Promoting Interprofessional Education through Home Visit with Service Mind Model

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ABSTRACT

This study is a quasi-experimental research: one group pre-post test research design that aims to develop an interprofessional education learning model and assesses an outcome of an interprofessional education. The total of 108 students and 18 staffs were selected from faculty of Nursing, Pharmacy, Medical Technology, Physical Therapy, Social Work and Social Welfare, Science and Technology, and Communication Art from Huachiew Chalermprakiet University. The total of 9 public health volunteers were included. Clients were patients residing in the Sisa Chorakhe Yai district, Bang Sao Thong, Samut Prakan Province. Data were analyzed with descriptive statistics and Wilcoxon signed ranks test.

The result showed that the learning outcomes of the students after the program were significantly different in all aspects when compared with results before entering the program. An interprofessional learning preparation scores (p <0.001), perceptions and skills in an interprofessional learning: roles and responsibilities (p <0.001), teamwork and leadership (p <0.001), interprofessional communication (p <0.001), relationship with others, and recognizing the need of the patient (p <0.001). Moreover, satisfaction of participated clients in an interprofessional home visits received the highest score.

This study findings indicated that interprofessional education in the form of home visits with service mind was a good practice model that can be used as a learning model in both regular curriculum and extracurricular learning activities at Huachiew Chalermprakiet

University. Moreover, an information system IPE-ICT HCU can be used to track patient progress and also used as a channel for interprofessional education.

KEYWORDS: Interprofessional education (IPE), Home visit, Service mind

Introduction

Interprofessional education (IPE) is a combination of more than two professions aimed to develop knowledge, skills, understanding, cooperation in education and interdisciplinary work and research. It prepares professional staffs in line with the educational reform guidelines for health professionals to work in the 21st century include the ability to bring knowledge into practice, focus teamwork in order to deal with public health problems together and drive the health system (Panich, 2012). The six goal of interprofessional education understanding the role of their profession, professional responsibility, respect for other professions (role, responsibility, respect), teamwork and leadership, learning and reflection, interprofessional communication, relationship with patient and recognizing the need of the patient, effective communication, create a social relationship, and moral and ethics. In addition to interprofessional education in health related field, knowledge should be shared among other professions. For a person to have a good health, it is not limited to only physical and mental health but it also

includes economy, society, environment, and peers (WHO, 2010, and Chuangklongkaew, 2017). Thus, we are interested in studying interprofessional education and developing an information system to be used for monitoring patient progress which may help learning skills in the 21st century for students.

Home visit is a patient care process that is in line with problems, and needs of patients and families. There is ongoing assessment, care planning and follow up, which requires knowledge collaboration of the interprofessional team. Thus, an interprofessional education is a process that promotes mutual learning among students of interprofessional team. Recent studies showed that the home visit activities were used as an interprofessional teaching and learning model which increased students' ability and learning skills (Opina-Tan, 2013). Students were well prepared to learn together in an interprofessional education. (Setthasathien, 2015) and can widen knowledge of each profession by exchanging knowledge from one's profession own with others (Sethasathien, 2015). Also a comparative study between students who were part of an interprofessional education and students who educated only in their own profession by Darlow and et al found that after joining the experimental group program students scored significantly higher in Readiness for Interprofessional Learning Scale questionnaire (RIPLS), the Team Skills Scale (TSS) and the Long-term care Condition Management Scale than the control group.

Therefore, we are interested in developing an interprofessional education learning model in both regular curriculum and extracurricular learning activities at Huachiew Chalermprakiet University in order for our students to be ready to work collaboratively and effectively in health care system.

Purposes

To develop an interprofessional education learning model in regular curriculum and extracurricular learning activities at Huachiew Chalermprakiet University and to study an outcome of an interprofessional education.

Population and Sample

Samples: The total of 108 students and 18 staffs were selected from faculty of Nursing, Pharmacy, Medical Technology, Physical Therapy, Social Work and Social Welfare, Science and

Technology, and Communication Art from Huachiew Chalermprakiet University. The total of 9 public health volunteers was included. Clients were patients residing in the Sisa Chorakhe Noi district, Bang Sao Thong, Samut Prakan Province. The study was approved by the ethics review committee at Huachiew Chalermprakiet University 0.585/2560

Research Methods and Instruments

A quasi-experimental research comparing learning outcomes before and after participating in the program. The program included 3 instruments: preparation, home visit and group innovation

1) Activity to prepare students for interprofessional learning through workshop activities in order to develop teamwork and leadership skill, role, responsibility, respect, and interprofessional communication. Students were scheduled to attend lectures on community visits and went through training on the roles and responsibilities of interprofessional teams through workshop activities as follows:

The role of interprofessional profession

Physical Therapy: Analyze, evaluate, and treat impaired physical mobility. Promotes and regenerates the skeletal system, muscular system, nervous system, and cardiovascular

system. The home visit will be monitored continuously

which includes the appropriate exercise program for relatives and caregivers.

Computer Science: Develop an effective information system in order to solve problems. The home visit will use information systems in order to store basic information, history of sickness, visiting records, diagnosis, and follow-up care.

Pharmacology: Produce and perform quality control on drug, drug dispensing, and drug counseling. Watch out for problems caused by medications, protect consumer regarding medication, food and health products. Home visit assists in reviewing patient's history of drug to determine the relationship between illness and current drug used and also assesses the

Medical Technology: Laboratory analysis to assist diagnosis, assess prognosis, follow-up treatment, prevent disease, and health assessment. The role of home visit will monitor treatment including screening for Non-Communicable Diseases (NCDs) such as diabetes, high blood pressure including knowledge needed to prevent diseases.

problem of existing or new drug used.

Mass Communications: Makes media production more attractive. The home visit collects information on various aspects of the community in order to create health care media that is understandable.

Nursing: Assess the health of the patients, examine the vital signs, assess the environment, and provide nursing services, provide counseling, encourage behavior change, promote self-care, develop the ability of patients and families to care for patients. The home visit will evaluate nursing services and interprofessional profession team work.

Social Works: Physical and mental assessment of patients and caregivers. Performs family assessment, risk assessment, and exercise the right of the patients. Empowers patients and caregivers to adapt and to have a positive attitude, reduce the feeling of being a burdened, and improve self-esteem. The home visit considers all holistic way, leading to assistant planning, giving proper advice to improve the mental health of patients and caregivers effectively.

Preparation activities

Activity 1 To stimulate attentiveness, physical activity and relationships. Finger wiggles game, Loud applause game, and Bee hive game.

Activity 2 To develop teamwork, leadership skills, and an effective communication.

1. Students write their own expectations into a "Post it" and post it on several places. Then each group turns to each other and holds hands to pick up all the post it. Then, everyone sits down together, thinking about the group's expectations. Then

communicate through the use of the body language.

- 2. Students form a group of 10 in the row, the first person reads a sentence and then whisper to the second person in the row, continues doing the same until the last person.
- 3. Students form a group of 10 using the body as a proverbial gesture without verbal communication.

Activity 3 Learning through reflection (My expectation and your expectation, the most powerful communication is the result of an effective communication, teamwork and leadership)

- 1. Students form a small circle and discuss about what they discover from the activity
- 2. All students form a circle and discuss about what they discover from the activity

Activity 4 To understand the role, professional responsibility, and respect other professions including creating relationship with others and accepting the needs of the patient.

- 1. Students play land lord game
- 2. Students draw an unforgettable event

Activity 5 Learning through reflection. Giving students an opportunity to be thankful to all failures that made them who they are today so they can learn, accept, understand, and improve one self.

- 1. Students form a small circle and discuss about what they discover from the activity
- 2. All students form a circle and discuss about what they discover from the activity

Activity 6 To promote moral awareness which is the identity of Huachiew Chalermprakiat University's six virtues: diligence, patience, frugality, compassion, honesty, gratitude, and the four virtues: punctuality, verbal fluency, appropriate dress code, and positive thinking.

Have students draw up three of their strong point using a three-story board, then circle the strongest point.

Activity 7 Learning through reflection (self-worthiness, pass on goodness, virtue, and morality to others)

- 1. Students form a small circle and discuss about what they discover from the activity
- 2. All students form a circle and discuss about what they discover from the activity

Activity 8 Learning through reflection. We are all human, patients are human. Human beings are good creatures that are born, age, and die, it is a cycle of life. "Man is a noble animal" means "man is a noble animal by training." We, as service providers, must train our mind in order to provide patient care with a good heart.

Students form a small circle and discuss about the activity

2 Three home visits and after-action review (AAR) including knowledge management among team every visit as follows

2.1 **Home** Visiting students were divided into 9 teams consisting of students from each faculty. Each team was responsible for visiting two patients 3 times (1-2 weeks apart), together with the community health volunteer. Students explained project aims to patients and caregivers then have patients sign the consent form in order to be able to participate in the project. Then, took medical history and performed physical examination for patients and families. Students also provided cares and advices according to problems and needs of patients and families. On the 2nd and 3rd visits, students took medical history, performed physical examination, and assessed problems and evaluated other additional needs of patients as well as provided ongoing cares and advices from the 1st visit and new problems encountered in each visit.

2.2 **Knowledge management.** Every afternoon after home visit, students presented their experience, outcome of home visit and patient care plan for the next visit (summarize after action review (AAR))

3 Innovation for individual patient was also assigned. Each group had to come up with an innovation to help promoting the care of patients who are under their responsibility. The innovation should be creative, inexpensive, practical and must be

delivered to their patients on the final home visit.

Interprofessional education learning outcomes were assessed by using series of questionnaires including interprofessional education readiness, capability in learning all 6 areas of interprofessional education, attitude toward interprofessional education, patient satisfaction, and assessment via observation. Moreover, the program yet developed and assessed a Systems Development Life Cycle (SDLC) for patient tracking.

Data Analysis

The learning outcomes of the students after the program were significantly different in all aspects when compared with results from before entering the program (Wilcoxon signed ranks test, p -value < 0.05) such as interprofessional learning readiness, capability in learning all 6 areas: role and responsibility of the profession, respect other professions, team work, leadership and reflection, effective interprofessional communication and social relationship, recognizing patient needs, moral and ethics. The assessment showed that attitudes toward interprofessional education and patient satisfaction were scored as high (Table 1-5). Innovation for individual patient was appropriate such as Dazzling bag (A), Little elephant hand exercise (B) One step at a time (C). Information system for patient tracking

IPE-ICT HCU was found to be effective and can be used to monitor patient continuously. Moreover, it can be used as a channel for interprofessional education. Home visit satisfaction was scored as high to highest.







A B C

HCU Interprofessional Education

- 1. Activity to prepare students for interprofessional learning through workshop activities
 - 1.1 Games-Based Learning 9 games
 - 1.2 To attend lectures on community visits
- **2. Home visit**: Three home visits and after-action review (AAR)
- **3. Group innovation:** Innovation for individual patient was also assigned.

Results of Interprofessional Education

- 1. Readiness for Inter-professional Learning
- 2. Perceptions and skills in an interprofessional learning:
 - 2.1 Roles and Responsibilities
 - 2.2 Teamwork and leadership
 - 2.3 Interprofessional Communication
 - 2.4 Relationship with others, and recognizing the need of the patient
 - 2.5 Learning and reflection
 - 2.6 Moral and ethics
- 3. Satisfaction of recipients in the project.

Figure 1 Conceptual Framework

Table 1 Readiness for Inter-professional Learning Scale (RIPLS) pre-test and post-test (Positive questions)

| Rea | ndiness for Inter-professional Learning | Pre | -test | Pos | t-test | p - | |
|-----|--|-----------------|-------------|-----------|-----------|------------|--|
| | | Mode (%) | Min-MaxM | lode (%) | Min-Max | Value | |
| 1. | Learning with other students will make | 4 (66.25) | 2.00-5.00 5 | (51.25) | 3.00-5.00 | < 0.001 | |
| | me become a more effective | | | | | | |
| 2. | Patients would ultimately benefit if | 4 (58.75) | 2.00-5.005 | (58.75) | 3.00-5.00 | < 0.001 | |
| | health care students worked together to | | | | | | |
| 3. | Shared learning with other health care | 4 (56.25) | 2.00-5.005 | (61.25) | 4.00-5.00 | < 0.05 | |
| | students will increase my ability to | | | | | | |
| 4. | I have to acquire much more knowledge | 4 (57.50) | 2.00-5.00 5 | (57.50) | 3.00-5.00 | < 0.001 | |
| | and skills than other health care students | | | | | | |
| 5. | Communication skills should be learned | 4 (66.25) | 2.00-5.00 5 | (47.50) | 3.00-5.00 | < 0.05 | |
| | with other health care students | | | | | | |
| 6. | Shared learning with other health care | 4)66.25(| 2.00-5.00 5 |)62.50(| 3.00-5.00 | < 0.001 | |
| | students will help me to communicate | | | | | | |
| 7. | Shared learning will help me think | 4 (62.50) | 2.00-5.00 5 | (55.00) | 3.00-5.00 | < 0.001 | |
| | positively about other professionals | | | | | | |
| 8. | For small-group learning to work, | 4 (61.25) | 2.00-5.005 | (61.25) | 3.00-5.00 | < 0.05 | |
| | students need to respect and trust each | | | | | | |
| 9. | Team-working skills are essential for all | 4 (65.00) | 2.00-5.004 | (50.00) | 3.00-5.00 | 0.08 | |
| | health care students to learn | | | | | | |
| 10. | Shared learning will help me to | 4 (65.00) | 2.00-5.00 5 | 5 (58.75) | 3.00-5.00 | < 0.001 | |
| | understand my own limitations | | | | | | |
| 16. | I would welcome the opportunity to | 4 (53.75) | 1.00-5.00 5 | 5 (62.50) | 2.00-5.00 | < 0.001 | |
| | work on small group projects with other | | | | | | |
| 17. | Shared learning will help to clarify the | 4 (60.00) | 1.00-5.00 5 | (58.75) | 2.00-5.00 | < 0.001 | |
| | nature of patients problems | | | | | | |
| 18. | Shared learning before qualification will | 4 (61.25) | 1.00-5.00 5 | (52.50) | 2.00-5.00 | < 0.05 | |
| | help me to become a better team worker | | | | | | |
| 19. | Learning with health care students | 4 (58.75) | 1.00-5.00 5 | (66.25) | 2.00-5.00 | < 0.001 | |
| | before qualification would improve | | | | | | |
| | | 4 (61.33) | 4 | 5 (57.41) | | < 0.001 | |

Table 2 Readiness for Inter-professional Learning Scale (RIPLS) pre-test and post-test (Negative questions)

| eadiness for Inter-professional Learning Pre-t | | e-test | Pos | t-test | p - | |
|--|-----------|-----------|-----------|-----------|------------|--|
| | Mode | Min-Max | Mode | Min-Max | Valu | |
| 11. I don't want to waste my time | 4 (28.75) | 2.00-5.00 | 1 (31.25) | 1.00-5.00 | 0.082 | |
| 12. It is not necessary for undergraduate | 4 (33.75) | 2.00-5.00 | 1 (30.00) | 1.00-5.00 | 0.168 | |
| 13. I am not sure what my professional role | 3 (33.75) | 1.00-5.00 | 1 (27.50) | 1.00-5.00 | 0.176 | |
| 14. Clinical problem-solving skills can only be learnt with students from my | 4 (35.00) | 1.00-5.00 | 1 (33.75) | 1.00-5.00 | 0.053 | |
| 15. The function of nurses and therapists | 4 (63.75) | 1.00-5.00 | 4 (40.00) | 1.00-5.00 | 0.255 | |
| | 4 (39.00) | | 1 (32.50) | | < 0.05 | |

Table 3 Scores on knowledge and skills in interprofessional learning before and after joining the project

| | Pre-test | | Post-test | | p- |
|--|-----------|-------------|-----------|-------------|--------|
| | Mode | Min-Max | Mode | Min-Max | Value |
| | (%) | (1.00-4.00) | (%) | (1.00-4.00) | |
| 1. Roles and Responsibilities | 4(37.12) | | 4(47.71) | | <0.001 |
| - Roles and Responsibilities | 4 (35.50) | 1.00 -4.00 | 4 (42.50) | 2.00- | 0.083 |
| | | | | 4.00 | |
| - Role/Responsibility Integration | 4 (32.50) | 1.00 -4.00 | 4 (43.75) | 1.00- | < 0.05 |
| | | | | 4.00 | |
| - Accountability to professional | 4 (37.50) | 1.00 -4.00 | 4 (47.50) | 2.00- | 0.056 |
| judgment when assuming tasks or | | | | 4.00 | |
| delegating tasks. | | | | | |
| - Accountability to the failure of | 4 (43.75) | 1.00 -4.00 | 4 (55.00) | 2.00- | < 0.05 |
| collaborative goals. | | | | 4.00 | |
| - Accountability to individual actions | 4 (37.50) | 2.00-4.00 | 4 (53.75) | 2.00- | 0.056 |
| that impact the team. | | | | 4.00 | |

Table 3 (cont.)

| | Pre-test | | Post | p- | |
|---|-----------|-------------|-----------|-------------|---------|
| | Mode (%) | Min-Max | Mode (%) | Min-Max | Value |
| | | (1.00-4.00) | | (1.00-4.00) | |
| - Accountability to explain own scope | 3 (37.50) | 1.00-4.00 | 3 (46.25) | 1.00-4.00 | 0.085 |
| of practice code of ethics, standards | | | | | |
| and/or clinical guidelines in relation to | | | | | |
| collaborative patient-centred | | | | | |
| relationship. | | | | | |
| 2.Teamwork and leadership | 4 (43.33) | | 4 (60.25) | | < 0.001 |
| - Recognition of the relationship | 4 (41.25) | 1.00-4.00 | 4 (45.00) | 2.00-4.00 | < 0.05 |
| between team functioning and quality | | | | | |
| of care. | | | | | |
| - Strategic understanding to improve | 3 (40.00) | 1.00-4.00 | 4 (51.25) | 1.00-4.00 | < 0.05 |
| teamwork. | | | | | |
| - Understands the important of | 3 (37.50) | 1.00-4.00 | 4 (45.00) | 2.00-4.00 | 0.144 |
| sharing information and takes turn to | | | | | |
| be a leader with other professions. | | | | | |
| - Accepting that you are part of the | 4 (41.25) | 1.00-4.00 | 4 (45.00) | 2.00-4.00 | 0.058 |
| team | | | | | |
| - Being a part of decision making in | 4 (41.25) | 1.00-4.00 | 4 (55.00) | 2.00-4.00 | < 0.05 |
| the interprofessional team | | | | | |
| - Considerate to other prospective and | 4 (41.25) | 1.00-4.00 | 4 (57.50) | 2.00-4.00 | < 0.05 |
| opinions | | | | | |
| - Seeks explanation with great respect | 4 (40.00) | 1.00-4.00 | 4 (58.75) | 2.00-4.00 | < 0.05 |
| once misunderstanding arises | | | | | |
| - Pay attention to others | 4 (52.50) | 1.00-4.00 | 4 (72.50) | 2.00-4.00 | < 0.05 |
| - Uses appropriate strategies to | 4 (43.75) | 1.00-4.00 | 4 (51.25) | 2.00-4.00 | < 0.05 |
| resolve conflict | | | | | |
| 3. Interprofessional Communication | 4 (46.60) | | 4 (54.82) | | < 0.001 |
| - Communicates with others in a | 4 (56.25) | 1.00-4.00 | 4 (63.75) | 2.00-4.00 | < 0.05 |
| confident, assertive and respectful | | | | | |
| manner. | | | | | |

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Table 3 (cont.)

| | Pre | e-test | Post-test | | р- |
|--|-----------------|-------------|-----------------|-------------|---------|
| | Mode (%) | Min-Max | Mode (%) | Min-Max | Value |
| | | (1.00-4.00) | | (1.00-4.00) | |
| - Responds or replies to requests in a | 4 (52.50) | 1.00-4.00 | 4 (57.50) | 2.00- | 0.054 |
| timely manner. | | | | 4.00 | |
| - Communication strategies (verbal & | 4 (42.50) | 1.00-4.00 | 4 (52.50) | 2.00- | < 0.05 |
| non- verbal) appropriately with others. | | | | 4.00 | |
| - Communicates in a logical and | 4 (40.00) | 1.00-4.00 | 4 (51.25) | 2.00- | < 0.05 |
| structured manner. | | | | 4.00 | |
| - Explains discipline-specific | 4 (43.75) | 1.00-4.00 | 4 (52.50) | 1.00- | < 0.05 |
| terminology/jargon. | | | | 4.00 | |
| - Uses strategies that are appropriate for | 4 (43.75) | 1.00-4.00 | 4 (50.00) | 2.00- | < 0.05 |
| communicating with individuals | | | | 4.00 | |
| 5. Relationship with others, and | 4 (42.25) | | 4 | | < 0.001 |
| recognizing the need of the patient | | | | | |
| 5.1 Relationships with others | 4 (41.25) | | 4 (62.18) | | < 0.001 |
| - Collaborates in interprofessional team | 4 (42.50) | 1.00-4.00 | 4 (61.25) | 2.00- | < 0.001 |
| in planning and patient care. | | | | 4.00 | |
| - Collects data from other professions to | 4 (38.75) | 1.00-4.00 | 4 (62.50) | 2.00- | < 0.001 |
| plan and take care of patients. | | | | 4.00 | |
| - Shares information with other | 4 (40.00) | 1.00-4.00 | 4 (63.75) | 2.00- | < 0.001 |
| professions. | | | | 4.00 | |
| Castra nationta desirion | 4 (43.75) | 1.00-4.00 | 4 (61.25) | 2.00- | < 0.001 |
| - Seeks patients decision | | | | 4.00 | |
| 5.2 Collaboration with patients and | 4 (43.25) | | 4 (55.25) | | < 0.001 |
| families | | | | | |
| - Seeks information from patients and | 4 (41.25) | 1.00-4.00 | 4 (52.50) | 2.00- | < 0.05 |
| families | | | | 4.00 | |
| - Collects information about beliefs and | 4 (43.75) | 1.00-4.00 | 4 (55.00) | 2.00- | < 0.05 |
| values of patients and families. | | | | 4.00 | |
| - Shares alternatives and information | 4 (43.75) | 1.00-4.00 | 4 (57.50) | 2.00- | < 0.05 |
| regarding health care of patients and | | | | 4.00 | |
| families. | | | | | |

| - Support patients and families to be | 4 (42.50) | 1.00-4.00 | 4 (58.75) | 2.00- | < 0.001 |
|---------------------------------------|-----------|-----------|-----------|-------|---------|
| part of decision making. | | | | 4.00 | |
| - Seeks information from patients and | 4 (45.00) | 1.00-4.00 | 4 (52.50) | 2.00- | < 0.05 |
| families. | | | | 4.00 | |

Table 4 The teachers' comments on students after the project.

| Topics | Participatory observation by teachers |
|-------------------------|---|
| 1. Understands role, | Students understood their roles, responsibilities including respect for |
| responsibility of their | other professions. Students learned their professional roles and |
| profession and respect | created mutual agreements in patient care. From participatory |
| other professions | observation, students exchanged knowledge, prioritized their duties, |
| | and respected others roles. |
| 2. Teamwork and | Students learned to work as a team where they took turn as leaders |
| leadership | and followers. Once caring for variety of patients, many students |
| | demonstrated leadership and became more courageous. |
| 3. Learning through | Students brought information and problems they encountered to |
| reflection | share with teachers and friends in order to find solutions. The |
| | students were enthusiastic, only few needed encouragement from |
| | teachers. |
| 4. Interprofessional | Students asked information from patients, families, other students in |
| communication | the team in order to develop / update the system. However, due to |
| | limited time, communication through Line group was necessary |
| | after the visit. |
| 5. Relationship with | Students built relationships with others and learned information of |
| others, and | the patients through staffs. They established relationships with |
| recognizing the need | patients and their families. Students asked for permission to take |
| of the patient | care of patient every time. Students showed respect for patient |
| | rights. Teachers noticed that students were accepted by patients, |
| | relatives, and the community. |
| 6. Moral and ethics | Students had moral and good ethics such as punctuality; coming |
| | before appointment time and sending reminder within the team. |
| | There cut back on unnecessary thing such as making a urine bag |

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| | carrier from unused cloths. |
|-----------------|---|
| 7. Other | It was a good project and should be included in the curriculum. |
| recommendations | However, time for activities was limited; more time should be |
| | expanded for home visiting. |

Table 5 Satisfaction of recipients in the project.

| Characteristic of students during home visit | Mode (%) | Max -Min | Interpretation |
|--|-----------|----------|----------------|
| 1. Service with courtesy, politeness, and smile | 5 (76.93) | 4.00- | Strongly agree |
| | | 5.00 | |
| 2. Service with willingness and enthusiasm | 5 (76.9) | 4.00- | Strongly agree |
| | | 5.00 | |
| 3. Service was convenient and fast | 5 (61.54) | 4.00- | Strongly agree |
| | | 5.00 | |
| 4. Recipients were able to communicate with | 5 (53.85) | 3.00- | Strongly agree |
| interprofessional students conveniently | | 5.00 | |
| 5. Interprofessional students were responsible and | 5 (53.85) | 4.00- | Strongly agree |
| committed to home visiting | | 5.00 | |
| 6. Satisfaction rating of the service of | 5 (76.9) | 3.00- | Strongly agree |
| interprofessional students | | 5.00 | |
| Overall satisfaction | 5 (66.67) | | Strongly |
| | | | agree |

Findings and Discussion

This study findings indicated that interprofessional education in the form of home visits with service mind through several of process from preparing for home visit, 3 home visits, after action review (AAR), and innovation for individual patient was a good practice model that can be used as a learning model in both within the curriculum and outside the curriculum at

Huachiew Chalermprakiet University. This is consistent with Sunee Setasathien finding which studied the interprofessional model on students of the rehabilitation medicine team at Udon Thani hospital. The target population was the 4th year student in medicine, physical therapy, occupational therapy and nursing from the university who will go through their rotation in rehabilitation rotation. Students from each profession were divided into sub-groups

consisting of all professions and assigned to jointly study and plan the care of hemiplegic patients in the rehabilitation center. Each group had an instructor who was a group observer. Evaluation was performed according to student satisfaction and teachers' opinions on teaching method. Behavior was assessed during learning by instructor observation. The study indicated that that students agree the interprofessional model helped understanding the role of each profession and the nature of the collaboration.

Teachers and practitioners do not feel that this teaching method increase their workload. (Setasathien, 2015) In addition, the study of pina-Tan which conducted a pilot study to introduce an interprofessional education approach to patient care in the community in the Philippines. Medical students, nurses. physical therapists, and speech therapists were brought together caring for patients with intensive care needed in community. The activities of all students included: understanding the role of each profession, patient selection, evaluation, patient care planning, and follow up on patient outcomes. The results of the study found that students believed that interprofessional learning was beneficial in terms of teamwork, understanding the role of other professions, holistic care, and community service systems. (Opina-Tan,

2013). Morphet and colleage studied interprofessional education in last year medical and nursing students. The team worked in the ward for 2 weeks under the supervision of professionals. The study indicated that after working together, students had a good response to the interprofessional approach. This method of learning was similar to real working context that was working together with different professions (Morphet, 2014). Pornmanee Prakob brought together an interprofessional approach to develop a service system for HIV-infected patients. It was found that the collaboration between physicians, nurses, pharmacists, medical technologists and the support group in caring of HIV patients resulted in the passing of the HIVQUL-T criteria for noncompliance include CD4, viral load, Pap smear, the satisfaction of the service recipients increased significantly (Dabsok, 2014).

Mahasarakam model was an example of interprofessional learning medical students, between pharmacy students and architecture students. home visiting assignment was creating activities for disables and elders. The process began with analyzing the course, adjusting differences between professional. The content consisted of IN HOMESSS principles, knowledge of medicine and the community, home renovation according to

Universal design. The pre-activity preparation was set for students to get to know each other and worked together as a team. Then, home visiting for disables and elderly in the community actually had an interprofessional team such as doctors, nurses, pharmacists and architects as student mentors. Interprofessional learning allowed students to understand patient problems in the context of the actual community, understand their roles, value their profession, create friends network and have experiences that were not available in the classroom (Mahasarakham University, 2016).

Rasi Salai Model was an example of interprofessional work by using contextbased learning for professional nurses and community health workers who provided primary care under a systematic management framework. The operation started with an orientation for those involved; staffs, coordinators, and doctors, to understand and to motivate together. The training was 3 days per week for 4-6 weeks focusing on patient care in real situation, selecting patients in the area, patient physical examination, presenting patient cases. Collaboration of relevant agencies at sub-district and district level was conducted. Research was done to evaluate the effectiveness of learning which led to a better referral system (Rasi Salai hospital, 2016).

From all relevant research found that interprofessional learning is one of the strategies in reforming medical education in order to provide graduates with the skills and ability to work as a team and to respond to the current situation and health system. Moreover, students are pleased and satisfied with the interprofessional teaching style. This is a great way for last year students who have completed their studies and several training experience, and ready for actual work. Students will get a real work experiences that cannot be found in the classroom.

Recommendation

This study findings indicated that interprofessional education in the form of home visits with service mind through several processes from preparing for home visit, 3 home visits, after action review (AAR), and innovation for individual patient was a good practice model that can be used as a learning model in both regular curriculum and extracurricular learning activities at Huachiew Chalermprakiet University. Moreover, information an system IPE-ICT HCU can be used to track patient progress and also used as a channel for interprofessional education.

Suggestions and additional comments

Interprofessional education in the form of home visits should be set in smaller group since large group can be

difficult to manage in term of activity arrangement.

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