

Student Attitudes Toward Interprofessional Education: Baseline and Midpoint in the Jefferson Health Mentor Program

Elena M. Umland*, Cynthia A. Sanoski*, Kevin Lyons**, Carolyn Giordano**, Jon Veloski***, Christine Arenson***, Molly Rose#.

*Jefferson School of Pharmacy, **Jefferson Center for Collaborative Research, ***Jefferson Medical College, #Jefferson School of Nursing, Thomas Jefferson University.

Background

- The Jefferson Health Mentor (JHM) Program is a two-year longitudinal experience that partners 3-5 students from 3-4 different professions with a Health Mentor, an adult volunteer who has one or more chronic conditions.
- Students meet with their Health Mentor 3-4 times per academic year to complete structured modules that include: life history, health history, evaluation of access to care, importance of professionalism, creation of a wellness plan and patient safety
- Through participation in the JHM Program, Jefferson students will:
 - Obtain an increased understanding of the roles of their colleagues and be prepared to function as members of an effective healthcare team; and
 - Define patient-centered care and identify the role of the interprofessional healthcare team in its provision.

Objectives

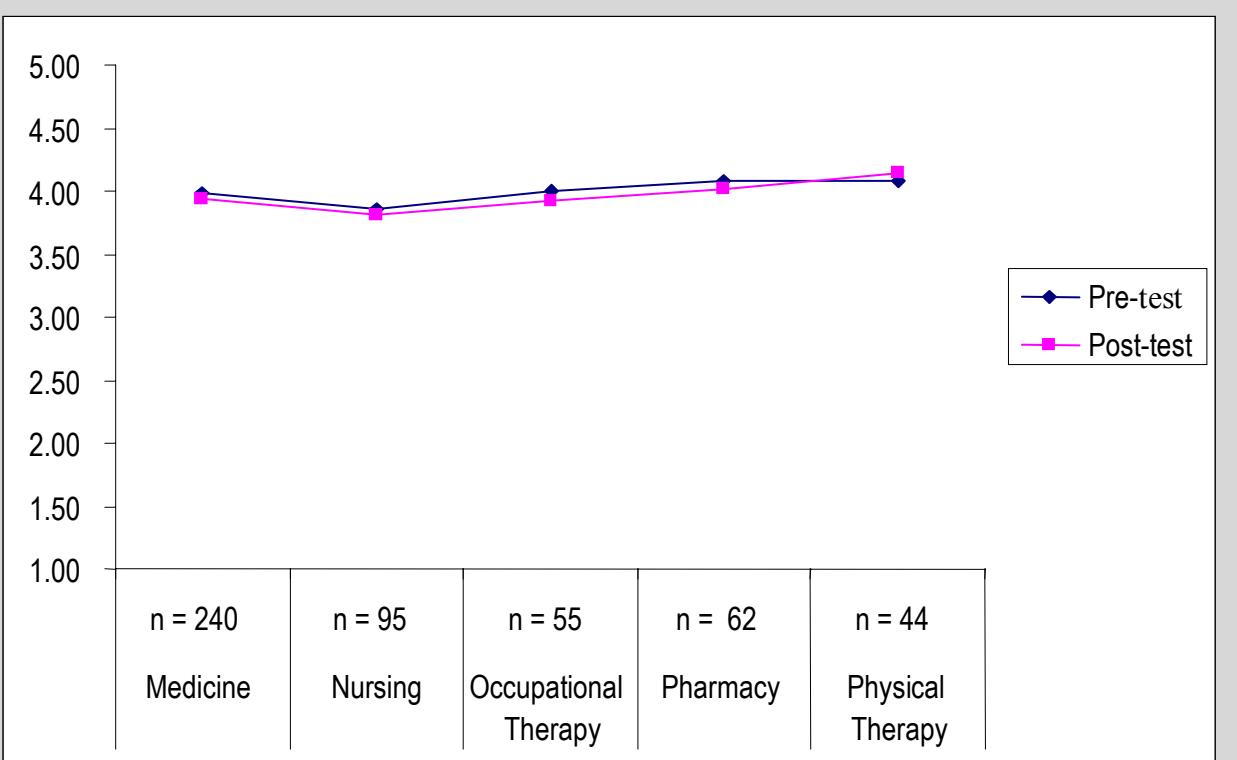
To measure pharmacy student attitudes toward interprofessional education (IPE) at baseline and after completion of one year of the program and compare the results to medical, nursing, occupational therapy (OT) and physical therapy (PT) students using the Interdisciplinary Education Perception Scale (IEPS)¹.

Methods

- First-year medical, nursing, OT, pharmacy and PT students (n=544) completed the IEPS at baseline (Fall 2008) and at the end of year one of the JHM program (Spring 2009). It will be repeated again at the conclusion of the JHM program (Spring 2010).
- The IEPS is a psychometrically designed, validated instrument that includes 18 statements to which the respondent identifies their level of agreement using a 5-item scale (strongly disagree, disagree, neutral, agree or strongly agree).
- The IEPS measures four attitudes deemed important in the interprofessional setting:
 - Factor 1 = Professional competency and autonomy (statements 1, 3, 4, 5, 7, 9, 10, 13).
 - Factor 2 = Perceived need for professional cooperation (statements 6, 8).
 - Factor 3 = Perception of actual cooperation and resource sharing within and across professions (statements 2, 14, 15, 16, 17).
 - Factor 4 = Understanding the value and contributions of other professions (statements 11, 12, 18).

Results

Mean IEPS Total Score by Academic Discipline Pre-test (September 2008) and Post-test (April 2009)



- Pre-test: pharmacy students scored highest; significance only identified when compared to nursing students ($p=0.018$).
- Post-test: continued significant difference between pharmacy and nursing ($p<0.01$).

Pre- and Post-test Means for Each IEPS Factor for Entire Cohort (n=496)

	Mean Pre-Test	Mean Post-Test
Factor 1 Professional Competence and Autonomy*	4.09	4.01
Factor 2 Perceived Need for Professional Cooperation*	4.39	4.22
Factor 3 Perception of actual cooperation and resource sharing within and across professions	3.96	3.95
Factor 4 Understanding the value and contributions of other professions**	3.47	3.52

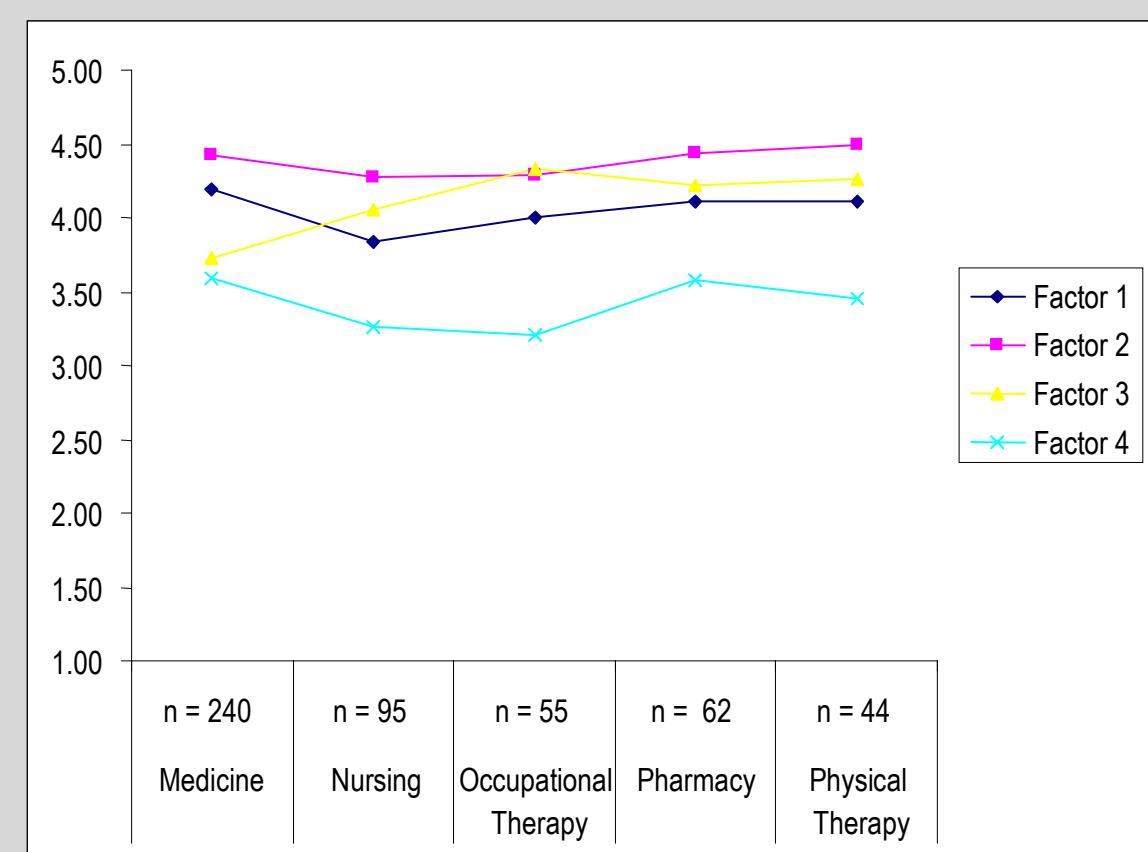
* Significant decline over time ($p=0.00$)

** Significant increase over time ($p=0.04$)

While not significant, among the pharmacy students, a decline in score over time was noted for factors 1 and 2 and an increase in score over time was noted for factors 3 and 4.

Results

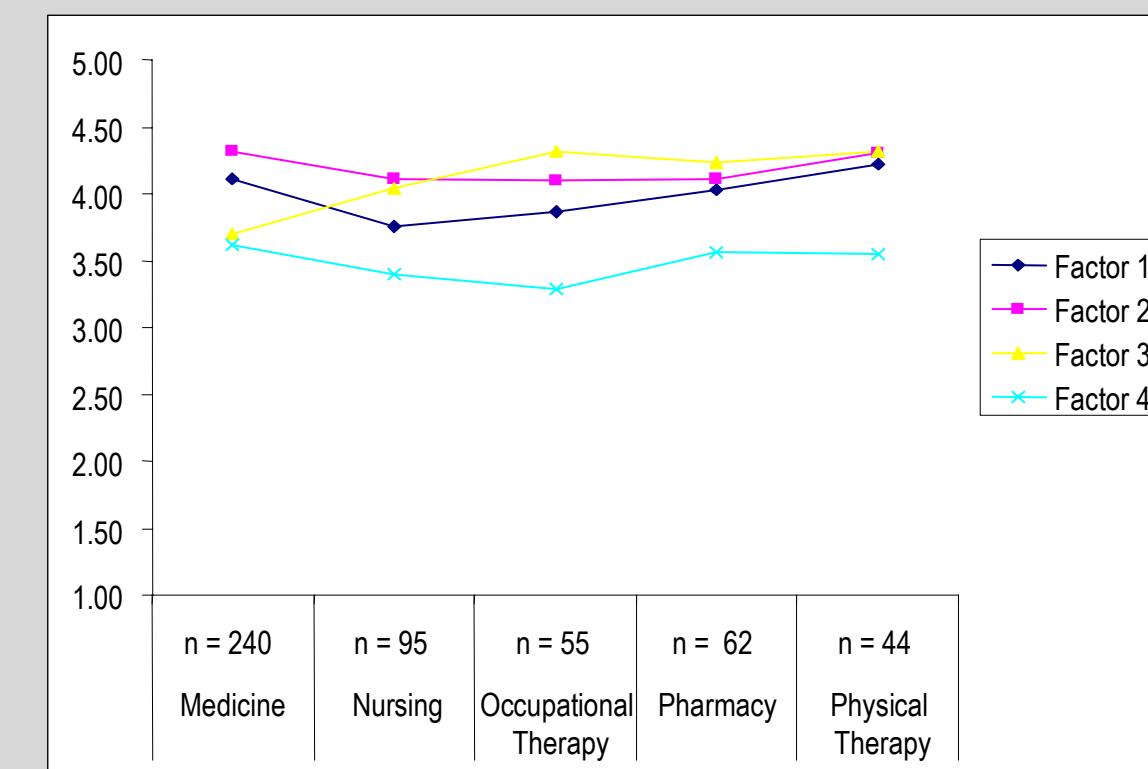
Mean IEPS Factor Score by Academic Discipline Pre-test (September 2008)



At baseline:

- Factor 1 - Pharmacy students scored significantly higher than nursing students ($p<.001$).
- Factor 2 - There were no differences noted between the programs.
- Factor 3 - Medical students scored significantly lower than all other programs ($p<.001$ for nursing, OT, PT; $p=.005$ for pharmacy).
- Factor 4 - Pharmacy students scored significantly lower than OT students ($p=.006$).

Mean IEPS Factor Score by Academic Discipline Post-test (April 2009)



At the conclusion of year one of the JHM Program:

- Factor 1 - Pharmacy students continue to score significantly higher than nursing students ($p<.001$).
- Factor 2 - There were no differences noted between the academic programs.
- Factor 3 - Medical students scored significantly lower than all other academic programs ($p<.001$ for each program).
- Factor 4 - There were no significant differences noted between Pharmacy students and the other academic programs. Medical students scored significantly higher than nursing and OT students ($p<.001$).

Conclusions and Implications

Overall, pharmacy students entered the JHM Program with positive attitudes towards IPE. Over the first year of the JHM Program, the biggest change in IEPS score for the pharmacy students was a decline in Factor 2 (perceived need for professional cooperation). Anecdotally, it appears that the strength of the team may have been a large factor in the IEPS results.

For the entire cohort of students, the decline from baseline in results for Factors 1 (professional competency and autonomy) and 2 (perceived need for professional cooperation) has been considered and has contributed to changes to the first year of the JHM Program for the cohort entering in September 2009.

JHM Program orientation will include a more specific and thorough introduction to each of the disciplines represented.

Defined scheduling of group meetings and meetings with the Health Mentor will be facilitated by the Jefferson Center for Interprofessional Education and be in place by orientation.

Individual programs will incorporate discussion and activities within their curricula to improve student's understanding of their current and future role in providing patient-centered care in an interprofessional healthcare team.

The increase from baseline in results for Factor 4 (understanding the value and contributions of other professions) illustrates that the team environment with structured, patient-centered activities for interprofessional groups of students in their first professional year was successful in providing the students with an increased understanding of their colleagues.

A survey of faculty across the participating disciplines is currently underway to evaluate similarities and differences between faculty and students in the specific academic disciplines relative to their attitudes towards IPE.

Reference

Luecht RM, Madsen MK, Taucher MP, Petterson BJ. Assessing professional perceptions: design and validation of an interdisciplinary education perception scale. *Journal of Allied Health* 1990;19:181-91.

Contact information

Elena M. Umland, PharmD
Associate Dean for Academic Affairs
Jefferson School of Pharmacy
Thomas Jefferson University
elena.umland@jefferson.edu
215-503-9000