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Research Article

### EFFECTS OF BEDSORE MANAGEMENT FROM PERSPECTIVE OF A NURSE MANAGER IN HOSPITAL SETTING

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#### Abstract:

A localized damage to the tissues or skin due to poor circulation of blood, usually over a bony prominence and friction. The skin is the major part of the human body which makes up almost 10% of the adult total body weight. It is important and needs to be intact to perform important functions for the survival of the human being (Dougherty, 2015). Rehman (2011) further explore that patient diagnosed with cancer are at high risk of developing pressure ulcers because of poor nutrition, fatigue, and immunosuppression. Pressure ulcers are considered a major burden of hospitalization all over the world, and nurses are considered the first person to prevent Pressure. However, prevention of PUs is essential not only to keep the patients safe from injury but more important is to lessen the financial burden them. Most of the PUs can lead to life-threatening infections if identified at late-stage. Many patients die of complications associated to hospital-acquired pressure ulcers (HAPUs) (Sullivan & Schoelles, 2013). The main objectives of this study are to scrutinize the evidence supporting the use of specific interventions, documentation and on-going staff education to prevent Pressure Ulcers in hospitalized patients. **Methodology:** Literature was reviewed and searched different articles from PubMed, google and google scholar. Focus article which were published in the English language. and study was only adult patients. Three themes were identified which were skin and risk assessment, the release of pressure, and knowledge & education of the nurses.

**Implementing 5 steps of Management Process:** According to "Thomas J. D'Zurilla 1988 Model", process includes the problem finding or "problem analysis", problem formation, generation of alternative strategies, implementation and verification of chosen solution distinguishing feature of a problem is that, there is a goal to be achieved.

**Conclusion:** pressure ulcers are mostly preventable in any acute or cancer care hospital. However, it needs a proper skin assessment of the patients at the time of admission.

**Keywords:** Pressure Ulcer, Cytotoxic, Evaluation, Friction, Moisture, Incontinence, Intervention, Risk assessment tools.

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**CASE SCENARIO:**

The very difficult situations was arise one year back when I was on evening duty in a private hospital as a Nursing manager. A 57 years old man who has had a history of diabetes for the last 4 years, and stroke survival and now his diseases was metastases. He was developed a stage 4 pressure ulcer on the sacrum area during his hospital stay. He was DNR, unconscious and also history incontinence of the urine. When he became conscious, he was trying to pull his catheter and sometimes he was successful to pull out the catheter. Due to this reason his bedsore size was increased in size and day by day bedsore was going worse. Bedsore surgery was not possible due to disease progression with bones met. He was relapsed.

**INTRODUCTION:**

The skin is the major part of the human body which makes up almost 10% of the adult total body weight. It is important and needs to be intact to perform important functions for the survival of the human being (Dougherty 2015). They are described that due to poor circulation of blood and compression of soft tissue on the bony prominence. Pressure ulcer remains a great problem in the healthcare system. In addition to the patient's suffering, it causes a huge financial burden to the patient as well as for the families (Shrestha & Shrestha, 2016). It is furthermore PUs significantly leave negative impact. There is physical, mental and social disturbance; patient feels that they are isolated resulting in depression, frustrated, finally depression and anxiety (Sving 2014). Pressure ulcers in admitted patients are the most expensive treating conditions. In the United States, the treat cost ranges from 500 US dollars to 130,000 dollars per patient. In addition to the financial burden, a prognosis of the treatment is poor in ill patients (Padula et al., 2016).

**METHODOLOGY:**

Literature was reviewed and searched different articles from PubMed, google and google scholar. Articles published from the year 2010-2018 and those were published in the English language. The focus of the study was only adult patients and three themes were identified including skin and risk assessment, the release of pressure from the bony areas, and assess the knowledge and further education to the staff (Wilborn, 2015).

**LITERATURE REVIEW:**

Literature was reviewed to find out the different strategies to prevent HAPUs in admitted patients. Pressure ulcers could be due to two factors: extrinsic or intrinsic factors. Intrinsic factors are restricted mobility, poor nutrition, reduced level of

consciousness, incontinence, and patient in one position for a long time. Extrinsic factors include pressure from any hard surface, shear, and friction when the body is rubbed and due to moisture (Osuala, 2014).

**According to Rehman (2011)** that cancer patients are at high risk of developing pressure ulcers because of poor nutrition, fatigue, and immunosuppression. According to the literature review assured to use pressure ulcer risk screening for the hospitalized patients. It should be done under the supervision of a competent registered nurse. She further explores that pressure ulcers causes individual misery and increases health care costs, so the prevention of this ailment needs to be highlighted and prioritized (Loikkanen and Tammi 2016). Dougherty & Lister (2015) re-enforced to eliminate the risk factors including pressure, friction and proper skin assessment. It is further stated that the risk assessment is done by competent nurses who have completed their competencies and have taken proper training to identify the contributing risk factors.

**Implementing 5 steps of Management Process:**

According to "Thomas J. D'Zurilla 1988 Model", an individual (or group) attempts to cognitive - affective - behavioral processes that identify, detect, or invent effective ways of dealing with everyday life problems. Problem-solving specifically in psychology refers to a state of desire to reach a definite "goal" from a current state. This process includes problem finding or "problem analysis", problem formation, generation of alternative strategies, implementation and verification of chosen solution. Furthermore, there is a goal to be achieved and how you get dependson problem orientation (problem-solving managing stylishness and skills) and systematic.



"Thomas J.D 'Zurilla in 1988 model"

**Background of the problem:**

HAPUs are known as a key performance indicator within an oncology setup. Gill (2015) recognized that HAPUs left negative impacts on patients and their families too. It was identified that in inpatient department HAPUs incidences increase was due to health care staff attitude and behavior, high turnover of the nurses, and did not do proper documentation regarding nutritional status; change of patient's position. Sullivan, Keran & Schoelles, (2013) also supported that to prevent HAPUs is aimed not to protect patients from damage only, but lessen the financial burden of the patients too. Complications associated with HAPUs require extra care, needs more resources and increases patient's hospital stay. Complications associated with HAPUs require extra care, needs more resources and increases patient's hospital stay (Sullivan & Schoelles, 2013).

**Problem analysis:**

The challenges are more difficult when there is a high turnover of the nursing staff and shortage of staff. Analyze the issue, a written test (Appendix-2) was conducted for all the nurses of the in-patient department to evaluate their existing knowledge to prevent HAPUs and their management. A questionnaire was given to them and explore their practices and find out the gaps. First, there was a high turnover, lack of knowledge, poor practices about HAPUs prevention. The second reason was the improper online documentation for example multidisciplinary team, , position change and nutritional status of patients. Lastly, it was identified that there is a lack of family and patients' education and their involvement in their care (Rahman and Naif 2011).

**Objectives:**

The main objectives of this article are:

- To review and analyze the current literature in relation to the prevention of HAPUs in cancer patients.
- To scrutinize the evidence supporting the use of specific interventions, including skin /risk assessment, documentation, and on-going staff education to prevent Pressure Ulcers in hospitalized patients.

These guidelines were available in 2003 for the first time and restructured in 2005 and again in 2010 (Padula et al., 2016). . There are the following pressure ulcer prevention guidelines.

**1: Skin assessment and prevention of medical device-related pressure ulcers**

According to Coloplast quick guide (2013) risk assessment tool must be accomplished within four to

six hours of patient's admission by the attending nurse. Water low scale parameters are scored and these are calculated to find an overall risk score, 10+ is at risk 15+ at high risk and 20+ patient is at very high risk. We at SKM are following the Waterlow PU Risk Assessment tool by observing the same parameters including; mobility, neurological deficit, appetite, major surgery trauma, continence, skin Area at risk, medication and tissue malnutrition (Appendix-D).

**2: Repositioning:**

Reham (2011) also emphasizes that patients who are at risk of getting PU must change their position every 2 to 3 hourly. there will enough oxygen supply to the tissues.

**3: Documentation of pressure ulcer care**

Loikkanen (2016) stated that the educational programs, the making skin-care teams, and developing care plans, including skin/risk assessment, documentation provides evidence that the plan of care is appropriate, may less the occurrence of PUs.

**4: Nutrition:**

Inadequate intake of a healthy diet and deprived nutritional status is significant risk factors in the development of HAPUs and wound healing prolonged. Therefore, nutritional screening ought to be completed as soon as a patient is admitted to the hospital or when nutrition risk is provoked (Posthauer, Banks, Dorner, & Schols, 2015).

**5: Education /knowledge of health care staff:**

Poor knowledge, practices and insufficient skills contribute to developing and worsening of pressure ulcers which lead to further complications. Therefore, continuous training and education for nurses are required to enhance their knowledge and practices can be improved. According to study that 80.6% of nurses had poor knowledge about pressure ulcer prevention and 82.6% had poor practices (Nasreen, Afzal, & Sarwar, 2017). Team Leaders were nominated to check online documentation on daily bases and communicate the gaps immediately. Nurses must be educated and involved in care. It is beneficial to the patients as well as to the organization (Eljedi, El-Daharja, & Dukhan, 2015).

**6: Impacts of PUs on quality of life:**

Pressure Ulcers have a significant influence on quality of life of the patients. They suffer physically, socially, spiritually, psychologically, emotionally and have a financial burden on their life (Repić & Ivanović, 2014). Identified psychosocial issues and explored that PUs have a negative impact on the

wellbeing of the patient as well as affect the quality of life. They could be painful, feel discomfort due to bad smell leads to anxiety and frustration. Nurses should listen to the patient's concern and discuss their feelings to help them to develop their coping skills(Browning, 2016).

#### **Implementation:**

The team leaders were allocated to check online documentation, care plans and must communicate to the attending nurse instantly if some gaps were found on daily bases. An arrangement was done for the nurses to attend the wound care seminars, treatment plans and emphasized on documentation(Gesme & Wiseman, 2010). Therefore, one competent team leader was assigned in every shift to review online documentation and physical assessment of patients. An incident report must be generated whenever a PU is identified whether at the time of admission or during hospital admission (Armour-Burton, Fields, Outlaw, & Deleon, 2013).However, In addition to all two-hourly position change charts were placed on the patient bedside. The nursing assistant has to sign every time they change the position of patients who are at risk of developing HAPUs. Moreover, SSKIN bundles were applied for skincare and Health care assistants were allocated to make a regular round with the help of checklist to confirm the availability of lotions/cream for skincare at patient's bedside, air mattresses are applied and supportive cushions for elbow and heels to high-risk patients. The final step was to generate an online approach to a multidisciplinary team which was established by the electronic medical record department by introducing an online alert system. Once an online physical assessment is completed, an automatic alert was created to all teams including physiotherapists, infection control nurses, tissue viability nurses, and nutritionists and to the quality patient safety department.

#### **Evaluation:**

The process of assessing the extent to which the Organization Development intervention has delivered the outcomes that the organization required is the evaluation phase. Skin assessment, scoring through Waterlow tool done by a primary nurse, frequent audits were performed to evaluate the effect of selected strategies. The result of this implementation proved a successful outcome on the prevention of PUs within three months by reduction of PU incidence by 0%. According to the article change resistance is normal but should be handled timely and wisely otherwise change process may fail(Rick 2013).

#### **DISCUSSION:**

This project was developed for a change in HAPUs incidence in hospitalized patients. After problem analysis, planning for change is required. Literature was reviewed to find out the alternative solution for the prevention of HAPUs in hospitalized patients.This will also focus on the different strategies and the implications of PU on the patient's quality of life. Adoption of appropriate interventions, and staff education to prevent HAPUs can help to improve the performance and decrease the health care workload.The use of an electronic medical record system for tracking the data about HAPUs. It will help in early detection and decrease in HAPUs through quick management which assists to initiate an active care plan (Zaratkiewicz et al., 2010).

Sullivan, (2013) stated that due to multiple factors patients develop PU therefore; it is of great importance to focus on multidisciplinary initiative intervention because it is more effective rather than individual interventions. However, pressure ulcer prevention care team includes nurses, physicians, Nutritionist, physiotherapist, tissue viability nurse and other members of the team.Globally, pressure ulcers are considered a major complicated health issue, which causes severe disruption to the life of the patient as well as caretakers. Since, PUs has a significant impact on a person's quality of life in many ways; nurses play a vital role to support the patient by applying a holist approach. They must address the patient's spiritual, physical, and social needs. Nurses are considered the first care providers from the time of admission, and pressure ulcer prevention should be a nursing initiative (Rahman and Naif 2011).

#### **CONCLUSION:**

Holten (2015) believes that leadership skills plays vital role to achieve individual, departmental and organizational goals(Holten & Brenner, 2015). PUs increases the patient's suffering and causes a huge financial burden to the patient and families. It also increases the patient's pain, extends hospital stay. HAPUs could be prevented by using risk assessment tools, repositioning, educating staff and the most important is skin assessment. In-service training and an educational program should be arranged for nurses to improve their Knowledge and practice.

Identifying patients at risk, regular skin care and assessment, position change, proper diet will help to prevent HAPUs. The unit manager worked for the improvement of patients' outcomes and to accomplish the organizational goal to lessen the HAPUs occurrence rate. Furthermore, posters of



various stages of PU were displayed in different noticeable areas throughout the department e.g. notice boards. This information was updated on a regular basis by the unit manager and constantly evaluated and updated the information. Summary of HAPUs incidence rate was dispatched on quality board.

### Recommendation:

Further researches should be conducted to explore the knowledge of nurses about the prevention of HAPUs. Specific education should be provided to the nurses, patients, their carers and PUs preventive strategies must be carried out with proper guidelines. An interdisciplinary approach is required to prevent PUs; all members of the health care team must be responsible for providing best practices to promote better health of all individuals.

**Abbreviations:** HAPU, PU, SSKIN

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