Changing Registered Nurses’ Attitudes Regarding Delirium Assessment in a Military Community Hospital

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Changing Nurses Attitudes to Delirium Assessment

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- Westbrook—Medical Center Enterprise
- Forehand & Vardaman—Troy University

Learning Objectives:
- Analyze the impact that delirium has on the hospitalized patient.
- Relate nurse attitudes towards standardized delirium assessment.
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- Commonly develops in the hospitalized patient
- Patients age 65 and older
- Precipitating factors:
  - Unplanned hospital admission
  - Surgery
  - Trauma
- Most will have long-term cognitive impairment
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Pain, Agitation, and Delirium: Interrelated

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- Delirium is undetected by nurses and other HCPs
  - In 50-70% of all hospitalized patients
  - In >80% of Intensive Care Unit (ICU) patients
  - In 8-10% of all patients seen in the Emergency Department (ED)
  - Military Veterans have a 6-20% higher incidence of delirium during acute hospitalization

- Delirium predicts:
  - Longer hospital stays
  - Higher morbidity and mortality
  - Discharge to a destination other than home

- Delirium medical costs in U.S.: $184 billion annually
- Despite practice guidelines few implement.
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- Basic “nursing assessments” do not capture delirium symptoms
- Low detection rates attributed to nursing attitudes, knowledge deficits
- Education and training increase registered nurses’:
  - Positive attitude toward use of standard tool
  - Confidence in use of standard tool
  - Accuracy in diagnosis
  - Willingness to continue to use standard tool
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ACE Star Model of Knowledge Transformation

- Framework provides 5 steps to Knowledge Transformation:
  - Knowledge generation (research)
  - Evidence summary (systematic reviews)
  - Evidence restructuring (clinical practice guidelines)
  - Clinical practice integration
  - Patient outcome evaluation (evidence-based research)

- Outcome concept: Knowledge = Evidence-Based Practice = Quality of Care
Measurable Goals and Outcomes

✓ RNs would report delirium assessment essential to quality nursing

✓ RNs would report positive attitude to use of standardized delirium assessment tool

✓ RNs would report increased confidence in recognizing delirium in patients with increased knowledge of delirium symptoms and keys to proper assessment

✓ RNs would report willingness to continue use of standardized delirium assessment tool
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Sample

- Minimum of 1 year experience
- Ability to read and write English
- Target population:
  - 6 anesthesia providers
  - 16 ICU nurses
  - 25 ED nurses
  - 29 surgical services nurses
  - 42 medical/surgical nurses.
- Majority (78%) had either direct personal and/or family connections to a current or former military service member
- N = 29
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**Setting**

- Less than 100-bed adult, acute care, non-teaching hospital facility
- Located in the downtown area of a rural city in Alabama, U.S.A.
- Full service community hospital
  - 24-hour, 12-bed Emergency Department
  - 8-bed Intensive Care Unit (ICU)
  - One 29-bed surgical floor
  - One 29-bed medical floor
  - 6-bed labor unit with a 12-bed post-partum unit
  - 4-room main operating suite with 2 endoscopic procedure rooms and 7-bed PACU
- Hospital admissions average 284 per month
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Resources

- Vignettes produced by:
  - The John A. Hartford Institute for Geriatric Nursing (HIGN)
  - The American Journal of Nursing (AJN)
- Video program entitled:
  - Delirium - The Under-Recognized Medical Emergency: Chapter 1-Responding to trigger behavior using the CAM
  - Retrieved from http://hartfordign.org/practice/try_this
  - AACN Delirium Practice Alert & Gap Analysis
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**Intervention**

- Pre-survey with imbedded informed consent
- 50-minute education and training intervention (ETI) session
  - PowerPoint (PPT) presentation
  - Introduce Delirium clinical assessment tools
    - Confusion Assessment Method (CAM, CAM-ICU)
    - Delirium Screening Checklist (DSC, ICDSC)
  - Practice use of DA tools while viewing clinical video-scenarios
  - Present the project implementation procedure
- Post-survey
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Tool

- **Attitudes of Nurses to Delirium Assessment Questionnaire Survey**
  - Developed by Eastwood, Peck, Bellomo, Baldwin, & Reade (2012)
  - Importance of delirium assessments to quality of care
  - Perceived value of delirium assessment to patient, nurse, other HCPs
  - Perceived confidence of accuracy of delirium assessments
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Statistical Results

- Description of the sample
  - Female (93.1%, n = 27)
  - Caucasian (96.6%, n = 28)
  - Age of 30-60 years (72.3%, n = 21)
  - Employed full-time in nursing (86.2%, n = 25)
  - RN for 1-20 years (55.1%, n = 16)
  - ADN degree (37.9%, n = 11)
  - Did not hold a specialty nursing certification (72.4%, n = 21)
  - Unit of assignment: 62.1% worked in Surgery (Day Surgery, Pre-op Clinic and PACU)
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Statistical Results

- Frequencies: Knowledge of delirium, clinical use of standardized assessment tools, and training:
  - Never assessed a patient for risk factors of delirium (96.6%, \( n = 28 \))
  - Never used a delirium assessment tool (100%, \( n = 29 \))
  - No knowledge that delirium assessment tools existed (79.9%, \( n = 22 \))
  - Never had any training on how to assess patients for delirium (100%, \( n = 29 \))
### Frequencies of pre- and post-intervention delirium assessment variables (N = 29)

<table>
<thead>
<tr>
<th>Importance of DA for patients</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Not important</td>
<td>1</td>
<td>3.4</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>12</td>
<td>41.4</td>
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<td>Very important</td>
<td>10</td>
<td>34.5</td>
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<tr>
<td>Essential</td>
<td>6</td>
<td>20.7</td>
</tr>
<tr>
<td>Feel performing DA worth time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not perform DA</td>
<td>28</td>
<td>96.6</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>3.4</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Confidence in accuracy of DA</td>
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<td></td>
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<tr>
<td>Very confident</td>
<td>0</td>
<td>0.0</td>
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<tr>
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<td>17.2</td>
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<tr>
<td>Not very confident</td>
<td>5</td>
<td>17.2</td>
</tr>
<tr>
<td>Not confident at all</td>
<td>19</td>
<td>65.5</td>
</tr>
</tbody>
</table>
## Future use of delirium assessment (N = 29)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency of DA preference</strong></td>
<td></td>
<td></td>
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<tr>
<td>On admission</td>
<td>7</td>
<td>21.1</td>
</tr>
<tr>
<td>Once a shift</td>
<td>16</td>
<td>55.2</td>
</tr>
<tr>
<td>Once a day</td>
<td>6</td>
<td>20.7</td>
</tr>
<tr>
<td><strong>Recommend continued use of DA tool</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>75.9</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>24.1</td>
</tr>
<tr>
<td><strong>Use different DA tool than those trialed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes – use another form</td>
<td>2</td>
<td>6.9</td>
</tr>
<tr>
<td>No – use one of two forms used in trial</td>
<td>27</td>
<td>93.1</td>
</tr>
</tbody>
</table>

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Statistical Results

- Inferential statistics:
  - Both paired samples t-tests and Chi-square statistics were conducted
  - Modest clinical differences in study outcomes
  - No statistically significant results
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**Statistical Results**

- **Open-ended question results:**
  - **Age:** Most common “general” risk factor reported in both pre-intervention (100.00%, n = 29) and post-intervention (96.50%, n = 28)
  - **Most frequently reported disease risk factor:**
    - **Alcoholism:** pre-intervention (96.55%, n = 28)
    - **Surgery:** post-intervention (89.60%, n = 26)
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Discussion & Findings

- Community hospital nurses reported
  - DA essential to quality patient care
  - Positive attitude to use of tools
  - Increased confidence
  - Willingness to continue use
  - Military veteran population was at great risk for delirium events
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**Implications for Practice Change/Sustainability**

- **Implications for Practice:**
  - Decreased long-term care requirements
  - Decreased hospital and health care costs
  - Improved bedside clinical assessment/patient care by all HCPs
  - VA research – Longitudinal studies with policy change
  - VA centralized reporting requirements/database

- **Sustainability**
  - Documentation of positive patient outcomes
  - Education for all HCPs
  - Transferability through dissemination
  - Health Care Policy change – VA and civilian
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LIMITATIONS

- Sample size small
- Respondent bias
- Hawthorne effect
- Lack of diversity of participant population
- Single project site