IMPLEMENTATION OF AN EMERGENCY MEDICINE PALLIATIVE CARE CURRICULUM FOR EMERGENCY MEDICINE RESIDENTS, A QUALITY IMPROVEMENT PROJECT

Dylan Rupska, MD1; Travis Hase, MD1; Ryan Tabor, MD1; Cindy Ndiaye, MPH2; Maggie Putman, DO1
1Department of Emergency Medicine, Advocate Christ Medical Center; 2Department of Graduate Medical Education Research, Advocate Aurora Health

Introduction:
Half of Americans visit the Emergency Department (ED) in their last month of life, and 75 percent in the last six months.1 Because many patients present to the ED while critically ill and require urgent interventions, it is imperative emergency medicine (EM) physicians are able to quickly align with patients and families to determine patients’ values and offer recommendations for further medical treatment. EM physicians have reported that primary palliative care is an important component in their practice, yet they feel they are not adequately educated in providing palliative care.2,3,4,5,6 Previously reported EM residency palliative curricula were effective methods to increase knowledge and increase resident confidence in palliative care skills.7

Objectives:
Our specific aim is to develop a primary palliative care curriculum for EM residents and evaluate if this curriculum improves residents’ knowledge, level of comfort, and perceived application of skills in caring for patients with chronic and/or terminal illness in the ED. Secondarily, we would like to determine if EM residents find primary palliative care education important and determine which modalities are most effective as a means to learn palliative care knowledge and skills.

Methods:
A curriculum was developed that consisted of 4 didactic sessions, a communication skills lab using standardized patients, and a small group simulation case using a high fidelity manikin. The study population is Emergency Medicine residents at Advocate Christ Medical Center in all levels of training. Data was collected via pre- and post-intervention surveys using Likert Scale questions to capture residents’ perceived ability of each component. In order to conduct a statistical comparison, Likert Scale items were converted to corresponding numerical values respectively (1-5): Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. As variables were found to be not normally distributed, the non-parametric equivalent of the paired t-test, the Wilcoxon Signed-Rank test was used for comparison. A p-value of <0.05 determined significant differences in Likert scores pre- versus post-tests.

Results:
Table 1 displays the survey data with medians and interquartile ranges as these items were found to not be normally distributed. Figure 1 demonstrates the median scores of survey items 3-12 as these were found to be statistically significant. Results in Figure 2 showed that residents found lecture, small group discussion, and simulation are all effective modalities for teaching Palliative Care skills with preference for small group discussion and simulation.

Educational Modality Survey

This palliative care curriculum for EM residents did improve residents’ knowledge, level of comfort, and perceived application of skills in caring for patients with chronic and/or terminal illness in the ED. EM residents did find primary palliative care education important. Lecture, small group discussion, and simulation were all found to be effective modalities for learning palliative care skills, and the strongest preference was for simulation and small group discussion.

References:

Table 1

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Pre-Test Median Score with interquartile range N = 41</th>
<th>Post-Test Median Score with interquartile range N = 41</th>
<th>Wilcoxon Signed-Rank P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Emergency Medicine has an important role in providing palliative care</td>
<td>4 (4-5)</td>
<td>4 (4-5)</td>
<td>0.8333</td>
</tr>
<tr>
<td>2) Palliative care education is important in Emergency Medicine residency</td>
<td>4 (4-5)</td>
<td>4 (4-5)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>3) I feel confident in my ability to determine a patient’s decision making capacity</td>
<td>4 (4-5)</td>
<td>4 (4-5)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>4) I feel confident in my ability to have goals of care discussions with my patients/surrogates</td>
<td>4 (4-5)</td>
<td>4 (4-5)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>5) I feel confident in my ability to interpret advanced directive forms (POLST, surrogate decision maker, living will, etc)</td>
<td>3 (4-4)</td>
<td>3 (4-4)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>6) I feel confident in my ability to manage symptoms associated with the last hours of living</td>
<td>3 (3-3)</td>
<td>3 (3-3)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>7) I feel confident in my ability to effectively negotiate decision making with patients and families regarding risks, benefits, and alternatives when patients present with chronic or terminal illness</td>
<td>3 (4-4)</td>
<td>3 (4-4)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>8) I feel confident in my ability to treat refractory symptoms associated with chronic/terminal disease</td>
<td>2 (3-3)</td>
<td>2 (3-3)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>9) I feel confident in my ability to perform effective acute pain management in patients with palliative care needs</td>
<td>3 (4-4)</td>
<td>3 (4-4)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>10) I feel confident in my ability to effectively communicate bad news including death disclosure, errors, unexpected outcomes, and other challenges while caring for patients with the limiting illnesses and those at the end of life</td>
<td>3 (4-4)</td>
<td>3 (4-4)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>11) I understand the difference between hospice and palliative care and the resources each provider to patients</td>
<td>3 (4-4)</td>
<td>3 (4-4)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>12) I feel confident in my ability to initiate contact and involve palliative and/or hospice care teams to optimize care for patients in the ED</td>
<td>2 (3-3)</td>
<td>2 (3-3)</td>
<td>&lt;0.001*</td>
</tr>
</tbody>
</table>

Figure 1

Differences in Median Scores for pre-versus-post Intervention

Survey Items

Question 3
Question 4
Question 5
Question 6
Question 7
Question 8
Question 9
Question 10
Question 11
Question 12

Pre-intervention
Post-intervention

Figure 2

Educational Modality Survey

Lecture is an effective educational tool to learn EM palliative care skills
Simulation is an effective educational tool to learn EM palliative care skills
Lecture improved residents ability to have goals of care conversations
Simulation improved residents ability to discuss bad news
Simulation improved residents ability to align with patient and family wishes about treatment recommendations

0% 25% 50% 75% 100%