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 evolve into agitation and combative behavior. It is one of the most common complications for hospitalized older adults (70+ years old) affecting an estimated 14-56% of this vulnerable population. Causes permanent harm, leaving patients below baseline cognitive functioning. Associated with 62% increased mortality within one year after discharge. Unrecognized in about 60% of all cases. Nursing interventions can effectively help prevent delirium.

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.

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 intervention immediately delivered to staff via academic detailing
- Clearly Defined, Concise, Targeted, Repetitive, Personalized, Engaging Imagery, One on One
- Knowledge test repeated after 30 days
- And/or documented CAM-ICU screenings

Results
Statistical Analysis of Aims

<table>
<thead>
<tr>
<th>Aim</th>
<th>Knowledge Test Question</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Significance (t-test)</th>
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</thead>
<tbody>
<tr>
<td>Aim 1</td>
<td>Definition of Delirium</td>
<td>50</td>
<td>48</td>
<td>.170</td>
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<td>Aim 2</td>
<td>Risk Factors for Delirium</td>
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<td>6.52</td>
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<td>Aim 3</td>
<td>Signs and Symptoms of Delirium</td>
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<td>7.22</td>
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<td>Aim 4</td>
<td>Summary Score</td>
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<td>14.22</td>
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<td>Aim 5</td>
<td>Interventions</td>
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<td>6.78</td>
<td>.009</td>
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<td>Aim 6</td>
<td>Number of CAM-ICU</td>
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<td>Aim 7</td>
<td>Summary Score</td>
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<td>48.11</td>
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</tbody>
</table>

- 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
- To the nurses of 3West Telemetry for their time and attention
- To subject matter experts, Dr. Cathy, Dr. Wang and Dr. Rodriguez
- To the nurses of 1A Medical Surgical for piloting the intervention

References