

# Think Delirium! Do we Assess our Critically Ill Patients for Delirium? A Closed Loop Audit

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## Abstract

Delirium is prevalent among critically ill patients and it is an independent risk factor for mortality. The audit aimed to determine the staff awareness of delirium screening and to establish whether we assess and document the cognitive state of our patients regularly in the course of intensive care admission. Furthermore, we aimed to review if the causes of delirium were considered and treated appropriately. A closed loop audit was conducted in the different intensive care units. The initial audit showed that Most of the nurses; 63 (97%) neither assessed the patients for delirium nor were aware of the delirium assessment checklist. There were 12(20%) patients out of 58 who had delirium during the audit with no documentation or treatment. The second audit cycle showed 86 (90.5%) of the staff were fully aware of the checklist and using it. We conclude that re-implementing the routine screening for delirium improved its evaluation and management.

**Keywords:** Delirium, intensive care units, critically ill patients.

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## BACKGROUND

Delirium is prevalent among critically ill patients and it is an independent risk factor for mortality. It is associated with multiple complications and adverse outcomes, including self-extubation and removal of catheters, failed extubation, prolonged hospital stay and increased health care costs [1]. Delirium may be reversible. The society of critical care medicine guidelines 2013 recommended routine delirium monitoring using either confusion assessment method (CAM- ICU) or intensive care delirium screening check list (ICDSC) [2], the latter is the tool of assessment in our department. Nevertheless, the ICDSC was removed from the nurses' flow chart and the new electronic system, which we think affects the routine assessment of delirium in our patients.

## AIM

The audit aimed to determine the staff awareness of delirium screening and to establish whether we assess and document the cognitive state of our patients regularly in the course of intensive care admission. In addition to review if the causes of delirium were considered and treated appropriately.

## METHODS

In the the first audit, we screened all the day

and night staff (65 nurses) in all intensive care units, medical intensive care unit (MICU 25 beds), surgical intensive care unit (SICU 7 beds), post cardiac surgery intensive care unit (CSICU 9 beds), cardiac care unit (CCU 18 beds) and neurointensive care unit (NICU 13 beds). By asking the staff directly if they assessed the delirium or not, in addition to looking retrospectively at the notes of the patients. Moreover, we screened the patients (57 patients) for delirium and checked if they received the appropriate treatment or not. We presented our results during the monthly departmental meeting, during the medical record committee meeting for medical forms approval and with the quality management team emphasizing on the importance of reintroducing the delirium checklist assessment in the nursing flow chart. Additionally, we started some lectures in the department about the importance of regular delirium assessment in critically ill patients. We have conducted the reaudit after reintroducing and implementing the ICDSC checklist.

## RESULTS

The initial audit showed that only 2 out of 65 nurses (3%) in all the units assessed their patients for delirium and it was not regularly done. Most of the nurses; 63 (97%) neither assessed the patients for delirium nor were aware of the delirium assessment checklist. Of concern, 5 nurses in the MICU did not

know about the delirium assessment, while 20 (30%) nurses mentioned it is due to the lack of the assessment tool. We found, however, that there were 12(20%) patients out of 58 who had delirium during the audit with no documentation or treatment (assessed with ICDSC). Furthermore, the main risk factors in the screened patients with delirium were: sepsis, old age, kidney injury, hepatic dysfunction and midazolam use for sedation. The second audit cycle was conducted on 95 of the staff in the different units after reimplementation of the delirium checklist. There were 9 (9.47%) of the staff (mainly from CCU and CSICU) reported unawareness of the reimplementation of the checklist while most of the other staff 86 (90.5%) were fully aware of the checklist and using it. We found 8 (12.9%) patients (out of 62) diagnosed with delirium which was documented and the treatment has been already initiated.

## CONCLUSION

Assessment of delirium was not done routinely in our ICUs after removal of the screening checklist. There was a scope to improve this with further education. In addition, re-implementing the routine screening for delirium improved the compliance of its evaluation and management.

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