physical structure of pharmaceutical establishments can also interfere with the professional's ability to identify and solve problems related to pharmacotherapy, as the lack of a private environment is detrimental to individualized patient care and makes adequate guidance difficult due to the flow of customers and does not ensure the discretion desired by the user.

Some research participants found it relevant to make a comment about their work in the pharmacy. Among the comments, it is mentioned: "Pharmaceutical care is important mainly for laymen and elderly patients who during the covid 19 pandemic came to clear many questions with us pharmacists who are prepared for this (Pharmaceutical A1); "It's what I like, I work with pleasure (Pharmacist A2); "I love what I do!!! (Pharmacist A3)"; "Your research made me rethink the lack of recycling (Pharmaceutical A4); "The drugstore is the pharmacist's first field of work, but there is a lot of focus on sales, goals and results, it is still the health trade, in fact the disease trade (Pharmacist A5)"; "I found a lot of resistance from the team in accepting the presence and work of a pharmacist in the store (Pharmaceutical A5)"; "It would be good if there really was a separate room for pharmaceutical care (Pharmacist A6)".

The research helped the pharmacist to make his self-portrait and analyze how his work was in relation to the practice of pharmaceutical care in drugstores, because although many of the pharmacists interviewed were not aware of the theoretical concept of pharmaceutical care, they expressed knowledge of the value of this practice that is aimed at the user and that has dialogue as the main element in sharing information regarding the benefit of the user's health, always valuing the rational use of medicines.



FINAL CONSIDERATIONS

The majority of pharmacists do not have the appropriate knowledge to provide satisfactory pharmaceutical care in drugstores, which may affect the quality of pharmaceutical services offered to medication users.

The drugstore is the place where the user usually has the first access when leaving the doctor's office. It is up to the pharmacist, who is the professional responsible for dispensing medications and who is almost always the user's last contact before using the medication, to dispense the medication correctly, in the correct dosage, providing true and effective pharmaceutical care, providing an opportunity for better adherence to treatment, through rational use of the medication.

Pharmaceutical care in the drugstore presents itself as a challenge for pharmacists, as on the one hand they have to sell to achieve goals and results and on the other they seek to restore the user's health and restore their quality of life.

The development of new researches on this matter has proved itself necessary, since decision making involving pharmaceutical care and assistance shall occur based on broader studies in other cities and different countries.

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