Pressure Ulcers

English 120 English Composition

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If you walk through any healthcare institution around the world you will most likely see at least one chronic wound amongst the patients. Pressure ulcers are serious problems for patients in healthcare settings and are responsible for extreme amounts of pain, discomfort, extremely high treatment costs and even death. With the increase of aging population and fewer resources; the intensity of pressure ulcers in patients in healthcare settings will only increase without the appropriate prevention techniques to prevent these risks from occurring. In the following we will explore what exactly is a pressure ulcer. Risk factors that contribute to their development such as the intrinsic and extrinsic factors. Followed by how to treat a pressure ulcer and preventive measures needed to keep them from occurring.

 Pressure ulcers commonly called “bed sores, pressure ulcers and decubitus ulcers are injuries to skin and underlying tissue resulting from prolonged pressure on the skin. Bedsores most often develop on skin that covers bony areas of the body, such as the heels, ankles, hips and tailbone” (Mayo,2020). The skin that overlaying on these bony prominence begins to become necrotic when compressed (or weight is applied without constant shifting) for long periods of time. Friction and shearing forces could also lead to pressure ulcers. Constant pressure would disrupt the blood supply to the skin and associated tissues leading to tissue hypoxia and formation of pressure ulcers (Mayo, 2020). There are many risk factors attributing to the development of pressure ulcers mainly obesity, immobilization, and malnutrition while old age, malignancy, venous insufficiency, diabetics, and history contribute to delay in the healing process.

The management of chronic wounds is a significant part of the workload for any nurse caring for elderly and vulnerable people, since these patients are more prone to conditions that can lead to chronic wounds. Chronic wounds like pressure ulcers demands a detailed and individual treatment plans depending upon the nature of the wound and the circumstances of the patient. The experience of having a pressure ulcer can result in the loss of a patient’s sense of self. Hence Pressure ulcers need to be prevented as much as possible in all aspects of patient care. Pressure ulcer management involves treating infection, providing a moist wound-healing environment, and choosing the appropriate dressing.  Various studies on the topic have found that a multidisciplinary approach is the efficient when caring for patients with pressure ulcers.

Pressure ulcers usually occur in patients who have developed spinal cord injuries, experience paralysis, or who are wheelchair bound (Mayo 2020). Pressure ulcers are more common in patients above 70 years of age. This is partly due to the skin being thin and slightly atrophic, causing a greater chance of degeneration when pressure is applied for long periods of time. The risk of developing a pressure ulcer in patients with spinal cord injuries is also high due to the patient being unable to sense pain or discomfort in portions of their bodies. “It is estimated that each year more than 2.5 million patients in United States acute-care facilities suffer from pressure ulcers and 60,000 die from their complications” (Joint Commission Center for Transforming Healthcare, 2020). Excessive moisture is also a factor that could be responsible for the development of a pressure ulcer. “Your skin provides the first line of defense against infections. A breach in the integrity of this critical part of your body could be life-threatening” (Clark, 2020).

Successful management of any wound should include assessment, planning, management, reassessment, admission, transfer, reporting and some form of audit, pressure ulcers being no different. All patients with wounds such as pressure ulcers should be reassessed, and results documented at the very minimum weekly and any alterations in the treatment process be discussed with the patient.

The first step in pressure ulcer prevention is to identify those patients at risk. Upon admission to any facility a full detailed skin check is performed by at least two nurses to assess the patient’s skin condition and integrity. Over the course of history there have been many assessment tools or guides created to aid nurses in this aspect. The most common of these tools being the Braden’s scale. Most patients do not like this invasion of privacy however it is key to determining the patient’s overall health. During the assessment nurses are examining the skin for any blanchable or non-blanchable redness or breaks in the skin especially along the patient’s spine, elbows, hips, heals of the feet, inside of the knees and bottom. After this physical examination, the patient is given a score based off the Braden’s scale determining their risk of developing or further developing a pressure wound.

The Braden’s scale is a tool comprised of 6 categories, sensory perception, moisture, activity, mobility, nutrition, friction, and shear. Each category is rated on a scale of 1 to 4, each segment possesses a possible total of 23 points. The lower the total score the more likely the patients are to develop a pressure ulcer. Scores of 19-23 points in any category indicates no risk. Mild risk is a score of 15-18 points. Moderate risk is 13-14 points. High Risk is a score of 10-12 points. And Very high risk is a score of 9 or less (Unknown, 2016).

Pressure ulcers are classified according to stages. Stage one includes redness of a localized area, usually over a bony prominence. Darkly pigmented skin that does not have visible blanching (Anthony, 2018). Stage two involves loss of partial skin thickness where the dermis is showing a shallow open ulcer with a red or pink wound bed, without any slough. This may also appear as an open or ruptured fluid filled blister (Anthony, 2018). Stage three is where the subcutaneous layer of fat can be seen however, no muscle, tendon or bone is exposed. Slough maybe present (Anthony, 2018). Stage four pressure ulcers show exposed bone, tendon, or muscle (Anthony, 2018). The final stage of pressure ulcer development is called unstageable. This stage includes loss of all the thickness of skin in which the base of the ulcer and wound is covered by slough of yellow, tan, gray, green or brown in color (Anthony, 2018).

Once a pressure ulcer is detected it should be taken care of immediately regardless of the stage. The nursing staff should ensure that the skin is kept clean and dry. All wounds must be measured, documented, and photographed. Moisturizer or barrier creams such as Sensi Care 2 and 3 as well as medicinal grade honey (a natural antibiotic) can be applied to maintain the integrity of the skin, followed by some form of dressing. Finding the proper dressing for a pressure ulcer can be challenging. Each wound has its own set of challenges and obstacles. For pressure wounds located on the buttocks or coccyx area. Heart shaped Mepilex foam dressings are the best. They not only provide a barrier between the wound and surfaces, but it provides a very absorbent padded cushion, giving the patient slightly more comfort.

Wounds on the extremities such as elbows and heals should be dressed using a nonstick abdominal dressing pad, wrapped with Curlex gauze both above and below and tapped in place. A netted stocking can be placed over this to create an additional layer of security to the dressing. It is key that no tape is applied directly to the patient’s already fragile skin. This could cause skin irritation or in some patient cases the skin rips creating an additional wound. Patients who have pressure ulcers on their feet should especially avoid applying pressure to the affected extremity. should be moved or repositioned every two hours to avoid prolonged pressure of the affected areas. The dressing should be replaced, and the wound reassessed and documented daily at minimum. Special consideration should be taken for dressing on the bottom or coccyx that should be changed with each incontinence episode. Some patients who need extensive treatment qualify for hyperbaric treatments. This special type of treatment involves a highly pressurized oxygen tank. High levels of oxygen have proven affective in increased healing of wounds especially in diabetic patients. Patients who receive this form of treatment tend to heal much quicker then with use of traditional methods.

When positioning bedbound patients, a special emphasis needs to be made on proper positioning of the patient’s limbs and overall body alignment. Padding of pillows and blankets can be placed especially between the patient’s knees, ankles, behind the back and under the arms to prevent friction and increase overall patient comfort. In most cases patients are placed on a special air circulating mattress. This special mattress is designed to randomly shift the pressure applied to the patient’s body, reducing the amount of friction. Patients who are incontinent should be monitored closely and any incontinence episodes should be addressed promptly.

Any break in the skin caused by pressure, regardless of the cause, can become infected. Common infections related to pressure ulcers include localized infections or infection in the immediate area, [cellulitis](https://www.sepsis.org/sepsisand/cellulitis/), and osteomyelitis. These and other infections can all lead to what is known as sepsis. Key signs of infection include foul smell coming from the wound, increased pain or discomfort, fever, increased redness around the edges of the wound or development of pus discharging from the wound bed. If for any reason signs of infection become present the wound should be swabbed and cultured, and the patient should be treated with appropriate medications such as antibiotics either through IV access or oral depending on the patient’s condition. Extra care should also be taken in cleaning and dressing the wound. Patients who develop pressure ulcers also experience a great amount of pain and discomfort from them. It is vital that these patients have access to pain management medications such as Tylenol, ibuprofen, hydrocodone, and oxycodone to help alleviate some of the pain and discomfort.

One very large problem that can present alongside pressure ulcers is malnourishment. Both underweight and obese patients are at risk of being malnourished. Patients who are fail and malnourished have a higher risk of succumbing to their wound. “Hospital acquired pressure ulcers result in significant patient harm, including pain, expensive treatments, increased length of institutional stays and in some patents premature mortality” (Joint Commission Center for Transforming Healthcare, 2020). It is very important that patients who have pressure ulcers have access to balanced adequate nutrition. A deficiency in vital nutrients may delay critical wound healing. A diet rich in protein, vitamin C and zinc from foods such as milk, yogurt, beans, eggs, meat, and fish promotes healthy blood flow and wound healing. Wound healing involves complex physio-chemical interactions that require various micro and macronutrients at every stage (Anthony, 2018). Early identification of at-risk patients with afflictions such as this is vital for the prevention and exacerbation of pressure sore development.

Since pressure ulcers occur in patients who are immobile in majority cases of bed ridden patients, occurrence of the same is considered a nursing problem. Nurses are responsible for the assessment and prevention of pressure ulcers and the role of Doctors come only secondary to the role of a nurse in this situation. All the reviews and detailed studies on the pressure ulcer indicates the need of an interdisciplinary approach for the management of a pressure ulcer participating almost all level of practitioners like doctors, nurses, therapists, dieticians, porters etc. It is the first and foremost obligation of a nurse to conduct ongoing, repeated assessment of risk factors of pressure ulcers since early detection and treatment are vital for the treatment and management of pressure ulcers. With increased diligence and monitoring from both nurses and patients alike we can prevent chronic wounds like pressure ulcers from developing.

Once a wound is healed it is imperative that they patient still maintain preventive habits as if they still had the wound otherwise, the wound could reoccur, resulting in much needless pain and suffering for the patient. For patients who are cared for by family members, further education needs to be conducted so these individuals are aware of what is needed to care for their loved ones properly. Patients who comply with these courses of treatments not only heal quicker but also have a better overall outlook. Through interventions such as these and proper nursing care, there is a good chance that pressure ulcers could be prevented. Resulting in billions of dollars that can be allocated elsewhere with in the healthcare system.

The amount of money spent for the prevention of pressure ulcers is considerably less when compared to their treatment. “The cost of treating a single full-thickness pressure ulcer can be as high as 70,000.00” (Joint Commission Center for Transforming Healthcare, 2020). Pressure ulcers cost $9.1-$11.6 billion per year in the US. Cost of individual patient care ranges from $20,900 to 151,700 per pressure ulcer. Medicare estimated in 2007 that each pressure ulcer added $43,180 in costs to a hospital stay (Joint Commission Center for Transforming Healthcare, 2020). These finances can be used in the administering to other various patient medical needs, thus improving the quality of the overall healthcare system.

Nursing practice is also affected by the high prevalence of pressure ulcers. This is because the attention given to the dressing and managing of pressure ulcers has increased tremendously commanding a 50% increase in the time that is given to the afflicted patients (Clarke et al, 2005). If the pressure ulcers are properly managed, this critical time can be utilized to increase medical attention and further assessment to other conditions that require close monitoring.

Although pressure ulcers are a problem found in every healthcare facility, it is a problem that has a very wide range of solutions. Pressure ulcers can negatively affect a client’s quality of life. This type of situation also poses potential medical complications, including coma and death associated with this condition. Proper assessment and management of pressure ulcers reflects quality of care not just for the nurse staff but also the facility. Evidence-based nursing interventions such as assessing a patient’s risk using the Braden Scale, use of special pressure reducing mattresses, managing adequate nutrition the use of wet-dressings, and hyperbaric oxygen as treatments, have been proven to be effective and are all of great importance in improving patient care.

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