

Factors Affecting the Use of Physical Restraints by Nurses for Patients in Intensive Care Units

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Dear Editor,

Since the nurses spend most of their time in the clinics interacting with patients in intensive care units (ICU) and play the main role in taking care of the patients in ICUs, thus it is important to be aware of the factors influencing the use of physical restraints by nurses. Thus, the present study aimed to determine the factors affecting the use of physical restraints by nurses for patients in ICUs. In this observational study, 160 patients over 18 years old were admitted to ICUs after passing at least eight hours of hospitalization, and hemodynamic stability was studied. The researcher attended the research setting and registered the demographic and clinical information while observing nurses' usage of physical restraints. Then, the patients were divided into two groups based on the use of restraints, namely the group using the restraints, and the group not using them. This study is part of a master's thesis on critical care nursing that was conducted at the Kurdistan University of Medical Sciences with the ethics code of IR.MUK.REC.1400.121.

The total number of patients was 160 out of whom 94 patients were male and 66 were female. In this study, 55% of the patients had physical restraints. The comparison among the patients using and not using physical restraints showed that there was a statistically significant difference between the two groups in terms of the factors BMI ($p = 0.018$), drinking ($p = 0.007$), being intubated ($p = 0.0001$), having NGT ($p = 0.0001$), delirium ($p = 0.0001$), GCS ($p = 0.0001$), and four scores ($p = 0.0001$), the nursing shifts using physical restraints ($p = 0.0001$), and patient's restlessness ($p = 0.0001$). The significant factors were entered into the regression model, and finally, a significant relationship was found between the evening shifts ($p = 0.002$, OR = 7.226), night shifts ($p = 0.001$, OR = 7.417), restlessness ($p = 0.0001$, OR = 15.006), GCS ($p = 0.0001$, OR = 0.370), and four scores ($p = 0.0001$, OR = 1.879), with the use of physical restraints.

According to the results, the use of physical restraints had a significant relationship with the variables restlessness, evening and night shifts, GCS, and four scores. In the same studies, associated factors of physical restraint use in adult patients in ICUs were reported as using sedatives, GCS, and delirium.^{1,2} The strongest risk factor requiring physical restraints in patients in ICUs was restlessness while restlessness was also reported by other studies as an effective factor in the use of physical restraints.³⁻⁵ The findings of the present study are of clinical importance for managers in ICUs. It is recommended that the details of the use of physical restraints should be added to the nursing reports, and also the application of physical restraints be registered by physicians in

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patients' records on a daily basis. Clarification of the indications of the use of physical restraints and the obligations to evaluate and remove these restraints, if necessary, can restrict the use of physical restraints.

In the present study, the use of restraints and relevant factors were investigated in a cross-sectional process, and the continuity and frequency of the use of restraints and their side effects, and the nurses' characteristics were not examined. Thus, it is recommended that the use of restraints by nurses during patients' hospitalization should be investigated.

The information collected by this study showed that the use of physical restraints had a significant relationship with the variables restlessness, night and evening shifts, four scores, and GCS. The high prevalence of the use of restraints reflects the common use of restraints in ICUs in research settings. There is a need for designing and using standard guidelines and procedures to use physical restraints by nurses. It is necessary to plan to educate the nurses on the timely and requisite use of physical restraints.

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