Nurses' knowledge, attitudes, confidence, and practices related to the early identification and management of sepsis are crucial to patients' survival.

**Online continuing education on sepsis increases nurses' knowledge and confidence to identify & manage sepsis.**

**Survey Responses: Significant Differences**
Median response based on 5-point Likert scale. Nurses were asked to rate to what extent they agree with each statement. 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

**Pre/Post Education Survey Means**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre-Education Mean</th>
<th>Post-Education Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivering sepsis care to SSC guidelines is part of my patient management</td>
<td>3.17</td>
<td>4.15</td>
</tr>
<tr>
<td>I would only initiate the 1-hour sepsis bundle at the direction of a provider</td>
<td>2.96</td>
<td>3.78</td>
</tr>
<tr>
<td>I discuss the risk for sepsis and assessment of sepsis with the ICU team</td>
<td>3.35</td>
<td>3.54</td>
</tr>
<tr>
<td>I make assessing for sepsis a part of my shift</td>
<td>2.96</td>
<td>3.78</td>
</tr>
<tr>
<td>I am confident I know each intervention of SSC's 1-hour bundle</td>
<td>2.41</td>
<td>4.54</td>
</tr>
<tr>
<td>I am knowledgeable of the SSC sepsis guidelines</td>
<td>2.7</td>
<td>4.46</td>
</tr>
</tbody>
</table>

**Outcomes**
- Early identification of sepsis in neurosurgical critical care patients is a significant challenge due to the many possible confounding variables that lead to altered mental status in this specific patient population.
- Standardized online training:
  - Increased knowledge of SSC’s 1-hour bundle.
  - Increased confidence in the management of sepsis.
  - Increased self-ratings in discussing sepsis risk & assessment with providers.
  - Increased self-ratings of sepsis assessment during nurses' shifts.
- Consistently low self-ratings in the initiation of SSC’s 1-hour bundle may be due to a lack of protocol.

**Implications**
- Offer yearly CE on sepsis for nurses.
- CE may empower nurses to advocate for early, life-saving sepsis interventions.
- Advocate for a Sepsis Screening tool and regular assessment of sepsis.
- Develop a nurse delegation protocol to initiate the evidence-based 1-hour SSC Sepsis Bundle.
- Continue to monitor unit-level sepsis data to determine how education influences early identification and survival.

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- Crystal Pelgorsch, BSN, RN, CCRN Specialty Practice Leader, MICU

**People**
Education and surveys were administered to:
- N=23 Neurosurgical ICU Nurses, pre-education
- N=15 Neurosurgical ICU Nurses, post-education

**References**

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**Background**
- Neurosurgical ICU nurses are in the prime position to assess early changes in altered-mental status, including “sepsis-associated encephalopathy”, which could lead to early identification of sepsis.
- Nurses do not currently have a required continuing education for Sepsis nor use a Sepsis Screening Tool or Sepsis Management Bundle to guide their sepsis assessment or care.

**Method**
- This quality improvement project used the Advancing Research and Clinical practice through Collaboration (ARCC) model based on the evidence-based practice paradigm and process.
- Nurses took an online Sepsis Continuing Education course provided by the Sepsis Alliance Institute & pre/post-education surveys on their knowledge, confidence, attitudes, & practices to identify and treat sepsis.