



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 professions¹
- 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 care 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.

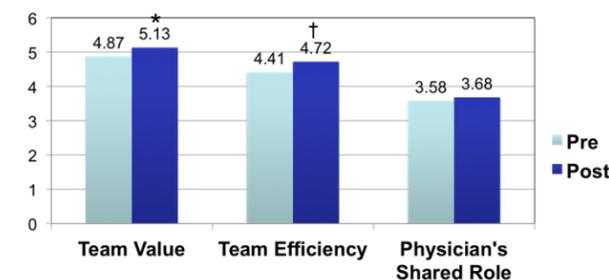
Analysis

- 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 $\alpha=0.017$ ($\alpha/n=0.05/3$)

RESULTS

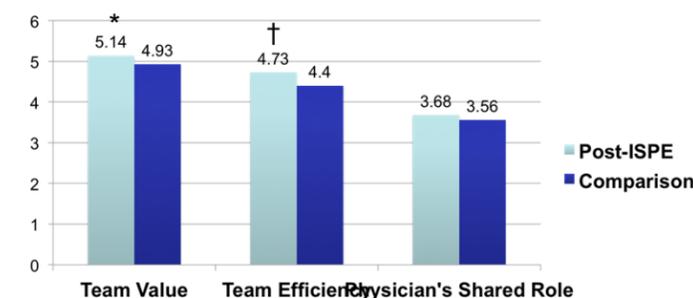
101 student participants, all in 3rd year, except for NP students (2nd year)
 >23 dental, 26 medical, 21 nursing, 24 pharmacy, 7 physical therapy
 >73% female, 27% male

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

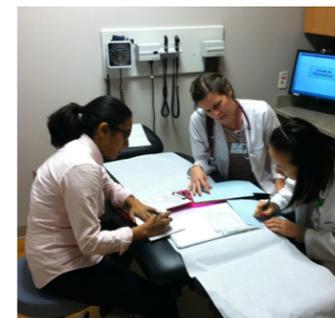


Higher scores represent more positive attitudes (1=strongly disagree, 6=strongly agree).
 * $p<.001$ partial eta squared = 0.31. Increases in Team Value score were statistically significant for all professions.
 † $p<.001$ partial eta squared = 0.25. Significant interaction effect ($p=.014$, partial 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)



* $p<.001$, partial eta squared = .05 † $p<.001$, partial eta squared = .05
 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).



RESULTS (cont)

Student and Faculty Impressions of ISPE

Student Impressions of ISPE	N=91 Mean (SD)	Faculty Impressions of ISPE	N=24 Mean (SD)
I learned about the patient care roles of other healthcare professionals during this exercise	5.36 (0.64)	The ISPE enhances student understanding of the patient care roles of different health professionals.	5.50 (1.10)
This standardized patient exercise increased my comfort in working collaboratively in an interprofessional team to develop a patient care plan	5.18 (0.78)	The ISPE fosters communication between participating health professional students.	5.50 (1.10)
I found the debriefing session to be helpful to process my group's experience during the interprofessional exercise	5.03 (0.97)	The ISPE increases collaboration between participating health professional students.	5.50 (1.18)

T = strongly disagree; 6 = strongly agree

Focus Group Discussion Themes

Common Focus Group Outcome Themes	Sample Student Quotes
Learning roles of other professions	"It was one of those things that really opens your eyes and just gives you a little more insight into what other people do... more empathy for understanding their programs, and that they're just as valuable." (Nursing)
Educating others about your profession	"I think a lot of the students in my group were kind of confused as to what an NP would do in that situation...they were like - oh! Oh, okay, that's what you would do." (Nursing)
Learning skills by watching other team members	"...it was really good to observe other professionals interact with the patient, because I always do it my own way, and when I saw what other people do, I learned how to interview the patient." (Dentistry)
Increased confidence in working with other professionals	"I'm a little more comfortable talking to the physician...it's not so intimidating to go up to the physician and say, hey, this is what I feel should happen to this patient..." (PT)

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 interns.
- We are currently studying team interactions during the ISPE to better understand interprofessional interactions in student learners.

References

1. Staves J, Hossaini M, Kroon L, Lindsay C, Newlin B, O'Brien B, Topp K, Wamsley M. Interprofessional Standardized Patient Exercise (ISPE): The Case of "Paul Harris". MedEdPORTAL; 2011. Available from: www.mededportal.org/publication/9011.
2. Hyer K, Fairchild S, Abraham I, Mezey M, Fulmer T. Journal of Interprofessional Care 2000; 14:249-258.