

**Reducing Healthcare-Acquired Pressure Injuries: Literature Review**

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Long-term pressure from immobility causes pressure injuries, typically occurring at bony prominence points and harming the skin and tissue. Medical equipment can also cause pressure injuries. Patients in the intensive care unit are more likely to develop pressure ulcers due to being critically ill and bedridden. A literature review aims to offer a thorough overview and analysis of the body of knowledge on a particular subject or research question (*Literature Reviews*, 2021). Patients' safety is a concern when pressure ulcers occur. Serious side effects such as infections, cellulitis, sepsis, and even death may develop. In order to ensure the safety and well-being of patients in medical settings, pressure ulcers must be treated and prevented. Nurses must find ways to help prevent pressure ulcers in critically ill patients.

### **Risk Factors For Pressure Injury In Patients With COVID-19 in the Intensive Care Unit**

Patients enrolled in the trial were admitted to the ICU between April and December 2020. A data collection tool with demographic and clinical factors was used to obtain data through electronic medical records. This study examined whether people with upper respiratory tract infections were more likely to experience changes in skin integrity that could impact the development of pressure ulcers. This study aimed to identify and examine the risk variables that may contribute to the development of pressure ulcers in COVID-19 patients receiving intensive care.

### **Key Points**

The study found that some intrinsic and extrinsic risk factors make critically ill patients more susceptible to developing pressure ulcers. This descriptive study was created in an intensive care unit and used a quantitative, retrospective approach. The study primarily used ICU patients with respiratory diseases such as COVID-19 or pneumonia. This research found that the

aging process causes changes in the susceptibility of the elderly, a risk group for COVID-19, to infections and the development of pressure ulcers. “When applying the chi-square test, a p-value of 0% was obtained, i.e., lower than the 5% significance level, and therefore, the hypothesis of independence between the comorbidity and PU variables was rejected” (Povoas Costa et al., 2022). The management of the patient with COVID-19 was discovered to be unusual and challenging during the research, and multiple factors played a role in this conclusion.

### **Assumptions**

Patients can be prone to pressure ulcers based on underlying issues, not only due to a lack of mobility. The prevalence of comorbid conditions in patients, such as diabetes mellitus and hypertension, increased the occurrence of pressure ulcers. The Braden Scale is another significant consideration. When used to assess the patient's risk of pressure ulcers at admission, it allows for the possibility of taking preventative measures (Povoas Costa et al., 2022). Health workers in critical care require safety and expertise to execute the procedure efficiently, placing the pads and preventive dressings in the appropriate locations with increased vulnerability.

### **Deficit/Conclusion**

Risk factors for the formation of pressure ulcers include duration of stay, use of mechanical breathing, pronation, use of sedatives and vasoactive medications, antibiotic therapy, enteral food, and zero diets, as well as clinical and hemodynamic instability (Povoas Costa et al., 2022). This article aims to determine if comorbid diseases play a role in pressure ulcers. The role of nurses in preventing pressure ulcers is crucial. Ensuring patient safety, encouraging positive results, and providing high-quality care depend on their work. The role of nurses in preventing pressure ulcers has wide-ranging consequences that touch on a variety of patient care, advocacy,

coordination, education, monitoring, wound care, support, quality improvement, and professional development topics. They play a critical role in reducing pressure sores, fostering patient safety, and improving the standard of care.

The author's logic and the evidence from the literature and their research are both in agreement with one another. A future study needs to fill in some of the research's shortcomings and restrictions. For instance, they might do a larger study with more participants.

### **NURSES' KNOWLEDGE ABOUT THE PRESSURE INJURY PROTOCOL IN A PRIVATE AND ACCREDITED HOSPITAL**

This study sought to determine how well nurses understood the pressure injury procedure implemented in a private, accredited hospital. This study took place from November 5 to December 30, 2020, in a private hospital with 82 beds that offers medium and complex care services and is accredited globally under the name Qmentum of Surgical Review Corporation. The hospital is in Curitiba, State of Paraná, Brazil. The research hospital uses the skin care program, which focuses on preventing and treating pressure ulcers. Relevant findings from this study include nurses' high prevalence of daily Braden scale use in pressure injury (PI) prevention. CITE? This study has found that the institution must organize and provide training since there is a deficiency in the level of knowledge that nurses have concerning the protocol to prevent pressure ulcers.

#### **Key Points**

This study aimed to look into nurses' awareness of the pressure injury protocol in a private, licensed hospital. Adopting the recommendations of the multidisciplinary team and putting them into practice are necessary to reduce the incidence of pressure ulcers (Leal de Lima de Moura et al., 2021). These recommendations include nutritional assessment of the patient, planned patient repositioning more frequently, reducing skin exposure to moisture and pressure points, applying transparent film to bony prominences, and assessing the risk of PI development using the Braden Scale. This research article was a quantitative and cross-sectional study. In order to gather data, 27 nurses received a questionnaire that the researchers created and sent to them in November 2020. The researchers themselves created the instrument for data collection, a questionnaire. It had two parts: the participant identification portion and nine closed-ended questions about the classification and prevention of PI (Leal de Lima de Moura et al., 2021). Since 20 of the 27 nurses who participated in the study reported having received training for the prevention and treatment of PI in the workplace, it was necessary to draw attention to the provision of knowledge to the care team due to the institution's presentation of an international quality certification at the hospital level. Fourteen participants (51.85%) felt safe for the indication and use of coverage about the standardized dressings in the institution through the procedure, while 13 (48.15%) did not feel safe (Leal de Lima de Moura et al., 2021). This study has highlighted the importance of conducting research and training nurses about pressure ulcers to ensure patients are getting the best care.

## **Assumptions**

There is a high prevalence of the idea that PIs are related to external and internal variables unique to each patient. However, it is essential to find lesions that may be avoidable. The extrinsic factors include the effects of strength and shear on the individual, skin moisture, and a lack of preventive measures. In contrast, the intrinsic factors are related to the patient's clinical condition and include one's nutritional status, reduced or absent physical mobility, cardiovascular diseases, urinary and fecal incontinence, and advanced age. The study results suggest that managers should invest in further strategies that can improve nurses' familiarity with these technologies and increase patient safety (Leal de Lima de Moura et al., 2021).

### **Deficit/Conclusion**

The institution must organize and provide training since there is a deficiency in the nurses' knowledge concerning the protocol. Training is of the utmost significance for excellent quality and effectiveness in healthcare (Leal de Lima de Moura et al., 2021). Nurses knowledgeable about pressure ulcer prevention techniques can effectively implement evidence-based procedures. They may determine the risk factors for each patient, create individualized care plans, and put preventive measures like routine repositioning, improved nutrition, moisture control, and specific support surfaces into action. There are several restrictions on this study. One is the result of the small sample size and the study at an accredited healthcare facility. This research implies that it expands the knowledge nurses have about pressure ulcers. More pressure ulcers will develop, and patients will only receive the optimum care if nursing recognizes the need for more instruction.

## **PRESSURE INJURY PREVENTION IN A GERIATIRC POST ACUTE CARE SETTING: A QUALITY IMPROVEMENT STUDY**

Post-acute care groups are focusing on preventing pressure injuries (PI). This quality improvement project aimed to lower the incidence of pressure injuries in three complex continuing-care hospital units. A quantitative quality improvement study design was utilized for a year to ensure accurate data. The hospital had three critical care units (CCU) with 30 patients each, and it was a 262-bed post-acute care geriatric academic teaching hospital in Toronto, Ontario (Hartung and Fell, 2019).

### **Key Points**

Individualized patient positioning plans, quarterly point-of-care prevalence and incidence surveys, and an updated support surface algorithm were the three change concepts put into action. As a result, the number of pressure ulcers at stages two and above significantly decreased (Hartung and Fell, 2019). This research article used a quantitative quality improvement study design. This geriatric teaching hospital had three CCUs, each with 30 beds. Cerebrovascular accidents, Parkinson's disease, dementia, and diabetes are common diagnoses for the patients in this study. Many patients have tracheostomies, need artificial sustenance (such as enteral feeding), and are immobile. The staff completed a skin assessment twice a day for 30 days to gather data from each patient regarding pressure ulcers. The data showed that the three changes reduced the incidence of stage 2 and above pressure ulcers from 0.63% to 0.26% per patient daily (Hartung and Fell, 2019). Overall, this study led to a significant reduction in stage two and above pressure ulcers.

### **Assumptions**

The organization's commitment to the planning phase and point-of-care leadership in planning, execution, and assessment were two key elements that contributed to the project's success (Hartung and Fell, 2019). In the planning, execution, and evaluation of the pressure injuries project, point-of-care personnel on CCU had leadership roles that made this research possible. Staff members were committed to the change and took ownership of the prevalence and incidence results by being involved in all project phases. The team concentrated on equipment, inter-professional communication, mobility and repositioning, and mobility.

### **Deficit/Conclusion**

This quality improvement study focused on the increasing number of pressure injury incidents in three CCUs of a post-acute geriatric hospital. Individualized patient positioning plans, quarterly point-of-care prevalence and incidence surveys, and an updated support surface algorithm were the three change concepts put into practice. As a result, there was a significant decline in stage two and higher PIs and positive engagement from point-of-care staff (Hartung and Fell, 2019). The research here is accurate because plenty of evidence supports the fact that the three implemented changes decreased the number of pressure ulcers (Hartung and Fell, 2019). If individualized patient positioning, quarterly point-of-care prevalence and incidence surveys, and an updated support surface algorithm are not practiced in nursing today, then the number of pressure ulcers would continue to increase.

### **Conclusion**

As a nurse, the main objective is to ensure that the patients are safe and well. Patients who suffer from pressure injuries may have severe pain, discomfort, and consequences. Understanding pressure injuries, their causes, and risk factors will help prevent them. Pressure injuries can frequently decrease significantly with careful assessment, intervention, and continuing monitoring. Comorbid disorders can affect the body's capacity to bear pressure and heal wounds, making a person more susceptible to pressure injuries. When determining a patient's risk for pressure injuries, healthcare professionals—including nurses—must consider comorbidity (Povoas Costa et al., 2022). Nurses can significantly reduce the risk of pressure injuries by being thoroughly aware of prevention techniques, such as employing specialized support surfaces, improving nutrition, regulating moisture, and routinely moving patients. By taking proactive measures, healthcare providers can improve patient comfort by reducing the number of pressure ulcers in the hospital setting.

When nurses are appropriately educated and trained regarding pressure injuries, patient outcomes can improve through effective prevention, early detection, thorough wound management, collaborative care, patient education, and ongoing quality improvement initiatives.

The knowledge examined in the articles aids nursing practice in finding ways to enhance patient care. Interventions in education are crucial in influencing nursing practice. Improved patient outcomes, better treatment procedures, and a focus on ongoing quality improvement result in excellent patient safety.

The literature study emphasizes the significance of quality improvement initiatives and evidence-based practice with pressure ulcers. Studies on pressure ulcers are essential for evidence-based nursing because they educate best practices, direct decision-making, increase

patient safety, improve the standard of care, and contribute to research and knowledge creation.

Using evidence-based information, nurses can give people who have pressure ulcers or are at risk for them the most efficient and patient-centered care.

Enhancing the treatment of pressure injuries has broad implications for the healthcare system. It boosts patient safety culture, encourages evidence-based practice, lowers healthcare costs, lowers hospital-acquired conditions, improves patient outcomes, and promotes interdisciplinary cooperation. Healthcare systems can influence positive change and raise the standard of care, and establish a safer and more efficient working environment for healthcare professionals by prioritizing pressure injury treatment.

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