Evaluation of Inter Professional Education (IPE) During the COVID -19 Pandemic

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Abstract. The current COVID-19 pandemic has had a significant impact on various sectors. The impact in the education sector is the emergence of one of the policies made by the government, namely the abolition of direct teaching and learning activities. This has been implemented in several countries in the world, including Indonesia. Distance learning is considered as a solution as well as providing a big challenge for the world of education without providing other options. Face-to-face learning is not allowed by the government, and even mobility and crowds are limited to prevent the more massive spread of COVID-19. This study aims to evaluate the Inter Professional Education (IPE) program which happened to take place during the Covid-19 Pandemic. Data collection was done by distributing questionnaires via google form. The research sample was 52 students of the USU Faculty of Pharmacy who had taken IPE courses that were chosen by accidental sampling technique. The results of the study focused on several factors that were considered to be contributing to learning during the pandemic, namely stress, perception, learning media, understanding, creativity, and student-lecturer relationships. The results vary widely for each item asked. However, bad signals in certain areas are one of the main obstacles when lectures are carried out online. So students hope that the pandemic will pass soon so that learning can return to normal although some students feel pleasant with online teaching learning.

Keywords: Evaluation · IPE · the COVID-19 Pandemic

1 Introduction

Universitas Sumatera Utara (USU) Hospital together with the USU Health Sciences faculty have held an Inter Professional Education (IPE) and Inter Professional Collaboration (IPC) program involving the faculty of medicine, faculty of nursing, faculty of dentistry, faculty of public health, faculty of psychology, and faculty of pharmacy in 2018. IPE is very much needed, because it will be the initial basis for the formation of IPC when providing health services in practice. One of the benefits of IPC is to support patient safety. Collaboration between health professions is very important to create optimal services and improve patient safety.

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Several faculties of the health sciences group at USU have held meetings and produced an IPE curriculum which is expected to be a leading university course. Bollen, Harrison, Aslani, and Van Haastregt said [1] that IPE is learning that involves several different health professions that occurs when two or more disciplines study together to improve collaboration and understand each other's roles. Nurhidayah and Revi [2] added that IPE should start from the initial education of students so that when they undergo a professional education program they become accustomed to collaborating with other professions.

Wijoyo and Hananto [3] state that IPC habituation can be done with the IPE approach in the field of education. Rebecca [4] stated that the interprofessional team consists of a variety of different health professions that have specific knowledge, skills, and abilities. Therefore, IPE is needed to mediate these differences. USU has designed IPE courses for faculties belonging to the health family, but only the pharmacy faculty has implemented IPE as a separate course. IPE courses are placed for 3 semesters with one credit course per semester, starting from the 4th semester.

Several public and private universities have already implemented it. The findings of Bolesta and Chmil [5] state that inter professional education has developed and become part of the curriculum in universities, especially in medicine and nursing. Many obstacles arise to implement it, because all professions must be involved.

Al Achkar, Hanauer, Colavecchia, and Seehusen [6] found that several barriers that affect the implementation of IPE are time for educators, time for students, financial support, activity space, and readiness. Meanwhile, the focus of IPE development that has been running, both in Indonesia and abroad, is mostly still community-based, including the results of research by Hayashi [7].

Prearranged the importance of IPE as the basis for the formation of IPC, IPE courses will be implemented in the USU health sciences curriculum. In 2019 it was agreed to include IPE in the Health Sciences curriculum at USU, but only the pharmacy faculty has implemented it starting in 2020 and is now in the final first stages of implementation, so an evaluation should be carried out. Evaluation aims to improve things that become obstacles during the process.

Based on the results of research by Nurhidayah, Martina and Tanjung [8] they found that students' perceptions of Interprofessional Education (IPE) were already in the positive category. This means that students are ready to carry out IPE, but students' perceptions are still in the context of understanding. The results of Hakiman, Dewi, Sayusman and Wahyudi's [9] research stated that students' understanding of other health professions was good but professional collaboration in teams was still perceived as inadequate.

Nurhidayah and Revi [10] also found that the real conditions in the field of collaboration between professional students had not yet occurred. Collaboration has not occurred because communication is still rare between students who come from different professions or between students with other different professions. Therefore, communication is an important thing that must exist and be studied in IPE.

Nurhidayah's research results agree with Kusumaningrum and Anggorowati's research [11] which states the need for efforts to develop inter-professional communication to prepare prospective nurses to be able to communicate in a team. Another

study from Sundari and Sembodo [12] found that in the implementation of IPE, understanding of other professions had the lowest average due to the lack of interaction and communication between professions. In fact, communication is very important in a team for collaboration to occur.

The IPE program which started at the pharmacy faculty coincided with the ongoing covid 19 online pandemic during the covid 19 period. The Covid-19 pandemic that is currently engulfing the world causes many problems that are difficult for the community to handle. The Covid-19 pandemic is the first and foremost health crisis in the world today, many countries have decided to close schools, colleges and universities.

The World Health Organization (WHO) [13] noted that in the early of March, 2020 as many as 90.308 were infected with Covid-19 and it is estimated that this number will increase. The faster the spread of COVID-19 has resulted in many countries in the world implementing a lockdown in order to break the average spread of Covid-19.

According to Covid-19 Cluster Indonesia reported data in the middle of May, 2020 in Indonesia obtained 16.496 confirmed Covid-19 with 490 new cases, 11.617 people in treatment, 3.803 declared cured and 1,076 died, while People Under Monitoring (PUM) were 262.919 and Patients Under Surveillance (PUP) were 34.360 people.

The current Covid-19 pandemic has an impact on various sectors such as the economy and social, to prevent the spread of Covid-19 in Indonesia itself has begun to set LSSR (Large-Scale Social Restrictions) this is stated in the Minister of Health Regulation, 2020. PSBB itself includes restrictions activities of residents in one area, including restrictions on the movement of people or goods for one province or city district to prevent the spread of covid-19.

These restrictions are carried out through online learning at home, restrictions on religious activities, and restrictions on activities in public places or facilities. Studying at home using gadgets or other media is not entirely fun. Some students even experience some psychological problems such as anxiety, stress and depression. This can be triggered because of boredom or tasks that are considered burdensome.

Information technology is currently developing rapidly with adequate infrastructure support. The availability of software, hardware, and internet networks opens up opportunities for innovation, including in the world of nursing education. The use of online learning methods has increased since the LSSR was set by the government. LSSR is stated in Government Regulation. The current condition is a challenge for the world of nursing education to immediately respond by conducting online learning using e-learning developed by related institutions or using learning support resources that are already available in cyberspace.

Harjanto and Sumunar [14] and also Angelica and Tambunan [15] said that limited network and internet access, technical obstacles in learning, and the ineffectiveness of the mentoring system are challenges in implementing online learning. But on the other hand Iskandar, Masthura, Oktabiyana [16] have a different opinion. According to Iskandar et al.; online learning must be implemented by the academic community where quality must be maintained as in clinical learning in real practice facilities.

While Damayanti Santyasa, and Sudiatmika stated [17] that distance learning or called online teaching is a teaching method that uses a network to communicate, read,

and write which is done at the same time but not in the same space by using various technologies and multimedia such as computer, video, audio, smartphone and so on.

It has been explained that only the faculty of pharmacy has been running IPE courses at USU. Therefore, based on the background and studies that have been described as well as supporting research, the purpose of this research is focused on evaluating the implementation of the IPE course which took place at the USU pharmacy faculty which happened during the COVID-19 pandemic.

2 Methods

This research is a research development (Research Development) with the ADDIE approach (Analysis, Design, Development, Implementation, Evaluation) [18, 19] which aims to carry out an evaluation of the IPE program that has been running at the Faculty of Pharmacy, Universitas Sumatera Utara.

The population in this study was all 192 students of the USU Faculty of Pharmacy who had attended IPE lessons. The number of samples in this study was taken as much as 20–30% of the total population, so a sample of 52 people was obtained. The sampling technique chosen was accidental sampling.

Data collection was carried out after the proposal passed the ethical test from the Research Ethics Commission of the Faculty of Nursing, University of North Sumatra (USU) and received approval from the USU faculty of pharmacy with due observance of generally accepted ethical principles. The questionnaire is designed in the form of a google form, then distributed to respondents via the whatsapp application.

The research instrument was developed by the researcher himself by exploring problems related to methods, media, learning strategies and problems that support or hinder the IPE program or course. Based on the initial search results, the research instrument focused on several factors, namely student perceptions, stress, learning media, student understanding, creativity, and student-lecturer relationships while IPE program at the faculty of pharmacy at USU.

The research data were analyzed in a simple way, by tabulating, then the percentage was calculated from each component of the evaluation sub variable. The results of the calculation of the frequency distribution are presented in the form of a bar chart.

3 Results and Discussion

The results of the research are illustrated in the following figures:

Figure 1 illustrates the comparison of the number of samples by gender. It can be seen in the Fig. 1 that the numbers of samples participating in the study were 52 people, consisting of 5 (9.62%) male and 47 (90.38%) female.

Figure 2 illustrates student stress level. It can be seen in the bar chart that there are 3 (5.77%) students who experience stress, 29 (55.7%) students experience stress sometimes while 20 (38.5%) students do not experience stress at all. Based on the results of the study, it was found that only a few students experienced stress, the majority only experienced stress sometimes and some did not experience stress at all. This means that

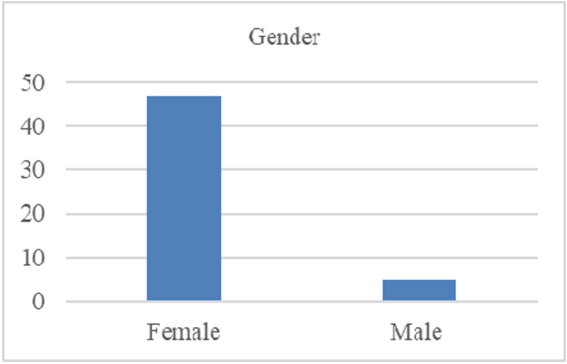

Fig. 1. Gender of Sample

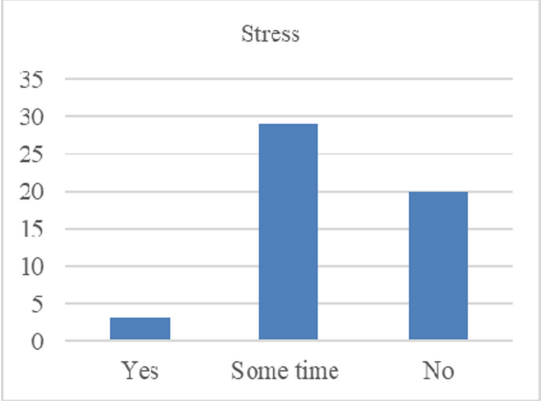

Fig. 2. Student Stress Level

they have a good self-defense mechanism so that they can still participate in IPE learning activities during the covid 19 pandemic.

As it is known that learning during the COVID-19 pandemic is carried out online, and raises many problems among stress. Andiarna and Kusumawati's [20] research found data indicating that students experienced stress during online learning with a moderate category of 55.7%. Another study from Jatira [21] which describes the phenomenon of stress and online learning habits during the COVID-19 pandemic, found that virtual learning cannot bring positive learning habits to the point of causing stress to students.

The results of this study are similar to the research Adrian, Putri, and Suri [22] who found that some of the nursing students, namely 32 (56.1%) of the 57 respondents, only experienced mild stress levels. Although the results of the statistical test show that there is a relationship between online learning and student stress levels. This indicates stress is not a scary thing, because it depends on each individual's coping mechanism.

Most people experience stress due to routine activities that are usually carried out on a daily basis. This is as shown by the results of Halliburton, Hill, Dawson, Hightower,

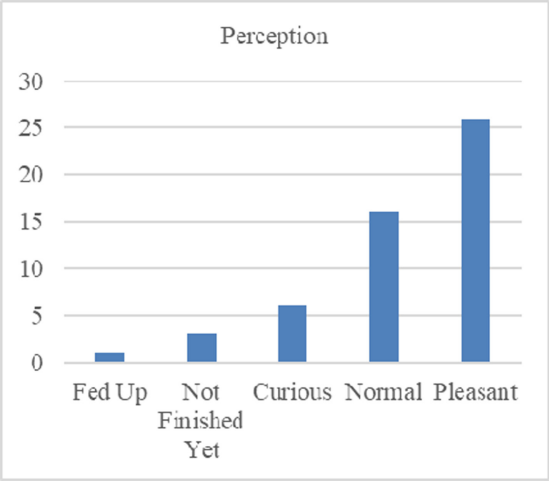

Fig. 3. Student Perception.

and Rueden's [23] the main cause of stress is the loss of routine and reduced social contact. Likewise conveyed by Barseli, Ifdil, and Fitria, [24] stress arises because the demands or tasks that are charged with online teaching and learning models and the learning process using online media is considered more tiring and boring, because they cannot interact directly to the fullest.

Figure 3 illustrates student perception about program IPE while phase covid-19 that there are 1 (1.92%) students who feel feed up, 3 (5.77%) students feel not finish yet, 6 (11,53%) students feel curious, 16 (30.76%) students fell normal, and 26 (50%) students feel pleasant. Same with research from Adrian, Putri, and Suri who found that as many as 32 respondents (56.1%) perceived that online learning was good.

Based on Fig. 3, it can be seen that some students perceive IPE learning as fun, even though it has to be through online learning. The results of this study are in contrast to the research of Septiani and Setyowati [25] who found that online learning was not fun, with a percentage of 70%.

Meanwhile Biswas, Roy, and Roy's [26] research involved 416 students from various universities about students' perceptions of using mobile phones as a learning system found that their research has similarities with the results of this study. The results of this study indicate that most students have a positive perception of e-learning.

There are many factors that can make a person give a positive or negative perception of a program or new thing. Martin, Stamper, Flowers determined that differences between participants' interests and levels of trust, advice and suggestions for online students, time management, and technical competence were considered more important than communication skills [27].

Cole, Lennon, and Weber [28] found that student engagement in online courses may be more ambiguous, and complex to understand than in a Face-to-Face classroom (FtF). Without regular FtF interactions, instructors may feel unable to accurately measure student engagement, and respond accordingly.

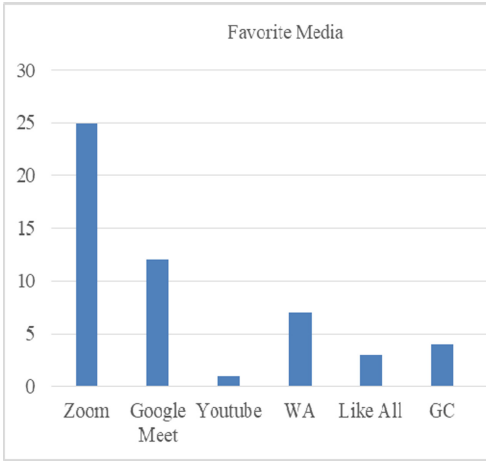

Fig. 4. Favorite Media

This study aims to explore students' perceptions of online active learning practices. The online learning climate has encouraged communication and collaboration between co-workers where instructors can exert considerable influence on participants or students.

Figure 4 illustrates favorite media based on student choice. The media that students like the most is zoom or google meet as many as 25 (48.07%) respondents. In the next place in order the favorite media are Google meet as many as 12 (23.07%) respondents, WhatsApp as many as 7 (13.46%) respondents, Google Classroom as many as 4 (7.69%) respondents, Like all media as many as 3 (5.77%) respondents, YouTube as many as 1 (1.92%) respondents. The reason students like this media is because it is considered easy and quite affordable.

The results of this study are in link with Maulana's [29] research which found that from the questionnaire given to students, a large number was obtained for zoom/google meet, which was 71.15%, the reason they chose this media was because of the implementation of online learning with Zoom Meeting and Google Classroom from the ease of access is in the good category. Likewise with Firman, Sari and Firdaus's [30] research which explains in his research that learning reflection using zoom and Google meet during 2021 is considered better because it makes it possible to communicate directly with lecturers or other fellow students.

In contrast to the others, Sakkir, Dollah dan Ahmad [31] judged his favorite media from the perspective of lecturers and students. His research found that the lecturers' favorite media was Zoom (80%) while the first place was occupied by WhatsApp (35%) and the second was Zoom (30%). The point can be drawn, based on many research results placing zoom as the most popular media as a learning medium during the covid 19 pandemic.

Figure 5 describes the level of understanding of students with various media for IPE learning. Most of the respondents or as many as 29 (55.75%) people quite understand the material that has been explained, as many as 22 (42.3%) people can understand well the material presented and as many as only 1 people (1.92%) did not understand.

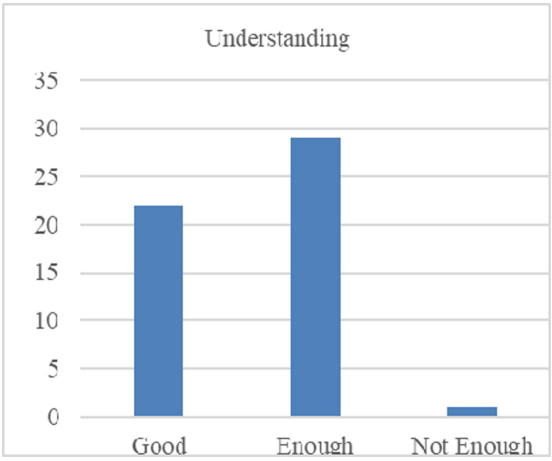

Fig. 5. Understanding

Based on the results of research conducted by the author, most students are in the adequate category to understand the material being taught even though it is carried out online, as many as 29 people (55.75%). While students who can understand well are fewer in number, namely 22 people (42.3%). This research is similar to Rahmawati and Putri [32] research during online learning for students who found that students' understanding was 54.5%. Andiarna and Kusumawati [20] added a statement that if there is a feeling of dissatisfaction during online learning that makes students feel heavy and difficult to understand the lecture material.

Figure 6 illustrates about student creativity. Based on the analyzed data, it was found that most students felt quite creative, as many as 35 (67.3%), 2 (3.84%) people felt they were not creative and 15 (28.84%) people felt they were already creative.

Mauladina and Giantara [33] through the results of interviews found that gadgets do have a negative effect because in addition to helping make the process online learning runs students also access media social media and playing online games. However, gadgets are also capable of creating students' creativity to create something that previously didn't exist and was not done by someone even though the results were not perfect.

Meanwhile, according to Yurida, damopolii and Erari [34] discover different things about creativity. The findings state that it is the teacher who must be creative, because the creativity of the teacher can increase the motivation of the rest who study online. Yurida's opinion is supported by Muna and Larasati [35] who states that innovative and efficient strategies are needed by teachers to improve the development and creativity of students. Creativity is an important element for all children because the development of children's creativity can be seen from the perspective of the desire and imagination to solve problems that arise in the learning process.

Nicholson, Nicholson, Shen and Song [36] explained that his research aims to test the creativity or involvement of students during learning, satisfaction, and learning styles and learning outcomes. The effects of various aspects of engagement, namely the value of learning activities for learning and personal effort included in learning activities and

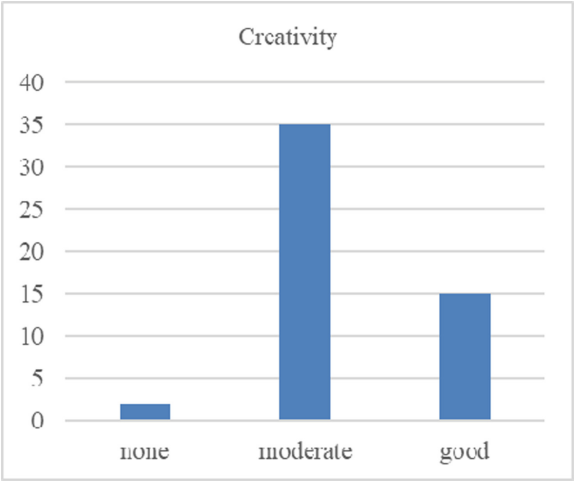

Fig. 6. Student Creativity

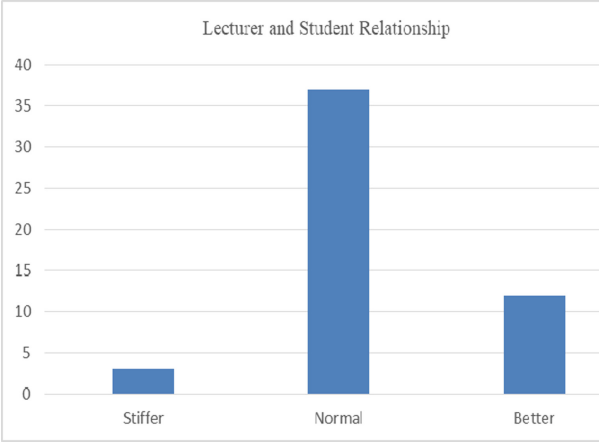

Fig. 7. Lecturer and Student Relationship

student satisfaction varied. Learning styles also affect different aspects of interaction differently.

Nicholson and friends assert that many factors influence learning, which can make a person satisfied or not, including being active and creative. Meanwhile, research by Rahmawati and Putri [32] found that the creativity possessed by students was categorized as quite creative, which was lower than the results of this study, which was 50%.

Figure 7 describes about lecturer and student relationship. It can be seen from the bar chart that for the IPE program there are 12 (23.07%), students who study IPE feel that their relationship with the lecturer is getting better, while 37 (71.15%) students feel that

the relationship is normal, and the remaining 3 (5.77) students feel that their relationship with the lecturer is stiff.

Based on the results of the research that the author did, students assessed the relationship with lecturers during online learning as normal with a percentage of 71.15%. In the research of Rahmawati and Putri [32] showed different results, namely 46% in the category of being less close to lecturers.

4 Conclusion

It can be concluded that Inter Professional Education (IPE) learning which took place during the covid 19 phase, resulted in various media innovations in learning. The students' perceptions, stress levels, activities or creativity of students and the relationship between lecturers and students as well as the understanding that emerges are also very varied. This is caused by many factors that contribute to the process and needs to be specifically investigated again. The more creative lecturers during online learning, it can increase student motivation. This of course has an impact on the boredom that arises because of the lack of interaction.

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