Implementation of a Healthy Skin Committee and Education on the Number of Hospital Acquired Pressure Injuries

Laura Viana, BSN, RN
Department of Nursing, Fort Hays State University

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Introduction and Purpose

Over the years, hospital-acquired pressure injuries (HAPI) have emerged as a significant challenge in the healthcare industry. Despite significant advancements in healthcare, pressure injuries continue to be a persistent global healthcare issue, closely linked to the safety of patients, affecting patient outcomes, and increasing healthcare costs (Gaspar et al., 2019). HAPIs are associated with increased morbidity and mortality rates. HAPIs are likely to experience longer hospital stays, increased risk of infections, higher treatment costs, and potentially more significant health complications.

Purpose: To reduce the number of hospital-acquired pressure injury rates at Lahey Hospital and Medical Center (LHMC) on the 7 West medical-surgical unit after education was implemented to nurses on the unit.

Research Question and Key Variables

Research Question: Does implementation of a Healthy Skin Committee and staff education reduce hospital-acquired pressure injuries among 7 West medical-surgical unit patients?

Independent Variable: Implementation of a Healthy Skin Committee and education on Pressure Injury Prevention.

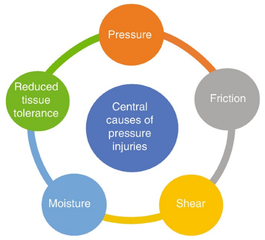
Dependent Variable: The number of hospital-acquired pressure injuries (HAPIs).

Review of Literature

- **According to Lin et al. (2020), five of the eight research studies reported significant decrease in pressure injury prevalence, and/or increase in compliance to pressure injury prevention protocols and strategies with the use of pressure injury bundle.**
- **Skin rounds are highly effective in standardizing and evaluating care practices and opening the lines of communication between frontline providers and leaders (Luton et al., 2018).**
- **Studies conducted by Li et al. (2022) display lack of nursing knowledge and barriers are associated with the continuation of PIs. Barriers include inadequate staff training and education, staffing shortages and high workload, inconsistent use of risk assessment tools, limited resources, communication gaps, and resistance to change.**
- **Studies indicate that nurses' total knowledge on PI prevention was 53.1%, which indicates that nurses do not have a sufficient level of knowledge on PI prevention (Dalvand et al., 2018).**
- **According to Pattabi et al. (2018), effective communication among healthcare providers is the key driver for the success in decreasing the number of HAPIs in the healthcare system.**

Methodology

Research Design: Quasi-experimental design, Retrospective chart review, and Pre-Test/Post-Test Design
Participant: All nurses on 7 West Medical-Surgical Unit
Setting: Lahey Hospital and Medical Center, specifically the 7 West Medical-Surgical Unit
Data Collection:
Collect data on HAPI rates from December 2023 (before the implementation of educational interventions) and February 2024 (after the training). Obtain hospital-wide HAPI data from the hospital's databases to assess changes in HAPI rates following the intervention.
Data Analysis:
Analyze the collected data to determine if there is a significant reduction in HAPI rates after the implementation of educational interventions. Use appropriate statistical methods to compare HAPI rates before and after the intervention period and assess the effectiveness of the educational interventions in reducing pressure injury occurrence.
Quality of scale:
- Reliability: Inter-Rater Reliability
- Validity: Internal Validity



Statistics

		Pre-Education December 2023 HAPI	Intervention January 2024 HAPI Rate	Post-Education February 2024 HAPI Rate	7-West HAPI Incidence Jan 2022- Feb 2024	Hospital HAPI Incidence Rate January 2022-February 2024
N	Valid	1	1	1	26	26
	Missing	0	0	0	0	0
Mean		3.0000	4.0000	.0000	.7692	6.6923
Median		3.0000	4.0000	.0000	.0000	6.0000
Mode		3.00	4.00	.00	.00	2.00[a]
Minimum		3.00	4.00	.00	.00	.00
Maximum		3.00	4.00	.00	4.00	18.00
Sum		3.00	4.00	.00	20.00	174.00
Std. Deviation					1.06987	5.11288
Variance					1.145	26.142

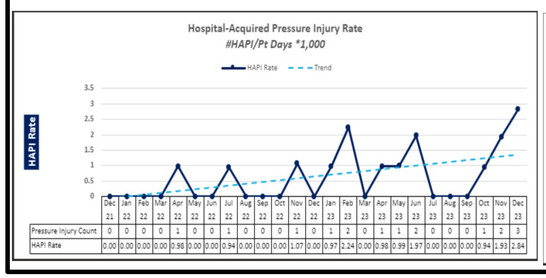
a. Multiple modes exist. The smallest value is shown

Results

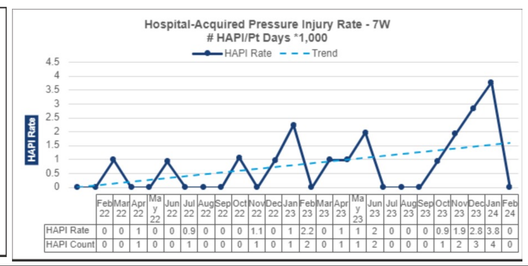
Statistical Analysis: Descriptive Statistics, Independent-Samples Mann-Whitney U Test, and T-test was used to gather data.

- Results of the study indicate a notable shift in hospital-acquired pressure injury (HAPI) incidence rates following the implementation of the educational interventions.
- Prior to the intervention in December 2023, all observed cases on the 7 West medical-surgical unit were characterized by a HAPI incidence rate of 3.00.
- In January 2024 after the intervention, HAPI rates increased to 4.00, suggesting a potential temporary increase immediately following the implementation of the interventions.
- However, February 2024, the HAPI incidence rate dropped to 0.00, indicating a substantial reduction in HAPI occurrence after educational interventions.

Pre-Education Implementation



Post- Education Implementation



Recommendations

Strengths: The use of a pre-post intervention design allows for the comparison of HAPI rates before and after the implementation of educational interventions, providing valuable insights into the effectiveness of the interventions over time. Interventions are implemented in a real healthcare setting, allowing for direct application and evaluation of their effectiveness in a clinical environment.
Limitations: The project is conducted at a single hospital, limiting the generalizability of the findings to other healthcare settings. The effectiveness of the educational interventions may vary across different hospitals or units. Long-term follow-up may be needed to assess the sustainability of the interventions and their effects on HAPI rates over time.
Nursing Implications: Ongoing education and training for nursing staff in pressure injury prevention such as prevention protocols and interventions in daily practice.
Recommendations: With an increase in HAPI rates hands-on training and simulation exercises can help reinforce learning and build confidence among nursing staff.

Conclusion

Hospital-acquired pressure injuries demand a comprehensive and strategic approach, combining effective preventive measures, staff education, and optimal resource allocation. With the implementation of care bundles and the role of the Healthy Skin Committee and education, standardizing practices across units can lead to a more consistent and effective approach in the reduction of HAPIs. Although findings suggest that while HAPI incidence rates fluctuate over time, the implementation of the Healthy Skin Committee and staff education may have played a significant role in reducing HAPI occurrence, particularly evident by the notable decrease observed in February 2024. However, further analysis and consideration of potential confounding factors are warranted to fully evaluate the impact of the interventions on HAPI rates.

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