

THE ROLE OF NURSING IN CHRONIC CARE AND ADHERENCE TO SAFETY PROTOCOLS: PERSPECTIVES ON BEHAVIOR IN CLINICAL SETTINGS

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Summary

The present study analyzes the critical role of nursing staff in the care of patients with chronic diseases and its influence on adherence to clinical safety protocols. Through a qualitative-descriptive methodology, behaviors and practices that promote patient safety are identified, as well as common barriers that hinder compliance with these protocols. The findings indicate that the commitment of nursing staff to continuous training, effective communication and collaborative work significantly improves the quality of care and reduces adverse events. A more structured integration of evidence-based practices and monitoring systems within clinical units is proposed.

Keywords: nursing, chronic diseases, patient safety, clinical protocols, adherence, clinical behavior.

INTRODUCTION

Chronic noncommunicable diseases (NCDs), such as diabetes, hypertension, chronic obstructive pulmonary disease (COPD) and cardiovascular diseases, currently represent the leading cause of morbidity and mortality in the world. According to the World Health Organization (2023), these pathologies are responsible for 74% of all deaths globally, many of them being preventable through timely interventions, continuous monitoring and comprehensive care. In this context, nursing staff play a leading role in care management, monitoring chronic conditions, and implementing clinical protocols that ensure patient safety.

The clinical environment in which nursing practice takes place is increasingly complex. Hospital units experience a high demand for care, a shortage of human resources and institutional pressure to meet quality standards. This generates multiple challenges for adherence to patient safety protocols, such as identity

verification, safe administration of medications, infection prevention, and effective communication in the health team (Navarro-Moya et al., 2022). Scientific evidence has shown that non-adherence to these protocols significantly increases the risk of preventable adverse events, especially in patients with chronic comorbidities (Medeiros et al., 2021).

Despite the development of international guidelines and standards for safety in clinical care, several studies indicate that the attitudes, perceptions, and behaviors of nursing staff directly influence the implementation of these protocols (Gómez-Salgado et al., 2020). Professional conduct, continuous training, an institutional safety culture, as well as effective interprofessional communication, are fundamental elements to guarantee rigorous compliance with standards that protect the integrity of patients.

In the care of chronic patients, continuity of care, the appropriate management of pharmacological treatments and the monitoring of clinical signs are essential responsibilities that fall on the nursing staff. Therefore, adherence to safety protocols not only represents an ethical and legal imperative, but also an indispensable condition for improving quality of life and reducing complications derived from chronic diseases (Rodríguez-Pérez et al., 2021). In addition, the nurse's educational and accompanying role empowers the patient and their family to actively participate in their care process, generating a collaborative model that improves clinical outcomes and promotes care safety (López-López & Aguilera-Rodríguez, 2022).

The present study aims to analyze the professional behavior of nursing staff in clinical settings with a high presence of chronic patients, and its relationship with adherence to safety protocols. It seeks to identify both the facilitators and the obstacles to compliance with these standards, in order to formulate proposals that contribute to safer, more effective and patient-centered care.

Theoretical Framework

The theoretical framework allows us to contextualize the role of nursing in the care of chronic patients and its link with adherence to clinical safety protocols. To this end, four key dimensions are addressed: chronic disease care, patient safety, care protocols, and professional behavior in clinical settings.

1. Chronic Disease Care and the Role of Nursing

Chronic diseases represent a growing burden on health systems and require sustained and personalized care. Nursing staff are essential in the comprehensive management of these pathologies, performing functions of surveillance, education, clinical intervention, and psychosocial support (Morales-Castillo et al., 2021). In this context, their role is not limited to the technical execution of tasks, but extends to care planning, evaluation of results and articulation with the rest of the multidisciplinary team.

Nursing also acts as a key agent in patient adherence to treatment. The therapeutic education of the patient and their family environment has a direct impact on the self-management of the disease, symptom control, and the prevention of complications (Gómez-González et al., 2023).

Table 1. Functions of the nursing professional in the management of chronic diseases

<i>Function</i>	<i>Short Description</i>
<i>Continuous clinical assessment</i>	Evaluation of vital signs, evolution of symptoms and adverse effects.
<i>Patient Education</i>	Instruction on medications, diet, exercise, preventive care.
<i>Coordination with the team</i>	Communication with doctors, nutritionists, and therapists to adjust plans.
<i>Emotional support</i>	Psychological and motivational support, especially in the diagnosis and bereavement phases.
<i>Self-care management</i>	Promotion of autonomy in disease control.

Source: Adapted from Morales-Castillo et al. (2021); Gómez-González et al. (2023).

2. PATIENT SAFETY IN CLINICAL SETTINGS

Patient safety is a fundamental principle in the quality of care. The World Health Organization (2021) has identified essential practices to reduce adverse events, such as verifying patient identity, preventing falls, and correctly administering drugs.

According to Téllez-Girón et al. (2022), 60% of adverse events in hospitals are related to incorrect administration of medications, procedures without prior verification, or communication errors. Nursing, being the professional body closest to the patient, is responsible for applying preventive measures on a daily basis.

Table 2. Key Patient Safety Practices Implemented by Nursing

<i>Security Practice</i>	<i>Application by Nurse</i>
<i>Double identity verification</i>	Confirmation with at least two pieces of information (full name and clinical number).
<i>Hand hygiene</i>	Before and after contact with each patient.
<i>Drug labeling</i>	Visual, auditory and documentary check.
<i>Effective communication</i> <i>shift</i>	Use of systems such as SBAR for secure delivery of information.
<i>Prevention of pressure ulcers</i>	Periodic mobilization and use of special surfaces.

Source: WHO (2021); Téllez-Girón et al. (2022).

3. CLINICAL PROTOCOLS AND ADHERENCE

Clinical protocols are normative instruments that standardize care procedures and minimize variability in care. Its correct application is associated with better clinical outcomes, reduced errors, and greater institutional efficiency (Ramírez-Patiño & Valenzuela-Soto, 2020).

However, compliance with them can be affected by multiple factors: work overload, deficiencies in training, poor institutional leadership, or even cultural resistance to change. A study by Contreras et al. (2022) found that only 55% of nursing staff applied all the steps of the medication administration protocol.

Table 3. Factors Influencing Adherence to Clinical Protocols

<i>Factor</i>	<i>Type of influence</i>	<i>Example</i>
<i>Training and updating</i>	Facilitator	Ongoing training on new clinical guidelines.
<i>Workload</i>	Barrier	High patient/nurse ratio limits comprehensive compliance.
<i>Clinical Leadership</i>	Facilitator	Supervisors promote compliance and resolution of doubts.
<i>Organizational culture</i>	Facilitator or barrier	Institutions that value quality versus punitive culture.
<i>Availability of resources</i>	Barrier	Lack of materials to apply biosafety techniques.

Source: Contreras et al. (2022); Ramírez-Patiño & Valenzuela-Soto (2020).

4. PROFESSIONAL NURSING BEHAVIOR IN CLINICAL SETTINGS

Professional behavior includes the attitude, ethics, responsibility, and motivation of nursing staff. These dimensions determine the way in which protocols are implemented, tasks are prioritized, and risk situations are responded to (Fernández-Cano et al., 2021).

Proactive, empathetic, and safety-committed behavior can offset many of the structural limitations. On the contrary, emotional exhaustion (burnout) or institutional skepticism can generate serious omissions (Arévalo-López et al., 2022).

The promotion of healthy clinical environments and participatory leadership is recognized as an effective strategy to strengthen professional behavior and patient safety.

Methodology

1. Research Approach and Design

A qualitative approach with an interpretative phenomenological design was used, suitable for exploring the experiences, meanings and perceptions of nursing staff regarding their professional behavior and adherence to safety protocols in the care of chronic patients. This approach allows for an in-depth understanding of complex phenomena from the perspective of the actors involved (Alonso-Rodríguez et al., 2021).

The choice of a phenomenological design is justified by the need to analyze not only what professionals do, but also how and why they do it within their daily clinical contexts, in interaction with factors such as institutional culture, workload, and continuous training (Pineda-Ruiz & Carreño, 2023).

2. Participants and sampling

The target population was made up of nursing professionals from three tertiary level hospital institutions (one public and two private) in Colombia. Intentional sampling by criteria was used, selecting participants who met the following conditions:

- Professional degree in nursing.
- Minimum experience of 5 years in chronic patient care units (internal medicine, nephrology, geriatrics or palliative care).
- Participation in patient safety training processes in the last 2 years.

20 participants were included until theoretical saturation was reached, defined as the point at which no new relevant categories emerge (Flick, 2022).

Table 4. Sociodemographic characteristics of the participants

<i>Variable</i>	<i>Frequency (n=20)</i>	<i>Percentage (%)</i>
<i>Gender: female</i>	14	70 %
<i>Gender: male</i>	6	30 %
<i>Average age</i>	—	38.4 years
<i>Type of institution</i>	Public (8)	40 %
	Private (12)	60 %
<i>Years of experience</i>	5–10 years	10 (50 %)
	>10 years	10 (50 %)

Source: Own elaboration based on fieldwork.

3. INFORMATION COLLECTION TECHNIQUES

In-depth semi-structured interviews were applied, with a guide of questions built from previous theoretical categories and reviewed by experts. The interviews were conducted in private spaces within the institutions, recorded with authorization and later transcribed verbatim.

The questions were aimed at exploring:

- Experiences in the care of chronic patients.
- Knowledge and application of security protocols.
- Facilitating and limiting factors of adherence.
- Perception of the clinical environment and professional behavior.

The average duration of each interview was 45 minutes.

4. ANALYSIS OF THE INFORMATION

For the treatment of the data, the thematic analysis method proposed by Braun and Clarke (2019) was used, which includes the following phases:

1. **Familiarization with the data:** intensive reading of the transcripts.
2. **Initial coding:** identification of relevant units of meaning.
3. **Topic Search:** Grouping codes into preliminary topics.
4. **Review and definition of topics:** conceptual refinement of the categories.
5. **Writing of the final report:** integration of the findings with textual quotations.

NVivo 14 **software** was used to organize and code the interviews, facilitating data triangulation and validation (García-Peña et al., 2023).

Table 5. Emerging categories in qualitative analysis

<i>Main Category</i>	<i>Identified subcategories</i>
<i>Knowledge of protocols</i>	Training received, conceptual understanding, updating.
<i>Application of security measures</i>	Identity verification, hand washing, use of clinical guidelines.
<i>Obstacles in adherence</i>	Workload, shortage of supplies, lack of supervision.
<i>Motivating factors</i>	Recognition, positive leadership, safety culture.
<i>Observed professional behavior</i>	Ethics, responsibility, commitment, decision-making.

Source: Prepared by the authors based on thematic analysis NVivo.

5. ETHICAL CONSIDERATIONS

The study was approved by the ethics committee of the participating institutions and was governed by the principles of the Declaration of Helsinki. All participants signed an informed consent. The confidentiality of the data was ensured through the use of pseudonyms and the secure storage of recordings and transcripts.

RESULTS

The analysis of the interviews allowed us to identify **five central thematic categories** that describe the experience of nursing staff in relation to the care of chronic patients and adherence to safety protocols. The findings show the coexistence of technical knowledge, operational barriers and attitudes that influence the effective application of clinical protocols.

1. Knowledge and understanding of safety protocols

95% of the participants stated that they had received training on patient safety protocols at some point in their professional career. However, only 60% indicated that they felt totally confident about its correct application in daily practice.

The most recognized protocols were:

- Hand washing (100%)
- Patient identification (85%)
- Medication verification (80%)
- Adverse Event Reporting (65%)

"In theory, we all know the protocols, but in daily practice, with so much workload, priority is given to what is urgent and not always to what is correct" (Nurse, 38 years old, private hospital).

Table 6. Level of knowledge reported on key protocols

<i>Protocol</i>	<i>Theoretical knowledge (%)</i>	<i>Systematic application (%)</i>
<i>Hand hygiene</i>	100	85
<i>Patient Identification</i>	85	60
<i>Safe drug administration</i>	80	55
<i>Interprofessional communication</i>	75	50
<i>Adverse Event Reporting</i>	65	40

Source: Authors' elaboration based on interviews (2025).

2. Application in real contexts and barriers encountered

One of the main barriers identified was **work overload**, especially in night shifts and weekends. 70% of the participants mentioned that the nurse/patient ratio is disproportionate, making it difficult to systematically adhere to the protocols.

In addition, 60% reported **little institutional feedback**, which generates demotivation. The lack of basic materials (gloves, antiseptic solutions, labels) was also mentioned as a frequent obstacle (Gutiérrez-Molina et al., 2021).

Table 7. Main barriers to adherence to protocols

<i>Barrier identified</i>	<i>Frequency (%)</i>	<i>Staff Comment</i>
<i>Work overload</i>	70	"We have up to 12 patients per nurse."
<i>Lack of material resources</i>	55	"Sometimes there are no labels or gel dispensers."
<i>Lack of institutional leadership</i>	45	"There is no follow-up or enforcement of compliance."
<i>Emotional exhaustion</i>	40	"Burnout causes one to automate without reflection."
<i>Little continuing education</i>	35	"The courses are punctual, there is no constant updating."

Source: Prepared by the authors based on thematic analysis.

3. Factors that facilitate adherence

In contrast, the study identified that the main facilitating factors of adherence are:

- **Ongoing training** (reported by 75% of participants).
- **Teamwork and fluid interprofessional communication** (65%).
- **Close and empathetic clinical leadership** (50%).

Professionals working in institutions with active patient safety committees reported greater satisfaction and commitment to the application of the protocols (Navarro-Sánchez et al., 2022).

"When you see that the supervisor also complies with the protocols, you feel more obliged to do the right thing" (Nurse, 41 years old, public hospital).

4. Perceived impact on quality of care

80% of the participants stated that adherence to protocols significantly improves patient safety and confidence. Some professionals reported witnessing avoidable adverse events in contexts where minimum safety standards were not met.

Table 8. Perception of the impact of protocols on quality of care

<i>Dimension evaluated</i>	<i>Positive perception (%)</i>
<i>Reduction of medication errors</i>	85
<i>Reduction of hospital-acquired infections</i>	75
<i>Improved patient communication</i>	70
<i>Increased user confidence</i>	80
<i>Prevention of adverse events</i>	65

Source: Authors' elaboration based on qualitative testimonies.

5. Professional behavior as a mediating variable

The analysis showed that **professional behavior**—ethical, empathetic, responsible, and reflective—influences the application of protocols even when there are structural barriers. In the words of the participants, "personal commitment" can make a difference.

This finding coincides with what was proposed by Herrera-González et al. (2023), who argue that work environments that promote self-regulation and active participation favor patient safety.

CONCLUSIONS

The findings of this study show that the **role of nursing staff in the care of chronic patients** transcends the operational dimension to position themselves as a fundamental agent in the **construction of safe and humanized clinical environments**. Nursing not only applies care techniques, but also mediates between the patient, the health team and institutional protocols, generating dynamics that directly impact clinical results.

First, it was found that **theoretical knowledge about safety protocols is present in most nursing staff**, but its systematic application is limited by structural factors such as work overload, scarcity of resources and lack of institutional follow-up. This phenomenon has also been identified in recent studies such as that of Pérez-Correa et al. (2021), which highlight that the partial implementation of protocols can generate a false sense of security in clinical care.

Secondly, it was found that the **professional and ethical behavior of nursing staff** has a decisive influence on adherence to safety standards, even when there are operational barriers. A proactive attitude, ethical commitment and empathy were traits repeatedly associated with good care practices. This conclusion is in line with what was reported by Suárez-Murillo and Gómez-González (2022), who emphasize that motivated and trained professionals are more resilient to the structural limitations of the system.

Likewise, it was identified that **continuous training and empathetic clinical leadership** are key factors that enhance compliance with protocols. Institutions that invest in the regular training of their staff and promote a safety culture focused on collaboration have better quality indicators and a lower incidence of adverse events (Martínez-Torres et al., 2023). This highlights the need for hospitals to adopt **management models based on patient safety as a cross-cutting axis of clinical care**.

On the other hand, the care of chronic patients requires a comprehensive vision, where nursing acts as a therapeutic guide, educational agent and guarantor of continuity of care. In this sense, adherence to protocols should not be perceived as a bureaucratic burden, but as a strategy to protect the patient, the professional, and the system. The therapeutic relationship based on trust and the systematic replication of good practices has the potential to significantly reduce morbidity and mortality and improve the user experience (WHO, 2021).

Finally, it is concluded that **patient safety in contexts of chronicity depends both on the quality of institutional protocols and on the human and professional quality of the nursing team**. The articulation between knowledge, attitude and adequate structural conditions is what guarantees safe, empathetic and effective care.

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