

Pressure Ulcers

Literature Review

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This paper highlights the significance of pressure ulcers as a challenging issue for the elderly and those with mobility problems. Various factors, such as immobility, nutrition, and physiologic factors, cause pressure ulcers (Bos et al., 2016). The three articles reviewed show that there are effective interventions to prevent pressure ulcers. When already present, using various tools can promote faster healing of pressure ulcers and mitigate its adverse influence on the quality of life of patients (Zeigler et al., 2016).

Pressure Ulcer Risk Factors in Persons with Mobility-Related Disabilities

The article is a summary of a research study of electronic health records from the Cerner Health Records database of thousands of patients whose diagnosis qualified them for skin protective wheelchair cushions. In the study, patients had to have significant mobility problems that dependent on a wheelchair (Sprigle et al., 2020). The researchers divided those who developed pressure ulcers (PU group) and those who did not (non-PU group). Data analysis includes demographic, laboratory, hemodynamic, and pharmacologic factors (Sprigle et al., 2020).

Key Points

The research identified seven disability groups that have the most prominent prevalence of PUs. These are Alzheimer's disease, cerebral palsy, multiple sclerosis, paraplegia/quadriplegia, Parkinson's disease, and spina bifida. Those with paraplegia/quadriplegia and spina bifida have the highest prevalence of pressure ulcers (Sprigle et al., 2020). Males are at higher risk of developing pressure ulcers, while Blacks are at a slightly higher risk of developing pressure

ulcers (Sprigle et al., 2020). Most ulcers develop in the pelvic area. Physiologic components that increase the risk for pressure ulcers include kidney disease, low serum albumin levels, and increased serum C-reactive protein. Systolic blood pressure above 150 mmHg is a protective factor against pressure ulcers (Sprigle et al., 2020).

Assumptions

The study assumed that patients with mobility problems are at higher risk of developing pressure ulcers (Gillespie et al., 2020). Within this population are those who are even more vulnerable – those with risk factors that qualify them for wheelchair cushions as skin protectants (Sprigle et al., 2020).

The study also assumed that sex (males) and race (blacks) who are more at risk for pressure ulcers might be related to risky behaviors and access to healthcare (Sprigle et al., 2020).

The study did not consider the extent of wheelchair usage of the cohorts; wheelchair usage time was the same for all the groups (Sprigle et al., 2020).

Deficit/Conclusion

The study revealed that mobility-impaired patients have a higher risk for pressure ulcers. The risk varies depending on the disability that impairs mobility, gender, and race (Sprigle et al., 2020). The study also identified physiologic factors that lead to a higher risk of developing pressure ulcers. It is essential to know these risk factors so that interventions like wheelchair cushions, increased nutrition, and increased education can help prevent pressure ulcers to this vulnerable population (Gillespie et al., 2020).

Pressure Ulcer Prevention

Pressure ulcers are conditions that negatively affect not only patients but families and healthcare organizations as well (Bos et al., 2016). Nurses have a critical role in the assessment and management of pressure ulcers. As such, nurses must have the proper knowledge regarding pressure ulcer prevention, risk factors, staging, treatment, and implications on nursing practice (Jones, 2020). One study in the *Journal for Nurses in Professional Development* describes the development and implementation of a pressure ulcer educational program at a Midwest medical center (Bos et al., 2016).

Key Points

Pressure ulcers are a detriment to patients and have shown to increase the risk of infection and sepsis, lengthen hospital stays, and cause immense discomfort (Jones, 2020). Pressure ulcers also pose a tremendous financial burden to healthcare organizations as a whole. Based on the Institute for Healthcare Improvement (IHI), close to 2.5 million pressure ulcers are being treated in the United States each year, with an average total of \$11 billion (Bos et al., 2016). To further enhance healthcare workers' knowledge, a Midwest medical center developed an interactive, scenario-based pressure ulcer educational program. Each class consisted of 30 participants, all of whom are to stage the pressure ulcer and choose the appropriate interventions (Bos et al., 2016). One year after the class's implementation, the institution found a considerable decrease in reportable pressure ulcers (Bos et al., 2016).

Assumptions

The primary assumption underlying the authors' thinking is that pressure ulcers are severe, often preventable conditions with negative ramifications on patients, families, and healthcare organizations. The authors also stress the importance of equipping bedside nurses with the proper

knowledge and tools to prevent, assess, and treat pressure ulcers (Bos et al., 2016). Pressure ulcer prevention is multifaceted; nurses must evaluate their patients' nutritional status, mobility level, skin integrity, comorbidities, and more (Jones, 2020). Failing to acknowledge these factors and intervene accordingly can further complicate patients' illnesses, and total hospital stays.

Deficit/Conclusion

This article outlines the considerable impact of pressure ulcers on patients and health care systems. The authors also highlight the importance of education by reviewing the efficacy of a pressure ulcer educational program for healthcare providers (Bos et al., 2016). Pressure ulcers are associated with numerous health complications for patients (Jones, 2020). Therefore, early assessment and intervention by the multidisciplinary team are essential.

Pressure Ulcer Scale for Healing (PUSH)

The article is a case study of how the Pressure Ulcer Scale for Healing (PUSH) was used by nurses to monitor and design the care of an admitted 74- year- old male to a rehabilitation facility with a stage IV sacral ulcer (Zeigler et al., 2016). The patient four weeks earlier suffered a hemorrhagic cerebral accident, which led to severe immobility, impaired sensation, bladder and bowel incontinence, cognitive impairment, dysphagia, and global aphasia (Zeigler et al., 2016). The patient required total assist during transfers and in activities of daily living (Horn et al., 2015).

The patient's pressure ulcer is getting monitored twice weekly using PUSH, which involved evaluating the wound's size, exudate description and amount, tissue type, wound odor, and

location (Zeigler et al., 2016). Pressure ulcer staging is also being done extensively using the National Pressure Ulcer Advisory Panel (Horn et al., 2015).

The patient admitted with an initial maximum PUSH score of seventeen, which indicated a pressure ulcer of considerable size, heavy exudate, and non-viable tissue (Zeigler et al., 2016). The patient also had osteomyelitis, which required IV antibiotics. The patient wound care involved surgical removal of dead tissue, continuous chemical removal of dead tissue, and moist wound therapy, air mattress, wheelchair seat pillow, bowel, and intermittent catheterization program (Horn et al., 2015). The PUSH score went down from seventeen to thirteen when initiating a diet by mouth. The PUSH score went down some more to ten, which indicated wound healing has started. The patient was discharged to home with this score to be followed by home health care (Zeigler et al., 2016).

Key Points

The PUSH tool is a comprehensive, systematic, and easy to use assessment guide that nurses at the bedside can use to monitor pressure ulcer condition over time (Zeigler et al., 2016). Its reliability rating is excellent in patients with pressure ulcers and chronic leg ulcers (Horn et al., 2015).

The PUSH tool is an excellent guide to design pressure ulcer clinical management strategies by providers. A score that shows no improvement after two-four weeks should prompt clinicians and nurses to explore other therapies (Horn et al., 2015). The PUSH over time can also indicate the trajectory of wound healing, which may give patients and their families an idea when the pressure ulcer is to be healed and encourage them to be compliant with their treatment (Zeigler et al., 2016).

Assumptions

This case study assumes that pressure ulcers are a severe health issue affecting the elderly and those with mobility problems (Zeigler et al., 2016). The care of pressure ulcers involves a multidisciplinary approach involving doctors, nurses, wound care specialists, dieticians, physical therapists, and family members. Cooperation by the patient is also crucial as compliance with medications, nutritional requirements, and physical activity plays a vital role in pressure ulcer healing (Horn et al., 2015).

Deficit/Conclusion

The PUSH is another tool that nurses can use to manage patients with pressure ulcers effectively. It is easy to utilize and free. It allows the health care team to monitor the progress over time of their efforts to heal pressure ulcers (Zeigler et al., 2016). Periodic monitoring of pressure ulcer healing or non-healing will enable clinicians to intervene appropriately (Horn et al., 2015).

The PUSH is limited in that it only measures wound size, exudate or drainage, and injury tissue type (Zeigler et al., 2016). It should, therefore, be used together with other factors such as nutritional status, degree of immobility, and other medical conditions to promote pressure ulcer treatment and healing (Horn et al., 2015).

Conclusion

Pressure ulcers are a significant health issue among the elderly and those with impaired mobility. They are mostly preventable through careful and timely interventions, especially by bedside nurses (Horn et al., 2015). Nurses can use various tools to ensure their patients avoid

developing pressure ulcers (Zeigler et al., 2016). Knowing the risk factors that lead to the development of pressure ulcers will allow timely and effective interventions. Careful monitoring of pressure ulcer care will also promote faster-wound healing for those who develop pressure ulcers (Bos et al., 2016).

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