



A study to assess effectiveness of assking bundle in preventing pressure sore among bedridden patient in selected hospital, Gandhinagar

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Abstract

Pressure sores are a major concern in hospitals and long-term care settings, especially among bedridden patients who face risks due to immobility, poor skin condition, and inadequate nutrition. These sores cause pain, complications, longer hospital stay, and increased healthcare costs. Globally, their prevalence ranges from 4% to 23%, with higher rates in elderly and critically ill patients. Since pressure sores often reflect poor-quality care and are largely preventable, structured approaches like the ASSKING bundle are essential. The ASSKING bundle provides an evidence-based checklist that supports early assessment and consistent nursing care. This study aims to assess how effective the ASSKING bundle is in preventing pressure sores in bedridden patients and to encourage its wider use in nursing practice.

Materials and Methods: Research design used for the study was quasi-experimental with one group pre-test post-test design. The investigator has adopted non-probability convenient sampling technique to select 30 samples of bedridden patients in ICUs in selected hospital of Ahmedabad. The Braden scale was used to assess the patient after and before providing ASSKING bundle.

Results: Data gathered was analyzed and interpreted using both experimental and inferential statistics. The mean and SD in pre-test were 14.66 and 1.27, whereas the mean and SD in post-test was 17.73 and 3.05. The calculated 't' value was greater than tabulated 't' value. Hence the null hypothesis was rejected and the research hypothesis was accepted. The result shows that ASSKING bundle was effective in reducing the risk of pressure sore development among bedridden patients.

Keywords: ASSKING bundle, bedridden patient, pressure sore

Introduction

Pressure sores, also known as pressure injuries or bedsores, are localized injuries to the skin and underlying tissues caused by prolonged pressure, friction, or shear forces. They commonly develop over bony prominences such as the heels, sacrum, elbows, hips, and back.

Pressure sores, also known as pressure injuries or bedsores, are localized injuries to the skin and underlying tissues caused by prolonged pressure, friction, or shear, usually over bony prominences such as the heels, sacrum, elbows, hips, and back. They are a major global health concern, particularly in bedridden or immobile patients, and lead to pain, increased morbidity, and reduced quality of life. Evidence-based care bundles help standardize preventive measures and reduce their occurrence.

The ASSKING care bundle is an evidence-based, 7-step framework used by healthcare professionals to prevent and manage pressure ulcers. It updates the original SSKIN model to enhance patient safety through structured risk assessment, skin care, surface selection, movement, moisture management, nutrition, and education.

Need for The Study

In 2024, a study conducted in Andhra Pradesh, India, found that pressure sore prevalence ranged from 14% to 65%, with incidence rates between 4.94% and 40.9%. Evidence shows that most pressure ulcers develop within the first two weeks of hospital admission. Pressure injuries remain a global healthcare challenge despite medical advancements, with incidence remaining stable or slightly increasing in 2022.

Objective

1. To assess the effectiveness of the ASSKING bundle care.
2. To find out the association between the ASSKING bundle with the selected demographic variables.

Hypothesis

H0: There will be no significance difference in the incidence of pressure sore among bedridden patient before and after implementation of the ASSKING bundle.

H1: There will be a significance difference in the incidence of pressure sore among bedridden patient before and after implementation of the ASSKING bundle.

Operational Definition

Effectiveness: In this study it refers to how ASSKING bundle has achieved the desired effect on preventing pressure sore.

ASSKING Bundle: In this study it refers to a set of nursing action used in healthcare to prevent pressure sore.

Delimitation

The study uses only the ASSKING bundle.

- Patients with existing pressure sore at the time of start of the study.
- Patient who are on air and water mattress and restricted body movements.
- Paediatric patients those who are in intensive care unit.

Methodology

Research design: Quasi experimental one group pre-test post-test design

Research setting: The present study was conducted in Apollo hospital, Gandhinagar

Target population: In this study target population consisted of bed ridden patients at ICU in Apollo Hospital, Gandhinagar.

Sample size: The sample consist of 30 samples of bedridden patients of ICU.

Sampling technique: The investigator has adopted convenient sampling technique to select the sample.

Inclusion criteria

- Age more than 18 years and less than 80 years
- Inclusion of all ICUs.
- Patient at risk of developing pressure sores (BRADEN

scale score above 18)

- Bedridden patients (unable to ambulate)
- Patient expected to remain in bed for atleast 3 days (allow enough time to apply the AASKING bundle and observe the effects).

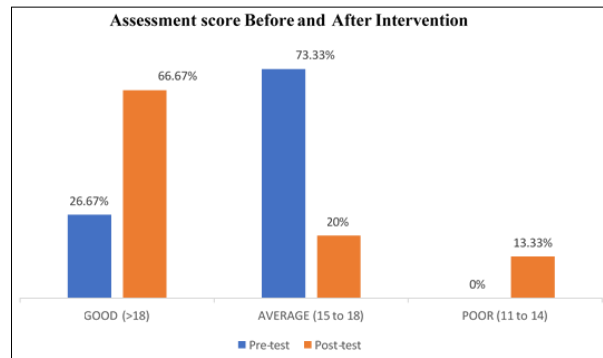
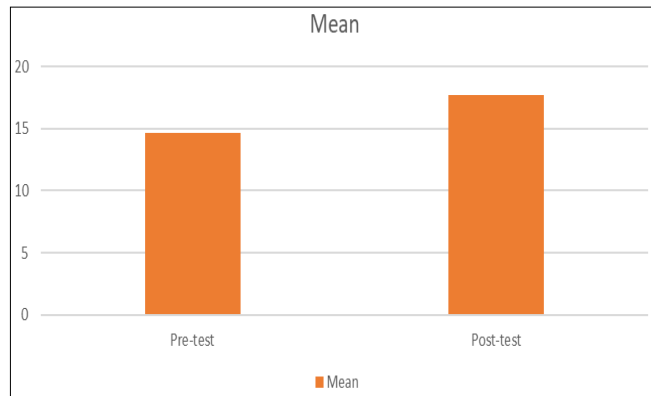
Exclusion criteria

- Patient with existing pressure sores at the time of start of the study.
- Patients with skin conditions or wound unrelated to pressure sore (e.g. burns or surgical wounds).
- Patients who are on air mattress and restricted body movement. Excluding PICU and NICU.

Analysis and interpretation of data collected based on different demographic variables.

Finding related to mean, mean difference, standard deviation and t- test value of the pre-test and post-test effectiveness score of samples.

Groups		Mean	Mean difference	SD	“t” value	Table “t” Value	df	Level of significance
Sample data	Pre-test	14.66	3.07	1.27	6.19	1.70	29	Significance
	Post-test	17.73		3.05				



Comparison between pre-test and post-test effectiveness score obtained by the respondents for reducing risk of pressure sore among bedridden patients shows that the mean pre-test score was 14.66 and mean post-test score was 17.73. thus, the mean difference of 3.07 the table also shows that the SD of pre-test score was 1.27 and SD of post-test score was 3.05. the calculated “t” value was 6.19 and the tabulated “t” value was 1.70 at 0.05 level of significance for 29 df, above table reveals that the mean post-test effectiveness score was significantly higher than the mean pre-test effectiveness score. The calculated “t” value (t=6.19) was greater than the tabulated “t” value (t=1.70), there for the null hypothesis H0 was rejected and research hypothesis H1 was accepted and it reveals that the ASSKING bundle was effective among bedridden patients.

In the above mentioned bar chart, in pre-test 26.67% of sample (8) in the group were having good assess level , 73.33% of sample (22) in the group were having average assess level and 0% of sample (0) in the group were having poor assess level ; In the post-test 66.67% of samples (20) in the group were having good assess level , 20% of samples (6) in the group were having average assess level and 13.33% of samples (4) in the group were having poor assess level regarding effectiveness of ASSKING bundle.

Analysis and intervention of data collection to assess level of effectiveness of ASSKING bundle.

Summary

The aim of the study and its association with selected variable in terms of effectiveness of ASSKING bundle to relieve pressure sores among bedridden patient Based on the objective extensive research for literature was needed to determine and develop the conceptual framework, research approach and methodology to conduct the study. Research approach used for the experimental study. Present study was undertaken at Gandhinagar. Digitalization in bedridden patient was used by reviewing the literature and under the expert guidance of lecturers from Apollo Institute of Nursing, Gandhinagar

Level	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Good (>18)	8	26.67%	20	66.67%
Average (15 to 18)	22	73.33%	6	20%
Poor (11 to 14)	0	0%	4	13.33%

Conclusion

The study concludes that implementation of the ASSKING bundle significantly reduces the risk of pressure sores among bedridden patients. The statistically significant

difference between pre-test and post-test results supports rejection of the null hypothesis and acceptance of the research hypothesis. Therefore, the ASSKING bundle is an effective nursing intervention for enhancing patient safety and preventing pressure ulcer development in bedridden individuals.

References

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