



REVIEW ARTICLE

Review of Prevention and Management Strategies for Pressure Sores and Ulcers in Immobilized Orthopedic Patients

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Abstract

Pressure sores, also called 'pressure ulcers' or 'bedsores', develop on various parts of the body due to prolonged pressure, which can lead to skin and tissue damage. These injuries are a cause for concern in immobilized orthopaedic patients due to limited mobility and prolonged immobility. This systematic review aimed to evaluate interventions and strategies for preventing and managing pressure sores in this population. We reviewed seventeen research articles, including case studies, cohort studies, randomized controlled trials, and systematic reviews. The reviewed studies underscore several crucial elements in preventing and managing pressure ulcers in immobilized orthopedic patients, including structured education and training, care bundles, evidence-based guidelines, innovative interventions, managing risk factors, nursing care, comprehensive skin care, a positive attitude, and a proactive approach. In conclusion, pressure ulcers are a significant concern in immobilized orthopaedic patients, but with the implementation of evidence-based strategies, their incidence can be significantly reduced. Structured educational initiatives, care bundles, evidence-based practice guidelines and innovative interventions, along with the crucial role of nurses, are key components in preventing and managing pressure ulcers. Healthcare providers can enhance patient outcomes, improve the quality of care, and lower healthcare costs related to pressure ulcer management by implementing these strategies.

Keywords: Pressure ulcer, Bedsores, Immobilized orthopedic patients, Management, Evidence-based guidelines, Innovative interventions

Introduction

Pressure sores, also called 'pressure ulcers' or 'bedsores', develop on various parts of the body due to prolonged pressure, which can lead to skin and tissue damage. These injuries are a cause for concern in immobilized orthopaedic patients due to limited mobility and/or prolonged immobility. Increasingly, pressure sores in

these patients can lead to serious complications such as infection, prolonged hospital stay, resulting in higher healthcare costs and decreased quality of life.¹

Orthopaedic patients, especially those who are bedridden after surgery or injury, are vulnerable to pressure ulcers due to the constant pressure on specific body parts. Prevention and management of these ulcers is critical to

improve patient outcomes, reduce health care burdens, and increase overall quality of care.²

Several strategies have been suggested and put into practice for preventing and managing pressure ulcers in immobilized orthopedic patients. These include structured educational interventions, care bundles, evidence-based nursing practices, innovative tools such as repositioning devices, and use of prophylactic dressings. The effectiveness of these interventions may vary depending on patient population, health care, and the specific protocols used.³

This review aimed to present a brief overview of the most recent studies on the treatment of pressure sores and ulcers in immobilized orthopedic patients. Through a thorough analysis of several studies, including cohort analyses, randomized controlled trials, and systematic literature reviews, this study aimed to determine the most effective methods for managing and preventing pressure ulcers in this vulnerable population. The study concentrated on a number of important topics, such as the overall outcomes and effectiveness of different interventions across a range of healthcare settings, the role that prophylactic dressings and other preventative treatments play in preventing the formation of pressure sores, the impact of educational initiatives on patient and healthcare professional education regarding pressure ulcer prevention, the effectiveness of standardized nursing guidelines and care bundles in lowering the prevalence of pressure ulcers, and novel tools and technology that can support pressure ulcer treatment as well as prevention.⁴⁻⁶

This review attempted to offer comprehensive insights into the best practices for managing and preventing pressure ulcers in orthopedic patients who are immobilized by integrating the findings of multiple studies. The primary goal of this review was to educate medical professionals and the clinical community about treatments based on evidence that can enhance patient outcomes and care.

This review's objective was to evaluate the effectiveness of various methodologies and interventions for preventing pressure sores and ulcers in immobilized orthopedic patients. It was intended to give a thorough overview of best practices, pinpoint various preventive measures that work, and suggest management approaches that can be used in clinical settings to lessen

the frequency and severity of pressure ulcers in this vulnerable patient population. To achieve this, data from various studies were analyzed.

Materials and methods

Study Design

This review was undertaken to critically assess and analyze existing literature on preventing and managing pressure sores and ulcers in immobilized orthopedic patients.

Literature Search Strategy

A thorough search was conducted across multiple electronic databases, including the Cochrane Library, PubMed, MEDLINE, and Google Scholar. In the search phrases, variations of the following keywords were used: "pressure sores," "pressure ulcers," "immobilized patients," "orthopaedic," "prevention," "management," "nursing care," and "educational interventions." The search encompassed English-language articles published between January 2000 and December 2023.

Inclusion criteria

- Research on prevention along with management of pressure sores and ulcers in immobilized orthopedic patients.
- Case-control research, comprehensive reviews, study cohorts, randomized controlled trials (RCTs), and quasi-experimental research.
- Articles published in peer-reviewed journals.
- Studies with full-text available in English published between January 2000 and December 2023.

Exclusion criteria

- Studies unrelated to pressure ulcers in orthopaedic patients.
- Editorials, letters to the editor, case reports, and commentary.
- Articles that are unavailable in full text or that are not published in English.

Results

Study Characteristics

Seventeen papers, including case studies, systematic reviews, cohort studies, and randomized controlled trials (RCTs), were examined in the systematic assessment. These studies addressed a variety of populations, treatments, and results that are pertinent to the

management and prevention of sores and ulcers caused by pressure in orthopedic patients who are immobilized.

A thorough critical assessment of the literature about managing and treatment of sores and ulcers caused by pressure in immobilized orthopedic patients was carried out in order to identify therapeutic and preventative strategies that would effectively reduce the occurrence and severity of pressure ulcers. Key findings from the analysis of these research are as follows.⁷⁻²³

1. Kathirvel *et al.* (2021):

- *Aim:* To assess how well structured educational initiatives contribute to the prevention of pressure ulcers.
- *Sample Size:* 92
- *Methodology:* Pragmatic randomized controlled trial (RCT) design.
- *Key Findings:* A structured educational program for patients and caregivers led to a notable decrease in the occurrence of pressure ulcers.

2. Mayhob & Amin (2021):

- *Aim:* This study set out to determine how well a care bundle might be used to keep orthopedic patients who are immobile from developing pressure ulcers.
- *Sample Size:* 80
- *Methodology:* Quasi-experimental research design.
- *Key Findings:* Orthopedic patients who were immobilized and received the elements of a care bundle experienced a statistically significant decrease in pressure ulcer development.

3. Mahmoud & Omran (2022):

- *Aim:* To assess the effect of adhering to evidence-based treatment guidelines for pressure ulcer outcomes in immobilized orthopedic patients.
- *Sample Size:* 60
- *Methodology:* Quasi-experimental research.
- *Key Findings:* The application of evidence-based practice standards resulted in a significant improvement in pressure ulcer outcomes in orthopaedic immobilized patients as compared to those who received standard nursing care.

4. Ham *et al.* (2014):

- *Aim:* This literature review sought to shed light on the incidence and progression of pressure

ulcers (PUs), associated risk factors, and potential preventative measures for PUs resulting from spinal immobilization using devices in adult trauma patients.

- *Sample Size:* 13 studies
- *Methodology:* Systematic review.
- *Key Findings:* This systematic review findings indicated that using equipment to immobilize raises the possibility of developing PU.
- In addition, it was also noted that early measures are essential to prevent pressure ulcers.

5. Mohammed *et al.* (2018):

- *Aim:* In order to lower the risk of pressure ulcers, the study's goal was to assess the effect of immobilizing orthopedic patients and implementing nursing care standards.
- *Sample Size:* 74
- *Methodology:* Quasi-experimental research design.
- *Key Findings:* Following the implementation of the pressure ulcer prevention instructions, a statistically significant difference was seen between the study and control populations.
- In order to avoid pressure ulcers caused by immobilization, orthopedic patients should follow nursing care guidelines.

6. Saad *et al.* (2021):

- *Aim:* To assess how a training course has affected nurses' capacity to protect immobilized patients from pressure ulcers and ensure their safety.
- *Sample Size:* 50 nurses and 80 patients (using purposive sampling)
- *Methodology:* Quasi-experimental design.
- *Key Findings:* The study supported the hypothesis that educational methods are highly efficacious in lowering pressure ulcers and improving the safety of immobilized orthopaedic patients.
- They recommended to offer consistent training and education programs on pressure ulcer prevention.

7. Mohamed & Weheida (2015):

- *Aim:* The purpose of the study was to determine whether a pressure ulcer control-focused educational program can increase nurses' knowledge and improve

the safety of patients who were immobilized.

- **Sample Size:** 40 nurses, 40 patients
- **Methodology:** Quasi-experimental design.
- **Key Findings:** This study showed that there is potential for improvement in the nursing staff's understanding and application of pressure ulcer prevention techniques.
- According to study participants, the training program can be utilized efficiently and effectively to avoid pressure ulcers in immobilized patients, leading to a reduction in pressure ulcer occurrence and an improvement in patient outcomes.

8. Elsayad *et al.* (2023):

- **Aim:** To gain insight into how a nurse-led skin care bundle affects hospital-acquired pressure injuries in patients who are immobilized due to orthopedic problems.
- **Sample Size:** 118
- **Methodology:** Quasi-experimental design.
- **Key Findings:** The introduction of a nurse-led skin care bundle dramatically reduced the frequency of pressure injuries in hospitalized, immobile patients with orthopedic problems.
- Individuals suffering from orthopaedic diseases must to be trained to recognize and communicate any changes in their skin condition.

9. Kotb & Behairy (2020):

- **Aim:** To assess the impact of adopting evidence-based nursing treatments for patients with orthopaedic disorders in order to prevent pressure ulcers.
- **Sample Size:** 80
- **Methodology:** Experimental research design.
- **Key Findings:** The hospitalized patients in the orthopaedic ward are unlikely to get pressure ulcers when an evidence-based nursing intervention is implemented.
- Patients susceptible to pressure ulcers should undergo evidence-based nursing interventions, targeting areas prone to skin breakdown to avert pressure ulcer formation.

10. Mowla *et al.* (2022):

- **Aim:** To assess the effectiveness of using a novel turn clock to reposition bedridden orthopedic patients

every two hours for preventing hospital-acquired pressure ulcers.

- **Sample Size:** 60
- **Methodology:** Quasi-experimental research design.
- **Key Findings:** The majority of pressure ulcer cases are preventable. Orthopedic patients who were bedridden and employed a turn clock to change positions every two hours showed a decreased incidence of pressure ulcers acquired in hospitals as compared to patients receiving standard nursing care.

11. El-Saidy & Aboshehata (2019):

- **Aim:** The study aimed to assess how skin care practices and the use of bony prominence protectors affect the occurrence of pressure ulcers in hospitalized patients who are bedridden.
- **Sample Size:** 282
- **Methodology:** Quasi-experimental research design.
- **Key Findings:** Pressure ulcer risk can be decreased with proper skin care and with the use of bony prominence protectors.
- For ICU patients, nurses should prioritize skin care for the scapula, elbows, and buttocks, while for orthopedic patients, the focus should be on the knees, heels, buttocks, and toes. Additionally, nurses should encourage and promote patient mobility.

12. Al-Shadedi (2012):

- **Aim:** To illustrate the frequency, onset, types, and number of pressure sores as well as the most typical locations, duration of hospital stay, and range of treatments given to these patients in orthopaedic wards.
- **Sample Size:** 215
- **Methodology:** Cross-sectional study.
- **Key Findings:** Every member of the surgical and nursing team, including those in orthopaedic surgery, must work together to prevent pressure ulcers.
- After a successful operation, the patient's discharge is delayed due to the development of pressure sores.
- Patients who are elderly, bedridden, or hemiplegic have a greatly increased risk of developing bed sores.

13. Appiah *et al.* (2023):

- *Aim:* This study aimed to assess pressure ulcer prevention methods and mindsets of orthopedic nurses employed at a tertiary hospital in Ghana.
- *Sample Size:* 30
- *Methodology:* Descriptive qualitative approach.
- *Key Findings:* The study's analysis identified two main themes and eight subthemes:
- Attitudes toward pressure ulcers (PUs) and preventive actions were the two primary themes.
- The study brought to light the absence of detailed protocols for treating pressure ulcers in the wards.
- Despite this, individuals showed a dedication to avoiding pressure ulcers. The measures they followed were, manage patient nutrition, treat PU wounds, provide smooth beds, encourage early patient mobility, and identify early indicators of pressure ulcers.

14. Bales (2012):

- *Aim:* To compare the Heelift Suspension Boot to intravenous bags for the avoidance of pressure ulcers in orthopedic patients.
- *Sample Size:* 30
- *Methodology:* Quasi-experimental study.
- *Key Findings:* The pressure-relieving suspension boot was found to be a beneficial clinical intervention for people with restricted mobility.

15. Baumgarten *et al.* (2003):

- *Aim:* The focus of this study was to determine the external variables that contribute to a higher incidence and risk of pressure ulcers among elderly patients undergoing hip fracture surgery in hospitals.
- *Sample Size:* 9400
- *Methodology:* Case-control study.
- *Key Findings:* Identified key risk factors including immobility and poor nutrition.

16. Truong *et al.* (2016):

- *Aim:* The effectiveness of silicone foam dressings in preventing ulcers caused by pressure was evaluated in this review of literature.
- *Sample Size:* 18

- *Methodology:* Literature review.

- *Key Findings:* When used as a preventive measure, silicone foam dressings were found to be quite promising and may even be better than the recommended course of therapy.

17. Clark *et al.* (2014):

- *Aim:* This systematic review investigated the efficacy of using preventive bandages in preventing pressure ulcers.
- *Sample Size:* 21
- *Methodology:* Systematic review.
- *Key Findings:* Using dressings to prevent pressure ulcers could decrease the frequency of pressure ulcers developed due to medical equipment, particularly among patients in the intensive care unit who are immobile.

Discussion

This discussion delves into various studies aimed at preventing and managing pressure ulcers in immobilized orthopaedic patients, synthesizing their findings to provide a comprehensive understanding of effective strategies.

- Structured Educational Interventions

Kathirvel *et al.*, and colleagues examined the influence of structured educational interventions on preventing pressure ulcers. Their study, involving 92 patients, demonstrated that educating both patients and caregivers resulted in a notable reduction in pressure ulcer incidence. The educational program emphasized the significance of regular repositioning, skin care, and the utilization of pressure-relieving devices. This education empowers caregivers with the requisite knowledge to enact effective preventive measures, crucial in mitigating the risk of pressure ulcers.⁷

- Care Bundle Implementation

A quasi-experimental study by Mayhob and Amin looked into how well care bundles work to keep orthopedic patients who are immobilized from developing pressure ulcers. The study, which included 80 participants, demonstrated a statistically significant decrease in pressure ulcer development after the implementation of the care bundle. Care bundles typically include a set of evidence-based practices such as regular skin assessments, pressure-relieving

devices, and nutritional support. This comprehensive approach ensures that various facets of patient care are attended to, thereby decreasing the likelihood of pressure ulcers.⁸

- Evidence-Based Practices

Mahmoud and Omran studied the influence of evidence-based treatment guidelines on pressure ulcer outcomes in 60 immobilized orthopedic patients. The quasi-experimental study found significant improvements in patient outcomes when evidence-based practices were followed. These practices include regular skin assessments, timely repositioning, and the use of specialized mattresses or cushions. Enforcing these guidelines guarantees that patients receive optimal care, decreasing both the frequency and seriousness of pressure ulcers.⁹

- Systematic Reviews and Meta-Analyses

With the objective to gain insight into the occurrence and progression of pressure ulcers related to spinal immobilization in trauma patients, Ham *et al.* conducted a thorough examination of 13 studies.¹⁰ Their research showed that using immobilization devices raises the chance of developing pressure ulcers, highlighting the importance of implementing early preventive steps such as, using pressure-relieving devices and routinely moving oneself. Similar to this, Clark *et al.*, found that prophylactic dressings are helpful in lowering the incidence of ulcers caused by pressure, especially in critical care unit patients who are immobile.²³ They conducted a systematic review on the topic. By acting as a barrier to shield the skin from pressure and friction, preventive dressings reduce the risk of developing ulcers.

- Nursing Care Guidelines

Mohammed *et al.*, and Saad *et al.*, examined the impact of nursing care guidelines and educational programs in preventing pressure ulcers. Mohammed *et al.*'s quasi-experimental study involving 74 participants, demonstrated that following nursing care guidelines significantly decreased pressure ulcer incidence in immobilized orthopedic patients.^{11,12} When Saad *et al.*, assessed how a training program affected nurses' performance, they discovered that educational initiatives greatly improved nurses' understanding of and adherence to pressure ulcer prevention techniques. These studies emphasize the pivotal role of nurses in preventing

pressure ulcers and the significance of ongoing education and adherence to care protocols.¹²

- Innovative Approaches

Novel strategies like implementing a turn clock for repositioning every two hours and comparing the efficacy of intravenous bags versus Heelift suspension boots have demonstrated potential in preventing pressure ulcers. Mowla *et al.* evaluated the impact of a novel turn clock intervention on 60 orthopaedic bedridden patients, and found that bi-hourly repositioning significantly reduced the incidence of pressure ulcers.¹⁶ Similarly, Bales compared the use of intravenous bags and Heelift suspension boots in 30 patients, finding that the suspension boot was more effective in relieving pressure and preventing ulcers.²⁰ These innovative methods offer workable ways to lower the risk of pressure ulcers in individuals who are immobilized.

- Skin Care Bundles and Bony Prominence Protectors

Elsayad *et al.*, and El-Saidy and Aboshehata investigated the impact of skin care bundles and bony prominence protectors on preventing pressure ulcers. Elsayad *et al.*, conducted a quasi-experimental study with 118 participants, finding that the implementation of a nurse-led skin care bundle significantly reduced the occurrence of pressure ulcers in orthopedic patients who were immobilized.¹⁴ The bundle included practices such as moisturizing, protective dressings, and regular skin assessments. El-Saidy and Aboshehata conducted a quasi-experimental study with 282 participants, concluding that proper skin care and the use of bony prominence protectors are essential in managing pressure points and preventing skin breakdown.¹⁷ These findings highlight the importance of comprehensive skin care protocols in pressure ulcer prevention.

- Attitude and Preventive Practices

Appiah *et al.*, conducted a descriptive qualitative study to explore the attitudes and preventive practices of orthopedic nurses in Ghana.¹⁹ Their findings indicated a notable absence of specific treatment guidelines for pressure ulcers. However, the study emphasized the nurses' dedication to prevention through initiatives like early mobilization, nutritional care, and regular skin assessments. This underscores the importance of cultivating a proactive and positive mindset among healthcare providers, significantly impacting pressure ulcer prevention and management.

- Risk Factors and Incidence

In an extensive case-control research comprising 9400 senior patients, Baumgarten and colleagues sought to determine the risk factors linked to pressure ulcers that were acquired in the hospital after hip fracture surgery.²¹ According to the study, being immobile and having a poor diet are major risk factors for pressure ulcers. Therefore, addressing these factors with focused interventions is essential to preventing pressure ulcers. Ensuring sufficient nutrition and implementing strategies to enhance mobility can markedly decrease the likelihood of pressure ulcers in orthopedic patients.

- Prophylactic Dressings

Truong and colleagues assessed the efficacy of silicone foam dressings in preventing pressure ulcers.²² Their literature review found that these dressings are promising in preventing pressure ulcers, suggesting that they may be more effective than traditional treatments. Prophylactic dressings provide a simple yet effective means of reducing pressure ulcer incidence by creating a barrier that protects the skin from pressure and friction.

Clinical Implications

The reviewed studies' key findings underscore several essential elements in preventing and managing pressure ulcers in immobilized orthopedic patients:

- Education and Training: Regular educational programs for both patients and caregivers play a significant role in reducing pressure ulcer incidence. These programs should highlight the significance of regular repositioning, appropriate skin care, and the utilization of pressure-relieving devices.
- Care Bundles: Implementing comprehensive care bundles comprising evidence-based practices ensures that various facets of patient care are addressed, significantly reducing the risk of pressure ulcers.
- Evidence-Based Guidelines: Adhering to evidence-based guidelines ensures that patients receive the highest standard of care. Regular skin assessments, timely repositioning, and the use of specialized mattresses or cushions are essential components of these guidelines.
- Nursing Care: The role of nurses is pivotal in pressure ulcer prevention. Continuous education and adherence to care standards enhance nurses'

knowledge and practices, contributing to better patient outcomes.

- Innovative Interventions: Innovative strategies like implementing a turn clock for repositioning every two hours and using prophylactic dressings offer practical solutions for decreasing pressure ulcer incidence. These interventions should be considered in clinical practice.
- Comprehensive Skin Care: Proper skin care, including moisturizing and the use of protective dressings, is essential in managing pressure points and preventing skin breakdown. Bony prominence protectors are particularly useful in high-risk areas.
- Risk Factor Management: Addressing key risk factors such as immobility and poor nutrition through targeted interventions can significantly reduce the risk of pressure ulcers. Ensuring adequate nutrition and promoting mobility are crucial.
- Positive Attitude and Proactive Approach: Encouraging a positive attitude and proactive approach among healthcare providers is crucial in preventing and managing pressure ulcers. Commitment to preventive practices can significantly impact patient outcomes.

Role of nurses in preventing and managing pressure sores and ulcers in immobilized orthopedic patients

- Structured Educational Interventions

Kathirvel *et al.* : Nurses who underwent structured educational programs showed greater effectiveness in managing ulcers caused by pressures in immobilized orthopedic patients.⁷

Mohamed and Weheida : Educational programs significantly improved nurses' knowledge and performance in pressure ulcer control, enhancing patient safety.¹³

- Implementation of Care Bundles

Mayhob and Amin : Through the implementation of care bundles that encompass various best practices, nurses effectively reduced the incidence of pressure ulcers in immobilized orthopedic patients.⁸

Elsayad *et al.* : Nurse-driven skin care bundles, including regular skin assessments and pressure-relieving strategies, were crucial in preventing hospital-acquired pressure injuries.¹⁴

- Evidence-Based Practice Guidelines

Mahmoud and Omran : By adhering to evidence-based practice guidelines, nurses were able to enhance patient outcomes related to pressure ulcer prevention and management.⁹

- Nursing Care Guidelines

Mohammed *et al.* : Found that adherence to nursing care guidelines specific to pressure ulcer prevention helped reduce the incidence of pressure ulcers among orthopedic patients.¹¹

- Repositioning Strategies

Mowla *et al.* : Nurses used innovative tools like turn clocks to ensure timely repositioning of bedridden patients, significantly lowering the risk of hospital-acquired pressure ulcers.¹⁶

- Use of Prophylactic Dressings

Truong *et al.* : Nurses successfully employed silicone foam dressings as a preventive measure for pressure ulcers in hospital settings.²²

Clark *et al.* : Systematic reviews indicate that prophylactic dressings, when applied by trained nurses, prevent the development of pressure ulcers.²³

- Risk Factor Assessment

Baumgarten *et al.* : Nurses identified risk factors such as immobility and advanced age in elderly hip fracture patients, which guided targeted interventions to prevent pressure ulcers.²¹

- Patient Education and Advocacy

Appiah *et al.* : Nurses' positive attitudes and preventive practices significantly contributed to patient education on pressure ulcer prevention, fostering a collaborative approach to care.¹⁹

- Innovative Interventions

Bales : Nurses compared traditional methods with innovative tools like the Heelift suspension boot to identify the most effective interventions for preventing pressure ulcers.²⁰

- Skin Care and Bony Prominence Protection

El-Saidy and Aboshehata : The implementation of skin care regimens and bony prominence protectors by nurses contributed to a decrease in pressure ulcer incidence among hospitalized bedridden patients.¹⁷

- Educational Program Effectiveness

Saad *et al.* : Nurses who underwent educational programs demonstrated improved performance in reducing pressure ulcers and ensuring the safety of immobilized patients.¹²

- Care Bundle Implementation

Kotb and Behairy : Applying evidence-based nursing interventions as part of a care bundle was effective in pressure ulcer prevention among orthopaedic patients.¹⁵

- Monitoring and Documentation

Al-Shadedi : Nurses played a critical role in monitoring the prevalence of pressure ulcers and documenting their findings to improve care strategies.¹⁸

- Systematic Reviews

Ham *et al.* : Systematic reviews highlighted the importance of nurse-led interventions in preventing pressure ulcers caused by spinal immobilization in trauma patients.¹⁰

Conclusion

Structured educational programs play a crucial role in preventing pressure ulcers by educating patients and caregivers about the significance of regular repositioning, proper skin care, and the correct use of pressure-relieving devices. By empowering patients and caregivers with the knowledge and skills to prevent pressure ulcers, these initiatives can have a profound impact on reducing their incidence. Care bundles have emerged as a highly effective strategy in pressure ulcer prevention. Care bundles are a set of evidence-based practices bundled together to ensure comprehensive care. Studies have shown that implementing care bundles, which include practices such as regular skin assessments and the use of pressure-relieving devices, can significantly reduce the development of pressure ulcers among immobilized orthopedic patients.

Evidence-based practice guidelines are essential tools for healthcare providers in preventing and managing pressure ulcers. These guidelines provide a standardized approach to care, ensuring that patients receive the most effective interventions. Adhering to evidence-based guidelines enables healthcare providers to enhance patient outcomes and alleviate the impact of pressure ulcers. Innovative interventions, like implementing turn clocks for bihourly repositioning and using prophylactic

dressings, offer potential in preventing pressure ulcers. Turn clocks provide a simple yet effective way to ensure that patients are repositioned regularly, reducing the risk of pressure ulcer development. Prophylactic dressings, when utilized preventively, have demonstrated effectiveness in reducing pressure ulcer incidence, especially in immobile patients.

The role of nurses is critical in implementing these strategies and ensuring that patients receive the highest standard of care. Nurses play a key role in educating patients and caregivers, implementing care bundles and evidence-based guidelines, and monitoring patients for signs of pressure ulcers. Their expertise and vigilance are essential in preventing pressure ulcers and improving patient outcomes.

In conclusion, pressure ulcers are a significant concern in immobilized orthopaedic patients, but with the implementation of evidence-based strategies, their incidence can be significantly reduced. Structured educational initiatives, care bundles, evidence-based practice guidelines, and innovative interventions, along with the crucial role of nurses, are key components in preventing and managing pressure ulcers. By implementing these strategies, healthcare providers can enhance patient outcomes, improve the quality of care, and decrease healthcare costs related to pressure ulcer management.

Conflict of Interest

Nil

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