Breaking Down Silos: Impact of an Interprofessional Curriculum to Teach Health Professions Students Oncology Palliative Care

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• Interprofessional practice is a key component of improving overall quality of health care and health outcomes (Institute of Medicine, 2003).

• Interprofessional education and practice is necessary worldwide (World Health Organization, 2010).
Interprofessional Teams….

- enhance quality of patient care.
- lower health care costs.
- decrease patients’ length of stay.
- reduce medical errors.
• Health professionals must be educated to provide patient-centered care as interdisciplinary team members (IOM, 2003).

• Nursing students must be prepared for collaborative interdisciplinary practice.
• Interprofessional communication and collaboration - essential component of baccalaureate education (AACN, 2008).

• Team work and collaboration – core pre-licensure QSEN competency (Cronenwett, 2007).
• Key to preparing nursing students for collaborative practice may be through interprofessional educational experiences during undergraduate programs.

• Interprofessional education essential to transform nursing education (Institute of Medicine, 2010).
Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care.”

(Center for the Advancement of Interprofessional Education, 2002)
Challenges
Study Purpose

To examine the effect of a mandatory, interdisciplinary oncology palliative care curriculum on nursing, medical, social work, and chaplaincy students’ self-perceived comfort with palliative care skills, self-efficacy related to interprofessional learning and interprofessional palliative care knowledge.
Study supported by a grant from the National Cancer Institute at the National Institutes of Health
Interdisciplinary Curriculum for Oncology Palliative Education (iCOPE)

- Design an innovative, truly interdisciplinary palliative care curriculum for nursing, medicine, social work and chaplaincy students.
- Implement the curriculum.
- Evaluate the effectiveness of the curriculum and learner outcomes.
The iCOPE Curriculum was…

• Centrally-driven, mandatory, integrated, flexible, multi-modal, and portable.

• Driven by best clinical practices, evidence-based guidelines, and existing palliative care and oncology curricula.
The iCOPE Curriculum…

• Demonstrated palliative care’s core principles by integrating the technical, scientific, and humanistic qualities into holistic care of the cancer patient.

• Included learning experiences that promoted collaborative learning and teamwork and broadened interdisciplinary awareness.
Process Schematic

Individual-Oriented, Discipline-Specific Education

Team-Oriented, Changed Learners In Each Discipline

Interprofessional Learning Experiences

- Medicine
- Nursing
- Social Work
- Chaplaincy
National Consensus Project for Quality Palliative Care
Four Major Components

1. Case-based online didactics

2. ICME: Interprofessional Case Management Experience

3. Clinical Rotation

4. Reflective Writing / Small Group Sessions
Study Purpose

To examine the effect of a mandatory, interdisciplinary oncology palliative care curriculum on nursing, medical, social work, and chaplaincy students’ self-perceived comfort with palliative care skills, self-efficacy related to interprofessional learning and interprofessional palliative care knowledge.
Methods

- Pre-post mixed methods design
- Data collection: On-line surveys; focus groups
Sample

- Nursing students; last semester BSN
- Medical students; fourth year
- Social work students specializing in health related social work (master’s level)
- Chaplaincy residents
Measures

Pre/post tests on 3 measures:

• End-of-life Professional Caregiver Survey¹

• Self-Efficacy for Interprofessional Experiential Learning Scale²

• Palliative Care Knowledge Test

Measures

• Evaluation of each learning modality; evaluation of iCOPE curriculum overall

• Focus groups (optional) for feedback on content, process, outcomes, logistics
Our Learners

- 373 Interdisciplinary Learners
  - 240 Nursing
  - 95 Medicine
  - 8 Chaplaincy
  - 30 Social Work
# Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic (N=373)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>93</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>280</td>
<td>75</td>
</tr>
<tr>
<td>Previous IPE with other health professions students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>98</td>
<td>26</td>
</tr>
<tr>
<td>A little bit</td>
<td>122</td>
<td>33</td>
</tr>
<tr>
<td>Some</td>
<td>83</td>
<td>22</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>49</td>
<td>13</td>
</tr>
<tr>
<td>Very much</td>
<td>21</td>
<td>6</td>
</tr>
</tbody>
</table>
Results: End-of-Life Professional Caregiver Survey

Comparisons:

- **Nursing¹**
  - Pre: 1.5
  - Post: 3.0
  - ES = 1.46
  - Significance: $p < 0.001$

- **Medicine¹**
  - Pre: 1.5
  - Post: 3.0
  - ES = 1.92
  - Significance: $p < 0.001$

- **Social Work¹**
  - Pre: 1.5
  - Post: 3.0
  - ES = 1.86
  - Significance: $p < 0.001$

- **Chaplaincy²**
  - Pre: 1.5
  - Post: 2.0
  - ES = 0.98
  - Significance: $p = 0.027$

¹ $p < 0.001$
² $p = 0.027$
Results: Self-Efficacy for Interprofessional Experiential Learning Scale

Nursing\(^1\)  Medicine\(^1\)  Social Work\(^1\)  Chaplaincy\(^2\)

ES=0.80  ES=0.96  ES=0.83  ES=0.80

\(^1 p < 0.001\)  \(^2 p = 0.058\)
Results: Palliative Care Knowledge Test

<table>
<thead>
<tr>
<th>Field</th>
<th>Pre</th>
<th>Post</th>
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</thead>
<tbody>
<tr>
<td>Nursing¹</td>
<td>116</td>
<td>81</td>
</tr>
<tr>
<td>Medicine¹</td>
<td>116</td>
<td>81</td>
</tr>
<tr>
<td>Social Work²</td>
<td>116</td>
<td>81</td>
</tr>
<tr>
<td>Chaplaincy³</td>
<td>116</td>
<td>81</td>
</tr>
</tbody>
</table>

¹p = 0.001, ²p = 0.033, ³p = 0.151
Results

- Open-ended evaluation questions for each component and the overall curriculum
- Focus Groups
# Overall iCOPE Evaluation

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Rating*</th>
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<tbody>
<tr>
<td>iCOPE learning activities contributed to my learning</td>
<td>4.19</td>
</tr>
<tr>
<td>iCOPE taught me to provide holistic patient/family centered care</td>
<td>4.15</td>
</tr>
<tr>
<td>iCOPE taught me to communicate effectively with patient, families &amp;</td>
<td>4.13</td>
</tr>
<tr>
<td>colleagues</td>
<td></td>
</tr>
<tr>
<td>iCOPE taught me to work effectively with colleagues of multiple</td>
<td>4.09</td>
</tr>
<tr>
<td>professions across multiple settings</td>
<td></td>
</tr>
<tr>
<td>iCOPE taught me to provide effective physical care to address</td>
<td>4.03</td>
</tr>
<tr>
<td>palliative care needs</td>
<td></td>
</tr>
<tr>
<td>iCOPE taught me to identify and address ethical and legal issues</td>
<td>4.00</td>
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<tr>
<td>related to palliative care</td>
<td></td>
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<tr>
<td>iCOPE provided adequate time to work with students preparing to</td>
<td>3.96</td>
</tr>
<tr>
<td>work in other healthcare professions</td>
<td></td>
</tr>
</tbody>
</table>

* Based on 1-5 scale with 1 being strongly disagree and 5 being strongly agree
Overall Themes

• Students most valued clinical experience and team work with students from other disciplines.
• On-line didactics were least favorite portion of curriculum.
• Clinical rotations positively impacted students professionally and personally.
• Increased understanding of and respect for other disciplines.
Themes (cont’d)

- Improved understanding of interdisciplinary teams.
- Perceived improved ability to function on a team.
- Care as it should be for all patients.
- Increased comfort with seriously ill patients.
“Interdisciplinary practice in healthcare is extremely important. For the first time I saw how important it is…when you see the resources that they [other professionals] use, you yourself become a very valuable resource in those areas. You may not have the depth of knowledge that a chaplain or social worker has, but you know to refer. We are all teaching each other.”
“All aspects of this program together make it an incredible educational experience. Each step has its own unique purpose and value. I thoroughly enjoyed the Interdisciplinary Case Management Experience since it involved having to put various concepts learned throughout the curriculum into actual practice. It allowed students to encounter a true interdisciplinary team and take away tools for thriving amidst different disciplines for the sake of the patient.”
Challenges
Lessons Learned

• Teamwork is challenging even when the team members share the passion.

• Less is more.

• Faculty development is crucial.

• Experiential learning trumps other approaches in the eyes of learners.
• Case studies and vignettes don’t have to be perfect – students might learn more if they aren’t.

• Continuous quality improvement is essential.

• Learn from the learners.
Limitations

- Unequal representation of learners from various disciplines.
- Palliative care knowledge survey investigator developed.
- No measurement of long term outcomes; impact on practice.
Summary

• Interprofessional practice is essential for quality health care.
• Interprofessional education is key for preparation as an effective interdisciplinary team member.
• Nurse educators are ideally suited to develop and lead interprofessional educational initiatives.