Using a multifaceted education intervention to improve nurses’ recognition and management of delirium

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Background

Delirium, an acute disorder with decline of attention and cognition, is a clinical complication for as many as 50% of hospitalized older adults leading to increases in mortality, length of stay, falls, rate of discharge to long-term care, and cognitive and functional decline. Early delirium recognition, prevention, and management are needed to improve safety and quality of care for this vulnerable population. Nurses are key to detecting and reporting delirium symptom. Evidence indicates that education programs for nurses regarding delirium recognition and management are needed and are a priority in delirium clinical practice guidelines. A multifaceted education intervention is described most frequently in the evidence.

Practice Question

Does implementing a multifaceted delirium education program for nurses result in increased delirium recognition as evidenced by improved documentation of delirium risk factors, delirium screens, nonpharmacological interventions, and initiation of delirium plans of care for patients 65 years and older on a medical/surgical unit?

Methods

The Johns Hopkins Nursing Evidence-Based Practice Model was used to guide the evidence search, appraisal, synthesis, and translation. A thorough search for original evidence regarding delirium education for nurses yielded articles from 1998 to 2015. The evidence was reviewed; expert opinion; QI

Evidence Findings

<table>
<thead>
<tr>
<th>Type of Evidence</th>
<th>Number of Articles</th>
<th>Overall Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>3</td>
<td>A-High</td>
</tr>
<tr>
<td>Level II</td>
<td>19</td>
<td>B-Good</td>
</tr>
<tr>
<td>Level V</td>
<td>9</td>
<td>A-High</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

Evidence Translation

Evidence translation began September 2015 with nursing staff in the project unit: A 55-bed orthopedic, neuroscience, and trauma unit. The intervention was a multifaceted education program. All registered nurses (RNs) working on the unit were invited to participate. The multifaceted education intervention included:

- Nursing knowledge of delirium questionnaire pre and post intervention
- B.E.A.T. Delirium computer based training (CBT) module
- One-hour didactic in-services (offered 12 times in the month)
- Delirium bulletin board with post-test
- bedside coaching by the project leader
- B.E.A.T. Delirium mnemonic

Of the 77 RNs in the unit, 69 (90%) participated in at least one educational offering.

Clinical Implications

- Delirium is a costly, under recognized, and often fatal condition for patients 65 years and older.
- Nurses are key to detecting and reporting delirium symptoms, yet many exhibit lack of knowledge regarding the differences between delirium and dementia—the confusion associated with delirium is often attributed to the normal aging process.
- Use of a multifaceted education intervention in this project has demonstrated increased recognition of delirium as evidenced through improved delirium symptom and management documentation
- Rounding by a bedside coach or resource person reinforces learning and helps to improve recognition and management
- Conversations regarding delirium symptoms are occurring daily during structured interdisciplinary bedside rounds
- Raising awareness, educating nurses, screening, and using nonpharmacological interventions are essential in order to B.E.A.T. delirium!

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Percent Completed Documentation Comparison Pre-Intervention 2014 to Post-Intervention 2015

- Delirium Risk Documented
- Delirium Screen
- Plan of Care Initiated
- Nonpharmacological Interventions Documented

Delirium Risk Documented: Pre-Intervention 2014 = 61% Post-Intervention 2015 = 72% (p < .0001)
Delirium Screen: Pre-Intervention 2014 = 14% Post-Intervention 2015 = 50% (p < .0001)
Plan of Care Initiated: Pre-Intervention 2014 = 5% Post-Intervention 2015 = 30% (p < .0001)
Nonpharmacological Interventions Documented: Pre-Intervention 2014 = 13% Post-Intervention 2015 = 43% (p < .0001)

* Chi square p value