

Hospital Acquired Delirium Screening and Nursing Knowledge After an Inservice

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Introduction & Background

Hospital Acquired Delirium is an acute confusion state. Patients may be disoriented, have impaired attention, and refuse help. Delirium can devolve into agitation and combative behavior.^{1,2,3}

- Delirium is one of the **most common complications** for hospitalized older adults (70+ years old) affecting an estimated 14–56% of this vulnerable population.^{1,4,5}
- Causes **permanent harm**, leaving patients below baseline cognitive functioning^{1,3,6}
- Associated with 62% increased mortality within one year after discharge^{1,3,6}
- Unrecognized in about 60% of all cases^{1,3,5,6}
- Nursing interventions can effectively help prevent delirium^{1,3,5,6,7}

Purpose & Aims

The purpose of this evidence-based quality improvement project was to increase nursing knowledge of how to recognize and react to delirium by implementing a teaching intervention, via academic detailing, and to increase screening for delirium.

Nurses will demonstrate increased knowledge of evidence based indications to complete a delirium assessment using the CAM-ICU via a knowledge test.

Nurses will demonstrate increased knowledge of evidence based, immediate, resource non-intensive, nursing interventions to prevent and treat delirium in patients who screened positive using the CAM-ICU via knowledge test.

Nurses will increase the number of delirium screenings performed using the CAM-ICU by the end of the project.

Methods

Design: Pre/post-intervention survey
Setting: Telemetry unit of a mid sized transplant hospital in the southern US
Sample: Convenience, 55 nurses (RN & LVN) in direct patient care

Interventions

- Knowledge test administered
- Education inservice immediately delivered to staff via **academic detailing**⁸

Clearly Defined Concise
 Targeted Repetitive
 Personalized Engaging Imagery
 One on One

- Knowledge test repeated after 30 days
- Audit documented CAM-ICU screenings

Results

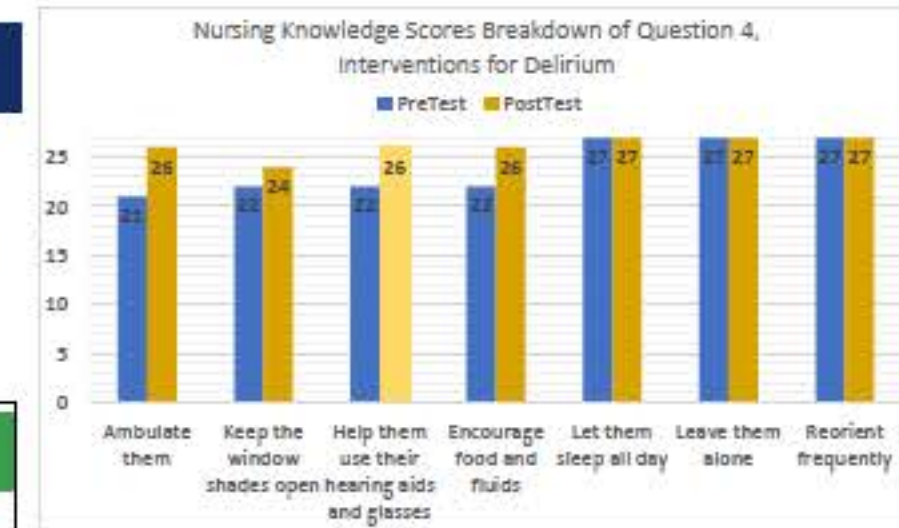
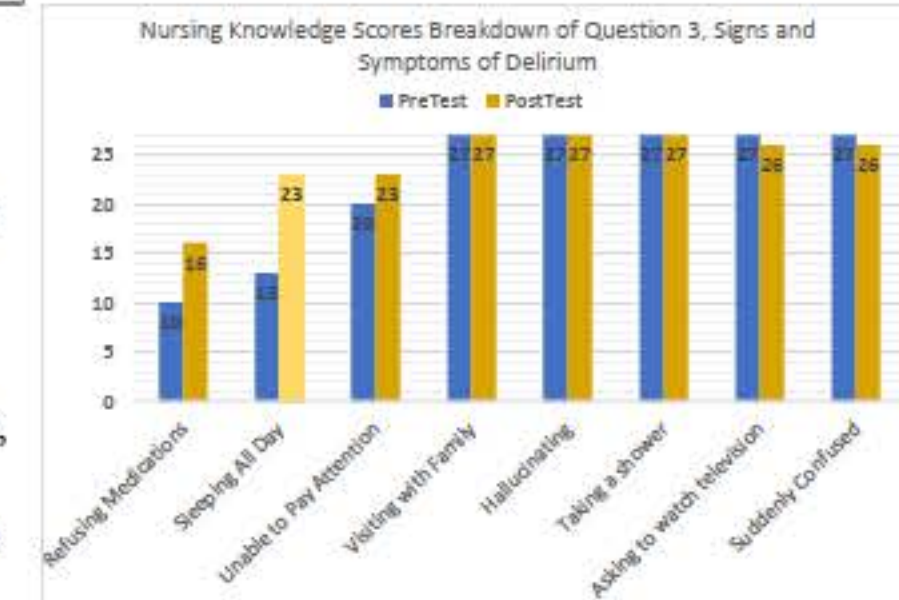
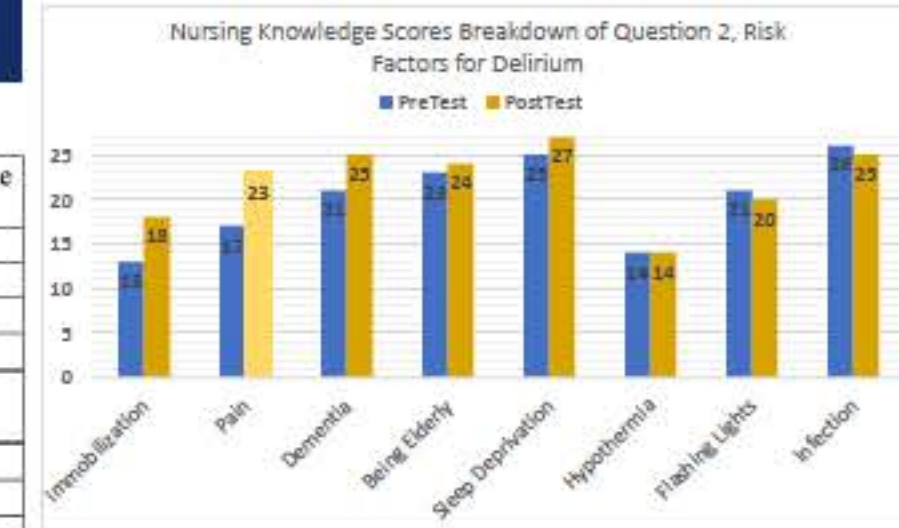
Statistical Analysis of Aims

	Knowledge Test Question	Pre-Test Mean	Post-Test Mean	Significance (2-tailed)
Aim 1	1. Definition of Delirium	.30	.48	.170
	2. Risk Factors for Delirium	5.93	6.52	.007
	3. Signs and Symptoms of Delirium	6.59	7.22	.024
	Aim 1 Summary Score	12.81	14.22	.001
Aim 2	4. Interventions for Delirium			
	Aim 2 Summary Score	6.22	6.78	.029
Aim 3	5. Screening tool	.30	.85	.000
	6. Charting of CAM-ICU	.19	.56	.005
	Aim 3 Summary Score	.48	1.41	.000

- 55 pre-tests and 36 post-tests yielded 27 matched pairs.
- This project led to significant increase in nurses' knowledge of how to recognize and react to delirium
- No change in documentation of screening for delirium using the CAM-ICU
- Statistically significant improvement about three lesser-known aspects of delirium: pain as a risk factor, sleeping all day as a symptom of delirium, and helping patients use their hearing aids and glasses as a prevention and treatment intervention.

Conclusion

Targeted teaching interventions using academic detailing can be successful in improving nursing knowledge and sustaining that improvement 30 days later.



Special Thanks

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References



Delirium SIGNS & SYMPTOMS

ACUTE CONFUSIONAL STATE

CONFUSION, INATTENTION, HALLUCINATION

LETHARGY, WITHDRAWN, AGITATION

Delirium RISK FACTORS

ELDERLY, SENSORY IMPAIRMENT, COMORBIDITIES

DEMENTIA, ACUTE ILLNESS, SURGERY

STRESSORS

Delirium NURSING INTERVENTIONS

ALWAYS RULE OUT A MEDICAL EMERGENCY FIRST

HYDRATION & NUTRITION, HEARING AID/BATTERY, MOBILIZE

NORMALIZE SLEEP/WAKE CYCLE, REORIENT, ENGAGE

Delirium ASSESSMENT & DOCUMENTATION

CONFUSION ASSESSMENT METHOD (CAM-ICU)

1. CONFUSION

2. INATTENTION

3. FLUCTUATING COURSE

Delirium ASSESSMENT & DOCUMENTATION

MEDITECH - ADD INTERVENTION

1. CONFUSION

2. INATTENTION

3. FLUCTUATING COURSE

Delirium ASSESSMENT & DOCUMENTATION

PERFORMING THE BASIC CAM-ICU

1. CONFUSION

2. INATTENTION

3. FLUCTUATING COURSE