Interprofessional Learning Readiness: Health Policy Summit

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Abstract

Purpose:

Interprofessional Education (IPE) and Health Policy are important components in health professional curricula. Students from business, communication sciences and disorders, dietetics, occupational therapy, nursing, and social work participated in an innovative IPE event working in an IPE group to apply discipline specific knowledge and propose solutions to the Medicaid Expansion gap in Virginia. Students presented their final proposals to legislators while advocating for issues important to their discipline.

Methodology/Results:

This study used the Readiness for Interprofessional Learning Scale (RIPLS) to examine student Teamwork and Collaboration, Professional Identity, and Roles and Responsibilities following participation in a Health Policy Summit. The results revealed a difference at baseline between health professions students and business students (N= 260) in their perception of teamwork and collaboration between groups. The themes of the question items found to be significant within the scale pre- and posttest were student perception of learning with other health-care/professional students, shared learning to help students understand their limitations, and welcoming opportunities to work with IPE students.

Conclusion:

This data indicates that there remains an opportunity to promote student perceptions of their abilities to participate in teamwork, collaborate significantly, and to understand the scope of their discipline specific knowledge and contributions to a team.

Key words: *interprofessional, health policy*

Introduction

Interprofessional education (IPE) is when two or more professions learn from and work with each other to enable effective collaborations, and to improve the wellbeing of the community (World Health Organization (WHO), 2010). Established by the Institute of Medicine in the 1970's, guidelines for IPE curricula stress the importance of IPE for both professionals and clients/patients, and propose the models and application that reflect the holistic approach. There are several different methods of IPE to include case simulations through online learning, simulations through pedagogy, combining classroom and clinical learning, pilot studies, utilizing small groups, health mentors in clinical settings, scenario modeling and role playing, and faculty training. Interprofessional practice and more advanced IPE interventions may be more effective if the students involved have optimistic outlooks on teamwork and knowledge about the professions that they would be working with (Jutte, Browne, & Reynolds, 2016).

There are benefits of IPE for both patients/clients and healthcare professionals. These include increased safety, improved patient care, reduction of health inequities, reasonable costs, better patient outcomes and collaborative care (Kolmer, Quinn, & Steele, 2010). When students are properly equipped and directed, they become better liaisons between their practice, patients, families, and the community (Earnest & Brandt, 2014). When learning from an IPE model or approach, students are taught not only the roles in which they will carry out their professions, but also can describe those of the other professionals within their team. This leads to a more comprehensive understanding of their profession as well as others (Charles et al, 2011). IPE training amongst health and social service professions includes the importance of understanding the social determinants of clients (Addy et al, 2015). Training professionals to work within a team and adapt to the needs of their community can reduce health inequities, and keep costs from rising by adjusting the services provided to match the complexity and acuity of the individual (Dow & Thibault, 2017). Interprofessional collaboration has been shown to improve team behavior and reduce the potential for medical error (Loversidge & Demb, 2015). Students begin to appreciate teamwork by authentic experiences, thus providing the ability to build relationships, both intra- and inter-professionally, while allowing them to test collective methods alongside faculty mentors (Loversidge & Demb, 2015).

Some common barriers to the implementation of IPE include the fear of professionals being territorial and fear of domain infringement, power differences among professions, different philosophies and values of the differing professions, deskilled or de-professionalized, closed role boundaries, loss of professional knowledge, role insecurity, and the perceived need for clinical autonomy (Charles et al, 2011; Kolomer, Quinn, and Steele, 2010). Other limitations to the implementation of IPE within programs is the lack of funding, and challenges of incorporating a curriculum that bridges education and practice which has created difficulty in evaluating the readiness of students in IPE programs (Chen, Delnat, & Gardner, 2015). Some of the most authentic and robust academic experiences come from students being paired in high-functioning collaborative teams and these processes could be limited by faculty commitment and time requirements, thus limited the availability of these placements (Loversidge & Demb, 2015).

An annual interprofessional health policy summit brings together students from several disciplines with the goal of leveraging diverse professional perspectives to develop potential solutions to real-world problems. Given that IPE is integral to professional practice, we sought to measure the attitudes of health and social services students and professionals regarding interprofessional learning using the Student Readiness for Interprofessional Learning Scale (RIPLS). RIPLS has been used across several settings, sometimes in its entirety and sometimes as a supplement to other assessments. IPE trainings that have implemented pre-and post-tests utilizing RIPLS have indicated results of student's readiness, perceptions, and attitudes towards interprofessional learning (Lipton et. at., 2010; Murphy & Nimmagadda; Thompson et al, 2016).

Methods

Students from the School of Nursing, College of Business, and Departments of Occupational Therapy, Dietetics, Social Work and Communication Sciences and Disorders at a medium-sized public university come together each year for a Health Policy Summit (HPS). The HPS engages students using Team Based Learning (TBL), which has been shown to improve learning and promote students' ability to solve difficult and complex problems (Michaelsen et al., 2002). The four key components of TBL include appropriate group formation where intellectual talent is equally distributed, student accountability for teamwork, assignments that promote learning and team development, and frequent and immediate feedback.

To ensure accountability, students reviewed discipline specific basics of legislation, health policy advocacy, and learned about a health care "hot topic", the Virginia Medicaid Gap, in advance of the HPS. On the day of the HPS, students' were grouped according to self-identified skills and experiences and then sub-divided by counting off and forming IPE groups of 5-6 students. This method composes groups of relatively equal skills and experiences. Within the IPE groups an Individual Readiness Test (IRAT) and a Group Readiness Assessment (GRAT) was given to assess baseline knowledge of health policy. The IRAT promotes individual accountability for readiness, while the GRAT promotes group socialization and sharing of discipline specific knowledge. Immediate review of the IRAT and GRAT with an expert faculty facilitator provided students an opportunity to ask questions for clarification while providing contextual application examples for students. Following this, students were given a case study that detailed the experience of a family living in the Virginia Medicaid Gap. Students worked in their IPE groups to develop possible feasible and sustainable solutions to Medicaid Expansion in Virginia to close the gap. The proposed solutions were outlined on a poster and placed around the conference room in a Gallery Walk where students, faculty, and local legislators reviewed each proposal. Students voted on the proposals and the top three were presented to local legislators in an 3-minute elevator speech. The local legislators asked clarifying questions and brought up historical references as a means to strengthen proposals.

Following the HPS, the legislators shared that they were impressed with the students' innovative and creative problem-solving approaches and indicated that the interprofessional approach was apparent in the proposals. They even requested copies of the proposals to take back with them to the General Assembly. The students gave positive feedback and reported appreciating the chance to learn how to work in an interprofessional group, advocate for their practice, gain perspective of other professions, and communicate with and build rapport with legislators.

Sample and Instrument

This interprofessional teaching and learning project was designed to examine student readiness for interprofessional learning. A convenience sample of students (N=260) from nursing (n=90), business (n=60), occupational therapy (n=20), dietetics (n=15), social work (n=48), and communication science and disorders (n=27) who attended the Health Policy Summit were recruited (Table 1). The Readiness for Interprofessional Learning Scale (RIPLS) was used to

examine students' knowledge, skills, and attitudes regarding working with other health care professionals. The questionnaire consists of 19 items, with a three-factor subscale: teamwork and collaboration, professional identity, and roles and responsibilities (Parsell & Bligh, 1999). High RIPLS scores are reflective of a high level of readiness for interprofessional learning. The Cronbach Alpha value for the total scale was ($\alpha = 0.89$).

Table 1:

Student Participants By Major

Student Major	Number of Participants
Nursing	90
Business	60
Occupational Therapy	20
Dietetics	15
Communication Sciences and Disorders	27
Social Work	48
Total	**260**

Data Analysis

We used one descriptive statistic, primary major discipline, for the identifier of the participant. Paired-samples t-test was used to compare pre-test scores with post-test scores by discipline and for the entire group. A one-way analysis of variance (ANOVA) was conducted to examine significant differences among the specific dimensions of RIPLS by discipline. SPSS version 25 was used for all analyses.

Results

In this sample, the pretest and posttest scores for business students was significantly different on the subscale of Perception of Teamwork and Collaboration (pretest M = 36.3; posttest M = 40.5; t(26)=-2.815, p = 0.009). A pretest/posttest difference was found for the items on student perception of learning with other healthcare/professional students before qualification would improve relationships after qualification (pretest M= 4.44; posttest M = 4.48; t(194)= -2.57, p = 0.011); shared learning will help me to understand my own limitations (pretest M= 4.24; posttest M = 4.41; t(194)= -2.040, p = 0.043); and I would welcome the opportunity to work on small-group projects with other health-care/professional students (pretest M = 3.88; posttest M= 4.17; t(194)= -2.851, p = 0.005). Interestingly, an improvement was noted for the reverse coded item I don't want to waste my time learning with other healthcare/professional students (pretest M = 2.14; posttest M = 1.90; t(194)= 2.219, p = 0.028).

Table 2 illustrates the pre-test and post-test scores for each of the items on the RIPLS.

Table 2:

RIPLS Results

Question	Pretest	Posttest	Paired Samples t-test	p-value
Learning with other students will help me become a more effective member of a team	M= 4.51 SD= 0.756	M= 4.51 SD= 0.814	t(194)=0.023,	p = 0.982
Patients would ultimately benefit if health-care/professionals worked together to solve patient problems	M= 4.73, SD = 0.66	M= 4.65 SD= 0.756	t(194)=1.171,	p = 0.243
Shared learning with other health-care/professional students will increase my ability to understand clinical problems	M= 4.44, SD= 0.780	M= 4.48, SD= 0.788	t(194)= -0.497,	p = 0.620
Learning with health-care/professional students before qualification would improve	M= 4.28, SD= 0.847	M= 4.49, SD= 0.727	t(194)= -2.57,	p = 0.011

relationships after qualification				
Communication skills should be learned with other health-care/professional students	M= 4.41, SD= 0.816	M= 4.56, SD= 0.739	t(194)= -1.90,	p = 0.058
Shared learning will help me to think positively about other professionals	M= 4.39, SD= 0.794	M= 4.37, SD= 0.866	t(194)= -0.223,	p = 0.823
For small group learning to work, students need to trust and respect each other	M= 4.69, SD= 0.648	M= 4.59, SD= 0.729	t(194)= 1.538,	p = 0.126
Team-working skills are essential for all students to learn	M= 4.44, SD= 0.862	M= 4.56, SD= 0.739	t(194)= -1.509,	p = 0.133
Shared learning will help me to understand my own limitations	M= 4.24, SD= 0.853	M=4.41, SD= 0.796	t(194)= -2.040,	p = 0.043
I don't want to waste my time learning with other health care/professional students	M= 2.14, SD= 1.162	M= 1.90, SD= 1.053	t(194)= 2.219,	p = 0.028
It is not necessary for undergraduate students to learn together	M=1.76, SD= 0.930	M= 1.71, SD= 0.965	t(194)= 0.510,	p = 0.611
Clinical problem-solving skills can only be learned with students from my own department	M= 1.77, SD= 0.965	M= 1.80, SD= 0.993	t(194)= -0.305,	p = 0.761
Shared learning with other health-care/professional students will help me to communicate better with patients and other professionals	M= 4.36, SD = 0.810	M= 4.37, SD= 0.890	t(194)= -0.076,	p = 0.939
I would welcome the opportunity to work on small-group projects with other health-care/professional students	M= 3.88, SD= 1.056	M= 4.17, SD = 0.953	t(194)= -2.851,	p = 0.005
Shared learning will help to clarify the nature of patient problems	M= 4.25,	M= 4.33,	t(194)= -0.979,	p = 0.329

	SD= 0.825	SD = 0.866		
Shared learning before qualification will help me become a better team worker	M= 4.22, SD= 0.791	M= 4.38, SD= 0.861	t(194)= -1.830,	p = 0.069
The function of nurses and therapists is mainly to provide support for doctors	M= 2.14, SD = 1.221	M= 2.19, SD = 1.290	t(194)= -0.473,	p = 0.637
I'm not sure what my professional role will be	M= 2.16, SD = 1.237	M= 2.34, SD= 1.248	t(194)= -1.395,	p = 0.164
I have to acquire much more knowledge and skills than other health-care/professional students	M= 2.97, SD= 1.105	M= 3.36, SD= 1.161	t(194)= -3.297,	p = 0.001

Discussion

Interprofessional education is an integral component for students entering professional fields to introduce and reinforce concepts of teamwork and collaboration. Our results indicate that once exposed to a team-based learning interprofessional education experience, students have a more favorable attitude toward IPE. Introducing students to theoretical concepts of IPE early in each program and exposing students to IPE regularly during each program is likely to enhance students' role development in the domains of teamwork and collaboration. Indeed, starting early and gradually introducing students to IPE has been reported to be a valuable method for fostering collaborative spirit and to mutual respect (Cooper, Spencer-Dawe, & McClean, 2005).

Interestingly, there was not a significant difference in student perception in the overall subscales of teamwork and collaboration or negative and positive professional identity pre- and post-summit event. Many factors contribute to student perceptions of these subscales and professional programs teach theoretical concepts of IPE. Exposure to IPE concepts, even without a structured IPE event, may have affected student scores in these areas. However, business students were found to be significantly different in their perception of teamwork and

collaboration between groups, indicating that there is an opportunity to enhance these concepts in business curricula.

Conclusions

Emerging healthcare professionals are often consumed with the intensity of their work in learning to provide needed healthcare services. Students may underestimate their abilities to work together across disciplines in civic education for legislators on the need for health policy change. Implementing IPE activities to build student capacity to solve important real-world problems may enhance the likelihood of positive application of discipline specific concepts to public issues in the future. Healthcare professional students may have stronger attitudes toward interprofessional learning, which has implications for future work and continuing education. Further research on discipline specific attitudes toward working inter-professionally with an emphasis on understanding how these attitudes are promoted or discouraged in undergraduate education and how the value of teamwork and collaboration influence student learning will add to the developing body of work on this topic and inform future IPE endeavors.

Recommendations

IPE is recognized by professional healthcare related careers and accreditation bodies as foundational to promoting good, quality services to patients. Events such as the Health Policy Summit can help educate students from all health professions practice collaborative work. There is considerable evidence to support implementing IPE and ideally fosters specific competencies in the learner such as leadership, consensus building, and collaboration. Although there are barriers to IPE, we advocate consideration of this type of model to implement IPE across an undergraduate curriculum. New curricular events can be exciting, but the operational support and commitment of faculty must exist to support truly effective, long-term IPE. As this project is approaching the seventh year, it is evident that the faculty are demonstrating their own IPE in action.

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