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Taking responsibility for pharmacotherapy: the role of philosophy of pharmaceutical care practice in the process of learning clinical skills

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Abstract

Objective: To describe how awareness of professional responsibility assumed based on the philosophy of the Pharmaceutical Care practice model impacts the development of competencies for clinical practice from the perspective of pharmacists working in the Brazilian Unified Health System. **Methods:** This is a qualitative study, based on the Grounded Theory methodology with a constructivist approach. In-depth interviews were conducted between April and June 2024 with pharmacists working in secondary and tertiary care of Brazilian Unified Health System, selected by intentional sampling. Data was analyzed with NVivo until thematic saturation. **Results:** Nine pharmacists who worked in the provision of clinical services in their practice settings were selected. Their statements demonstrated the importance of pharmacists understanding their role in the care process, to allow greater discernment regarding their attributions and the competencies necessary for practice. This awareness regarding the incorporation of the philosophy of Pharmaceutical Care practice also demonstrated to facilitate the identification of deficiencies and needs for improvement and the development of collaborative competencies. Thus, four elements stood out and outlined the reflections, namely: understanding of the assumed responsibility; the paradigm shift; integration into the multidisciplinary team and the importance of a practice standard. **Conclusion:** The philosophy of professional practice guides the pharmacist regarding their responsibility in the care process and, when internalized and assumed by pharmacists, proves to be an important pillar in the process of developing competencies for clinical pharmaceutical practice. Developing a workforce that recognizes its philosophy of practice and is prepared to assume responsibility for managing patients' pharmacotherapeutic needs should therefore be part of actions linked to the development process of pharmacists focused on care.

Keywords: pharmaceutical care, clinical competence, qualitative research.

Assumindo a responsabilidade pela farmacoterapia: o papel da filosofia de prática do Cuidado Farmacêutico no desenvolvimento de competências clínicas

Resumo

Objetivo: Descrever a perspectiva de farmacêuticos sobre como a filosofia de prática do Cuidado Farmacêutico influencia a prática clínica. **Métodos:** Trata-se de um estudo qualitativo, baseado na metodologia da Teoria Fundamentada nos Dados com abordagem construtivista. Foram conduzidas entrevistas em profundidade, entre os meses de abril e junho de 2024, com farmacêuticos atuantes na atenção secundária e terciária do Sistema Único de Saúde, selecionados por amostragem intencional. Os dados foram analisados com o NVivo até a saturação teórica. **Resultados:** Nove farmacêuticos, que atuavam na provisão de serviços clínicos nos seus cenários de prática, foram selecionados. Suas falas demonstraram a importância do entendimento pelo farmacêutico quanto ao seu papel no processo de cuidado, de forma a permitir maior discernimento quanto as suas atribuições e as competências necessárias para a prática. Essa consciência quanto a incorporação da filosofia de prática do Cuidado Farmacêutico demonstrou ainda facilitar a identificação de deficiências e necessidades de aprimoramento e o desenvolvimento de competências colaborativas. Assim, quatro elementos se destacaram e delinearam as reflexões, sendo: o entendimento quanto a responsabilidade assumida; a mudança de paradigma; a integração à equipe multidisciplinar e a importância de um padrão de prática. **Conclusão:** A filosofia da prática profissional direciona o farmacêutico quanto a sua reponsabilidade no processo de cuidado e, ao ser internalizada e assumida pelos farmacêuticos, mostra-se como um importante pilar no processo de desenvolvimento de competências para a prática clínica farmacêutica. Desenvolver uma força de trabalho que reconheça sua filosofia de prática e esteja preparada a assumir a responsabilidade pelo gerenciamento das necessidades farmacoterapêuticas dos pacientes, deve fazer parte, portanto, de ações vinculadas ao processo de desenvolvimento dos farmacêuticos voltados ao cuidado.

Palavras-chave: atenção farmacêutica, competência clínica, pesquisa qualitativa.

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Introduction

The World Health Organization's statement in its publication *"Medication Without Harm"*[1] that everyone around the world, at some point in their lives, will use medication to prevent or treat a health condition, demonstrates the significant impact medications have on our society. In addition, the context of a medicalized society and the increasing complexity of pharmaceutical products create a risk-laden scenario and pose a major challenge for healthcare systems.

Since the 1999 report *"To Err is Human"*, medication safety has been widely discussed and has become a public health concern. Currently, medications continue to be significant contributors to morbidity, mortality, hospitalizations, and rising healthcare costs worldwide.[1,3-5] It is estimated that approximately 50% of patient harm in healthcare settings is related to pharmacotherapeutic practices.[5] In Brazil, around 27% of reported poisonings are due to medications, and 16% of deaths from poisoning are caused by pharmaceuticals.[6]

Pharmaceutical care emerges as both a philosophy and a professional practice model capable of addressing the societal demand to reduce medication-related morbidity and mortality. Through this practice, the pharmacist assumes responsibility for the pharmacotherapeutic needs of patients, collaborating with other healthcare team members to prevent, identify, and resolve drug-related problems.[7,8] This practice model originated in the United States in the 1990s and was popularized by the work of Hepler and Strand, titled *"Opportunities and Responsibilities in Pharmaceutical Care."*[9] In Brazil, pharmaceutical care has been gradually implemented over recent decades, although in a non-systematic and uneven manner across different regions of the country.[10] This slow progress can be partially explained by the historical detachment of pharmacists from direct patient care[7,10], as well as by an insufficient conceptual and philosophical discussion around pharmaceutical care.[11]

This new role assumed by pharmacists implies a paradigm shift in the pharmacy profession and requires the development of clinical and humanistic competencies.[7] The pharmacist's historical distance from patients and gaps in education and training - due to curricula that have traditionally focused more on the product than on the patient[7,12] - have hindered the development of patient-centered pharmaceutical professionals. This traditional educational model limits the acquisition of the necessary tools and competencies for clinical practice and for making rational pharmacotherapy decisions[12].

However, the development of clinical knowledge and skills alone is not sufficient to maximize the effectiveness of pharmaceutical services. It is essential to incorporate a philosophy of professional practice within a complex process that involves forming a professional identity[9,13]. This philosophy defines the values and responsibilities of the professional in meeting a social demand and must be embraced by all practitioners engaged in this field. It provides the foundation of the practice[7,8], establishing *"what"* (addressing the patient's medication-related needs), *"why"* (meeting a social demand to reduce medication-related morbidity and mortality), and *"how"* (through a holistic and patient-centered approach and a care process built on a therapeutic relationship) the professional should carry out their activities[7]. The philosophy is unique to the professional practice, and it is this uniformity—when fully embraced by practitioners—that can result in the consistent delivery of high-quality services that become recognized and valued by patients.[7,13,14]

Some studies[15-17] have sought to deepen the discussion around the philosophy of professional practice in pharmaceutical care and the development of professionalism in pharmacy undergraduate education. However, this remains a relatively underexplored and limited topic in Brazil. Additionally, few studies have addressed the redefinition of professional identity among those already working in the field or have examined continuing education efforts aimed at constructing the foundational philosophy of professional practice. Therefore, this study aimed to describe how awareness of the philosophy of pharmaceutical care practice influences clinical practice and, consequently, the development of pharmacists' competencies, from the perspective of professionals working in secondary and tertiary levels of the Brazilian Unified Health System.

Methods

Study Design

A qualitative study was conducted using the Grounded Theory methodology, under a constructivist perspective as proposed by Charmaz[18]. The study was carried out between April and June 2024, based on data collected through individual interviews with pharmacists recognized as references in the development of clinical practice in their respective workplaces. The aim was to understand, through the perceptions and experiences of these pharmacists, the educational needs for the development of competencies for clinical practice, and to assess how the incorporation of the philosophy of pharmaceutical care practice influences this process.

Participants and Study Setting

Pharmacists working in hospitals of the Hospital Foundation of the State of Minas Gerais (Fhemig) were invited to participate in the study. Fhemig is a public institution linked to the government of the State of Minas Gerais, responsible for managing hospitals and healthcare units throughout the state. It is composed of 17 healthcare units located in Belo Horizonte, the metropolitan region, and cities in the countryside (https://www.fhemig.mg.gov.br). In these hospitals, pharmacists engage in both technical-managerial activities related to pharmaceutical services and in the provision of clinical services.

Participants were selected intentionally, with key informants being pharmacists directly involved in the provision of clinical services within the institution. These pharmacists were initially nominated by service managers as references in conducting activities related to pharmaceutical care in these hospitals. Purposeful sampling is a technique supported in the literature[18,19], which advocates for the selection of participants by researchers based on their potential to provide rich, comprehensive, and insightful information regarding the phenomenon under study.

Participants were initially invited via email and informed about the study objectives and ethical considerations through a written informed consent form. Subsequently, interviews were scheduled and conducted individually. Among the pharmacists invited to participate in the research, two declined—one citing lack of time and the other feeling unqualified to participate.

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Journal of Hospital Pharmacy and Health Services

To preserve the participants' identities, fictitious names were used. These names were randomly selected and have no connection to the individuals.

Data Collection

In-depth semi-structured interviews were used as the method of data collection. To guide the interviews, a topic guide was developed by the researchers based on the theoretical framework adopted[7,8]. Open-ended questions were used to broadly understand the participants' perspectives on the phenomenon under investigation. In accordance with Grounded Theory[18] methodology, the questions in the topic guide were refined throughout the study to allow deeper exploration of underdeveloped areas and to fill emerging gaps.

Most interviews were conducted in person at the participants' workplaces, in private, distraction-free settings. Due to geographic distance (cities in the countryside) and participant availability, three interviews were conducted via videoconference using the Google Meet platform. The interviews had an average duration of 64 minutes, ranging from 31 to 88 minutes. Relevant themes that emerged during the interviews were explored by the interviewer (POF, a pharmacist and staff member at the studied institution for 14 years). A field diary was used to record personal impressions of participant narratives and non-verbal communication elements. All interviews were audio-recorded, fully transcribed, and analyzed.

Data Saturation

As proposed by Grounded Theory[18] methodology, the sample was defined in the field, based on the ongoing analysis of data and the need to clarify and deepen emerging findings. In accordance with the data saturation process[18], after theoretical sufficiency was reached, nine pharmacists were interviewed—each from a different hospital unit within the Fhemig network.

Data Analysis

Data analysis followed the principles of Grounded Theory[18], involving a constant process of coding and comparison, conducted concurrently with data collection. From the very first interview and throughout the study, data were evaluated individually, coded, synthesized, and compared. Initial and focused coding methods were employed, along with the writing of analytical memos[18]. All data were analyzed using NVivo software, version release 1.2.

Ethical Considerations

The study was approved by the Research Ethics Committees of Fhemig (CAAE: 69327823.4.3001.5119) and the Federal University of Minas Gerais (CAAE: 69327823.4.0000.514).

Results

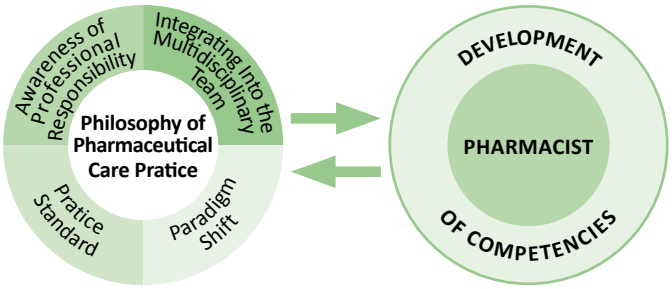
Nine pharmacists participated in the study. All were identified as key references in clinical pharmacy activities within their hospital units and had experience in leading clinical services in the hospital setting. Table 1 presents the sociodemographic and professional data of the participants.

Table 1. Characterization of study participants (n = 9)

Characteristics	n (%)
Sex	
Female	8 (88.9%)
Male	1 (11.1%)
Age	Mean: 38
Time of graduation	
6 to 10 years	4 (44.4%)
11 to 15 years	2 (22.2%)
16 years or older	3 (33.3%)
Employment relationship	
Statutory	5 (55.6%)
Administrative	4 (44.4%)
Time at the institution (full years)	
1 to 5 years	4(44.4%)
10 to 15 years	5 (55.6%)

The experiences described and the unique situations faced by each of them enabled the comparison and differentiation of events reported during the interviews. Awareness of the professional responsibility assumed by pharmacists in clinical practice emerged as a key point in the development of professional competencies. Systematic data analysis highlighted four main elements related to the philosophy of practice: (i) understanding of assumed responsibility; (ii) paradigm shift; (iii) integration into the multidisciplinary team; and (iv) the importance of a standard of practice, as represented in Figure 1. The results are illustrated through excerpts from the interviews conducted.

Figure 1. Representative diagram of the categories that emerged from the data.



Understanding of Assumed Responsibility

"The doctor prescribes, the nurse administers, the physical therapist works on the respiratory part... their roles are well defined, but the pharmacist doesn't have a clearly defined role. I still can't put a 'face' on us so that we are really seen." (Bianca)

The responsibility assumed by the pharmacist in the patient care process was shown to be poorly aligned among professionals, as evidenced by the participants' statements. Pharmacists themselves demonstrated difficulty in expressing the responsibilities associated with this professional practice. Some participants highlighted a practice still centered on the medication, focusing on technical aspects of prescriptions and remaining distant from the patient.

This lack of clarity regarding the pharmacist's actual role was presented as a weakness in clinical practice, as it undermines the perception of their duties and leads to a more fragile position when it comes to decision-making in pharmacotherapy. This is reflected in the following statement:

"And I get really upset when I hear things like this, because people want recognition, but they don't want to take responsibility. Because when someone says: 'The dose is wrong.' 'Oh, but the doctor prescribed it'... To me, it's not just the doctor who prescribed it — you were also there, so you're also responsible." (Teresa)

The participants perceived that pharmacists are still viewed as holding a secondary role in patient care responsibility.

Paradigm Shift

The shift in the pharmacist's focus—from the medication alone to the patient—was cited as one of the main challenges in incorporating this philosophy of practice. "I see that many pharmacists who came to the hospital came thinking about management. So it's a huge challenge to break that barrier and take on patient care, right? The added responsibility is intimidating. And many don't even, let's say, have the right profile. And now we're seeing a moment where the institution's vision is changing a bit; the idea is no longer to have a pharmacist sitting in the pharmacy behind a computer. It's about having them at the frontline. That's scary." (Sofia)

This shift requires openness and willingness from the pharmacist to readjust and requalify in order to meet the new responsibilities inherent to patient-centered care[20]. Taking on their role in care practice involves assuming new responsibilities that better address patients' pharmacotherapeutic needs and preferences[7-20]. "(...) since the pharmacist is used to staying inside the pharmacy, at first it was a bit difficult for us to know how to interact with the patient, because you need to have free time, which is hard to come by, right? So it was really difficult, because the patient wants to tell you their whole life story—everything that's happened. They take up a lot of your time, so you need to be willing to listen, and that part is really important." (Camila)

Integration into the Multidisciplinary Team

The integration of the pharmacist into the multidisciplinary patient care team—and their recognition as a provider of care, just like the other professionals—was found to be a work in progress in the settings studied, especially considering the strong influence of the biomedical model in hospital environments. Participant narratives revealed that decision-making in patient care is still largely centered on physicians, with clinical pharmacists often being perceived as auxiliary team members.

"I think that's it—because sometimes we're seen as an auxiliary member of the team, you know? Like, if I do something: 'Oh, how nice that I identified the medication, that I went there and made an intervention,' and if I don't do it: 'That's fine,' or if I do it wrong or in a different way [...]." (Helena)

Participants described the ongoing effort to claim their space within the care team and emphasized that recognition of their specific contributions is gradually being earned. "Sometimes I arrive in the unit and say, 'Hey, can I discuss my pharmaceutical interventions with you today?' and the doctor looks at me and says, 'Wow, great! I love when you come by!' So, there's a lot of acceptance. Because of that positive reception, I understand that they see the pharmacist's presence as valuable." (Sofia)

Importance of a Standard of Practice

The results also demonstrated the need to establish a standard of practice for pharmaceutical care so that the services provided can be assimilated and reproduced by all pharmacists, and better identified and recognized by other healthcare professionals. As noted by one participant, this standard should be aligned with the philosophy of practice:

"I think that's mainly it—aligning this philosophy with everyone so that we all speak the same language, all of us. Let's do the same work, and that's it. I think it would be great if a resident rotating here and then at another hospital saw the same thing. They see the same thing in nutrition, the same thing in physiotherapy... But with pharmacists, it's like everyone does things based on... maybe what's possible, based on their reality, but maybe we could have a minimum standard within each reality." (Helena)

Discussion

As with any healthcare professional practice, defining a professional philosophy as one of its structuring components is essential for promoting its value, legitimacy, and recognition by society.[7] The construction of a practice philosophy involves a complex and reflective process, integrating ethical values, principles, and professional knowledge that will guide professional actions.[16,21] The consolidation of this philosophy is tied to the formation of professional identity—how individuals see themselves as members of the profession, their sense of belonging, and the roles they believe they fulfill.[21] It is this professional identity that influences how the individual internalizes and incorporates the philosophy of practice into their daily routine.

In the context of pharmaceutical care, this philosophy materializes through the pharmacist's understanding of their clinical responsibility, the overcoming of traditional medication-centered models, and the adoption of a patient-centered approach. This requires multidisciplinary integration and the systematic application of practice standards that make philosophical principles concrete and recognizable.

Understanding of Assumed Responsibility

The understanding and incorporation of a professional philosophy of practice appear to be crucial for pharmacists to internalize their responsibilities as direct care providers[8,20]. This understanding marks a shift from responsibility limited to the product and its technical dispensing to an expanded, care-oriented responsibility, in which the pharmacist is encouraged to exercise autonomy and make decisions that directly impact patient health[17,20]. As cited by Araujo-Neto[17], assuming this responsibility implies an identity repositioning, with the pharmacist recognizing themselves as an active professional in patient care[21].

However, many pharmacists still demonstrate a fragmented and diffuse professional identity, reflecting the historical transitions of the profession from a traditional to a clinical model.[7,21] According to Dawodu and Rutter[21], many students enter pharmacy school without a clear vocational sense, and this lack of a cohesive professional identity contributes to the persistence of a product-centered practice model, to the detriment of clinical care.

This identity gap compromises the assimilation of the philosophy of practice linked to Pharmaceutical Care, hindering the full consolidation of the practice in accordance with its foundational precepts. It also weakens the perception of responsibilities to be assumed, leading to a more fragile stance in decision-making and distancing pharmacists from their care role.

Therefore, it is essential that the philosophy of practice be well understood, clearly defined, and easily recognized by those who perform it[7,8,14]. This process involves coordinated educational, organizational, and professional strategies aimed at promoting reflective practice and the development of the pharmacist's professional identity. Open spaces for reflection, supported by active methodologies, discussion circles, and case studies, help professionals recognize the clinical and social value of their role.[22]

Paradigm Shift

In recent decades, both the pharmacy profession and pharmacy education have undergone significant transformations, with substantial changes in the context of clinical practice. The undergraduate pharmacy curriculum in Brazil prior to the National Curriculum Guidelines of 2017—which are still being implemented at many universities—showed weaknesses in preparing graduates for clinical practice.[24,25] As a result, many pharmacists currently working in the field were trained in academic environments that did not provide them with a solid foundation to consistently apply a patient care process. For many of these professionals, providing patient care represents a true paradigm shift and a break[20] from the traditional models that shaped their roles, as confirmed by the findings of this study.

As discussed by Ramalho de Oliveira and Shoemaker[20], the shift to a patient-centered approach is recognized as a completely different paradigm from the traditional medication-centered model. Pharmacists trained under this technically focused model must be open to taking on new responsibilities that better address the pharmacotherapeutic needs and preferences of patients[20].

A deeper understanding of their role in the patient care process and the internalization of a philosophy of practice enables pharmacists to better discern their responsibilities and, therefore, their competencies. This awareness facilitates the identification of deficiencies and development needs. Conversely, when clinical competencies are already well developed, they help the pharmacist fully understand and embrace their responsibilities, aligning with the principles of pharmaceutical care philosophy and strengthening their commitment to the service provided.

Integration into the Multidisciplinary Team

Historically, pharmacists have been confined to the physical limits of the pharmacy, occupying a secondary role in the patient care process. This separation has contributed to weaker integration of the pharmacist not only with patients but also with the broader healthcare team, reinforcing the perception that their primary professional responsibility is limited to medication access.

The effort to resocialize and integrate pharmacists into the care team has required them to develop skills and attitudes that support collaborative and team-based work. By understanding their role and committing to their own development, pharmacists are increasingly able to carve out their place among other healthcare professionals and demonstrate the value of their contributions within the broader scope of healthcare practice.

Understanding the professional responsibility assumed—guided by a clear philosophy of practice—allows pharmacists to recognize their role and value within the team, as well as the importance of their specific contributions to patient care, in a manner comparable to other professionals. This self-perception and self-recognition as a healthcare provider enables pharmacists to position themselves effectively and use their competencies collaboratively and integratively within the multidisciplinary team[23,24].

The effort to integrate pharmacists into the healthcare team generates a need for the development of skills and attitudes that enable collaborative and team-based work. By understanding their role and actively seeking professional development toward this goal, pharmacists become capable of earning their place among other healthcare professionals and demonstrating their significant contributions within the broader scope of healthcare practices.

It is important to highlight that the philosophy of pharmaceutical practice focused on health care reinforces the need for multiprofessional interaction by helping ensure comprehensive patient care[7,23]. Interaction among professionals is essential for making the competencies required for holistic and integral care available to address the health problems of the population[23]. The complementary nature of each professional's expertise enables more appropriate and higher-quality care, based on the understanding that healthcare is grounded in the intersection of various interdisciplinary decision-making processes that collaboratively complement one another from different perspectives[23]. In this sense, pharmacists' integration into the multiprofessional team is driven by the awareness of their professional responsibilities and leads to the pursuit of collaborative competencies, encouraging effective communication and shared decision-making.

The Importance of a Practice Standard

The specificity of pharmaceutical practice within the multiprofessional team stems from its grounding in a defined philosophy of practice, whose central purpose is to address all of the patient's pharmacotherapy-related needs through a unique assessment process carried out by the pharmacist[14]. Speaking the same language, therefore, is essential for the clinical pharmacist to be recognized as an active member of the patient care team.

The literature emphasizes that standardizing practice—anchored in a shared philosophy—is fundamental to ensuring consistency, quality, and recognition of pharmaceutical care[14,16].

Conclusion

This study demonstrated that the internalization of a philosophy of practice by pharmacists requires professional positioning, a shift in paradigms, collaborative integration, and adherence to structured standards—all of which are intrinsically linked to the development of a professional identity. Being aware of the role assumed by the pharmacist in the patient care process is vital for identifying their shortcomings and development needs, as well as for better understanding the attitudes, values, skills, behaviors, and knowledge required for clinical practice.

JHPHS
Journal of Hospital Pharmacy and Health Services

Therefore, developing a workforce that is prepared to assume responsibility for managing patients' pharmacotherapeutic needs—within practice standards that enable recognition and sustain professional expectations—must be part of continuous development and lifelong education initiatives aimed at pharmacists involved in patient care.

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Author Contributions

Both authors worked collaboratively on the conception, drafting, and critical review of this manuscript.

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Conflict of Interest Statement

The authors declare no conflicts of interest regarding this article.

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