



Quality Management of Nursing Graduates: An Integrative Systemic Review

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ABSTRACT

Introduction: the quality of the graduate is not an accidental outcome nor a mere compliance with standards; it is the ethical manifestation of a coherent project that integrates knowledge, humanity, and social commitment.

Objective: to characterize the quality management strategies implemented in the university context to improve graduate quality, based on a critical review of the scientific literature.

Methods: an integrative systematic review was conducted in September and October 2025, following PRISMA stages. The search was carried out in the following databases: Medline (PubMed), Web of Science, Host, EBSCO, Scopus, ScienceDirect, Embase, Virtual Health Library, and SciELO, using the Boolean operators OR and AND. Full texts in all languages were considered, and 22 articles met the proposed objectives to achieve a comprehensive and integrative understanding of the phenomenon under study.

Development: from graduate quality management emerges a linkage that acts as a permanent feedback mechanism, allowing adjustments to curricula, training practices, and graduate profiles according to the changing demands of the health system. A competent, critical, and humanized graduate is not only a desirable outcome but an ethical requirement before society.

Conclusions: the management of nursing graduate quality should be oriented toward the development of competencies, instructional coherence, faculty support, and connection with the reality of care.

Keywords: Nursing Students; Management; Quality; University Education.

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INTRODUCTION

Quality is not only measured in terms of acquired knowledge, but also in developed skills, competencies, and values. An important aspect to consider is that quality is understood as the degree to which a process or outcome meets previously established standards. In the educational field, quality implies that teaching-learning processes, resources, planning, and outcomes achieved by students meet the criteria of efficacy, relevance, equity, and academic excellence.⁽¹⁾

this sense, management is conceived as the set of systematic actions oriented toward planning, organization, direction, and control of resources and processes to achieve defined objectives.⁽²⁾ By integrating both concepts, quality management emerges as a structured approach that seeks to guarantee compliance with educational standards through continuous improvement, systematic evaluation, and evidence-based decision-making.⁽³⁾

From this perspective, the analysis of the quality of a teaching process focuses on articulation with educational management, which encompasses the coordination of curricular, pedagogical, organizational, and evaluative elements involved in training, ensuring that formative outcomes respond coherently to institutional and social demands.⁽⁴⁾

For a health organization such as the Mexican Social Security Institute, graduate quality has consolidated as a critical factor to guarantee efficiency, competitiveness, and responsiveness of professionals in the health field. Graduates must not only possess solid technical and scientific competencies, but also critical thinking skills, professional ethics, and the capacity to adapt to changing contexts. The lack of clear standards or an integral approach in training can have negative repercussions on patient care, resource management, and implementation of good practices in health services, which can generate gaps between academic training and workplace demands.

A key aspect in the context of the Mexican Social Security Institute, a flagship institution in health service provision in Mexico, graduate quality acquires strategic relevance. The Mexican Social Security Institute demands highly trained professionals who can perform in complex clinical and administrative environments, while attending to a diverse population with growing needs for comprehensive care. The training of graduates at the Mexican Social Security Institute is based on ensuring professional competencies that translate into operational efficiency, patient safety, and continuous improvement of services, which makes graduate quality a central element for institutional management that in turn generates user satisfaction.

The competency-based approach has in the analysis of graduate quality at the Mexican Social Security Institute a pedagogical and methodological paradigm worthy of highlighting, as it integrates elements from various educational, psychological, and sociological theories that contribute to orienting effective and pertinent action in graduate quality.

Graduate quality at the Mexican Social Security Institute is based on the articulation of the competency-based approach with theoretical foundations that explain how knowledge is constructed and applied in real contexts. From this perspective, the contributions of constructivism by Jean Piaget and Lev Vygotsky allow understanding that learning is not passive, but active and social, in which the student develops skills through interaction with their environment. In the context of the Mexican Social Security Institute, this implies that graduate training should be oriented toward solving real clinical and organizational problems, favoring the integration of knowledge, skills, and attitudes in authentic health care scenarios.

Likewise, David Ausubel's theory of meaningful learning and David Kolb's experiential learning strengthen graduate quality by emphasizing the need for acquired knowledge to be meaningful and consolidated through reflective practice.⁽⁵⁾ In the context of the Mexican Social Security Institute, this translates into formative processes where the student not only acquires information, but understands it, relates it to previous experiences, and applies it in patient care. In this way, the development of clinical, ethical, and communicative competencies is favored, essential for guaranteeing safe, efficient, and user-centered care.

Another element to consider are the contributions of Albert Bandura's social learning theory and the postulates of Etienne Wenger, known for developing together with Jean Lave the concept of "communities of practice," which proposes that learning is not only acquiring information, but participating in social practices, interacting with others, and constructing identity within a professional community.⁽⁶⁾ At the Mexican Social Security Institute, this implies that graduate quality depends not only on the formal curriculum, but also on immersion in real clinical environments, interdisciplinary collaboration, and organizational culture. Thus, the integration of these theoretical frameworks allows understanding graduate quality as a dynamic, contextualized, and performance-oriented process, aligned with institutional demands and population needs.

Despite the availability of multiple theoretical approaches, a gap is observed in the integration of these frameworks to generate a holistic analysis of graduate quality at the Mexican Social Security Institute; conducted studies tend to address the evaluation of technical competencies, attitudes, or professional impact in a fragmented manner, without considering the systemic interaction between academic training, institutional needs, and patient care outcomes. This lack of integration limits the capacity to implement evidence-based improvement strategies that guarantee graduates fully meet institutional expectations.

The aforementioned reflects an epistemological gap by not systematically integrating each of these aspects, which is why the authors of this research considered it pertinent to conduct an integrative systematic review on the triad: instructional quality as a micro process, transformational leadership as a macro process, and quality management of nursing graduates as an outcome, necessary methodological and academically basic elements.

The objective of this study is to characterize the quality management strategies implemented in the university context to improve graduate quality based on a critical review of the scientific literature.

METHODS

An integrative systematic review was conducted in September and October 2025. This publication recognizes the methodological guide for conducting integrative reviews that has the nomenclature "Integra": (I) Idea or study problem; (N) Question or objective; (T) Search tactic; (E) Execution or use of the search; (G) Grade and quality control of results; (R) Filtered results; and finally, (A) Analysis and discussion.⁽⁶⁾

The question to be answered took into account the PICO strategy: (P) population (graduates of Nursing schools); Interest (Quality management strategies or programs that provide follow-up to graduates, evaluation of competencies, and curricular improvement programs); Context (nursing university).⁽⁷⁾ The following question was formulated: What are the characteristics of quality management strategies implemented in the university context to improve graduate quality?

Based on the question, a thorough search was conducted, taking into account controlled vocabulary in Spanish (DeCS) and English (MeSH), which were linked with Boolean operators AND and OR (Table 1) in the databases: Medline (PubMed), Web of Science, EBSCO, Scopus, Science Direct, Embase, Virtual Health Library, and SciELO.

Table 1. Key Concept Search Strategy.

Key Concept	DeCS (Spanish)	MeSH (English)	Synonyms / Free Terms	Search Equation (Base Structure)	Adaptation by Database
Quality Management	"Gestión de la calidad"	"Quality Management"	Educational quality, quality assurance, continuous improvement	("Gestión de la calidad" OR / AND "calidad educativa" OR / AND "aseguramiento de la calidad")	PubMed/MEDLINE : ("Quality Management" [MeSH] OR / AND "Quality Assurance, Health Care" [MeSH])
Higher Education	"Educación Superior"	"Education, Higher"	University, university training	("Educación Superior" OR / AND "Universidad")	Scopus/Web of Science: TITLE-ABS-KEY ("higher education" OR / AND "UNIVERSIT")
Graduate Quality	"Educación Basada en competencias"	"Competency-Based Education"	Graduate profile, professional competencies, learning outcomes	("Educación Basada en Competencias" OR / AND "competencias profesionales" OR "perfil de egreso")	EBSCO: [MeSH] ("Competency-Based Education" OR "graduate attributes")
Strategies	"Planificación Estratégica"	"Strategic Planning"	Educational strategies, educational intervention, institutional management	("Planificación Estratégica" OR / AND "estrategia" OR "intervención")	ScienceDirect: ("strategic planning" OR / AND "educational strategies")
Educational Evaluation	"Evaluación Educacional"	"Educational Measurement"	Learning evaluation, institutional evaluation	("Evaluación Educacional" OR / AND "evaluación del aprendizaje")	Embase: ("education"/exp AND "quality management"/exp)
University Context	"Instituciones Académicas"	"Universities"	University Education, Academic Context	("Instituciones Académicas" OR "Universidad")	BVS/SciELO: (("educación superior" AND "Calidad"))

DEVELOPMENT

In the identification phase, a systematic search was conducted in the databases Medline (via PubMed), Scopus, Web of Science, EBSCO, Science Direct, Embase, Virtual Health Library, and SciELO, retrieving a total of 489 records. Additionally, 60 records were identified through other sources, such as manual search and cross-referencing. After eliminating 315 duplicate records, a total of 174 studies were obtained for the screening process.

In the screening phase, two independent reviewers evaluated the titles and abstracts of the identified studies; previously defined inclusion criteria were applied: original articles, studies related to quality management strategies in higher education, published in Spanish or English, in the last five years. In this stage, 129 studies were excluded for not meeting thematic, design, or context criteria, leaving 54 studies for full-text evaluation.

Disagreements between reviewers were resolved through discussion and, if necessary, with the participation of a third reviewer. In the eligibility phase, 54 selected articles were analyzed in full text, of which 32 studies were excluded for reasons such as: lack of direct relationship with graduate quality, absence of focus on quality management, non-university context, or insufficient methodological rigor. Finally, 22 studies were selected that met all established criteria.

In this systematic review with an integrative approach, the synthesis of findings was conducted through thematic analysis within a narrative synthesis framework, which was useful since the included studies presented methodological heterogeneity (quantitative, qualitative, and mixed). In this case, the process began with exhaustive reading of the 22 selected articles, followed by an open coding phase, in which relevant units of meaning were identified such as: results, key concepts, variables, relationships. Subsequently, these codes were grouped into thematic categories through an iterative process of constant comparison, which allowed constructing central themes that synthesize common patterns and divergences among studies. This procedure corresponds to an inductive type thematic analysis, supported by a narrative synthesis, since the results were not statistically integrated, but through structured interpretation of findings.

The use of a spreadsheet in Microsoft Excel was fundamental to guarantee traceability and organization of the process. A data extraction matrix was designed in it that included variables such as: author/year, methodological design, population, main objectives, main results, and conclusions. Additionally, specific columns were incorporated for initial coding, category assignment, and identification of emerging themes. Through filters, pivot tables, and color coding, comparisons between studies were facilitated, allowing identification of recurrences, gaps, and contradictions. This support allowed systematizing information and documenting each analytical decision. Subsequently, to synthesize the information, it was organized by author/year/country, objective, and result; as shown in Table 2. Analysis Matrix.

The transition from the 22 individual articles to general conclusions was carried out in several clearly defined stages: (1) data extraction and reduction, where key findings from each study were summarized; (2) coding and categorization, similar information was grouped; (3) construction of integrative themes, which represented cross-cutting patterns; and (4) interpretative synthesis, in which themes were related to each other and to the review objective. Finally, general conclusions were elaborated that not only reflect the frequency of findings, but also their contextual meaning, consistency among studies, and level of evidence. This approach allowed transforming dispersed evidence into a coherent body of knowledge, which guaranteed methodological rigor and transparency in the process.

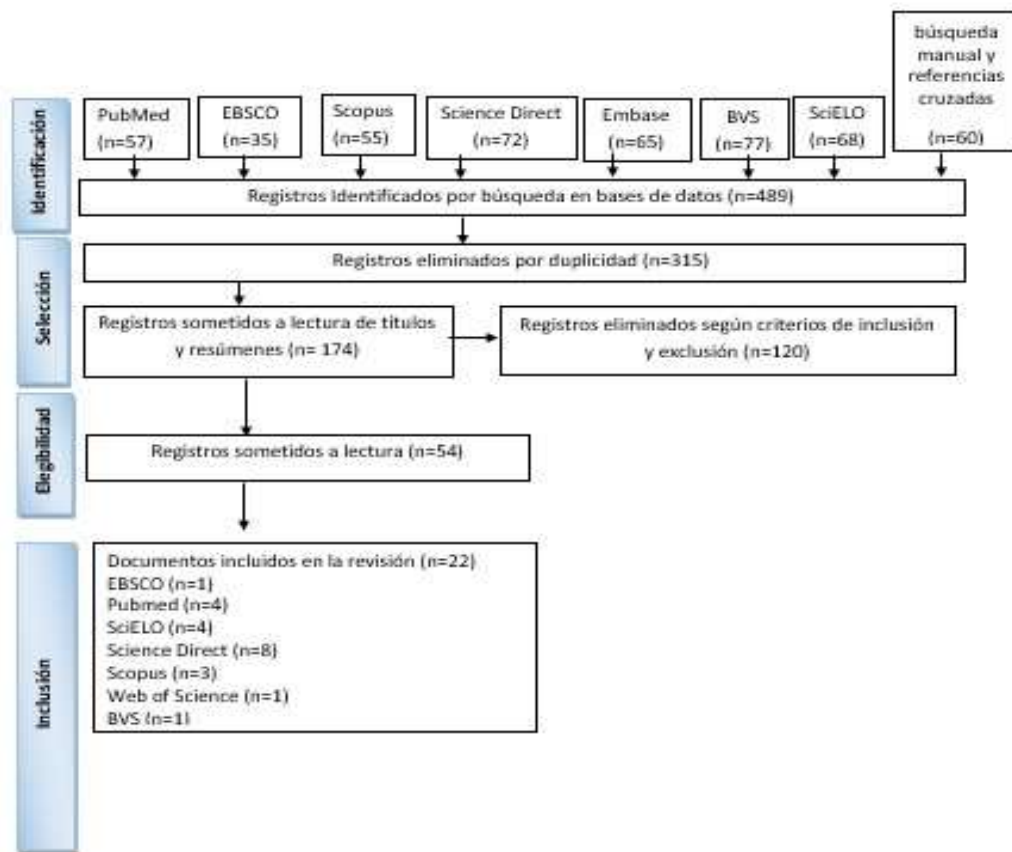


Fig. 1 Article Selection Flow Diagram.

The authors of this research, upon reviewing each of the articles shown in Table 2, encountered a range of interpretations, as well as approaches, data collection methods, and studies, which have obliged deepening the research with respect for methodological, epistemological, and theoretical differences. The aforementioned, far from being an impediment, was assumed as an endless complement of perspectives.

Table 2. Analysis Matrix.

Author/Year/Country	Objective	Results
Institutional Report 2024–2025 (training and human resources chapters). ⁽⁸⁾ Mexican Social Security Institute (IMSS) (2025)	To present updated data on staff, training, recognitions, and qualification strategies in nursing at IMSS.	Primary source that justifies institutional relevance, in order to continue encouraging the professional quality of nursing graduates from the Mexican Social Security Institute
Ren Xiao (2025) ⁽⁹⁾ United Kingdom	To design instruments to evaluate clinical reasoning in nursing graduates.	Clinical reasoning is shown as a key quality indicator in graduates.
Walter et al. (2025) ⁽¹⁰⁾ Islamic Republic of Iran	Protocol to review instruments that evaluate quality of the clinical environment.	Relevant for choosing tools that measure formative context associated with graduate quality

Dzomeku et al. (2024) ⁽¹¹⁾ Ghana	To design a methodological model that measures perception of quality of the bachelor's program in nursing; proposes variables and questionnaires	A replicable and adaptable methodological model to evaluate the quality of IMSS graduates
Mainz et al. (2024) ⁽¹²⁾ Germany	To identify definitions and instruments to measure digital competence in health professionals.	Digital competencies are part of current graduate quality (telehealth, electronic records). Useful for indicators.
Sandoval-Guerrero, Oralia; Mancera-González, Omar ⁽¹³⁾ (2024) Mexico	To describe the experiences of graduates from the master's in nursing at the Culiacán Nursing Faculty	Lived experiences by graduates identified emotions experienced during competency development in research, where emotions affected their cognitive process when living with stress, despair, fear, or depression, and in research competencies led them to be competent, when conducting database searches, using software, and publishing skills
Gómez A, Pérez B, Martínez C ⁽¹⁴⁾ (2024) Mexico	Study on school/work trajectories and opinions of graduates regarding their training.	Local and recent source (IMSS/Mexican context) justifies the relevance of the study with IMSS population
Zhai et al. ⁽¹⁵⁾ 2024. China	To validate a scale to measure safety and quality competencies in newly hired nurses; good validity and reliability	Directly usable and adaptable instrument to measure quality management in graduates; useful validation model for your work
Alharbi et al. ⁽¹⁶⁾ (2024)	To gather evidence on evaluation practices in competency-based programs	Proposes robust evaluation strategies. Guides on how to evaluate competencies, a central aspect of "quality management" in graduates.
Allouch et al. ⁽¹⁷⁾ (2024)	To identify properties of instruments that measure curricular integration	Useful for linking instrument properties with graduate outcomes with degree of curricular integration, a factor of educational quality
Wynne et al. ⁽¹⁸⁾ (2024)	To propose indicators that identify factors determining professional preparedness	Construction of quality management indicators based on professional preparedness of graduates
Egalla RB, Maranoc PM et al. ⁽¹⁹⁾ (2024)	To offer a graduate follow-up report on employment, curricular relevance, and competency gaps.	Academic document that reinforces the utility of a methodological model as a measure of quality of nursing graduates
Xia et al. ⁽²⁰⁾ (2023)	To evaluate instruments to measure research competence in nursing.	Research/knowledge management is considered part of "quality management"; these instruments help measure that dimension

Austria JS ⁽²¹⁾ (2023)	To present a survey with results on job placement and competency satisfaction in nursing graduates.	Practical example of instrument and qualitative/thematic analysis that can be contextualized
Khari S, Pazokian M et al. ⁽²²⁾ (2023)	To demonstrate the positive relationship between quality of environment and clinical self-efficacy; measurement proposals	Allows measuring dimensions of formative environment that explain quality management in graduates
De Vries et al. ⁽²³⁾ (2023)	To review strategies that affect retention and professional satisfaction.	Retention and working conditions affect perception of quality and performance of graduates
Stalmeijer RE, Whittingham JRD et al. ⁽²⁴⁾ (2022)	To argue the evolution of quality assurance toward continuous improvement and total efficacy management in nursing graduates	Theoretical framework to support the need for a methodological strategy that not only evaluates, but improves
Mortensen et al. ⁽²⁵⁾ 2022. Norway	To identify instruments that measure patient safety competencies in nursing, including their content, validity, and reliability.	Explanation of a panorama of validated instruments that measure key aspects of quality in professional practice
Nigenda et al. ⁽²⁶⁾ (2022). Mexico	To analyze the performance of the nursing labor market in Mexico; indicators of supply, demand, and labor mobility.	Contextualizes the Mexican labor panorama; reference is made to the high efficacy of IMSS nursing graduates; this element is assumed as an expectation of quality in nursing training.
Sreedharan et al. ⁽²⁷⁾ (2022)	To emphasize the importance of including quality assurance as a key domain in evaluation of health training programs.	Provides a conceptual framework on quality assurance applicable to the design of a "methodological strategy" to measure quality in graduates
Vallejo-Gómez et al. ⁽²⁸⁾ (2021)	To validate instruments to measure complete competencies in nursing students and professionals.	Basis for selecting or adapting validated instruments to measure quality management in graduates
Carreño-Moreno et al. ⁽²⁹⁾ (2021), Colombia	To describe and correlate the level of fear, stress, knowledge, attitudes, and practices regarding Covid-19 in nursing students and recent graduates in Colombia.	An adequate cognitive level is observed in nursing students and recent graduates, but an emotional deficiency regarding Covid-19, in terms of stress and fear. It is necessary to establish mental health support strategies for this key population in current and future control of health crisis situations.

From systematized educational research, and based on standardized critical evaluation, it was possible to verify that instructional quality as a micro process manifests in the daily reality of the classroom and clinical settings through intentional, coherent, and meaningful learning-centered pedagogical practices.⁽⁸⁾ In Nursing training, this translates into active didactic strategies, examples of which are problem-based learning, clinical simulation, and guided reflection. Other didactic strategies referred to in the literature include formative evaluation and continuous feedback, as well as the alignment that should exist between objectives, content, and professional competencies. Empirical evidence demonstrates that when teaching is oriented toward developing clinical, ethical, and communicative competencies, clinical reasoning, decision-making, and patient safety are strengthened, which are essential elements for quality professional performance.⁽⁹⁾

In the university context, quality management strategies oriented toward improving graduate competencies and performance share a set of key characteristics that articulate the pedagogical, organizational, and ethical, and allow translating quality standards into observable formative outcomes.⁽¹⁰⁾ An example of the aforementioned is the competency-based approach; these are structured on the alignment that should exist between the graduate profile, curriculum, teaching methodologies, and evaluation systems. This curricular coherence ensures that learning is oriented toward real performance and not only acquisition of theoretical knowledge.⁽¹¹⁾

Another element to consider is the systematic integration between learning objectives, didactic strategies, and evaluation, which allows formative activities to generate progressive cognitive challenges. A detailed analysis of the topic addressed in the literature includes the use of active methodologies and authentic experiences, which favor the development of clinical reasoning, decision-making, and transfer of learning to real care contexts.^(12,13)

In this sense, comprehensive and performance-oriented evaluation incorporates authentic evaluations that measure complex competencies in simulated and real contexts, surpassing traditional approaches focused on memorization. Thus, academic leadership promotes communities of practice and culture that foster faculty development and support.

From educational and philosophical perspectives, academic leadership breaks with the transmissive and reproductive logic of knowledge, by favoring meaningful construction of knowledge based on real problems generated during nursing care. In this way, learning ceases to be an abstract activity to become an experience validated by action and deep understanding of reality.⁽¹⁴⁾

These experiences promote the integration of knowledge, values, and attitudes, which facilitate transfer of learning to diverse clinical contexts. In terms of educational quality, active methodologies constitute bridges between curriculum and professional performance, by guaranteeing that the graduate not only "knows," but "knows how to act" with judgment, responsibility, and humanity in the face of the needs of individuals, families, and communities.⁽¹⁵⁾

This path allows implementation of systematic processes of self-evaluation, accreditation, use of graduate performance indicators, and feedback from clinical fields, which provides using this information for curricular and organizational decision-making.⁽¹⁶⁾ Quality strategies are associated with formative environments that promote psychological safety, academic support, tutoring, and pedagogical relationships based on respect and collaboration, which are essential conditions for deep learning and development of professional competencies.^(17,18) Reviewer triangulation identified that the link that should be established between the health system and the social

responsibility of the institution must have strong articulation with community needs, by ensuring that training of graduates, in this case Nursing, responds to real contexts of health systems.^(19,20) In this order of ideas, from Eckhard Klieme's instructional quality theory, the reviewed articles provide a solid conceptual basis by recognizing clinical reasoning as a central and predictive indicator of nursing graduate quality. This position aligns with the cognitive activity dimension, as it emphasizes the development of higher skills such as analysis, interpretation, and prioritization of clinical information in complex contexts.⁽¹⁰⁾

Studies examined through reviewer triangulation highlighted the importance of clinical reasoning development; it is emphasized that curricular design does not guarantee its progress by itself.⁽¹¹⁾ The learning support climate dimension of Eckhard Klieme is strengthened through pedagogical relationships between students and teachers, formative feedback, and teaching support as key educational conditions to promote motivation, emotional safety, and clinical reasoning.

The literature highlights that motivation during professional training influences transformational leadership. The aforementioned has repercussions in increasing clinical, cognitive, and attitudinal competencies, which constitute fundamental pillars for a quality-oriented nursing practice.⁽¹²⁾ Transformational leadership as a macro process manifested in the reviewed literature as an aspect expressed at the institutional and organizational level, which influences academic culture and conditions that enable instructional quality.^(13,14)

The reviewed research suggests, based on standardized critical evaluation, that exploring institutional adjustments based on the diverse teaching modalities applied in the nursing educational context should be more flexible, promoting the combination of work with study, to guarantee a balance between life and work of graduates.⁽¹⁵⁾ It is made explicit that, through symbolic interactions, information is acquired, ideas are generated, through which students manage to understand their own experiences and those of others.⁽¹⁶⁾

Educational analysis reveals that the effectiveness of transformational leadership becomes evident in generating continuous improvement processes. The aforementioned becomes palpable in practice when academic directors and managers promote a shared vision of excellence, foster pedagogical innovation, support teaching improvement, and stimulate collective commitment to continuous improvement.⁽¹⁷⁾ Transformational leadership articulates teaching with assistance with research; which promotes the creation of collaborative learning environments, becoming a catalyst that integrates individual efforts into a fused, coherent, and sustainable educational project.

Under this premise, a convergence of transformational leadership dimensions is sought, since teaching mediation in graduate quality allows consensus and co-participation, processes become more fluid, and a more horizontal structure is generated; emphasis is placed on communication and motivation by inspiring the student to continue advancing and thus contributing to their achievements and goals.⁽¹⁸⁾

In a reviewer triangulation process, it was analyzed that quality management of Nursing graduates as an outcome is concretized in competent, ethical, and socially responsible professionals, capable of responding to society's health demands. The reviewed authors consider that training is not justified by accumulation of content, but by full realization of human capacities oriented toward autonomy, beneficence, and non-maleficence.^(19,20) In this framework, graduate quality is not a technical attribute or a quantifiable indicator; it is the concrete expression of an ethical, reflective, and socially responsible formative praxis; whose professional action embodies the central objective of the profession, which is human care, respect for human dignity, and social justice.^(21,22)

This outcome cannot be understood as a process isolated from context, but as an intersubjective construction that emerges from pedagogical, institutional, and social relationships that configure training. Managing graduate quality implies, therefore, assuming a responsibility that has repercussions on the collective ethics of the educational institution, since the institution responds not only for what it teaches, but for the human and professional quality of the graduate.⁽²³⁾

From graduate quality management, a link is generated that acts as a permanent feedback mechanism that allows adjusting curricula, formative practices, and graduate profiles to the changing demands of the health system. A competent, critical, and humanized graduate is not only a desirable outcome, but also an ethical requirement for society.⁽²⁴⁾ Thus, quality ceases to be an instrumental end to become a form of educational and social justice; training professionals capable of caring well is, in turn, a way of caring for society as a whole.^(25,26)

Graduate quality management should encourage fostering critical thinking as an interactive process that requires participation of both teacher and student.^(27,28,29) New theoretical perspectives or conceptual frameworks on the topic should be based on attempting to understand essential, underlying truths, and not simply the superficial truth that is obvious at first glance. Graduate quality management requires commitment from all people participating in the pedagogical process.

It is necessary to point out that a limitation of this study lies in the high methodological, theoretical, and epistemological heterogeneity of the 22 analyzed articles. Although this diversity is assumed as an interpretative richness, it also hinders systematic comparability of findings and limits the possibility of establishing homogeneous or generalizable conclusions. Secondly, a limitation related to a possible risk of subjectivity in interpretation is evident.

Regarding implications for practice, the results offer relevant guidance for teachers, by emphasizing the need to implement active methodologies such as problem-based learning, clinical simulation, and authentic evaluation, and urging strengthening formative feedback as the axis of clinical reasoning development. As for academic managers, the importance of guaranteeing curricular coherence, promoting self-evaluation and accreditation processes, and fostering educational environments with psychological safety and teaching support is highlighted. In the case of decision-makers, findings suggest promoting educational policies that articulate nursing training with health system needs, ensuring social relevance and graduate quality.

From an institutional perspective, results imply consolidation of transformational leadership models that integrate teaching, assistance, and research, which will favor organizational cultures oriented toward continuous improvement. Likewise, the need to use graduate performance indicators and feedback mechanisms with clinical fields for evidence-based curricular decision-making is highlighted, which strengthens educational quality and social responsibility of the university.

Regarding future research perspectives, the need to develop studies with more homogeneous and comparable methodological designs is identified, as well as empirical research that evaluates the direct impact of pedagogical and leadership strategies on clinical and professional outcomes. It is also suggested to deepen analysis of clinical reasoning as a quality indicator, explore the influence of flexible educational modalities, and study the relationship between training, student well-being, and job performance. These lines would allow advancing toward a more integral, objective, and applied understanding of quality in nursing training.

CONCLUSIONS

The synthesis of the 22 articles evidences that nursing graduate quality is configured from the articulation between institutional quality (micro) and transformational leadership (macro), identifying as critical competencies clinical reasoning, decision-making, ethical and communicative skills, as well as critical thinking; however, a relevant and partially contradictory finding is that curricular coherence alone does not guarantee clinical reasoning development, so specific pedagogical conditions are necessary. Studies agree that effective teaching support models are based on continuous formative feedback, tutoring, horizontal pedagogical relationships, and generation of psychological safety, elements that enhance motivation and deep learning. Likewise, connection with reality is operationalized through authentic clinical practices, high-fidelity simulation, problem-based learning, and systematic integration with health services and community needs, which allows transfer of learning to real contexts. As a novel contribution, the conception of graduate quality is highlighted not as a technical indicator, but as an ethical, intersubjective, and socially responsible praxis, based on continuous improvement processes, institutional feedback, and social responsibility; however, methodological heterogeneity and risk of subjectivity in synthesis limit generalization of findings, which opens the need to conduct more robust research that consolidates this line of knowledge.

Conflict of Interest

None declared

Authorship Contribution

YJCGO: participated in conceptualization, investigation, project administration, data curation, supervision, visualization, writing – original draft, writing – review and editing.

EIM: participated in conceptualization, investigation, visualization, writing – original draft, writing – review and editing.

MRR: participated in conceptualization, investigation, writing – original draft.

All authors approved the final version of the manuscript

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