



Pressure Injuries in a Clinical Setting: A Quality Improvement Project



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Abstract:

The purpose of this quality improvement project is to develop a teaching tool aimed at decreasing the incidence rate of pressure injuries in the clinical setting specifically those in intensive care settings. Pressure injuries are a common preventable hospital-acquired complication. The occurrence of pressure injuries is higher in an ICU setting than in a non-ICU setting with 30% and 27.6% respectively during a one-year time period. The development of a teaching tool to be distributed to nurses' stations, staff workrooms, and nurse managers seeks to improve ICU staff nurses' education on the topic of pressure injures at a large urban teaching hospital.

Background:

Most ICU patients are completely sedated and dependent, and their means of survival and safety relies solely on the nurse. The safety of that patient is in jeopardy when not properly turned and repositioned in a timely and efficient manner. Pressure injuries developed from prolonged exposure of pressure to a specific boney prominence such as the coccyx or the heels of the feet. Early evidence of pressure injuries includes non-blanchable reddened areas and can progress to the point where bone is exposed, and infection is present if left untreated. For many years, it has been a common practice in the hospital settings to turn patients that are dependent, usually every 2 hours. Pressure injuries are still formed when patients are not turned with a purpose and turned effectively. There have been many prevention measures put in place in hospitals across the country such as early ambulation if appropriate, pressure redistribution mattresses, oral nutritional supplements, and skin emollients.

Review of Literature:

A thorough literature review was conducted and resulted in 48 studies related to pressure injury development. One emerging theme noted indicated many patients are not turned often enough resulting in the development of pressure injuries, specifically on the sacrum area. Pressure injuries generally occur due to sustained pressure over a bony prominence that ultimately leads to tissue ischemia and necrosis (Mervis, Joshua., Phillips, Tania., 2019). When lying at an angle, the downward force of gravity is countered by friction, which prevents the person from sliding down in the bed. Though the skin may not move down the bed, internal structures like the muscle and bone of the sacrum area that are not in contact with an external surface are displaced downward because of gravity, ultimately leading to the development of a pressure injury (Mervis, Joshua., Phillips, Tania., 2019). In the clinical setting, another theme emerged about the incidence of pressure injuries.

An estimated 2.5 million pressure injuries are treated each year in the US clinical facilities alone, with the coccyx and sacrum being the most frequent sites (Burk, Ruth., Grap, Mary., 2017). With the high prevalence of pressure injuries on the sacrum in the clinical setting, patient positioning has become a theme of interest in preventing those in many of the studies examined. Currently, repositioning and turning patients is a recommended clinical practice guideline, but implementation is variable and dependent on the availability of resources. Current guidelines include patient repositioning every 2 hours. However, many nurses are not repositioning during these times due to lack of time. This results in pressure injury development.

Problem Statement:

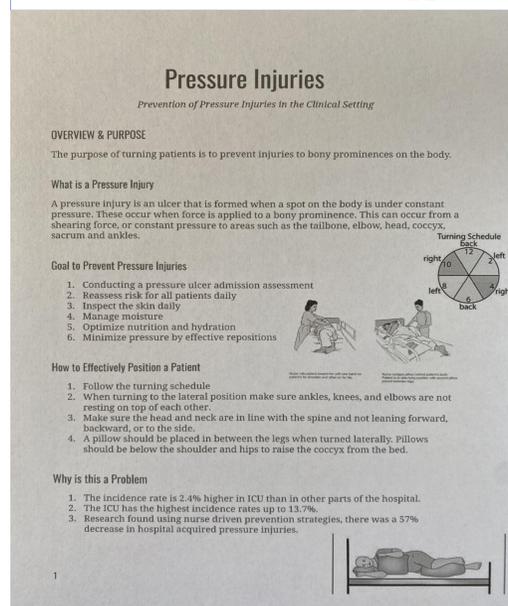
In long term acute care settings, the body is at risk for developing pressure injuries due to multiple reasons such as immobility, skin breakdown, incontinency, poor perfusion, and medical devices. Health care professionals assess and evaluate the incidence rate of pressure injuries. The purpose of this project is to develop a teaching tool aimed at increasing nursing knowledge of how to prevent pressure injuries in the ICU setting.

Conclusion:

In conclusion, this Quality Improvement project illustrated the main factor that contributed to pressure injury development in the clinical setting was related to inadequate turning and repositioning of patients. Furthermore, if the nurses did reposition their patients within a two-hour time frame, they did not properly position the patient to off-load the weight bearing down on the coccyx and sacrum. After an extensive literature review, reasons for not repositioning included time restrictions and level of education regarding pressure injury prevention. As a result of this project, a teaching tool will be shared with staff nurses at student clinical site. This tool provides a step-by-step guide on effective positioning.

Desired Outcome:

- To educate nursing staff on prevalence and prevention of pressure injuries
- Decrease the incidence rate of hospital acquired pressure injuries
- Improve patient safety by preventing pressure injuries



This is the teaching tool we used in the clinical setting to educate nurses about the importance of turning patients effectively

