



PERCEPTION OF HEALTH PROFESSION STUDENTS TOWARDS INTERPROFESSIONAL EDUCATION AT HOSPITAL

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ABSTRACT

Interprofessional Education (IPE) is a curriculum approach where students from various health profession backgrounds collaborate in one place to learn and get to know each other, as well as appreciate the role of each health profession to achieve collaboration and teamwork for the advancement of health services. Objective: To determine the perception of health profession students towards interprofessional education at Unand Hospital. Methods: This study is a descriptive research with a cross-sectional research design. The research was conducted at Unand Hospital with a total sample of 51 people consisting of 8 students of the Doctor Profession, 19 students of the Midwife Profession, 16 students of the Nursing Profession, and 8 students of the Pharmacist Profession. The research sample was determined using the proportionate stratified random sampling technique. This study uses an Interdisciplinary Education Perception Scale (IEPS) questionnaire. Results: A total of 40 students (78.4%) had a good perception of IPE with the highest percentage of competency and autonomy perception components (82.4%) and the perception component of understanding of other professions had the lowest percentage (62.7%). Nursing Profession students have the highest percentage of perception (87.5%), while Pharmacist Profession students have the lowest percentage of perception (62.5%). First-year students (83.3%) have a higher percentage of perception than second-year students (75.8%). Conclusion: The perception of health profession students towards IPE at Unand Hospital is mostly in the good category, however, the understanding of other professions is still lacking, so this needs to be considered and improved.

Keywords: health profession students; interprofessional education; perception

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INTRODUCTION

Interprofessional Education (IPE) is a curriculum approach where students from various health profession backgrounds collaborate in one place to learn and get to know each other, and appreciate the role of each health profession to achieve collaboration and teamwork for the advancement of health services.¹ Interprofessional education occurs when two or more professions learn from each other to improve collaboration and quality of health services. Interprofessional education includes all learning in the academic and work environment from before to after graduate qualification.² Health profession students are expected to be able to get to know the role of each other health profession better and be able to collaborate well and effectively in caring for patients so as to increase satisfaction and quality of health services.³ IPE was first designed by the World Health Organization (WHO) in Geneva in 1973. The WHO Expert Committee reviewing medical education in the same year has seen interprofessional programs as complementary. The WHO expert committee believes that IPE

will increase job satisfaction, increase public appreciation of healthcare teams and encourage a holistic response to patient needs.⁴

According to the Center for the Advancement of Interprofessional Education (CAIPE), IPE is two or more professions that learn with, from, and about each other to improve collaboration and quality of service. IPE occurs when two or more students of different health professions carry out interactive learning together with the aim of enhancing interprofessional collaboration and improving patient health and well-being.³ IPE aims to make health profession students familiar with the role of other health professions by lowering feelings of superiority and inferiority so that they can collaborate effectively in caring for patients.³ Interprofessional Education Collaborative (IPEC) in 2011, introduced four core competencies of IPE to guide curriculum development in health professions schools, namely values and ethics for interprofessional practice, roles and responsibilities, interprofessional communication, and teamwork and teamwork.⁵ LAM-PTKes as an Independent Accreditation Institution for Indonesian Health Higher Education states that health interprofessional education is a real application of the other four operational values of LAM-PTKes, namely Continuous Quality Improvement (CQI); Quality Cascade; Conceptualization - Production - Usability (CPU); and Trustworthy.² LAM-PTKes has a strategic role in implementing interprofessional education in the health higher education accreditation system by, namely facilitating the preparation of standards, criteria and methods of assessment of interprofessional education according to the rules of their respective professions, facilitating the integration of interprofessional education into the accreditation instrument of health higher education.²

The implementation of IPE requires support from institutions, leadership, and a conducive educational environment.⁶ The introduction of IPE at the beginning of the health curriculum can be useful to prevent negative behavior and avoid stereotypes among health profession students.⁷ Factors that can hinder the implementation of IPE such as stereotyping, the feeling of superiors and subordinates, as well as the many actions that are instructions from other professions that still dominate the practice of collaboration.⁸ Various studies on the implementation of IPE have been carried out both domestically and abroad, including ASEAN countries. The development of each country regarding the implementation of IPE is different. ASEAN countries such as Singapore have well-maintained IPE programs and they have also created platform Sustainable IPE for Universities in ASEAN. Another study at one of the universities in Laos is still in the process of implementing IPE.⁹ Other overseas research conducted by Butler found that students make decisions together through communication and collaboration with health care teams and patients and families.¹⁰ Research conducted by Lestari E et al in the same year it was found that early exposure to clinical practice triggers both positive and negative perceptions of IPE to improve communication and leadership skills.¹¹

An assessment of the perception of health profession students towards the implementation of IPE is important to be carried out because a good perception can help the development of an IPE model to achieve better quality of health services.¹² The assessment of students' perception of IPE is more towards assessing the readiness of each profession for IPE. An instrument that can be used to assess students' perception of IPE implementation is a questionnaire Interdisciplinary Education Perception Scale (IEPS) where there are four components of perception of IPE, namely competence and autonomy, perception of the need to cooperate, evidence of cooperation, and understanding of other professions.¹³ Research on student perception of IPE has been carried out a lot, both at the university level and at the

faculty level from various regions. Based on research literature review conducted by Fattah at Gadjah Mada University in 2017 found that the implementation of IPE has gone well in the Faculty of Medicine with a percentage of 54.15% and has been sufficiently implemented in the Faculty of Pharmacy with a percentage of 66.04%.¹⁴

IPE has not been implemented at Andalas University in the sense that both teaching staff and students of the health profession at the academic level have not been brought together in one forum to discuss the IPE educational curriculum and in discussing a patient-centered case (Patient Centered Care).¹⁵ The only research on IPE and readiness for IPE implementation at the Faculty of Medicine, Andalas University was conducted by Devenski. The only research on IPE and readiness for IPE implementation at the Faculty of Medicine, Andalas University was conducted by Devenski.¹⁶ In the study, 82% of students were found to be in the good category for readiness for the implementation of IPE, while for teaching staff, socialization and preparation are still needed with the support of institutions.¹⁶ Another research at Andalas University conducted by Riyanda with the title "Overview of Student Perception of the Academic Stage of the Faculty of Medicine, Andalas University towards Interprofessional Education", shows that most of the students at the academic stage of the Faculty of Medicine, Andalas University, 266 (84.2%) out of 316 students have a good perception of IPE.¹³ Chandra conducted a study entitled "Overview of Student Perception of the Academic Stage of the Faculty of Medicine, Andalas University towards Interprofessional Education", shows that in general, FK Unand students have a good perception of the implementation of IPE as many as 252 people (84%) out of a total of 300 student respondents.¹⁷ Unand Hospital as a teaching hospital is a hospital that provides education, research, and health services in an integrated manner in the fields of medical and/or dental professional education, continuing education, and other health worker education.¹⁸ This study aims to find out the perception of health profession students towards IPE at Unand Hospital.

METHOD

This study is descriptive with a cross-sectional research design using an IEPS questionnaire that has been tested for validation and reliability to determine the perception of health profession students towards interprofessional education at Unand Hospital in September – December 2021. The population in this study is 58 health profession students at Unand Hospital. The sample in this study was 51 people consisting of the doctor profession (8 people), the midwife profession (19 people), the nurse profession (16 people), and the pharmacist profession (8 people) who met the inclusion criteria and exclusion criteria. Inclusion criteria: students who are registered as health profession students at Andalas University who run their duties at Unand Hospital, are willing to be respondents, and fill out the respondent consent form. Exclusion criteria: health profession students who are on leave, do not fill out the questionnaire completely, and cancel themselves as respondents. The sampling technique carried out in this study is proportionate stratified random sampling, which is randomly taken from each batch of health profession students of Andalas University at Unand Hospital by paying attention to the number of students in each professional program. Data analysis was carried out univariately. Univariate analysis aims to determine the distribution of each variable to be studied, both dependent variables and independent variables. The variables analyzed in this study are the perception of health profession and IPE students. This research has been approved by the ethics committee of the Faculty of Medicine, Andalas University with ethics number 537/UN.16.2/KEP-FK/2021.

RESULTS

The frequency distribution of research respondent characteristics is presented in table 1. Table 1 of the characteristics of the respondents in the above study, it was found that female respondents (92.2%) were more than male respondents (7.8%). In this study, the most respondents came from the midwife professional program (37.7%). The most respondents based on academic year came from second-year academic students (64.7%). The most respondents by age came from the age group of 23 years (72.5%) with the average age of respondents being 23.18 years.

Table 1.
Characteristics of Health Profession Students at Unand Hospital for the Period of September – December 2021

Characteristics Responden	f	%
Gender		
Law Law	4	7,8
Woman	47	92,2
Program Studi		
Doctor Profession	8	15,7
Prof. Bidan	19	37,3
Nursing Profession	16	31,4
Profesi Apoteker	8	15,7
Academic Year		
First year	18	35,3
Second year	33	64,7
Age		
22 years	4	7,8
23 years	37	72,5
24 years	8	15,7
25 years	1	2
26 years	1	2

Student perception of IPE is generally measured using the IEPS questionnaire. Student perceptions will be classified into three categories, namely good, medium, and poor. An overview of the perception of health profession students towards IPE at Unand Hospital is generally presented in figure 1.

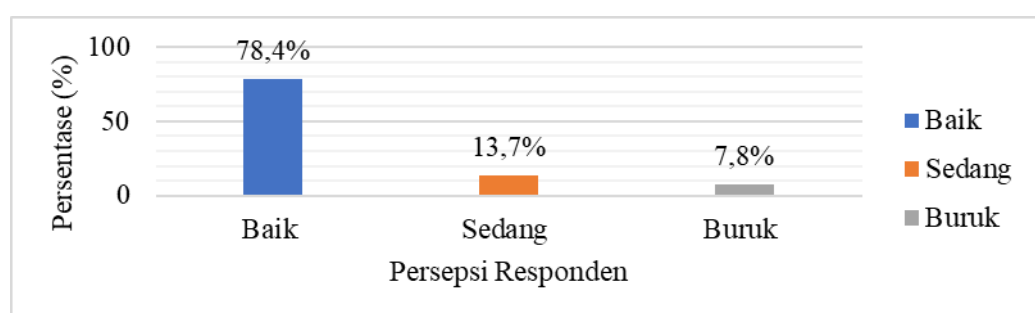


Figure 1.
1. Distribution of Frequency of Health Profession Students' Perception of IPE at Unand Hospital in General

Based on the graph above, it was found that in general, health profession students at Unand Hospital had a good perception of IPE (78.4%) with an average perception score of 71.35. Students' perception of IPE consists of four perception components, namely competence and autonomy, the need to cooperate, evidence of cooperation, and understanding of other professions. An overview of the perception of health profession students towards IPE at Unand Hospital based on the perception component is presented in figure 2.

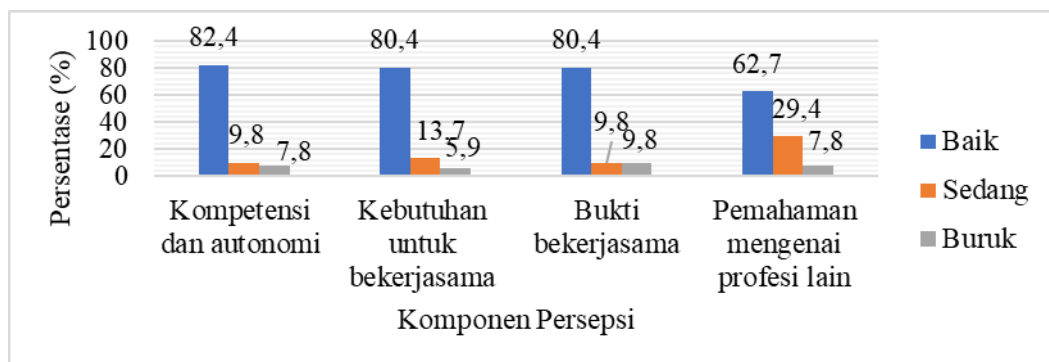


Figure 2. Distribution of Frequency of Perception of Health Profession Students towards IPE at Unand Hospital Based on Perception Components

Based on the graph above, health profession students in general have a good perception of each component of perception. The highest percentage is competence and autonomy (82.4%) with an average perception score of 32.39 and the lowest percentage of perception components is understanding of other professions (62.7%) with an average perception score of 10.88. An overview of the perception of health profession students towards IPE at Unand Hospital Based on the Professional Program consisting of the doctor profession, midwife profession, nurse profession, and pharmacist profession is presented in figure 3.

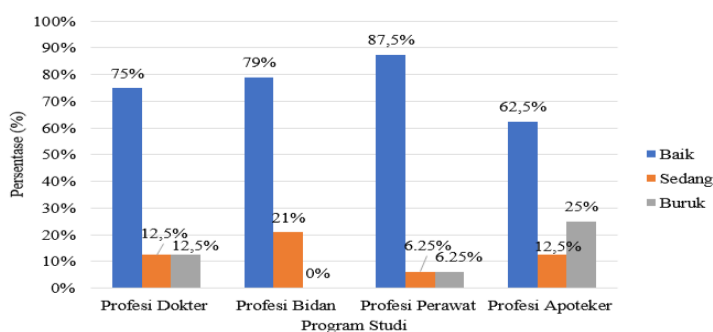


Figure 3. Distribution of Frequency Distribution of Health Profession Students to IPE at Unand Hospital Based on Professional Programs

Based on the graph above, most students in each professional program have a good perception of IPE, namely the nursing profession (87.5%) with an average score of 73.25, the midwife profession (79%) with an average score of 73.94, the doctor profession (75%) with an average score of 68.87, and the pharmacist profession (62.5%) with an average score of 63.87. The measurement of the perception of health profession students towards IPE was carried out in each of the first and second year health professions presented in figure 4.

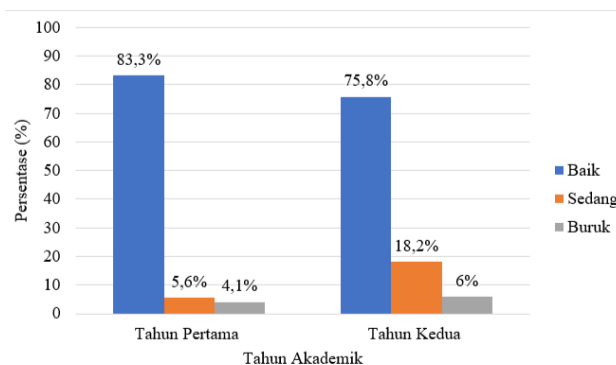


Figure 4. Frequency Distribution of Health Profession Students' Perception of IPE Based on Academic Year

Based on the fiatas graph, most students in each academic year have a good perception of IPE, namely the first year (83.3%) and the second year (75.8%) with an average score of 71.16 and 71.45 in each academic year. Overview of the perception of health profession students towards IPE at Unand Hospital Based on the perception components in each professional program is presented in figure 5.

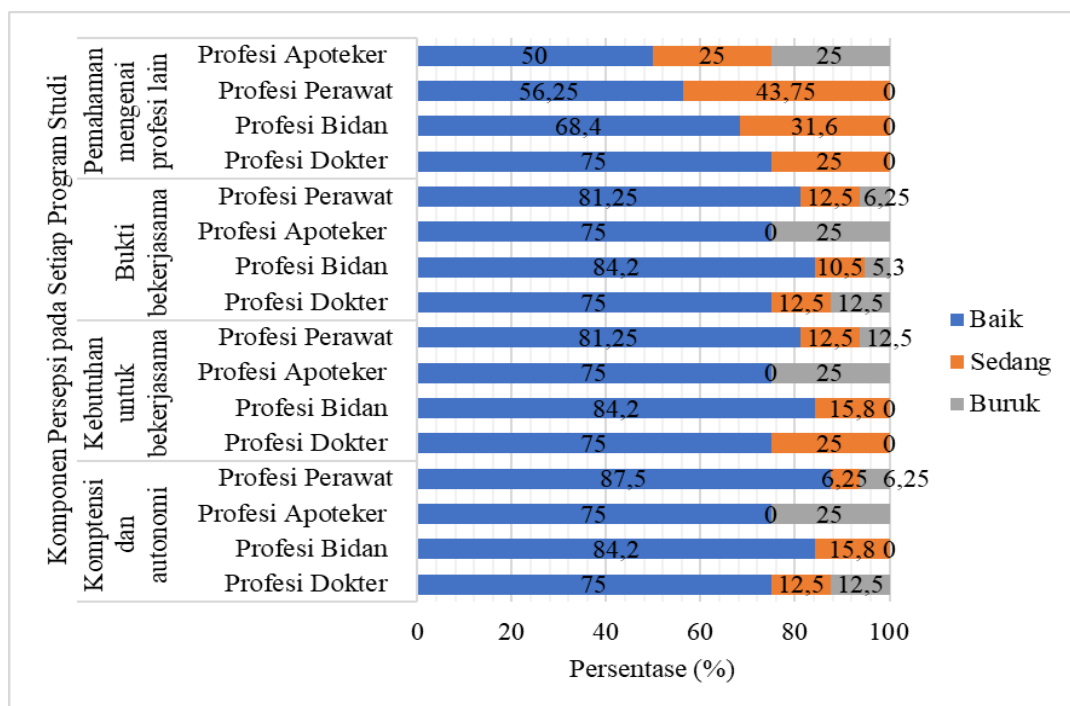


Figure 5. Distribution of Frequency of Health Profession Students' Perception of IPE at Unand Hospital Based on Perception Components in Each Professional Program

Based on the graph above, most students in the four professional programs have a good perception of each component of IPE. The medical profession has the highest percentage of perception in all four components of perception (75%). The midwife profession had the highest percentage of good perception in the components of perception of evidence of cooperation, the need to cooperate, and competence and autonomy (84.2%). The nursing profession had the highest perception of both competencies and autonomy (87.5%). The pharmacist profession has the highest percentage of good perception in all three perception components, namely competence and autonomy, the need to cooperate, and evidence of cooperation (75%). The lowest percentage of perception components in the midwifery

profession, nurse profession, and pharmacist profession was understanding other professions (68.4%, 56.25%, and 50%).

DISCUSSION

Characteristics of Research Respondents

Table 1 provides an overview of the characteristics of the research respondents consisting of gender, study program, academic year, and age. The respondents in this study were mostly female (92.2%). This is in line with the research of Fivi and Hakimian where most of the health science students are female (67% and 83.7%).^{19,20} Most of the research respondents came from the midwifery profession (37.7%). This is because the number of students who undergo service at Unand Hospital for the period of September – December 2021 is more in the midwifery profession than in other health professions. According to Sundari's research, there is no significant difference in number between professional programs. This is because even though the respondents are from different majors, the respondents have similarities, namely from the health department, so that the respondents can have the same experience when they interact together.²¹ Research respondents based on academic year were divided into first-year respondents and second-year respondents. Table 1 shows that the respondents in the second year (64.7%) are more than the respondents in the first year (35.3%). The research respondents were selected because they carried out service at Unand Hospital for the period September-December 2021. Table 1 based on age, the respondents of this study were spread in the age group of 22 to 26 years. The respondents who had the highest percentage of age groups were 23 years old (72.5%) and the respondents with the least age group were 25 years and 26 years old (2%).

Perception of Health Profession Students towards IPE at Unand Hospital in General

Figure 1 shows the distribution of perception of health profession students towards IPE at Unand Hospital in general is in the good category (78.4%). This is in line with Chandra's research et al where students of the Faculty of Medicine Unand have a good perception of IPE (84%).¹⁷ Another research conducted by Fivi showed that most health science students at Unand had a good perception of IPE (86.4%).¹⁹ The same thing is also shown in Ulung's research on FKIK students of UIN Syarif Hidayatullah Jakarta which shows that these students generally have a good perception of IPE (97.21%).²² A good perception of IPE shows that respondents can take advantage of the IPE program as an important means of developing collaboration skills, namely knowledge, skills, communication, attitudes, and team abilities.²³ Students who are able to learn and adapt to an environment that practices collaboration will give rise to a good perception of IPE.¹⁷ According to Thibault's research, IPE must be carried out both at the academic and clinical practice stages with the aim of connecting the theory obtained by students during on-campus learning and the practice undertaken in the field.²⁴

Perception of Health Profession Students towards IPE at Unand Hospital Based on Perception Components

Figure 2 shows that the perception of Unand health profession students is generally in the good category in each component of the perception of IPE. This is in line with Chandra and Wahyuni's research which shows that the results of the research students have a good perception of each component of perception of IPE.^{17,23} The Perception component that has the highest perception value in this study is the perception component of competence and autonomy (82.4%). This is because some respondents had answers "strongly agree" and "agree" on the points of the statement of the competency and autonomy perception components. This is in line with Ulung's research that the competency perception and

autonomy component of FKIK UIN Jakarta students has a positive perception.²² This is the same as the research conducted by Hakim where most students have a good perception of the perception component of competence and autonomy.²⁰ In contrast to Chandra's research which showed that FK Unand students had the highest perception in the perception component of evidence of cooperation (90%).

In this study, the lowest perception component was the understanding of other professions (65.1%). This is because some respondents chose the answers "disagree" and "strongly disagree" on the points of the statement component of perception of understanding about other professions. The results of this study are in line with Chandra's research where the perception component of understanding about other professions has the lowest percentage of perception value (51%).¹⁷ The same thing can also be seen in Riyanda's research where it was found that the perception component of understanding about other professions had the lowest percentage (60.7%).¹³ The factor that affects this may be because the educational process does not encourage students to get to know each other and cooperate in fact, students at the professional stage who are undergoing clinical clerkship in hospitals rarely cooperate with other professions. The lack of understanding of other professions can also be caused by the lack of an assessment of the authority, responsibility, and scope of roles between professions at the academic stage so that the understanding of other professions is only formed from each individual.²⁵ Therefore, it is necessary to hold IPE as a means of joint learning between health students at Unand in order to better understand other health worker professions and cooperation between other health professions.²⁰

Perception of Health Profession Students towards IPE at Unand Hospital Based on Professional Programs

Figure 3 illustrates the distribution of perception of health profession students towards IPE at Unand Hospital based on professional programs consisting of the profession of doctor, midwife, nurse, and pharmacist where all health profession students have a good perception of IPE. The nursing profession mostly has a good perception of IPE (87.5%). This is in accordance with Ulung's research where the results of Nursing students had the highest perception of IPE (97.14%).²² This is also supported by Sundari research et al where the Faculty of Medicine is the faculty with the least good perception students compared to the Faculty of Nursing with students having the highest good perception (81%).²¹ The midwife profession has a good perception of IPE (79%). One of the factors that affects the good perception of IPE in Midwifery students is the implementation of the IPE program which is introduced to first-year students in the form of an introductory lecture by lecturers for 50 minutes and has been integrated into the curriculum so that students are able to learn to discuss, collaborate, and communicate with their peers from other study programs.¹⁷ The medical profession has a good perception of IPE (75%) and 12.5% of medical students have a bad perception of IPE. According to Malahayani et al, Challenges and obstacles that arise in the learning process for medical students who undergo clinical clerkship include learning objectives which is less clear, lack of active participation from students, lack of practice problem solving, lack of direct observation and feedback on student activities, lack of time for reflection and discussion, and lack of congruence of professional learning programs with the existing curriculum.²⁶ The low perception of good in the Faculty of Medicine can also be caused by the lack of information and training about IPE obtained by Medical students compared to other health students.

The pharmacist profession has the lowest good perception of IPE (62.5%) compared to other health profession students. The low percentage of good perception of IPE in pharmacist students is in line with Ilmanita's research et al where pharmacy students have the lowest level

of confidence due to the lack of practice to practice collaboration with other health profession students.²⁷ Suharjono in his research also explained that pharmacist students feel more junior than medical students, causing feelings of fear and lack of confidence.²⁸ This causes a lack of collaboration and effective communication with other health professions in providing the best service to patients.²⁸

Perception of Health Profession Students towards IPE at Unand Hospital Based on Academic Year

Figure 4 regarding the distribution of health profession students towards IPE based on academic year illustrates that in general, first-year and second-year students have a good perception of IPE. First-year students have the highest percentage of perception of IPE (83.3%) and followed by second-year students (75.8%). In Chandra's research conducted on students at the academic stage of FK Unand, it was found that the perception of IPE decreased with the closer students towards the final stage of the learning process.²⁹ William et al stated that students have a high interest in learning IPE in the early stages of education and interest will decrease when the student approaches the end of education.³⁰ At the professional stage, students do not get IPE learning materials, but directly collaborate with other health professions. This is in line with research conducted in Canada which explains that IPE carried out theoretically can provide a significant positive change in the perception of health science students towards the health profession.³¹

Perception of Health Profession Students towards IPE at Unand Hospital Based on Perception Components in Each Professional Program

Figure 5 shows the distribution of perception of health profession students towards IPE based on the perception component in each professional program where in general students from each professional program have a good perception of each perception component. The medical profession has a high perception of all four components of perception (75%). The high component of perception of competence and autonomy in medical students shows that students have a better understanding of the roles and responsibilities of their own profession and other health professions. In the perception component of evidence of cooperation, there are still students who have a bad perception of the perception component. The evidence component of cooperation proves whether the student is willing to share information and resources with students of other professions, cooperate with each other, and have good relationships between professions.²³ The high perception of the perception component of the need to cooperate is in accordance with the Siburian research which shows that medical students feel the need to cooperate with other professions to get better treatment results for patients even though students still get a moderate perception of this perception component (25%). The lack of need to collaborate may be due to the lack of exposure to other health professions, especially for undergraduate study program students so that respondents understand the role of their respective professions.³² Poor understanding will lead to overlapping competencies and unclear role boundaries.³²

The midwife profession had the highest percentage of good perception in the components of perception of evidence of cooperation, the need to cooperate, and competence and autonomy (84.2%). The lowest percentage was found in the perception component of understanding about other professions (68.4%). Low understanding of other professions can be caused by a lack of interaction and communication between professions. Health science students are taught communication that only focuses on interaction with patients and their families from the perspective of their respective professions, not interprofessional communication. The specific viewpoint of each profession only prepares students to work in the same professional

environment, not to communicate with students from other professions.³² The nursing profession has the highest percentage of good perception in the perception component of competence and autonomy (87.5%). This indicates that the respondents have a better understanding of the competence and autonomy of their respective professions as well as cooperation and resource sharing both intra and interprofessional.³² This is in line with Siburian research where students of the Faculty of Nursing have the most good perceptions of the components of perception of competence and autonomy (97%).³³ The lowest percentage of nursing students was found in the perception component of understanding the profession (56.24%). The low understanding of other professions can be caused by the educational process that does not encourage students to get to know each other and cooperate even though the competence to work intra and interprofessional in the health service team is contained in the SKDI, SKBI, and other competency standards for health workers. Health profession students must work together in handling patients so that an understanding of good cooperation between health professions is needed, therefore, IPE needs to be held as a means of joint learning between health science study programs at Unand so that students between health professions can better understand other health professions and cooperation between health professions.³²

The pharmacist profession has the highest percentage of good perception in all three components of perception, namely competence and autonomy, the need to cooperate, and evidence of cooperation (75%). This is in line with the Hakiman's research et al Where pharmacist students have the highest good perception in the components of perception of competence and autonomy (96.6%), the need to cooperate (96.4%), and evidence of cooperation (100%). This shows that pharmacist students have understood competence, autonomy, perception of cooperation, and the distribution of intra and interprofessional resources.³² The lowest percentage of pharmacist students is found in the perception component of understanding other professions (50%). The low understanding of other professions shows that it is necessary to hold joint learning through IPE with other health professions in order to better understand other health professions, cooperation, and effective communication between health professions.³²

CONCLUSION

Based on the results of the research on the perception of health profession students towards IPE at Unand Hospital, the following conclusions were obtained: The perception of health profession students towards IPE at Unand Hospital is mostly in the good category, most health profession students at Unand Hospital have a good perception of all perception components, namely competence and autonomy, the need to cooperate, evidence of cooperation, and understanding of other professions, most students of the medical profession, midwifery profession, nurse profession, and pharmacist profession have a good perception of IPE, and most of the first- and second-year health profession students have a good perception of IPE.

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