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Original Article

A study to assess the effectiveness of planned teaching programme on knowledge and skill in the use of Braden Scale for predicting risk and prevention of pressure ulcers

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Abstract

A study to assess the existing knowledge and skill in the use of Braden Scale for predicting risk and prevention of pressure ulcers in bedridden patient among the staff nurses. The aim of the study is to test the effectiveness of planned teaching use of Braden scale and to associate the pretest knowledge and skill in the use of Braden scale for predicting risk and prevention of pressure ulcer with their demographic variables. Material and method A pre-experimental design one group pretest and post test design was used. The sample for the study was staff nurses working in MIMSR Yaswanthrao chavan rural hospital selected by using convenience sampling technique as per the criteria inform consent was taken from staff nurses data was collected and recorded pre test intervention knowledge was checked through structure questionnaire and recorded intervention planned knowledge and skill I use of Braden Scale for predicting risk prevention. Assessment of post test knowledge skill score was done. Data was analysed using 't' test mean score knowledge of staff nurses before intervention 7.15 among 40 sample SD was 2.14 and skill SD is 0.99 after teaching knowledge SD is 2.01 skill is 0.99 mean difference is highly significant than calculated 't' value (30.25) skill (27.71) table value is (2.66) the degree of freedom is 1% level of knowledge and skill significance, so investigator concluded that is significant increase knowledge after intervention. To comparing the knowledge and skill used Mann Whitney Utest with their demographic variables medium of education using 'p' value is 0.67 and the skill 0.027; Domicile with knowledge 0.103 and skill.0.618; experience carried of knowledge is 0.57 and skill is 0.71 so there was significant association between pretest knowledge with demographic variables.

Keywords: Braden Scale, Staff Nurses, pressure ulcers.

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1. Introduction

Skin care, a fundamental component of basic care, reflects on the overall quality of care that a patient receives in hospital. Quality care aimed at preventing and minimizing skin breakdown and pressure ulcers has been identified as one of the nursing research priority. Pressure ulcer is a common problem in nursing practice and entails great expenses for the patients as well as for the health care service

Pressure ulcers are a common, painful and costly condition. Results of a 1991 study into the knowledge among Dutch hospital nurses on the usefulness of measures to prevent pressure ulcers showed moderate knowledge. Results were confirmed by subsequent studies. In

recent years, Dutch guidelines have been updated and the attention given to pressure ulcer care has been increased. This was expected to improve pressure ulcer care and to increase nurses' knowledge [2]

They cause great pain and are a source of serious systemic disease in some and seriously impair health in other systems. They cause extra work for nursing staff and are also the cause of feelings of guilt and distress. They delay other patients care by a long stay in hospital, sometimes 10-12 weeks for a grade four pressure sore [1].

Rosemary Crow stated that despite the mass of information on pressure sores, nurses are still failing to respond to the challenge of their preventive. For those who involved in patient care, the real challenge of pressure sores is to stop them appearing in the first place. Identifying those patients at risk, removing the causes of tissue necrosis and monitoring the patients progress is the essence of good practice [3].

2. Materials and Methods
Research design:
A pre-experimental design, one group pretest-posttest design was adopted for this study.
Variables:

Independent variable: Planned teaching programme on use of Braden Scale for Predicting Risk and prevention of pressure ulcers.

Dependent variable: Knowledge and skill in the use of Braden Scale

Extraneous variable: Individual difference in staff nurse.

Setting of the study:

The study was conducted in MIMSR Yaswanthrao Chavan Rural Hospital Latur,

Population:

Staff nurses working in MIMSR Yaswantharao Chavan Rural Hospital Latur.

Sampling technique

Convenience sampling technique.

Criteria for sample selection:

Inclusion criteria:

Staff nurses willing to participate in the study.

Exclusion criteria:

Staff Nurses not willing to participate

3. Results and Discussion
Frequency and percentage distribution of demographic variables of the staff nurses

N=40

S.N	Demographic variables	Frequency	Percentage %
1.	Age		
	a) 21-25 years	38	95
	b) 26-30 years	2	5
2.	Religion		
	a) Hindu	29	72.5
	b) Muslim	2	5
	c) Christian	8	20
	d) Others	1	2.5
3.	Medium of Education		
	a) Marathi	19	47.5
	b) English	21	52.5
	c) Hindi	-	-
4.	Domicile		
	a) Rural	31	77.5
	b) Urban	9	22.5
5.	Experience of Caring Bedridden Person in the Family		
	a) Yes	4	10
	b) No	36	90

Table 1 shows that out of 40 nurses 38 (95%) of them were between 21-25 years and 2(5%) of them were 26-30 years. Religion 29 (72.5%) of them were Hindus and 2 (5%) of them were Muslims, 8(20%) of them were Christians and 1(2.5%) of them belonged to other religion. Nineteen (47.5%) of them were Marathi medium nurses and 21 (52.5%) of them had completed their schooling in English medium. Majority of the students were from rural area 31 (77.5%) and only 9 (22.5%) of them were from urban area. Four (10%) of them had experience of caring bedridden person in the family and 36 (90%) of them did not have experience of caring bedridden person in the family.

Frequency and percentage distribution of level of knowledge score on use of braden scale for predicting risk and prevention of pressure ulcers among staff nurses in pretest & post test

SN	Level of Skill	Pretest		Posttest	
		Frequency	%	Frequency	%
1	Poor (1-3)	28	70	-	-
2	Fair (4-5)	12	30	-	-
3	Good (6-7)	-	-	2	5
4	Excellent (8-10)	-	-	38	95
	Total	40	100	40	100

Table 2 shows that 39 (97.5%) nurses had inadequate knowledge and 1 (2.5%) nurses had moderately adequate knowledge in pretest and post test 13 (32.5 %) increased. About 27 (67.5 %) of that had adequate knowledge. It shows that there was an inadequate knowledge among nurses in using the Braden Scale for predicting risk and prevention of pressure ulcers. After post test there was an adequate knowledge among staff nurses in using Braden scale for predicting risk and prevention of pressure ulcers after planned teaching programme.

Frequency and percentage distribution of level of skill score in using the braden scale for predicting risk and prevention of pressure ulcers among staff nurses in pretest & posttest

Table 3 reveals that 12 (30%) nurses had fair skill and 28 (70%) nurses had poor skill in pretest. In post test shows that 38 (95%) nurses had excellent skill and 2(5%) nurses had good skill. It indicates that there was excellent skill in using the Braden Scale for predicting risk and prevention of pressure ulcers after planned teaching programme.

Comparison of knowledge score on use of braden scale for predicting risk and prevention of pressure ulcers among ii staff nurses between pretest and posttest.
N=20

S.N	Level of Knowledge	Pretest		Posttest	
		Frequency	%	Frequency	%
1	Inadequate (0-12)	39	97.5	-	-
2	Moderately Adequate (13-20)	1	2.5	13	32.5
3	Adequate (21-25)	-	-	27	67.5
	Total	40	100	40	100

Table 4 shows that the mean knowledge score in pretest was 7.15 with a standard deviation of 2.45. In posttest the mean score was 21.45 with a standard deviation of 2.06. The mean skill score in pretest was 2.9 with a standard deviation of 0.99. In posttest the mean score was 9.20 with a standard deviation of 0.99. The improvement was statistically tested by paired 't' test and the results were found to be significant (P<0.001). This finding indicated that planned teaching programme on use of Braden Scale for predicting risk and prevention of pressure ulcers was effective in improving the knowledge and skill of the staff nurses.

Table shows that there was a significant association between pretest knowledge with demographic variable such as medium of education (P<0.027). The other demographic variables such as domicile and experience of caring bedridden person in the family were

Group	Mean Knowlege	Mean Skill	Knowledge Standard deviation	Skill Standard deviation	Knowledge 't' value	Skill 't' value	'p' value
Pretest	7.15	2.9	2.45	0.99	30.259	27.714	<0.001 *
Posttest	21.4	9.2	2.06	0.99			

not significant to the pretest knowledge level which was statistically confirmed with Mann Whitney U test.

Conclusion

The effectiveness of planned teaching programme on knowledge and skill in the use of Braden Scale for predicting risk and prevention of pressure ulcers was assessed N=40

among staff Nurses working in MIMSR Yaswanthrao Chavan Rural Hospital Latur. The study revealed that the PPT was effective in improving knowledge and skill in the use of Braden Scale for predicting risk and prevention of pressure ulcers in bedridden patients among staff nurses.

* - Significant

S.N	Groups	No. of Subjects	Knowledge Mean	Skill Mean	Knowledge SD	Skill SD	Knowledge Mann – Whitney U test	Skill Mann – Whitney U test	knowledge 'p' value	Skill 'p' value
1	Medium of Education									
	a)Marathi	19	6.15	3	2.08	0.882	119	214.5	0.67	0.027 *
	b) English	21	8.04	28.57	2.43	1.108				
	c) Hindi	-	-	-	-	-				
2	Domicile									
	a) Rural	31	7.16	2.77	2.17	0.97	152	91.5	0.103	0.681
	b) Urban	9	7.1	3.44	31.4	0.88				
3	Experience of Caring Bedridden Person in the Family									
	a) Yes	4	5.25	2.77	1.25	0.5	32.5	60	0.57	0.71
	b) No	36	7.36	3.44	2.46	1.04				

Reference:

1. Black, J.M., & Hawks, J.K. (2005). Medical Surgical Nursing: Clinical management for positive outcomes. St. Louis: Saunders.
2. Rosemary Crow J.B. (1990). Nursing theories: The Base for professional Nursing Practice. New Jersey: Prentice-Hall.
3. Gowda Nanjunde, S.N. (2005). Basic Principles and practice of Nursing. Bangalore:
4. Lewis, S.M., Heitkemper, M.M., & Dirksen, S.R. (2004). Medical Surgical Nursing: Assessment and management of clinical problems. Missouri: Mosby.
5. Polit, D.F., & Beck, C.T. (2006). Nursing Research: Generating and assessing evidence for Nursing Practice. New Delhi: Wolters Kluwer.