Influential Factors Impacting the Utilization of Pain Assessment Tools among Hospitalized Elderly Patients in Taiwan

Authors: Huei Jiun Chen, Hui Mei Huan

Abstract: Introduction: Pain is an unpleasant experience for hospitalized patients that impacts both their physical and mental well-being. It is important to select appropriate pain assessment tools to ensure effective pain management. Therefore, it is suggested to use Verbal Rating Scale (VRS) instead for better assessment. The Wong-Baker FACES Pain Rating Scale (WBS) is a widely used pain assessment tool in Taiwan to help individuals communicate the intensity of their pain. However, in clinical practice, even when using various assessment tools to evaluate pain, Numeric Rating Scale-11 (NRS-11) is still commonly utilized to quantify the intensity of pain. The correlation between NRS and other pain assessment tools has not been extensively explored in Taiwan. Additionally, the influence of gender and education level on pain assessment among elderly individuals has not been extensively studied in Taiwan. The aim of this study is to investigate the correlation between pain assessment scales (NRS-11, VRS, WBS) in assessing pain intensity among elderly inpatients. The secondary objective of this study is to examine how gender and education level influence pain assessment among individuals, as well as to explore their preferences regarding pain assessment tools. Method: In this study, a questionnaire survey and purposive sampling were employed to recruit participants from a medical center located in central Taiwan. Participants were requested to assess their pain intensity in the past 24 hours using NRS-11, VRS, and WBS. Additionally, the study investigated their preferences for pain assessment tools. Result: A total of 252 participants were included in this study, with a mean age of 71.1 years (SD=6.2). Of these participants, 135 were male (53.6%), and 44.4% had a primary level or below education. Participants were asked to use NRS-11, VRS, and WBS to assess their current, maximum, and minimum pain intensity experienced in the past 24 hours. The findings indicated a significant correlation (p< .01) among all three pain assessment tools. No significant differences were observed in gender across the three pain assessment scales. For severe pain, there were significant differences in self-rated pain scales among the elderly participants with different education levels (F=3.08, p<.01; $X^2=17.25$, $X^2=17.21$, p<.01), but there were no significant differences observed for mild pain. Regarding preferences for pain assessment tools, 158 participants (62.7%) favored VRS, followed by WBS; gender and education level had no influence on their preferences. Conclusion: Most elderly participants prefer using VRS (Verbal Rating Scale) to self-reported their pain. The reason for this preference may be attributed to the verbal nature of VRS, as it is simple and easy to understand. Furthermore, it could be associated with the level of education among the elderly participants. The pain assessment using VRS demonstrated a significant correlation with NRS-11 and WBS, and gender was not found to have any influence on these assessment. Further research is needed to explore the effect of different education levels on self-reported pain intensity among elderly people in Taiwan.

Keywords: pain assessment, elderly, gender, education

Conference Title: ICN 2024: International Conference on Nursing

Conference Location : Tokyo, Japan **Conference Dates :** October 03-04, 2024