

The role of supervision in the stress management of nursing students in clinical internship: scoping review

Papel da supervisão na gestão do stress dos estudantes de enfermagem em estágio clínico: scoping review
El papel de la supervisión en el manejo del estrés entre los estudiantes de enfermería durante la pasantía clínica: una revisión de alcance

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Abstract

Objective: to map the scientific evidence about the role of supervision in the stress management of nursing students in clinical internship. **Methods:** scoping review, according to the methodology of the Joanna Briggs Institute. The research was carried out in the Cumulative Index to Nursing and Allied Health Literature; Nursing & Allied Health Collection; Library, Information Science & Technology Abstracts and MedicLatina (via EBSCOhost), National Library of Medicine and National Institutes of Health and MEDLINE Complete® (via Pubmed). Included studies published between 2019-2025 in any language. **Results:** twenty studies were identified that highlighted the central role of supervision in managing stress among nursing students during clinical internships. Supervisory strategies such as peer mentoring, regular and individualized feedback, and emotional support programs proved effective in promoting the well-being and professional development of students, contributing to a significant reduction in perceived stress. **Conclusion:** effective supervision plays a critical role in stress management by providing structured guidance, ongoing emotional support, and constructive feedback. These supervisory practices contribute to the construction of a safe and favorable learning environment, reinforcing the need to invest in the qualification of supervisors in the context of the clinical internship.

Descriptors: Nursing Students; Preceptorship; Anxiety; Psychological Stress; Clinical Internship.

Whats is already known on this?

The literature shows high levels of stress in clinical nursing students, recognizing supervision as a moderating factor, although with poorly systematized approaches and impacts.

What this study adds?

By consolidating effective supervision strategies and identifying gaps in the literature, it contributes to the advancement of scientific knowledge, with implications for pedagogical practice and for future investigations.



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Resumo

Objetivo: mapear as evidências científicas acerca do papel da supervisão na gestão do estresse dos estudantes de enfermagem em estágio clínico. **Métodos:** scoping review, segundo a metodologia do Joanna Briggs Institute. A pesquisa foi realizada na Cumulative Index to Nursing and Allied Health Literature; Nursing & Allied Health Collection; Library, Information Science & Technology Abstracts e MedicLatina (via EBSCOhost), National Library of Medicine and National Institutes of Health e MEDLINE Complete® (via Pubmed). Incluiu-se estudos publicados entre 2019-2025 em qualquer idioma. **Resultados:** identificou-se 20 estudos que destacaram o papel central da supervisão na gestão do estresse dos estudantes de enfermagem durante o estágio clínico. As estratégias supervisionadas como a mentoria entre pares, o feedback regular e individualizado, e os programas de apoio emocional se revelaram eficazes na promoção do bem-estar e do desenvolvimento profissional dos estudantes, contribuindo para reduzir significativamente o estresse percebido. **Conclusão:** a supervisão eficaz desempenha um papel determinante na gestão do estresse, ao oferecer orientação estruturada, apoio emocional contínuo e feedback construtivo. Estas práticas supervisionadas contribuem para construção de um ambiente de aprendizagem seguro e favorável, reforçando a necessidade de investir na qualificação dos supervisores no contexto do estágio clínico.

Descritores: Estudantes de Enfermagem; Preceptoria; Ansiedade; Estresse Psicológico; Estágio Clínico.

Resumen

Objetivo: mapear evidencia científica sobre el papel de la supervisión en el manejo del estrés en estudiantes de enfermería durante la pasantía clínica. **Métodos:** revisión de alcance, según la metodología del Instituto Joanna Briggs. La investigación se llevó a cabo en el Índice acumulativo de literatura de enfermería y salud afin; Colección de enfermería y salud afines; Biblioteca, Resúmenes de Ciencias de la Información y Tecnología y MedicLatina (a través de EBSCOhost), Biblioteca Nacional de Medicina e Institutos Nacionales de Salud y MEDLINE Complete® (a través de Pubmed). Estudios publicados entre 2019-2025 en cualquier idioma incluido. **Resultados:** se identificaron veinte estudios que destacaron el papel central de la supervisión en el manejo del estrés de los estudiantes de enfermería durante la pasantía clínica. Las estrategias de supervisión como la tutoría entre pares, la retroalimentación regular e individualizada y los programas de apoyo emocional han demostrado ser eficaces para promover el bienestar y el desarrollo profesional de los estudiantes, ayudando a reducir significativamente el estrés percibido. **Conclusión:** la supervisión eficaz desempeña un papel crucial en el manejo del estrés al proporcionar orientación estructurada, apoyo emocional continuo y retroalimentación constructiva. Estas prácticas de supervisión contribuyen a construir un ambiente de aprendizaje seguro y favorable, reforzando la necesidad de invertir en la calificación de los supervisores en el contexto de la pasantía clínica.

Descriptor: Estudiantes de enfermería; Preceptoria; Ansiedad; Estrés psicológico; Pasantía Clínica.

INTRODUCTION

Clinical supervision (CS) is fundamental in the training path of nursing students, by recognizing the educational value of practice in a real context and by promoting the integrated development of professional and personal skills. Clinical supervisors - nurse advisors, educators and health professionals, monitor and evaluate students, offering specialized guidance, emotional support and constructive feedback ⁽¹⁾. This support contributes significantly to professional growth and to the adaptation of students to the clinical environment.

However, the quality of CS can vary significantly, which directly affects the student experience. Students who do not receive adequate support tend to experience higher levels of stress and face greater difficulties in the clinical context ⁽²⁾.

In a study conducted with nursing students in New Mexico ⁽³⁾, clinical supervisors played a crucial role in supporting students during clinical practices, providing guidance and support that contributed to mitigating the negative effects of stress, creating a more favorable learning environment. The opportunity to receive regular and personalized feedback was also highlighted as essential for students' professional development and for identifying areas for improvement. The authors ⁽¹⁾ reinforce that clinical supervisors offer not only guidance and encouragement, but also emotional regulation strategies, helping to reduce stress and anxiety, while providing valuable feedback on performance.

However, not all CS experiences turn out to be positive. Students who receive insufficient support during the clinical internship (CI) often face high levels of stress and difficulties in adapting to the clinical environment ⁽⁴⁾.

Clinical internship is understood as the set of practical experiences, integrated in the curriculum of nursing courses, that take place in health care environments and that aim at the development of technical, relational and ethical-deontological skills, under the supervision of qualified professionals.

In 2023 the World Health Organization defined stress as a state of worry or mental strain caused by a difficult situation. It is a natural human response that prepares us to face challenges and threats. However, the way each individual manages stress has a decisive influence on overall well-being.

Although there is evidence on the influence on students' experience of stress, knowledge gaps persist regarding the most effective supervision strategies in reducing stress during the clinical internship.

Recent studies ⁽⁵⁻⁶⁾ indicate that strategies such as peer mentoring can contribute significantly to this reduction, but the results are still dispersed and poorly systematized.

In a study developed to analyze the factors that influence the intention to abandon the career among nursing students after graduation, the importance of the quality of clinical experience in training was highlighted. The lack of adequate support and supervision during clinical practices proved to be a risk factor for students' dissatisfaction and demotivation, increasing the probability of leaving the profession⁽⁷⁾.

Throughout the training course, nursing students face a multiplicity of stressful events associated with their learning process, from workload, academic expectations, interpersonal interactions and concerns about the professional future ⁽⁸⁾. During the clinical internship, students are faced with additional challenges, such as dealing with patients in pain and emergency situations, and fulfilling their clinical responsibilities. These requirements contribute significantly to the increase in perceived stress ⁽⁹⁾.

According to the study ⁽⁸⁾, prolonged exposure to high levels of stress during nursing training may have relevant consequences for the mental health of students, associated with an increase in symptoms of anxiety and depression, with a negative impact on well-being and formative performance.

Therefore, it is essential to promote the participation of students in emotional support programs, namely, discussion groups and counseling sessions, which favor emotional expression, the development of appropriate coping strategies and emotional self-regulation. The implementation of stress management techniques, such as mindfulness practices, breathing exercises and relaxation, has been shown to be effective in reducing anxiety and promoting emotional balance. These interventions play a crucial role in promoting the well-being of nursing students and in enabling them to face the challenges of training with greater resilience and security ⁽⁸⁾.

In this context, ensuring quality CS is essential to create a positive learning environment and minimize the effects of CI-associated stress. However, it is still necessary to systematically map the existing scientific evidence on supervisory practices that effectively contribute to the stress management of nursing students.

The objective of this study was to map the available scientific evidence about the role of supervision in the stress management of nursing students in clinical internship.

METHODS

This review was conducted according to the JBI® methodological framework ⁽¹⁰⁾ and written based on the guidelines by the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR®) ⁽¹¹⁾.

As recommended, the following five stages were followed to prepare this article: 1) construction of the research question; 2) identification of relevant records; 3) selection and inclusion of studies; 4) summarization of data; and 5) synthesis of results ⁽¹²⁾. The research question was elaborated based on the population strategy (nursing students), concept (role of supervision in stress management) and context (clinical internship) (PCC): What is the role of supervision in the stress management of nursing students during the clinical internship? The protocol was registered on the platform in the Open Science Framework (OSF) HOME (<https://doi.org/10.17605/OSF.IO/VYAZ6>) and can be consulted through the link: <https://osf.io/vyaz6/>.

Studies published between 2019 and 2025 were included, without language restriction, available in free full text and that addressed CS in nursing and the management of stress and/or anxiety in the context of practice. We chose to include the term anxiety in the eligibility criteria and in the search strategy because it is an emotional response often associated with stress in clinical training contexts. The temporal delimitation of the search for the last five years was established with the objective of ensuring the inclusion of updated and representative evidence of the state of the art on this theme. This methodological option is justified by the wide availability of primary literature, allowing a more focused and relevant mapping of supervisory practices in the current context. Scoping reviews play an important role in linking research findings with evidence-based health decision making. To be trustworthy, reliable methods must be used and include all results obtained from relevant research ⁽¹³⁾. Literature reference lists were checked to identify complementary studies.

For the information search, the Descriptors in Health Sciences (DeCS), "Estudantes de enfermagem"; "Educação", "Preceptoria", "Ansiedade", "Estresse Psicológico", "Estágio clínico" and the Medical Subject Headings (MeSH) platform, "Nursing Students"; "Education"; "Preceptorship"; "Anxiety"; "Stress, Psychological"; "Clinical Clerkship" were used. The boolean operators AND and OR were used,

using AND to identify studies that related the themes and OR to include synonyms ⁽¹¹⁾, according to the combinations between the descriptors and adapted to each data source, to promote the combination between the descriptors.

The research was carried out between January and February 2025, in the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL®); Nursing & Allied Health Collection; Library, Information Science & Technology Abstracts and MedicLatina (via EBSCOhost), National Library of Medicine and National Institutes of Health (PubMed) and MEDLINE Complete® (access via PubMed), as shown in Box 1.

Box 1. Descriptors and synonyms used in databases. Porto, PT, Portugal, 2025.

| Database | Controlled terms |
|------------------------------------|---|
| PubMed | ("students, nursing"[MeSH Terms] OR "Nursing Students"[Title/ Abstract]) AND ("Preceptorship"[MeSH Terms] OR "Preceptorship"[Title/ Abstract]) OR ("Anxiety"[MeSH Terms] OR "Anxiety"[Title/ Abstract]) AND ("stress, psychological"[MeSH Terms] OR "Stress"[Title/ Abstract]) AND ("Clinical Clerkship"[MeSH Terms] OR "Clinical Training"[Title/ Abstract] OR "Clinical Internship"[Title/ Abstract]) |
| MEDLINE | (MH "Nursing Students" OR TX "Nursing Students") AND (MH "Preceptorship" OR TX "Preceptorship") OR (MH "Anxiety" OR TX "Anxiety") AND (MH "Psychological Stress" OR TX "Stress") AND (MH "Clinical Clerkship" OR TX "Clinical Training" OR TX "Clinical Internship") |
| CINAHL | (MH "Nursing Students" OR TX "Nursing Students") AND (MH "Preceptorship" OR TX "Preceptorship") OR (MH "Anxiety" OR TX "Anxiety") AND (MH "Psychological Stress" OR TX "Stress") AND (MH "Clinical Clerkship" OR TX "Clinical Training" OR TX "Clinical Internship") |
| Nursing & Allied Health Collection | ("Nursing Students" OR "Students, Nursing") AND ("Preceptorship" OR "Anxiety") AND ("Psychological Stress" OR "Stress") AND ("Clinical Clerkship" OR "Clinical Training" OR "Clinical Internship") |
| MedicLatina | ("Estudiantes de Enfermería" OR "Nursing Students") AND ("Preceptoría" OR "Preceptorship") OR ("Ansiedad" OR "Anxiety") AND ("Estrés Psicológico" OR "Stress") AND ("Prácticas Clínicas" OR "Clinical Clerkship" OR "Clinical Training" OR "Clinical Internship") |

Source: authors (2025).

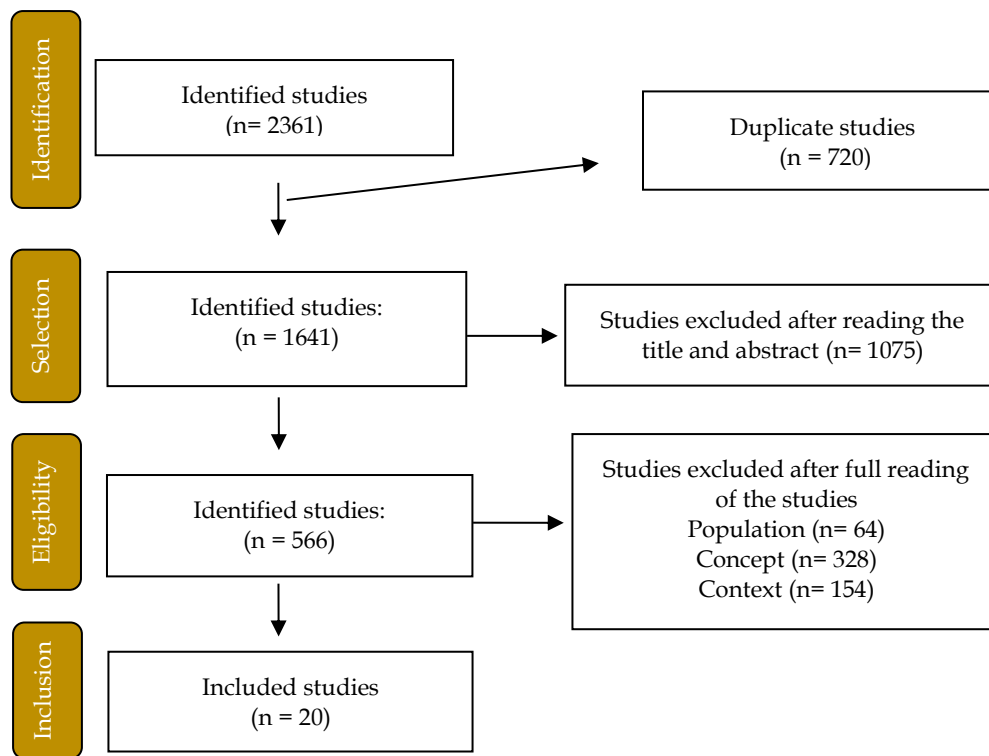
The identified studies were exported to the Qatar Computing Research Institute (Rayyan QCRI®) platform. Then the title and abstract were read and then the full text of the identified studies was read. The results obtained were written according to PRISMA-ScR® ⁽¹⁴⁾, considering the eligibility criteria previously defined.

RESULTS

A total of 2361 articles were identified in the searched databases, PubMed Central (n=1206), MEDLINE (n=294), CINAHL (n=850), Nursing & Allied Health Collection (n=5) and MedicLatina (n=6). A search was also carried out in the list of references of the selected studies. 20 studies were included in this review.

The studies selected for analysis in this review were obtained through a strategy that involved identification, selection, eligibility assessment and inclusion, following the inclusion criteria and previously determined search parameters. The process of identification and inclusion of the studies is documented through a PRISMA flowchart diagram, as shown in Figure 1.

Figure 1. Flowchart of the study selection process. Porto, PT, Portugal, 2025.



Source: PRISMA Flow Diagram adapted from Page *et al.* (2022).

An evidence table was prepared to assist in data extraction. Box 2 contains the following information: author(s)/year, objective(s), type of study, role of supervision and main results. Data were extracted and analyzed by two investigators independently, using a third reviewer in case of disagreement who decided on the inclusion or exclusion of the study.

Box 2. Studies included in this scoping review. Porto, PT, Portugal, 2025.

| Authors Year/country | Objectives: | Study type | Role of supervision in stress management | Main results |
|---|---|-----------------|---|---|
| Dias <i>et al.</i> , 2024 ⁽¹⁵⁾ United Arab Emirates | To identify the stressors experienced by undergraduate nursing students in the UAE during their first clinical training and the basic adaptation approaches or coping strategies they used. | Qualitative | Management of expectations; facilitation of adaptation to the clinical environment; promotion of emotional and social support; provision of constructive feedback (identified as unmet need). | Impediments to participation in procedures; lack of support; inappropriate team attitudes; absence of feedback and emotional support. |
| Larsson <i>et al.</i> , 2023 ⁽¹⁶⁾ Sweden | To describe and compare the clinical learning environment in community-based home care and primary health care in the training of district graduate nursing students. | Cross-sectional | Creation of a welcoming and safe learning environment; integration of the student into the clinical team; promotion of critical reflection; mitigation of organizational barriers. | Learning environment generated tension and high levels of stress; need for preceptors with advanced support skills. |

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| Ha, <i>et al.</i> , 2023 ⁽¹⁷⁾ Vietnam | To examine turnover intent and associated factors among students in Central Vietnam. | Cross-sectional | Promotion of welcoming learning environments; implementation of psychological support and guidance services; support for coping strategies and emotional management. | Need for counselling, career guidance and financial support. |
| Ferri <i>et al.</i> , 2023 ⁽¹⁸⁾ Italy | To compare students' perception levels about the quality of the Clinical Learning Environment (CLE) using two different models of clinical supervision. | Comparative | Promotion of clinical competencies; provision of constructive feedback; emotional support during clinical practice. | Personalized supervision resulted in better learning experience, safety perception and quality of the clinical environment. |
| Bahar, <i>et al.</i> , 2022 ⁽¹⁹⁾ Türkiye | To determine the effect of peer education on clinical skills learning and anxiety in nursing students. | Quasi-experimental | Facilitation of collaborative learning; promotion of peer support; reduction of anxiety associated with the clinical setting. | Peer education reduced anxiety compared to the traditional model. |
| Koo <i>et al.</i> , 2022 ⁽²⁰⁾ South Korea | To develop and evaluate a project-based learning program on high-risk newborn care for nursing students. | Quasi-experimental | Promotion of active and team learning; support for the development of clinical skills; reduction of stress during practice. | Improvements in clinical competence and reduction of practice-related stress. |
| Madsgaard <i>et al.</i> , 2022 ⁽²¹⁾ Denmark | To investigate the strategies used by counselors during Simulation-Based Education (SBE) to deal with students' emotions, recognizing the importance of these emotions as an integral part of the learning process. | Qualitative | Promoting a psychologically safe environment; facilitating self-reflection; tailored emotional support; analytical feedback on mistakes. | Supervisors promoted psychological safety and adaptation to individual needs, resulting in positive learning. |
| Strandell-Laine <i>et al.</i> , 2022 ⁽²²⁾ Finland, Spain, Iceland, Ireland, Portugal, Sweden | To explore and compare the experiences of undergraduate nursing students on the pedagogical cooperation of the nursing teacher with students, the clinical learning environment and supervision in their final clinical internship, and analyze the factors associated with these experiences in six European countries. | Cross-sectional | Promoting pedagogical cooperation; fostering a positive learning environment; supervised support during clinical practice. | Students' experience associated with the quality of cooperation and clinical environment. |
| Pienaar <i>et al.</i> , 2022 ⁽²³⁾ | To report a study that synthesized evidence | Integrative Review | Creation of structured support networks; | Innovative strategies can foster more effective |

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| South Africa | on strategies to provide a supportive clinical learning environment for undergraduate health science students. | | strengthening of the relationship between student, supervisor and clinical team; promotion of self-efficacy and autonomy. | learning environments. |
| Harrison, <i>et al.</i> , 2021 ⁽²⁴⁾ United Kingdom | To contribute to the knowledge about the cognitive and embodied experiences of peer tutoring by students in a context of education in health professions. | Hermeneutic phenomenological | Sharing responsibilities; facilitating coping; moderating power relations; fostering trust and emotional support. | A dialogue-based approach and peer support strengthened learning and personal development. |
| Tang, <i>et al.</i> , 2021 ⁽²⁵⁾ China | To explore the clinical learning experience of nursing students. | Qualitative, descriptive | Improved support from supervisors and institutions; promotion of a proactive learning environment; facilitation of emotional support. | Dissatisfaction with clinical experience; high levels of anxiety; need for change in the organization of the practice. |
| McCarthy <i>et al.</i> , 2021 ⁽²⁶⁾ Ireland | To assess differences in supervisees' understanding of clinical supervision and their perceptions of organizational functioning before and after engaging in peer group clinical supervision. | Pilot study | Fostering an environment of trust; facilitating experience sharing; emotional support; stress and workload management. | Group supervision favored sharing, trust, and stress reduction. |
| Saab <i>et al.</i> , 2021 ⁽²⁷⁾ United Kingdom | To explore supervisory experiences from the perspectives of nursing supervisees, their direct line managers, and clinical supervisors. | Descriptive, qualitative study; | Group supervision for stress reduction; promotion of self-awareness and peer support; development of emotional management skills. | Group supervision has resulted in positive impact on stress management and organizational well-being. |
| Majrashi, <i>et al.</i> , 2021 ⁽²⁸⁾ Saudi Arabia | To explore relevant evidence related to stressors and coping strategies among nursing students during the COVID-19 pandemic. | Scoping Review | Promotion of emotional support programs; encouragement of self-care; support in the management of stress associated with clinical practice. | High levels of anxiety and stress; importance of emotional support and adaptive coping strategies. |
| Stubin, 2021 ⁽²⁹⁾ USA | To understand how clinical nursing faculty better manage the stress of undergraduate nursing students in the clinical environment. | Qualitative descriptive | Promotion of self-awareness; development of emotional flexibility; provision of realistic feedback; emotional and academic support. | Supervisors play an essential role in creating supportive clinical environments. |
| Chaabane <i>et al.</i> , 2021 ⁽³⁰⁾ | To characterize the epidemiology of perceived stress, stressors and coping | Systematic review | Promotion of adaptive coping strategies; encouragement of social and emotional | Moderate to high levels of stress associated with |

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| Middle East and North Africa | strategies among nursing students in the Middle East and North Africa region. | | support; development of emotional regulation skills. | clinical and academic teaching. |
| Markey <i>et al.</i> , 2020 ⁽³¹⁾ Ireland | Clinical supervision is proposed as a solution-focused approach that supports nurses in busy healthcare settings, helping to address growing incidents of missed care. | Literature review | Facilitation of moments of reflection and sharing; promotion of self-reflection and well-being. | Clinical supervision promotes critical reflection and well-being of professionals. |
| McNeal, 2019 ⁽³²⁾ USA | To investigate the correlation between academic performance and nurse-to-student orientation between military and veterans. | Pilot study | Promotion of mentoring; development of supportive partnerships; facilitation of adaptation and academic performance. | Positive mentoring in academic performance and adaptation to the nursing course. |
| Brady, <i>et al.</i> , 2019 ⁽³³⁾ Ireland | To investigate the anxieties of first-year pediatric nursing students prior to their first practical internship and their support needs during this period. | Mixed Study. | Promoting role clarity; developing collaborative support networks; facilitating communication and feedback. | Adequate support reduced anxiety and promoted a positive learning experience. |
| Ekstedt <i>et al.</i> , 2019 ⁽³⁴⁾ Sweden | To compare nursing students' experiences of the clinical learning environment and supervisory relationships of two different models of supervision used in a Swedish nursing education. | Cross-sectional | Promotion of peer learning; development of an environment of cooperation between student, preceptor and teacher; provision of diverse feedback. | Peer learning model favored more positive experiences and cooperation in clinical learning. |

Source: authors (2025).

DISCUSSION

Clinical Internship represents a challenging time for nursing students, often associated with high levels of stress and with a significant impact on emotional well-being and the development of professional skills⁽³⁵⁾. The results of this study confirm this reality, by identifying as the main sources of pressure, the lack of emotional support, absence of feedback and difficulties in integrating into the team⁽¹⁴⁾.

In this context, CS (Clinical Supervision) plays a decisive role, providing technical and emotional support, promoting constructive feedback and fostering an environment conducive to personal and professional growth. The presence of accessible supervisors, capable of stimulating relationships of trust and critical reflection, is directly associated with a more positive perception of the clinical environment^(16,18). Among the models of supervision, peer supervision stands out as an effective strategy in reducing anxiety, by facilitating the sharing of experiences and mutual emotional support^(19,24,37). This model allows for safer learning contexts, in which students feel encouraged to express difficulties and seek support from peers with similar experiences. Simultaneously, it favors the development of clinical and psychomotor skills, contributing to the reduction of stress and inherent to practice in a real context^(18,26,27).

Clinical Supervision (CS), conceived as a solution-centered approach, promotes critical reflection and guided feedback, allowing students to recognize weaknesses and develop strategies to overcome the challenges of Clinical Internship (CI)⁽³¹⁾. This methodology strengthens motivation, autonomy and self-confidence, aspects closely linked to the capacity for emotional regulation^(17,28). The relevance of welcoming

and psychologically safe clinical environments for learning is widely recognized. The lack of institutional support, social isolation and emotional overload appear as aggravating factors of stress, highlighting the need for organizational strategies aimed at the emotional protection of students ^(21,25,28,35).

The effectiveness of CS is conditioned by several facilitating factors, among which are the clarity of pedagogical objectives, the specific training of supervisors, the quality of interpersonal relationships and the effective integration of students into the care team ^(22,23). On the other hand, the work overload of supervisors and the lack of organizational support were pointed out as significant barriers to their implementation ⁽³⁵⁻³⁶⁾.

Traditional supervisory models, characterized by low emotional interaction and absence of structured feedback, remain associated with elevated levels of stress and feelings of unpreparedness among students ⁽²³⁻²⁴⁾. The integration of differentiated approaches, such as peer supervision groups ⁽²⁵⁻²⁶⁾ and hybrid models that combine senior supervision with peer supervision ⁽³⁵⁾, has shown promising results by promoting emotional support and the development of interpersonal skills, contributing to more collaborative learning environments ⁽³⁷⁾.

Students involved in these models report greater perception of support, sense of belonging and confidence in their abilities to face the challenges of the Clinical Internship ^(24,29). Peer group Clinical Supervision has been shown to contribute significantly to strengthening attributes such as leadership, resilience, confidence, and personal growth. In addition, it has a relevant organizational impact, by promoting healthy work contexts, increasing the retention of professionals, ensuring patient safety and favoring adherence to quality of care standards ^(27,30,36).

The creation of safe and positive learning environments is crucial to mitigate the psychosocial pressure felt during the Clinical Internship ⁽¹⁵⁾. Continued support from supervisors and peers is essential for students to develop effective adaptive strategies. At the same time, Clinical Supervision should foster the development of interpersonal skills, such as assertive communication and conflict resolution, which are indispensable to professional practice.

Supervisors who provide consistent support and promote welcoming environments are perceived as reference figures, not only for the transmission of technical knowledge, but also for the care shown for the emotional well-being of students, reinforcing confidence throughout the training course ⁽¹⁷⁾.

In the field of clinical practice, peer-to-peer Clinical Supervision contributes to the improvement of critical thinking, clinical assessment capacity, patient safety and the maintenance of high standards of care quality.

Recent authors also highlight the importance of building support networks and implementing pedagogical strategies focused on the needs of students ^(22,29). Collaboration between supervisors, teachers and colleagues enhances the feeling of belonging and reinforces self-confidence, aspects that determine formative and professional success. Mutual support and knowledge sharing within supervisory teams play a decisive role so that students feel better prepared to face the challenges of the clinical and training context. The existence of continuous feedback and the encouragement of motivation appear as key components for a formative performance of excellence ^(31,32).

The evidence analyzed in this scoping review demonstrates that the implementation of Clinical Supervision models that articulate emotional support, technical development and psychosocial coping strategies is essential to reduce stress and optimize the learning process. Supervision must be dynamic, adaptable and responsive to the emotional and formative needs of students, promoting safe, collaborative and excellence-oriented learning environments.

Thus, the results of this review support that well-structured Clinical Supervision is a priority intervention in stress management during Clinical Internship. The adoption of integrated and student-centered models should be considered a fundamental educational strategy by educational institutions and health facilities.

CONCLUSION

Clinical Supervision is an essential strategy in reducing stress among nursing students by providing guidance, emotional support and constructive feedback. Quality supervision is crucial for well-being, professional development and the creation of safe and effective learning environments during the Clinical Internship. Among the most effective strategies identified are personalized and regular feedback, structured emotional support from clinical supervisors, and peer mentoring programs. These approaches

have been shown to be useful in promoting emotional self-regulation and creating more positive learning environments.

However, more comparative and longitudinal studies are needed to evaluate the efficacy of different Clinical Supervision models and identify the main stressors in Clinical Internship. Future research should support the development of more specific supervisory interventions, adjusted to the real needs of students, thus contributing to a more robust and humanized nursing training.

CONTRIBUTIONS

Contributed to the conception or design of the study/research: Souto R, Augusto F, Silva M. Contributed to data collection: Souto R, Augusto F, Silva M. Contributed to the analysis and/or interpretation of data: Souto R, Augusto F, Silva M. Contributed to article writing or critical review: Souto R, Augusto F, Silva M. Final approval of the version to be published: Souto R, Augusto F, Silva M.

REFERENCES

1. Zhang J, Escudos L, Ma B, Yin Y, Wang J, Zhang R, Hui X. The clinical learning environment, supervision and future intention to work as a nurse in nursing students: a cross-sectional and descriptive study [Internet]. *BMC Med Educ.* 2022; 22(1):548. DOI: <https://doi.org/10.1186/S12909-022-03609-Y>.
2. Yaseen Fathi K, Ibrahim RH. Factors influencing the integration of theory into practice in the acquisition of clinical skills among nursing students [Internet]. *Inform Med Unlocked.* 2023;37:101181. DOI: <https://doi.org/10.1016/j.imu.2023.101181>.
3. Liesveld J, Rohr J, Petrovic K, Grohman S, Bourgeois CL. Nursing student challenges during the COVID-19 pandemic from 2020 to 2021: A thematic analysis [Internet]. *Teach Learn Nurs.* 2023;18(1): 50-5. h DOI: <https://doi.org/10.1016/j.teln.2022.10.006>.
4. Alanazi FJ, Alenezi MHM, Alanazi AAN, Alanazi TSR. Do internship students do well in a clinical environment? A qualitative naturistic study [Internet]. *Belitung Nurs J.* 2023; 9(6): 539-546. DOI: <https://doi.org/10.33546/bnj.2938>.
5. Mumba M, Horton A, Cole H, Dickson B, Brown W, Parker K, *et al.* Development and implementation of a novel peer mentoring program for undergraduate nursing students [Internet]. *Int J Nurs Educ Scholarsh.* 2023; 20(1): 20220013. DOI: <https://doi.org/10.1515/ijnes-2022-0013>.
6. Gehreke L, Schilling H, Kauffeld S. Effectiveness of peer mentoring in the study entry phase: A systematic review [Internet]. *Rev Educ.* 2024; 12, e3462. DOI: <https://doi.org/10.1002/rev3.3462>.
7. Negm LMMA, Mersal FA, Fawzy MS, Rajennal AT, Alanazi RS, Alanazi LO. Challenges of nursing students during clinical training: A nursing perspective [Internet]. *AIMS Public Health.* 2024; 11(2):379-98. DOI: <https://doi.org/10.3934/PublicHealth.2024019>.
8. Majrashi A, Khalil A, Nagshabandi EA, Majrashi A. Stressors and Coping Strategies among Nursing Students during the COVID-19 Pandemic: Scoping Review [Internet]. *Nurs Rep.* 2021; 11(2): 444-59. DOI: <https://doi.org/https://doi.org/10.3390/nursrep11020042>.
9. Yeo KJ, Yap CK. Helping undergraduate students cope with stress: The role of psychosocial resources as resilience factors [Internet]. *Soc Sci J.* 2020; 60(1): 1-23. DOI: <https://doi.org/10.1080/03623319.2020.1728501>.
10. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: Scoping Reviews (2024 version) [Internet]. In: Aromataris E, Munn Z, editors. *JBIM Manual for Evidence Synthesis.* 2024. Adelaide: JBI; 2024. DOI: <https://doi.org/10.46658/JBIMES-20-12>.

11. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, *et al.* PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation [Internet]. *Ann Intern Med.* 2018;169(7), 467–473. DOI: <https://doi.org/10.7326/m18-0850>.
12. Arksey H, O'Malley L. Scoping studies: towards a methodological framework [Internet]. *Int J Soc Res Methodol.* 2005;8(1):19-32. DOI: <https://doi.org/10.1080/1364557032000119616>.
13. Sampaio F, Gonçalves P, Parola V, Sequeira C, Lluch Canut T. Nursing process addressing the focus “anxiety”: A scoping review [Internet]. *Clin Nurs Res.* 2020; 30(7). DOI: <https://doi.org/10.1177/1054773820979576>.
14. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, *et al.* The PRISMA 2020 statement: an updated guideline for reporting systematic reviews [Internet]. *BMJ.* 2021;372:n71. DOI: <https://doi.org/10.1136/bmj.n71>.
15. Dias JM, Subu MA, Al-Yateem N, Ahmed FR, Rahman SA, Abraham MS, *et al.* Nursing students' stressors and coping strategies during their first clinical training: a qualitative study in the United Arab Emirates [Internet]. *BMC Nurs.* 2024; 23(1): 322. DOI: <https://doi.org/10.1186/s12912-024-01962-5>.
16. Larsson M, Sundler AJ, Blomberg K, Bisholt B. The clinical learning environment during clinical practice in postgraduate district nursing students' education: A cross-sectional study [Internet]. *Nurs Open.* 2023; 10(2): 879–88. DOI: <https://doi.org/10.1002/nop2.1356>.
17. Ha TTT, Thuy LT, Thanh DTH. Factors affecting career turnover intention after graduation among nursing students: A cross-sectional study in Central Vietnam [Internet]. *Nurs Pract Today.* 2023; 10(3):229–38. DOI: <https://doi.org/10.18502/npt.v10i3.13432>.
18. Ferri P, Stifani S, Morotti E, Alberti S, Vannini V, Di Lorenzo R, *et al.* Nursing students' evaluation of clinical learning environment and supervision models before and during the COVID-19 pandemic: a comparative study [Internet]. *Acta Biomed.* 2023; 94(6), e2023256. DOI: <https://doi.org/10.23750/abm.v94i6.14750>.
19. Bahar A, Kocacal E, Maras G. Impact of the peer education model on nursing students' anxiety and psychomotor skill performance: a quasi-experimental study [Internet]. *Niger J Clin Pract.* 2022; 25(5): 677. DOI: https://doi.org/10.4103/njcp.njcp_1905_21.
20. Koo HY, Gu YE, Lee BR. Development of a Project-Based Learning Program on High-Risk Newborn Care for Nursing Students and Its Effects: a quasi-Experimental Study [Internet]. *Int J of Environ Res Public Health.* 2022; 19(9): 5249. DOI: <https://doi.org/10.3390/ijerph19095249>.
21. Madsgaard A, Røykenes K, Smith-Strøm H, Kvernenes M. The affective component of learning in simulation-based education – facilitators' strategies to establish psychological safety and accommodate nursing students' emotions [Internet]. *BMC Nurs.* 2022; 21(1). DOI: <https://doi.org/10.1186/s12912-022-00869-3>.
22. Strandell-Laine C, Salminen L, Blöndal K, Fuster P, Hourican S, Koskinen S, Leino-Kilpi H, *et al.* The nurse teacher's pedagogical cooperation with students, the clinical learning environment and supervision in clinical practicum: a European cross-sectional study of graduating nursing students [Internet]. *BMC Med Educ.* 2022; 22(1): 509. DOI: <https://doi.org/10.1186/s12909-022-03445-0>.
23. Pienaar M, Orton AM, Botma Y. A supportive clinical learning environment for undergraduate students in health sciences: An integrative review [Internet]. *Nurse Educ Today.* 2022; 119: 105572. DOI: <https://doi.org/10.1016/j.nedt.2022.105572>.

24. Harrison HF, Kinsella EA, DeLuca S, Loftus S. "We know what they're struggling with": student peer mentors' embodied perceptions of teaching in a health professional education mentorship program [Internet]. *Adv Health Sci Educ Theory Pract*. 2021; 27(1): 63–86. DOI: <https://doi.org/10.1007/s10459-021-10072-9>.
25. Tang ACY. Learning Experience of Chinese Nursing Students during Clinical Practicum: A Descriptive Qualitative Study [Internet]. *Nurs Rep*. 2021; 11(2): 495–505. DOI: <https://doi.org/10.3390/nursrep11020046>.
26. McCarthy V, Goodwin J, Saab MM, Kilty C, Meehan E, Connaire S, *et al*. Nurses and midwives' experiences with peer-group clinical supervision intervention: a pilot study [Internet]. *J Nurs Manag*. 2021; 29(8): 2523–2533. <https://doi.org/10.1111/jonm.13404>.
27. Saab MM, Kilty C, Meehan E, Goodwin J, Connaire S, Buckley C, Walsh A, *et al*. Peer group clinical supervision: Qualitative perspectives from nurse supervisees, managers, and supervisors [Internet]. *Collegian*. 2021; 28(4): 359–68. DOI: <https://doi.org/10.1016/j.colegn.2020.11.004>.
28. Majrashi A, Khalil A, Nagshabandi EA, Majrashi A. Stressors and Coping Strategies among Nursing Students during the COVID-19 Pandemic: Scoping Review [Internet]. *Nurs Rep*. 2021;11(2): 444–459. DOI: <https://doi.org/10.3390/nursrep11020042>.
29. Stubin CA. Keeping Nursing Student Stress in Check: Strategies from Clinical Nursing Faculty [Internet]. *J Nurs Pract Appl Rev Res*. 2021; 11(1): 51–57. DOI: <https://doi.org/10.13178/jnparr.2021.11.01.1007>.
30. Chaabane S, Chaabna K, Bhagat S, Abraham A, Doraiswamy S, Mamtani R, *et al*. Perceived stress, stressors, and coping strategies among nursing students in the Middle East and North Africa: an overview of systematic reviews [Internet]. *Syst Rev*. 2021; 10(1): 136. DOI: <https://doi.org/10.1186/s13643-021-01691-9>.
31. Markey K, Murphy L, O'Donnell C, Turner J, Doody O. Clinical supervision: a panacea for missed care [Internet]. *J Nurs Manag*. 2020;28(8):2113–2117. DOI: <https://doi.org/10.1111/jonm.13001>.
32. McNeal GJ. A Pilot Intervention Using Professional Nursing Mentoring to Engage Prior Corpsman and Medic Nursing Students in Academic Success [Internet]. *ABNF J*. 2019; 30(3): 74–80. Available from: <https://web.p.ebscohost.com/ehost/detail/detail?vid=8&sid=913a859a-ee4c-4cd895b6-4d3d96b5f963%40redis&bdata=Jmxhbmc9cHQtcHQmc2l0ZT1laG9zdC1saXZl#AN=138542214&db=ccm>.
33. Brady M, Price J, Bolland R, Finnerty G. Needing to Belong: First Practice Placement Experiences of Children's Nursing Students [Internet]. *Compr Child Adolesc Nurs*. 2019; 42(1): 24–39. DOI: <https://doi.org/10.1080/24694193.2017.1372530>.
34. Ekstedt M, Lindblad M, Löfmark A. Nursing students' perception of the clinical learning environment and supervision in relation to two different supervision models: a comparative cross-sectional study [Internet]. *BMC Nurs*. 2019, 18, 49. <https://doi.org/10.1186/s12912-019-0375-6>.
35. Atashi V, Movahedi Najafabadi M, Afshari A, Ghafari S. Barriers to effective clinical supervision from the perspective of nurses: A descriptive qualitative study [Internet]. *Nurs Open*. 2024; 11, e2028. DOI: <https://doi.org/10.1002/nop2.2028>.
36. Rothwell C, Kehoe A, Farook SF, Illing J. Enablers and barriers to effective clinical supervision in the workplace: a rapid evidence review [Internet]. *BMJ Open*. 2021;11(9):e052929. DOI: <https://doi.org/10.1136/bmjopen-2021-052929>.

37. Doody O, Markey K, Turner J, O'Donnell C, Murphy L. Clinical supervisor's experiences of peer group clinical supervision during COVID-19: a mixed methods study [Internet]. *BMC Nurs.* 2024; 23:612. DOI: <https://doi.org/10.1186/s12912-024-02283-3>.

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