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A guest-speaker-based healthcare workforce preparation course enhances interprofessional education

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Abstract

Purpose: To examine the effects of an undergraduate guest-speaker-based healthcare workforce preparation course on students' understanding of interprofessional education (IPE).

Methodology: Twenty invited guest speakers from varied healthcare backgrounds came to share their work experiences and perspectives with the class. Qualitative data from weekly reflections and a final reflection paper completed by the students were extracted and analysed.

Findings: Qualitative themes suggested increased understanding of changes in career path trajectories and the value of public health in prevention and health preservation.

Research Implications: This pilot project offers insights that may guide future research in conducting a guest-speaker-based course that may enhance student understanding of teamwork and collaboration. Caution must be applied to the interpretation of results in this pilot study as there was a very limited number of participants.

Practical Implications: Healthcare guest speakers provided a unique educational opportunity for students, increasing their understanding of IPE and career path versatility.

Originality: To our knowledge, no previous literature exists relating to the possible effect of a guest-speaker-based healthcare workforce-preparation course on student understanding of IPE.

Limitations: This study had a very small sample size, and larger studies are needed to assess more meaningful change.

Keywords: interprofessional education, undergraduate training course, healthcare pipeline, career path

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INTRODUCTION

The value of interprofessional collaboration in healthcare is well understood. Global health agencies encourage interprofessional education (IPE) and collaboration. According to the World Health Organization's framework, 'Interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes' (World Health Organization 2010). IPE brings diverse professionals together to work cohesively to achieve a common goal, laying the foundation for meaningful engagement in interprofessional practices (Dyess et al. 2019). Healthcare works best when professionals providing patient-centred care work together to deliver care in comprehensive and collaborative manner. The Healthcare Transformation Project (Executive Office of Health and Human Services, Rhode Island 2018) calls for better preparation and understanding, both of the roles of multiple disciplines, and how they can work together to form a robust healthcare pipeline. This call to action is more important than ever as we continue to combat infections such as COVID. A recent updated systematic review and meta-analysis (Hou et al. 2025) found a continuation of the global persistence of long COVID, which entails a multitude of ongoing symptoms including pulmonary, neurological, psychological and dermatological symptoms, general fatigue and memory loss, requiring care from multiple disciplines.

IPE activities for students in majors related to health professions have demonstrated overall significant improvements in attitudes towards interdisciplinary teamwork, communication and collaboration (Dyess et al. 2019). A meta-analysis examining the effectiveness of IPE on healthcare students' IPE knowledge, skills and attitudes found improvements in these measures related to IPE education within different healthcare disciplines (Guraya & Barr 2018). Another recent systematic review and meta-analysis examined studies that used various teaching methods and approaches to IPE and explored the attitudes and perceptions towards IPE and collaboration among healthcare students and professionals. It found that IPE enabled significant improvements in attitudes towards other disciplines, and in the value placed on a team-based approach (Spaulding et al. 2021).

In higher education, a guest speaker is a professional and expert who is invited to present or speak regarding a topic at an event where they are not the host, such as for a course or fair (Eveleth & Baker-Eveleth 2009). Research within undergraduate nursing programs has demonstrated that guest speakers in the classroom enhance students' knowledge (Sortedahl & Imhoff 2015). Other work has shown the positive effects of providing students with the opportunity to engage with leaders in the pharmacy industry (Chesnut & Tran-Johnson 2013). While a course offering students the opportunity to hear directly from healthcare experts may be an effective way to generate student interest in the health professions, the effectiveness of a guest-speaker-based course in increasing students' understanding of IPE within healthcare has not been previously explored. Therefore, the purpose of this study was to examine the impact of a guest-speaker-based course on student understanding of IPE. Our specific research question was: Can an undergraduate guest-speaker-based course increase understanding of the roles within the healthcare profession, and that career planning can be tractable?

METHODS

STUDY DESIGN AND PARTICIPANTS

This qualitative pilot study assesses data from final reflection papers written by students at the semester's end. Eligible students were sent an email and invited to take a Healthcare Workforce Professional Preparation (HWPP) course, which was developed as the main component of the project. Students considered eligible were juniors and seniors enrolled in health-related majors who came from ethnically and racially diverse backgrounds, with Grade Point Averages (GPAs) greater than 3.2. The reasons for these eligibility criteria were firstly that funding was provided by the State Health and Human Services Grant, which aims for diversity in the workforce pipeline, and secondly, the minimal GPA of 3.2 provided reasonable assurance that students would apply good study habits to the course content, given the financial investment by the Transformation Project (Executive Office of Health and Human Services, Rhode Island 2018). Fifteen students were invited to enrol in the course by email. Students who responded to the email were sent an application with instructions for completion. The researchers reviewed the applications, and all students who applied were accepted and provided a registration number for this Special Topics course, for which they would receive three credits upon its completion. On the first day of class, all students ($n = 8$) were offered the option of participating in this research study. Students were told that the choice to participate was optional and that this choice would not affect their course grade. All eight students chose to participate in the research study and provided signed informed consent forms. The university Institutional Review Board approved this study.

COURSE DESIGN

Prior to the start of the course, students completed a baseline survey assessing age, sex assigned at birth, and major area of study. The students participated in the 15-week course with guest speakers from various healthcare sectors. Table 1 provides an overview of the topics and guest speakers. Students wrote weekly summary reflections after each class and a final reflection paper at the end of the semester.

Table 1: Course topics and speakers for the HWPP course

| Class | Topic(s) | Speakers |
|-------|--|---|
| 1 | Introduction Health status and ecological models Overview of history, present and future trends in healthcare | Intro: main instructors Physical therapist and Assistant Professor of Health Studies |
| 2 | Epidemiology, health education | Professional from Acute Infectious Disease Epidemiology at a State Department of Health Course instructor |
| 3 | Interprofessional communication and collaboration | Director of a Geriatric Education Centre at a university |
| 4 | Public health and State Department of Health | Executive Director of Health from a State Department of Health |
| 5 | Overview of Medicare & Medicaid Understanding and using qualitative and quantitative data Overview of surveillance data, e.g., BRFSS, YRBSS, & NHANES data | Professor of Pharmacy Practice, State Medicaid Epidemiologist from Center for Health Data Analysis, a State Department of Health Chief Health Program State Innovation Model Evaluator from a State Department of Health |
| 6 | Social determinants of health Health disparities | Assistant Professor with a public health and nutrition background Director of childhood obesity research |
| 7 | Working with diverse populations Cultural competency Fundamentals of teamwork and team building | Director of a university's Multicultural Student Services Centre Course instructor |
| 8 | No Class | Spring Break |
| 9 | Grants programs Public health initiatives Emergency management services | Grants program officer from a foundation |
| 10 | Career panel: social work | Professor of Human Development and Family Studies Licensed social worker and substance abuse specialist Behavioural health clinician from the community health team at a community health centre |

BRFSS: Behavioral Risk Factor Surveillance System; YRBSS: Youth Risk Behavior Surveillance System; NHANES: National Health and Nutrition Examination Survey; all these are US Centers for Disease Control and Prevention (n.d.) surveys.

STATISTICAL ANALYSIS

Descriptive statistics (means, standard deviations, frequencies, and percentages) were performed with SPSS 24 (Statistical Package for Social Sciences, IBM-SPSS Inc., Armonk, New York) to summarise demographics. Two investigators conducted the qualitative analyses by independently reading the reflection papers, and one investigator formulated a codebook using the general inductive approach (Malterud 2001). Investigators then separately analysed data by hand to connect *a priori* and emerging themes, and then reviewed and discussed them, formulating a consensus on items that differed.

RESULTS

Participants (n = 8; 75% female; mean age = 21.1 \pm 2.0 years) reported their health-related majors (one health studies major; one combined health studies and gender and women's studies; three kinesiology; one nutrition and food sciences; and two psychology majors).

A codebook was developed initially based on the hypotheses. *A priori* codes were identified based on the researchers' hypothesis that students would gain an increased understanding of interprofessional teamwork and collaboration and of career paths changing. Students shared their openness to consider changes in career choice. Emerging codes were identified based on reflections data and included an increased understanding of the role of prevention as an important component of public health and the reactive nature of healthcare in the USA as opposed to investment in proactive or preventative care.

THEME 1: INCREASED UNDERSTANDING OF INTERPROFESSIONAL TEAMWORK AND COLLABORATION

Most students reported a general understanding of interprofessional collaboration before this course, but their definitions expanded by course end. One student stated,

'Back then [before the start of the course], to me, interprofessional collaboration meant that several professionals communicated with each other about a patient's current state through either the phone, fax, or online chatting program – anything that involved long-distance communication. Not once did I think these professionals were working side by side with each other ... with the same patient, all present at the same time; communicating, voicing their professional opinions, and working collectively as a team to help the patient recover.' [Student 2]

Another student reported,

'Before this course began, I did not fully understand the depth of how patient care enhances when multiple disciplines work in cohesion.' [Student 1]

Student 7 reported,

'The lessons learned throughout this course have allowed me to gain a greater respect and appreciation for the responsibilities of those working outside of my discipline and has also led me to look forward to working in integrated teams in order to continue to learn more from others with differing perspectives.'

THEME 2: CAREER PATHS ARE NOT LINEAR

Another central message was that career paths do not follow a straight line. Student 4 stated,

‘The most persistent takeaway message was, understanding there is no direct path towards your future. Every single guest speaker made that very clear ... this was the most beneficial message because we are constantly asked what our plans are for the future ...’

Student 3 reported,

‘Hearing from professors, researchers, leaders of organisations, and skilled professionals that the consensus is that you ... accumulate a resume full of “failures” that is sometimes longer than your resume of “successes”, makes the process seem more bearable.’

THEME 3: INCREASED UNDERSTANDING OF THE ROLE OF PUBLIC HEALTH IN HEALTHCARE

Students expressed an increased understanding of the importance of prevention through the essential role of the public health profession. Student 4 stated,

‘... after taking this course, I believe public health should be given more recognition within healthcare and applied to all health majors. Public health fights for equity for all to have equal access and resources to health care ... also addresses health disparities on the local, state, and federal level. It is an initiative for a change within healthcare that I personally think is very urgent ...’

Other students connected public health and health equity, identified as the need for equitable access to healthcare. Student 6 reported:

‘I didn’t realise how our healthcare system and social environment correlated and how much it impacted the health of our country. We were valuing the treatment for a patient rather than discovering preventative measures ... many [speakers] also emphasised the differences in clinical cultural traditions ... It is important to consider different cultures and beliefs even if it contradicts what’s been taught in school. Oftentimes we are presented with a conflict and listen but don’t really analyse or understand what has been offered. It is most important to weigh out the options efficiently and empathise.’

THEME 4: STUDENTS CONSIDERED A CAREER PATH CHANGE AFTER TAKING THE COURSE.

Student 4 shared that the guest speakers helped them to reconsider their career path:

‘... as a result of the course’s content and careers and the versatility certain careers can hold, my own career trajectory took a turn. As a health major, I was never aware of the multitude of careers that are possible for me. Throughout this course, I was exposed to ideas, themes, concepts, careers, and messages that would not have even crossed my mind prior to taking this class. From learning about public health, speech pathology, research, epidemiology, interprofessionalism, psychology, social workers, health and wellness specialists, the multicultural director, occupational therapist,

physical therapist, nurse practitioner, and more, I was given endless opportunities to learn about the multitude of different paths I could take. I believe each week ... there was always something to be learned and a lesson to be taught.'

Student 5 shared that their career focus was changing after learning more about the demographic of patients with whom they would work

'... a week before the panel discussion ... I had decided to shift my previous career focus from case management/social work to higher education. This was due to the rich insight I received from the social work panel ... I realised it wasn't ... the topic of work that I wanted to pursue necessarily, but the demographic that these panellists met with daily, college-aged students, or 18–25-year-olds ... As a result, this class has been immensely eye-opening to me because it gave me ... a deeper look into what each career looked and felt like.'

THEME 5: HEALTHCARE IN THE UNITED STATES IS REACTIVE, NOT PROACTIVE

Students expressed a new understanding of the contrast between the United States of America's healthcare system and those of other countries. One student expressed,

'It was fascinating learning the flaws in our healthcare system, where we as a society emphasise individuality and self-improvement but lack the important social resources. This course has provided for me not only different perspectives within several healthcare fields provided by professionals within that field but also the many flaws within our health services and social services, which all impact one another.'
[Student 6]

Another student shared a connection of this theme to interdisciplinary care as a potential solution...

'Another theme I found to be interesting is how many of the panellists talked about how reactive care is much more detrimental than proactive care in their respect[ive] fields. and the resulting theme of how to achieve the positive changes ... comes from looking at each issue from multiple lenses.' [Student 5]

DISCUSSION

In this pilot study examining the effect of a guest-speaker-based course on student knowledge of IPE, our qualitative data analysis suggests a self-reported increase in understanding of the value of interdisciplinary teamwork. This small study is the first, to our knowledge, to offer this strategy and lends critical insight into a new way in which IPE can be disseminated to students on a pre-professional healthcare track. A previous study used a similar model for pharmacy students to provide education on merging faith, values and ethics with professional practice in healthcare, providing students with learning approaches using a combination of guest presenters, panel discussions, interactive interviews and small group discussions. Results demonstrated students were strongly committed to the idea of compassionate care as the best approach to patient care (Deweese et al. 2022). Another recent study focused on the impact of

IPE delivery to nursing, midwifery and law students (Nichols, Trimble & Stebbings 2022). While this type of delivery differed in that it used case-scenarios to deliver the IPE, this non-traditional approach to IPE delivery led to increased student knowledge of healthcare law and ethics (Rosen et al. 2018).

Students also reported learning that healthcare careers are often not linear. This recognition seemed to come as a welcome relief for some students, who reported feeling pressure to decide on a career path. Exposure to IPE improves student knowledge of the roles and responsibilities of other healthcare professions, which can help professionals overcome day-to-day obstacles. This study demonstrated the ability of the guest speakers to improve student knowledge about IPE within healthcare.

The current study has unique features that contribute to the IPE literature by demonstrating the positive impact of a guest speaker-based course centred around career paths and IPE and providing the opportunity for students in healthcare disciplines to hear from professional experts in their fields of interest. The improvement in knowledge about interprofessional teamwork and the roles of various disciplines within the healthcare team was important, as was the benefits of investing in healthcare prevention programming to reduce lifestyle behaviour-related chronic disease.

Our study is the first study, to our knowledge, to examine the effects of a guest-speaker-based course designed so that students hear directly from a wide range of health professionals. Each guest spoke about the roles and responsibilities of their jobs and shared personal insights about the experiences and decisions altering the direction of their career paths through the years. Limitations of this pilot study include its very small sample size, which may limit the ability to understand student perceptions of IPE. Limitations also include a lack of generalizability to other students who did not achieve our minimum GPA criterion. Future directions should focus on providing students with opportunities to hear from and connect with experts from a variety of healthcare careers to illuminate the important role of interdisciplinary work in healthcare.

CONCLUSION

A guest-speaker-based healthcare workforce preparation course led to enhanced general understanding of interprofessional work and the roles of individuals who are part of an interdisciplinary team. Students reported learning that career paths are not linear while exploring job choices and career trajectories. The importance of providing opportunities for students to learn about the role of interprofessional teamwork and collaboration has been established in previous research. Larger studies are needed, but incorporating opportunities to hear from and interact with guest speakers is warranted.

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Conflict of interest

There are no conflicts of interest.

References

- Chesnut, R & Tran-Johnson, J 2013, 'Impact of a student leadership development program', *American Journal of Pharmaceutical Education*, vol. 77, no. 10, p. 225, viewed 22 April 2022, <http://www.ajpe.org/lookup/doi/10.5688/ajpe7710225>
- Deweese, JE, Wilcox, D, Campbell, TCC, McCormack, J, Terry, CL & Davis RL 2022, 'A model for incorporating faith, values, and ethics into a healthcare provider course', *International Journal of Christianity & Education*, vol. 26, no. 1, pp. 50–64, viewed 6 July 2022, <http://journals.sagepub.com/doi/10.1177/20569971211040068>
- Dyess, AL, Brown, JS, Brown, ND, Flautt, KM & Barnes, LJ 2019, 'Impact of interprofessional education on students of the health professions: a systematic review', *Journal of Educational Evaluation for Health Professions*, vol. 16, p. 33, viewed 7 July 2022, <http://jeehp.org/DOIx.php?id=10.3352/jeehp.2019.16.33>
- Eveleth, DM & Baker-Eveleth, LJ 2009, 'Student dialogue with online guest speakers', *Decision Sciences Journal of Innovative Education*, vol. 7, no. 2, pp. 417–421, viewed 22 April 2022, <https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2009.00226.x>
- Executive Office of Health and Human Services, Rhode Island 2018, *The healthcare workforce transformation project*, Official State of Rhode Island, viewed 24 June 2025, <https://eohhs.ri.gov/initiatives/workforce-transformation>
- Guraya, SY & Barr, H 2018, 'The effectiveness of interprofessional education in healthcare: a systematic review and meta-analysis', *The Kaohsiung Journal of Medical Sciences*, vol. 34, no. 3, pp. 160–165, viewed 7 July 2022, <http://doi.wiley.com/10.1016/j.kjms.2017.12.009>
- Hou, Y, Gu, T, Ni, Z, Shi, X, Ranney, ML & Mukherjee, B 2025, 'Global prevalence of long COVID, its subtypes and risk factors: an updated systematic review and meta-analysis', *medRxiv: The Preprint Server for Health Sciences*, p. 2025.01.01.24319384.
- Malterud, K 2001, 'Qualitative research: standards, challenges, and guidelines', *The Lancet*, vol. 358, no. 9280, pp. 483–488, viewed 22 April 2022, <https://linkinghub.elsevier.com/retrieve/pii/S0140673601056276>
- Nichols, A, Trimble, P, & Stebbings, A 2022, 'The use of inter-professional education (IPE) healthcare law and ethics scenario based learning sessions amongst nursing, midwifery and law students: a qualitative investigation', *Nurse Education Today*, vol. 109, p. 105254, viewed 8 July 2022, <https://linkinghub.elsevier.com/retrieve/pii/S0260691721005116>

Rosen, MA, DiazGranados, D, Dietz, AS, Benishek, LE, Thompson, D, Pronovost, PJ & Weaver SJ 2018, 'Teamwork in healthcare: key discoveries enabling safer, high-quality care.', *American Psychologist*, vol. 73, no. 4, pp. 433–450.

Sortedahl, CK & Imhoff, H 2015, 'Perspectives from the field: bringing nurse leaders into the classroom', *Nursing Education Perspectives*, pp. 14–1385, viewed 22 April 2022, <http://nlnjournals.org/doi/10.5480/14-1385>

Spaulding, EM, Marvel, FA, Jacob, E, Rahman, A, Hansen, BR, Hanyok, LA, Martin, SS & Han H-R 2021, 'Interprofessional education and collaboration among healthcare students and professionals: a systematic review and call for action', *Journal of Interprofessional Care*, vol. 35, no. 4, pp. 612–621, viewed 28 October 2023, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7305974/>

US Centers for Disease Control and Prevention n.d., viewed 25 June 2025, <https://www.cdc.gov/>

World Health Organization 2010, *Framework for action on interprofessional education and collaborative practice*; World Health Organization, Geneva, Switzerland, viewed 24 June 2025, <https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice>