

STUDENTS' AND ACADEMIC STAFFS' PERSPECTIVES ON AN INTERPROFESSIONAL EDUCATION MODEL

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ABSTRACT

Background: Teamwork in health care is beneficial because it allows a holistic approach to patient care. Interprofessional education (IPE) provides students with an opportunity to develop their professional roles and their functions as team members. Understanding Interprofessional Collaboration (IPC) from the perspective of student and academic staff is an essential assessment for creating IPE model.

Methods: This was a qualitative study with phenomenology approach. We explored students' and academic staff's perspective of IPE by focus group discussions. We selected fifteen midwifery student, twenty medical students and twenty-two lecturers (midwifery and obstetrician gynecologist doctor) who were involved in IPE project. Data analysis used thematic analysis technique.

Results: Findings showed four themes that presented the most common perspective in collaborative experience, (1) interprofessional communication, (2) the role each profession, (3) IPE learning model, and (4) suggested IPE model. The major obstacle was poor communication in daily practices. Developing an IPE model is important to improve patient care.

Conclusion: The main common problem of IPC was interprofessional communication. That poor communication problem can be solved by developing intra-curricular and extra-curricular IPE model and train the effective interprofessional communication.

Keywords: Interprofessional education, collaboration, perspective, midwifery student, medical student, academic staff.

ABSTRAK

Latar belakang: kerja tim dalam pelayanan kesehatan sangat penting untuk menjamin pendekatan holistik pada pelayanan pasien. Interprofessional education (IPE) memberikan kesempatan pada mahasiswa untuk mengembangkan peran profesional dan fungsi sebagai anggota tim kesehatan. Pemahaman kolaborasi interprofesi dari persepsi mahasiswa dan dosen menjadi salah satu pertimbangan penting dalam menyusun model pembelajaran IPE.

Metode: Penelitian ini adalah penelitian kualitatif dengan pendekatan fenomenologi. Persepsi mahasiswa dan dosen tentang IPE dieksplorasi dengan focus group discussion. Informan terdiri dari 15 mahasiswa kebidanan, 20 mahasiswa kedokteran dan 20 dosen kebidanan dan dokter spesialis kandungan dan kebidanan. Analisis data dilakukan secara tematik analisis.

Hasil: Ada empat tema tentang persepsi mahasiswa dan dosen tentang kolaborasi: (1) komunikasi interprofesi, (2) peran tiap profesi, (3) model pembelajaran IPE, (4) saran tentang model pembelajaran IPE. Hambatan utama adalah kurang baiknya komunikasi pada praktik sehari-hari. Mengembangkan mode pembelajaran IPE sangat penting untuk meningkatkan pelayanan pasien.

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Kesimpulan: Masalah utama dalam IPC adalah komunikasi interprofesi. Komunikasi yang kurang baik dalam kolaborasi ini dapat dipecahkan dengan mengembangkan intra kurikulum atau ekstra kurikulum IPE dan melatih komunikasi interprofesi yang efektif.

Kata kunci: pendidikan interprofesi, kolaborasi, persepsi, mahasiswa kebidanan, mahasiswa kedokteran, dosen

BACKGROUND

Practically, professional health will not work individually however in a group which consists of some related professionals, such as medical doctors, nurses, midwife, pharmacists, radiographers, occupation therapists, psychologists, etc. Those professions were collaborating with many motives such as the impact of diseases complexity, improving health care quality, and upgrading health education.¹ In fact, implementation of interprofessional collaboration is not smooth. Unclear job description and communication problem make collaboration is not working. Another problem in collaboration is who will be the leader of health professional team. The unfamiliarity of health profession worker in collaboration caused by at their educational period, they never exposed with collaboration between health professionals in their curriculum.²

Interprofessional Education is a concept that developed to find a solution for problems on interprofessional collaboration. IPE can be defined as, 'students from two or more professions learning about, from, and with each other to enable effective collaboration and improve health outcomes.'³ Therefore, health education institutions should facilitate the university students to be able to cooperate in a health group professionally.⁴ Learning in health profession group will introducing students about their profession and other health professions, so after graduation they will not awkward working in the health professional team. Learning outcome expected from IPE learning such as students understanding about values and ethics of professional practice, role and responsibility each profession, communication between profession and effective participation on health professional team.²

In a fact, medical and health professions' education these days endure their own profession curriculums, although those professions implement the education profession at the same hospital education. The

education which is implemented separately, so possible can cause the difficulties when the university students graduate and work. IPE curriculum development needs efforts to IPE succeed implementation, such as support and institution commitment and adequate facility. The other obstacle in the implementation of IPE curriculum is about lecturer. It is not easy for some health profession lecture to teach another health profession. For example, a lecturer from nurse education feels awkward when they must teach medical students. Students could experience a feeling of worry learning in health professional group like lecturers. Students assessment development also challenging in the IPE curriculum development.⁴

There is now still limitation research about IPE curriculum development, especially in developing country.⁵ Not many health education institutions developing and implementing IPE curriculum because they worries about difficulties that will be faced. Need assessment is an essential step in developing IPE curriculum with considering interprofessional collaboration obstacles. The purpose of this research was to explore the students' and academic staff perspective on interprofessional collaboration and interprofessional education model.

METHODS

Research setting

This research was conducted in the Faculty of Medicine Universitas Sebelas Maret (FM UNS) during 2014. The FM UNS has some study programs including schools of medicine, schools of midwifery, schools of hygiene and occupational health and schools of psychology. As the educational institution that wants to improve the professionals, FM UNS put an effort to developing in education. The development that will be done in this research is the learning model of IPE, for the medical and midwifery student. IPE model in two professions as

the pilot implementation of IPE and the beginning to the continued on more than two professions. Medical and midwifery are the selected professions because those two professions are the health schools which are managed under the FM UNS.

Study design

This was a qualitative research with phenomenology research tradition which was conducted during 2014. Clinical lecturers (medical and midwifery), medical and midwifery student was our informant. Qualitative data explored was the perception of students and lecturers about communication inter professions, the role limitation, task and responsibility, and learning activity model of IPE which possibly implemented. We explored the interprofessional collaboration perspective of student and lecturer. According to the result, we formulated an IPE model.

Subject and sampling

We collected data by purposive sampling from total amount student and lecturer. Fifteen midwifery student, twenty medical students, and twenty-two academic staff (midwifery and obstetricians) were conducted to the FGD group. Students who were selected to be member FGD group was medical and midwifery students that have through clinical stage so they have experience take part in collaboration practice. Each FGD group consisted of five until ten members, came from the same profession. There were four FGD's groups of students; two groups consist of midwifery students and two group of medical students. The faculty member there were four groups; the groups for obstetricians and gynecologists, midwifery lecturer, lecturers who in developing medical and health profession education, and another group for clinical skills and field laboratory lecturers.

Data collection

Before taking the qualitative data, the academic staffs were offered an introduction training about the basic concept of IPE, so that they have enough understanding about IPE. FGD was taken for collecting data. Data collection ended when we

found data saturation, with three FGDs of midwifery students, three FGDs of medical students, six FGDs of academic staff.

Data analysis

The data validity test by member checking and analyzed with thematic analysis. The third and fourth author as the first coder who coded the transcripts of interviews and FGDs. The output of first phase was categories of codes. They met second author for further final coding, what categories and codes were agreed, to concluded as themes. The next step was triangulation process by the first author, from those themes, categories and codes were checking with theories and previous research.

Research ethics

Ethical permission to explore informant perspective was affirmed by Ethical Committee of Moewardi Hospital. Student and lecturer were informed that participation was voluntary and the findings would only be used for the research purposes. We defined clearly that the research no impact on anything in the future career.

RESULTS AND DISCUSSION

The qualitative analysis resulted in four themes including (1) communication interprofessional, (2) limitation of the role each profession, (3) purpose IPE learning model, and (4) suggestions of IPE model (see Table 1).

Collaboration between health workforces is affected by the institutional policy. The current situation promotes all health workforces to work together within interprofessional collaboration in order to improve patient safety as quoted,

"In health services, we regulated by the hospital standards of accreditation that leads to safeties, which patient safety is the goals. In the patient management should have led to Interprofessional. So, whether you want it or not, the curriculum needs to consider that issues. Moreover, the 2012 version of accreditation standard, the outcome is patient who treated and educated interprofessional. It began to be applied in each health profession education." (4th informant: midwives lecturer)

Table 1. Qualitative codes and themes

Meaning units	Codes	Themes
Interprofessional communication has not developed well	Bad interprofessional communication	Communication interprofessions
Role of profession organization was lack	Barrier for communication	
Respect for other profession need to increase	How to make effective communication	
The relation between health profession	Obstacles for implementing IPE*	The role each profession
Some competencies still overlapping	Overlapping competencies	
IPE need to develop	The reason to the need of IPE	IPE learning model
Purpose to increase patient care	IPE as important element in hospital	
Short time: extra-curricular IPE	Suggestion model	Suggested IPE model
Long time : intra curricular IPE		

IPE=Interprofessional Education

Interprofessional communication

Communication within a profession or among other professions was identified as the barrier of IPE implementation. Communication is necessary to be improved, and also a form of communication within and between professions. Poor communication within profession could lead to low commitment towards the professionalism and its organization. Low commitment in health profession may result in becoming egoist, thinking about their own way, especially in the case of career and finance. Someone who commits in his/her profession is expected to obey the rules about their competence and obligation as quoted,

"It is different with that doctor when the shift changed. Yes, he/ she has gone after the time was over. No handover to the next shift." (19th informant: doctor)

"There is no communication inter professions. In my opinion, the professional organization hasn't role yet, here." (5th informant: midwifery)

"The communication doesn't run well among health professional, especially in the teaching hospital." (1st informant: medical student)

Poor communication can cause there is no appreciation and trust between professions, and it became the barrier the IPE implementation. For example, the doctors who recently graduate and work in the hospital felt that others professions who cooperate with them, less appreciate and trust in their abilities as quoted,

"In my opinion, the communication tends to ability or skill. So, based my experience, senior nurses don't regard us. They are considered that are we able to do. That was same when we firstly graduate as a medical doctor in a hospital." (18th informant: medical students)

The role of the profession

This research was identified many obstacles in implementing IPE on clinical phase. The obstacle in IPE came from the fact that the daily collaboration of health service team in hospital or place that is used as clinic education hasn't run well. Each health profession students were seen how of those professions interacts, both interaction in the same profession and other professions. Nowadays, some health services, collaboration among health care provider weren't as the partner within them, but within them just who are the worker and who

are in the top positions. The midwives tend to passively wait for doctors' instruction and doing the instruction even they didn't know the reason of that instructions. Often no discussion between doctor and midwives about patient management in daily practice as quoted,

"Our expectation on interprofessional collaboration is we act as a partner. Unfortunately, in fact, we still wait for the instruction from the doctor." (19th Informant: a midwife)

The main factor is overlapping competencies between health professions, not only in health services but also in education level. For example, normal delivery, it was midwifery, general practitioners, and specialist doctor's competency, or infusion installation as a skill that must be mastered by the nursery, midwifery, and doctor. This should be considered in interprofessional collaboration context. What cases should be treated by those professions, and what should do refer to other professions must be clearly explained as quoted,

"A private midwife is competent for assisting a normal birth delivery. For abnormal pregnancy, they must collaborate with obstetricians. So there was a clear role of the competency." (10th Informant: a lecturer)

"Medical student is usually taking more patients than midwife student in delivery skill. So, midwife can't reach the target because the normal delivery is arranged for a medical student. Whereas, they have the same target in rescuing the normal delivery." (5th Informant: midwife)

IPE learning model

The lecturers and curriculum team in this research was agreed that IPE development is necessary to be implemented. IPE implementation was expected to increase the health service quality and decrease medical errors.

"In reality, IPE is important and necessary because those patients need others professions to be recovered. Moreover, in our regulation which arranges patient's right and duty, already stated that patient also making efforts and medical decisions for the patient care. So, since patients have admitted, they took part of the medical plan. Moreover, involving patient from the beginning [of the clinical management] and collaboration among healthcare provider

will decrease medical error and improving patient safety" (7th Informant: a midwife)

Based on the lecturer and curriculum team, IPE can include intra-curricular and or extra-curricular activities. IPE as extra-curricular more practical because it will be easy in making activity which involves more than one subject program or more than one institution without changing the formal curriculum. For example, students' competition of inter professions. However, IPE model of extra-curricular should be considered about its weakness in the students' participation. Intra-curricular IPE model will guarantee more participation and seriousness of student's participation, but it is difficult to be implemented. The difficulty is especially from curriculum merge and or institution coordination within professions. If curriculum some professions which perform clinic phase in the same place and change into IPE model might change many things, namely: schedule, funding, the faculty, and facilities in each institution or profession.

"In health services was regulated by hospital accreditation standards which target is directed to patient safety. So, patient management must be doing by interprofessional team. It is because the accreditation guideline version 2012 was aimed to the patient who given by interprofessional collaboration." (4th Informant: midwife).

Suggested IPE model

Based on the analysis, IPE learning for clinical phase can be implemented by an improvement of the environment of clinical learning, especially communication between and within professions, good role model, clear role and task. Suggested IPE model can be started from preclinical phase. Students and lecturers can be more accustomed to communication and cooperation interprofessional.

"In Faculty of medicine Universitas Sebelas Maret, there are five study programs. Bargaining position was important things. But, in order to IPE implementation, we need to consider in the curriculum of each study program. What phase is suitable for IPE? We can share our resource including field practice, such as hospitals. We might be collaboration on that" (5th informant: midwives student)

Furthermore, interprofessional education should be both for intra and extra-curriculum.

“Based on my experience in social services, we conducted a medical check-up in collaboration between midwifery and medical students. The midwifery students giving counseling about antenatal care, and medical students taking part of

the general medical check-up.” (4th informant: midwives students)

Based comments of all informants about IPE implementation, the authors suggest IPE model in Table 2.

Table 2. Suggestion IPE model

Period	Type	Activity Form	The involved institution	Details of the model
Short term (1-3 years later)	Intra-curriculum	Laboratory skills (preclinical)	Medical and midwifery	Example topic: infusion installation Model: A group consists of the midwifery and medical students. The instructor can be from midwifery or medical lecturer, each of group one instructor. The instructor train show to infusion installation and catheter followed by the explanation of task and role of each profession in health service. Exercise should be done three times for each skill and taking the assessment in third times.
		Field laboratory (preclinic)	Medical and midwifery	Example topic: children nutrient or immunization. Model: Group consists of midwifery and medical students. An instructor from public health center which is adjusted of field laboratory, one instructor for each group. The instructor trains about the program and explains each health profession role in that skill. Three sessions of meeting for each skill, and a last session for student assessment
	Extra-curricular	Student Olympiad (pre-clinic and clinic)	Medical, midwifery, nursery, pharmacy.	Competition between students' group in case management context, each group must contain 2 or more professions. Each group will assess the teamwork, communication, collaboration, role and responsibility, and accuracy in case analysis.
Longterm (over three years)	Intra-curricular	IPE curriculum in clinical phase	Medical midwifery nursery specialist doctor, etc.	Location: patient ward Healthcare team consists of two or more professions. Each group is given responsibility for handling patients. Clinical lecturer as a supervisor. The group should follow up the patients and reports the results to the supervisor every day. Evaluation by the supervisor, patient or family, and peer.

An effective interprofessional communication is one of the important things in patient safety. Communication component in a clinical setting are appreciating each other, clear, direct and explicit. To great communication, its needs listening ability so well, administrative support, and commitment together for leaving old perception and stereotype in clinic service.⁶

This effective communication should be started in the earlier education period. The clinical lecturer is one of the elements who have a role in this matter. During the clinical phase, based on the students' perception, one of the important attribute as a clinical lecturer is the ability to conduct communication.⁷ Communication also the important aspect of the context patient safety and improving health services.⁸ IPE in workplace education needs role model what kind of good and effective health service team. But, those part didn't happen in daily services.⁹

The understanding about the role of each health profession is not clear yet, and job description overlapping between health professions still a barrier on collaboration. Lestari et al, state that medical students are the readiest on the understanding of professional identity and role on collaboration compare with the other students like nurse, midwife and dentistry students.¹⁰ Professional identity is important aspect on IPE implementation.¹¹

The lecturers and curriculum team in this research was agreed that IPE development is necessary to be implemented. It is a synergy with the main reason of developing IPE is improving patient care.¹² The patient will get more benefit in optimal health services if they take care of good collaborative health team. IPE implementation was expected to increase the health service quality and decrease medical errors. However, it is necessary to prepare the curriculum maturely, as many difficulties may be encountered in the implementation of the IPE curriculum. In the development of the IPE curriculum it is necessary to consider the following, among other things, the necessity of piloting and determining the most appropriate curriculum, establishing a formal organizational structure, institutional support, preparing educators, adequate infrastructure, recognizing challenges and barriers, recognizing

commonalities and differences, accommodate student concerns, and develop appropriate assessments.²

A research in Canada explores the perception of students about IPE implementation. IPE in Toronto Canada is developed on seven professions that are medical, nursery, occupant therapist, pharmacy, physiotherapy, social workers, and speech-language pathology. Nine students from these seven professions taking IPE during 5 weeks. All students feel the importance of cooperation between professions in serving the patients and agree if all of the health professions must give chance students for developing their ability, behavior, and attitude which is needed in interprofessional collaboration.¹³ A previous research in Sweden compared nurse graduations from educational institutions who use IPE or not. The result states that the nurse graduation from the university with IPE curriculum feels that they have been prepared by the institution to able to cooperating with others professions compared with the graduation of non-IPE curriculum.^{14,15}

Previous research found that the obstacle in IPE implementation such as the difficulty in arranging learning activity collaboratively, finance arrangement, complexity students assessment method.^{12,14} The main factor is overlapping competencies between health professions not only in health services but also in education level. It became negative thought such as a threat to expand the field of others profession.¹⁵ Previous research stated that the obstacle in IPE implementation such as the difficulty in arranging learning activity collaboratively, finance arrangement, complexity students assessment method.^{12,14} Each medical education institutions needs to identify and recognize the potentials and barriers to implement IPE, therefore they could design a feasibility and relevant IPE model. Some barriers that should be considered in designing IPE model are scheduling, logistics and financial supports.¹⁶

Collaboration can be an important element in the hospital for the achievement of the national and international standard. The expectation of implementing collaboration is supressing medical errors and increasing patient service. It makes the hospital easier in achieving accreditation status in

the national and international level. Collaboration should begin to be educated during education with IPE. The aim of IPE based on one of the systematic reviews such as the coverage of teamwork, role and responsibility, communication, reflection in learning, patient safety, ethics, and behavior.⁹

CONCLUSIONS

Communication between and within professions was the main problem in IPE. Others obstacles in development IPE is task and role of each profession in health care service and education level still overlapping. Based on the perception of lecturers and students, IPE can be implemented in intra and extra-curricular. Meanwhile, the development of IPE in intra-curricular is more feasible for the short period plan.

Health profession should improve communication skill inter and intra professions by various approaches, such as by profession organization or coordination multi profession organization and institution. Various health professions and health education institution are necessary to make agreement together about role and task of each profession. The IPE need developing good role model in health service. Furthermore, we need more study to make IPE model, both for intra and extra-curricular.

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