



Poster 43

# Mind the Gap

Assessing the gap between delirium management guidelines and current clinical practice

Sarah Train<sup>a</sup>, Dr Alexandra Peterson<sup>b</sup>, Dr Emma Marshall<sup>b</sup>, Dr Susan Shenkin<sup>b</sup>, Prof Alasdair MacLulich<sup>b</sup>

a - Edinburgh Medical School  
b - Medicine of the Elderly, Royal Infirmary Edinburgh

## Aim

To assess how closely delirium diagnosis and treatment follow national and international guidelines in a Medicine of the Elderly population at a large teaching hospital

## Introduction

Delirium is a neuropsychiatric medical emergency, particularly common in acutely unwell elderly populations due to multifactorial risk factors. It causes significant distress for patients and relatives and is associated with poor morbidity and mortality outcomes.

Current (Scottish Delirium Association<sup>1</sup>; NICE<sup>2</sup>) and new (SIGN<sup>3</sup>) guidelines provide comprehensive recommendations for detection, diagnosis and management.

- Principal elements of delirium care (SIGN 2019):**
- Check for immediate threat to life
  - Investigate for, identify and treat any causes
  - Optimise physiology, environment, sleep; ensure formal medication review
  - Detect and treat agitation and distress, spare anti-psychotic use where possible
  - Communicate the diagnosis to both patient and carers
  - Prevent complications
  - Monitor for recovery

However, it is unclear how closely practice adheres to these guidelines, whether guidance is feasible to follow in practice, and how best to study usual care. Retrospective studies conducted in the Netherlands<sup>4</sup> and Northern Ireland<sup>5</sup> have identified high rates of antipsychotic use.

This study assesses the feasibility of conducting a retrospective case-note review of clinical practice in a Medicine of the Elderly (MoE) delirium cohort at a large Scottish teaching hospital.

## Methods

**Study Design**

Retrospective case note analysis used to assess delirium care from the time of diagnosis to 48hrs later

Data extracted from medical notes and collected on data collection form on secure NHS network

30 patient target

**Population**

MoE inpatients at RIE during study period (Feb-March 2019) diagnosed with 'delirium' in medical notes within previous 14 days

Excluded: delirium tremens, palliative care, confirmed CNS cause or investigator involved in patient's care

**Data Collection Form**

Designed to focus on 6 key aspects of delirium care

'ideal' care defined by guidelines, expert consensus and group discussion

Form designed, piloted, discussed and reformed

Data dictionary compiled

**Outcomes + Analysis**

Binary outcomes were reported where possible (minimal free text recorded)

NEWS score observations recorded (summary data reported)

Analysis using Microsoft Excel

No hypothesis testing required

## Results

30 patients met inclusion criteria and were included: median age 86.5, 53.3% male. Consideration of the cause of delirium was documented in 66.7% of patients. For all 30 patients, investigations are shown in fig.1.

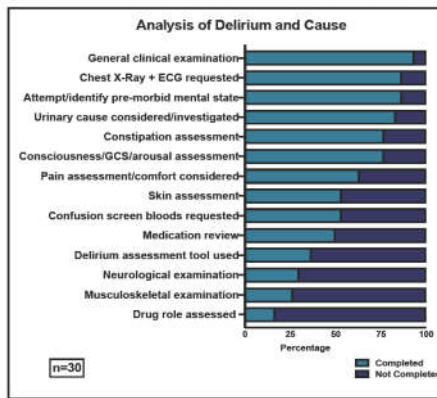


Figure 1: 'Completed' if within 48 hours of delirium diagnosis. Confusion screen bloods: LFT, INR, TFT, glucose. Delirium assessment tool = e.g. 4AT

Figure 2: Treatments recorded specifically for delirium management. 'Non-pharmacological' included moving to side room, monitoring of mood, reassurance. Psychoactive medications: haloperidol, lorazepam

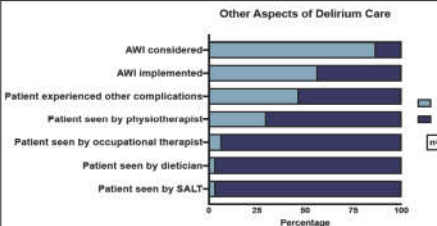
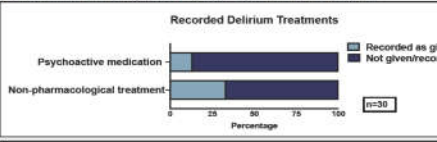


Figure 3: AWI: Adults with Incapacity Act; SALT: Speech and Language therapist. Only included if within 48 hours of diagnosis

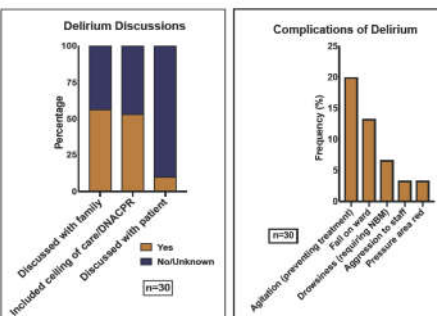


Figure 4: Only recorded 'yes' if discussion recorded in medical notes in context of delirium

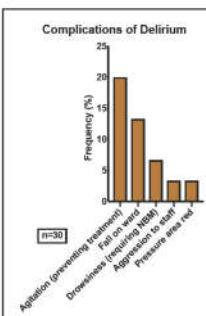


Figure 5: Complications related to patient delirium. All occurred in separate patient cases (no overlap). Total = 48.0%

## Discussion

**Investigations to diagnose and assess delirium varied**

- Delirium assessment tools such as the 4AT were absent in 66.7% of cases (fig.1); these are easy to use, can improve accuracy of diagnosis (especially in acute settings) and are recommended in guidelines
- Neurological examination, medication review and confusion blood screen were under-used, perhaps due to time constraints or perceived lack of relevance to a patient's ongoing care

**Low rates of treatment specifically for delirium**

- Minimising pharmacological intervention (fig.2) follows current guidelines and contrasts previous studies which have shown much higher rates, particularly of benzodiazepines (known deliriogenics) and haloperidol<sup>4,5</sup>
- Non-pharmacological interventions were not systematically recorded in medical notes despite being the focus of guideline recommended interventions

**Delirium discussions may rarely involve patients**

- Patients often weren't seen by OT and physiotherapists in the initial 48 hours (fig.3). Given that significant proportion of patients experienced complications, (fig.5), this could reduce falls rates

**Implications**

- The complexity and breadth of delirium management makes recording and assessing practice challenging: specific focus in medical and nursing notes such as prompts or checklists could help (but have their own issues)
- Guidelines are only useful if feasible to implement in practice: e.g. recommending undertaking full clinical examination and investigation battery is futile if not achievable in reality
- Future use of the data collection form can facilitate larger, hypothesis testing studies, comparison between cohorts and assess the impact guidelines have on practice in future

**Limitations**

- Retrospective analysis relies on recorded data: events that occurred without being documented are missed, likely resulting in under-representation of informal interventions/discussions
- The small study size prevents hypothesis testing however allowed for detailed data collection. Studying one hospital limits generalisability
- The short study period placed artificial limits on delirium course, which extend far beyond 48 hours

## Key Findings

This study demonstrates a feasible method of assessing delirium management.

Within this 30 patient cohort, management varied widely: particularly in investigating for causes of delirium, and discussions regarding its diagnosis.

Capacity assessments and low rates of pharmacological treatments were in accordance with current guidelines.

## References

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