IMPROVING CARDIAC NURSES’ KNOWLEDGE, ATTITUDE, AND CONFIDENCE IN DELIVERING PALLIATIVE CARE FOR HOSPITALIZED PATIENTS WITH HEART FAILURE

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Background

Heart failure (HF), a chronic, common syndrome, remains burdensome & affects 37.7 million people globally (Vos, 2012). HF, rarely cured, is a life-limiting disease with a poor prognosis (Mozaffarian, 2016). Most palliative care (PC) research focuses on improving quality of life of cancer patients, but patients with HF, do not receive the same access to PC as other life-limiting diseases (Beernaert, 2013).

A review of the literature has documented inadequate PC knowledge, attitude, and confidence in nurses caring for HF patients (Dunlay, 2015). Worldwide, HF, rarely cured, is a life-limiting disease with a poor prognosis (Vos, 2012). HF patients, do not receive the same access to PC as cancer patients (Beernaert, 2013).

Setting & Sample

All staff nurses were invited to participate.

Design

Evaluate over time the effectiveness of an educational intervention via a series of systematic steps.

Translation Framework

Knowledge-to-Action framework guided the project from tool development through implementation via a series of systematic steps.

Aims

• Measuring the percentage of nurses that complete a PC education program.
• Measuring over time the effectiveness of a PC education program on changing cardiac nurses’ -Knowledge level of PC, -Attitude toward care of the dying, and -Confidence level providing PC for HF patients.

Methods

Design

• Interventions 1 group pretest posttest and 1month follow up posttest within group comparison design.
• Setting & Sample

• Inpatient cardiac unit in a 284-bed community hospital in the Midwest United States
• Johns Hopkins University IRB deemed the project quality improvement.
• All staff nurses were invited to participate.

Table 1. Demographics of Study Sample (N=16)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yrs)</td>
<td>37.4 (10.6)</td>
</tr>
<tr>
<td>Gender (M/F)</td>
<td>10/6</td>
</tr>
<tr>
<td>Race (White/Black/Asian/Hispanic)</td>
<td>10/2/3/1</td>
</tr>
<tr>
<td>Education level (B.S./M.S./Ph.D.)</td>
<td>8/6/2</td>
</tr>
<tr>
<td>Clinical experience (yrs)</td>
<td>8.0 (6.5)</td>
</tr>
<tr>
<td>Prior clinical experience (M/F)</td>
<td>10/6</td>
</tr>
<tr>
<td>Prior palliative care education (M/F)</td>
<td>10/6</td>
</tr>
<tr>
<td>Prior palliative care education (M/F)</td>
<td>10/6</td>
</tr>
<tr>
<td>Team role (M/F)</td>
<td>8/8</td>
</tr>
<tr>
<td>Number of end-stage HF cared for in last week</td>
<td>6.7 (4.0)</td>
</tr>
<tr>
<td>Number of end-stage HF cared for in last month</td>
<td>2.2 (1.61)</td>
</tr>
</tbody>
</table>

Intervention

End-of-Life Nursing Education Consortium (ELNEC) provided the intervention foundation. The intervention blended web-based & face-to-face teaching over 7.5 hours.

• Web-based modules: Voice over Power points teaching comprehensive PC.
• Face-to-face class: Practice communication skills & discuss case studies/vignettes; answer questions.

All surveys completed at pre-, post-, and 1month follow up & accessed via Qualtrics.

Results

Knowledge alone will not change bedside practice. Must also incorporate communication skills training.

Future studies should measure the success of transferring PC education to the nursing practice.

Overall, there was a significant increase in Knowledge, Attitude, and Confidence scores after participating in an ELNEC-based PC education program.

Aims (Table 1)

• 41% participation rate.
• Significant increase in Knowledge, Attitude, and Confidence scores after attending the education program.
• Knowledge, Attitude, and Confidence scores maintained at 1 month follow up.

Discussion

Pre-intervention knowledge scores show over half of the nurses did not meet the minimum knowledge competency and scores were lower than in other research. The majority had not worked in an ELNEC-based PC education program.

Pre-intervention confidence scores were lower in other research. The scores significantly improved at post-intervention and although increased at 1month follow up, did not reach significance. It appears implementing knowledge improved confidence and scores may reach significance if repeated later.

Limitations

Convenient sample size did not meet a priori power analysis. Repeated measures format may allow for repeat testing bias.

Table 2. Knowledge, Attitude, and Confidence Survey Scores at Pre-Intervention, Post-Intervention, and 1month Follow-up

<table>
<thead>
<tr>
<th>Survey Type</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>1month follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>77.8 (10.3)</td>
<td>97.0 (7.4)</td>
<td>95.8 (10.3)</td>
</tr>
<tr>
<td>Attitude</td>
<td>56.2 (8.5)</td>
<td>65.4 (7.2)</td>
<td>62.1 (9.4)</td>
</tr>
<tr>
<td>Confidence</td>
<td>54.1 (8.5)</td>
<td>68.1 (10.4)</td>
<td>68.1 (10.4)</td>
</tr>
</tbody>
</table>

Data Analysis

Statistical analysis used SPSS Statistics Version 24. Descriptive analyses were analyzed with descriptive statistics. Repeated measures ANOVA assessed change in sum scores on Knowledge, Attitude, and Confidence.

Demographics (Table 1)

Average 3.8 years nursing experience.

Care for 7 end-stage HF patients in the last week & 5 dying patients in the last month.

76% have no prior clinical PC or hospice experience.

45% have no prior PC education.

Aims (Table 2)

41% participation rate.

Significant increase in Knowledge, Attitude, and Confidence scores after attending the education program.

Knowledge, Attitude, and Confidence scores maintained at 1 month follow up.

References


