

Students' Perception on Collaboration through the Online Implementation of Interprofessional Education (IPE) in Handling Covid-19

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Abstract

Interprofessional education is Interprofessional education (IPE) entails learning with, from, and about each other to enable effective collaboration and improve health outcomes. Negative perception, professional egoism, bad knowledge about it will hamper collaboration. Reducing negative perception and creating readiness is a prime target for IPE training. COVID-19 restrictions necessitated wholesale scale conversion of curricula to online learning environments globally. The research is aimed at getting students' perceptions of collaboration through interprofessional education online. This was a descriptive study. The study took place at Mahardika Health College. The respondents consisted of 155 students in nursing, public health, midwifery, and medical record students. Students were grouped into interprofessional teams for two days and participated in IPE training consisting of lectures and small group discussions. The training is done online using the zoom meeting app. At the beginning of the first session, they completed a pre-test survey with demographic items and measures of their perception of interprofessional education to work as a team. They completed a post-test with the same measures after the end of the session. 155 students completed both the pre-test and post-test survey. The student's perception before taking ipe training is 88.38 % good to be 100% good. This study demonstrated that a short series of IPE training experiences resulted in improved perceptions of interprofessional practice.

Keywords

interprofessional education;
interprofessional collaboration;
IPE training; health education;
covid-19



I. Introduction

Collaboration between health workers or what is known as interprofessional collaboration (IPC) is a system that provides opportunities for various health professions to collaborate in resolving various client problems (Handerson, et al., 2013). In the context of the current global health crisis as a result of the COVID-19 pandemic, health professionals and students need interprofessional collaboration skills more than ever (Khalili & Xyrichis, 2020). IPE is a way to achieve interprofessional collaboration. Thistlethwaite & Nisbert (2007) introduction of IPE to undergraduate students can be done for early students and final year students (senior years). According to Handerson (2013), IPE can be explained through case-based discussion. Lecture method, teamwork training, learning clinical setting, problem based learning, experimental learning, and simulation are other methods that can be used to introduce IPE to students in the health professions (Ogawara, 2009;

Thistlethwaite & Nisbert, 2007). An introduction to the lecture method is a good start for explaining IPE to students. Introduction of IPE using PBL and methods case-based provides space for student interaction of various professions. The use of simulation methods to introduce IPE can increase self-confidence, knowledge, leadership, teamwork, and communication skills (Gough, Hellaby, Jones, Mackinnon, 2012). The introduction of IPE through training using lecture methods, case discussions, and simulations increases the positive perception and readiness of health students to collaborate (Andhini et al., 2021).

The outbreak of this virus has an impact of a nation and Globally (Ningrum *et al*, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020). COVID-19 pandemic is a clear example of how collaboration between health workers is needed (Khalili & Xyrichis, 2020). The COVID-19 pandemic has changed conventional or offline learning to be methods online. Several universities that are already implementing IPE in their curriculum have replaced the IPE lecture method with an online method. Based on research (Jones et al., 2020) explaining the COVID-19 pandemic changed the planned educational method or curriculum, but this situation increased student awareness of the importance of collaboration and awareness of students majoring in health to understand each other's competencies of each profession, besides strengthening solidarity among health students.

According to Lee (2009), the perception of IPE has several components, namely competence and autonomy, the view of the case of the new method together, current cooperation, and understanding of other professions. Cameron *et al*, (2009) stated that one of the components of perception, namely understanding other professions, is a way that must be fulfilled in the application of IPE. Negative perception, professional egoism, bad knowledge about it will almost be collaboration. Reducing negative perception and creating readiness is a prime target for IPE training (Andhini et al., 2021). This study aims to determine student perceptions of collaboration through the application of interprofessional education in handling COVID-19 in an online clinical setting.

II. Research Methods

This research is a type of quantitative descriptive research. This research was conducted at STIKes Mahardika in August 2021. The population in this study were seventh-semester students majoring in nursing (60 respondents), majoring in public health (13 respondents), semester V majoring in midwifery (7 respondents), majoring in medical recorders and health information (75 respondents). This study uses total sampling. The questionnaire used was IEPS to measure perceptions. Validity and reliability tests were carried out on 30 students with a reliability score on the IEPS questionnaire was 0.942. Based on this value, the IEPS and RIPLS questionnaires are reliable to use. Researchers collect data, arrange research permits, test validity, and reliability and then socialize research to related parties. Coordinate training schedule for 4 study programs. Conduct IPE training for students for 2 days online using a zoom meeting. The first day of giving material with lectures. The second day of the COVID-19 case discussion or Small Group Discussion (SGD). Perception measurements were carried out before and after the training. Data analysis was carried out univariately.

IV. Results and Discussion

4.1 Results

Characteristics of respondents in this study include the origin of the study program and gender are described in the following:

Table 1. Characteristics of Respondents

Characteristics of Respondents	F	%
Study Program		
Nursing	60	38.7
Public Health	13	8.38
Midwifery	7	4.52
Medical Records	75	48.4
Gender		
Female	121	78.1
Male	34	21.9

Source: Primary data

Based on the data above we can conclude that most of the respondents came from the Medical Record study program and the respondents were dominated by the female.

Table 2. Perception Category

Perception Category	Nursing (%)		Public Health (%)		Midwifery (%)		Medical Records (%)		Total	
	pre	Post	pre	post	pre	Post	pre	Post	pre	Post
Good	91.67	100	84.6	100	85.7	100	86.7	100	88, 3	100
Average	8.33	0	15.4	0	14.3	0	13.3	0	11.7	0
Bad	0	0	0	0	0	0	0	0	0	0

4.2 Discussion

The learning process given in health schools is either medical education or education in the health profession. Others can be achieved well when lecturers optimize student perceptions. Optimizing student perceptions greatly helps the achievement of learning competencies in school and influences their practice and participation in collaborative practices (Jackman et al, 2017). According to Loversidge, & Demb (2015) culture is a very influential thing on the perception of collaboration among students. Students view the quality of care, safety, and collaborative practice as the norm. One of them is the culture of asking and answering, which affects the perception of collaborative practice. In the process of introducing IPE, good perception is important to form an interprofessional health team. Students who view collaboration as important will interact and build good communication relationships with other professional teams (Cusack & O'Donoghue, 2012).

In this study, there was a good perception before and after the IPE training was given. Building a good perception of collaborative practice cannot just happen, but is supported by various parties such as academics or faculty (A Rhoda, et al, 2016). At STIKes Mahardika previously, there was an introduction to IPE for students but it was brief and not comprehensive, and not periodic. However, from this introduction, the leadership, study programs, and lecturers realized how important collaborative learning was to be applied from the beginning of the semester. According to A Rhoda, et al the year

2016, a positive perception will arise when the introduction of IPE, especially during discussions, because students will communicate with each other even though they are online. Cusack & O'Donoghue in their 2012 research said that positive perceptions would appear influenced by the IPE recognition method. The introduction is done through the case discussion method (SGD) or PBL. This method is considered good for an introduction to IPE because it provides opportunities for students to solve problems in small interprofessional health groups. Small group case discussions are a basic principle of adult learning, motivating students, encouraging them to have their own learning goals, and contributing to decisions related to their learning. Group dynamics and the development of relationships that occur during case discussions are important for shaping views in the introduction of IPE because they provide experience in the emergence of conflicts and broaden insights regarding interprofessional health teams. In this study, students' perceptions of collaborative practices were in a good category. The case discussion was conducted after the introduction of collaboration through the lecture method. Discussion group members consist of each study program. In the discussion process that has been carried out, students first introduce themselves to each other. They discuss the cases that have been given. Each study program communicates with each other and gives their opinion in the zoom room of each group.

The results of this study are in line with research conducted by Noorharyanti (2012). The benefits obtained from interprofessional learning are that it can increase awareness of the overall capabilities possessed following existing policies, to be able to think critically and work collaboratively (Ruebling, et.al, 2014). The component of cooperation needs to interpret a statistically significant difference between before and after the IPE training was given. This happens because, in the IPE training that has been carried out, students are given awareness about the importance of collaboration and inculcated the principle of collaboration with students from other health professions when providing material through online lectures, during icebreaking, and joint case discussions. According to Baker (2008), a good understanding of the role of the team can increase awareness of the interdependence between the profession and other health professions. In the implementation of the IPE training which has been carried out online, students are given activities in the form of case discussions and simulations wherein 1 group there are 4 students from different health study programs so that students are familiar with collaborating with students of other health professions. Studying together in an interprofessional environment can help students build effective and collaborative working relationships within a healthcare team (Ateach et. al, 2011). The proof of cooperation component is closely related to another component, namely the need for cooperation. According to Baker (2008) that with the need for good cooperation, students will understand the importance of interprofessional cooperation and they will show evidence of strong cooperation.

IV. Conclusion

The application of IPE through IPE training in handling COVID-19 in an online clinical setting was able to change the perception of students from 88.38% good to 100% good.

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