

# Think Delirium: A Quality Improvement Project

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## Introduction

- Delirium affects up to 50% of hospitalised adults over the age of 65.
- It is associated with increased morbidity, mortality, prolonged hospital admissions, and higher rates of readmission.
- Timely recognition enables appropriate management and can significantly improve patient outcomes.

## Aims

- To improve knowledge and confidence in recognising and managing Delirium in Foundation Year 1 (FY1) Doctors at the Countess of Chester Hospital.
- To evaluate the impact of two structured educational interventions in promoting knowledge and understanding of Delirium.

## Methods

- During protected FY1 teaching hours, a questionnaire with five multiple choice questions (MCQ's) on delirium recognition and management was distributed (Figure 1) to assess baseline knowledge.
- A face-to-face lecture was then delivered by a Care of the Elderly Registrar. Word clouds were also collected in response to the prompts: "What words come to mind when you think of delirium?" (Figure 2) and "How would you assess this patient?" (Figure 3). The same MCQs were redistributed immediately after teaching to assess improvement in knowledge.
- Four weeks later, an educational poster (Figure 4) was circulated electronically, and participants were prompted to repeat the MCQs to assess knowledge retention.
- A follow-up survey explored perceptions and confidence in delirium recognition and management.
- This project was conducted using the Plan-Do-Study-Act (PDSA) cycle and completed two cycles.

Figure 1: Multiple Choice Questionnaire

- 1) What is delirium?
2. Which type of delirium is most common?
3. What component is not part of the 4AT?
4. Which predisposing factor causes delirium?
5. Which type of delirium is associated with worse outcomes?

Figure 4: Educational Poster



Figure 2: "What words come to mind when you think of delirium?" Word Cloud.

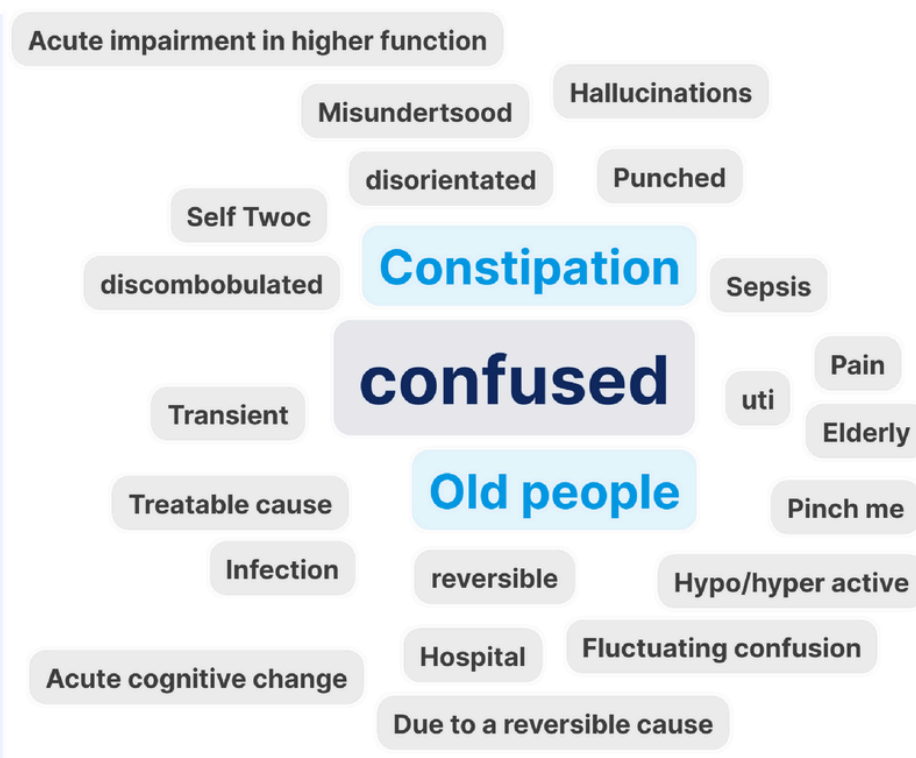
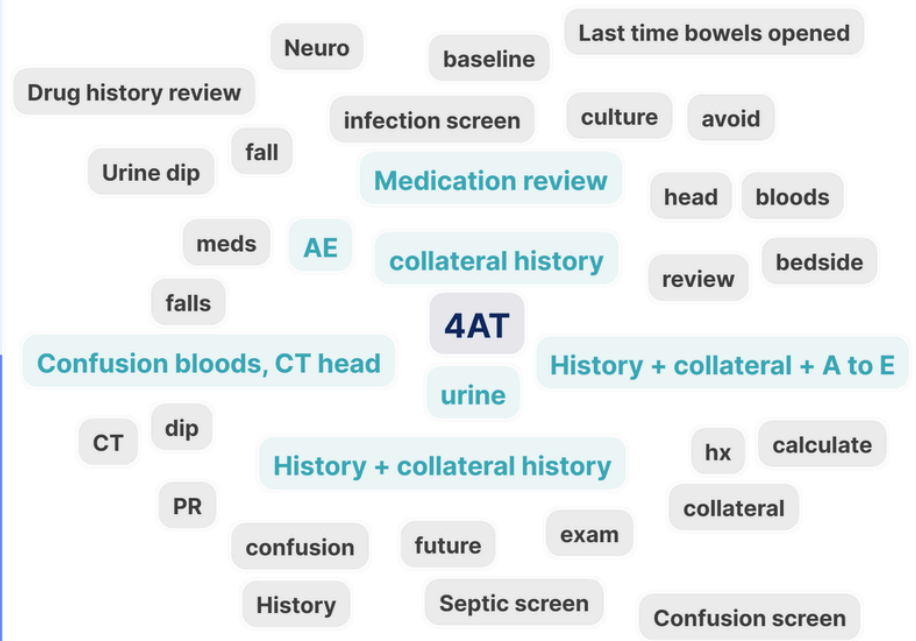


Figure 3: "How would you assess this patient?" Word Cloud



## Interventions and Results

Chart 1: Run chart of interventions and subsequent performance in MCQ Questionnaire for each PDSA cycle.

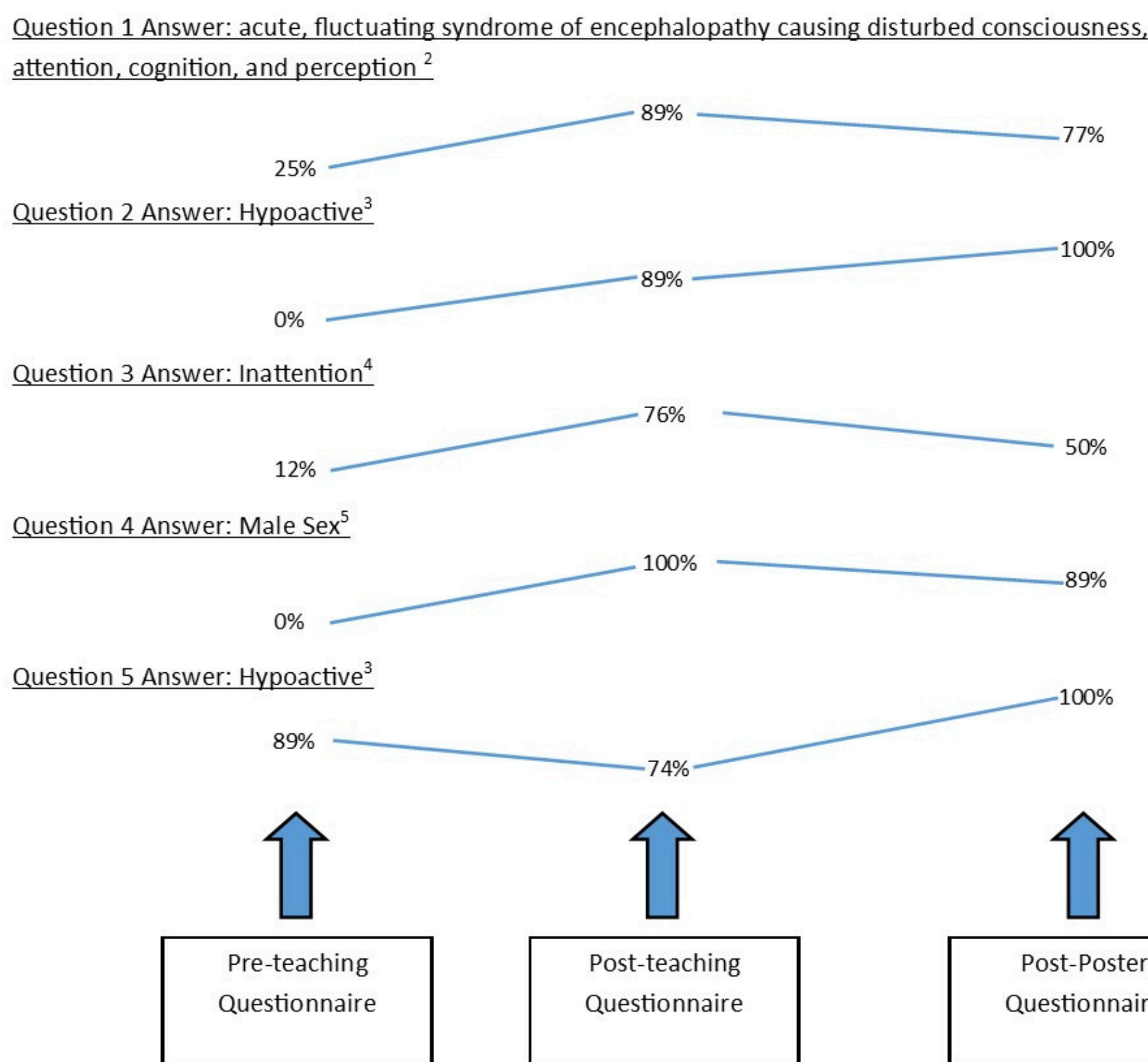


Table 1: Percentage of Cohort Selecting Correct Answer in MCQ Questionnaire

Question Domain	Percentage of Cohort Selecting Correct Answer in MCQ Questionnaire		
	Pre-Teaching (%)	Post-Teaching (%)	Post-Poster (%)
1. Definition of Delirium	25	89.5	77.8
2. Classification of Delirium	0	89.5	100
3. Components of 4AT	11.8	76.5	50
4. Predisposing factors to Delirium	0	100	88.9
5. Prognosis in Delirium	88.9	73.7	100
<b>Average</b>	<b>25.14%</b>	<b>85.84%</b>	<b>83.34%</b>

Table 2: A table showing the percentage of responses to an evaluation survey that either agreed or strongly agreed with the statement.

Evaluation Statement	Percentage of cohort who selected 'Agree' or 'Strongly Agree' (%)
'My knowledge on delirium has improved since the previous delirium teaching session'	100
'I feel confident that I am able to identify and diagnose patients with delirium following the previous teaching session'	100
'My knowledge on Delirium has improved with the Poster sent'	100
'I feel confident that I am able to identify and diagnose patients with delirium with the information on the poster'	100

## Discussion

- Targeted teaching and reinforcement with an educational poster led to a substantial improvement in FY1 doctors' knowledge of delirium, with average scores rising from 25% to 84% across two PDSA cycles.
- The most significant knowledge gains were seen in definitions and classification of Delirium, and predisposing factors. Notably familiarity with the 4AT assessment tool was low, highlighting an important gap in undergraduate and early postgraduate training.
- Performance remained stable between post-teaching (85%) and post-poster (83%), suggesting the poster was an effective tool for knowledge retention and reinforcement.
- Limitations included small sample size, IT-related issues affecting baseline data collection, and the reliance on a short MCQ format which may not fully capture clinical application.
- Future cycles could include longer follow-up periods, larger cohorts, pre- and post-intervention perception surveys, and expansion to wider multidisciplinary staff to better reflect the clinical setting.

## Conclusions

- Targeted educational interventions surrounding the assessment and management of Delirium improves knowledge and confidence in FY1 Doctors.
- Sequential interventions such as posters are useful tools in promoting knowledge consolidation and retention.
- Gaps in knowledge remain around assessment tools, highlighting areas for future focus.
- Embedding structured delirium education early in postgraduate training has the potential to enhance recognition and management of Delirium, ultimately improving patient outcomes.

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