Triggers for the pharmacological management of delirium in palliative care: a mixed methods study

Catherine Fairfield[1], Anne Finucane[1,2], Juliet Spiller[1,2]

[1]University of Edinburgh, [2]Marie Curie Hospice Edinburgh; Scotland.

Marie Curie

Care and support through terminal illness

Background

Delirium is a neurocognitive disorder of altered attention, awareness and cognition. It is highly prevalent in palliative care and can be challenging to identify and treat. Its symptoms are often distressing for patients and family. Current guidelines recommend the use of non-pharmacological measures prior to pharmacological approaches[1] and recent evidence suggests antipsychotics may not be as effective as best supportive care for patients with mild to moderate delirium[2].

Aims

- To describe how delirium, its symptoms, and its management are documented in patient records
- To determine the use of delirium screening tools and how these are viewed by staff
- To identify triggers for pharmacological intervention in delirium management in a terminally ill population.

Methods

- **Mixed methods:** A retrospective case-note review concerning all patients admitted to a hospice inpatient setting between 1-17th August 2017 and semi-structured interviews with 7 hospice doctors and nurses.

Results

- Twenty-one patients were reviewed. Sixteen (76%) had documented symptoms of delirium and of these, thirteen (81%) died without delirium resolution. *(Figure 1)*

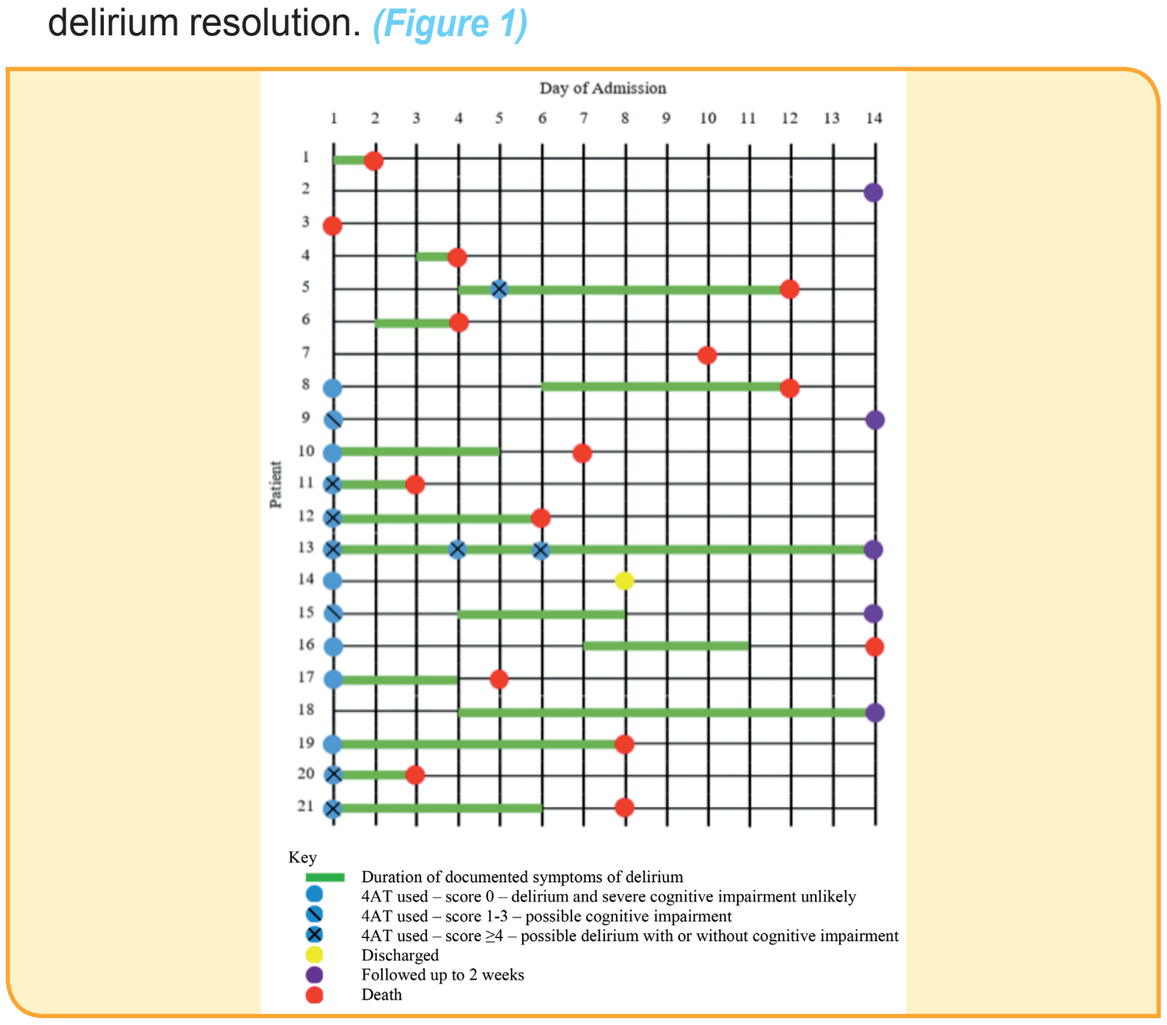

Figure 1: Patient Pathways.

- **Documentation:** Delirium was documented inconsistently and the term itself was used infrequently compared to agitation, confusion and distress. *(Figure 2)*
- **Screening:** Thirteen (62%) patients were screened for delirium using the 4AT on admission. *(Figure 1)* The nurses believed a screening tool was of limited value given delirium's acute onset, whereas the doctors felt the 4AT was useful in ambiguous cases.
- **Non-pharmacological measures:** These were documented infrequently and included, for example, reassurance, reorientation and management of the underlying cause of delirium.

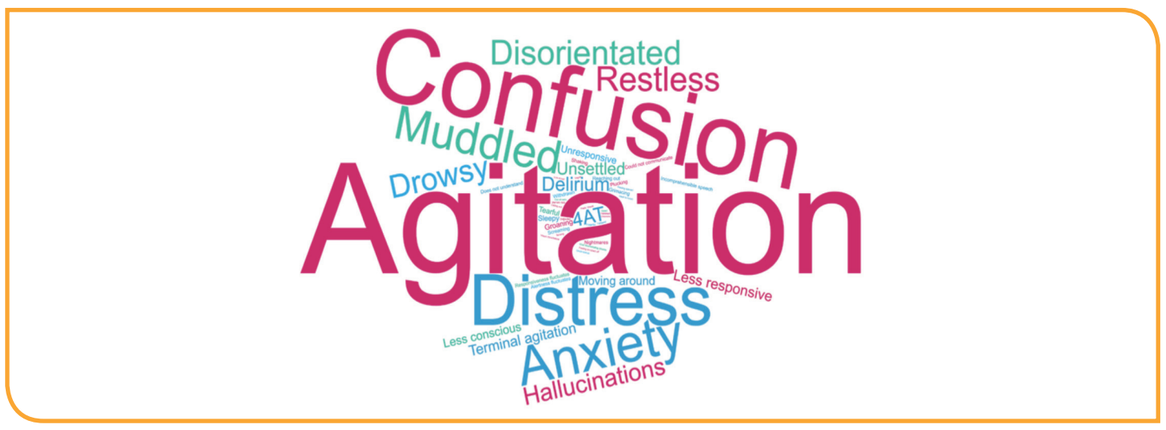

Figure 2: Documentation of delirium across 16 patients (the size of each word corresponds to how frequently it was used to describe delirium).

- **Pharmacological intervention:** Midazolam was the most frequently administered pro re nata medication (PRN) *(Figure 3)* and regular therapy. The indications for medication were often unclear due to multiple interventions being documented at once and multiple symptoms being treated in a single patient.

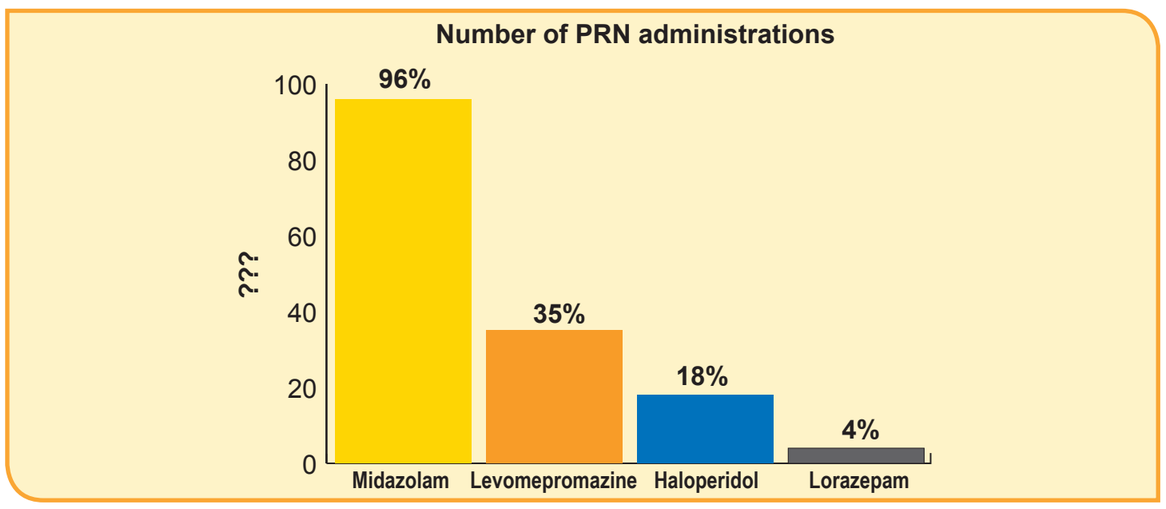

Figure 3: Number of PRN administrations for delirium across 16 patients.

Triggers for pharmacological intervention:

- Triggers included failure of non-pharmacological measures, distress, agitation and risk of patient harm.
- Nurses were more likely to give examples of severe delirium requiring medication, including as an initial management strategy.

> *[Interviewer]: What would your initial approach be to management? …What are the first things that run through your mind?*
>
> *[Nurse 3]: medicate…let's be very honest, medicate…particularly…if somebody's agitated.*

- Haloperidol and levomepromazine were first and second line.
- Participants stated benzodiazepines should be avoided, however they could be used alongside antipsychotics for terminal agitation.

Conclusions

- The prevalence of delirium was high, reflecting previous studies[3].
- The term delirium itself was infrequently documented perhaps reflecting a lack of confidence in distinguishing delirium from other symptoms.
- Non-pharmacological measures targeting delirium were poorly documented.
- Triggers for pharmacological intervention are in-keeping with guidelines, however midazolam was the most commonly used pharmacological intervention. Research evidence on the role of midazolam for treatment of delirium and its subtypes is now required.

REFERENCES: [1] NHS Scotland. Delirium. [Internet]. 2015 [cited 2017 Dec 10]; [1 screen]. Available from: http://www.palliativecareguidelines.scot.nhs.uk/guidelines/symptom-control/Delirium.aspx. [2] Agar MR, Lawlor PG, Quinn S, Draper B, Caplan GA, Rowett D, et al. Efficacy of Oral Risperidone, Haloperidol, or Placebo for Symptoms of Delirium Among Patients in Palliative Care: A Randomized Clinical Trial. JAMA Intern Med 2017; 177(1):34-42. doi:10.1001/jamainternmed.2016.7491. [3] Hosie A, Davidson PM, Agar M, Sanderson CR, Phillips J. Delirium prevalence, incidence, and implications for screening in specialist palliative care inpatient settings: A systematic review. Palliative Medicine 2012; 27(6): 486-498.