Interprofessional Collaborative: Piloting a multidisciplinary team training process in partnership with student scholars

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Background
Social and behavioral factors intersect with chronic health challenges, which are increasingly complex and multifactorial. Addressing these challenges requires interprofessional collaboration, creativity, and multidisciplinary approaches. These approaches can better prepare students for realities of future interprofessional practice. Wipfler et al. reported that students participating in a patient safety focused, interprofessional training, perceived the experience favorably and more than 70% of participants desired additional education. This study supports using interprofessional training as an educational method to explore various health topics and suggests value being added to existing health curricula. In addition to enhancing current health curricula, interprofessional activities should focus on preparing future generational healthcare providers for diverse clinical roles; support competencies that cultivate ethical relationships and shared values; ensure team building; promote professional interactions; and facilitate comprehension of clinical responsibilities.

Aim
• Develop and pilot a case study, for interprofessional team training, that can be delivered using an internet conferencing platform

Methods
Case Development
Medical Student Scholars Selected
• Collaborated with an interprofessional faculty panel
• Piloted a case-based, clinical care simulation

Complex Health Case Created
• Focused case on a young adult male with ADHD
• Adopted Social Determinants of Health and Stages of Change Model

Data Collection
Demographic survey questions were used to collect corresponding data. The 20 item, 6 category, Interprofessional Collaborative Competency Attainment Scale (ICCAS) was selected to assess collaboration competencies before and after training. IBM SPSS Statistics 28 was used to analyze quantitative data. Descriptive statistics and a paired sample t-test were used to describe demographic data and compare baseline and post-training mean scores. Significance was determined using 95% confidence intervals and a p-value less than 0.05. Finally, an open-ended comment section was provided to encourage students to characterize their training experiences.

Results
During the Spring of 2022, the case study was piloted by 45 learners representing 9 health professions. Female nursing students, less than 30 years of age, were the predominant learners illustrated in Figures 1-3. There was a significant increase in mean collaboration competency scores from baseline to follow-up. These findings are displayed in Table 1. Qualitatively, students reported training enjoyment and expressed benefitting from interprofessional learning.

Table 1. Mean ICCAS Scores Before and After IPT Training (n = 42)

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Before Training (M &amp; SD)</th>
<th>After Training (M &amp; SD)</th>
<th>Mean Difference</th>
<th>Cohen's D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>3.58 (0.75)</td>
<td>4.20 (0.60)</td>
<td>0.62*</td>
<td>0.55</td>
</tr>
<tr>
<td>Collaboration</td>
<td>3.38 (0.93)</td>
<td>4.17 (0.65)</td>
<td>0.79*</td>
<td>0.78</td>
</tr>
<tr>
<td>Roles &amp; Responsibilities</td>
<td>3.45 (0.90)</td>
<td>4.24 (0.59)</td>
<td>0.80*</td>
<td>0.77</td>
</tr>
<tr>
<td>Collaborative Pr. &amp; Family</td>
<td>3.45 (0.89)</td>
<td>4.18 (0.65)</td>
<td>0.74*</td>
<td>0.75</td>
</tr>
<tr>
<td>Centered Approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict Management &amp; Resolution</td>
<td>3.62 (0.75)</td>
<td>4.25 (0.68)</td>
<td>0.63*</td>
<td>0.77</td>
</tr>
<tr>
<td>Team Functioning</td>
<td>3.39 (0.88)</td>
<td>4.17 (0.71)</td>
<td>0.77*</td>
<td>0.78</td>
</tr>
<tr>
<td>All Competencies</td>
<td>3.48 (0.81)</td>
<td>4.21 (0.60)</td>
<td>0.73*</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Paired Samples T-Test performed, p<.001 for all comparisons, (*) denotes significance
M - Mean, SD - Standard Deviation

Figure 1. IPTT Professional School Representation (n = 46)

Figure 2. IPTT Participant Genders (n = 45)

Figure 3. IPTT Participant Ages (n = 45)

Conclusion
Survey results suggest that students' perceived ability to collaborate improved from baseline to post training follow-up. Exposure to health professional students from various disciplines, sharing their ideas and experiences on a topic, may be contributing factors. Training participants qualitatively reported benefitting from perspectives shared by non-traditional health fields like social work. Similarly, Wipfler et al. discovered that students valued communicating personal experiences regarding a clinical topic with their interprofessional groups and reported feeling empowered to do so. Despite a small sample size and self-report data, the pilot results are promising and warrant further exploration. This collaborative, virtual process offers a valuable experience for students and provides a platform from which synergistic relationships can form and collaborative skills can be acquired.

References