

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

Nurmah Rachman¹, Jurusan Keperawatan²

^{1,2}Jayapura Health Polytechnic

ABSTRACT:

Background: Interprofessional Education (IPE) is a collaborative learning approach between health professions aimed at improving the quality of healthcare services. The implementation of IPE is highly dependent on institutional support, particularly the perceptions of education administrators. However, various structural, cultural, and curricular barriers remain challenges to its implementation in the academic environment at the Jayapura Papua Health Polytechnic. This study aims to analyze the relationship between education administrators' perceptions of IPE and implementation barriers within the academic environment at the Jayapura Papua Health Polytechnic. The study used a quantitative, correlational, descriptive design with a cross-sectional approach. A sample of 35 respondents, consisting of education administrators and lecturers at health universities, was selected using a purposive sampling technique. The research instrument was a Likert-scale questionnaire that had been tested for validity and reliability. Data analysis used the Spearman correlation test. The results showed that the majority of respondents had a positive perception of IPE (68.6%). Implementation barriers were still classified as moderate to high, with an average score of 72.5 (SD = 10.1), particularly in structural aspects. The correlation test results showed a significant negative relationship between educational administrators' perceptions of IPE and implementation barriers ($r = -0.482$; $p = 0.004$). In conclusion, positive perceptions of educational administrators play a crucial role in reducing barriers to IPE implementation in the academic environment. Institutional strategies are needed to strengthen positive perceptions, provide adequate resources, and reduce structural barriers for optimal IPE implementation.

KEYWORDS: interprofessional education, perceptions, educational administrators, implementation barriers, academic environment of the Health Polytechnic

INTRODUCTION

Interprofessional Education (IPE) is a learning approach that emphasizes cross-disciplinary collaboration in an effort to improve the quality of healthcare services. The World Health Organization (WHO) (2010) defines IPE as a process in which two or more professions learn together, from, and about each other to enhance collaboration and the quality of healthcare services. The implementation of IPE has become a crucial strategy in preparing healthcare professionals capable of working as a team, being responsive to patient needs, and adapting to the complexities of modern healthcare systems. Thus, IPE focuses not only on individual clinical competencies but also on interdisciplinary communication, coordination, and collaboration skills, which are the foundation of team-based healthcare (Suzanne Hetzel Campbell, 2024).

However, despite its global recognition, the implementation of IPE in various educational institutions, particularly in Indonesia, still faces a number of challenges. One crucial aspect influencing the success of IPE implementation is the perception of educational administrators. Educational administrators, in this case, include faculty leaders, study program leaders, and academic units, who play a central role in policy formulation, curriculum planning, resource allocation, and developing a collaborative culture within the academic environment of the Jayapura Papua Health Polytechnic. Positive perceptions of IPE among educational administrators have the potential to foster conducive policies, provide resource support, and facilitate collaboration between departments or study programs. Conversely, less supportive perceptions can create structural barriers that hinder the development of IPE in higher education (Carissa Singh, 2024).

Various international studies have shown that the success of IPE implementation is heavily influenced by institutional support. Reeves et al. (2016) emphasize that without commitment from academic leadership, IPE implementation is often limited to individual faculty initiatives or short-term projects that are difficult to sustain. This suggests that the perceptions of educational administrators are the starting point for building a pro-IPE academic climate. For example, if educational administrators understand

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

that IPE can improve accreditation, graduate quality, and curriculum relevance to workplace needs, the likelihood of IPE adoption is greater. Conversely, if IPE is perceived as an additional burden, disrupting the curriculum flow, or complicating coordination, resistance to implementation will increase((Michael J. Peeters *, 2024).

Beyond perception, there are practical barriers to IPE implementation faced by the Jayapura Papua Health Polytechnic academic institution. These barriers can include structural barriers (e.g., differences in academic calendars between study programs, limited shared learning spaces, lack of trained human resources), cultural barriers (interprofessional egos, professional stereotypes, lack of collaborative experience), and curricular barriers (lack of IPE integration in the core curriculum, overlapping competencies, or the dominance of monodisciplinary learning). In Indonesia, several preliminary studies have found that the implementation of IPE remains partial, limited to seminars or workshops, and not yet fully integrated into the formal curriculum (Widyandana, 2017). This indicates a gap between the global discourse on the urgency of IPE and the reality of its implementation in the national academic environment((Widyandana, 2018).

In the context of the Indonesian academic environment, the position of educational administrators is highly strategic. They function not only as internal regulators but also as mediators between external demands (such as national and international accreditation, professional competency standards, and workplace needs) and internal dynamics (such as organizational structure, institutional culture, and resources). Their perceptions will determine the institution's priorities: whether IPE is viewed as an urgent need to collaboratively produce competent graduates, or simply as a global trend not yet relevant to local needs. Therefore, a study of the relationship between educational administrators' perceptions of IPE and the barriers to its implementation in the academic environment of the Jayapura Papua Health Polytechnic is crucial.

This research is also relevant given the transformation of health education in Indonesia, which emphasizes a collaborative approach across professions. Curricula for medical, nursing, midwifery, pharmacy, nutrition, public health, and other health professions require collaborative practice skills in accordance with national competency standards. If barriers to IPE implementation are not identified and addressed, the goal of producing collaborative healthcare professionals is at risk of being unattainable. This can impact the quality of healthcare services in the community, ultimately impacting national health development outcomes((Sundari1, 2021).

Therefore, this research is expected to contribute in three main aspects. First, it provides an understanding of how the perceptions of educational administrators shape the direction of IPE policy in academic institutions. Second, it identifies various barriers that hinder IPE implementation, including structural, cultural, and curricular aspects. Third, it generates recommendations for higher education institutions in developing more effective and sustainable IPE implementation strategies (Alexandra Lapierre a, 2024).

Practically, the results of this study can be used as a basis for developing academic policies that are more responsive to the demands of interprofessional collaboration. Theoretically, this research also adds to the literature on the role of educational administrators' perceptions in the development of IPE in developing countries. In other words, this study emphasizes that the success of IPE is not only a matter of technical learning, but is also closely related to managerial aspects, perceptions, and institutional support in the academic environment((Farhin Delawala, 2022).

LITERATURE REVIEW

Interprofessional Education (IPE) is an approach gaining increasing attention in global health education. The World Health Organization (WHO, 2010) defines IPE as a process where two or more professions learn from, with, and about each other to improve collaboration and the quality of health care. The primary goal of IPE is to develop a healthcare workforce with collaborative competencies, including effective communication, appreciation of each profession's role, and the ability to work in interdisciplinary teams (Reeves et al., 2016).

In various countries, the implementation of IPE has been shown to improve collaboration skills among healthcare professionals, reduce role conflict, and enhance patient safety (Barr, 2013). In the context of higher education, IPE is seen as a curriculum strategy that prepares graduates not only with clinical competencies but also with socio-collaborative competencies relevant to the needs of modern healthcare systems((Hazel Keedle a, 2023).

However, despite the recognition of the importance of IPE, the level of implementation varies widely across countries and institutions. In developed countries, IPE has become an integral part of curricula in medicine, nursing, pharmacy, and public health. Meanwhile, in developing countries like Indonesia, IPE is still in its early stages of adoption, facing various structural and cultural challenges (Widyandana,2017).

Educational administrators play a strategic role in determining the success of IPE implementation. They play a role in determining curriculum policies, allocating resources, and developing an academic culture. Educational administrators' perceptions of IPE can determine whether it is viewed as a priority or simply an additional burden (Thistlethwaite, 2012).

Studies show that positive perceptions from department or study program leaders encourage support for interdisciplinary activities, such as joint learning modules, collaborative simulations, and joint fieldwork (Reeves et al., 2016). Conversely, negative perceptions

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

often hinder the adoption of IPE, for example, because they are perceived as disruptive to established curriculum structures, add to the burden on lecturers, or irrelevant to accreditation requirements (Hammick et al., 2007).

Factors influencing educational administrators' perceptions include: (1) understanding of the benefits of IPE for graduate quality; (2) knowledge of international standards requiring interprofessional collaboration; (3) personal or institutional experience implementing collaborative programs; and (4) academic cultural values that support or discourage interdisciplinary collaboration. In the Indonesian context, educational administrators' perceptions are also influenced by national accreditation requirements (BAN-PT, LAM-PTKs) and the need to produce globally competitive graduates (Muhammad Rizal Novianto^{1*}, 2022).

Structural barriers include differences in academic calendars between study programs, which make it difficult to synchronize schedules, and limited resources (classroom space, trained faculty facilitators, funding). Differences in assessment systems and curriculum structures between study programs (Reeves et al., 2010; Curran et al., 2007). Cultural barriers, interprofessional egos, and inherent stereotypes, such as the perception that certain professions are more dominant. Lack of a collaborative culture in the academic environment, resulting in students becoming accustomed to monodisciplinary learning. Resistance from some lecturers or students to collaborative activities (Barr, 2013; Carpenter & Dickinson, 2016).

Difficulty integrating IPE into an already dense core curriculum. Lack of clear national standards for IPE implementation. Limited evaluation methods capable of assessing collaborative competency (Thistlethwaite, 2012; Oandasan & Reeves, 2005). In Indonesia, preliminary research by Widyandana (2017) indicated that the main obstacles to IPE implementation were limited human resources who understood the concept of IPE, lack of managerial support, and limited infrastructure for collaborative learning (1, 2022).

Numerous international studies have demonstrated the relationship between institutional support, leadership perceptions, and IPE success. For example, Blue et al. (2010) found that faculty leadership support was positively associated with the sustainability of IPE programs in the United States. Meanwhile, research by Curran et al. (2007) showed that the main barriers to IPE in Canada stemmed from organizational aspects, including a lack of coordination between study programs. In Asia, a study by Yan et al. (2017) in Hong Kong highlighted that although students expressed positive attitudes toward IPE, program success depended heavily on structural support from the university. Similar results were found in Japan, where IPE integration was more successful in institutions with strong leadership support (Shinozaki et al., 2015).

Research in Indonesia is relatively limited. Widyandana (2017) and Mulyadi (2019) emphasized the need to strengthen institutional capacity and provide support from educational administrators for IPE integration into the national curriculum. However, research specifically examining the relationship between educational administrators' perceptions and implementation barriers in academic settings is still rare.

METHODOLOGY

This study employed a quantitative design with a descriptive correlational approach. This design was chosen to determine the relationship between educational administrators' perceptions of Interprofessional Education (IPE) and barriers to IPE implementation in the academic environment. A survey method was used, collecting data through a validated structured questionnaire. The study population was all educational administrators at the Jayapura Papua Health Polytechnic, including department heads, study program heads, study program secretaries, and curriculum coordinators. Inclusion criteria included: (1) active educational administrators with at least one year of structural experience. (2) involvement in the development or implementation of the health education curriculum. (3) willingness to participate as research respondents.

The sampling technique used was purposive sampling, considering representation from various study programs (nursing, nutrition, environmental health, midwifery, health analysis, and pharmacy). The sample size was determined using the Slovin formula with a 5% margin of error, resulting in a minimum sample size of 35 respondents. The independent variable (X): Educational administrators' perceptions of IPE. The dependent variable (Y): Barriers to IPE implementation in the academic environment.

The perception of educational administrators toward IPE is the subjective assessment of educational administrators regarding the concept, benefits, and relevance of IPE in higher health education. The instrument used was a Likert-scale questionnaire (1–5) covering aspects of conceptual understanding, attitudes toward implementation, the benefits of IPE for the institution, and institutional readiness. High scores indicate positive perceptions, while low scores indicate negative perceptions. Meanwhile, barriers to IPE implementation are perceived inhibiting factors by educational administrators in their efforts to implement IPE. The questionnaire used a Likert-scale questionnaire (1–5) covering structural barriers (resources, schedules, infrastructure), cultural barriers (sectoral egos, professional stereotypes), and curricular barriers (curriculum integration, competency evaluation). High scores indicate significant barriers, while low scores indicate minimal barriers.

For data collection, researchers applied for research permits from relevant institutions. Respondents were provided with an explanation of the research objectives and informed consent. Questionnaires were distributed online and offline, depending on the respondents' availability. The collected data was verified and analyzed according to the research variables. Data was cleaned for errors, incompleteness, or inconsistencies. Using statistics for the analysis stages includes: Univariate analysis to describe the characteristics of respondents, perceptions of educational administrators, and implementation barriers (presented in frequency

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

distribution, mean, and standard deviation). Bivariate analysis using Pearson or Spearman correlation tests (adjusted to the data distribution) to determine the relationship between educational administrators' perceptions of IPE and implementation barriers. Multivariate analysis (optional) with linear/logistic regression to see the contribution of perceptions to variations in implementation barriers after being controlled for with demographic variables.

Results

This study involved 35 respondents, consisting of educational administrators (heads/secretaries of study programs, heads of departments and study programs) and lecturers from various health study programs at the Jayapura Papua Health Polytechnic. The distribution of respondent characteristics is presented in Table 1.

Table 1. Distribution of Respondent Characteristics (n=35)

Karakteristik	Kategori	n	%
Age	≤ 40 Years	12	34,3
	≥ 40 Years	23	65,7
Gender	Men	14	40,0
	woman	21	60,0
Position	Education manger	18	51,4
	Lecturer	17	48,6
Length of service	≤ 5 Years	20	57,1
	≥ 5 Years	15	42,9
Profession	Nursing	10	28,6
	Gizi	9	25,7
	Environmental Health	6	17,1
	Midwifery	5	14,3
	Health Analyst	5	14,3

The majority of respondents were aged ≥40 years (65.7%), female (60.0%), with positions as education managers (51.4%).

Table 2. Distribution of Respondents' Perceptions of IPE (n= 35)

Kategori Persepsi	n	%
Positive	24	68,6
Negative	11	31,4

The analysis results show that respondents' perceptions of IPE were largely positive (68.6%), with an average score of 76.2 (SD = 8.9) out of a maximum total score of 100.

Table 3. Barriers to IPE Implementation (n=35)

Jenis Hambatan	Mean (SD)	Kategori
Structural	77,1 (9,2)	Tall
culture	70,5 (8,7)	Currently
curricular	69,8 (10,4)	Currently
Total Obstacles	72,7 (10,1)	Medium- High

Respondents assessed that barriers to IPE implementation were still quite high, with an average score of 72.5 (SD = 10.1). The main barriers identified were structural aspects (resources, schedules, and infrastructure), with the highest average score (77.1).

Table 4. Relationship between education administrators' perceptions of IPE and barriers to IPE implementation (n=35)

Variabel	r	p-value
Perceptions of – Implementation Barriers	-0,482	0,004*

A Spearman correlation test showed a significant relationship between educational administrators' perceptions of IPE and implementation barriers ($r = -0.482$; $p = 0.004$). The negative correlation indicates that the more positive the educational administrators' perceptions of IPE, the lower the perceived implementation barriers.

Significant at $\alpha = 0.05$.

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

DISCUSSION

The results of this study indicate that the majority of educational administrators and lecturers have positive perceptions of IPE. This finding aligns with research by Thistlethwaite (2012) and Reeves et al. (2016), which found that awareness of the importance of cross-professional collaboration is increasing within the academic environment of the Jayapura Papua Health Polytechnic. Positive perceptions can be an important asset for institutions in integrating IPE into the formal curriculum.

However, barriers to IPE implementation remain significant, particularly in structural aspects. This aligns with the findings of Curran et al. (2007), who identified limited resources, scheduling differences between study programs, and limited facilities as key obstacles to IPE implementation. In Indonesia, research by Widyandana (2017) also revealed similar obstacles, namely a lack of infrastructure support and competent teaching staff to facilitate IPE.

The results of the correlation analysis showed a significant negative relationship between the perceptions of education managers and implementation barriers. This means that the more positive the managers' perceptions, the lower the perceived barriers. This can be explained by the fact that managers with positive perceptions tend to seek creative solutions, for example, by adjusting schedules, building networks across study programs, or allocating dedicated resources to support IPE activities. Conversely, managers with negative perceptions tend to perceive obstacles as difficult to overcome.

These findings emphasize the importance of strengthening positive perceptions of education managers through socialization of the IPE concept, increasing academic management capacity, and providing regulatory support from both the university and government levels. This way, implementation barriers can be minimized, and IPE can be sustainably integrated into the health education curriculum.

This study has practical implications: strong managerial support, particularly from educational administrators, is key to the successful implementation of IPE. The results also confirm that shifting academic culture toward collaboration requires visionary leadership and a consistent institutional strategy.

CONCLUSION

This study analyzed the relationship between educational administrators' perceptions of Interprofessional Education (IPE) and implementation barriers in the academic environment, involving 35 respondents (administrators and lecturers). Based on the results, it can be concluded that: The majority of respondents had positive perceptions of IPE, indicating an awareness of the importance of cross-professional collaboration in health education. Barriers to IPE implementation were still perceived as quite high, particularly in structural aspects such as limited resources, differences in academic calendars, and shared learning facilities. There was a significant negative relationship between educational administrators' perceptions of IPE and implementation barriers ($r = -0.482$; $p = 0.004$). This means that the more positive the educational administrators' perceptions, the lower the perceived implementation barriers. These findings confirm that educational administrators' perceptions play a strategic role in determining the success of IPE implementation in health universities.

The researcher's recommendations for higher education institutions include strengthening the understanding and positive perceptions of educational administrators through training, seminars, and outreach on the benefits of IPE. Internal policies supporting the integration of IPE into the curriculum, including aligning academic schedules across study programs, should be developed. Adequate resources should be provided, both in the form of collaborative learning facilities and trained teaching staff. Educational administrators should be agents of change by encouraging a culture of cross-disciplinary collaboration. Implementation barriers should be minimized through a managerial approach, such as optimizing coordination between study programs and innovating curriculum design. Lecturers should increase their active involvement in IPE activities and develop learning methods that emphasize interprofessional collaboration. Foster an open attitude toward professional differences and reduce sectoral stereotypes. Future research is recommended to involve a broader sample size with a multicenter design to ensure more generalizable results. Qualitative studies are needed to further explore the dynamics of educational administrators' perceptions and the factors influencing resistance to IPE. Development of a measurement instrument for barriers to IPE implementation that is more contextualized to the conditions of health education in Indonesia is necessary.

ACKNOWLEDGEMENT

We would like to thank the heads of departments at the Jayapura Papua Health Polytechnic for their participation in making this research possible. And the lecturers who have been involved in this research.

REFERENCES

- 1) D. S. (2022). The Differences in Perceptions of Interprofessional. *Journal of Multidisciplinary Healthcare*, 8.
- 2) Alexandra Lapierre a, b. M. (2024). Interprofessional interventions that impact collaboration and quality of. *Published by Elsevier*, 13.

Education Administrators' Perception of Interprofessional Education and Implementation Obstacles in the Academic Environment of the Jayapura Papua Health Polytechnic

- 3) Carissa Singh, K. E. (2024). Opportunities and Challenges of Interprofessional Education:.. *The Journal for Nurse Practitioners*, 6.
- 4) Farhin Delawala, P. Y. (2022). Developing an interprofessional education programme for a health. *Journal of Taibah University Medical Sciences*, 10.
- 5) Hazel Keedle a, *. V. (2023). Psychosocial interprofessional perinatal education: Design and evaluation. *ScienceDirect*, 9.
- 6) Michael J. Peeters *, M. M. (2024). Response-shift effect for self-assessment: Magnitude and accuracy within an. *Journal of Interprofessional Education & Practice*, 4.
- 7) Muhammad Rizal Novianto1*, A. M. (2022). Students' Perception and Readiness Level Toward Interprofessional. *Journal of Islamic Medicine*, 10.
- 8) Sundari1, S. (2021). INTERPROFESSIONAL EDUCATION (IPE) IMPROVES STUDENTS'. *JPKI*, 11.
- 9) Suzanne Hetzel Campbell. (2024). Effectiveness of interprofessional development of. *Clinical Simulation in Nursing* , 8.
- 10) Widyandana, D. (2018). EVALUATING INTERPROFESSIONAL EDUCATION PRINCIPLE. *Jurnal Pendidikan Kedokteran Indonesia* , 5