

# THE IMPORTANCE OF THE NURSING TEAM'S KNOWLEDGE IN PREVENTING SKIN LESIONS IN NEWBORNS

# IMPORTANCIA DE LOS CONOCIMIENTOS DEL PERSONAL DE ENFERMERÍA EN LA PREVENCIÓN DE LAS LESIONES CUTÁNEAS EN LOS RECIÉN NACIDOS

# A IMPORTÂNCIA DO CONHECIMENTO DA EQUIPE DE ENFERMAGEM NA PREVENÇÃO DE LESÕES DE PELE EM RECÉM-NASCIDOS

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#### ABSTRACT

This study addresses the relevance of nursing team knowledge in preventing skin lesions in newborns. Skin lesions are common in this group, requiring appropriate interventions to ensure the health and well-being of newborns. General Objective: To verify in the literature the importance of nursing team knowledge in preventing skin lesions in newborns, as well as to identify effective practices, challenges faced and implications for professional training and improvement of the quality of neonatal care. Methodology: This study adopted a literature review, with research in the databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Nursing Database (BDENF), through the Virtual Health Library (BVS) and Latin American and Caribbean Literature in Health Sciences (LILACS). Result: Training and continuous updating of nursing professionals are essential for the implementation of effective practices. Conclusion: Nursing staff play a crucial role in preventing skin lesions in newborns. Investing in training and updating professionals is essential to improve the quality of care and ensure the health of newborns. To improve the quality of neonatal care and reduce the incidence of skin lesions, it is essential that health institutions prioritize training and support for nursing staff. These actions can result in better clinical outcomes for newborns and contribute to the construction of a more informed and effective nursing practice.

Keywords: Wounds and Injuries; Infant, Newborn; Neonatal Nursing; Nursing, Team.

#### RESUMEN

El estudio aborda la relevancia del conocimiento del equipo de enfermería en la prevención de lesiones cutáneas en el recién nacido. Las lesiones cutáneas son comunes en este grupo y requieren intervenciones adecuadas para garantizar la salud y el bienestar de los recién nacidos. Objetivo General: Verificar en la literatura la importancia del conocimiento del equipo de enfermería en la prevención de lesiones cutáneas en el recién nacido, así como identificar prácticas efectivas, desafíos enfrentados e implicaciones para la formación profesional y la mejora de la calidad de la atención neonatal. Metodología: Este estudio adoptó una revisión bibliográfica, con investigación en las bases de datos: Medical Literature Analysis and Retrieval System Online (MEDLINE), Nursing Database (BDENF), a través de la biblioteca virtual en salud (BVS) y Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS). Resultado: La formación y actualización continua de los profesionales de enfermería son fundamentales para la implementación de prácticas efectivas. Conclusión: El equipo de enfermería juega un papel crucial en la prevención de lesiones cutáneas en los recién nacidos. Invertir en la formación y actualización de los profesionales es fundamental para mejorar la calidad de la atención y garantizar la salud de los recién nacidos. Para mejorar la calidad de la atención neonatal y reducir la incidencia de lesiones cutáneas, es fundamental que las instituciones de salud prioricen la capacitación y el apoyo al equipo de enfermería. Estas acciones pueden redundar en mejores resultados clínicos para los recién nacidos y contribuir para la construcción de una práctica de enfermería más fundamentada y eficaz.

Palabras clave: Heridas y Lesiones; Recién Nacido; Enfermería Neonatal; Grupo de Enfermería.

#### RESUMO

Este estudo aborda a relevância do conhecimento da equipe de enfermagem na prevenção de lesões de pele em recém-nascidos. Lesões cutâneas são comuns nesse grupo, exigindo intervenções adequadas para garantir a saúde e o bem-estar dos neonatos. Objetivo Geral: Verificar na literatura a importância do conhecimento da equipe de enfermagem na prevenção de lesões de pele em recém-nascidos, bem como, identificar práticas eficazes, desafios enfrentados e implicações para a formação profissional e melhoria da qualidade do cuidado neonatal. Metodologia: Este estudo adotou uma revisão bibliográfica, com pesquisa nas bases de dados; Medical Literature Analysis and Retrieval System Online (MEDLINE), Banco de Dados em Enfermagem (BDENF), através da biblioteca virtual em saúde (BVS) e Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS). Resultado: A capacitação e a atualização contínua dos profissionais de enfermagem são fundamentais para a implementação de práticas eficazes. Conclusão: A equipe de enfermagem tem um papel crucial na prevenção de lesões de pele em recém-nascidos. Investir na formação e atualização dos profissionais é fundamental para melhorar a qualidade do atendimento e garantir a saúde dos neonatos. Para melhorar a qualidade do cuidado neonatal e reduzir a incidência de lesões de pele, é essencial que as instituições de saúde priorizem a formação e o apoio à equipe de enfermagem. Essas ações podem resultar em melhores desfechos clínicos para os recém-nascidos e contribuir para a construção de uma prática de enfermagem mais fundamentada e eficaz.

Palavras Chaves: Ferimentos e Lesões; Recém-Nascido; Enfermagem Neonatal; Equipe de Enfermagem



# INTRODUCTION

Skin lesions in newborns (NB), such as diaper dermatitis and pressure sores, are frequent concerns in neonatal intensive care units and maternity wards. The nursing team plays a crucial role in identifying, preventing and treating these conditions (1). Nurses theoretical and practical knowledge is essential to ensure quality care.

According to Fernandes et al, diaper dermatitis is a generic expression covering a set of inflammatory dermatoses that affect the area of the body covered by the diaper, the region composed of the perineum, gluteal region, lower abdomen and thighs (2). These are characterized by rashes caused directly by the use of diapers, such as irritated plastic diaper dermatitis (very rare); dermatitis exacerbated by the use of diapers and those that occur in this location.

As for pressure injuries, according to the definition given by the National Pressure Ulcer Advisory Panel <sup>(3)</sup>, a pressure injury (PI) is when there is localized damage affecting the skin and/or the underlying soft tissue, usually in areas over bony prominences. This injury can also be associated with the use of medical equipment or other devices. It can manifest as intact skin or as an open ulcer, and can cause pain depending on its stage.

Knowledge of the anatomy and physiology of neonatal skin is fundamental for injury prevention (4). Studies show that nurses are able to implement effective care protocols, reducing the incidence of skin lesions <sup>(5)</sup>.

Prevention practices include regular skin assessment, the use of suitable products and correct positioning techniques (6).

Despite their importance, many professionals still lack specific training in neonatal skin care. Identifying knowledge and promoting appropriate training is essential for improving the care provided <sup>(7)</sup>. The lack of solid training in this area leads to the adoption of practices based on common sense rather than scientific evidence. This deficiency in the preparation of future nurses compromises both the quality of care and patient safety (8).

The purpose of this article is to verify in the literature the importance of the nursing team's knowledge in preventing skin lesions in newborns, as well as to identify effective practices, challenges faced and implications for professional training and improving the quality of neonatal care.

#### Research Problem

What is the relationship between the level of knowledge of nursing staff and the incidence of skin lesions in newborns?

# **Hypothesis**

A higher level of knowledge among nursing staff about neonatal skin care is associated with a lower incidence of skin lesions in newborns.

# **Background**



# **METHODOLOGY**

This is an integrative literature review, which aims to systematize the results obtained from previous studies <sup>(9)</sup>. The integrative review has international recognition, allowing reviewers to synthesize results in the individual or collective spheres in the area of health care based on scientific evidence or practice based on scientific evidence, thus providing results that benefit nursing care <sup>(10)</sup>.

The steps followed to prepare this integrative review were: establishing the research question, searching the literature, describing the data and presenting the review (11). The guiding question was "What is the relationship between the level of knowledge of the nursing team and the incidence of skin lesions in newborns?"

The search was carried out in 2024, in the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Nursing Database (BDENF), through the Virtual Health Library (VHL) and Latin American and Caribbean Literature in Health Sciences (LILACS). No time frame was established for the inclusion of the texts. The terms used in the searches, extracted from the Health Sciences Descriptors (DeCS) and Medical Subject Headings (MeSH), were: Wounds and Injuries, Newborn, Neonatal Nursing and Nursing Team, their respective versions in well as Portuguese, English and Spanish. The articles were selected independently, and the inclusion criteria were: original studies published in full

Skin lesions in newborns are a common complication that can lead to infections and increased length of stay, impacting the health of the neonate and generating additional costs for healthcare systems <sup>(1)</sup>. Nursing staff, often on the front line of neonatal care, play a crucial role in identifying, preventing and treating these injuries. Studies show that properly training nursing staff in skin care practices can significantly reduce the incidence of injuries <sup>(5)</sup>. However, many professionals still have gaps in their knowledge about the best prevention practices, which justifies the need for more indepth research into this relationship.

Understanding how nursing staff knowledge influences the occurrence of skin lesions in neonates can not only contribute to improving care practices, but also promote a culture of continuing education and professional training, resulting in better outcomes for patients (7)

The nursing team plays a central role in preventing skin lesions in newborns. Investing in training and updating professionals is fundamental to improving the quality of care and ensuring the health of neonates. In order to improve the quality of neonatal care and reduce the incidence of skin lesions, it is essential that health institutions prioritize training and support for nursing staff. These actions can result in better clinical outcomes for newborns and contribute to building a more grounded and effective nursing practice.



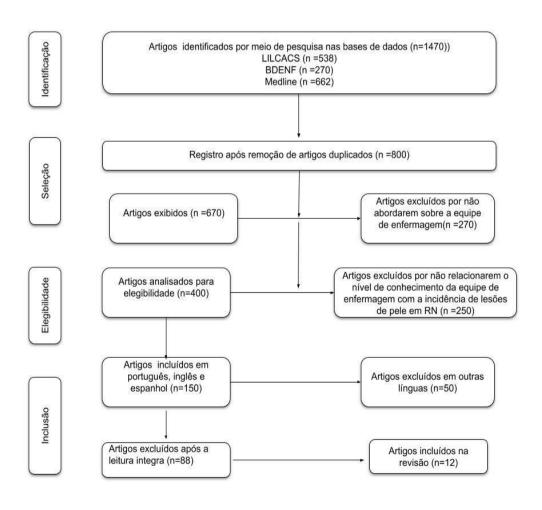
that addressed, in the title or abstract, the relationship between the level of knowledge of the nursing team and the prevention of skin lesions in newborns; studies published in Portuguese, English and Spanish; a total of 12 articles were selected. Papers such as case or experience reports, letters, editorials and publications in which the method was not clearly described were excluded.

To select the studies, the recommendations of the Preferred Reporting

Items for Systematic Reviews and Meta-Analyses (PRISMA) were followed, as shown in Figure 1.

As this is an integrative review, it was not necessary to request approval from the Ethics Committee to carry out the study. No conflicts of interest were declared.

**Figure 1** - Flowchart of the stages of the search and selection of studies for the development of the integrative review. São Paulo, SP, Brazil, 2025.





# **RESULTS**

Analysis of the data collected revealed that the knowledge of the nursing team is a crucial factor in preventing skin lesions in newborns. Adequate knowledge about the particularities of neonatal skin allows for the early identification of injuries, enabling more interventions (1). The prevention effective identified include practices regular assessment, the use of appropriate products and caregiver education. The studies highlight the following evidence-based importance of protocols to minimize the risk of injury.

The implementation of nursing care protocols, based on scientific knowledge, results in better outcomes for neonates. It is possible to observe that the scarcity of materials and the high demand for care can make it difficult to apply appropriate preventive practices <sup>(6)</sup>. Regular training for nursing staff in neonatal skin care is essential for reducing complications and improving the quality of care provided <sup>(12)</sup>.

The training of nurses in Brazil was identified, highlighting the challenges posed by complex and globalized contexts. The research shows that training faces gaps, especially in relation to integrating theory and practice and addressing essential competencies for working in diverse and constantly changing health systems. Globalization and the growing demands for comprehensive and humanized care require more dynamic curricula, aligned with contemporary needs and supported by active teaching methodologies <sup>(8)</sup>. The study points out that it is

crucial to strengthen critical and reflective training, promoting skills such as leadership, teamwork and problem-solving, in order to prepare nurses for challenging and multifaceted scenarios. In short, the results indicate that the knowledge of the nursing team is essential for the prevention of skin lesions in newborns. Continuous training and the implementation of evidence-based protocols are key to ensuring better clinical outcomes.

# **DISCUSSION**

The prevention of skin lesions in newborns is a significant concern in neonatal intensive care units and maternity wards. The results obtained in the research show that the knowledge of the nursing team is a determining factor in the effectiveness of care practices, corroborating the existing literature on the subject. Understanding the particularities of neonatal skin is fundamental for the early identification of lesions.

The lack of solid training in this area resulted in practices based on common sense rather than scientific evidence. This gap in the professional training of future nurses jeopardizes both the quality of care and patient safety <sup>(8)</sup>.

It has been pointed out that the nursing team's familiarity with the characteristics of neonates' skin allows for quick and effective interventions <sup>(1)</sup>. This agility in identification is crucial, since untreated injuries can lead to complications, such as infections, which increase the risk of neonatal mortality <sup>(5)</sup>. As noted, well-



defined protocols, combined with the team's knowledge, result in safer and more effective care <sup>(12)</sup>. This approach not only standardizes care, but also strengthens the team's confidence in implementing preventive interventions. Lack of material resources and work overload were mentioned as significant barriers. The scarcity of supplies and the high demand for care can jeopardize the implementation of effective preventive practices <sup>(6)</sup>. This scenario highlights the need for institutional support and improvements in the working conditions of the nursing team.

Continuing education is a fundamental pillar in ensuring that the nursing team is always up to date and able to provide the best possible care <sup>(7)</sup>.

The findings reinforce the need to improve the training of nurses in Brazil, considering the challenges posed by complex and globalized health scenarios (8). The analysis shows significant gaps in the integration between theory and practice, requiring revisions to the Pedagogical Projects of Nursing Courses (PPC). These should integrate methodologies that articulate theory and practice, promoting specific competencies from the supervised internship stage, recommended by the National Curriculum Guidelines (DCNs), as well as addressing fundamental competencies performance in diverse and constantly evolving health systems. These challenges reflect the inadequacy of traditional curricula in the face of contemporary demands for comprehensive and humanized care.

It is therefore necessary to rethink training programs to include active teaching methodologies that foster the development of critical and reflective skills, such as leadership, teamwork and problem-solving. These skills are essential to prepare future nurses to work efficiently in highly complex and unpredictable scenarios, promoting more qualified and safer care. This debate is in line with the importance of higher education that responds to the real demands of the professional context, ensuring a positive impact on collective health.

#### **CONCLUSION**

The literature review on the importance of the nursing team's knowledge in preventing skin lesions in newborns reveals a direct relationship between adequate professional training and the quality of care provided. The data analyzed highlights that familiarity with the characteristics of neonatal skin and the application of evidence-based protocols are fundamental for early identification and effective intervention in skin lesions.

In addition, the results show that although professionals have a good theoretical understanding, they face significant practical challenges, such as lack of resources and work overload. These factors can compromise the implementation of preventive care, highlighting the need for improvements in working conditions and institutional support.



Continuous training has emerged as a pressing need for nurses, ensuring that they are up-to-date on best practices and care approaches. Investing in training not only improves the technical competence of the team, but also promotes a safer and more effective working environment. Therefore, in order to improve the quality of neonatal care and reduce the incidence of skin lesions, it is essential that healthcare institutions prioritize training and support for nursing staff. These actions can result in better clinical outcomes for newborns and contribute to building a more grounded and effective nursing practice.

The fact that nurses' knowledge of skin health is neglected during their undergraduate education reflects structural challenges in higher nursing education. Many curricula remain limited to fragmented approaches, with an emphasis on general biological aspects, without delving into specific areas such as applied dermatology. This compromises professionals' ability to properly identify, prevent and treat skin conditions and lesions, which are unfortunately common in the clinical environment.

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# **Declaration of conflict of interest**

Nothing to declare.

# **Author contributions**

Carolinne de Campos Grossi. Designed the study, collected data, analyzed and interpreted the data, and wrote the manuscript.

**Julia Peres Pinto** analyzed and interpreted the data, wrote and revised the manuscript.

**Sandra Maria da Penha Conceição** supervised the research, analyzed and interpreted the data, critically reviewed the work, and approved the final version of the manuscript.

**Ingridy Tayane Gonçalves Pires Fernandes.** Critically reviewed the work and approved the final version of the manuscript

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