

Faculty members' readiness for interprofessional education



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ABSTRACT

Introduction: Healthcare is a complex system that requires collaboration across health professions. However, a plethora of reports has identified poor communication and collaboration within healthcare teams which could lead to patient safety issues. Interprofessional education (IPE) is an educational strategy to promote communication and collaboration between healthcare professionals. Despite knowing the readiness among students, opinions among faculty members regarding the need for IPE at UPH (Universitas Pelita Harapan) have yet to be examined despite the important roles of both students and faculties in developing an IPE curriculum. This study aimed to investigate the readiness among medical and nursing faculty members in establishing an IPE curriculum at UPH.

Methods: This study applied a quantitative study design using the Readiness for Interprofessional Learning Scale (RIPLS) by Parsell and Bligh (1999) which was translated to Indonesian and tested for its validity and reliability. The translated RIPLS questionnaire was administered to a total of 60 participants which consisted of 30 nursing and 30 medical faculty members. Subsequently, both descriptive and Mann-Whitney statistical analyses were conducted.

Results: Findings revealed a statistically significant difference between the IPE scores (RIPLS) of nursing faculties and medical faculties ($U = 652, z = 3.028; p = 0.012, r = 0.390$). This demonstrates that the nursing faculty members (Median 4.30) indicated a higher level of readiness or more positive attitude towards IPE compared to the medical faculty members (Median 4.07).

Conclusions: This study highlights that faculty members have a positive attitude or readiness toward IPE, with nursing faculties indicating higher levels of readiness than their counterparts in the medical faculty. Further exploration using a qualitative method is also important to understand the faculty members' readiness for IPE as well as the commitments of faculty members and leadership on delivering IPE.

Keywords: Interprofessional education, Medical faculty, Nursing faculty.

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INTRODUCTION

Interprofessional education (IPE) is an educational strategy to enhance communication and collaboration between interdisciplinary health care professions.¹ IPE is applied by involving students from two or more healthcare professions in the same learning environment with the aim of improving interprofessional collaboration, health care quality, mutual respect, and understanding regarding others' professional roles and responsibilities. However, the implementation of IPE in the Asian context has faced both advantages and challenges.²⁻⁴ Some advantages are improved quality of care and health care professional collaboration.^{3,4} Meanwhile, challenges include a lack of role models and the perception among faculty

members that IPE is burdensome.⁴

Both students and faculty members have important roles in developing an IPE curriculum, especially in health care education. A preliminary study in 2017 involving 50 medical and 50 nursing students at Universitas Pelita Harapan (UPH) Indonesia showed no significant difference between IPE readiness scores ($p < 0.05$) of medical students and nursing students. However, there was no report regarding faculty members' opinions on the need for IPE at UPH.

Faculty members have an important role in facilitating the effectiveness of an IPE learning environment, thus it is vital for faculty members to demonstrate good interprofessional teaching competencies including commitment,

practice, and role modeling IPE as well as valuing the unique contribution of each health care profession.^{4,5} On the other hand, some healthcare education programs still provide training in the traditional mono-professional system that neglects to emphasize the importance of interprofessional collaboration in healthcare settings.⁶ For example, most medical education programs stress self-reliance in clinical practice.⁴

In Southeast Asia, the culture of social hierarchy remains very strong and may affect the implementation of IPE.⁷ Doctors in this region, including Indonesia, are perceived to occupy highly respected positions in society, which leads to the marginalization of other health care professions such as nursing.⁸ This

perception further infiltrates healthcare education in which medical students feel superior to students from other healthcare professions. In light of this contextual dynamic, some challenges in delivering IPE effectively may occur.

Several studies reported that attitudes towards other professionals could impact individual engagement in teamwork and IPE.^{2,4,5} Therefore, further exploration regarding the readiness towards IPE among faculty members is crucial. A previous study in Indonesia explored the attitudes of faculty members towards IPE among four health care professions including medicine, nursing, midwifery, and dentistry.⁴ This study revealed that the attitude among nursing faculty toward IPE had a higher mean score compared to faculty members of other professions. Additionally, a number of challenges were reported, including varied perceptions among professions regarding patients' needs, imbalanced decision making, lack of direct interaction, and overlapping roles and responsibilities.⁴ Although this study recruited faculty members from seventeen health care schools, it calls for further exploration regarding attitudes towards IPE among faculty members due to limited evidence within the Asian context, including Indonesia. Lusmilasari and colleagues further argued that IPE is one of the top ten research priorities as perceived by nurses in Indonesia.⁹ Therefore, this study aims to build on the evidence from previous studies to assess faculty members' readiness toward establishing an IPE involving both medical and nursing faculty members at UPH Indonesia.

METHODS

A quantitative study design using a cross-sectional approach¹⁰ by using The Readiness for Interprofessional Learning Scale (RIPLS) was applied to examine readiness toward IPE among faculty members.¹¹ The RIPLS questionnaire used in this study had been translated and tested for its validity and reliability in a previous study at UPH (Cronbach Alpha 0.242-0.886)¹² and at Universitas Islam Sultan Agung (Cronbach Alpha 0.92-0.944).¹³ The variables examined in this study included readiness for interprofessional

learning, gender, prior experience with IPE, and completion of the RIPLS.

This study is a subset of a larger IPE study conducted at UPH, which gathered data from faculty and students. This paper contained only data from faculty members. In this study, purposive sampling was used. Faculty members employed at Faculty of Medicine (FoM) and Faculty of Nursing (FoN) UPH who volunteered were eligible. Due to the study's objective of comparing faculty members' readiness for IPE, the research team decided to collect 30 faculty members per group. The reason for this was that a statistical test requires a minimum of 30 respondents for normality assumption.^{14,15} Descriptive and Mann-Whitney statistical analyses were conducted¹⁶ on RIPLS responses from a total of 60 participants, consisting of 30 nursing and 30 medical faculty members. Statistical tests were performed using SPSS IBM Version 28.0.

RESULTS

More than half (56.7%) of faculty members at the Faculty of Medicine (FoM) were male and two-thirds of the faculty members (83.3%) at the Faculty of Nursing (FoN) were female (Table 1). Faculty members at both faculties also reported that most of them have not completed the RIPLS questionnaire before this study and had no prior experience with IPE (Table 1).

Mann-Whitney U statistical analyses revealed that the median scores differed significantly among groups and characteristics (Table 2 & 3). Table 2 shows that teamwork and collaboration were perceived differences between male and female faculty members (p-value

0.007), whereby male faculty members had a significantly higher median score for IPE than females. Conversely, professional identity and understanding of role-responsibility were perceived similarly by both male and female faculty members.

Readiness toward IPE based on the RIPLS score was similar between male and female faculty members. Furthermore, as demonstrated in Table 2, faculty members reported similar prior experience with IPE and experience of having completed the RIPLS questionnaire.

Conversely, Table 3 reveals a statistically significant difference between the nursing faculties and medical faculties on their RIPLS scores ($U = 652$, $z = 3.028$; $p = 0.012$, $r = 0.390$). This demonstrates that the nursing faculty members (Median 4.30) reported a higher level of readiness or had a more positive attitude toward IPE than the medical faculty members (Median 4.07).

DISCUSSION

This study was able to identify the level of readiness among Medical and Nursing faculty members toward IPE. Teamwork and collaboration were perceived differences between male and female faculty members, with male faculty members scoring higher than females. This result contradicts the findings from another study which showed a significant difference between the IPE scores of male and female faculty members in which female faculty members had higher readiness scores than males.² Prior experiences of team collaboration might be a factor for the perceived differences, although further exploration regarding

Table 1. Respondent characteristics.

Variables	Faculty members FoM		Faculty members FoN	
	N	%	N	%
Gender				
Male	17	56.7	5	16.7
Female	13	43.3	25	83.3
Have completed the RIPLS questionnaire before				
Yes	2	6.7	0	0
No	28	93.3	30	100
Prior experience with IPE				
Yes	6	20	10	33.3
No	24	80	20	66.7

Table 2. Readiness for interprofessional learning scores of faculty members.

	Teamwork & collaboration		Professional identity		Role & responsibility		Total RIPLS score	
	Median	U Test	Median	U Test	Median	U Test	Median	U Test
Gender								
Male	4.89	U=245 z=-2.679	4.29	U=343.5 z=-1.150	3.67	U=431.5 z=0.210	4.23	U=349 z=-1.059
Female	4.50	p=0.007* r=-0.346	4.07	p=0.250 r=-0.148	3.83	p=0.834 r=0.027	4.13	p=0.290 r=-0.137
Have previously completed the RIPLS questionnaire								
Yes	5	U=12 z=-1.913	4.14	U=57 z=-0.041	3	U=61.5 z=0.146	4.05	U=57.5 z=-0.021
No	4.56	p=0.055 r=-0.247	4.14	p=0.983 r=-0.005	3.67	p=0.886 r=0.019	4.16	p=0.983 r=-0.003
Prior experience with IPE								
Yes	4.72	U=323 z=-0.489	4.07	U=405 z=0.891	4	U=366.5 z=0.246	4.11	U=385.5 z=0.560
No	4.56	p=0.625 r=-0.063	4.14	p=0.373 r=0.115	3.67	p=0.806 r=0.032	4.17	p=0.575 r=0.072

*Statistically significant based on the Mann-Whitney U test

Table 3. RIPLS Score of Nursing and Medicine Faculty Members.

	Teamwork & collaboration		Professional identity		Role & responsibility		Total RIPLS score	
	Median	U Test	Median	U Test	Median	U Test	Median	U Test
Faculty								
FoM	4.56	U=439 z=-0.164 p=0.870 r=-0.021	4	U=565 z=1.711 p=0.087 r=0.221	3.67	U=652 z=3.028 p=0.002* r=0.390	4.07	U=620 z=2.514 p=0.012* r=0.324
FoN	4.61		4.29		4		4.30	

*Statistically significant based on the Mann-Whitney U test

this is warranted.

Furthermore, the findings also revealed that nursing faculty members had higher levels of readiness or attitude compared to their counterparts in the medical faculty. This confirms two previous studies that medical faculty members scored significantly lower in their readiness or attitudes toward IPE than nursing faculty members.^{4,17} Nursing faculty members also had more positive attitudes compared to health care professions other than medical faculty members,⁴ possibly due to the necessity for frequent collaboration with other professions in performing nursing care.¹⁸ Thus, nurses are expected to have a good quality of cooperation within health care teams. On the other hand, other

health care professionals such as doctors, dentists, and midwives are educated with an emphasis on independence and self-confidence in their clinical practice.⁶ This factor may be related to their lower level of readiness or less positive attitude toward IPE. Conducting faculty development programs to prepare IPE facilitators is further recommended since faculty members have a vital role in facilitating the effective implementation of IPE.¹⁹

Moreover, previous studies reported that faculty members in institutions with a fixed curriculum were hesitant to apply to new programs.^{4,6,20} For example, faculty members at an institution with a Problem Based Learning (PBL) approach are more reluctant to apply IPE due to curriculum

changes that will subsequently lead to changes in the course outline, timetable, and class size.²⁰ Thus, a strong commitment from faculty members is needed to face the challenges in preparing and implementing IPE. Moreover, commitment from the leadership level is also essential to support the establishment and effectiveness of IPE deliverance as executive leaders can role model as change agents, as an authority figure for resistance issues, and provide accountability in establishing IPE.⁴ Further studies using qualitative methods will be needed to explore the readiness and commitment to IPE among faculty members and executive leaders.

The main limitation of this study is only recruited 60 faculty members from

both FoM and FoN at one university, thus generalization of the findings should be taken into account. However, this study is the first study involving faculty members at this university, which further provides a new perspective for implementing IPE in the school. Additionally, these recent findings have implications for the planning of an IPE program at UPH, particularly the critical need for early exposure for faculty members at FoM.

CONCLUSION

This study highlights that faculty members had a positive attitude or readiness toward IPE, with nursing faculties having a higher level of readiness than the medical faculties. Given that the involvement of faculty members is crucial for developing IPE, there is a need for workshops or trainings on IPE for faculty members. The workshop will provide a basic understanding of the structures and processes required to develop IPE within the institutional context. Further exploration using a qualitative method is also important to understand the readiness of faculty members for IPE as well as the commitments of faculty members and leadership on delivering IPE.

DISCLOSURES

Conflict of Interest

There is no conflict of interest.

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Ethical Approval

Ethical approval was obtained from MRIN EC (Mochtar Riady Institute for Nanotechnology Ethical Committee) with number 003/MRIN-EC/ECL/III/2020.

Author Contribution

All authors have planned the study, applied for ethical approval, prepared its report

and developed the manuscript. Vivien as head of the study decided the roles within the team. Data collection was conducted by Mona and Neneng at FoM. Meanwhile, data collection at FoN was by Marisa and Grace. Data was analysed by Ni Eka in which all authors contributed for table establishment.

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