An Interprofessional Standardized Patient Exercise Improves Attitudes Towards Team Care

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SCHOOLS OF DENTISTRY, MEDICINE, NURSING, PHARMACY, AND GRADUATE PROGRAM IN PHYSICAL THERAPY

INTRODUCTION

• Effective interprofessional education (IPE) engages participants in authentic tasks, settings and roles.
• The use of standardized patients (SPs) for IPE allows students to practice patient care skills, to observe and interact with other health professional students and to practice communication skills.
• We created an interprofessional standardized patient exercise (ISPE) to simulate an interprofessional team.

ISPE Objectives:
1. Enhance knowledge of other healthcare professionals’ roles
2. Foster collaboration in patient care management
3. Improve communication skills among healthcare professionals

PROGRAM DESCRIPTION

• 6 sessions held from January to April 2010
• We created a complex standardized patient case, relevant to all participating professions
• Students from the Schools of Dentistry, Medicine, Nursing, Pharmacy, and Physical Therapy were assigned to interprofessional teams of 4-5 students.

ISPE Outline:
• Students meet their team and discuss how they will approach the case
• Each student interviews the SP for 15 minutes while team members observe
• The team develops a collaborative case plan
• Faculty-led debriefing session with 2-3 teams

METHODS

Study Measures
➢ ISPE participants:
  1. Pre-post administration of 21-item validated survey – Attitudes Toward Healthcare Teams (ATHCT)2; Items are grouped in 3 subscales: Team Value, Team Efficiency, Physician’s Shared Role on Team
  2. Post-exercise survey regarding impressions of the ISPE
➢ Control students (N=209): Administration of the ATHCT
➢ Focus groups for each profession individually held and led by research team. Analysis
• Repeated measures ANOVA with one between factor (profession) and one within factor (score on pre-post attitudes toward team value, team efficiency, or physician’s shared role) using a Bonferroni adjusted significance level of α=0.017 (α/ν=0.05/3)

RESULTS

101 student participants, all in 3rd year, except for NP students (2nd year)
➢ 23 dental, 26 medical, 21 nursing, 24 pharmacy, 7 physical therapy
➢ 73% female, 27% male

Pre-Post ISPE Attitudes Towards Healthcare Teams (N=84)

<table>
<thead>
<tr>
<th>Team Value</th>
<th>Team Efficiency</th>
<th>Physician’s Shared Role</th>
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<tbody>
<tr>
<td>6.97</td>
<td>5.13</td>
<td>4.41</td>
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<tr>
<td>4.72</td>
<td>3.36</td>
<td>3.98</td>
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<tr>
<td>Pre</td>
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Higher scores represent more positive attitudes (1=strongly disagree, 6=strongly agree).
*p<.001 partial eta squared = 0.33. Increases in Team Value score were statistically significant for all professions.
*p=.01 partial eta squared = 0.23. Significant interaction effect (p=.04), partial eta squared = 0.14.

Medical students’ attitudes toward team efficiency changed by less than 0.01, compared with the 0.25 to 0.55 improvements that occurred in the other professions.
No significant improvement in Physician’s Shared Role for any profession.

ATHCT of Post-Intervention ISPE (N=91) vs. Comparison Group (N=209)

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<tr>
<th>Team Value</th>
<th>Team Efficiency</th>
<th>Physician’s Shared Role</th>
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<tr>
<td>6.14</td>
<td>4.92</td>
<td>4.70</td>
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<tr>
<td>4.44</td>
<td>3.88</td>
<td>2.06</td>
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<td>Post-ISPE</td>
<td>Comparison</td>
<td>Post-ISPE</td>
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*p=.001, partial eta squared = 0.06. *p=.001 partial eta squared = 0.06.
In addition, pre-intervention ATHCT scores of ISPE group were comparable, and not statistically different, vs. the comparison group (demonstrates no significant pre-existing differences).

DISCUSSION

• We successfully implemented a pilot ISPE for students from 5 health professions
• Faculty and student satisfaction with the ISPE was high
• The ISPE improved students’ attitudes towards health care teams in the areas of Team Value and Team Efficiency, but not Attitudes Toward Physicians’ Shared Role. There were significant differences by profession.
• Students perceived increased knowledge of professional roles, an opportunity to teach others about their roles and increased confidence in interacting with other healthcare professionals.

Future directions:
• We have expanded the ISPE and in 2012-2013, 377 students will participate including students from social work and nutrition internships.
• We are currently studying team interactions during the ISPE to better understand interprofessional interactions in student learners.

References