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Delirium in Critically Ill Patients and Its Association With Patient Factors and Outcomes

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Purpose: To determine the incidence of delirium in critically ill patients and to explore the relationship between delirium, patient clinical factors and outcomes.

Background: Delirium is a frequent problem in the intensive care unit and associated with increased mortality, prolonged duration of intensive care unit stay and increased cost. Global guidelines have been developed for early detection and management of delirium. It is argued that routine nurse-led screening for delirium using a validated screening tool will allow early detection and timely implementation of management strategies that reduce severity and/or duration.

Setting: The setting for the study was the adult intensive care units of a 1,200 bedded university-affiliated public hospital in Johannesburg, South Africa.

Design and Methods: A quantitative-descriptive and longitudinal design was utilized. The total sample comprised of 82 (n=82) patients from the ICU's between the period of 1.07.2017 to 30.09.2017. The random sampling method was utilized. Data was collected using a researcher-developed checklist built on items from two validated questionnaires: Richmond Agitation and Anxiety Scale (RASS) and Confusion Assessment Method for ICU (CAM-ICU).

Results: Overall 82 (n=82) patients participated in this study, and more than one-third tested positive for delirium when the CAM-ICU method was used during their length of stay in ICU. It should be noted that two-thirds of the sample were surgical cases, and the average length of ICU stay was 6 days. Six patients who developed delirium had a death outcome after 218 days in ICU, but these results showed no statistical significance (IR 2.62; CI 0.56-16.10; p=0.916). Eight clinical factors in this study were statistically significantly (p<0.000) associated with patients having delirium or not, and most important were medication (p=0.030), physical restraint (p=0.025), and severity of critical illness (p<0.001). Further, the characteristics of >60 years of patients who had tested positive for delirium were mostly male (83.3%), with tertiary level education (50.0%) and on Midazolam medication (83.3%).

Clinical implications: These findings have implications for nursing care because they highlight the importance of regular screening for delirium and addressing modifiable factors that contribute to delirium, such as the use of physical restraint and medication titration.

Conclusion: These findings suggest patients are at risk for delirium in these ICUs, and current best practice measures to prevent or combat the incidence of delirium should be put into place.

Title:

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Keywords:

critically ill patients, delirium and intensive care unit

References:

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Abstract Summary:

This study determined the incidence of delirium in critically ill patients and explored the relationships between delirium, patient clinical factors and outcomes. The study setting was the adult intensive care units of a 1,200 bedded university-affiliated public hospital in Johannesburg, South Africa.

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