# INFLUENCE OF CLINICAL LEADERSHIP IN NURSING ON QUALITY AND SAFETY OF CARE: SCOPING REVIEW

## INFLUÊNCIA DA LIDERANÇA CLÍNICA EM ENFERMAGEM NA QUALIDADE E SEGURANÇA DOS CUIDADOS: REVISÃO DE ESCOPO

## INFLUENCIA DEL LIDERAZGO CLÍNICO EN ENFERMERÍA SOBRE LA CALIDAD Y SEGURIDAD DE LA ATENCIÓN: REVISIÓN DE ALCANCE

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Objective: to map the available scientific evidence on the influence of clinical nursing leadership on the quality and safety of care in hospital health organizations. Method: scoping review according to the recommendations of the Joanna Briggs Institute and PRISMA-ScR. Search in three stages, in the MEDLINE Complete, CINHAL Complete, Web of Science, Scopus, ProQuest Dissertations and Theses and OpenGrey databases. Results: Most studies show the positive effect of clinical leadership in nursing on the quality of care. The strategies that promote clinical leadership are related to the training of nurses to perform the role. The clinical nurse leader is a model for peers, demonstrates communication skills, mentoring and the ability to influence others. Conclusion: clinical leadership has an impact on the patients, the nurses and the organization. Strategies that enable clinical leadership development should underpin leadership programs in healthcare organizations that aim for safe and quality care.

Keywords: Leadership. Nursing. Clinical Governance. Quality of health care, Review.

*Objetivo: mapear a evidência científica disponível sobre a influência da liderança clínica em enfermagem na qualidade e segurança dos cuidados em organizações de saúde hospitalares. Método: revisão de escopo segundo as recomendações do Joanna Briggs Institute e PRISMA-ScR. Pesquisa em três etapas, nas bases de dados MEDLINE Complete, CINHAL Complete, Web of Science, Scopus, ProQuest Dissertations and Theses e OpenGrey. Resultados: a maioria dos estudos evidencia o efeito positivo da liderança clínica em enfermagem na qualidade dos cuidados. As*

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*estratégias promotoras da liderança clínica relacionam-se com a capacitação do enfermeiro para o desempenho do papel. O enfermeiro líder clínico é modelo para os pares, demonstra competências de comunicação, mentoria e capacidade de influenciar o outro. Conclusão: a liderança clínica tem impacto no doente, no enfermeiro e na organização. As estratégias que permitem o desenvolvimento de liderança clínica devem fundamentar programas de liderança nas organizações de saúde que objetivam cuidados seguros e de qualidade.*

*Descritores: Liderança. Enfermagem. Governança Clínica. Qualidade da Assistência à Saúde. Revisão*

*Objetivo: mapear la evidencia científica disponible sobre la influencia del liderazgo clínico de enfermería en la calidad y seguridad de la atención en las organizaciones de salud hospitalarias. Método: revisión de alcance según las recomendaciones del Instituto Joanna Briggs y PRISMA-ScR. Búsqueda en tres etapas, en las bases de datos MEDLINE Complete, CINHAL Complete, Web of Science, Scopus, ProQuest Dissertations and Theses y OpenGrey. Resultados: la mayoría de los estudios muestran el efecto positivo del liderazgo clínico en enfermería sobre la calidad de la atención. Las estrategias que promueven el liderazgo clínico están relacionadas con la capacitación de enfermeras para desempeñar su rol. La enfermera clínica líder es un modelo para sus pares y demuestra habilidades de comunicación, tutoría y capacidad para influir en los demás. Conclusión: el liderazgo clínico tiene impacto en los pacientes, los enfermeros y la organización. Las estrategias que permiten el desarrollo del liderazgo clínico deben sustentar los programas de liderazgo en las organizaciones de atención a la salud que apunten a cuidados seguros y de calidad.*

*Descriptores: Liderazgo. Enfermería. Gobernanza clínica. Calidad de la atención a la salud. Revisión*

## Introduction

Health outcomes and the quality and safety of care are concerns of well-structured health systems that intend to respond to the growing health needs and the emerging challenge of increasing complexity of care[1-2]. The 2030 Agenda for Sustainable Development[3] reiterates the need to ensure universal access to health and quality care, so health policy makers must define strategies that are consistent with the provision of safe, effective and efficient care[4]. However, fragmentation of care is still a reality between countries, which translates into increased economic costs associated with health care and loss of quality of life. It is estimated that, in underdeveloped countries, there are 5.7 to 8.4 million secondary deaths per year due to poor quality care and that, in developed countries, one in ten patients suffers an adverse event during the provision of hospital health care[5].

The concept of quality of care is multi-dimensional. It results from the efforts made by health services to achieve positive results consistent with the knowledge of health professionals and evidence-based practice[4]. The Canadian Patient Safety Institute[6] reaffirms this premise by referring to the quality of care as the degree of excellence resulting from the ability of health organizations to respond to the persons' need and exceed their expectations. Thus, the relationship between the quality of health care and nursing leadership becomes understandable[7-9]. Setting regulatory policies and adopting new leadership roles is critical in defining organisational cultures targeted at patient outcomes and safety.

In nursing, leading presupposes the exercise of influence in the mechanisms of decision making, prioritization of care and allocation of resources to obtain health gains[10]. Leadership at the level of micro, meso and macrosystems has significance in improving the quality of care[8,11], expanding health services and achieving the Sustainable Development Goals[12].

Nurses, as they constitute the largest workforce of health organizations, are a critical component of health care delivery[13], since, currently, health systems face challenges, such as demotivation, scarcity and difficulty in retaining these professionals[14]. In parallel, they are faced with the need to respond to the exponentiation of the number of people with chronic disease, the increase in the complexity of care and the trend of its deinstitutionalization. This reality requires a nursing staff with a level of training,

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skills and abilities that is in line with the effective participation of nurses in health teams and in the decision of care[11].

In clinical practice, when developing a professional exercise characterized by an ontology and epistemology directed to health, nurses must demonstrate team leadership capacity at all levels[15]. Authors[16] corroborate this opinion and highlight the need for nurses to adapt to the constant change and emerging complexity of health care, affirming themselves as effective partners in the decision of care.

The comprehensive understanding of the informal leadership behavior of nurses in clinical practice is essential and is presented as a contribution to the necessary re-signification of health systems. The concept of clinical leadership in nursing is recent in the literature and has been the subject of interest in research due to the impact on the quality and safety of care[8,17-18], in organizations and health systems[18].

Clinical leadership in nursing is defined as the process of significant influence that nurses in clinical practice exert over peers and other elements of the health team, with the objective of bringing together individual and collective efforts in order to achieve shared clinical results[19]. The clinical nurse leader is the one who mirrors the excellence of care in the direct provision of care through informal leadership practices. He is recognized for demonstrating competencies and clinical experience, team-building skills, and interpersonal qualities that inspire peers[18]. It leads in all contexts of clinical practice, assuming a significant role in the provision of care, in the assessment of needs, in the definition of health strategies and policies and in the evaluation of results and their effectiveness[20]. However, nurses do not recognize themselves as leaders and are not identified as health care decision makers[21-22].

Despite the growing interest in the investigation of nursing leadership, there is still a gap in the literature regarding the synthesis of evidence of the influence of clinical leadership on the quality of care. A preliminary search was carried out in the Joanna Briggs Institute, Database of Systematic Reviews and Implementation Reports, PROSPERO, Cochrane Central Register of Controlled Trials and Open Science Framework databases, verifying that, at the time of the research, there was no scoping review published or in progress on this topic. A scoping review protocol designed to assess the impact of clinical nurse leader care on quality of care indicators, specifically nosocomial infection, was identified. However, this review was not effectively published and would not be comprehensive in the systematization of knowledge regarding the overall quality and safety of care.

For this scoping review, the objective is to map the available scientific evidence on the influence of clinical nursing leadership on the quality and safety of care in hospital health organizations. This systematization may translate into contributions to nursing training, clinical practice and clinical governance. By systematizing the knowledge built, it shows strategies that support the development of clinical leadership skills from initial nursing training and the relevance of implementing clinical leadership programs in hospital health organizations. In clinical practice, it is considered that clinical leadership in nursing can increase the engagement of nurses with leadership, the profession and the organization and, thus, translate into better health care.

## Method

The quality and safety of health care is currently an indicator that reflects the achievement of the desired results, thus ensuring the effectiveness of health organizations in responding to health needs[4]. The domain of knowledge related to clinical leadership in nursing recognizes the direct relationship between this concept and the quality and safety of health care[8]. Given the concepts stated, conducting a scoping review is presented as a method of reviewing the literature that enables the response to the defined objective.

*Scoping* literature reviews project the synthesis of available scientific evidence, are based on methodological rigor, transparency and reproducibility[23-24] and allow the factors related to concepts and knowledge gaps to be exposed[25].

In order to map the evidence regarding the influence of clinical leadership in nursing on the quality and safety of care, a scoping review was carried out following the recommendations of the Joanna Briggs Institute for this type of literature review[23]. The structuring of the writing followed the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extention for Scoping Reviews (PRISMA-ScR) checklist[25]. Previously, a review protocol was carried out, which is registered on the Open Science Framework platform (https://doi.org/10.17605/OSF.IO/SGDYX). As this is a secondary study, approval by an ethics committee was not considered necessary. However, all ethical principles inherent to scientific research were respected.

*Review question*

In the design of the review question, the PCC strategy (P – Population, C – Concept, C – Context) was followed, according to the JBI Manual for Evidence Synthesis[23]. Thus, the following premise was defined as a review question: *What is the influence of clinical leadership in nursing on the quality and safety of care in hospital health organizations?*, considering P – Nurses in clinical practice, C – Clinical leadership in nursing, quality and safety of care and C – Hospital health organizations.

*Inclusion criteria*

The definition of the inclusion criteria resulted from the components of the review question and was based on the JBI recommendations for scoping reviews[23], followed by the PCC mnemonic.

*Population*

Primary studies carried out on nurses in clinical practice in hospital health organizations were considered, excluding those that were carried out in other populations, such as nursing technicians. In order to make the research comprehensive, no limits were defined due to the sociodemographic, professional and academic characteristics of the study sample.

*Concept*

Concepts of interest were defined as clinical leadership in nursing and the quality and safety of health care. In this literature review, clinical leadership in nursing is understood as the demonstration of attitudes and skills of informal leadership by nurses in clinical practice and to whom competencies and clinical excellence, skills to build teams and relationships and qualities that inspire peers are recognized[18]. The quality and safety of health care refers to the degree of excellence of care, resulting from the ability of health organizations to respond to the needs of the people and exceed their expectations, meeting principles such as safety, the provision of person-centered care, effectiveness, efficiency and punctuality[6].

*Context*

The selected studies were conducted in the context of public or private hospital health organizations. The research was not limited to the clinical area of operation, the size or the geographical location.

*Kinds of Sources*

Primary, quantitative, qualitative or mixed-method studies were included. Opinion texts and secondary studies were excluded because they were not empirical studies. To identify the original studies, the research was limited to evidence published in peer-reviewed journals or available in the gray literature, articles written in Portuguese, English and/or Spanish and whose full text is available in open access. Contact with the authors was attempted when there was a need to obtain unpublished information.

Considering that the concept of clinical leadership in nursing is relatively recent in the literature, no chronological limitation was

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considered. Articles that did not fit the conceptual structure of the scoping review designed or whose units of analysis were health services or microsystems were excluded.

## Research Strategy

The research strategy was carried out in three stages, aiming, with this methodology, to carry out a comprehensive research that would enable the identification of published and unpublished studies.

In the first stage, a limited search was carried out in the search engines Medical Literature Analysis and Retrieval System Online (MEDLINE), via PubMed, and Comulative Index to Nursing and Allied Health Literature (CINAHL), via EBSCOHost, to analyze the indexing terms and words contained in the title text and abstract of the articles. The research strategy used to identify the articles was "clinical leadership" [All fields] AND "nurs*" [All fields] AND "hospital*" [All fields] AND "quality of health care" [All fields] AND "patient safety" [All fields].

The second stage, carried out on February 13, 2023, comprised a complete search in the search engines MEDLINE Complete, CINHAL Complete, Web of Science and Scopus, to identify published studies, and ProQuest Dissertations and Theses and OpenGrey, to identify unpublished studies. In the search strategy, truncation * and the boolean operators AND and OR were used to combine the indexing terms and identified keywords. The search strategy was adapted to each search engine, according to its specificities. Box 1 illustrates the search strategy used in the MEDLINE Complete search engine.

**Box 1 –** Search strategy for the MEDLINE Complete search engine

| Survey | Consultation terms | Recovered items |
|---|---|---|
| #1 | "clinical leadership" OR "informal leaders*" OR "clinical nurse leader" OR "CNL" OR "frontline leadership" OR "registered nurse clinical leadership" OR "staff nurse clinical leadership" OR "clinical practice leadership" [Title] | 354 |
| #2 | "clinical leadership" OR "informal leaders*" OR "clinical nurse leader" OR "CNL" OR "frontline leadership" OR "registered nurse clinical leadership" OR "staff nurse clinical leadership" OR "clinical practice leadership" [Abstract] | 2225 |
| #3 | "hospital" OR "healthcare units" OR "ward" [All fields] | 3842312 |
| #4 | "patient safety" OR "patient safety culture" OR "quality and patient outcomes" OR "patients outcomes" OR "quality outcomes" OR "nursing sensitive outcomes" [All fields] | 455542 |
| #5 | (#1 OR #2) AND #3 AND #4 | 175 |

Source: prepared by the authors.

In the third stage, additional studies were identified in the bibliographic reference lists of the articles selected for inclusion.

## Study selection

After identifying the studies in the search engines, they were imported and cataloged in the *Ryyan Intelligent Systematic Review*® software (Cambridge/United States of America (USA), Doha/Qatar). For the selection of studies, after the removal of duplicates, two independent reviewers analyzed the title and abstract according to the eligibility criteria previously defined. Disagreements were resolved using a third reviewer, who decided to include the articles in the list for analysis of the full text.

The identification of the relevant studies contained in the bibliographic references of the included articles was decided based on the analysis

of the title and abstract. Potentially relevant articles were individually evaluated by two reviewers.

Figure 1 represents the results of the research and the selection process of the studies.

**Figure 1 –** Flowchart of the study selection process
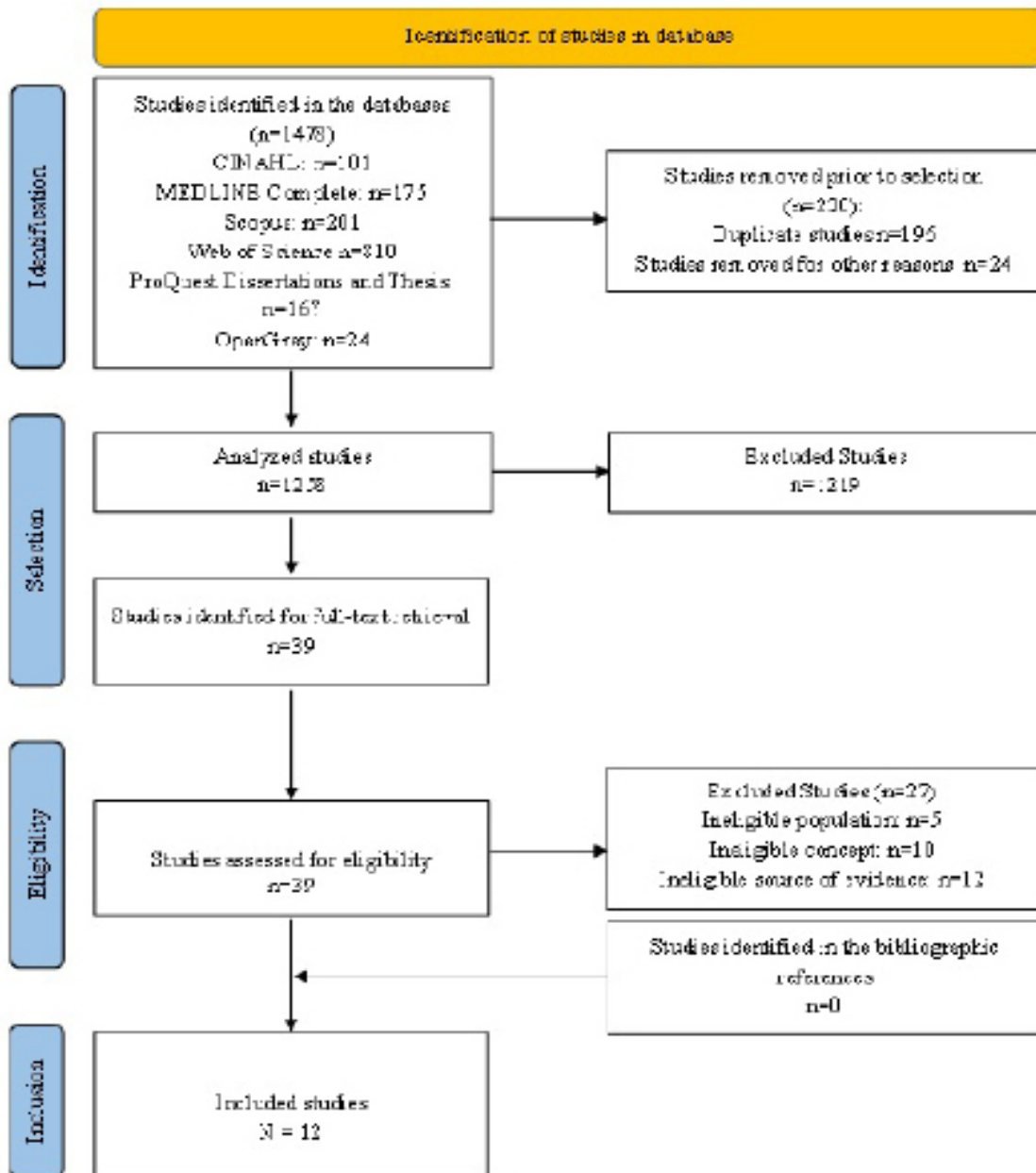


Source: prepared by the authors.

For the studies selected by reading the title and abstract, the full text was retrieved, which was analyzed independently by two reviewers. The data of detail, characteristics and results were extracted for an instrument built for this purpose, and the first five articles were subject to simultaneous analysis by the two reviewers in order to generate clarity and the best possible consistency during the analysis. During the analysis of the full text, the doubts were resolved with the recruitment of a third reviewer.

The extracted data are documented in tables accompanied by a narrative summary that clarifies the influence of clinical nursing leadership on the quality of care. As it is considered relevant to the body of knowledge in nursing, the defining

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characteristics of the clinical nurse leader and the strategies that promote clinical leadership in nursing are also systematized.

## Results

From the research strategy came 1478 studies, of which 1287 corresponded to articles published in journals. Of the total number of studies identified, 220 were excluded, since 196 were duplicates and 24 did not have the full text available in open access, which resulted in 1258 studies selected for analysis of the title and abstract. Of these, 1219 were excluded for not meeting the criteria defined for the literature review, a fact that results in the identification of 39 studies for retrieval and analysis of the full text. After evaluation by the reviewers, 27 were excluded for non-compliance with the inclusion criteria (ineligible population (n=4), ineligible concept (n=10) and ineligible source of evidence (n=12)), which resulted in the inclusion of 12 studies in the scoping review.

By reading and analyzing the lists of bibliographic references of the included studies, 41 references considered relevant were identified. Of these, 7 were removed because they were duplicate studies and 2 because there was no possibility of open access to the full text, which resulted in 32 studies for analysis of the title and abstract. After this analysis, 29 articles were excluded, and of the remaining 3, 1 was excluded for not being eligible for the concept and 2 for not being primary studies.

The included studies (n=12) reflect evidence on the influence of clinical nursing leadership on the quality and safety of health care. Chronologically, they are between 2005 and 2022, six of which were carried out in the United States of America[26-31], three in Canada[17,32-33], two in Jordan[34-35] and one in Australia[36]. The analysis of the detailed data and characteristics of the studies (Table 2) shows that these are qualitative studies[27-28,31,36], quantitative[17,30,32,34] and mixed methods[35]. One study is retrospective[29] and two are experimental studies[26,33]. Regarding the evaluation of clinical leadership in nursing, the instruments chosen by the authors were The Clinical Leadership Analysis[34-35], the Clinical Leadership Survey[17,32] and the Multifactor Leadership Questionnaire[17,30].

**Box 2 –** Detail data and characteristics of the studies

(continued)

| Author, year, Study Type (Sample) Country | Objectives: |
|---|---|
| Boamah S[17]. 2018. Cross-sectional, quantitative study (378 nurses providing direct care). Canada | To evaluate the association between transformational leadership, structural empowerment, clinical leadership of the nursing staff and adverse patient outcomes assessed by nurses |
| Bender M, Connelly CD, Glaser D, Brown C[26]. 2012. Experimental study (Clinical nurse leaders of a progressive care unit of an urban teaching hospital). United States of America | To test the hypothesis that integrating the role of clinical nurse leader results in improved quality of care |
| Bender M, Spiva LA, Patrick S, Meffert S, Moton L, Clarke S, et al[27]. 2019. Qualitative study (Clinical nurse leaders). United States of America | To describe the systems-based participatory approach used to investigate the clinical leadership health care model in nursing |
| Booher L, Yates E, Claus S, Haight K, Burchill CN[28]. 2021. Qualitative study (20 nurses from 2 hospitals). United States of America | To explore bedside clinical nurses' self-perception of leadership and their perception of the impact of leadership on patient outcomes |

**Box 2 –** Detail data and characteristics of the studies

(conclusion)

| Author, year, Study Type (Sample) Country | Objectives: |
|---|---|
| Hix C, Mckeon L, Walters S[29]. 2009. Retrospective study (Clinical lead nurses). United States of America | To evaluate the impact of the clinical nurse leader role on the microsystems of the Department of Veterans Affairs Tennessee Valley Health System |
| Lawson T, Tecson M, Shaver C, Barnes S, Kavli S[30]. 2019. Quantitative, non-experimental study (470 clinical lead nurses from 14 hospitals). United States of America | To understand the relationship between informal nursing leadership, job satisfaction and patient satisfaction |
| Sorbello BC[31]. 2010. Qualitative study with a phenomenological approach (10 clinical nurse leaders). United States of America | To understand the meaning of lived experience of a sample of clinical nurse leaders |
| Boamah S[32]. 2019. Quantitative, cross-sectional, predictive and non-experimental study (1000 nurses from intensive care units). Canada | To analyze the attributes of clinical leadership. Testing a model that examines the effect of clinical nursing leadership on quality of patient care and job satisfaction |
| Ginsburg L, Norton PG, Casebeer A, Lewis S[33]. 2005. Experimental study (244 nurses from two teaching hospitals). Canada | To design a training intervention and test its effect on nursing leaders' perception of patient safety culture |
| Mrayyan MT[34]. 2022. Quantitative study (349 nurses). Jordan | To evaluate the correlations and clinical leadership needs of Jordanian nurses |
| Mrayyan MT[35]. 2022. Cross-sectional mixed methods study (349 nurses from six hospitals). Jordan | To analyze nurses' perceptions of clinical leadership needs and compare their differences based on sample characteristics. To compare nurses' perceptions of clinical leadership needs between nurses and nurse managers |
| Ennis G, Happell B, Reid-Searl K[36]. 2015. Qualitative study (12 nurses in clinical practice in mental health). Australia | To understand the characteristics and attributes of effective clinical leaders in mental health nursing |

Source: prepared by the authors.

As specified in Box 3, most studies showed a direct positive effect of clinical leadership on the quality and safety of care[17,26-27,29,31-36]. Studies have associated clinical leadership in nursing with improved patient safety[17,31,34]; however, the improvement of clinical practice environments[27,34] and improved patient outcomes[17,31] were also evidenced.

In the study[28] conducted with 20 nurses in clinical practice, the authors concluded that clinical nurse leaders do not establish a direct relationship between clinical leadership and

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patient outcomes. Authors[30] demonstrated that the clinical leadership and leadership styles of informal leaders do not have a statistically significant relationship with patient satisfaction.

**Box 3 –** Influence of clinical leadership in nursing on the quality and safety of care

| Study identification | Influence of clinical leadership on quality and safety of care |
|---|---|
| (17) | Improving quality of care<br>Improving patient safety<br>Improving patient outcomes |
| (26) | Improving patient satisfaction |
| (27) | Improving clinical practice environments<br>Improving quality of care<br>Improving professional motivation |
| (28) | Clinical nurse leaders did not establish a direct relationship between clinical leadership and patient outcomes |
| (29) | Improving the quality of care |
| (30) | Clinical leadership and leadership styles of informal leaders have no statistically significant relationship with patient satisfaction |
| (31) | Promoting patient safety<br>Improving quality of care<br>Improving clinical outcomes |
| (32) | Improving the quality of care<br>Improving patient safety |
| (33) | Improving the quality of care<br>Increasing the value of the organizational safety climate<br>Valuing the state of patient safety |
| (34) | Improving the clinical practice environment<br>Improving patient safety<br>Improving quality of care |
| (35) | Clinical leadership is essential for quality and safety of care<br>Increased accountability for clinical practice<br>Increased visibility of the role of the nurses<br>Value-driven clinical practice |
| (36) | Clinical leadership behaviors in mental health nursing, such as calmness and confidence, have a positive effect on peers and patients<br>Effective clinical leaders demonstrate the ability to manage unpredictable or unexpected clinical situations through interpersonal skills |

Source: prepared by the authors.

From the studies analyzed, strategies promoting clinical leadership emerged that are characterized by comprehensiveness and heterogeneity. Most evidence the importance of implementing strategies and interventions based on the training of clinical nurse leaders for the performance of the role [27,31,33-34] and a study[28] highlights the need to develop clinical leadership skills from initial nursing training.

The analysis of the results allowed the identification of characteristics of the clinical nurse leader that, when present, are facilitators

of clinical leadership practice (Box 4). Mentoring[26,28,31-32,36], communication[26,28,31,36], being a model[26,28,32,36] and the ability to influence others[30,32,36] were the most mentioned attributes.

**Box 4 –** Characteristics of the clinical nurse leader

| Study identification | Characteristics of the clinical nurse leader |
|---|---|
| (17) | Not specified |
| (26) | Ability to communicate interprofessionally, in-depth knowledge of clinical practice and health policies, serve as a role model for peers, facilitate the integration of new staff, promote the provision of patient-centred care |
| (27) | Not specified |
| (28) | Coordination of care, communication, collaboration, advocacy, empowerment of peers and patients, provision of authentic care, empathy, humility, serving as a role model, clinical competence, interpersonal skills |
| (29) | Not specified |
| (30) | Recognition by peers, influence over peers, lack of formal leadership authority |
| (31) | Presence, coordination of care, relationship building, effective communication, innovation, questioning the status quo, mentoring, contribution to the development of the value of nursing |
| (32) | Ability to inspire and empower peers and the multidisciplinary team, team building, provision of patient-centred care, serving as a role model |
| (33) | Not specified |
| (34) | Coordination of care, anticipation of risk |
| (35) | Not specified |
| (36) | Calmness, confidence, expertise, knowledge, communication with patient and multidisciplinary team, ability to influence others, clinical supervision of peers and students, serving as a role model the others |

Source: prepared by the authors.

Although only two studies evaluated the relationship between sociodemographic and professional characteristics of the sample[34-35], both concluded that marital status, age, number of years of clinical practice, clinical practice in teaching hospitals and academic level are associated with the practice of clinical leadership in nursing.

## Discussion

In response to geopolitical, environmental and economic changes, the health needs of populations require the restructuring of health systems, so that the necessary strategies are effective, at the lowest cost and translate into safe and quality health care[37]. The growing interest in the investigation of clinical leadership in nursing exposes the positive impact of clinical nurse leadership skills on the quality and safety of health care[7,8,38-39], a premise that has been demonstrated in studies by several authors[17,26-27,29,31-36]. Studies[40-41] corroborate this evidence by revealing the potential influence that clinical leadership behaviors have on patient outcomes. Due to their skills and personal characteristics, clinical leaders in nursing are expected to contribute to reducing the fragmentation of health care, increasing the quality of care and the results in the person and in the health organization itself[42].

Along with improving the quality and safety of care, this review exposed the relationship between clinical leadership in nursing and patient satisfaction[26], professional motivation[27] and clinical practice environments[27,33-34]. Previous studies corroborate the evidence found, supporting the relevance of defining policies

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and organizational strategies that encourage and facilitate the development of leadership behaviors by nurses. Authors[43-45] are consensual, when affirming the meaning of clinical leadership in nursing in organizational success, given that this is dependent on motivated professionals and committed to the organization and to the results in people. However, despite the representativeness of nurses in the workforce of health organizations, they are not recognized as decision-makers in strategic planning and decision-making in health. Thus, it is imperative that nurses in clinical practice assume leadership roles at all organizational levels[46-47] and that the investigation of the association between clinical leadership in nursing and quality of care be exponentiated[48].

Along with phenomena such as *turnover* and demotivation of health teams, health organizations witness a gradual increase in the complexity of care and the need for integration and deinstitutionalization. In this sense, vertical leadership is insufficient, considering that the so-called magnet hospitals, recognized for the quality of care provided and the development of clinical practice environments that are consistent with care excellence, invest in strategies that promote clinical leadership in nursing[49].

In the studies analyzed, the relevance of clinical leadership in nursing and the need to define and implement organizational policies that result in the training of nurses in clinical practice as leaders were recognized[35]. The need for reflection by nursing managers and leaders on the impact of leadership on the quality of care and their support for the development of formal leadership programs aimed at nurses in clinical practice are defended in a Den Breejen-de Hooge, van Os-Medendorp and Hafsteinsdóttir research[48], as evidenced in other studies[31,35].

Despite the ambiguity of the strategies referred to in the literature, the training of clinical leadership skills and competencies[27,34], the definition of educational interventions that facilitate the understanding of the role of clinical nurse leader[27,33] and the development of mentoring programs[27-28,33] were mentioned in the studies included in this literature review

as measures congruent with the promotion and development of clinical leadership.

It is considered essential to define interventions that promote the development, in nurses, of intrinsic, cognitive and interpersonal skills, as these meet the characterizing attributes of the clinical nurse leader, thus allowing them to respond to the demands of their role[50]. However, it is essential to increase the field of research in the context of defining strategies and interventions that promote the development of clinical leadership in nursing and explore the positioning of health organizations in its implementation, since the clinical practice environment is structuring for engagement with clinical leadership in nursing[51]. In parallel, the definition of a sustained theoretical framework that underpins the interventions to be implemented is considered relevant. This may result in evidence that projects the influence of clinical leadership on the quality of health care and organizational results, as demonstrated in a study[27]. Studies carried out in the United States of America and Canada, where the concept of clinical leadership is well defined and implemented, prove that the use of strategies and interventions that promote the development of clinical leadership skills has significance in safety[17,31,33], patient satisfaction[26], professional motivation[27] and clinical outcomes[31].

A pioneering study in the definition of clinical leadership states that clinical knowledge in domains of specialized clinical practice and the use of interpersonal communication skills are attributes that characterize the clinical nurse leader[52], and the influence on peers and the individual and collective effort to achieve shared clinical objectives are valued[19]. The clinical nurse leader must demonstrate personal qualities that inspire peers and team-building and relationship-building skills[18]. In this literature review, it was evident that the clinical nurse leader is recognized for the ability to influence the others[26,28,32,36], effective communication[26,28,32,36], demonstration of clinical competence[28,36], coordination of care[28,31,35], building relationships[31], focus on clinical excellence and quality of care[26],

mentoring[28,31], knowledge[26] and participation in training and team development[26,28,31-32,36]. In a previous review[53], these attributes were also identified and it was mentioned that the clinical nurse leader is recognized by the values and beliefs that are associated with the ability to intervene and make decisions.

The limitations resulting from this review process are recognized, namely the definition of language criteria and the limited selection of search engines.

By mapping the scientific evidence on the influence of clinical leadership on the quality and safety of care, this study contributes to increasing the body of knowledge in nursing, and this is still an area that requires research and expansion of empirical knowledge. It is believed that the knowledge demonstrated can contribute to the awareness of organizational policy makers regarding the appreciation and recognition of the relevance of the role of clinical nurse leader and that it will support the design of future studies aimed at the evaluation of specific quality indicators, namely with regard to clinical outcomes and patient experience.

## Final Considerations

The quality of health care is a priority in well-structured health systems and reflects the efforts that health services make to achieve universal health coverage and respond efficiently to the health needs of populations. Clinical leadership is a recent but emerging concept in clinical nursing practice, since it is imperative that nurses assume the role of leading change, demonstrating competencies and skills that translate into increased quality and safety of care, but also in recognition and appreciation of the profession.

The results of this scoping review reveal the influence of clinical nursing leadership on the quality of health care, showing that patient safety and satisfaction, clinical outcomes, professional motivation, organizational safety climate and improvement of clinical practice environments are sensitive to clinical leadership practice. Thus, it is legitimate to affirm that clinical leadership in

nursing has an impact on the patients, the nurses and the organization, so it should be prioritized by health organizations that aim for safe, patient-centered and quality care. Competencies, such as interpersonal communication skills, the mastery of scientific knowledge, coordination, mentoring and team building, are characteristics of the clinical nurse leader that are consistent with evidence-based practice and with the provision of person-centered care, reducing the fragmentation of care.

Based on the results of this review, it is suggested the development of clinical leadership skills from initial training in nursing and the definition of systematized strategies based on robust conceptual frameworks that support the development of cognitive, interpersonal and intrinsic skills to the clinical nurse leader.

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2 – analysis and interpretation of data: Olga Alexandra Moura Ramos, José Alberto Fernandes Traila Monteiro de Sá and Ana Rita Capela Oliveira;

3 – writing and/or critical review: Olga Alexandra Moura Ramos, José Alberto Fernandes Traila Monteiro de Sá and Ana Rita Capela Oliveira;

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## Conflicts of interest

There are no conflicts of interest.

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