Advances in Medical Education and Practice

Dovepress
Taylor & Francis Group

Open Access Full Text Article

ORIGINAL RESEARCH

A Simulated Interprofessional Team Conference Using Cross-Training for Junior Healthcare Students in Interprofessional Education: a Qualitative Content Analysis

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Purpose: In 2021, we introduced a new simulation-based learning program focusing on a roleplay conference before patient discharge. This study aimed to evaluate the program's effectiveness and highlight the significance of cross-training in interprofessional education (IPE).

Methods: In September 2023, the program included 346 students (98 medical, 110 nursing, and 138 pharmacy students). The students' reflective writing was analyzed using inductive content analysis to describe their learning and perspectives. The original items, subcategories, and main categories were extracted. The simulation involved the students role-playing various healthcare professionals during a discharge-planning conference for a stroke patient. This allowed them to experience the challenges and dynamics of interprofessional collaboration.

Results: Student feedback emphasized the importance of understanding what constitutes a good healthcare team. A total of 203 items were grouped into eight main categories and 17 subcategories, including patient-centered care (related to the importance of patient-centered care, supporting patient decision-making, communicating with patients during conferences, and facilitating decision-making processes), contrasts in patient and interprofessional communication, conference communication (challenge of building consensus, the way to proceed conferences, importance of conference preparation, and process of information aggregation and realization of outcomes), mutual recognition and role contribution, building relationships (importance of daily interprofessional communication), understanding one's profession (reflection on one's own profession, understanding the roles of different professions, and communication within one's own professional context), recursion into learning (motivation for continuous learning and improvement), and understanding other professions (understanding the role and perspectives of other professions and recognizing professional differences). Specific feedback highlighted improved empathy and communication skills. Students recognized the value of each profession's contribution to patient care. Moreover, students reported a deeper appreciation of patient-centered approaches and the complexities of coordinating care across different healthcare roles.

Conclusion: Simulated interprofessional team conferences using cross-training effectively taught junior students to understand the essence of a good healthcare team and the importance of a patient-centered approach. Cross-training significantly enhanced students' interprofessional competencies, communication skills, and empathy toward other professions. This case underscores the necessity of incorporating cross-training into IPE to prepare healthcare professionals for collaborative practice and improve patient outcomes. Future research should consider expanding the scope to include more diverse scenarios and longitudinal assessments to measure long-term impacts on professional practice.

Keywords: simulated interprofessional education, cross-training, undergraduate education, interprofessional competency framework

Received: 11 November 2024
Accepted: 6 March 2025
Published: 11 April 2025

Introduction

The World Health Organization (WHO) has emphasized the importance of interprofessional education (IPE) for patients with complex healthcare needs.[1,2] Collaborative practice is essential for addressing health needs, strengthening systems, and improving outcomes. Effective IPE enables collaborative practice.[1] It is thus defined as occasions when two or more professions learn with, from, and about each other to improve collaboration and care quality.[3] Furthermore, such education 1) develops students' ability to share knowledge and skills collaboratively; 2) enables students to become competent in teamwork addressing priority health problems; 3) helps different categories of healthcare professions mutually assess strengths, limitations, and work patterns; 4) helps to "decompartmentalize" and prevent the development of a corporate mentality that hinders interprofessional collaboration; 5) permits the integration of new skills and areas of knowledge crucial for health care; 6) facilitates communication among learners from different professions; and 7) establishes new roles, competencies, and responsibilities.[2] IPE programs provide interprofessional knowledge, skills, and values to develop interprofessional competencies.[4]

Globally, universities are implementing IPE programs.[1,4] In Japan, IPE is one of the key competencies in the model core curriculum.[5–7] As of 2016, 71.9% of medical schools in Japan had implemented IPE programs.[8] In 2017, 58.7% of nursing schools had IPE programs.[9] Pharmacy schools conduct cross-university and cross-faculty case studies and community activities, with IPE education realized through workshops and inter-university collaboration.[10]

We started an IPE program at our university in 2011 that involved the faculties of medicine, nursing, and pharmacy. In Japan, medical and pharmacy schools offer six-year courses, and nursing has a four-year course. The program was conducted three times during the students' education: first, in the first year; second, in the junior year (second grade for nursing, and fourth grade for medicine and pharmacy); and third, in the senior year.

The first program focused on communication and the importance of becoming valuable members of future healthcare teams. The students participated in an escape game. This game was adapted for interprofessional education to teach teamwork skills.[11,12] The second program emphasized understanding what constitutes a good healthcare team using a patient-centered approach and interprofessional collaboration. The third program involved practical team activities where students worked in groups to develop patient care plans. The students read a case scenario, analyzed the patient's problems, and determined the necessary care.

A second program is conducted when students begin their professional studies but have not yet engaged in extensive practical training. Involving junior students from different professions can provide an opportunity to address and understand professional boundaries.[13] We sought to determine if there might be a more effective program for junior students. We designed a new program based on simulation-based learning from 2021.

There are various approaches to IPE, including problem-based, case-based, team-based, and simulation-based learning.[4,14] Each approach has distinct strengths and weaknesses, and the optimal choice depends on factors such as the university environment and student readiness. For junior students, simulation-based learning, particularly through simulated ward exercises, is often considered both feasible and effective.[13] Simulation-based learning replicates clinical scenarios, allowing students to integrate professional knowledge, skills, and attitudes while encouraging reflection and validation of their experience.[15] This method is especially powerful for improving communication and collaboration skills among students from different healthcare professions.[14,16–18] Furthermore, it allows participants to explore the patient's perspective and safely learn from mistakes during debriefing sessions without risking patient harm.[14,15]

Role-play exercises, particularly when integrated with cross-training, further enhance students' understanding of each profession's specific roles and responsibilities.[19] Cross-training is a term used in relation to positional clarification, positional modeling, and positional rotation, which develop shared team interaction knowledge.[19] For instance, students taking on roles outside their profession gain empathy and develop practical insights into interprofessional collaboration dynamics. Given that most of the students in our program had not yet undergone practical training, we decided to use simulation-based learning with role play and cross-training as elements of effective teamwork in healthcare.

Pre-discharge conferences are critical moments for patients and their families, where effective interprofessional collaboration is crucial. At discharge, communication interventions can decrease hospital readmissions and improve treatment adherence and patient satisfaction.[20] Furthermore, studies have shown that such conferences improve

information sharing and demonstrate concern for the patient's family.[21] Therefore, we decided to focus our program on simulating a pre-discharge conference—a high-stakes, patient-centered event that demands robust teamwork and communication among healthcare professionals. Using simulation-based learning and cross-training, we aimed to foster these skills in our students.

Despite the growing body of evidence supporting IPE, there remains a lack of standardized approaches, particularly in using cross-training methodologies that enhance understanding of interprofessional roles and responsibilities. This study aimed to evaluate the effectiveness of a simulation-based IPE program in helping junior students develop a deeper understanding of what constitutes an effective healthcare team and the importance of a patient-centered approach. Additionally, it highlights the value of cross-training in building interprofessional competencies among medical, nursing, and pharmacy students.

Methods

Participants

The program was conducted at our university, which has medicine, nursing, and pharmacy faculties. Subsequently, the participants were 98 medical, 110 nursing, and 138 pharmacy students, totaling 346. Of these, 188, 54.3% (53 medical students, 54.1%; 48 nursing students, 43.6%; and 87 pharmacy students, 63.0%) completed the optional reflective questionnaire using a 5-point scale. Furthermore, 76 students, 22.0% (17 medical students, 17.3%; 21 nursing students, 19.1%; and 38 pharmacy students, 27.5%) provided reflective responses to the free-response questions. The survey was conducted in September 2023.

IPE Program Overview

The IPE program aims to "understand how medical teams can provide patient-centered care and to think about what a good medical team is".[22] The IPE program (Table 1) was implemented at a simulated interprofessional team conference for the discharge planning of a 78-year-old patient who had suffered a stroke. The simulated interprofessional team conference participants included the patient, his family, physician, nurse manager, ward nurse, pharmacist, medical social worker, physical therapist, occupational therapist, and speech therapist. Each group consisted of approximately seven to eight students from the medical, nursing, and pharmacy faculties. Students played roles outside of their faculty affiliation. The facilitator, a faculty member, played the role of the patient's family.

Table 1 Pre-Schedules

Schedules	Content	Time
Orientation	*The students in the same role are in one room*	
	Confirmation of schedule and viewing of pre-study video	30 min
	Cardiogenic cerebral embolism-Lecture on various problems in the chronic phase	10 min
Understanding your role	Viewing video -explanation of the role-	15 min
	Thinking about what your role needs to know and what information is important	
Viewing a mock conference	Viewing the video of the first simulation interprofessional team conference without family (Prepared by a faculty member)	10 min
	Changes room to a group work room (all roles are in one group)	
Conducting mock conferences	Second simulation interprofessional team conference (experienced by each group)	45 min
Groupwork	Group discussion (debriefing and conceptualizing)	60 min
	Eight groups are in one room	
Group presentations	Group presentations (8 groups)	45 min
Conclusion	Feedback	10 min

Notes: Pre-study: 1. Watching a video explaining the roles of other professionals. 2. Think about the patient's problems in preparing for discharge. Post-study: 1. What did you learn and think about team medicine through your role in the simulation interprofessional team conference? 2. Based on the program, what do you think your faculty (physicians, pharmacists, nurses) needs to promote patient-centered medicine?

Given that most students had only recently started professional education and had limited practical training, the pre-study consisted of watching a video explaining the roles of various professionals and thinking about patients' problems in preparing for discharge.

Scenario Setting

The scenario involved a 78-year-old man who previously lived alone with his wife; she had died of a myocardial infarction a year earlier. Their child, who is currently 45 years old, lived 15 minutes away by car alongside two grandchildren, a 14-year-old boy and a 10-year-old girl. The patient experienced symptoms during a town gathering and was transported by ambulance to a university hospital 30 minutes away. He was diagnosed with cardiogenic cerebral infarction primarily affecting the left frontal lobe and was urgently hospitalized. During the first month of hospitalization, the patient could perform several daily living activities. The attending physician informed the patient and his family that their options for future medical treatment were either to return home or be transferred to a convalescent home. The patient wished to be discharged; however, the family was concerned about his ability to live independently and the financial burden of a convalescent home.

In addition to the overall scenario, students received specific information relevant to each professional's role. For the physician, details included treatment options and future prospects; for the nurse, changes in daily life and the patient's thoughts about family; for the pharmacist, information about medication and the need for reminders regarding adherence; for the medical social worker, details about his home and available social resources; for the therapist, his capacity for movement and swallowing; and for the patient, his feelings regarding returning home. The program began with a lecture on various issues in the chronic phase of a stroke patient's life, followed by a lecture regarding each professional role. The students then discussed what they should consider in their respective roles. To teach students how to conduct an interprofessional team conference, a video simulation was shown. At the end of the simulated conference, a summary of what the students would discuss was provided to facilitate discussion.

Program Implementation

After understanding their roles and the conference process, the students conducted a simulated conference for cross-training. The facilitator, playing the role of the patient's family, encouraged the students to consider both returning home and transferring to a convalescent home. Before the conference, the students playing the role of healthcare professionals had communicated with each other regarding prospective actions and the conference contents, while the student playing the role of the patient communicated with a facilitator acting as the patient's family and talked about the family dynamics, such as a family with a stubborn father or a harmonious family.

After the conference, group work was conducted to debrief and conceptualize their learning in two ways: (1) reflections on their role during the conference and whether they could elicit the patient's desires as a team, and (2) how to interact with patients, families, and other professionals to provide patient-centered care. The session concluded with presentations of the themes discussed in the group work and feedback from the facilitators, mostly doctors, nurses, and pharmacists. Moreover, because medical social workers play an important role in the discharge process, but students do not have much contact in class, medical social workers provided feedback.

Ethical Considerations

The questionnaire was administered as part of the class evaluation process. At that time, we explained that the questionnaire would not affect grades and that completing the questionnaire was voluntary. Considering the significance of compiling the students' responses as a research study, we obtained opt-out permission through a Keio University ethics review. Ethical approval was obtained from the Keio University Ethics Committee (no. 2246). After ethical approval, we disclosed information about the research being conducted. The information disclosed included: 1) an outline of the research, 2) the principal investigator's name, 3) that materials related to the research methods could be viewed and how they could be viewed, 4) information regarding consultation with the research subjects and other persons concerned regarding the disclosure of personal information, and 5) the fact that the subjects could refuse to allow use of the samples and information.

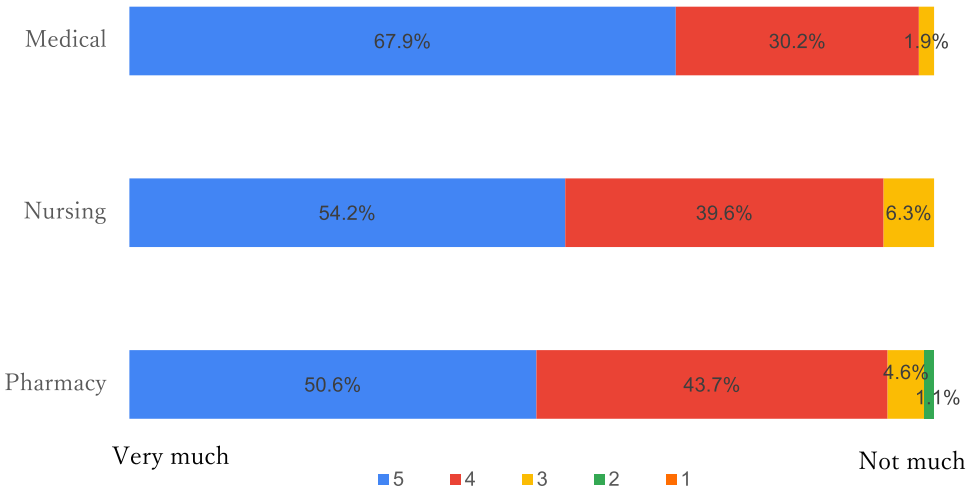

Figure 1 Responses to the question, "Do you think you learned more about collaboration because of participating in the simulated interprofessional team conference?".

Additionally, they were asked to provide consent for the use of their responses, including anonymized direct quotations, in our paper. This information was sent to all participants, and those who wanted to opt out had their data deleted.

Data Collection

After the program, participants voluntarily completed an online questionnaire. The survey included a question using a 5-point scale: "Do you think you learned more about collaboration because of participating in the simulated interprofessional team conference?" (Figure 1). The questionnaire included free-response questions designed to allow students to express in their own words what they had learned, what they found useful, and their overall impressions of the program. Free-response questions were chosen to capture a wider range of insights and personal reflections, which might not have been possible through predetermined answer choices. This approach allowed for richer, more detailed data to better understand the students' experiences and perspectives.

Data Analysis

The qualitative data were analyzed using inductive content analysis to describe what the students learned and their perspectives on the program.[23] Original items were extracted, and similar items were grouped into categories based on the raw, anonymized data to ensure an inductive and unbiased analysis. Subcategories with shared characteristics were further consolidated and named according to their content, with the primary categories initially identified by ET and JH through independent analysis. The preliminary findings were then discussed and refined with 12 faculty members to ensure rigor and broader perspectives. The Japanese Interprofessional Competency framework was used as a reference to guide and enhance the categorization process.

Results

A significant number of responses indicated that the students learned the importance of understanding what constitutes a good healthcare team. This was the primary aim of the program. The following comments illustrated this:

> I learned the importance of a healthcare team. (Nursing student)

> Importance of collaboration among other professions. (Medical student)

To identify additional perspectives, items explicitly emphasizing the importance of understanding a good healthcare team were extracted from the analysis. A total of 202 items were extracted, then grouped into 17 subcategories and further divided into eight main categories, as shown in Table 2.

https://doi.org/10.2147/AMEP.S494541

Table 2 Main Categories and Sub-Categories

Main Category	Subcategory
Patient-centered care	Related to the importance of patient-centered care
	Supporting patient decision-making
	Communicating with patients during conferences
	Facilitating decision-making processes
Contrasts in patient and interprofessional communication	Contrasts in patient and interprofessional communication
Conference communication	Challenge of building consensus
	The way to proceed with conferences
	Importance of conference preparation
	Process of information aggregation and realization of outcomes
Mutual recognition and role contribution	Mutual recognition and role contribution
Building relationships	Importance of daily interprofessional communication
Understanding one's profession	Reflection on one's own profession
	Understanding the roles of different professions
	Communication within one's own professional context
Recursion into learning	Motivation for continuous learning and improvement
Understanding other professional	Understanding the role and perspectives of other professions
	Recognizing professional differences

Patient-Centered Care

This category includes the importance of patient-centered care, supporting patient decision-making, communicating with patients during conferences, and facilitating decision-making processes. Items related to patient-centered care were particularly prevalent:

> Related to the importance of patient-centered care: Although it has been said that patient-centered care is important, I did not know about the methods. Through this experience, I had difficulty finding the best words to describe the conditions and treatment that patients must know. (Medical student)

> Supporting patient decision-making: I tried to speak in a way that was considerate to the patient, but the student who played the role of the patient told us that he felt as if he was an outsider and that he wanted us to respect his wishes. This opinion made us reflect on the progress of our conversation. Although we know the patient's needs before the conference, we need to give him a chance to speak out by himself so that he can decide by himself. Though this is a very hard conversation skill, I feel it is important for patient satisfaction. (Pharmacy student)

> Communicating with patients during conferences: I didn't think it is so difficult to ask patients about their feelings. (Pharmacy student)

> Facilitating decision-making processes: I understood that a conference is not a one-time event but an ongoing process that considers the patient's condition and feelings as they change from time to time. (Nursing student)

Contrasts in Patient and Interprofessional Communication

This subcategory highlighted the differences in communication approaches between patients and healthcare professionals.

> Contrasts in patient and interprofessional communication: Experiencing the patient's role, I realized that even if the medical staff take it for granted, the manner in which information is conveyed to the patient is extremely important. (Medical student). A student who played the patient role mentioned feeling like an outsider and wanted us to respect his wishes. (Pharmacy student)

Conference Communication

Items in this category addressed the challenges of building consensus, how to proceed with conferences, the importance of conference preparation, the information aggregation process, and outcome realization. Reflecting on their roles and communication, students expressed challenges in knowing when and what to say.

> The challenge of building consensus: I felt difficulties in proceeding with treatment decision-making in a multi-professional medical group. (Medical student)

> The way to proceed conferences: It is important to share information and collaborate to get a complete picture of the patient and then discuss what to do. (Nursing student)

> Importance of conference preparation: I have learned that it is difficult to have a smooth progression without a detailed meeting in advance. (Pharmacy student)

> Process of information aggregation and realization of outcomes: It is important to exchange information with other professionals and consider the best medical care for patients while considering patients' feelings. (Nursing student)

Mutual Recognition and Role Contribution

This category focused on the recognition and contribution of different professional roles within a team.

> Mutual recognition and role contribution: I found differences in how each faculty communicates, which likely comes from what they study and their viewpoints. (Nursing student). The opinions of other faculties provided a very valuable experience. (Nursing student). It was valuable to understand the image that other faculties have of my department and to learn about what other faculties study. (Nursing student)

Building Relationships

Items in this category emphasized the importance of daily interprofessional communication.

> Importance of daily interprofessional communication: Cooperation among other professions is difficult, and daily communication is important. (Medical student). I felt that actual interaction was necessary to understand other professions. (Pharmacy student)

Understanding One's Profession

This category includes reflecting on one's profession, understanding the roles of different professions, and communicating within one's own professional context.

> Reflection on one's own profession: By looking at patients from a perspective different from the usual, I learned the importance of seeing them using a different perspective. (Nursing student)

> Understanding the roles of different professions: It was very interesting to hear the opinions of people from other faculties, giving me perspectives that I would not normally get. (Pharmacy student)

> Communication within one's own professional context: I reflected on the fact that I could not provide the information I had at the appropriate time. (Medical student)

Recursion Into Learning

Recursion into learning means reflecting on their own ways of learning and correcting them as necessary. The items in this category highlight the motivation for continuous learning and improvement. Some representative student comments included:

> Motivation for continuous learning and improvement: Because I want to be close to patients, it was good to learn in a more practical way how to act in real situations and how patients' feelings can be affected by unexpected actions. (Nursing student). The conference involved patients and their families, but the medical staff talked more. It would have been better if we were more aware of the difference between a conference with patient participation and one without. (Pharmacy student). I found it difficult to provide the information I had in the conversation among other professionals. Even if I had information in mind, it was not easy to incorporate it into the conversations. I found it difficult to convey what I really want to say. I felt that I needed to practice speaking clearly. (Nursing student)

Understanding Other Professionals

This category includes items related to understanding the roles and perspectives of other professions and recognizing professional differences.

> Understanding the role and perspectives of other professions: By participating in discussions from the perspective of a profession different from my own, I was able to understand the patient's thoughts and the importance of other professions, which cannot be conveyed through knowledge alone. (Pharmacy student). Participating in the conference as a member of a different profession allowed me to imagine what other professionals have to consider. (Pharmacy student)

> Recognizing professional differences: I learned that there are differences in common understanding and information in each profession; furthermore, values, perspectives, and ways of explaining things are different too. Probably it is due to the environment in which they are placed. (Nursing student)

Roleplay, using cross-training, and debriefing facilitated new insights for students, even when they made mistakes, by providing a secure environment in which they could share their experiences and safely learn. This approach helped develop communication skills and deepen the understanding of different professions. By playing roles outside their profession through cross-training, students gained valuable insights into other professions and patient perspectives. Moreover, they felt that they learned more about collaboration because of participating in the program (Figure 1).

Items related to cross-training: The content included "Understanding one's profession" and "Understanding other professionals." In addition, "Patient-centered care" was included.

> Understanding one's profession; The student who played the nurse allowed me to view nurses objectively using self-comparison. (Nursing student). I was able to reaffirm the role and importance of pharmacists in team medicine, which I felt after experiencing positions from other professions. (Pharmacy student). By looking at patients from a perspective different from the usual, I learned the importance of seeing them from a different angle. (Nursing student)

> Understanding other professionals; It was interesting to know and feel what other faculty and professions are doing (Nursing student). By taking on a role that is different from my department, I think I developed some concepts about how other professions think (Pharmacy student). I was able to think from the perspective of other professions and notice things that I would not have known from my faculty's perspective. (Nursing student)

> Patient-centered care; Experiencing the role of the patient, I realized that even if the medical staff takes it for granted, the manner of explaining facts to the patient is extremely important. (Medical student)

Discussion

This program aimed to help students understand the components of a good healthcare team, and this objective appears to have been achieved. The structured sequence of simulation education, including pre-study, introduction, simulation,

debriefing, and summary, provided a comprehensive learning experience. Notably, the debriefing sessions allowed students to reflect on challenges and organize their learning, including learning from mistakes in a safe environment.[15]

The students' perceptions during the second program were analyzed using the Japanese Interprofessional Competency framework, which consists of two core domains (patient/client/family/community-centered and interprofessional communication) and four peripheral domains (role contribution, facilitation relationship, introspection, and understanding of others).[24] The results showed some alignment with this framework but also revealed notable differences (Table 3).

One key difference was the contrast between patient-family-centered and interprofessional communication. This may stem from the student's challenges in balancing these two types of communication, which are recognized as critical skills to be taught to healthcare students. Important basic professional communication skills are not spontaneously learned, and communication skills must be taught and trained.[25] To perform a medical interview, initiating the session, gathering information, building relationships, explaining and planning, and closing the session are sequential tasks.[26] Because communication skills are complex, it is doubtful whether professional communication expertise can be fully attained during medical training.[27] Through the simulation of interprofessional team conferences, students likely encountered difficulties in managing both patient-centered and interprofessional communication,[28] a challenge that may have been compounded by their lack of experience with conducting conferences.

Additionally, many students were unfamiliar with how to lead or participate in a conference, which may explain their focus on "conference communication." Despite watching a simulation video of an interprofessional team conference, students still found it challenging to conduct a conference and reach a consensus. In practice, medical staff must develop essential skills such as building relationships, listening, and exploring the root causes of problems, providing information, and making shared decisions with patients and other healthcare professionals. These skills are essential in interprofessional meetings and can be challenging to master.

However, communication skills can be developed through teaching, and experiential learning methods are particularly effective. While continuous improvement is necessary for communication skills,[29] this program provided a valuable initial experience for students, allowing them to engage in trial and error within a safe, supportive simulation environment.

In IPE, learning teamwork among different healthcare professionals is crucial. Through these experiences, students enhance their communication skills and deepen their understanding of the development of these skills.[30,31] Role-play using cross-training was employed to facilitate the enriched students' learning.[17,18,32] During the simulations and debriefing sessions, students recognized the differences between professions and gained a deeper understanding of their professional roles.

The program also contributed to students' understanding of professionalism. Through cross-training, where students take on roles outside their own profession, they were able to broaden their perspectives and gain insight into the responsibilities of other healthcare professions.[30,31] This experiential learning helped students understand different roles

Table 3 Comparison with JASSIC Results

JASSIC's Six Domains	Main Category in this Study
Patient-/Client-/Family-/Community-Centered	Patient-centered care
Interprofessional Communication	Contrasts in patient and interprofessional communication
	Conference communication
Role Contribution	Mutual recognition and role contribution
Facilitation Relationship	Building relationships
Reflection	Understanding one's profession
	Recursion into learning
Understanding of Others	Understanding other professional

https://doi.org/10.2147/AMEP.S494541

and appreciate the importance of effective communication with patients, a skill often taken for granted in medical practice. Studies suggest that role-play leads to better patient care, particularly when playing a patient role.[33] Students appeared to recognize the overarching importance of patient-centered care.

However, "mutual recognition and role contribution" and "relationship building" were less frequently mentioned by students. This may be due to their early stage of professional education, as well as limited exposure to real-life interprofessional collaboration. Additionally, demonstrating professional and relational roles simultaneously during simulation-based IPE can be particularly challenging for students who have not entered clinical practice.

Reflective writing was conducted to evaluate the second program among junior students, and the results showed that the program effectively helped students understand what constitutes a good healthcare team and how to provide patient-centered care. Furthermore, the students' reflections were largely aligned with the interprofessional competency framework, and the program helped them identify areas where they need further study.

According to Kolb's experiential learning theory, which encompasses concrete experience (involve themselves fully, openly, and without bias in new experience), reflective observation (reflect on and observe their experience from many perspectives), abstract conceptualization (create concepts that integrate their observations into logically sound theories), and active experimentation (use these theories to make decisions and solve problems),[34] this program facilitated these four abilities. It provided a valuable learning experience for students who had not yet undergone clinical training.

As the need for collaborative practice grows, designing educational curricula that foster the competencies required for IPE is crucial.[35] Unfortunately, most IPE programs, including ours, are conducted as isolated workshops or training sessions. Integrating IPE into a cohesive curricula[4] that continuously develops interprofessional competencies is preferable, rather than using standalone workshops, and we need to make cohesive curricula in IPE.

This study's primary limitation was the small sample size, as only one-fifth of all eligible students participated. Consequently, the findings may reflect the views of students who were already satisfied with the program. To gain a comprehensive understanding of the program's effectiveness and areas for improvement, gathering feedback from students who did not participate is crucial, ensuring a broader range of perspectives is considered.

Conclusion

Using a simulated interprofessional team conference through IPE cross-training for junior students provided a valuable learning opportunity. It helped the students understand the components of an effective healthcare team and how to implement a patient-centered approach. Furthermore, students' perspectives after the program closely aligned with the interprofessional competency framework for successful interprofessional collaboration. Cross-training significantly enhanced students' interprofessional competencies, communication skills, and empathy toward other professions. This study underscores the necessity of incorporating cross-training into IPE to prepare healthcare professionals for collaborative practice and improve patient outcomes. Future research should explore diverse scenarios, such as emergency care or chronic disease management, and consider longitudinal assessments to evaluate how cross-training impacts professional competencies over time. Additionally, integrating IPE into a cohesive curriculum rather than standalone workshops could enhance the continuous development of interprofessional skills.

Acknowledgments

We would like to thank Dr. Yagasaki, who started the new program for junior students. We are grateful to the students at Keio University for their help with the survey.

Disclosure

Dr Etsuko Tomisaki reports grants from Tokyo Metropolitan Government, outside the submitted work. Dr Satoko Ishikawa reports personal fees from KAKEN Pharmaceutical Co., Ltd., outside the submitted work. Dr Katsunori Yamaura reports grants from Higashi Nihon Medicom Co., Ltd, outside the submitted work. The authors report no other conflicts of interest in this work.

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