



Understanding of delirium amongst the surgical team, a multidisciplinary survey

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Introduction

Delirium is a common postoperative neurocognitive complication in the elderly population(1-3). Depending on its presentation, delirium can be classified as hyperactive (characterized by agitation and overt behavioral disturbances), hypoactive (drowsiness and withdrawal) or mixed delirium. It is thought that hypoactive delirium is by far the most prevalent.

Postoperative delirium is associated with significant morbidity and mortality; as well as cognitive and functional impairment. However, missed diagnosis of delirium is common in clinical practice; this is especially true for hypoactive delirium, which may not present with overt behavioral disturbances (4).

We conducted this survey to investigate the staff understanding of delirium on our surgical unit.

Methods

We approached doctors, nurses and allied health professionals on our surgical unit with a survey which asked participants for a description of delirium. The responses were then compared to the DSM-V definition of delirium (table 1).

Criteria	Description
A	Disturbance in attention and awareness
B	The disturbance develops over a short period of time, represents an acute change from baseline, and tends to fluctuate in severity
C	An additional disturbance in cognition (e.g. Memory deficit, language, visuospatial ability, or perception)
D	The disturbances are not better explained by a pre-existing, established or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal such as coma.
E	There is evidence from the history, physical examination or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal or exposure to a toxin, or is due to multiple etiologies.

Table 1: DSM V definition of delirium (5)

Results

The delirium definition question was completed by 81 out of 84 respondents. The most frequently used term in the definition was “confusion”. 41% used the term “acute confusion “or “acute confusional state”, a further 37% used the term “confusion”. In addition, 20% of the responses used the term “altered mental state” (Fig 1).



Figure 1: ‘word cloud’ of the terms used to describe delirium

The key words from the responses were compared to the DSM V definition of delirium. 30% of the responses mentioned altered awareness or attention (Criteria A); 65% of the responses make some reference to the acute fluctuating time course of delirium (Criteria B); 15% mentioned at least one of the additional features such as memory and language impairment, or perceptual disturbances (Criteria C) and 15% mentioned the underlying medical illness (Criteria D & E).

There were no responses which mentioned all the diagnostic criteria according to DSM V; 8% of the responses fulfilled more than two diagnostic criteria, and while 49% of the responses fulfilled more than one diagnostic criteria. (see Fig. 2)

When divided by role, we did not find significant difference between the responses from doctors, nurses and allied health professionals

Comparison of responses with the DSM-V definition

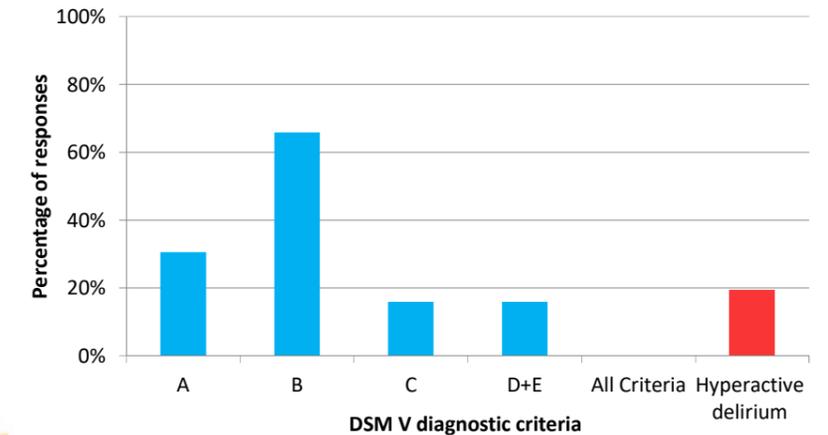


Figure 2: Responses to questions ‘How would you describe delirium’ compared to the definition in DSM V (5). Letters A to E corresponds to the criteria in DSM V; blue bar represents the percentage of respondents that correctly mentioned the DSM V criteria (table 1). Red bar represents the percentage of respondents what referred to features of hyperactive delirium in their description

Conclusion

While over 80% of the responses used the word “confusion”, however very few went actually on to describe defining features of delirium. This may be an indication that they may not be aware of the cognitive changes associated with delirium. Indeed, 20% of the responses referred to features of hyperactive delirium in their definition.

The finding of our survey suggests that additional staff training on delirium is needed in order to improve delirium recognition, and similar survey could be used to identify key knowledge gaps and aid the allocation of educational resources in improving delirium management.

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