EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME (STP) ON KNOWLEDGE REGARDING USE OF BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK AMONG B.SC NURSING FIRST SEMESTER STUDENTS IN SHRIDEVI COLLEGE OF NURSING, TUMKUR

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ABSTRACT

BACKGROUND: Skin is the largest organ covering the entire outside of the body. Skin care is a fundamental component of basic patient care and reflects on the overall quality of care a patient receives in the hospital. Pressure ulcers have been described as one of the physically debilitating complications in the 20* century and it will increase the costs of health care. OBJECTIVES: 1.To assess the knowledge regarding use of Braden Scale for predicting pressure sore risk among B.Sc nursing first semester students.2.To evaluate the effectiveness of Structured Teaching Programme on knowledge regarding use of Braden Scale for predicting pressure sore risk among at B.Sc nursing first semester students in terms of gain in knowledge scores. 3.To find out an association between pre-test knowledge scores regarding use of Braden Scale for predicting pressure sore risk among B.Sc nursing first semester students and their selected socio-demographic variables. METHODS: A pre experimental one group pre-test post-test design was used. The sample size of 60 were selected by using Probability; simple random sampling technique. Data was collected from samples in Shridevi College of Nursing, Tumkur by means of structured knowledge questionnaire. The reliability of the tool was r =0.89 and analysis was done using descriptive and inferential statistics. RESULTS: The overall post-test knowledge scores of B.Sc nursing first semester students had Majority of 30(50%) with good knowledge, 20(33.33%) had poor knowledge and

10(16.66%) had average knowledge in the post-test, regarding use of Braden scale in predicting pressure sore risk. There was significant gain in knowledge score of 74.94% who were exposed to structured teaching programme. The paired 't' test value **(t cal=51.09*)**was greater than the tabulated value (t tab' 2.000) for knowledge, hence proved that stated hypothesis i.e. mean post-test knowledge scores of Nursing students who have been exposed to structured teaching Programme will be significantly higher than the mean pre-test knowledge scores at 0 05 level of significance. CONCLUSION: The study concluded that structured teaching programme was more effective for student nurses to increase the knowledge regarding use of Braden scale in predicting pressure ulcer risk.

KEYWORDS: Ulcer risk, structured teaching programme, knowledge, pressure.

INTRODUCTION

Skin is the largest organ covering the entire outside of the body. It receives one third of the body's blood Skin is tough and pliable, forming the body's protective shield against heat, light chemical and physical action. The skin protects us from microbes and the elements, helps regulate body temperature, and permits the sensations of touch, heat, and cold. It plays an active role with the immune system, protecting us from infection. Destruction or skin breakdown can range from minor scrapes, cuts, tears, blisters or burns with destruction of tissue down up to the bone. Anemia, malnutrition, and diabetes are some of the important risk factors, that occur individually or in combination, and can lead to form pressure ulcer.[1]

A sound skin makes you feel good and look healthy; skin is often an indicator of our holistic wellness. Maintenance of a glowing, healthy skin needs good personal hygiene, unpolluted environment, avoiding contact with chemicals, good eating habits and proper rest and peace.[2]

Skin care is a fundamental component of basic patient care and reflects on the overall quality of care a patient receives in the hospital. Maintaining skin integrity is an important function of nursing. Nurses must use consistent observations and skin care measures to prevent abrasions and subsequent tissue breakdown. Impaired skin integrity leads to skin irregularities. Skin irregularities that are frequently encountered in nursing practice is pressure ulcer and is usually a threat to the elderly and to patients who have restricted mobility or chronic illness.[3] The bedridden patients face various problems which include depression, nervousness, poor hygiene, and pressure ulcer.[4]

The word pressure means stress or strain. It is the force exerted by one object upon another. In the pressure areas of the body where the tissues may be compressed between the bed and underlying bone, especially the sacrum, greater trochanters, and heels, constant pressure against the pressure areas will reduces the blood supplies to the area and the affected tissue will become ischemia and leads to necrosis.[5]

Pressure ulcer also known as pressure sores, decubitus ulcers and bedsores and are now referred to as pressure injuries, pressure ulcers are localized damage to the skin and underlying tissue that usually occur over a bony prominence as a result of pressure or pressure in combination with shear and friction. The most common sites are the skin overlying the sacrum, coccyx, heels, or the hip, but other sites such as the elbows, knees, ankles, back of shoulders, or the back of the cranium can be affected.[6]

Pressure ulcer can be prevented by assessing the risk factors like Poor blood circulation, Immobility, Poor nutrition, rubbing or friction. If pressure ulcers cannot be assessed cautiously, it will lead to pain and decreased quality of Patient's life. Assessing all these risk factors is important to prevent pressure ulcers among patients.[7]

Pressure ulcers remain one of the most neglected aspects of health-care provision in India and identifying their associated risk factors at an early stage may go a long way in preventing their occurrence.'

Objectives of the study

1) To assess the knowledge regarding use of Braden Scale for predicting pressure sore risk among B.Sc nursing first semester students.

2) To evaluate the effectiveness of Structured Teaching Programme on knowledge regarding use of Braden Scale for predicting pressure sore risk among st B.Sc nursing first semester students in terms of gain in knowledge scores.

3) To find out an association between pre-test knowledge scores regarding use of Braden Scale for predicting pressure sore risk among B.Sc nursing first semester students and their selected socio-demographic variables.

Research Hypothesis

H_1: The mean post-test knowledge scores of nursing students who have been exposed to structured teaching programme will be significantly higher than the mean pre-test knowledge

scores at 0.05 level of significance.

H₂: There will be statistical association between pre-test knowledge scores of nursing Students with their selected socio-demographic variables at 0.05 level of significance.

Methodology

Research Approach: Research approach used was evaluative approach.

Research Design: The research design for the study was Pre-experimental; one group pre-test, post-test design.

Research Setting: Shridevi college of nursing, Tumkur

Population: B.Sc nursing first semester students studying in Shridevi college of nursing, Tumkur

Sample: The sample for the study were the B.Sc nursing first semester students of age 20-22 years studying in Shridevi college of nursing, Tumkur

Sample Size: The sample size selected for the present study was 60 nursing students of Shridevi college of nursing, Tumkur

Sampling Technique: Simple random sampling technique.

Criteria for Selection

Inclusion Criteria: B.Sc nursing first semester students who are:

✓ In the age group of 20-22 years.

✓ Available at the time of data collection.

✓ Willing to participate in the study.

Exclusion Criteria: B.Sc nursing first semester students who are sick during the time of data collection.

Instrument Used

Section A: Demographic Performa was used to collect the baseline variables.

Section B: A structured knowledge questionnaire regarding use of Braden scale in predicting pressure sore risk was prepared by the researcher for the present study.

Description of the instruments

Section I: Socio-demographic data which consists of 6 variables that includes-Age, gender, religion, course of study, type of family, habitat, and source of information.

Section II: Structured knowledge questionnaire that consists of 49 items.

The structured knowledge questionnaire was divided into following parts.

RESULTS

Section I: Description of demographic variables of B.Sc nursing first semester students

The 38% of subjects are in age group of 21 years.

The 82% are females.

The 66% belongs to Hindu religion.

The 86% belong to nuclear family.

The 27 (54%) belongs to rural area.

The 21 (42%) had source of information by electronic media urban area.

Table No 1: Mean, Median, Mode, Standard Deviation and Range of knowledge scores of subjects regarding use of Braden Scale for predicting pressure sore. n=60

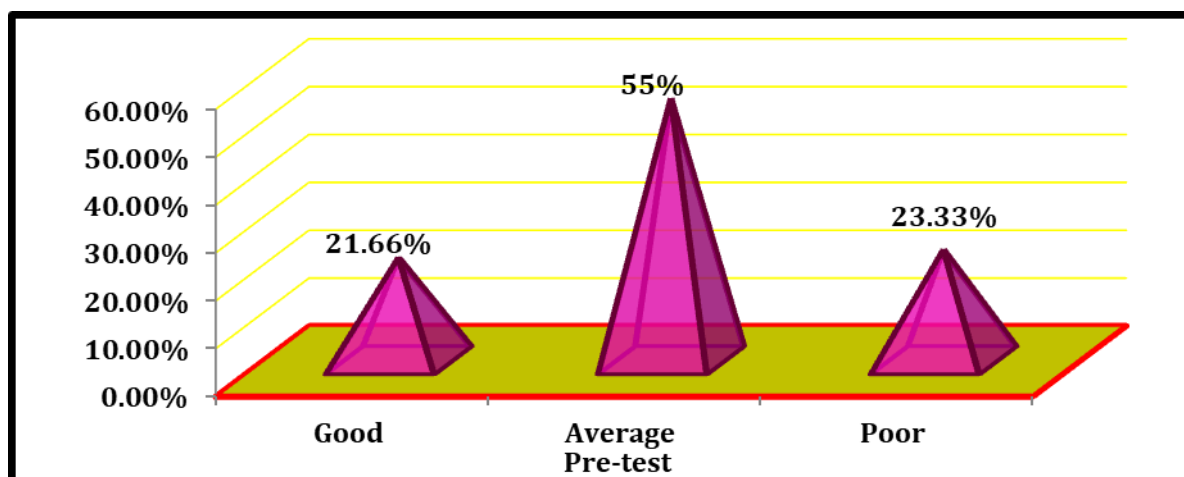| Area of Analysis	Mean	Median	Mode	Standard Deviation	Range
Pre-test	6.51	06	03	3.14	9
Post test	29	29	30	1	3
Difference	22.49	23	27	2.14	6

Table No 1 reveals that

The pre-test mean knowledge score was mean 6.51, median 06, mode 03, standard deviation 3.14, and range 09. Whereas the post-test, mean knowledge score was 29, median 29, mode 29, standard deviation 1 and range 3. The overall difference in mean knowledge score was 22.49, median 23, mode 27, standard deviation 2.14 and range 6.

Table No 2: **Frequency and percentage distribution of Pretest knowledge scores of subjects regarding use of Braden Scale for predicting pressure sore.n=60**

Knowledge score	Pre-test	
	Frequency(f)	Percentage (%)
Good (13.63 & above)	13	21.66
Average (7.23-13.63)	33	55
Poor (7.23 & below)	14	23.33

Table No 2 & Graph 1 reveals that

Majority of subjects 33(55%) had average knowledge, 14(23.33%) had poor knowledge and 13(21.66%) had good knowledge in the pre-test, whereas in post test 60(100%) of them had good knowledge.
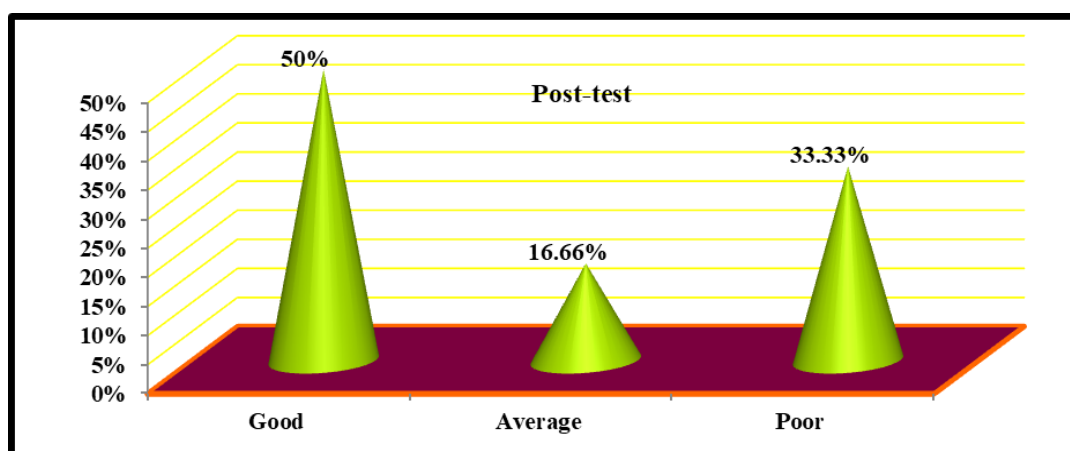
Graph 01: The Pyramidal graph represents the pre-test percentage distribution of the subjects according to their level of knowledge scores.

Table No 3: **Frequency and percentage distribution of Post-test knowledge scores of subjects regarding use of Braden Scale for predicting pressure sore. n=60**

Knowledge score	Post-test	
	Frequency(f)	Percentage (%)
Good (30 & above)	30	50
Average (28-30)	10	16.66
Poor (28 & below)	20	33.33

Table No 3 & Graph 2 reveals that

Majority of subjects 30(50%) had good knowledge, 20(33.33%) had poor knowledge and 10(16.66%) had average knowledge in the post-test.
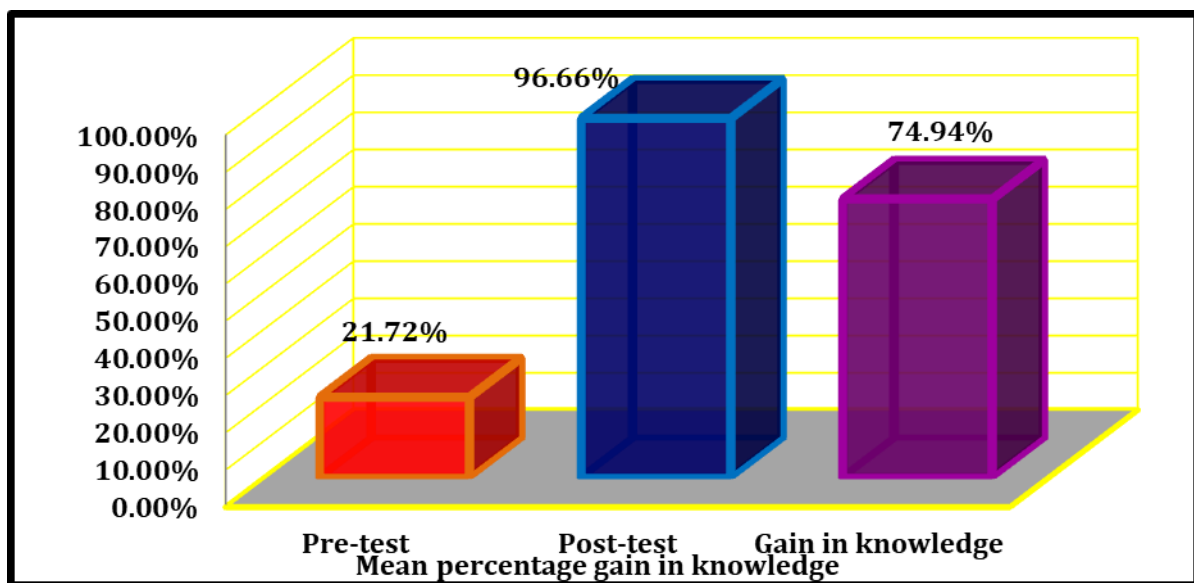

Graph 2: The conical graph represents the post-test percentage distribution of the subjects according to their level of knowledge scores

Table No 4: **Frequency and percentage distribution of knowledge scores of subjects regarding use of Braden Scale for predicting pressure sore.n=60**

Mean % of knowledge score of subjects			
Total score	Pre-test	Post test	Gain in knowledge
1800	21.72%	96.66%	74.94%

Table No 4 reveals that

The mean percentage of knowledge scores in the pre-test was 21.72% and 96.66% in post-test. Hence the total gain in Knowledge is 74.94%.

Graph 3: The column graph represents the mean percentage gain in knowledge of the subjects according to their level of knowledge scores

Table No 5: Mean difference $\overline{(d)}$, Standard Error of difference $(\overline{S}Ed)$ and paired 't' values of knowledge scores of subjects regarding use of Braden Scale for predicting pressure sore. n=60

Mean Difference $(\overline{d})$	Standard error of difference $(SEd)^{\overline{}}$	Paired 't' values	
		Calculated	Tabulated
59	0.44	**51.09***	2.000

*Significant at 5% level

Table No 5 reveals that

The calculated paired 't' value (**t $_{cal}$ = 51.09***) was greater than the tabulated paired 't'

value (t_{tab}= 2.000). **Hence, H$_1$ was accepted**.

This indicates that the gain in knowledge score was statistically significant at 0.05 level of significance. Therefore, the Structured Teaching Program was effective in enhancing knowledge regarding use of Braden Scale for predicting pressure sore.

H$_2$: There will be statistical association between pre-test knowledge scores of B.Sc nursing first semester students with their selected socio-demographic variables at 0.05 level of significance.

There was no association found between pre-test with socio-demographic variables. **Hence, H$_2$ was rejected**

DISCUSSION

The present study assessed the effectiveness of a structured teaching programme on the knowledge of B.Sc nursing first semester students regarding the use of the Braden scale for pressure sore prevention. The findings demonstrated a substantial improvement in both knowledge scores in the post-test phase, confirming the effectiveness of the intervention. These results are consistent with the findings resonating with the results of Gagandeep Kaur et al. (2021), who reported that 96.7% of staff nurses demonstrated very good knowledge post intervention, compared to 73.3% with only good knowledge in the pre-test. Their study highlighted a significant effect of the structured teaching programme. [9]

RECOMMENDATIONS

Keeping in view the findings of the present study, the following recommendations were made:

- A similar study can be replicated on a larger sample size thereby findings can be generalized for larger population.
- A comparative study can be conducted among staffs of different wards with same setting.
- A descriptive study can be conducted to assess the knowledge, attitude, and practice regarding use of Braden scale in predicting pressure ulcer risk among student nurses.
- A similar study can be conducted and evaluated using alternative teaching strategies like self- instruction module, video assisted teaching.
- An observational study can be conducted regarding use of Braden scale among staff nurses.

CONCLUSION

- The overall pre-test knowledge scores of were average.
- The post-test knowledge scores of the subjects after administration of the structured

teaching programme was significantly higher than the pre-test knowledge scores.

🞦 The results revealed that there was no statistical association between the knowledge scores and variables.

🞦 The study concluded that structured teaching programme was more effective for to increase the knowledge regarding use of Braden scale in predicting pressure ulcer risk.

REFERENCES

1. Dean J. Skin health: Prevention and treatment of skin breakdown. Transverse Myelitis Assoc J. 2011;5:26-32.

2. Nadagaddi BS, Sikandar BJ, Chopade S, Appangouda P. The effectiveness of individual structured teaching Programme (istp) on use of Braden scale for predicting pressure sore risk for Bed fast patients among staff nurses at selected hospital of Bijapur. Int J Curr Adv Res. 2018;7(9):15420-423.

3. Kaur I. Preventing pressure ulcer. Nightingale Nurs Times. 2015;10(12): 50-52.

4. Jagtap M, Tata S, Philip ES, Jadhav K. Effectiveness of structured teaching programme on use of Braden scale among nurses at tertiary care hospital, Karad. Int J Sci Res. 2018;6(7):868-72.

5. Patidar DD, Patidar K, Patel J. Effectiveness of structured teaching programme on knowledge of staff nurses regarding use of Braden scale on pressure sore in selected hospital. Int J Adv Nurs Manag. 2019;7(3):275-78.

6. Pressure nulcer Wikipedia [online] 2019 [cited 2025 dec 12]. Availablefrom: https://en.wikipedia.org/wiki/Pressure ulcer

7. CourtneyH. Pressure ulcer [online]s 2019 [cited 2025 dec 14]. Availablefrom: https://www.hopkinsmedicine.org/geriatric medicine gerontology

8. Daniel B, Ashkan J. Pressure ulcer prevention: Evaluation and Management. J Am Fam Phys. 15;78(10):1186-1189.

9. Gagandeep Kaur, et al. A study to assess the effectiveness of structured teaching programme regarding use of Braden scale in prevention of pressure sores in terms of knowledge among staff nurses at selected hospital, District Hisar (Haryana). Int J Sci Res. 2021;10(6):1-6.