

A Descriptive Study to Assess the Knowledge Regarding Prevention of Bedsores in Unconscious Patients among the Staff Nurses at Sarji Super Specialty Hospital, Shivamogga

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Abstract: “Pressure ulcers are red areas of sores on the skin.” They are also called bed sores, and diabetes ulcers. They can occur over any bony parts of the body. Pressure ulcers are defined as areas of localized damage to the skin and underlying tissue caused by pressure, shear or friction. They are most common among patients who are immobile, elderly, have no sensation in some area of their body or in intensive care.^{1,2,3} Commonly known factors that increase the risk for developing pressure ulcers include immobility, circulatory problems, infections, incontinence, passivity and decrease in consciousness. Sometimes pressure ulcers cause intolerable suffering for the patient. They often are relapsing, painful and represent a risk for secondary infections. They may affect activities of daily living and social relations. **Material and methods:** The researcher has selected descriptive research design for the present study. In the present study the target population was nurses who are working in Sarji Super Specialty Hospital, Shivamogga, convenient sampling technique was used to select the samples. Sample size was 30. Self-administered structured Questionnaire was used to collect the data. **Results:** The knowledge levels of staff nurses regarding prevention of bedsores in unconscious patients: 26.66% having adequate knowledge, 70% are having moderate knowledge and 3.3% are having inadequate knowledge.

Keywords: pressure ulcers, nursing knowledge, patient care, prevention, immobility

1. Introduction

Skin is indispensable for human life and forms a barrier between the internal organs and the external environment and participate in many vital body functions. The skin is continuous with the mucous membrane at the external opening of the respiratory and urogenital system¹. Skin regulates the body temperature, protects the underlying structures from injury and microorganism. Skin disorders are encountered frequently in Nursing practices².

Pressure ulcers are defined as areas of localized damage to the skin and underlying tissue caused by pressure, shear or friction. They are most common among patients who are immobile, elderly, have no sensation in some area of their body or in intensive care^{4, 5}.

Pressure sores are most likely to happen when the pressure is confined to a bed or wheel chair for long period of time and is relatively immobile. The basic treatment is prevention and prevention cannot be stressed too strongly. Pressure sore may develop and can cause, serious infection, some of which are life threatening⁴. “Prevention is better than cure.” The basic treatment for pressure ulcer is “Prevention.” Nurses are primarily responsible for prevention and management of pressure sore and is a nursing practice priority across all care settings²³. Dr. Koziak who is excellent to be the father of modern pressure sore research, found that very high pressure over a short period of time was just as dangerous for developing ulcers as low pressure over a longer period of time⁶.

Commonly known factors that increase the risk for developing pressure ulcers include immobility, circulatory problems, infections, incontinence, passivity and decrease in consciousness⁷. Some time pressure ulcers cause intolerable suffering for the patient. They often are relapsing, painful and represent a risk for secondary infections. They may affect activities of daily living and social relations⁸. Pressure ulcers is a problem in both acute care settings and long term care settings includes homes²⁷. A few patient populations are enough to be at greater risk of developing pressure ulcers because of immobility, patients confined to bed for long periods, patients with motor or sensory dysfunction and patients to who experiences Muscular atrophy and reduction of padding between the overlying skin and the underlying bone are prone to pressure ulcers⁷.

Pressure ulcers are key clinical indicators of the standard and effectiveness of care. Prevention of pressure ulcers is a fundamental aspect of intensive care Nursing and quality improvement methods are arguably the most cost effective and intuitive approach to addressing this potentially serious problem⁸.

A study was conducted “To estimate the frequency of use of pressure-redistributing support surface (PRSS) among hip fracture patients and to determine whether higher pressure ulcer risk is associated with greater pressure. Patients (n=658) aged or ≥65 years who had surgery for hip fracture were examined by research nurse at baseline and on alternating days for 21 days. The result was 9 pressure ulcers were observed 36.4% of the 5,9 study visits. The odds of pressure ulcers were lower in the rehabilitation setting captured odds ratio (OR) 0.4, 95% confidence interval (CI) 0.3-0.6, in the

nursing home (adjusted OR 0.2, 95%, (1=1-0.3) and during read mission to the acute setting (adjusted OR 0.6, 95% (1-.4-0.9) than in the initial auto settings⁹

A study done on “Knowledge of pressure ulcer by under graduate nursing students in Brazil.” Third and forth ear undergraduate baccalaure at students at a public university in a Brazil CN=38 were asked to provide demographic information, identifying extracurricular activities and complete the pressure ulcer knowledge test. Students currently answered 67.71 of the pressure ulcer knowledge test. The result was student who participate in extra circular activities and wed the interest had significant impact on knowledge test score. Generally the students were found to have low pressure ulcer knowledge.¹⁰

Mirjum A Hulsenboom Assesses study to assess the knowledge of pressure ulcer prevention a cross-sectional and comparative study among nurses. The important of the study knowledge in 2003 was slightly better than that is 1991. The nurses were moderately aware of the usefulness of preventive measures. Nurses employed organizations that old not do so. Knowledge about prevention has improved little.¹¹

Reid and Morrison (1994) mentioned in their studies that pressure ulcer are present in 6-14% of all the patients in acute care setting and up to 25% in residential nursing care. A prevalence of 40% has been reported in adult intensive care unit. Two-third of pressure ulcer occur in patients over the age of 70, pressure ulcer may complicated the individual at any age.¹²

Hypothesis

H₀: There will be no significant association between knowledge regarding prevention of bedsore in unconscious patients among staff nurses with their demographic variables.

H₁: There will be significant association between knowledge regarding prevention of bedsore in unconscious patients among staff nurses with their demographic variables.

2. Material and Methods

In this study, a descriptive research design to the present study. In the present study the target population was nurses who are working in Sarji Super Speciality Hospital, Shivamogga, convenient sampling technique was used to select the samples Sample size was 30. Self -administered structured Questionnaire was used to collect the data.

Inclusion Criteria

- The nurses who are willing to participate in the study.
- The nurses who knows to read and write.

Exclusion Criteria:

- Who are not participate in this study
- Who are not willing to participate the study

Description of the Tool: Structured interview schedule.

The questionnaire consisted of **Part- I:** Demographic data of

Nurses at Sarji Super Speciality Hospital, Shivamogga. Professional qualifications, Years of experience, Areas of experience.

- Knowledge of Braden scale
- Application of Braden scale.
- Have you cared an unconscious patients
- Sex of Nurse
- Salary of Nurse

Part-II

Questions where created as knowledge of the Nurses regarding prevention of bedsore and contains 20 multiple choice questions.

The questionnaire consisted of **Part-I** : Demographic data of Nurses and **Part-II:** Questions where created as knowledge of the Nurses regarding prevention of bedsore and contains 20 multiple choice questions. Descriptive and inferential statistics were used to compute and analyse the data.

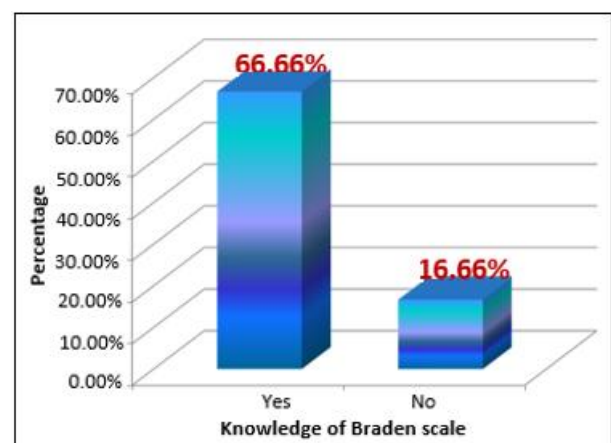
Frequency Distribution and Percentage of Demographic Variables based on Age

Characteristics	Category	Respondents	
Age in years	22-25 years	20	66.66%
	26-28 years	9	30%
	29-32 years	1	3.33%
	33-40 years	0	0%

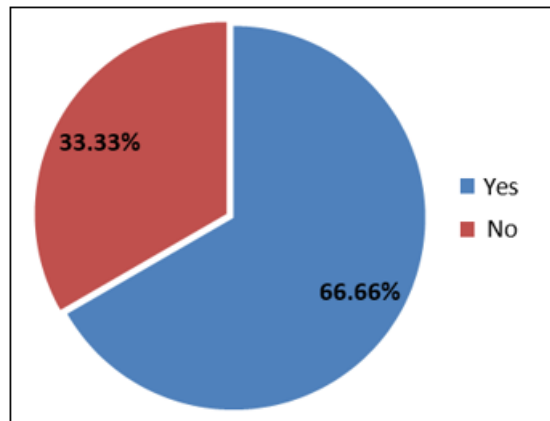
Interprets that among 30 samples in relation their age groups, 20 (66.66%) samples are between 22-25 years, 9 (30%) samples are between 26-28 Years 1(3.33%) are between 29-32 years.

Classification by knowledge of Braden scale

This bar diagram implies that among 30 samples in relation to their knowledge of Braden scale 25 (66.66%) have knowledge and 5 (16.66%) doesn't have knowledge of Braden scale.



Classification of applications of Braden scale



Interprets that among 30 samples in relation to their application of Braden scale. 20 (66.66%) were using with Braden scale and 10 (33.33%) were belongs to No.

Mean Knowledge of Staff Nurses in Association with Demographic Valuables

S. No.	Category	Observation	Mean Value
1	Age in years		
	a) 22-25	20	12.2
	b) 26-28	9	13.2
	c) 29-32	1	14
	d) 33-40	0	0
2	Gender		
	a) Female	27	13.7
	b) Male	3	12
3	Professional qualification.		
	a. ANM	1	19
	b. GNM	22	11.77
	c. BSC	7	14.71
	d. MSC	0	0
4	Years of experience		
	a. 1-2	20	12.55
	b. 3-5	8	13.62
	c. 6-10	2	10.5
	d. 11-15	0	0
5	Areas of experience		
	a. Neuro ward	2	16.5
	b. SICU	3	10.66
	c. General ward	19	12.98
	d. All the above	0	0
6	Knowledge of Barden scale		
	a) Yes	24	12.7
	b) No	6	12.66
7	Applications of Barden scale		
	a. Yes	20	13
	b. No.	10	12.1
8	Cared an unconscious patients		
	a. Yes	20	13.11
	b. No.	4	10

The following conclusions were drawn the result indicate that only 8 (26.66%) nurses and of 30 had adequate knowledge 21 (70%) of nurses had moderate knowledge 1 nurse (3.33%) out of 30 had inadequate knowledge.

Chi square test was done to find out association between mean of knowledge towards and selected social demographic variable such as age gender, professional qualification, years of experience, area a of experiences. Have you cared

unconscious patient, knowledge of Braden scale application of Braden scale and are not significant.

3. Nursing Implication

The result of the study shows that 21 of the 30 staff nurses had adequate knowledge regarding bed sore development, presentation and use of Braden scale so the study has several implications for nursing education, nursing practice, Nursing administration and Nursing Research.

Nursing Practice

This study carries an implication that the nurses play an important role in imparting the technique of using Braden scale to assess and prevent bed sore. The study helps to create an awareness of various sources of Braden scale to assess the development of bed sore. It is the nurse's responsibility to use those techniques an unconscious patient and teach the family members regarding the prevention of bed sore.

Nursing Education

The concept of prevention is better than; care were need to be concentrated by the staff nurses. The nursing standard care should be derived from a sound, scientifically validated evidence-based practice and knowledge. The nursing curriculum should be constructed to provide more extensive knowledge to the nursing students and in-service education to be organized for the staff nurses.

Nursing Administration:

Nursing as an administrator plays as importance role in educating the professionals and in policy making. The nurse administrator should pay attention to all students and staff nurses to whether they provide with enough knowledge regarding various preventive measures and assess the development of bed sore by using Braden scale.

Nursing Research:

Nursing practice initiates for nursing research, evidence-based practice is a corner stone of the professional practice, which will enhance the quality of patient area. A response must be generated among nurses to perform various studies to being at evidence-based practice concept. Nursing research help to identify the existing knowledge gap in Nursing Staff to improve the quality of nursing care.

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Conflict of Interest

Researcher does not have any Conflict of Interest

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References

- [1] Brunner and Suddarth's "Text book of medical and surgical nursing" 10th Edition Lippincott Williams publications pp: 175-183
- [2] Joys M. Black, Jane Hokanson Hawks "A Text book of Medical surgical nursing" 8th edition. Elsevier publications PP: 1208-1217
- [3] BT Basavanthappa "A Text Book of medical and surgical nursing". First edition. JP publications PP: 840-842.
- [4] Lewis Collier Heitkemper, "A text of medical and surgical nursing". Fourth edition. PP: 521-525
- [5] Linda Williams, Paula D. Hopper. "A text book of understanding medical and surgical nursing. Third edition- JP publications. PP: 246-248.
- [6] Dugas "A text book of Introduction to patient care A comprehensive approach to nursing" 4th edition Elsevier publications. PP: 543-545.
- [7] Nightingale Nursing times, Ashok Jain publications. PP:30-32
- [8] Nightingale nursing times, Ashok Jain publications. PP:50-52
- [9] Mrs. Queen Mary. S "A text book of Medical surgical nursing for GNM students. First edition. Florence publications. PP: 405-410
- [10] Chacon JM, Blanes L, Hochman B, Ferrersa LM. Prevalence of pressure ulcer. Sea Pacel Med. J 2009 Jul 127 (4) :211-5
- [11] Crowin Brown. Bed sore prevention and treatment of bed sore 2008 April 04 . Available from URL//www.articlesbase.com
- [12] Shukla VK, Shuklad, Singh D, Tripathi AK, Jaswals Basus. Risk assessment for pressure ulcer, a hospital based study J. Wound Ostomy Continence Nurse 2008 Jul-Aug.