



USE OF BRADEN SCALE -A NARRATIVE REVIEW

Rekha Pant^{1*}, Mannu², Diksha Biswal³, Sadhana Rawat⁴

¹*PG Tutor, M.Sc. Medical Surgical Nursing SGT University, Haryana

²PG Tutor, M.Sc. Medical Surgical Nursing SGT University, Haryana

³PG Tutor, M.Sc. Medical Surgical Nursing SGT University, Haryana

⁴Nursing Tutor, School of Nursing, Dev Bhoomi Uttarakhand University, Dehradun

***Corresponding Author:** Rekha Pant

*PG Tutor, M.Sc. Medical Surgical Nursing SGT University, Haryana

Abstract

The main organ that covers our outside of the body is the skin. Skin is the largest organ in our body. One-third of the blood that the body circulates passes through it. The skin serves as a barrier against heat, light, chemicals, and physical exertion. The skin offers us the ability to feel touch, heat, and cold, shields us from viruses and environmental variables, and helps control body temperature. To fight infection, it actively works with the immune system. In addition to small scrapes, cuts, tears, blisters, or burns, destruction or skin breakdown can involve tissue degeneration that extends all the way to the bone. Anemia, malnutrition, and diabetes are some of the primary risk factors that might result in pressure ulcers either individually or in combination. Skin often serves as an indicator of our general wellness; healthy skin makes you feel good and makes you look nice. Good personal hygiene, an unpolluted environment, avoiding chemical contact, healthy eating practices, adequate relaxation, are all necessary for maintaining beautiful, healthy skin

Aim-This literature review aimed to check knowledge of Staff Nurses and Nursing students regarding prevention, cause & treatment of pressure ulcers and use of Braden Scale.

Method-An extensive search and numerous evaluation of the peer-reviewed literature was conducted for narrative review. Journal article were retrieved from three database (Pub Med, Medline, Embase & Research gate) using the search terms 'pressure ulcer' and 'Braden Scale'.

Result-The search yielded eleven studies related to knowledge among Staff Nurses regarding use of Braden Scale. Subsequent review identified people have very less knowledge regarding pressure ulcers and its occurrence.

Keywords – Braden Scale, Pressure ulcers.

Introduction

Braden Scale is a standard technique to assess the possibility of skin ulcers in patients at hospitals and nursing homes. In regards to improve prophylactic methods and lower the prevalence of pressure ulcers, Bergstrom et al. created the Braden Scale in 1987. The six subscales that make up Braden Scale, applied for determine likelihood to developing pressure sore. Five categories are assigned a score between 1 (least favorable) and 4. (Most favorable). From 1 to 3, the friction and shear subscale is rated. There are a total of 23 points available. The patient is more likely to get a pressure ulcer if their score is lower. The scale was designed to aid nurses as well as other medical

professionals to measure the client's risk of establishing bedsores.

Search strategy for identification of studies

This search strategy was designed to access published and was comprised three stages:

- A limited search of Pub Med Medline, Google Scholar and Research Gate to identify relevant keywords contained in and subject the title, abstract descriptors.
- Terms identified in this way, and the synonyms used by respective databases, was used in an extensive search of the literature.
- Reference lists and bibliographies of the articles collected from those identified in stage two above was searched.

Table No.1 Literature search details table.

Search Strategy	List of data bases and e-journals searched
<ul style="list-style-type: none"> • Key words used: Pressure Ulcer & Braden Scale • Used with MESH terms OR ,AND • Search was limited to publication year 2018 – 2023 	<ul style="list-style-type: none"> • Scopus • PubMed • Research Gate • Indian Journal of Public Health • Google scholar • Medline

Table No.2 studies related to knowledge regarding use of Braden scale for prevention of pressure ulcer.

Author	Country	Study Design/Method	Sample	Result	Discussion
1. Anupama Sharma (2023) ¹	India	Non-experimental randomized control research design was used	40 staff nurses	The results showed that the calculated 't' value in the morning and evening shift attitude group was statistically significant at P. The results showed that the calculated 't' value in the morning and evening shift attitude group was statistically significant at P<0.05.	It can be concluded that Braden's scale was effective regarding pressure ulcer.
2. Iyabode Adetoro Gbadamosi (2023) ²	Nigeria	Quantitative research with a quasi experimental research design was adopted	268 and 134 nurses were selected in the experimental group and control group respectively	Results showed that the mean score of participants in intervention & control groups were 42.45 8.89 and 38.81 10.56 years,	The study found that educational programme had a significant positive impact on nurses' knowledge of preventative tactics. It is essential to provide all nurse clinicians with regular training programmes on the issue to promote high-quality nursing care in accordance with global best practices.
3. Mrs Renuka (2022) ³	India	The research design adopted for the present study was quasi experimental one group pre-test post-test design	50 staff nurses*	Results revealed that in the pre-test, most of the staff nurses (12%) had average knowledge, were (36%) had good knowledge, and (52%) had good knowledge. In the post test, most of staff nurses had (52%) acquired very good knowledge, were (41%) acquired good knowledge, (7%) acquired average knowledge. the knowledge level had statistical significance relationship with educational qualification calculated p value is 0.03 which is less than 0.05 hence there is association between level of knowledge and educational qualification	The researcher was pleased after study being conducted which was a very new experience. The participants were co-operative and willingly participated in the study. The experience gained during this study will motivate the investigator to take other research studies. The results obtained will motivate other researchers for future studies.
4. Aparna B Raj (2021) ⁴	India	An evaluative research approach with one group pre-test post-test design was used	30 care givers	The main findings showed that there was difference in the mean pre-test and post-test knowledge scores (24.4% and 15.1%) and mean pre-test and post-test ability scores (27.7% and 11.4%). The mean difference between the post-test and pre-test knowledge scores of caregivers regarding prevention of pressure sores was found to be highly significant (t29=3.94, p<0.05).	Findings of the study indicated that Individual planned teaching was effective in prevention of pressure sores among caregivers of immobilized patients
5. Suma K et al (2021) ⁵	India	Pre –experimental one group pre test post test research design.	Simple random sampling process was used to obtain	The study result was participants 38 (78%) had moderate knowledge ,4 (8%) had adequate knowledge ,8 (16%) had inadequate knowledge .in post test ,majority of participants 47% had	The study predicts a structured education approach was more effective in increasing student's nurse's awareness of application of assessment tool in predicting

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			50 sample	adequate knowledge ,3 (6%) has moderate knowledge and none had inadequate understanding about braden scale.	potential dangers.
6.Joemer Calderon Maravilla (2020) ⁶	Manila, philippines	descriptive study with cross-sectional design	71 Staff Nurses	The research findings revealed that staff nurses in both medical wards and intensive care units had favorable attitudes towards using the Braden Scale M= 4.03; 3.88; SD= 0.52; 0.38. Additionally, there was significant relationship between nurses' attitudes regarding using Braden Scale and their clinical area ($\chi^2=9.1268, p<0.05$). It was discovered that the attitude of working nurses in medical wards was significantly lower than that of nurses working in critical care units ($z= 1.669, CV= 1.645$).	The study's conclusions indicate that nurses' workplaces reflect their beliefs about using the Braden Scale was used as a tool for risk detection with a view to reduce pressure ulcers in their clients.
7.Gagandeep kaur et al (2020) ⁷	India	The research design was pre –experimental	Simple random sampling was selected to choose 60 participants	The result shows that in the pre test 44(73%) of staff nurses had good knowledge scores and 16 (26.7%) of the staff nurses had fair knowledge scores .none of the staff nurses had poor and very good knowledge scores .in the post test 58(96.7%) of staff nurses had very good knowledge scores and 2 (3.3%)of the staff nurses had good knowledge scores.	The study findings provide the statistical evidence which clearly indicate that structured teaching programme has significance effect on the level of knowledge in staff nurses.
8.Mrs. Sonali Kumawat (2020) ⁸	India	Quasi-experimental research approach with one group pre-test-post-test research design	50 student nurses	The mean post-test knowledge score is 36.10 was greater than the mean pre-test knowledge scores 20.50. The enhancement in the knowledge level of respondents is 15.60 indicates gain in knowledge by respondents.	Structured teaching programme was effective in improving the knowledge level of student nurses on use of braden scale.
9.Dayalal d. Patidar, (2019) ⁹	India	Quantitative approach applying one-group pre-test-post-test research design	100 staff nurses	Outcome revealed that research were post-test means (20.88) that were apparently far more in mean pre-test (9.72) knowledge. It indicating that organized education was effective in raising staff nurses' knowledge of the use of the Braden scale on pressure sores.	Structured teaching was effective in increasing the Knowledge of staff nurses regarding use of Braden scale on pressure sore. Chi-square test to associate the level of knowledge and selected demographic variable.
10. Clady PC Zothankhumi (2019) ¹⁰	India	A descriptive survey design was adopted for the study	82 staff nurses	The result showed that majority of the staff nurses had moderate knowledge level (65.9%) regarding use of Braden scale for the prevention of bed sore 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 bed sore. 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	The result revealed 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.
11. Satish B Nadagaddi (2018) ¹¹	India	Pre experimental design with one group pretest and posttest	50 staff nurses	The result revealed that in pre-test I prior to the administration of individual structure teaching program data reflects that out of 50 respondents 50 (100%) had inadequate knowledge scores. Whereas in post-test 50 (100%) of respondents had scores. In the pre-test practice scores i.e. 50 (100%) had inadequate practice scores whereas in post-test 40 (80%) of respondents had adequate practice scores and only 10 (20%) of respondents had moderate adequate practice score. paired t-test reveals that there is significant between pre test and post test knowledge score ($t=55.33, df=39, p=0.05$) There will be a significant association between the pre test level of practice Score with selected socio demographic variables of staff nurses	The study concluded that Individual structure teaching for effective in prevent pressure sore for bedfast patient using Braden assessment scale.

Conclusion-

“Prevention is better than cure”, the greatest method of treating pressure sores is early identification and prevention. Pressure sore prevention into practice methods to people found to be at risk is the major nursing responsibility in preventing pressure sores. Nurses should therefore regularly receive training and education in this field of practice. Wheel chair cushions, foam mattresses with sufficient rigidity and thickness, and alternating pressure mattresses are examples of devices. Padded toilet seats, foam boots, and lift sheets can help reduce pressure and shearing force. In

addition to the use of health maintenance and protective measures, preventative skincare practices ideally washing, improve the moisture protection of the skin, also regular repositioning in every 2 hourly. An accurate and quick pressure ulcer assessment using the Braden scale. Most effective PU prevention techniques should be promoted by nurses

Conflicts of Interest

The author declares that they have no conflicts of interest

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