

# Nurse's role in the prevention and care of patients with pressure ulcers in the intensive care unit

## Atuação do enfermeiro na prevenção e cuidado ao paciente com úlcera por pressão na unidade de terapia intensiva

## Papel de la enfermera en la prevención y atención de pacientes con úlceras por presión en la unidad de cuidados intensivos

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# REVISA

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### RESUMO

**Objetivo:** analisar a assistência da equipe de enfermagem nos cuidados e na prevenção de pacientes com lesões por pressão que se encontram internados na Unidade de Terapia Intensiva, evidenciando a contribuição e importância do enfermeiro no cuidado a esses pacientes. **Método:** o estudo trata-se de uma revisão de literatura, de abordagem qualitativa, com recorte temporal de 2006 a 2021. Foram selecionados 8 artigos para o estudo, captados na Biblioteca Virtual em Saúde (BVS). **Resultados:** Os cuidados de enfermagem às úlceras por pressão abrangem intervenções relacionadas ao acompanhamento integral do paciente em risco de adquirir a lesão, por meio da utilização de escalas de predição de risco, conhecimento dos fatores de risco e da realidade das unidades de saúde pelo enfermeiro. **Considerações finais:** a importância do enfermeiro por meio da prescrição dos cuidados e as intervenções relacionadas ao acompanhamento integral do paciente, é de suma importância à prevenção e ao tratamento das úlceras por pressão como forma de reduzir o tempo de permanência do paciente na Unidade de Terapia Intensiva e, conseqüentemente, os custos hospitalares, melhorias no prognóstico do paciente e prevenção de infecções.

**Descritores:** Unidade de Terapia Intensiva; Cuidados de Enfermagem; Úlcera por pressão.

### ABSTRACT

**Objective:** to analyze the assistance of the nursing team in the care and prevention of patients with pressure injuries who are hospitalized in the Intensive Care Unit, highlighting the contribution and importance of nurses in caring for these patients. **Method:** the study is a literature review, with a qualitative approach, with a time frame from 2006 to 2021. Eight articles were selected for the study, captured in the Biblioteca Virtual em Saúde (BVS). **Results:** Nursing care for pressure ulcers encompasses interventions related to comprehensive monitoring of patients at risk of acquiring the injury, through the use of risk prediction scales, knowledge of risk factors and the reality of health units by nurses. **Final considerations:** the importance of the nurse through the prescription of care and interventions related to comprehensive monitoring of the patient, is of paramount importance to the prevention and treatment of pressure ulcers as a way to reduce the length of stay of the patient in the Therapy Unit Intensive and, consequently, hospital costs, improvements in patient prognosis and infection prevention.

**Descriptors:** Intensive Care Unit; Nursing care; Pressure ulcer.

### RESUMEN

**Objetivo:** analizar la asistencia del equipo de enfermería en el cuidado y prevención de pacientes con lesiones por presión que se encuentran hospitalizados en la Unidad de Cuidados Intensivos, destacando la contribución e importancia del enfermero en el cuidado de estos pacientes. **Método:** el estudio es una revisión de la literatura, con enfoque cualitativo, con un período de tiempo de 2006 a 2021. Se seleccionaron ocho artículos para el estudio, capturados en la Biblioteca Virtual en Salud (BVS). **Resultados:** La atención de enfermería de las úlceras por presión comprende intervenciones relacionadas con el seguimiento integral de los pacientes en riesgo de adquirir la lesión, mediante el uso de escalas de predicción de riesgo, el conocimiento de los factores de riesgo y la realidad de las unidades de salud por parte del enfermero. **Consideraciones finales:** la importancia del enfermero a través de la prescripción de cuidados e intervenciones relacionadas con el seguimiento integral del paciente, es de suma importancia para la prevención y tratamiento de las úlceras por presión como forma de reducir el tiempo de estancia del paciente en la Terapia. Unidad intensiva y, conseqüentemente, costes hospitalarios, mejoras en el pronóstico del paciente y prevención de infecciones.

**Descritores:** Unidad de Cuidados Intensivos; Cuidado de enfermera; Úlcera de presión.

## Introduction

Pressure lesions or ulcers consist of lesions located on the skin and/or tissue or underlying structure, usually on a bony prominence resulting from isolated pressure or pressure combined with shear. These injuries may occur in patients admitted to intensive care units due to the patient's stay in these places, which may hinder positive results in treatment, due to pain caused by these lesions and possible infections.<sup>1</sup>

Pressure injuries are a challenge for health services, because their occurrence is considered an indicator of the quality of nursing care provided to the patient, besides generating pain, discomfort, delay in recovery, development of infections, besides causing expenses due to the increase in the patient's hospitalization time.<sup>2,3</sup>

The analysis of risk factors for the development of lesions is essential for quality care and the nursing team should seek not only the clinical stability of the patient until discharge, but also the non-occurrence of complications during the hospitalization period.<sup>2,3</sup> Avoiding the development of pressure ulcer scans of critically effective patients in the Intensive Care Unit is still a major challenge for the nursing team. Prevention is necessary to ensure the quality of care.<sup>4</sup>

The present work aims to perform an integrative review, evidencing the contribution and participation of intensive care nurses in the prevention and care of pressure injuries of patients hospitalized in the Intensive Care Unit.

## Method

This study is a literature review, with a qualitative approach, which aims to analyze the care of the nursing team in the care and prevention of patients with pressure injuries who are hospitalized in the Intensive Care Unit, evidencing the contribution and importance of nurses in the care of these patients.

The analysis of bibliographic documentation was used in the period from 2006 to 2021, in the Virtual Health Library (VHL) and the descriptors/keywords used were: Nursing Care, Pressure Ulcer, Pressure Injury, Intensive Care Unit, Patient Care, with the Boolean operator "AND".

After collecting the bibliographic data, the results obtained were read. Then, the inclusion and exclusion criteria were applied, selecting the articles to be used in the constitution of the review.

A total of 19 articles were found and 8 articles were selected after the inclusion and exclusion criteria were selected.

The criteria used and established for the inclusion of scientific articles were: articles that present the benefits of nurses' actions in the prevention and care of patients with pressure injury in the Intensive Care Unit, as well as the benefits of this professional's interventions in the clinical improvement of the patient in the Intensive Care Unit, articles available in full and in Portuguese.

The exclusion criterion was around articles that fit other hospital sectors not specifically related to intensive care for patients and studies that did not meet the inclusion criteria.

## Results and Discussion

Data were obtained from a research initiated between January 2021 and September 2021, in bibliographic publications attached in databases in electronic format from the VHL search form.

**Chart 1.** Articles collected in the VHL. 2021.

Origin	Title	Considerations/Thematic
ALCÂNTARA, Catarina Vieira. Revista Eletrônica Atualiza Saúde.	Pressure ulcers in intensive care from the eyes of nurses	To analyze the national scientific production of nurses on pressure ulcers in Intensive Care.
IOREZI et al. Revista Feridas	Decubitus Changes: Preventing Complications	To present the importance of decubitus change in the prevention of complications in icu patients.
LOPES, Clara Cristina de Paula. Revista Científica Multidisciplinar Núcleo do Conhecimento	Nursing care for patients with pressure injury in an intensive care unit	Describe nursing care to patients suffering from pressure injury in the Intensive Care Unit.
MATA et al. Revista Científica FacMais	Nursing care in the care of patients in the intensive care unit with predisposition to pressure ulcer: a literature review	Evaluate extrinsic factors to decubitus ulcer in patients hospitalized in intensive care units.
MEDEIROS et al. Revista da escola de enfermagem da USP	Analysis of the prevention and treatment of pressure ulcers proposed by nurses	Identify actions for prevention and treatment of pressure ulcers performed by nurses.
PESTANA, Margareth Pereira; VIEIRA, Rosemeire dos Santos. Revista Recien	Nursing actions in the prevention of pressure ulcers in ICU	Present the nurse's role in the prevention of pressure ulcers in the Intensive Care Unit.
ROLIM et al. Revista Rene	Prevention and treatment of pressure ulcers in the daily life of intensive care nurses	Identify activities for the prevention and treatment of pressure ulcers planned and implemented by nurses in Intensive Care Units.
TEIXEIRA et al. Revista Estima	Incidence of pressure injuries in intensive care unit in a hospital with accreditation	Analyze the incidence profile of pressure injuries in intensive care units in adults.

The nursing team is one of the most important professionals within the intensive care unit environment, due to the follow-up of the patient for twenty-four hours a day, providing the care, from the simplest as a bed change to the most complex.<sup>5,6</sup>

Considering that the patient's health leads to their well-being in the physical, mental and spiritual dimensions, nursing practice can be favored by the institutionalization of a nursing assessment instrument that guides professionals to, for example, predict whether or not the client admitted to the ICU presents

risk factors for developing pressure ulcer, since this pathology has a high incidence in the reality of these care units.<sup>7,8</sup>

International and national guidelines advise the use of the Braden scale to contribute to the identification of patients who present the risk for pressure injury since admission and during the hospitalization period and application of preventive measures by professionals. It is suggested that reassessment occurs at least every 48 hours after admission or whenever patient conditions change.<sup>7,8</sup>

Nursing care for pressure ulcers includes interventions related to the comprehensive follow-up of patients at risk of acquiring the lesion, through the use of risk prediction scales, knowledge of risk factors and the reality of health units.<sup>9</sup>

In the event of the prevention of pressure ulcers, it is necessary to develop a care plan. In this plan should be recorded the therapeutic approach, which contemplates the classification, location, size of tunnels, aspect of the wound bed and adjacent skin, drainage, pain or hypersensitivity and temperature. For this care to be considered effective, it is necessary to have debridement, wound cleaning, dressing application, and in some cases, reconstructive surgery. In all cases, specific wound care strategies should be consistent with the overall objectives or treatment goals of the client.<sup>10</sup>

The prevention of pressure ulcers is an essential role of nursing professionals. Important measures in the prevention of ulcers are the hygiene of the patient in bed, that is, keeping the clothes of the body and bed dry, clean, without foreign and non-wrinkled bodies, in addition to keeping the skin stimulated, relaxed, hydrated and the use of moisturizers; constant skin inspection in at-risk patients; keeping skin clean and dry; reducing humidity; the change of position every two hours, with protection of the areas of greater friction; assessment and correction of nutritional status; the use of special mattresses and/or pillows; the raised headboard; adequate hydration; seek to avoid sedative drugs and red blood cell transfusion.<sup>10</sup>

In view of the importance of nursing care to prevent the PU, especially in the ICU, where this problem is prevalent, it is necessary to qualify nursing professionals to assess the risk of the patient developing this problem, and to plan preventive actions, since, after they appear, care becomes more complex, and this requires more demands from both the institution and the team. Despite the importance of these measures and the commitment of professionals, it is known that their operationalization is often unfeasible due to the work overload of employees, the critical state of the client and the unplanned absences.<sup>11,12</sup>

## **Conclusion**

Patients who are hospitalized in Intensive Care Units may be considered at higher risk of developing pressure ulcers, due to the high degree of complexity of care and high dependence.

Although it can be avoided with simple measures, UPPs are a constant problem in ICUs, with high incidences and prevalences, increasing the time of hospitalization, costs and care to the patient.

To patients with pressure ulcers or predisposed to them, nurses and their staff should offer care and treatment focused on each stage and seek strategies for predisposing factors.

According to the above, the importance of nurses through the prescription of care and interventions related to the integral follow-up of the patient, is of paramount importance to the prevention and treatment of pressure ulcers as a way to reduce the length of stay of the patient in the Intensive Care Unit and, consequently, hospital costs, improvements in the patient's prognosis and prevention of infections.

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