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A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING USE OF BRADEN SCALE FOR PREVENTION OF BED SORE AMONG THE STAFF NURSES IN SELECTED HOSPITAL, GUWAHATI, ASSAM

Clady PC Zothankhumi., PallabiChetia and Betbhalin Mary Mukhim

Department of Medical Surgical Nursing, Assam downtown University, Guwahati, Assam

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ABSTRACT

Bed sore is a localized injury to the skin or underlying tissues, usually over a bony prominence, as a result of pressure in combination with shear or friction occluding blood flow to that area.

In this study, the data was collected within 1 month. A descriptive survey design was adopted for the study. In this study 82 numbers of the staff nurses working in ICU, SICU, General Ward and Private ward in Apollo Hospital, Guwahati, Assam were selected by using Non-Probability Convenient Sampling Technique. The tool used for the study were demographic variables, Structured knowledge questionnaire and observational checklist. The analysis was done by using both descriptive and inferential statistics in terms of frequency distribution, percentage, mean, standard deviation, Karl Pearson correlation coefficient and chi square test.

The result showed that majority of the staff nurses had moderate knowledge level (65.9%) regarding use of Braden scale for the prevention of bedsore and in practice the findings revealed that there is good practice level (62.2%) of the staff nurses regarding use of Braden scale for the prevention of bedsore. In the association there was association between the knowledge and demographic variables viz. age ($\chi^2=14.47$), sex ($\chi^2=6.85$) at $p<0.05$. and the association of practice and demographic variables viz. exposure to any in-service related to Braden scale ($\chi^2=4.75$) at $p<0.05$ significant level. There was a correlation between the knowledge and the practice of the staff nurses $r=0.365$ at $p<0.05$ significant level.

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INTRODUCTION

Bed sore is a localized injury to the skin or underlying tissues, usually over a bony prominence, as a result of pressure in combination with shear or friction occluding blood flow to that area.¹ The most common sites for bed sores are sacrum, elbows, heels, hips, ankles, shoulders, back and occiput. The factors that influence the development of bed sores are the intensity of the pressure, the duration of the pressure exerted on the skin and the ability of the patient's tissue to tolerate it.² The incidence rate in India, more than 80% of the bed ridden patients develop bedsore. The incidence varies from 0.4% to 38% in hospitals and 2.2%-23% in long term care settings.³

Objectives of the study

1. To assess the level of knowledge regarding use of Braden Scale for prevention of bed sore among staff nurses
2. To assess the level of practice regarding use of Braden Scale for prevention of bed sore among staff nurses

3. To find out the association between knowledge and practice of staff nurses regarding use of Braden Scale with selected demographic variables (age, sex, years of experience, area of working, educational qualification and exposure to in-service education related to Braden scale).
4. To find out the correlation between the knowledge and practice of staff nurses regarding use of Braden scale

Review of Literature

Kasikci M, Aksoy M, Ay E (2018) conducted “ a cross sectional study investigation of the prevalence of pressure ulcers and patient- related risk factors in hospital in the province of Erzurum, Turkey.” The objective of the study was to determine the prevalence of pressure ulcers and patient related risk factors in patients receiving treatment in province of Erzurum. The study was conducted on the inpatient 832 hospitalised for at least 24 hours after admission in the year 2016. The result show that the prevalence of pressure ulcers was calculated to be 12.7%, with the highest prevalence found

*Corresponding author: Clady PC Zothankhumi

Department of Medical Surgical Nursing, Assam downtown University, Guwahati, Assam

in intensive care clinics (35.3%). The age of the patient, the duration of the hospital stays, the presence of incontinence, albumin level problem, and the Braden scale below 17 were found to have impact (p,0.05).⁴

Ibrahim R (2015) conducted “a study assessment of nurses knowledge concerning Braden Scale in Critical Care units in Baghdad teaching hospitals, the objectives of the study is to identify nurses knowledge concerning Braden scale. A non-probability sampling technique which is purposive sampling technique was used. The study revealed that most of the sample of nurses they have moderate knowledge about the use of Braden scale. The study concluded that there is a relationship between knowledge of nurses with some variables such as level of education, year of experiences in nursing and experiences in CCU. In general, the study concluded that the nurses had moderate knowledge about the Braden Scale.⁵

A study was conducted by Saravanan SS (2014). “to assess the existing knowledge and skill in the use of Braden scale for prevention of pressure ulcers in the bed ridden patient among the staff nurses. The aim of the study is to test the effectiveness of the planned teaching use of Braden scale and to associate the pre-test knowledge and skill in use of Braden scale for predicting risk and prevention of pressure ulcer with demographic variables. Method a pre-experimental one group pre-test and post test was used. The sample of the study were the staff nurses working in MIMSR YaswanthraoChavan rural hospital, Latur selected by using convenient sampling technique as per the criteria informed consent was taken from the staff nurses. The result show that 39 (97.5%) nurses had inadequate knowledge and 1 (2.5%) had moderate knowledge in the pretest and post test 13 (32.5%).⁶

METHODS

The present study was conducted in a superspeciality hospital, Guwahati, Assam. In this study 82 numbers of the staff nurses working in ICU, SICU, General Ward and Private ward in Apollo Hospital, Guwahati.

Period of Study: 12th November 2019- 12th December 2019

Type of Study Design: 82 numbers of the staff nurses working in ICU, SICU, General Ward and Private ward in Apollo Hospital, Guwahati, Assam were selected by using Non-Probability Convenient Sampling Technique.

Mode of Data Collection: A descriptive survey design was adopted for the study.

Tools of Data Collection: A study was conducted by using Structured Knowledge Questionnaire and Observational checklist regarding Braden scale to assess the knowledge and practice among staff nurses.

Sample: Staff nurses working in ICU, SICU, General Ward and Private ward.

Sample size: Convenient sample of 82

A sample of 82 staff nurses working in ICU, SICU, General Ward and Private ward were taken.

Research Analysis and Interpretation

Table 1 Frequency and percentage distribution of knowledge score staff nurses regarding use of Braden scale

N=82

Knowledge	Score Range	Frequency (f)	Percentage (%)
Adequate	14-20	11	13.4
Moderate	7-13	54	65.9
Inadequate	0-6	17	20.7

The analysis presented in Table 1 showed that, majority (65.9%) of the staff nurses had moderate knowledge level, 20.7% had inadequate knowledge and 13.4% had adequate knowledge.

Table 2 Frequency and percentage distribution of practice score of the staff nurses regarding use of Braden Scale for prevention of bedsore.

N=82

Practice	Score Range	Frequency (f)	Percentage (%)
Poor	0-2	31	37.8
Good	3-5	51	62.2

The analysis presented in Table 2 showed that, majority (62.2%) of the staff nurses had good practice and 37.8% had poor practice.

Table 3 Association of knowledge of staff nurses regarding use of Braden Scale for prevention of bedsore with selected demographic variables.

N=82

Demographic variables	Knowledge Score			χ^2	Table value	df	Inference
	Adequate	Moderate	Inadequate				
1. Age in years							
a) 20-25	6	28	4	14.47	12.59	6	S
b) 26-30	5	22	2				
c) 31-35	3	3	2				
d) 36-40	3	1	3				
2. Sex							
a) Female	13	52	9	6.85	5.99	2	S
b) Male	4	2	2				
3. Years of experience							
a) <3years	8	32	5	8.67	12.59	6	NS
b) 3-6years	5	20	3				
c) 7-10years	4	2	3				
d) >10years	-	-	-				
4. Areas of working							
a) Intensive care unit	8	24	5	0.82	12.59	6	NS
b) Semi-Intensive unit	5	19	3				
c) General Ward	2	7	2				
d) Private ward	2	4	1				
5. Educational qualification							
a) GNM	8	27	4	1.01	12.59	6	NS
b) BSc	5	18	5				
c) PBSc	4	9	2				
d) MSc	-	-	-				
6. Exposure to any in-service education related to Braden scale							
a) Yes	14	31	9	5	5.99	2	NS
b) No	3	23	2				

p<0.05

S=Significant, NS= Not significant

The analysis presented in Table 3 showed that there is significant association found between knowledge of staff nurses with demographic variables viz. age and sex. Hence, the

null hypotheses is rejected and research hypotheses is accepted in terms of Age in Years and Gender inferring that there is association between knowledge of staff nurses with Age in Years and Gender. But no significant association was found between knowledge of staff nurses and other demographic variables such as Area of working, Years of experience, Educational Qualification and Exposure to any inservice education related to Braden Scale.

Table 4 Association of practice of staff nurses regarding use of Braden Scale for prevention of bed sore with selected variables.

N=82

Demographic variables	Practice Score		χ^2	Table Value	df	Inference
	Poor	Good				
1. Age in years						
a) 20-25	18	20	1.37	7.82	3	NS
b) 26-30	10	19				
c) 31-35	3	5				
d) 36-40	3	4				
2. Sex						
a) Female	29	45	1.17	3.84	1	NS
b) Male	5	3				
3. Years of experience						
a) <3years	19	26	3.36	7.82	3	NS
b) 3-6years	9	19				
c) 7-10years	6	3				
d) >10years	-	-				
4. Areas of working						
a) Intensive care unit	16	21	1.95	7.82	3	NS
b) Semi-Intensive unit	9	18				
c) General Ward	6	5				
d) Private ward	3	4				
5. Educational qualification						
a) GNM	15	24	1.35	7.82	3	NS
b) BSc	14	14				
c) PBSc	5	10				
d) MSc	-	-				
6. Exposure to any in-service education related to Braden scale						
a) Yes	27	27	4.74	3.84	1	S
b) No	7	21				

p<0.05

S=Significant,NS= Not significant

The analysis presented in Table4 showed that there is significant association found between practice of staff nurses with Exposure to any in-service education related to use of Braden Scale. Hence, the null hypotheses is rejected and research hypotheses is accepted in terms of Age in Years, Gender, Area of Posting, Educational Qualification and Years of experience

Table 5 Correlation between knowledge and practice of staff nurses regarding use of Braden Scale for prevention of bed sore.

N=82

Category	Mean	Standard Deviation	r-value	Table value	df	Inference
Knowledge	9.72	2.41	0.315	0.217	80	S
Practice	2.63	1.09				

p<0.05

S= Significant

The analysis presented in Table 5 showed that a significant correlation (r=0.365 at p<0.05) that implies there is a significant correlation between the knowledge and practice of

the staff nurses regarding use of Braden scale for the prevention of bed sore So, the null hypotheses is rejected and research hypotheses is accepted.

RESULT

In this study the knowledge of the staff nurses were assessed with structured knowledge questionnaire and found to be 11(13.45%) with adequate knowledge and 54(69.9%) with moderate knowledge and 17(20.7%) have inadequate knowledge regarding use of Braden scale for the prevention of bed sore. the practice of the staff nurses were observed with the observational checklist and 51 (62.2%) of the staff nurses have good practice and 31(37.8%) have poor practice. Chi square was computed to find out the association between knowledge and practice of the staff nurses regarding use of Braden scale for the prevention of bed sore with selected demographic variables viz. age in years, sex, years of experience, area of working, educational qualification, exposure to any in-service education related to use of Braden scale. It is found that there was a significant association between knowledge of the staff nurses with demographic variables viz..age, ($\chi^2=14.47$), sex ($\chi^2=6.85$) at p <0.05 and there was a significant association between the practice of the staff nurses with demographic variables viz.. exposure to any in-service education related to Braden scale. ($\chi^2=4.74$ at p<0.005). Karl Pearson’s correlation coefficient was computed to find out the correlation between knowledge and practice. it is found that there was a significant correlation between the knowledge and practice of the staff nurses (r=0.315 at p<0.005).

CONCLUSION

The present study was conducted to assess the knowledge and practice of the staff nurses regarding use of Braden scale among staff nurses in Apollo Hospital, Guwahati, Assam. The result reveal that 65.9% of the staff nurses had moderate knowledge and in the practice 62.2% had a good practice. Correlation between the knowledge and the practice was calculated and found that there was a significant correlation which means that adequate knowledge will infer good practice.

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