

# Analyst of research paper- pressure ulcers



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The study of interest for this statistical paper is within Applied Nursing Research. The Validity of the Braden and Waterlow subscales in predicting pressure ulcer risk in hospitalized patients. “ Pressure ulcer is a public health problem, which involves the biopsychosocial aspects of patients and their families. The development of pressure ulcers has an important impact on the patient’s quality of life, may affect metabolism, and results in prolonged hospital stay and need for specialized care with consequent increase cost. ” (Serpa, 2011).

To be a useful statistical information with a studied research, there must be a few components such as a sample, procedures, data analysis, results, and a conclusion. This study contained all these areas and will be covered within this analysis. First the sample contained “ Eligibility criteria included all patients without pressure ulcers, 18 years and older, who were hospitalized in the study wards for more than 24 hours and less than 48 hours, had a Braden score equal or less than 18, and agreed to participate in the study. For the purposes of the original study (i. . , evaluation of the validity of the Braden nutrition subscale in predicting pressure ulcers), patients with chronic renal failure, and/or with liver insufficiency, and/or ascites were excluded from the sample because these conditions would affect the nutritional assessment of the patients. A total of 269 patients were evaluated during the study period. Eighty-one patients were discharged before the three scheduled assessments, 11 refused to participate, 4 were excluded because there were no data available on their nutritional status, and 3 died.

The sample consisted of 170 patients who met all study criteria. ” ( Serpa, 2011). This study would have some statistical errors due to the missing

assessments because of discharge, refusal, insufficient data, and a few passing away. The errors must be taken into consideration for statistical purposes. Next the procedures within this study educated the research and those involved with the data collection. This is to the advantage of the study to make sure everyone is uniform with how they collect and interpret the data. For the procedures with the patients, “ Initially, the Braden scale was administered to all patients admitted to study wards who agreed to participate in the study. A Braden cutoff score of 18 was used as an inclusion criteria because many elderly patients are regularly admitted to the institutions (Ayello & Braden, 2002; Serpa & Santos, 2007). Later, the Waterlow scale was administered only to patients who were included in the study. Patients with Waterlow scores 10 or higher were considered at risk for developing pressure ulcers. ” ( Serpa, 2011) These patient had a body/skin check examination performed until they either developed a ulcer, were discharged, or death.

Along with the Waterlow and Braden scale assessment every 2 days. The data analysis is where the testing is performed and examined. Within this data the “ The statistical tests were performed at a significance level of . 05. The significance level of the Hosmer–Lemeshow chi-square test ranged from . 40 to . 65, indicating a good fit of the models. ” ( Serpa, 2011). The results showed that the “ The sample consisted of 170 patients with a mean age of  $67.0 \pm 15.4$  years, of which 57. 0% were males, and 57. % remained hospitalized for 6 to 12 days, with a mean length of stay of  $17.8 \pm 16.8$  days. Cardiovascular disease was the most common diagnosis at admission (45. 9%), and various comorbidities were observed, including systemic

arterial hypertension (56. 2%) and diabetes mellitus (29. 4%) ( Serpa, 2011). The conclusion stated that both of these scales when combined together for assessment for the risk for developing a pressure ulcer is effective. While during this study there was a small sample that was chosen, this could effect the outcome, if there were more patients tested.

This would make a wider range to show multiple results that may be a more accurate result than with the smaller sampling. References: Leticia F. Serpa, Vera L. C. G. Santos, Giovana R. P. Peres, Maria G. S. Cavicchioli, Mirta M. Hermida, Validity of the Braden and Waterlow subscales in predicting pressure ulcer risk in hospitalized patients, Applied Nursing Research, Volume 24, Issue 4, November 2011, Pages e23-e28, ISSN 0897-1897, 10. 1016/j. apnr. 2010. 05. 002. (<http://www. sciencedirect. com/science/article/pii/S0897189710000388>)