



# A Study to assess the Effectiveness of Structured Teaching Programme on knowledge regarding prevention of pressure ulcer by using Braden Scale among Staff Nurses working in selected hospitals at Lucknow, UP

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## ABSTRACT

**Introduction:** Skin is the first barrier for microorganisms to enter in human body. Healthy skin indicates the health status of a person. It protects the persons from infections and injuries. The skin completely covers the body and continuous with the membranes living the body orifice. It is regulating body temperature; protect underlying structures from injury and microorganisms. The skin is an active and largest organ in our body. A wound is the break in the continuity of the skin or mucous membrane. Wound is a simple when only skin is involved and it is complex when underlying tissue that is muscle, nerves and blood vessel are also involved. Pressure sores are developing due to abrasions and continuous pressure on bony prominence. The continuous pressure directly affects tissue perfusion which leads to pressure ulcer. **Objectives:** 1. To evaluate the effectiveness of Structured teaching Program on knowledge regarding prevention of pressure ulcer by using Braden scale among staff nurses. 2. To find the association between level of knowledge scores (Pre-test) regarding prevention of pressure ulcer by using

Braden scale with their selected demographic variables. **Materials and Methods:** A pre-experimental one-group pre-test and post-test design was used for the study. A total of 100 Staff Nurses students were selected by using purposive sampling technique. A Structured teaching programme on prevention of pressure ulcer by using Braden scale was implemented, and staff nurses knowledge levels were assessed before and after the program using a standardized knowledge questionnaire. This study was conducted in Staff Nurses working at Sewa Hospital & Research centre Lucknow. **Results:** There was a significant improvement in the students' knowledge regarding OSPE following the structured evaluation program. This was evidenced by the increase in post-test scores compared to pre-test scores, with a mean difference of 6.06, as confirmed by the paired samples t-test ( $t = 12.71$ ,  $p < 0.001$ ). This indicates that the structured evaluation program effectively enhanced the students' understanding of OSPE. **Conclusion:** The post- tests mean ( $17.26 \pm 2.33$ ) was apparently higher than that of mean pre-test ( $10.23 \pm 2.89$ ) knowledge score. The calculated “t” value (86.24) was greater than the table value (1.98) at 0.05 level of significance. The structured teaching programme was effective in enhancing staff nurses knowledge regarding prevention of pressure ulcers.

**Keywords:** Effectiveness, Structured Teaching Programme, Pressure ulcer, Braden Scale, Staff Nurses.

## INTRODUCTION:

**Background of the Study:** Pressure ulcers are a common, expensive and painful health-care problem, with prevalence rates ranging from 3% to 66% in health-care organizations. The estimated annual treatment costs are 21.07 billion in the UK, 22.4 billion in the USA and 20.6 million in Netherland.

An estimated 1.7 million patients develop Pressure ulcers annually. Both prevention and treatment of Pressure ulcers are costly in term of health care dollars and quality of life for patients at risk because the cost in term of pain and suffering for a person with Pressure ulcer can't be quantified, the old saying “an ounce of prevention is worth a pound of cure” is particularly applicable to Pressure ulcers.

The most common place for pressure sore are over bony prominence (bone close to the skin) like the elbow, heels, lips, ankles, shoulders, back and the occipital of the head. Skin care is hence a primary activity of the nurses. A bed sore can occur on any body part due to continuous pressure on the area. Pressure of 200 mm hg for 16 hrs or 600 mm hg for 11 hours required before bed sore. The continuous pressure directly affects tissue perfusion which leads to pressure ulcer. The prevalence of bed sore is reported from 3.5-69%.

According to Bergstrom N., Braden B. J., & Holman V, the Braden Scale for predicting pressure ulcer risk was developed to foster early identification of patients at risk for forming pressure ulcers. The scale is composed of six subscales that reflect sensory perception, skin moisture, activity, mobility, friction and shear, and nutritional status.

**NEED FOR THE STUDY:**

An Average of approximately 50% of the hospitalized individuals has mobility impairment. Immobilization and inactivity are frequently present in patients with involvement of musculoskeletal, neurological system and also among critically ill patients. An immobilized individual is at a greater risk of developing Pressure sore.

More than one million individuals develop pressure ulcers each year. It is estimated that 11% of residents in skilled-care and nursing homes facilities suffer from Pressure ulcers, 10% in acute care, and 4.4% in home care. In hospitals, the incidence of Pressure ulcers ranges from 2.7% to 29.5%. According to the journal, Pressure ulcers negatively affect a patient's quality of life and are associated with an increased incidence of medical complications, infection, and death. Every year an estimated 60,000 people die from complications related to Pressure ulcers.

**STATEMENT OF THE PROBLEM**

A Study to assess the Effectiveness of Structured Teaching Programme on knowledge regarding prevention of pressure ulcer by using Braden Scale among Staff Nurses working in selected hospitals at Lucknow, UP

**OBJECTIVES OF THE STUDY**

1. To evaluate the effectiveness of Structured teaching Program on knowledge regarding prevention of pressure ulcer by using Braden scale among staff nurses.
2. To find the association between level of knowledge scores (Pre-test) regarding prevention of pressure ulcer by using Braden scale with their selected demographic variables.

**RESEARCH METHODOLOGY****Research Approach:**

A quantitative approach was adopted to determine the research study.

**Research Design:**

A Pre-experimental one-group pre-test and post-test design was used for the study.

**Setting of the Study:**

The setting of the study is Sewa Hospital & Research Centre, Lucknow.

**Target Population:**

The target population for this present study includes all the staff nurses.

### **Accessible Population:**

The accessible population for the present study includes Staff nurses working in Sewa Hospital & Research Centre, Lucknow.

### **Sample Size:**

The sample size of the present study is 100 staff nurses.

### **Sampling Technique:**

Non probability purposive sampling technique was adopted for this study.

### **Inclusion criteria:**

Staff Nurses who are;

- Available at the time of data collection.
- Willing to participate in the study
- Working in Sewa Hospital and Research Centre, Lucknow.

### **Exclusion criteria:**

Staff Nurses who are;

- Who are sick or on leave

### **Variables of the Study:**

**Demographic variables:** Demographic variables like age, gender, professional qualification, Years of experience, Monthly income, Type of hospital, Current working area and In-service education programme.

**Independent variables:** Structured Teaching Programme regarding prevention of pressure ulcer by using Braden scale.

**Dependent variables:** Knowledge of Staff nurses.

### **Description of the Tool:**

**Part-A:** Demographic variables include age, gender, professional qualification, Years of experience, Monthly income, Type of hospital, Current working area and In-service education programme.

**Part-B:** Structured Knowledge Questionnaire on knowledge regarding prevention of pressure ulcer by using Braden scale.

## DATA ANALYSIS

**FINDING RELATED TO DEMOGRAPHIC DATA:** Highest percentage in the demographic data including the Age group 58% (34-38), Gender 64% (Female), Professional qualification 63% (GNM), Years of experience 31% (Above 10 years), Monthly income 63% (Above 30 years), Type of hospital 58% (Government), Current working area 65% (General ward), In service education programme No (80%), and First source of knowledge 06% (In service education).

### FINDING RELATED TO PRE AND POST KNOWLEDGE SCORE:

A paired samples t-test was conducted to compare the knowledge of staff nurses regarding prevention of pressure ulcers before and after the structured teaching programme.

Observation	N	Mean	Standard Deviation	t value	p value
Pre-test	100	10.23	2.89	86.24	0.000
Post-test	100	17.26	2.33		

The post- tests mean ( $17.26 \pm 2.33$ ) was apparently higher than that of mean pre-test ( $10.23 \pm 2.89$ ) knowledge score. The calculated “t” value (86.24) was greater than the table value (1.98) at 0.05 level of significance.

## RECOMMENDATIONS FOR FUTURE RESEARCH

On the basis of the findings of the study, it is recommended that the following study can be undertaken to strengthen quality of nursing care;

- Similar study can be replicated on a large sample.
- A comparative study can be conducted among the staff of different wards with same setting.
- A similar study can be replicated on a sample with different demographic characteristics.
- 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 post- tests mean ( $17.26 \pm 2.33$ ) was apparently higher than that of mean pre-test ( $10.23 \pm 2.89$ ) knowledge score. The calculated “t” value (86.24) was greater than the table value (1.98) at 0.05 level of significance. The structured teaching programme was effective in enhancing staff nurses knowledge regarding prevention of pressure ulcers.

## SOURCE OF FUNDING: NIL

## CONFLICTS OF INTEREST:

There are no conflicts of Interest.

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