



## MEDICAL STUDENTS' REFLECTION ON INTERPROFESIONAL EDUCATION WITH NURSING STUDENTS

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### ABSTRACT

Interprofessional education (IPE) is expected to help future health professionals prepare for collaborative roles between doctors and nurses. Therefore, IPE learning needs to be provided in the learning process of medical and nursing students. Objective: the purpose of this study was to see the effectiveness of IPE learning in medical students. The method used was qualitative content analysis method on self-reflection documents. Method: The population in this study were first-year medical students who participated in IPE learning, using total sampling of 157 respondents. Data were analyzed by qualitative content analysis method on self-reflection documents done by students. Results: The results obtained were three themes namely positive experiences, negative experiences and learning outcomes. Conclusions: IPE learning can encourage the development of relationships between students and the profession of doctors and nurses.

Keywords: collaborative; interprofessional education; medicine; nursing

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## INTRODUCTION

Effective interprofessional collaboration between health professionals is capable of providing quality patient care. Supporting this, the World Health Organization and its partners recognize interprofessional collaboration in education and practice as an innovative strategy that will play an important role in alleviating the global health workforce crisis (Gilbert, Yan, & Hoffman, 2010). The WHO therefore recommends interprofessional education (IPE) which is expected to help future health professionals prepare for their collaborative roles (Gilbert et al., 2010). IPE has a positive impact on teamwork in everyday healthcare practice. (Homeyer, Hoffmann, Hingst, Oppermann, & Dreier-Wolffgramm, 2018)

The World Health Organization (WHO) defines IPE as one of the integrated educational programs to improve collaboration skills (World Health Organization, 2010). IPE can occur when two or more students from different health study programs study together with the aim of improving cooperation and the quality of health services. IPE is not only a form of learning that focuses on learning from, with and about other professions to develop cooperation or collaboration between two or more health professions. But more than that, IPE is carried out for the realization of optimal health services to patients, but also learning to interact, understand and respect other professions (World Health Organization, 2010). IPE programs that start at the academic stage will get better results where students will be able to work

together when they work later (Sundari & Rai, 2021). By learning together, Carpenter & Dickinson (2016) added that health workers understand each other better, which in turn can improve the quality of health services.

Several studies report that IPE programs have a positive impact related to changes in perceptions and attitudes, increased knowledge, skills and ability to collaborate to improve patient health status (Nagge et al., 2017; Reeves et al., 2013, 2016). Furthermore, a literature review conducted by Sundari & Rai (2021) found that the majority of students' communication skills improved through the IPE program. According to the General Medical Council as a medical student, not only learning the scientific and clinical knowledge to become a doctor, but also the skills and professional identity that will help provide high-standard care to patients. The practice of reflection can help medical students in the learning process. Reflection is an important activity that doctors use every day in their practice.

Realizing the importance of the IPE program that has been described above, since 2021, the Faculty of Medicine and the Faculty of Nursing have implemented this program with a joint course method for the Communication in Health Care course from the Faculty of Nursing and the Effective Communication course from the Faculty of Medicine. There are seven learning topics that are studied together by both faculties including; Communication skills, Empathy, Communication across life span, Delivering bad news, Communication with clients with special needs, Communication with other professionals, and Communication in cultural context.

Although several studies have reported the positive impact of IPE programs, the maturity (age) of the students, the perceived power imbalance between professions or other factors that may affect the success of the program that has been provided, so an evaluation study in the form of self-reflection needs to be done for the improvement and enhancement of this program in the future (Olson & Bialocerkowski, 2014). Therefore, researchers want to conduct research related to IPE learning with the joint course method between medical students and nursing students which aims to see the effectiveness of IPE learning in medical students.

## **METHOD**

This study used a qualitative method of content analysis on self-reflection documents. The respondents of this study were medical students who participated in IPE lecture activities together with nursing students. IPE lectures were held for first semester students. The number of meetings was seven with different topics from 16 existing topics. The total documents of medical students analyzed were 157 self-reflection documents. The self-reflection question guide was developed from the Self and Peer Evaluation of Group Project MSED 467 Northwestern Education. Questions are in the form of essays that are filled in by students. Questions consist of experiences, feelings, things that happen, what will be done next by students after participating in IPE learning together with nursing faculty.

Data collection was conducted at the end of the IPE meeting. Reflective filling is given via a link and then filled in by each medical student. Informed consent was given along with the self-reflection link. After the reflection documents were collected, data were processed using qualitative methods with content analysis. Content analysis is a research method used to systematically analyze various forms of content. The content can be text, audio, video, images, social media posts, and others. This method involves a structured and systematic examination of content to identify patterns, subthemes, and themes. The researcher analyzed

the reflection documents by looking for similar patterns from each reflection that had been written by the respondents, then looking for subthemes and themes in the reflection documents and getting three themes from the reflection documents.

## RESULTS

The results of this study consist of data on the characteristics of respondents and the results of open questions from the self-reflection of medical students who have conducted IPE learning with nursing students.

Table 1.  
Respondent characteristics (n=157)

Gender	f	%
Male	6	3.8
Female	151	96.2
Regional Origins	f	%
Eastern region and beyond	3	1.9
Papua Island and its surroundings	5	3.2
Bali Island and its surroundings	3	1.9
Java Island and its surroundings	107	61.2
Kalimantan Island and its surroundings	10	6.4
Sulawesi Island and its surroundings	6	3.8
Sumatra Island and its surroundings	23	14.6

Most of those who filled in the self-reflection were female students at 151% of students who came from Java and its surroundings, the most at 61.2%.

## Theme and Subtheme

Three main themes emerged from the Medicine students' self-reflection on IPE learning with the Faculty of Nursing students. The first theme was positive experiences, the second theme was negative experiences, and the third theme was learning outcomes.

Table 2.  
Regional Origin Demographic Data (n=157)

Theme	Subtheme
Positive experience	Positive Feelings Relationship building Interactive class
Negative experience	Online learning method Less communication
Learning outcomes	Improved communication skills Change in mindset Bonding

Medical students had a positive experience after attending IPE lectures.

*[student 138] "I feel happy and very impressed because I can establish good communication between people."*

Other medical students also added that the lecturers who presented the material were very good so that they easily understood it.

*[student 14] "Starting from the good things, of course the mastery of the material and the way the lecturers are very interactive and passionate it helps me understand the material well. the new knowledge that is delivered becomes more and more integrated into my memory better....."*

In addition, students also had negative experiences during IPE learning. Students find it difficult to make decisions together because there are students who do not participate.

*[student 35] "..... However, while working together, there is minimal participation because nursing friends may still be awkward and lack initiative. This is evident in the creation of scripts, making videos, editing...."*

*[student 24] ".... However, when discussing or exchanging ideas and opinions, there were difficulties in reaching an agreement and there was a little difficulty in communication (how to express opinions clearly) so that there were some misunderstandings several times...."*

In addition to hindered communication, students also had unfavorable experiences due to online learning.

*[student 40] ".... because this lesson is conducted online, sometimes the internet really affects the continuity of the learning..."*

*[student 45] "Negative: Online classes may zoom Lagging due to connection, maybe online some are not active."*

The next theme is the results of IPE learning itself. Students can see that IPE learning can have the benefit of improving their communication skills.

*[student 14] ".... I feel more competent and confident because I now know how to communicate effectively with patients in various conditions, as well as with other professionals..."*

*[student 19] "The experience I get is that I can develop my knowledge and abilities in communicating with others. Especially those that are closely related to my profession as a doctor in the future. Thus, I have the opportunity to develop myself in empathizing and speaking and how to deal with patients in certain conditions."*

Students also felt that after learning, their mindset changed towards the nursing profession.

*[student 100] "in my opinion, the picture learning between the faculty of FON and Medicine is very good so we can exchange insights and especially understand more about how to communicate effectively between medical personnel and medical personnel to patients. then from the other side I see that this is very useful to erode the stigma in medicine that considers higher than nurses so with this we can understand that each job has its own portion and even make friends."*

*[student 16] "I've learned to work together in a better understanding, by which we brainstormed upon fellow members who have diverse opinions and thoughts, trying to find the point of agreement from the differences said, nonetheless for the completion of our team's goals. Moreover, I've also learned to listen and understand further of others opinions, and actually take it in. I've also got to experience working with different majors, by which Medicine meets Nursing. It was a fun experience, by which we Medicine and Nursing get to glimpse of what's coming upon all of us."*

In addition, students also feel that after learning IPE, a bond between their professional colleagues (nursing students) is formed, such as the statement made by the student.

*[student 23] "I feel that I can be closer and more familiar with fellow students from the same department (medical faculty students) and nursing faculty students. In addition, I am also grateful to be given the opportunity to work together with fellow faculties".*

## **DISCUSSION**

Interprofessional Education (IPE) is a collaborative approach to developing healthcare students as future members of the interprofessional team. According to Bridges (2011) the IPE model consists of: (a) Didactic program. Didactic programs emphasize interprofessional team-building skills, professional knowledge, patient-centered care, service learning, the impact of culture on healthcare delivery and interprofessional clinical components. (b) Community-based experiences. Demonstrate how interprofessional collaboration delivers services to patients and how the environment and availability of resources impact on a person's health status (c) Interprofessional simulation experiences. Describes clinical team skills training in formative and summative simulations used to develop skills in communication and leadership.

Factors that Facilitate IPE (Ho et al., 2008). Consists of perspective-taking the development and exploration of shared goals, values, and beliefs. Secondly the knowledge and effective skills of the IPE team. Supporters and barriers of IPE for medical students and nursing students (Homeyer et al., 2018) vary. The things that support IPE programs are developing and promoting an interprofessional mindset and patient-centered care actions, joint knowledge acquisition, promotion of information and knowledge exchange; mutual understanding, acceptance, respect for each other, reduced hierarchy, prerequisites for IPC success are special skills and knowledge; communication, special roles and the ability of medical assignments and nursing professions to place themselves in the perspective of other professions. As for the barriers, they consist of standardization of learning content levels, different levels of knowledge, harmonization of medical and nursing curricula, organization of IPE lectures; personal resources, time resources, financial resources, low mutual respect between medical and nursing students and resulting limited willingness to IPE, low appreciation of medical students towards nursing students, legal issues.

Reflective practice is widely and persistently viewed as "an internal process of examining and exploring an issue, triggered by an experience, to clarify meaning in terms of the "self" and generate a conceptual perspective" (Boyd & Fales, 1983). Reflective practice in the context of interprofessional education can contribute to the acquisition of shared meaning, leading to a better understanding of the role and importance of the professional (Zarezadeh et al., 2009). Furthermore, the Reflection method is identified as key to interprofessional education because it can facilitate a focus on interprofessional communication, collaborative practice, and professional roles (Saunders et al., 2016). The results of self-reflection after IPE learning obtained the first theme is the existence of positive experiences. The results of this self-reflection are supported by another research. Research (Lee et al., 2020) on medical and nursing students who underwent IPE lectures for two days, found that students had positive experiences. IPE learning is also perceived as interesting learning (Prentice et al., 2015).

Research from (Teuwen et al., 2022) also said that after learning IPE influenced the way of conceptualizing and interprofessional collaboration in clinical practice. This is in line with the results of this study where medical students feel positive experiences such as feeling positive feelings after participating in IPE learning because their insights increase in communication with other health workers and to patients. Building relationships where they become related to nursing students and learn to communicate with them, having assignments with nursing students, so they feel that this is good because they become able to communicate with other health workers, and the last is an interactive class. An interactive class, where they can make friends with nursing students, and where the learning is fun for them.

In addition, students after participating in IPE learning felt that learning brought benefits to their communication skills. Through IPE learning helped them increase their confidence in communication skills with the team (Lee et al., 2020). In addition, one of the themes found by (Costello et al., 2018) is that IPE learning makes students better understand communication and become confident. This was also recognized in research (Richard et al., 2019). Other research also supports that with medical and nursing IPE learning, medical students stated that they gained new insights (Salberg et al., 2022). Changes in mindset also occurred in the perspective of medical students (Salberg et al., 2022). In this study, medical students said that other perspectives, such as nursing, are equally important, although they are considered less in the workplace.

However, negative experiences were also felt when they did IPE learning. According to (Olson & Bialocerkowski, 2014) lack of participation in IPE programs can be an obstacle. Lack of communication skills can also be a negative or challenge in IPE learning (van Diggele et al., 2020). In this study, negative experiences were also obtained, namely about online learning methods and lack of communication. Online learning is one of the negative experiences due to different internet connections for each student and the lack of communication between medical students and nursing students at the beginning of learning. However, communication can take place actively when there is a group assignment involving medical students and nursing students.

In the third theme, it was found that there were good learning outcomes in medical students. The perspective of students can motivate when collaborating in the scope of health services so that it is expected to achieve the main goal of improving service to patients. Communication is an important component of interprofessional collaboration for all healthcare professionals to provide truly patient-centered patient care (Prentice et al., 2015). In the study (Berger-Estilita et al., 2020) it was also found that students recognized the relevance of IPE for their future professional performance. (Zaher et al., 2022) in their research also said that IPE learning significantly increased the level of readiness to engage in interdisciplinary learning and collaboration among health professions students. This is in line with the results of this study where medical students felt a change in mindset, improved communication skills and bonding.

## **CONCLUSION**

IPE learning can encourage the development of relationships between students and professional doctors and nurses. Through this IPE learning, medical students can also see different perspectives so that they better understand their professional colleagues (nursing). The impact of this IPE learning for medical students can increase competence and confidence when doing practice. Medical students also feel that interprofessional communication is very important in carrying out health services to patients. Further research and evaluation are needed regarding the appropriate learning method for IPE because students still feel less impact on the online implementation method. Self-reflection can be used as an effective tool.

## **REFERENCES**

- Adeani, I. S., Febriani, R. B., & Syafryadin, S. (2020). Using gibbs reflective cycle in making reflection of literary analysis. *Indonesian EFL Journal*, 6(2), 139. <https://doi.org/10.25134/ieflj.v6i2.3382>
- Berger-Estilita, J., Fuchs, A., Hahn, M., Chiang, H., & Greif, R. (2020). Attitudes towards Interprofessional education in the medical curriculum: A systematic review of the literature.

- Boyd, E. M., & Fales, A. W. (1983). Reflective learning: Key to learning from experience. *Journal of Humanistic Psychology*, 23(2), 99–117. <https://doi.org/10.1177/0022167883232011>
- Costello, M., Prelack, K., Faller, J., Huddleston, J., Adly, S., & Doolin, J. (2018). Student experiences of interprofessional simulation: Findings from a qualitative study. *Journal of Interprofessional Care*, 32(1). <https://doi.org/10.1080/13561820.2017.1356810>
- Carpenter, J., & Dickinson, H. (2016). Interprofessional education and training, second edition. In *Interprofessional Education and Training, Second Edition*.
- Ho, K., Jarvis-Selinger, S., Borduas, F., Frank, B., Hall, P., Handfield-Jones, R., Hardwick, D. F., Lockyer, J., Sinclair, D., Lauscher, H. N., Ferdinands, L., MacLeod, A., Robitaille, M. A., & Rouleau, M. (2008). Making interprofessional education work: The strategic roles of the academy. In *Academic Medicine* (Vol. 83, Issue 10). <https://doi.org/10.1097/ACM.0b013e3181850a75>
- Homeyer, S., Hoffmann, W., Hingst, P., Oppermann, R. F., & Dreier-Wolfgramm, A. (2018). Effects of interprofessional education for medical and nursing students: Enablers, barriers and expectations for optimizing future interprofessional collaboration - a qualitative study. *BMC Nursing*, 17(1), 1–10. <https://doi.org/10.1186/s12912-018-0279-x>
- Komisi Akreditasi Rumah Sakit, 2018, Standar Nasional Akreditasi Rumah Sakit (SNARS) edisi 1, Jakarta : KARS
- Lee, W., Kim, M., Kang, Y., Lee, Y. J., Kim, S. M., Lee, J., Hyun, S. J., Yu, J., & Park, Y. S. (2020). Nursing and medical students' perceptions of an interprofessional simulation-based education: A qualitative descriptive study. *Korean Journal of Medical Education*, 32(4). <https://doi.org/10.3946/KJME.2020.179>
- Maria, L. A. (2012). Model refleksi graham gibbs untuk mengembangkan religiusitas. *Jurnal Teologi*, 1(2), 195–208. <https://doi.org/10.24071/jt.v1i2.430>
- Nagge, J. J., Lee-Poy, M. F., & Richard, C. L. (2017). Evaluation of a Unique Interprofessional Education Program Involving Medical and Pharmacy Students. *American Journal of Pharmaceutical Education*, 81(10), 6140. <https://doi.org/10.5688/ajpe6140>
- Olson, R., & Bialocerkowski, A. (2014). Interprofessional education in allied health: a systematic review. *Medical Education*, 48(3), 236–246. <http://10.0.4.87/medu.12290>
- Prentice, D., Engel, J., Taplay, K., & Stobbe, K. (2015). Interprofessional collaboration: The experience of nursing and medical students' interprofessional education. *Global Qualitative Nursing Research*, 2015. <https://doi.org/10.1177/2333393614560566>
- Richard, A., Gagnon, M., & Careau, E. (2019). Using reflective practice in interprofessional education and practice: a realist review of its characteristics and effectiveness. *Journal of Interprofessional Care*, 33(5), 424–436. <https://doi.org/10.1080/13561820.2018.1551867>

- Reeves, S., Fletcher, S., Barr, H., Birch, I., Boet, S., Davies, N., McFadyen, A., Rivera, J., & Kitto, S. (2016). A BEME systematic review of the effects of interprofessional education: BEME Guide No. 39. *Medical Teacher*, 38(7), 656–668. <https://doi.org/10.3109/0142159X.2016.1173663>
- Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, 2018(8). <https://doi.org/10.1002/14651858.CD002213.pub3>
- Salberg, J., Ramklint, M., & Öster, C. (2022). Nursing and medical students' experiences of interprofessional education during clinical training in psychiatry. *Journal of Interprofessional Care*, 36(4), 582–588. <https://doi.org/10.1080/13561820.2021.1928028>
- Saunders, R., Singer, R., Dugmore, H., Seaman, K., & Lake, F. (2016). Nursing students' reflections on an interprofessional placement in ambulatory care. *Reflective Practice*, 17, 1–10. <https://doi.org/10.1080/14623943.2016.1164686>
- Sundari, S., & Rai, H. (2021). Interprofessional Education (IPE) improves students' communication skills: A literature review. *Jurnal Pendidikan Kedokteran Indonesia: The Indonesian Journal of Medical Education*, 10(2), 177. <https://doi.org/10.22146/jpki.5283>
- Teuwen, C., van der Burgt, S., Kusurkar, R., Schreurs, H., Daelmans, H., & Peerdeman, S. (2022). How does interprofessional education influence students' perceptions of collaboration in the clinical setting? A qualitative study. *BMC Medical Education*, 22(1). <https://doi.org/10.1186/s12909-022-03372-0>
- University Of Edinburgh. (2020, November 11). Gibbs' reflective cycle. University of Edinburgh. <https://www.ed.ac.uk/reflection/reflectors-toolkit/reflecting-on-experience/gibbs-reflective-cycle>
- Van Diggele, C., Roberts, C., Burgess, A., & Mellis, C. (2020). Interprofessional education: tips for design and implementation. In *BMC Medical Education* (Vol. 20). <https://doi.org/10.1186/s12909-020-02286-z>
- World Health Organization. (2010). Framework for Action on Interprofessional Education & Collaborative Practice Health Professions Networks. World Health Organization. <https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice>
- World Health Organization. (2015). WHO global strategy on integrated people-centred health services 2016-2026 -Placing people and communities at the centre of health services. Draft for Consultation, <http://apps.who.int/iris/bitstream/10665/180984/1/>. <https://doi.org/doi:10.1890/08-1895.1>
- Zaher, S., Otaki, F., Zary, N., Al Marzouqi, A., & Radhakrishnan, R. (2022). Effect of introducing interprofessional education concepts on students of various healthcare disciplines: a pre-post study in the United Arab Emirates. *BMC Medical Education*, 22(1), 1–14. <https://doi.org/10.1186/s12909-022-03571-9>.