

## Delirium Motor Subtypes in ICU Patients



Delirium is the most common cerebral dysfunction in the ICU, affecting nearly one-third of patients. Based on its clinical manifestation, it can be divided into a hypoactive, hyperactive, or mixed motor subtype. Patients with hyperactive delirium are usually in an agitated state of mind and can display symptoms of aggression and restlessness. Patients with hypoactive delirium are in an apathetic state of mind and can display symptoms of lethargy, depression and stupor. Patients with mixed delirium demonstrate shifts between hyperactive and hypoactive delirium. All three motor subtypes have the hallmark symptoms of confusion and inattention. Delirium can also be divided into other phenotypes based on the underlying mechanism.

Delirium in the ICU is associated with short and long-term impairments. In a recent study, hypoactive delirium was found to be associated with the poorest prognosis of survival compared with hyperactive and mixed delirium. However, another study found that the duration of different motor subtypes was not associated with long-term functional outcomes. It is thus clear that a lot more needs to be understood about delirium.

This review describes the distribution, pharmacological interventions and outcomes of delirium motor subtypes in ICU patients. One hundred and thirty-one studies, including 13,902 patients with delirium, were included in the analysis. Hypoactive delirium was the most prevalent motor subtype among the included patients accounting for 50.3% of delirium cases, followed by mixed delirium and hyperactive delirium.

Findings showed that patients with mixed delirium experienced the longest delirium duration, ICU hospital and length of stay, highest ICU and hospital mortality and more frequent administration of antipsychotics,  $\alpha$ 2-agonists, benzodiazepines, and propofol.

Overall, the findings from the review show that hypoactive delirium was the most prevalent subtype in ICU patients. Mixed delirium had the worst outcomes in terms of duration of delirium, length of stay and mortality and the use of more pharmacological interventions compared to other delirium motor subtypes.

The management of delirium is challenging, especially because no evidence-based treatment currently exists for this condition. This review shows that patients diagnosed with hyperactive delirium are more frequently intervened with a delirium-targeted pharmacological strategy. However, patients with mixed delirium receive more agents than other motor subtypes.

Source: [Critical Care](#)  
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