

Interprofessional Education: Exploring the Perspective of Psychology and Physiotherapy Students at a Malaysian Private University

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ABSTRACT

INTRODUCTION: Interprofessional education (IPE) is an essential component of healthcare training, designed to foster collaboration and improve patient outcomes by enabling students from different disciplines to learn with, from, and about each other. This study explores the perspective of healthcare students on IPE, focusing on their experiences, perceived benefits, challenges, and recommendations for improvement. **MATERIALS AND METHODS:** Using a qualitative research approach, semi-structured interviews were conducted with physiotherapy and psychology study participants to gain insights into their engagement with interprofessional learning. **RESULTS:** The findings revealed that participants generally recognize the value of IPE in enhancing communication skills, teamwork, and understanding of different professional roles. However, challenges such as limited structured opportunities for collaboration and misconceptions about the programme among other healthcare students were also identified. Participants suggested the need for more integrated and practical IPE experiences to bridge the gap between theory and practice among healthcare profession students. **CONCLUSION:** This study highlights the importance of refining IPE programmes to better prepare healthcare students for effective interprofessional collaboration in healthcare settings.

KEYWORDS: interprofessional education, healthcare students, collaborative learning, qualitative

INTRODUCTION

Different disciplines within a healthcare system seem to function independently, hence interprofessional education (IPE) aims to foster collaboration among the various disciplines. IPE is best understood as an educational strategy in which “students from two or more professions learn about, from, and with each other, enabling effective collaboration and improved health outcomes”.¹ This not only enhances patient care but also optimizes health outcomes and improves overall patient satisfaction.² There is an increasing global emphasis on adopting IPE within undergraduate health sciences education, and Malaysia is no exception to this trend.³ A study conducted by Ahmad (2023)⁴ among clinical healthcare students in Malaysia revealed that approximately 36.8% of final-year students had no prior exposure to IPE. This finding highlights a considerable gap in interprofessional learning even among students nearing the completion of their training.⁴ Similarly, a separate study by Ganeson and Ismail (2022)⁵ reported that 96.2% of pre-university health professional students had no prior experience with IPE before entering their tertiary education. These statistics underscore a critical need to embed IPE systematically into healthcare curricula at earlier stages of education to enhance collaborative competencies and foster interprofessional understanding.

At Manipal University College Malaysia (MUCM), physiotherapy and psychology students actively participate in organised IPE initiatives aimed at developing their interprofessional collaborative practice, competencies, and collaboration skills. Therefore, physiotherapy and psychology students were included in the current study since both professions collaborate in multidisciplinary health care settings, particularly in areas such as rehabilitation, chronic pain, and mental health. Although both professions play an important and integral role in the multidisciplinary team, especially in rehabilitation, the students' role perceptions and professional identities often influence group dynamics and interactions. Students' perspectives suggest that each student may see the learning process through different lenses. Considering the defined objectives pertaining to the student role, exploring students' perceptions of IPE is instrumental in enhancing program design and meaningful educational experiences towards collaborative healthcare practice. Therefore, the objectives of the current study were to investigate students' overall experiences with the IPE programs at MUCM, their perception and understanding of IPE, the main benefits, and key skills they learned from participation in IPE, challenges and barriers faced during the program, and suggestions for how to improve IPE events so that they will enhance collaboration in future healthcare practice.

Theoretical Framework

This study is guided by Social Constructivism (Vygotsky, 1978),⁶ which posits that learning is constructed through social interaction and collaboration. In the context of IPE, this theory highlights how healthcare students develop understanding by engaging with peers from different disciplines, co-constructing knowledge, and negotiating roles in shared learning environments.

The Zone of Proximal Development (ZPD) is central to this process, where students, supported by facilitators and peers, can reach deeper levels of understanding through interprofessional dialogue. This aligns with IPE's goals of fostering teamwork, mutual respect, and role clarity among future health professionals. By applying a social constructivist lens, this study explores how interaction within IPE settings influences students' perspectives, professional identity development, and attitudes toward collaborative practice.

MATERIALS AND METHODS

Program Description

MUCM has organised several IPE programs, such as i) the Healthy Athlete Screening Program with Special Olympics Malaysia and ii) community service at an old folks' home, to enhance interprofessional skills among healthcare students. The details of the programmes are as follows:

Healthy Athlete Special Olympics Malaysia

The Special Olympics Malaysia is a nonprofit organization registered with the Sports Commission of Malaysia, and it had recently co-organized a Healthy Athlete Screening Program at MUCM in collaboration with an international team of doctors and healthcare professionals from several countries. The event was officiated by YB Minister Hannah Yeoh, Minister of Youth and Sports Malaysia. This programme involved active participation from MUCM physiotherapy and psychology students who provided services to the Special Olympics Malaysia community of individuals and who have intellectual disabilities. Although different assessments were administered to the participants, physical therapy sessions (FUN Fitness) and mental health initiatives (Strong Minds) were actively assisted by the physiotherapy and psychology students.

Community Service

The community service programme was a half-day event held at the Senior Garden Elderly Care Centre, Bukit Baru, Malacca, and was participated in by the residents of the centre as well as psychology and physiotherapy students. The primary aim of the programme was to enhance students' understanding and appreciation of the importance of interprofessional collaboration and communication in managing elderly community. The secondary aim was to develop respect for and recognition of the roles of various healthcare professionals in the delivery of service to patients.

Study design

This study employed a qualitative research design to explore students' experiences and perspectives of the IPE programme.

A total of 10 undergraduate students (2 males, 8 females) who had participated in several IPE programs were selected to ensure relevance to the study objectives.⁷ The participants comprised one international student and nine local students. Five students were from the physiotherapy programme, which consisted of Year 1 and Year 2 students, and the remaining five students were from the psychology programme, all of whom were Year 2 students.

Participants for this study were selected using purposive sampling based on predefined inclusion and exclusion criteria. Eligible participants were undergraduate students enrolled in either the physiotherapy or psychology program at Manipal University College Malaysia (MUCM). Participants were required to have prior exposure to IPE activities, such as joint workshops, interdisciplinary lectures, group discussions, or simulation exercises involving students from multiple health disciplines. All participants needed to be fluent in English, as the interviews were conducted in English, and willing to provide informed consent, including agreement to participate in a semi-structured, audio-recorded interview. Data were collected from one-to-one semi-structured interview sessions conducted via Microsoft Teams. All four members of the research team were involved in conducting the interview sessions. Each interview lasted approximately 45-60 minutes and was audio-recorded with participants' informed consent.

The recorded interviews were transcribed verbatim and analysed using thematic analysis, following the six-phase framework by Braun and Clarke⁸ as shown in Figure 1. This included familiarisation with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. To enhance the rigour of the analysis, coding and theme development were conducted collaboratively and discussed among all members of the research team, ensuring triangulation and reflexivity.⁹

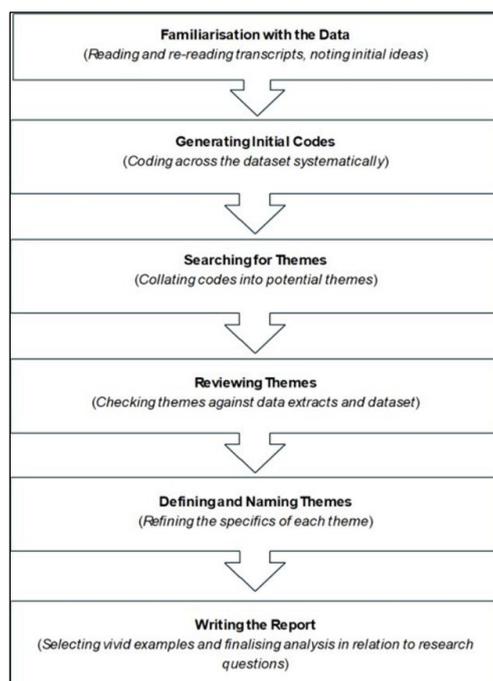


Figure 1. Thematic analysis steps (adapted from Braun & Clarke; 2006, 2021).

RESULTS

Perceptions and Attitudes Toward IPE

Thematic analysis of participants' responses revealed three main themes: i) initial uncertainty, ii) learning through exposure, and iii) appreciation of collaboration. Initially, many (70%) participants felt unsure about working with other disciplines, describing it as challenging and unfamiliar. However, as they interacted with peers from different fields, they gained valuable insights into various professional roles. This helped them understand how healthcare disciplines are connected and improved skills like communication, knowledge-sharing, and mutual respect. By the end of the programme, most participants (90%) viewed interprofessional collaboration positively, seeing it as enjoyable and helpful for building teamwork skills for their future careers.

All participants agreed that IPE is important for their professional development. They highlighted benefits such as improved communication, better teamwork, and a broader understanding of other healthcare roles. They also saw IPE as crucial in preparing them to handle real-world situations and collaborate effectively in future work settings. IPE was also viewed as essential for ethical practice and holistic care, guiding ethical decision-making and contributing to comprehensive treatment plans.

When asked about key skills for successful interprofessional collaboration, communication was the most frequently mentioned skill, followed by teamwork, collaboration, and active listening. Other important skills included empathy, open-mindedness, cooperation, observation, tolerance, and the ability to make mutual decisions. These skills are essential for effective collaboration.

Experience with Interprofessional Learning

Of the 10 participants, eight had participated in the Healthy Athlete Screening, Special Olympics programme. This event introduced them to IPE through group tasks that promoted teamwork across healthcare fields. All ten participants had also joined a community service project at an old folks' home with psychology and physiotherapy students. From there, they learned about changes in late adulthood in terms of emotional, physical, and mental aspects. For three physiotherapy participants, it was their first time working with psychology students, and they found it eye-opening.

Many (80%) reported that the experience improved their communication, problem-solving, and coordination, especially when dealing with language barriers. They appreciated the friendships formed and enjoyed learning from different perspectives. A few participants (20%) also mentioned learning about professional practices like getting informed consent. Most (70%) found the environment positive and welcoming, with only minor communication issues that were quickly resolved. Overall, these interprofessional activities helped them value teamwork, professional behaviour, and the need to care for both the body and mind in healthcare.

Challenges and Barriers in IPE

A qualitative analysis of participants' reflections on IPE revealed both positive experiences and notable challenges. Four participants reported smooth collaboration, with one participant crediting lecturer guidance for a seamless process. Others (50%) faced difficulties related to time, transportation, and extended program durations. Role ambiguity was also a concern, as one participant felt overshadowed by a more dominant teammate, while another participant had to assert the psychologist's role in a medically dominated team. Another participant struggled to understand the objective of the program, pointing to a need for better orientation. These findings underscore the importance of role clarity, logistical support, and balanced participation to improve interprofessional engagement.

Feedback on IPE activities revealed mixed perceptions. Five participants appreciated initiatives like community outreach and noted recent improvements in IPE efforts. Several issues were highlighted: i) societal stigma towards psychology, citing the use of terms like "orang gila" (crazy people) which affects the identity of psychology students, ii) confusion between the roles of psychologists and psychiatrists, where psychology is often seen as a "soft science" and undervalued compared to clinical fields, despite being evidence-based, and iii) misconceptions faced by physiotherapy students, who are often equated with massage therapy.

Although three participants experienced positive or neutral perceptions, the persistence of stereotypes and the limited inclusion of disciplines such as pharmacology, point to the need for broader inclusion, awareness, and respect within IPE.

Recommendations for Improvement

Nine out of ten participants mentioned that they wanted collaborative programmes with other faculties to enhance IPE at the institution. One of the participants highlighted the importance of promoting these collaborative programmes so that they could reach more students. Another participant suggested that student council should actively involve students from various programmes to increase IPE involvement. Having

hands-on projects is crucial for students to learn first-hand from the experts in the field. Regarding additional resources, three participants suggested financial support as an important factor for more effective engagement in IPE. One participant mentioned building websites as a tool to deliver information about IPE and as platform for students to interact with each other. Participants also felt that staff or lecturers should take a more active role in promoting IPE. Transportation was also regarded as an important resource in conducting IPE programs

Regarding the institutional role, one participant suggested regular implementation of IPE, with programmes conducted at least once every semester. Two participants suggested organising medical camps, field trips, and outdoor activities such as hiking as engaging ways to educate students about IPE. They also suggested that universities could take the initiative to conduct simulations and sessions with healthcare professionals so that the students could observe and demonstrate the skills they have gained to achieve high quality patient care. Half of the participants thought that organizing workshops and seminars is an effective way to prepare them for real collaboration in the future.

DISCUSSION

This study highlights the value of IPE in developing teamwork skills among healthcare students. Participants showed growth from initial uncertainty to a clearer understanding of the benefits of working together across disciplines. This supports existing research showing that IPE improves communication, role clarity, and attitudes towards collaboration.¹⁰ Structured IPE experiences help reduce barriers between professions and prepare students for collaborative clinical practice.¹¹ These findings align with the 2023 Interprofessional Education Collaborative (IPEC) Core Competencies, which focus on ethics, roles, communication, and teamwork.¹² Incorporating these competencies into healthcare education is essential to prepare graduates for effective team-based, patient-centred care.¹³

The study also emphasizes participants' recognition of the importance of IPE for professional growth, particularly in communication, teamwork, and understanding different disciplines. This aligns with literature showing that IPE is crucial for developing the collaborative skills needed in healthcare.¹⁴ Participants noted the real-world application of IPE, such as handling diverse patient situations and building confidence, highlighting its experiential nature. Ethical considerations, such as moral guidance and holistic care, were also emphasized.

Additionally, the study underscores the importance of communication in team collaboration. Skills such as active listening, empathy, and cooperation were mentioned as vital for positive team dynamics, supporting the need for emotional intelligence.¹⁵ The focus on adaptability and open-mindedness further highlights the importance of flexibility in diverse teams.¹⁶ These results suggest that a combination of communication skills and interpersonal qualities is key to successful collaboration.

According to Ahmad et al., clinical healthcare students in Malaysia value IPE because it enhances peer interactions and fosters skill development.¹⁷ This finding is consistent with a recent published review paper by Reeves et al in which students reported feeling more competent in communication and problem-solving after the IPE session, particularly when overcoming language barriers.¹⁸ In addition, students are also

exposed to professional duties such as obtaining informed consent early on, which helps them develop ethical values early in their careers.¹⁶ Another study conducted among medical and nursing students also demonstrated how a comprehensive IPE approach, utilizing community service and simulation, can enhance teamwork and cross-cultural understanding.¹⁹ Even though there are occasional communication problems, these can be promptly addressed in a supportive learning environment, highlighting the importance of a positive atmosphere in encouraging teamwork.^{20,21}

Additionally, the study by Lin et al.²² verified that Malaysian dental students had a favourable opinion of IPE, particularly in terms of understanding the interdisciplinary role.²² Based on these findings, IPE experiences promote a more comprehensive approach to healthcare and highlight the necessity of implementing IPE programmes in a structured manner to develop patient-centred and collaborative health professionals.

Next, the results of this qualitative study demonstrate both the benefits and ongoing challenges of IPE. Carlisle and Taing noted that logistical limitations, such as scheduling conflicts, transportation problems, and lengthy programme durations, impeded student engagement.²³ They contended that inadequate administrative support and coordination diminish the effectiveness of IPE.

Furthermore, students studying psychology and physiotherapy reported feeling overshadowed by their peers in more dominant fields, such as medicine, due to role ambiguity and hierarchical dynamics. This is consistent with research by Oregan et al who pointed out that ambiguous role definitions can hinder teamwork and increase tension between groups.²⁴ The stigmatization based on professional identity, such as the perception that physiotherapy is merely massage therapy or that psychology is a "soft science," reflects concerns raised by Lapkin, Levett-Jones, and Gilligan, who emphasized the detrimental effects of professional hierarchies and stereotypes on interprofessional relationships.²⁵ Despite these challenges, students observed increasing recognition of mental health expertise, indicating a gradual shift in the interprofessional value system.

Based on the above discussion, the current study confirms earlier research emphasizing the need for clearer role definitions, inclusive representation, and systematic implementation to ensure that IPE fulfils its collaborative promise.

Finally, the participants' recommendations and suggestions should be taken into consideration by the relevant stakeholders. First, their response reflect a desire for IPE to be implemented alongside academic subjects. This is supported by previous research, which shows that regular implementation of IPE through hands-on training and stimulation can enhance the acquisition of knowledge and skills in resolving complex issues.^{11,26,27}

Next, the participants' suggestion regarding their involvement of the student council reflects Brewer and Stewart-Wynne's studies that leadership is important in incorporating IPE within institutions.²⁵ Regarding additional resources such as transportation, financial support and websites, the students' suggestions align with previous research.²⁹ Importantly, opinions related to field trips and outdoor activities reflect the idea that experiential learning methods enhance teamwork and skill acquisition as supported by Kolb's experiential learning theory.³⁰

In summary, both psychology and physiotherapy participants demonstrated a positive shift in their understanding of interprofessional collaboration through IPE activities. However, their experiences and perspectives differed in notable ways. Psychology participants were more concerned with role ambiguity and professional identity, often feeling the need to assert their value in medically dominated teams. They also faced societal stigma and misconceptions, such as being confused with psychiatrists or being perceived as practicing a “soft science.” In contrast, physiotherapy participants encountered fewer identity challenges but were surprised by the importance of psychological perspectives in patient care. For many, it was their first experience working closely with psychology students, and they found it insightful and valuable. While both groups recognized the importance of communication, teamwork, and mutual respect, psychology students emphasized the need for greater awareness and inclusion of their discipline, whereas physiotherapy students focused on improving coordination and holistic care. Overall, the IPE experience enhanced interdisciplinary understanding and was seen as a vital step toward preparing for real-world collaborative practice. Figure 2 summarizes the findings and the suggestions for the improvement of IPE in the curriculum.

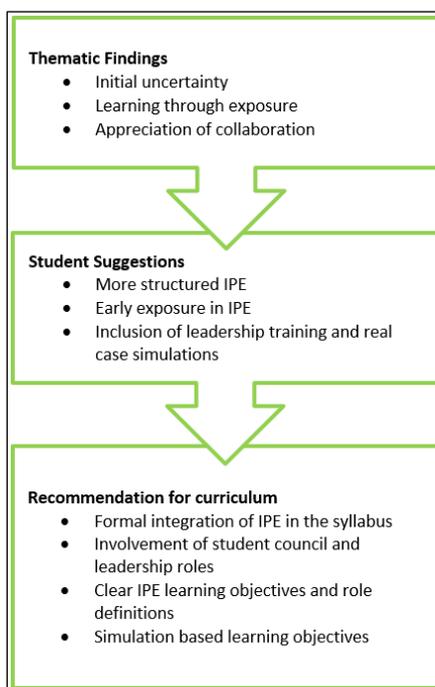


Figure 2: Suggestions for curriculum improvement based on the thematic finding

This qualitative study described participants’ experiences in the IPE course and found that it positively enhanced collaboration, communication, and understanding of the various roles within health care. Participants appreciated the learning experience but also noted certain challenges, like requiring more clarity in structure and guidance. Overall, the findings emphasised that well-planned IPE activities must be integrated with continuous evaluation to enhance teamwork and learning outcomes in healthcare education.

CONFLICT OF INTEREST

The author declares that there are no conflicts of interest.

INSTITUTIONAL REVIEW BOARD (ETHICS COMMITTEE)

Ethics approval was obtained from the Ethics Committee of MUCM (02/RMC/HEC02/FAH/May/2025). Every procedure used in this study that involved human subjects complied with the institutional or national research committee's ethical requirements, or similar ethical criteria.

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