

**TRAINING PHYSICIANS TO DELIVER BAD NEWS USING
PEER ROLE PLAY COMPARED TO STANDARDIZED
PATIENTS**



KAMOLTIP LERTCHAISATAPORN

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE
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PATIENTS**

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**TRAINING PHYSICIANS TO DELIVER BAD NEWS USING PEER ROLE PLAY
COMPARED TO STANDARDIZED PATIENTS**

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ABSTRACT

The purposes of this study were to investigate the effectiveness of training physicians to deliver bad news and to examine the participants' satisfaction and the perceived effect of training. The study was a one-day Breaking Bad News (BBN) training workshop. This was done by peer role-play (PRP) compared to standardized patients (SP). Thirty-four physicians were randomly assigned into two groups receiving training with PRP or SP. The assessment of communication skills used the Gap-Kalamazoo Communication Skills Assessment Form with one SP encounter at the pre-workshop and two SP encounters at the post-workshop. After the training, each participant completed questionnaires evaluating their satisfaction and perceived effects of the training. The one-day workshop, which the physicians practiced using either PRP or SP, could yield a significant improvement in BBN skills following the training. There was no significant difference in score improvement between the two groups. Both teaching methods seemed comparable for the BBN skill training and were very well accepted with highly perceived effectiveness from participants.

**KEY WORDS: PEER ROLE-PLAY / STANDARDIZED PATIENTS /
COMMUNICATION SKILL TRAINING / DOCTOR-PATIENT
COMMUNICATION / BREAKING BAD NEWS**

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การฝึกอบรมแพทย์ในการแจ้งข่าวร้ายด้วยการใช้การแสดงบทบาทสมมติโดยผู้เข้าอบรม
เปรียบเทียบกับผู้ป่วยมาตรฐาน

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บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาผลของการฝึกอบรมแพทย์ในการแจ้งข่าวร้าย และศึกษาความพึงพอใจของผู้เข้าร่วมการอบรมและการรับรู้ผลของการฝึกอบรม การศึกษานี้เป็นการจัดการอบรมเชิงปฏิบัติการในการแจ้งข่าวร้ายเป็นเวลาหนึ่งวันด้วยการใช้การแสดงบทบาทสมมติโดยผู้เข้าอบรมเปรียบเทียบกับการใช้ผู้ป่วยมาตรฐาน แพทย์สามสิบสี่คนถูกจัดเป็นสองกลุ่มแบบสุ่มให้ได้รับการฝึกด้วยการใช้การแสดงบทบาทสมมติโดยผู้เข้าอบรมหรือการฝึกโดยใช้ผู้ป่วยมาตรฐาน การประเมินทักษะการสื่อสารใช้แบบประเมินทักษะการสื่อสาร Gap-Kalamazoo ในการทดสอบการสื่อสารกับผู้ป่วยมาตรฐานหนึ่งข้อก่อนการฝึกอบรมและสองข้อหลังการฝึกอบรม ภายหลังจากการฝึกผู้เข้าร่วมการอบรมแต่ละคนตอบแบบสอบถามซึ่งประเมินความพึงพอใจและการรับรู้ผลของการฝึกอบรม พบว่าการฝึกอบรมแพทย์เป็นเวลาหนึ่งวันด้วยการแสดงบทบาทสมมติโดยผู้เข้าอบรมหรือการฝึกโดยใช้ผู้ป่วยมาตรฐานสามารถพัฒนาทักษะการแจ้งข่าวร้ายได้อย่างมีนัยสำคัญภายหลังการฝึกอบรม ไม่พบความแตกต่างกันอย่างมีนัยสำคัญในคะแนนที่เพิ่มขึ้นระหว่างสองกลุ่ม วิธีการสอนทั้งสองวิธีให้ผลเทียบเท่ากันสำหรับการฝึกทักษะการแจ้งข่าวร้าย และได้รับการยอมรับเป็นอย่างดีว่าเป็นวิธีการสอนที่มีประสิทธิภาพจากผู้เข้าร่วมการอบรม

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CHAPTER I

INTRODUCTION

This chapter describes background of the study, conceptual framework, purposes, research questions, and significance of the study.

1.1 Background

Good communication skills are important for physicians to communicate and enhance good relationships with their patients in everyday medical practice. In particular, effective communication between physicians and patients can potentially lead to more accomplishment of health outcomes, better compliance, and higher satisfaction.⁽¹⁻⁴⁾ Breaking bad news (BBN) is one of the most challenging situations for physicians since they are always involved in delivering bad news, such as diagnosis, treatment outcome, and prognosis, to patients and relatives. Bad news is undesirable to both doctors and patients. Some doctors feel uncomfortable and try to avoid BBN. However, bad news is the truth which seems actually helpful to patients. Avoiding BBN may be somewhat detrimental to patients.

Physicians need to be careful while delivering bad news to their patients since it involves emotions and feelings of recipients. Despite a critical skill for all physicians, there are very few practical teaching programs of BBN in medical schools. A small number of physicians receive adequate guidance during their initial experiences.⁽⁵⁾ Some physicians don't feel confident and try to avoid BBN for fear of worse consequences to their patients. Whereas, others apprehend that patients and relatives may not understand or become unsatisfied with such bad news.

Communication skills for BBN need to be taught and practiced in medical professions with several ways and methods. The commonly applied methods include didactic, video demonstrations, small group discussion, role modeling, demonstration,

real patients, peer role play (PRP), and standardized patient (SP).^(6, 7) A review of strategies for teaching BBN recommended more faculty-intensive educational interventions in delivering bad news (e.g., role play with feedback, clinical teaching).⁽⁷⁾ Effective teaching of BBN could be essential for good medical care and satisfaction between patients and physicians.

A systematic review of effective training methods for teaching communication skills to physicians revealed that training programs are effective if they last for at least one day⁽⁸⁻¹¹⁾, with the learner-centered on practicing skills.⁽⁸⁻¹¹⁾ Also, the best training strategies include small group discussions, role-play and feedback.⁽¹¹⁾ Thus, the training programs on effective communication skills consist of active, practice-oriented strategies.⁽¹¹⁾ Meanwhile, oral presentation, written information and role modeling can only be the supportive approaches.⁽¹¹⁾ Furthermore, the future research on effective training approach is suggested for specific topics, such as BBN and communication risks. Moreover, the methods of training and the content of communication skills need to be focused so they can best match with participants and their learning needs.⁽¹¹⁾

For BBN training, didactic methods are less effective than experiential methods.^(12, 13) Effective method of teaching communication skills should take the form of a practical approach such as PRP or SP. Both methods can promote learning in communication. SP is one of the popular teaching methods for the training of communication skills. This could be a real patient or an actor trained to play the patient role as a way to teach effective communication skills. There are many advantages to use SP in the training. The use of SP is beneficial for both teaching and assessing communication skills.^(14, 15) Applying SP in training requires more demanding scenarios and emotional safety.⁽¹⁶⁾ SP can also provide feedback to learners.⁽¹⁴⁾ However, the main limitation of using SP is its high cost.⁽¹⁷⁾ Additionally, it takes time for SP to understand the role.

PRP is another effective method to teach the communication skills. In this method, medical students switch their roles in acting as a doctor and a patient. There are many advantages of role play; for example, use of less resources, ease to practice in real world communication training, provision of an opportunity for rehearsal, and support to an empathic approach with patients' concerns⁽¹⁸⁾. However, the limitation

of this method is that students may be unrealistic or some of them may feel uncomfortable to play a role with friends. Moreover, the training with PRP requires a careful planning, with experienced facilitators, realistic roles, and appropriate tasks for the learner's level and feedback.⁽¹⁹⁾

Lane and colleagues reviewed the use of PRP and SP in the training of communication skills.⁽²⁰⁾ This review emphasized a lack of well-designed studies by comparing the effectiveness of teaching communication skills with PRP and SP. To date, there are scarce studies to compare the effectiveness of BBN training with PRP and SP. Both RP and SP can be important tools for training communication skills. In a recent study of the cost-effectiveness, Bosse et al ⁽¹⁶⁾ reported a major advantage from the cost-effectiveness analysis of PRP as compared to SP. Both teaching methods could yield the comparable effectiveness and results similar to post training competence.⁽²¹⁻²³⁾

As mentioned earlier, there is still a gap in the literature review of the best method to teach BBN. Thus, there is a need for a well-designed study to assess the communication competency after the BBN training with PRP and SP. It is very important to fulfill the gap in this knowledge. Therefore, I intend to conduct the study on the effect of training physicians to deliver bad news using PRP compared to SP on the performance of communication skills among the participants. Moreover, to determine the participant's perspectives on the satisfaction and the perceived effect of communication training with PRP and SP. The following reasons are the significances of this study. First, the findings from this present study could be useful to medical institutions in designing the training programs and choosing the most appropriate method for teaching of BBN. Second, the study results could be applicable to other groups of learners, such as medical students, residents, and physicians. Third, the expected outcomes from this study would be helpful for the improvement of teaching methods and the future training of BBN skills.

At Chulabhorn Hospital, the medical services mainly focus on treating cancer patients. Having good doctor-patient communication skills potentially helps promote the level of trust in patients for their treatments and reduce misconceptions. The in-hospital physicians include medical staffs and interns with different medical school training backgrounds in communication skills of varying standards. From time

to time, the most difficult task for the novice is delivering bad news and discussing about an advanced treatment plan. The novice medical staffs and interns often feel uncomfortable when they have to encounter those situations.

The hospital recognizes the necessity to enhance the doctor-patient communication skills of medical staffs and interns. In order to design a suitable training on communication skills for learners, we need to answer one important question: Which training would be the most beneficial method in term of contexts and learners? Nonetheless, there has been no consensus among medical schools and training programs regarding the best method to teach BBN. In part, it may be due to the lack or the limited number of research studies to compare the effectiveness of teaching communication skills with PRP and SP.⁽²⁰⁾

Hence, the aims of this study were to compare the effectiveness of training BBN skills to physicians with using PRP and SP, and assess the participant's perspectives on communication training with using both methods.

1.2 Conceptual framework

According to the aims of this study, I used Kolb's experiential learning theory and the Kalamazoo Consensus Statement for the conceptual framework in this study.^(24, 25)

Kolb's experiential learning theory was applicable to both teaching and learning in this research.⁽²⁴⁾ Both PRP and SP are parts of the experiential educational methods. The acquisition of knowledge and skills in the experiential learning theory is through the meaning that the learners find in their experiences.⁽²⁶⁾

The Kalamazoo Consensus Statement was developed from the conference of the leaders in communication and medical education.⁽²⁵⁾ This group of experts reported seven essential skills for communication tasks.⁽²⁵⁾ The Kalamazoo Consensus Statement was used to serve as a framework for the development of many communication skill training programs and communication assessment tools.⁽²⁷⁻²⁹⁾ Moreover, the Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF), a communication assessment tool in this study, was also developed from the Kalamazoo

Consensus Statement.⁽³⁰⁾ Therefore, I used the Kalamazoo Consensus Statement as a framework to teach and assess doctor-patient communication in this study.

Detail of Kolb's experiential learning theory and the Kalamazoo Consensus Statement was discussed in Chapter 2.

1.3 Research questions

The research questions in this study were:

Question 1: Do physicians who are trained to deliver bad news using PRP demonstrate statistically significant higher performance in the communication skills than those trained with SP?

Question 2: What are the participant perspectives on the acceptability and the perceived effect of communication training with PRP and SP?

1.4 The hypothesis of this study

From the literature review, PRP is a powerful educational strategy to teach the communication skills. PRP allows the medical students to experience the perspectives of both a clinician and a patient. This method encourages the participants to view the situations or problems from various perspectives other than their own. Moreover, there is evidence from the previous study which demonstrated that PRP offers a methodological benefit in promotion the empathy for patient's perspectives. Bosse and colleague conducted a study on the training communication skills to medical students by comparing the effects of teaching between PRP and SP.⁽¹⁸⁾ The authors reported that the switching roles between acting as a doctor and a patient could help the students understand the feelings of patients. They concluded that PRP instruction provides a methodological advantage of enhancing empathy to patients concerns.⁽¹⁸⁾ These considerations will make the teaching with PRP better than the training with SP. PRP fosters the changes in attitudes and perceptions, as well as can facilitate the modification of behaviors. It is ideally suited to doctors for practicing their communication skills.

Moreover, the findings from the previous study on teaching communication skills with PRP and SP for the undergraduate medical students reported that all of these parts were rated higher in the SP group.⁽³¹⁾ The literature suggested that the structuring feedback from SP was useful for the learning process.^(32, 33) One reason which might elucidate the higher ratings of the perceived effectiveness in the SP group was the presence of feedback provided by SPs in the previous study.⁽³¹⁾ However, the SPs in our study were not assigned to give feedback to the participants. Therefore, the main learning experiences came from the discussions of group members in the training with PRP and SP methods.^(19, 32, 34)

Therefore, the hypothesis of this study were; (1) “physicians who are trained to deliver bad news using PRP demonstrate the statistically significant higher performance on the communication skills than those trained with SP”; (2) “The participant’s perspectives on the satisfaction and the perceived effect of communication training with PRP and SP are comparable and very well accepted.”

1.5 The Purposes of the study

The purpose of the study was to study the effect of training physicians to deliver bad news using PRP compared to SP on the performance of communication skills among the participants. Moreover, to determine the participant’s perspectives on the satisfaction and the perceived effect of communication training with PRP and SP.

1.6 The Scope of the study

This study focused on the communication skills training program, more specifically, breaking bad news to cancer patient. The study took place at Chulabhorn Hospital, an institution with the context of comprehensive cancer center hospital. Chulabhorn Hospital is a public higher education institution located in the metropolis of Bangkok. Chulabhorn Hospital is an educational center that provides services involving for patient treatment, medical training, and research focusing on cancer. The clinical teaching facilities of the college consist of a current one hundred-bed cancer hospital. The scope of bad news in this study was defined as the news of cancer

diagnosis, recurrence of cancer, and stopping anticancer treatment due to intolerability or refractory to treatment.

The participants in this study were limited to those who have been working in the hospital. All participants in this study were in-hospital physicians include medical staffs and interns. They graduated from different medical school with various training backgrounds in communication skills. Before starting the internship program at Chulabhorn Hospital, the interns have to take a one-year clinical encounter program at the province hospital outside Bangkok. The Chulabhorn Hospital's internship program is a two-year clinical encounter program. The interns have to rotate to major wards: internal medicine, surgery, gynecology for two months each, and one month in each minor ward such as general practitioner's OPD, orthopedics. While the interns rotate to each ward the intern follows a mentor as an apprentice, practicing breaking bad news. They can also observe the professional behavior, doctor-patient communication and interpersonal skills directly from the mentor and some of them can recognize a role model.

The study period ranged from February to June 2018. The communication skills training workshop was administered on February 22, 2018. Participants attended the one-day BBN training workshop. A one-day training program was for the BBN training. The program started with an overview lecture on the principle of communication. Next, the concepts and methods of delivering bad news were introduced to all participants, with the main focus on the caring of cancer patients and a detailed instruction on the "SPIKES" protocol.⁽³⁵⁾ The invited speakers discussed the role of effective communication skills. They emphasized the doctor's role in delivering BBN and how to use them effectively.

I randomly stratified the participants into two groups (the PRP or the SP group). The intervention session took two hours to practice with two training cases. There were four groups of PRP and four groups of SP. For the SP arm, each small group consisted of five physicians and two SPs. For the PRP arm, each small group comprised of five physicians. All of them practiced breaking bad news with two training cases.

For the first training case, one of the group members was assigned to play in the physician's role and one for the patient role in the PRP group. The rest of the

members in each group were the observers. Similarly, one of the group members in the SP group was assigned to play in the physician's role and the rest of the members in each group were the observers. They practiced delivering bad news using the SPIKES protocol with peers in the PRP group and with SPs in the SP group.

The physicians, who received the patient role in the PRP group, took time to review the script for the patient. Then, the facilitators briefed the training cases. Next, the participants in the physician role conducted a twenty-minute interview for each case. The rests of the group were observers. Finally, the facilitator gave the concluded feedbacks, followed by the group discussion and debriefing. After that, for the second training case, the physicians rotated in the roles of a physician and observers in the SP group, and rotated in the roles of a patient, a physician and observers in the PRP group. The communication skill was assessed with the SP encounters before and after the workshop for two weeks. All participants filled in the questionnaires to assess their ratings for the satisfaction and the perceived effects of the training.

The speakers of the communication skills training workshop consisted of two experts in the field of communication skills training for physicians. In this study, the role of speakers was limited to just being the resource persons who helped facilitate in both groups in order to prevent biases from speakers which may have influence for the study results. The SP in this study only portrayed their roles and they were not assigned to give feedback to the participants. Therefore, the main learning experiences came from the discussions of group members in the training with PRP and SP methods.

1.7 Definition of terms

Bad news refers to the news of diagnosis of cancer and recurrence of cancer.

Participants refer to the interns or the physicians who participated in this study.

Breaking bad news (BBN) refers to a process of informing a patient or family of bad news. In this study, BBN focused on the disclosure of cancer diagnosis and recurrence of cancer.

Standardized patient (SP) refers to a person trained to portray a patient's illness in a standardized way.

Peer role play (PRP) refers to an activity or an exercise which participants assume a role to represent personal, professional, or social characteristics, such as a patient's or a doctor's interactions with other participants in the training program.

Interns refer to recent medical school graduates who spent their first year of post-graduate on-the-job training at the province hospital outside Bangkok. Then they took the internship program at Chulabhorn Hospital for two years which the medical services mainly focus on treating cancer patients. They rotated between different departments namely internal medicine, surgery, gynecology, orthopedics, out-patient and emergency departments.

Chulabhorn Hospital is a hospital in Thailand where the domestic internship program takes place. The medical services in Chulabhorn Hospital are focusing on treating cancer patients.

Empathy refers to an ability to understand the patient's inner experiences and perspectives.⁽³⁶⁾

Standardized patient encounter (SP encounter) refers to a medical encounter of BBN conducted for the purposes of communication skill assessment.

1.8 Summary

Communication skill trainings are very important. The teaching and training of doctor-patient communication skills including delivering bad news are crucial for medical professionals. However, there has been a scarce evidence regarding the best method for the teaching and the training of the communication skills in delivering bad news.⁽²⁰⁾ The purposes of this study were to investigate the effect of training the physicians to deliver bad news using PRP compared to SP on the performance of communication skills. Moreover, to determine the participant's

perspectives on the satisfaction and the perceived effect of communication training with PRP and SP.



CHAPTER II

LITERATURE REVIEW

This chapter discusses the conceptual framework, the importance of training physicians to deliver bad news, the methods for teaching BBN, and the assessment of communication skills.

2.1 Conceptual framework

2.1.1 Experiential learning theory

Kolb identified a four stage experiential learning cycle. In the experiential learning theory, there are four steps of the cycle that represent the processes of complex learning (see Figure 2.1).⁽²⁴⁾ First, a concrete experience is the stage where learners will gain experiences from the practice of the instructor-led activities. Activities may be an experiment, listening to the story, role-playing, or simulation. Second, a reflective observation is a process by which learners express their opinions and their own sense of experiences in performing the activities and exchanging them with group members. The learners will learn from the ideas of different people. This will allow for more extensive learning. Third, an abstract conceptualization is the stage where the learners summarize the feedbacks from their reflections. At this stage, teachers may use questions to motivate the learners to help them summarize their ideas. Last, an active experimentation is the stage that the learners will have to apply their knowledge to the learning activities. This is an important step for the instructor to give students an opportunity to learn about the application of knowledge.⁽²⁴⁾

Both PRP and SP are parts of the experiential educational methods. The acquisition of new knowledge in the experiential learning theory is through the meaning that the students find in their experiences.⁽²⁶⁾ The using of both PRP and SP

for an inspiration of learning through the interactions with the environment, discussions with peers or facilitators, and reflection.⁽³⁶⁾

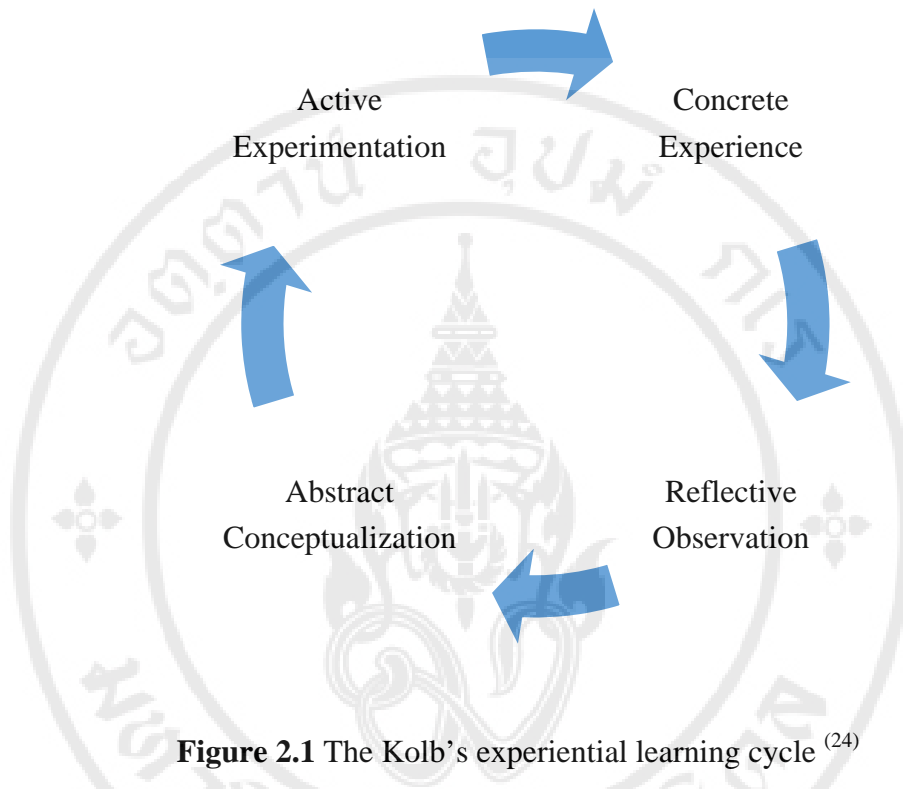


Figure 2.1 The Kolb's experiential learning cycle ⁽²⁴⁾

The experiential learning theory was applied to both teaching and learning in this study.⁽²⁴⁾ The communication skills training provided a learning experience for participants at the clinical level to maximize their learning efficiency. Choose the learning experience to suit for the learners. This workshop gave participant an opportunity to have a reflective observation period. The speakers should encourage the learners to explain the concept that they obtained from the review of the experience and allow learners to fully inquire if they do not understand. Moreover, the speakers need to provide appropriate feedback to help participant create the right concept in deliver bad news before they apply it to active experiments.⁽²⁴⁾

2.1.2 The Kalamazoo Consensus Statement

The Kalamazoo Consensus Statement was established in 1999 from the conference on physicians–patient communication.⁽²⁵⁾ The objective of the meeting was

to recognize a list of essential elements for the doctors–patient communication.⁽²⁵⁾ The Kalamazoo Consensus Statement reported seven essential skills for communication tasks: (1) opening the discussion; (2) building the doctor–patient relationship; (3) gathering information; (4) understanding the patient’s perspectives; (5) sharing information; (6) reaching agreement on problems and plans; and (7) providing closure.⁽²⁵⁾

The Kalamazoo Consensus Statement was widely used to serve as a framework for the development of many communication skill training programs and communication assessment tools.⁽²⁷⁻²⁹⁾ Moreover, the Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF), a communication assessment tool in this study, was also developed from the Kalamazoo Consensus Statement.⁽³⁰⁾

2.2 Training physicians to deliver bad news: Why is it important?

Cancer patients suffer from physical, psychological and emotional problems.⁽⁵⁾ The ways physicians manage these issues play vital roles in the outcome of patients.⁽³⁷⁾ Delivering bad news is one of the most essential communication skills. The physicians need to inevitably involve in this process. If doctors have a lack of knowledge and skills in BBN, they will lose their confidence to deliver it. It can have negative outcomes to physicians, patients, and relatives. Hence, the training physicians to deliver bad news are very important. BBN is also a complex communication task, which requires many skills include incorporate the patients in decision-making, interacting with family members, responding to patients’ emotional reactions, facing the dilemma to give a hope when the situation is bad, and coping with the stress.⁽³⁵⁾

Therefore, it is important to conduct the teaching and training of communication skills. Many health care organizations provide the training of communication skills.^(37, 38) A task of BBN should be for the improvement of understanding the process involved and the well-established principles of communication.

2.3 Teaching methods for delivering bad news

There are several teaching methods of BBN. The commonly used methods to teach how to deliver bad news include didactic methods, video demonstration, small group discussions, role modeling and demonstration, real patients, PRP, and SP. (Table 2.1 summarized the advantages and disadvantages of each BBN teaching method)

2.3.1 Didactic methods

Lectures are commonly used for teaching breaking bad news.⁽³⁹⁾ Some studies have discussed the use of an interactive lecture to introduce some basic information and encourage the participants to practice in the small group discussion.^(40, 41) There is also the use of videotapes of breaking bad news situation in lectures. Then the participants will discuss about the encounters. The following steps of delivering bad news would be presented in details.⁽⁴²⁾ The didactic methods are basic, but important methods to teach the basic knowledge of communication to learners. The advantage of a lecture is that it needs very minimal resources and faculty time to give the contents to all participants. However, the learners lack of an opportunity for practice and gain feedback.⁽⁷⁾

2.3.2 Video demonstrations

The instructors can use videos for demonstrate good or bad example of communication.^(43, 44) This approach provides some examples to the learner for discussion in the components of communication such as language usage or emotional concern.⁽⁴⁵⁾ After the discussion of videos, the learners become aware of the areas for improvement in communication.

2.3.3 Small group discussions

The instructors can use cases, demonstration or tapes to provide interesting points for small-group discussions to teach breaking bad news.⁽⁴⁶⁾ Although these tools gives the learners an opportunity to discuss their concerns, the discussion requires more time than the didactic methods.⁽⁷⁾

2.3.4 Role modeling and demonstrations

Role modeling and demonstration are the essential methods that students can learn their breaking bad news skills. The learners can ask their problems to supervisor while they observe. ⁽⁴⁰⁾ One of the challenges is to keep the patients' privacy while teaching and learning with this approach. ⁽⁷⁾

2.3.5 Real patients

Real patients are important for the active teaching roles in the medical education. ⁽⁴⁷⁾ This is a useful approach for teaching skills, such as history taking, physical examination, procedural and communication skills. Teaching with real patients has been demonstrated to be valuable for understanding patient illnesses, and learning communication skills. ⁽⁴⁸⁾

2.3.6 Video recordings

The video recording of the doctor-patients encounter is one of the important methods to teach communication skills. The learners can review the video of their communication, this will help the learners view the consultation process from the patients' perspectives. Watching a video with the teachers and receiving feedback can be useful for the learners. ⁽⁴⁸⁾

2.3.7 PRP

PRP is widely used in many studies for training of communication skills. ^(18, 23, 37) Some studies using PRP for practice and receive feedback. ^(18, 23, 49) In PRP, one of the learners portrays as a patient, and one portrays as physician delivers the bad news. Then the group gives feedback. PRP helps learners gain insights into the patient's perspectives. PRP requires less resource than the use of SP. However, some challenges of the using PRP are the variation in students' abilities to portray as patients, need more faculty time and familiarity among peers. The learners are not actors and they may find it hard to do the role-playing. Moreover, the learners may perceive a role-play as an artificial approach. ⁽⁵⁰⁾

Table 2.1 : Summary of BBN teaching methods.

Strategy	Advantages	Disadvantages
Didactic approaches	-Provide the basic knowledge of communication to many learners -Require less resource and faculty time	-No opportunity for practice and feedback
Video demonstrations	Provides some examples to the learner for discussion	-No opportunity for practice and feedback
Small group discussion	-Opportunity to discuss	-No opportunity for practice and feedback
Role modeling	-The learners can ask their problems to supervisor while they observe	-Concern about the patients' privacy
PRP	-Opportunity to discuss, practice and feedback -Understanding patient perspective -Requires less resource	-Variation in students' abilities to portray as patients -Need more faculty time -Familiarity among peers -Feeling of artificial approach
SP	-Opportunity to discuss, practice and feedback -More realistic than PRP	-Time-consuming -Expensive

2.3.8 SP

SP is important for teaching communication skills. SP is useful in many training studies on delivering bad news.^(18, 20, 21, 27) The interventions in these studies include the providing of an opportunity for learners to deliver bad news with SP. Using multiple scenarios in BBN training can provide an understanding of the patient responses in different situations.⁽⁴⁰⁾ SP plays important roles in teaching and assessing communication skills such as perform a patient role, rate the learners' performance, and give feedback to the learners. Although this approach is effective in the training communication skills, it is time-consuming and expensive.^(17, 18) It requires many resources, such as faculty and SP time, especially the audiovisual support if using VDO recording.⁽⁵⁰⁾

2.4 Teaching communication skills with PRP versus SP

A systematic review of teaching communication skills to physicians demonstrated that the effective methods to teach communication skills should include active learning, practice-based method, learner-centered such as small group discussion, role-play, feedback.⁽¹¹⁾ In a review of using PRP and SP, the training of communication skills demonstrated a number of methodological weaknesses in the studies about both methods.⁽²⁰⁾

There are limitations in the majority of studies, such as small sample size, lack of randomization, absence of baseline assessment, presence of bias, weakness of the outcome measurement, and poor quality of the instruments.⁽²⁰⁾ These methodological weaknesses make the drawing of a conclusion about the effectiveness of both teaching methods difficult. This review emphasized a lack of well-designed studies to compare the effectiveness of teaching communication skills through PRP and SP.⁽²⁰⁾

The review studies to compare PRP and SP showed that the effectiveness of both teaching methods is comparable and results in the same post training.⁽²¹⁻²³⁾ Nevertheless, those studies focused on the teaching of motivational interviewing.⁽²¹⁻²³⁾ Bosse and colleagues conducted a randomized controlled trial on the teaching of communication skills to medical students by comparing the effects of teaching with

PRP and SP⁽¹⁸⁾. The findings of this study demonstrated that the post training OSCE score of the training with PRP is higher than SP. Whilst, the benefit of RP is higher than SP due to the higher score from the domain understanding of the parents' perspective.⁽¹⁸⁾ The authors discussed that the switching roles between acting as a doctor and a patient help the students understand the patient's feelings. They concluded that the role-playing instruction provides the methodological advantage of enhancing empathy for the patients' concerns.⁽¹⁸⁾

In a recent study, Bosse and colleagues conducted a cost-effectiveness analysis of PRP and SP in the communication training for undergraduate.⁽¹⁶⁾ This study demonstrated that PRP was better in terms of cost-effectiveness at comparable skills levels after teaching with both approaches.⁽¹⁶⁾ Moreover, they recommended that PRP should be beneficial for teaching of BBN in the early stage of undergraduates because it enhanced a more empathic approach.^(16, 18) While SP may be useful for more experienced learners when training in difficult situations and need emotional safety.^(16, 18, 51)

2.5 Model for teaching BBN: SPIKES protocol

The SPIKES protocol, an approach for delivering bad news to cancer patients, developed by Baile, Buckman and colleagues.⁽⁴⁴⁾ The goal of the SPIKES protocol was to help the doctors while breaking bad news to their patients⁽⁴⁴⁾: This protocol can be summarized using the SPIKES mnemonic as:(1) setup; (2) perception; (3) invitation; (4) knowledge; (5) empathize; and (6) summarize and strategize.⁽⁴⁴⁾ The SPIKES protocol consisted of the following six steps.⁽³⁵⁾ First, the physicians should set up the situations which appropriate for BBN. Second, they should elicit the patient's perception of his or her problem. Third, they should find out how much information the patient wants and invite bad news. Fourth, they should provide knowledge and information to the patient. Fifth, they use empathic response to the patient's emotions. Lastly, they could summarize the clinical information and make a plan for the next step.⁽³⁵⁾ The SPIKES protocol was applicable to teaching BBN in this study.

2.6 Communication skills assessments

From the literature review, there are different ways for the assessment of communication skills. (Table 2.2 summarized the strengths and limitation of each communication skills assessment method)

2.6.1 Written assessment

There are multiple approaches for the written assessment of knowledge in communication, such as paper-based; open-ended or multiple choice questions; clinical scenario; computer-based.⁽⁵²⁾ The written exam is a short time testing with high reliability.⁽⁵³⁾ This method is suitable for the test the knowledge of concepts and processes in communication.⁽⁵⁴⁾ Moreover, these methods are useful to begin the training and follow the observation of the prepared videos.⁽⁵⁵⁾

2.6.2 Direct observation and workplace based assessment

Both direct observation and the Mini-Clinical Evaluation Exercise can be important for the assessment of the learners' communication with patients.⁽⁵⁶⁾ These methods become effective tool to support the feedback for postgraduate training.⁽⁵⁶⁾ Multiple observations by multiple supervisors may provide the high reliability to this assessment.⁽⁵⁷⁾

2.6.3 Objective Structured Clinical Exam (OSCE)

OSCE is a well-structured tool to assess the clinical competence.⁽⁵⁸⁾ OSCE comprises with the multiple stations of SP encounter, with the design in each station to challenge the learners for the application of communication skills in different tasks. OSCE meets the acceptable standards of contents, with less examiners' biases. Moreover, it has a high reliability and validity which depends on some components such as: scenarios, number of examiners per station, checklist and scoring system, number of stations, and SP.⁽⁵⁹⁾ The widely use of OSCE has been for the assessment of the communication skills in students, residents, and other physicians.⁽⁶⁰⁾

2.6.4 Ratings based on videotaped SP encounter

The assessment of communication skills in the encounters is by rating videotaped consultations.⁽⁶¹⁾ This kind of assessment is suitable for the postgraduate training. It allows the learners to review their own behaviors. The quality of scoring encounters is through the rating scales and checklists.⁽⁶²⁾ The arrangement of SP encounters can be more feasible than the encounters with real patients.⁽³²⁾

Table 2.2: Summary of Communication skills assessment

Method	Domain	Strengths	Limitations
Written exercises	Knowledge	-Little time -High reliability	-Can result in cueing
Direct observation	Communication skills	-Feedback	-Time-consuming
OSCE	Communication skills	-Reliable, realistic -Consistent case and ratings; -Rated by faculty or SP	-Timing and setting may seem artificial -Expensive -Time-consuming
VDO recorded SP encounter	Communication skills	Very realistic, most accurate way of assessing physician's behavior	-Expensive -Time and resource consuming

2.7 Planning for the communication skill assessment

2.7.1 Rationale for choosing the SP encounters for communication skill assessments in this study

Many previous studies used OSCE to assess the communication skills.⁽⁶³⁻⁶⁸⁾ The validity and reliability of OSCE depend on total length of the examination and the number of stations.⁽⁶⁹⁾ In general recommendation for develop OSCE stations with adequate reliability could be accomplished with 14–18 stations each of 5–10 minute duration.⁽⁷⁰⁾ This study faced with limitations for using OSCE in terms of feasibility and resources. There were many reasons why I chose video-recorded SP encounter for communication skills assessment in this study. First, the SP encounter has been described as a valid method to assess communication skills.⁽⁷¹⁾ Second, the SP encounter allows the learners to apply their clinical knowledge in a structured setting, with the raters scoring their performance by using the validated and reliable instruments.⁽⁷²⁾ Third, the learners can receive feedback from the SP, peers, and faculty.⁽⁷³⁾ Last, the learners may have an opportunity to view videotapes of the exams, making it an essential tool for both assessment and feedback.^(73, 74) However, there are some disadvantages of the SP encounter, which include the expenses in terms of the required resources and personnel (e.g., SP).

Table 2.3 summarizes the randomized control trials of BBN training with focusing on the cancer incorporating SP encounter or OSCE.⁽⁷⁵⁻⁷⁸⁾ A number of OSCE stations or SP encounters are between 1 to 2 stations⁽⁷⁵⁻⁷⁸⁾, with the observation time of 10 to 20 minutes for each station.⁽⁷⁵⁻⁷⁸⁾ Use of SP or faculty in those studies was as the raters of different rating scales.⁽⁷⁶⁻⁷⁸⁾ While, some studies applied the Lacomm software for the content analysis of SP encounter.⁽⁷⁵⁾

Table 2.3: Summary of BBN communication skills training focusing on cancer incorporating SP encounter and randomized controlled design ⁽⁷⁵⁻⁷⁹⁾

Authors	Training Method	Participants	Communication skills assessment
Lienard, et. al. ⁽⁷⁵⁾	Lecture and small groups with role-playing and feedback Total time: 40 h	Medical Residents (n=103) train vs. control	-Audiotaped SP consultation -Tool : Lacomm software -Each station 20 min Pre 1 station and Post 1 station After 8 mo.1 station
Szmuilowicz, et. al. ⁽⁷⁶⁾	Lecture and small groups with role-playing and feedback Total time: 5 h	Medical Residents (internal medicine PGY 2) (n=49) train vs. control	-OSCE with SP -Tool : BBN Check list -Raters; 2 blinded researchers -Each station 10 min Pre 2 stations and Post 2 stations
Gorniewicz, et. al. ⁽⁷⁷⁾	Self-directed PowerPoint-based training with using videos of cancer patient Total time: 1 h	1.Students (n=28) 2.Medical residents (n=38) (family medicine and internal medicine) train vs. control	-Video-record OSCE with SP -Tool 1.Common Ground assessment 2.BBN Skills Check list -Raters;3 SP -Each station 15 min 1.Students:Pre 2 stations and Post 2 stations 2.Medical residents Pre 1 station and Post 1
Fujimori, et. al. ⁽⁷⁸⁾	lecture with videos (1 h) + small group role plays with discussion (8 h) + summary session (30 min) Total time: 10 h	Oncologists (10 years of experience on average) (n=30) train vs. control	-Video-record OSCE with SP -Tool : SHARE category -Raters; 2 blinded coders -Each station 15 min Pre 1 station, Post 1 station

2.7.2 Communication skill measurement instruments

There are several instruments designed to assess communication skills. Some instruments are suitable for the faculty rating, such as Calgary-Cambridge⁽⁸⁰⁾, Kalamazoo⁽²⁷⁾, Common Ground⁽⁸¹⁾, Macy⁽⁸²⁾, SEGUE⁽⁸³⁾ and MAAS⁽⁸⁴⁾. While some instruments are for SP rating, such as, RUCIS⁽⁸⁵⁾, Rochester⁽⁸⁶⁾, Brown interview checklist⁽⁸⁷⁾. Some instruments which using rating scales (Common Ground, Four Habits, MAAS, and MISCE) may be useful for the well-developed communication expertise of the faculty.⁽⁸⁸⁾ Some checklists (Kalamazoo, Macy, and SEGUE) may be suitable for the raters with less experience. These instruments are categorized by the intended rater into three groups; faculty, SP, or patients. (Table 2.4 summarizes the communication skill assessment instruments).⁽⁸⁸⁾

Table 2.4: Communication skill Assessment Instruments

Title	Description
Assessors: faculty members	
Calgary-Cambridge Observation Guide ⁽⁸⁰⁾	Part 1 (Interviewing the Patient)—34 content areas. Part 2 (Explanation and Planning)—40 content areas. Part 3 (Content Guide)
Common Ground Rating form ⁽⁸¹⁾	Eight Domain include (Agenda, Setting, Rapport, Information Management, Addressing Feelings, Active Listening, Family Interviewing Skills, Reaching Common Ground and Global Performance)
Four Habits ⁽⁸⁹⁾	A five-point Likert scale rated on Four Habits (Beginning, Demonstrate Empathy, Elicit Patient's Perspective and End.
Kalamazoo Essential Elements: The Communication Checklist (Kalamazoo) ⁽²⁵⁾	Twenty-two content areas checklist. Seven sections (Open Discussion, Build Relationship, Gather Information, Understand Patient's Perspective, Reach Agreement, Share Information, and Provide Closure)
MAAS ⁽⁸⁴⁾	An eight-point Likert scale, Seventeen skills with 47 areas to rate

Table 2.4: Communication skill Assessment Instruments (cont.)

Title	Description
Assessors: faculty members	
Macy Model Checklist (Macy) ⁽⁸²⁾	57 content areas. Checklist. Eight sections (Prepare, Open, Gather Information, Communicate During Physical Exam or Procedure, Share Information, Elicit and Understand Patient's Perspective, Reach Agreement, Close)
Medical Interview Skills Competency Evaluation (MISCE)	A five-point behaviorally anchored scale, Seven content areas (Gathering Information, Preparation/Greeting, Establishing Focus, Understanding Patient's/Family's Perspective, Sharing Information, , and Providing Closure)
The SEGUE Framework (SEGUE) ⁽⁸³⁾	A checklist. Six content areas (Set the Stage, Understand Patient's Perspective, Elicit Information, Give Information, new/modified Rx/prevention plan, and End the Encounter)
Assessors: standardized and real patients	
Brown Interview Checklist (BIC) ⁽⁸⁷⁾	A yes/no checklist, three-point and six-point Likert scales. Five content areas (Interpersonal, Data Gathering, Organizational Skills, Information Giving, and Patient Satisfaction),
Educational Commission for Foreign Medical Graduates ⁽⁹⁰⁾	Each item includes four elements rated on a behaviorally anchored, four-point Likert scale. Four skill areas (Rapport, Personal Manner, Interviewing and Collecting Information, Counseling and Delivering Information).
Interpersonal and Communication Skills Checklist ⁽⁶⁷⁾	Seventeen-element checklist, from opening to closing the interview.
Rochester Communication Rating Scale ⁽⁸⁶⁾	Eighteen questions on a six-point Likert scale, from strongly disagree to strongly agree, then not applicable.
Revised UIC Communication and Interpersonal Skills (RUCIS) ⁽⁸⁵⁾	A thirteen-item rating, a four-category behaviorally anchored rating scale. Each item contains a short description from lowest to best performance

Table 2.4 : Communication skill Assessment Instruments (cont.)

Title	Description
Assessors: patients	
American Board of Internal Medicine Patient Assessment for Continuous Professional Development (ABIM) ⁽⁹¹⁾	Ten items rated on a six-point Likert scale; seven items on demographic data, general health, and use of physician's services.
Patient Perception of Patient Centeredness (PPPC) ⁽⁹²⁾	Fourteen questions on a four-point Likert scale

2.7.3 Rationale for choosing communication skill measurement instruments in this study

There were three reasons for choosing the GKCSAF in this study. First, the GKCSAF based on the Kalamazoo Consensus Statement, an accepted framework for communication skills assessment.⁽⁹³⁾ Second, this instrument demonstrated the good psychometric reliability.⁽⁹³⁾ Third, this instrument was friendly for users.

Three version tools were developed based on the Kalamazoo Consensus Statement.⁽²⁷⁾ The first version tool was Kalamazoo Essential Elements Communication Checklist (KEECC). It included seven core communication competencies (Opening the Discussion, Building the Relationship, Gathering Information, Sharing Information, Reach Agreement, Understanding the Patient's and Family's Perspective and Providing Closure) and 24 sub-competencies. The performance was rated by using categorical ratings: done well, needs improvement, not done, not applicable.⁽²⁸⁾

The second version, the KEECC-A was modified by Rider and colleagues.⁽²⁸⁾ This version allowed for the evaluation of the seven Kalamazoo Essential Elements on a global ratings scale and the 24 sub-competencies function as a rubric for this checklist.⁽²⁷⁾

The third version, the GKCSAF was developed by Calhoun, Rider, and colleagues using the Kalamazoo Consensus Statement framework and 360-degree assessment models.⁽⁹³⁾ Both instructor or peer can use this tool for communication skills assessment. This tool use a global rating of seven original core competencies and two additional competencies namely empathy and communicates accurate information. This tool comprise with five-point Likert-type scale (1 = poor, 5 = excellent), forced-choice, and free-text fields, to provide comments regarding strengths and areas for improvement.⁽⁹³⁾

The GKCSAF has high measures of high internal consistency with a Cronbach's alpha score of 0.880 (peer) and 0.844 (faculty) and, with the high inter-rater reliability of an ICC of 0.89 (peer) and 0.830 (faculty raters).^(27, 93)

2.7.4 SP training

The aim of SP training is to prepare SP for portray patient role with reach standard and consistent.⁽⁹⁴⁾ The training concepts for the role of SP comprise three training steps.⁽⁹⁵⁾ The first step is a self-study which SP learns the patient's profile and detailed illness.⁽⁹⁵⁾ The second step is SP and a trainer working out of the case together. In the third step, another trainer will join with the training and give SP an idea of how to improve the role play.^(18, 95)

2.7.5 Rater Training

A clinical skill assessment can be a challenging task because it is prone to rater biases and errors.⁽⁹⁶⁾ Rater training strategies are essential approaches to improve the rater reliability and accuracy.⁽⁹⁷⁾ Main general approach to rater training include, performance dimension training, rater error training, behavioral observation training, and frame-of-reference training (FORT).⁽⁹⁷⁾ FORT is commonly used in many researches due to its effectiveness for improving rating accuracy.

FORT gives raters a common concept of each behaviors before rating.⁽⁹⁸⁾ The approach of FORT is the presentation of example behaviors representing good, average, and poor performance. The rater will practice rating by evaluate the performance of multiple trainees.⁽⁹⁸⁾

2.7.6 Inter-rater reliability

The inter-rater reliability is widely used in measuring the consistency of different observers when they are scoring the same subject. A common statistics used is Intraclass Correlation Coefficient (ICC). The reliability range is between 0 and 1. The scoring 0.8 and above is considered as the gold standard. A good level of agreement is 0.6 and above.⁽⁵⁹⁾

2.8 Summary

The conceptual framework of this study comprised with the experiential learning theory and the Kalamazoo Consensus statement. The experiential learning theory was applied to both teaching and learning in this study. The Kalamazoo Consensus Statement and the Kalamazoo II Report were useful as a framework to teach and assess doctor-patient communication. The Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF) was used as a communication assessment tool in this study also developed from the Kalamazoo Consensus Statement. Moreover, the importance of training physicians to deliver bad news was discussed. Finally, there are many methods for teaching BBN and the assessment of communication skills. I discussed the advantages and disadvantages for each method for teaching and assessing of BBN in this chapter.

CHAPTER III

MATERIALS AND METHODS

This chapter describes the participants, instruments, procedures, data analysis, and ethical consideration.

3.1 Research design

The research design was a randomized pretest - posttest control group study.

3.2 Sample size

The aim of this study was to study the effects of training physicians to breaking bad news using SP compared to PRP. The mean of the OSCE score was compared in the two experimental groups. The sample size was calculated by using this formula.

$$n_A = \left(\sigma_A^2 + \frac{\sigma_B^2}{\kappa} \right) \left(\frac{z_{1-\alpha} + z_{1-\beta}}{\mu_A - \mu_B} \right)^2$$

$$\kappa = n_A/n_B \quad = \text{matching ratio}$$

$$\mu = \text{mean and } \sigma = \text{standard deviation}$$

I calculated the sample size based on the previous study of Bosse et al.⁽¹⁸⁾ They conducted a randomized controlled trial of teaching communication skills by comparing the effects of teaching with PRP and SP. They found that the post training OSCE score in both PRP and SP groups were 81.59 and 77.96, respectively. While,

the standard deviation of the OSCE score in the two groups were 3.32 and 6.23, respectively. There was a higher OSCE score in the PRP group compared to the SP group ($p < 0.021$, Cohen's $d = 0.71$).⁽¹⁸⁾ If both groups were assigned the same number and set $\alpha = 0.05$ and $\beta = 0.2$, the number of sample size would be 24 students in each group.

3.3 Participants

The participants in this study were physicians working at Chulabhorn Hospital and attended the one-day communicating bad news training program on February 22, 2018. All participants in this study consisted of two categories of physicians namely medical staffs and interns. The interns were Thai medical graduates who took one to three years of apprenticeship program at Chulabhorn Hospital. The medical services in Chulabhorn Hospital are focusing on treating cancer patients. Before starting the internship program at Chulabhorn Hospital, the interns have to take a one-year clinical encounter program at the province hospital outside Bangkok.

The two-year internship course outcomes consisted of having professional habits, attitudes, communication and interpersonal skills, basic medical knowledge, clinical skills, technical and procedural skills. While the interns rotate to each ward the intern follows a mentor as an apprentice, practicing breaking bad news. They can also observe the professional behavior, doctor-patient communication and interpersonal skills directly from the mentor and some of them can recognize a role model.

The medical staffs in this study were physicians who graduated from the residency or fellowship training program and then worked at Chulabhorn Hospital as medical specialists.

3.3.1 Inclusion criteria of the sample

The participants who took part in this study had to meet all the following criteria:

3.3.1.1 The participants attended a one-day training program of breaking bad news at Chulabhorn Hospital, Bangkok, Thailand on February 22, 2018.

3.3.1.2 The participants agreed to participate in the study.

3.3.1.3 The participants who provided the written informed consent to participate and gave permission for VDO recording of SP encounters.

3.3.2 Exclusion criteria

3.3.2.1 The participants did not agree to participate in this study.

3.3.2.2 The participants failed to participate or did not give permission to the VDO recording of SP encounters before and after the training program.

3.4 Recruitment, randomization, and blinding

The research subjects comprised physicians working at Chulabhorn Hospital, Thailand during 2017 - 2018. The recruitment of the participants was performed through the staff meetings. The contact information of researcher was provided at the meetings and through the e-mail distribution. The participation in this study was voluntary. All participants needed to give their written consent to participate in this study, with acceptance to use the data in this study for research purposes and permission for video-recording in the SP encounter sessions. The video-record sessions of delivering bad news to the SP were in one station before the training started and two stations within two weeks after the training ended.

After the completed enrollment, fifty-two physicians indicated that they wanted to participate in this study. Personal and professional characteristics were obtained. I used stratified randomization of participants after the sampling professional characteristics and the baseline communication skill performance measurement. I used the SPSS program to generate random number from binomial distribution to stratify randomization of fifty-two participants into two groups. The participants were stratified by their working experiences and the baseline communication skill performance. They were allocated to either the PRP or the SP groups by a statistician using the random data option in the SPSS program.

A blinding of the tutors in each group could not be performed due to the study design and the nature of the course. However, the ratings of video-record SP

encounters were done by three trained raters who were randomly assigned to rate each video-record SP encounter of both study groups. The raters did not take part in the BBN training. They were blinded for the group of participants.

Fifty-two (49.5%) of 105 physicians returned the consent form. Twenty-six of participants were randomized to the PRP group and 26 to the SP group. All 52 physicians completed the baseline assessment of communication skills. There were eight physicians drop outs in both PRP and SP groups. The reasons for not attending were being unable to attend the workshop during office hours and too busy. Of these, 34 physicians (65.4%) completed the follow-up assessment, of whom 17 were in the PRP group and 17 were in the SP group. There were 15 (44%) male and 19 (56%) female physicians. There were one physician drop outs in both PRP and SP groups because they could not completed the posttest assessment.

There were eight SPs to portray the cases. All of them were the allied health professionals, including five social workers and three physical therapists. Seven of these SPs were females at the age of 25 - 40 years. Only one SP was male, aged 28 years. All eight SPs were Thais, with the communication skill training workshop. All of them received a special gift set for devoting their time.

3.5 Research instrument

3.5.1 The instrument for communication skill assessment

In this study, I used the Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF) in communication skills assessment. (see Appendix B). This tool comprised with 5-point Likert-type scale (1 = poor, 5 = excellent) of seven original core competencies and two additional competencies namely empathy and communicates accurate information. ⁽⁹³⁾ This instrument added two forced-choice rankings. The first one was to ask the rater to identify the learner's three strongest domains of communication. The second one was to request for the three communication competencies that needed the most improvement. The GKCSAF showed a high internal consistency in the previous study, with a Cronbach's alpha of

0.87 and a high inter-rater reliability with an ICC of 0.83 (faculty raters) and 0.89 (peer observer raters).⁽²⁷⁾

The use of the GKCSAF for the purposes of this study received permission from Associate Prof. Aaron Calhoun (see Appendix H) for the English version of the GKCSAF. There was no translation into Thai language. Thus, raters used the original English version of the instrument. The raters got the process of rater training on how to use the GKCSAF, with the definition of the GKCSAF and the details of each item in the GKCSAF. In this study, the pre-testing of the GKCSAF instruments was by 18 physicians for the analysis of internal reliability utilizing the Cronbach's alpha. Internal consistency calculations yielded a Cronbach's alpha of 0.95.

3.5.2 The questionnaire for the participant perspective assessment on satisfaction and perceived effect of communication training

This study used the questionnaires which adapted from the questionnaires in the study of Bosse⁽³¹⁾. Each participant completed questionnaires after the training (see Appendix C). The questionnaires inquired about the participants' age, gender, specialty, and formal teaching in BBN. Moreover, the questionnaires inquired the participant's perspectives on the training with using 5-point Likert scale on 1) the satisfaction on the training; (1 = very poor to 5 = very good), 2) the training was worthwhile for time spent; (1 = don't agree at all to 5 = totally agree), 3) the training was useful; (1 = don't agree at all to 5 = totally agree), and 4) the training was applicable for future BBN; (1 = don't agree at all to 5 = totally agree).

Four experts in the medical setting assessed the contents of those instruments and gave their suggestions for each item. (i.e. 3 clinical instructor physicians and 1 specialist nurse, as in the appendix J).

3.6 Procedures

3.6.1 The key steps of this study. (See Figure 3.1)

3.6.1.1 I assessed the participants' BBN skills with using an individual SP encounter at 1 week prior to the training.

3.6.1.2 I randomly stratified the participants into two groups: (a) the skills of delivering bad news with PRP and (b) the skills of delivering bad news with SP. This stratified randomization used the scores from the pre-training SP encounter for the allocation of the participants.

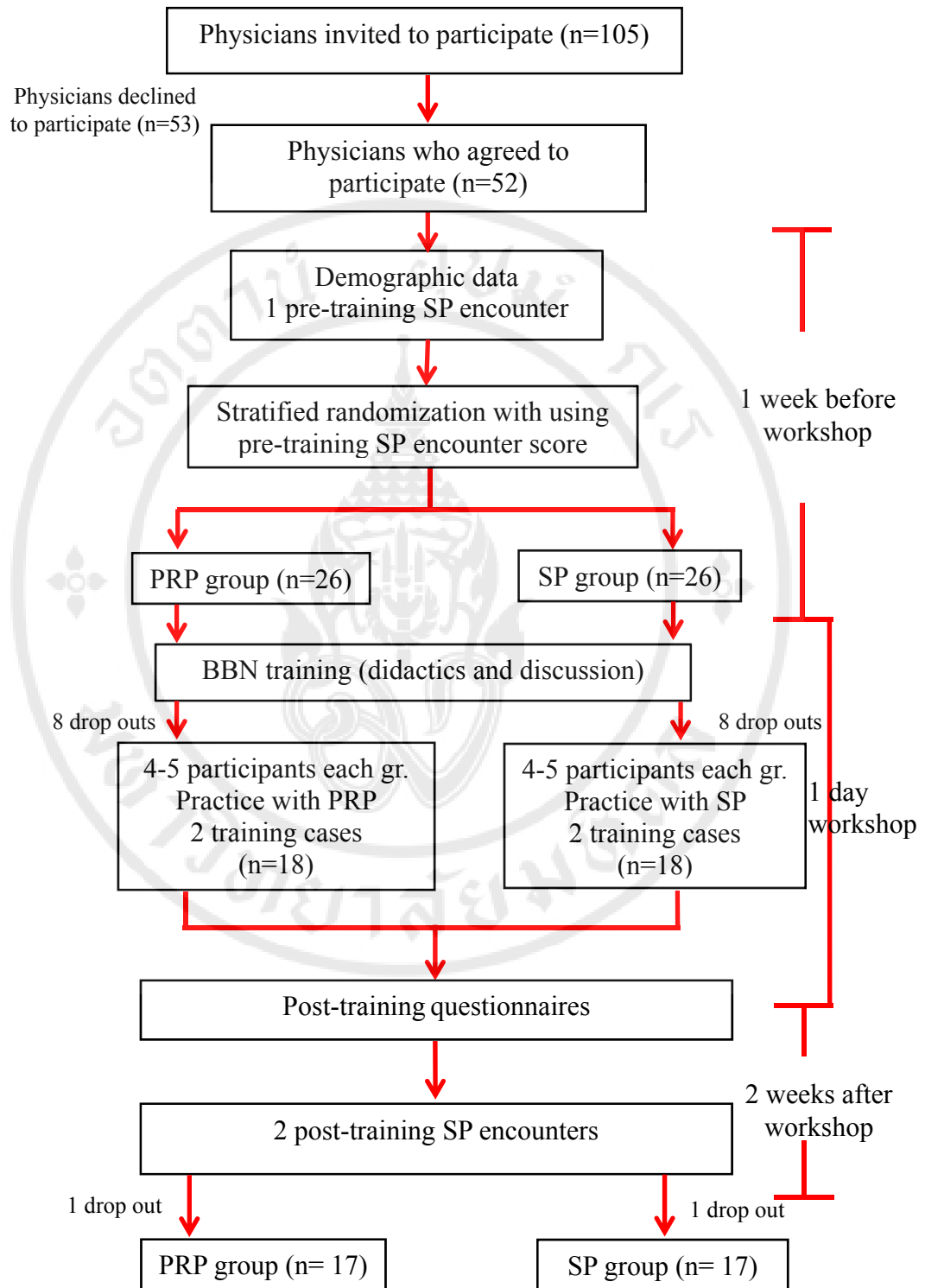
3.6.1.3 All participants attended the session on “Principles of Communication and BBN” and “BBN and SPIKES protocol”. (Interactive lecture for the whole group)

3.6.1.4 Then, all participants were divided into two groups practiced BBN using either PRP or SP. These sessions were set in parallel sessions in order to prevent the contamination between the studies groups.

3.6.1.5 For the PRP group, the participants were allocated into four small groups. Each group comprised with five physicians. In the first training case of BBN, one of the group members was assigned to play in the physician’s role and one for the patient’s role. The physicians, who received the patient role, took time to review the script for the patient. Then, the facilitators briefed the training cases. Next, the participants in the physician role conducted a twenty-minute interview for each case. The rests of the group were observers. Each group discussion of how doctors delivered bad news and how these interviews could be improved. Follow with the discussion within the large group and repeat of role play with roles exchanged in the second training case.

3.6.1.6 For the SP group, the participants were divided into four small groups. Each group consisted of five physicians and two SPs. One participant played the doctor’s role deliver bad news to one SP for twenty-minute interview for each case. The rests of the group were observers. Each group discussion of how doctors delivered bad news and how these interviews could be improved. Follow with the discussion within the large group and repeat of role play with roles exchanged in the second training case.

3.6.1.7 Then, all participants attended the session on “Advanced care planning” and “End-of-life discussion”. (Didactics and discussion for the whole group)



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Figure 3.1: Study flow diagram

3.6.1.8 Following the training, all participants filled in the questionnaires to assess their ratings for the satisfaction and the perceived effects of the training.

3.6.1.9 Two weeks following the training program, all participants were assessed for the BBN skills with two individual SP encounters, as well as the collection of their skillful communication performance, the perspectives on their satisfaction, and the perceived effects of the training between the two study groups.

3.6.2 The training materials

I prepared the materials including the scripts for the patients and the instruction for the training cases and SP encounters. (see Appendix A). Four specialists in the medical setting (i.e. 3 clinical instructor physicians and 1 specialist nurse, as in the appendix J) assessed the contents of all documents needed for the workshop sessions (scripts for the simulated patients and instructions for the training cases and the SP encounters) and provided their suggestions on each document. The feedbacks from these specialists were incorporated into the revision process of the questionnaires. In addition, there was the improvement process of linguistics for the clarity of all documents under the comments of the main advisor, co-advisor, and experts. Eighteen physicians pilot-tested the pre-training of the SP encounters.

3.6.3 The workshop schedule

The scheduled one-day BBN training program was on February 22, 2018. The training workshop lasted in one day. The workshop schedule was described as follows. (see Table 3.1)

Table 3.1 The workshop schedule

Time (minutes)	Session	Learning objective / content	Method
8:00-9:00 (60)	Principle of communication	-Introduction to basic of communication skills and counseling skills. -Common problem in counseling -Components of effective counseling, -Questioning skills, listening skills -Verbal and non-verbal skills.	-Lecture -VDO demonstration
9:00-9:45 (45)	BBN and SPIKES protocol	-Introduction to principle of BBN and SPIKES protocol. -The importance of BBN skills -The concepts of BBN	-Lecture -VDO demonstration
9:45-10:00 (15)	Break		
10:00-12:00 (120)	Workshop of BBN with PRP or SP	-Practice BBN with using the SPIKES protocol with PRP or SP	Intervention session (PRP, SP)
12.00-13.00 (60)	Lunch		
13:00-14:15 (75)	Advanced care planning	-The importance of advanced care planning	Didactics
14:15-14:30 (15)	Break		
14:30-16:00 (90)	End-of-life discussion	-The concepts and methods of the end-of-life discussion. -The main focus on the caring of cancer patients.	-Lecture -VDO demonstration
16:00-16:30 (30)	Summary	Summary and post-training questionnaire	-Discussion

3.6.4 The training program and intervention sessions

3.6.4.1 Principle of communication session (Interactive lecture for the whole group)

A one-day training program was for the BBN training. The program started with an overview lecture on the principle of communication. This session lasted one hour. All participants in both PRP and SP groups attended this teaching session. The teaching method was interactive lecture. Questions and informal discussion were encouraged throughout this session. The learning objective for this session was an introduction to basic of communication skills and counseling skills. The content of the session was included types of counseling, common problem in counseling, components of effective counseling, questioning skills, listening skills, verbal and non-verbal skills.

3.6.4.2 Principle of BBN and SPIKES protocol session (Interactive lecture and VDO demonstration for the whole group)

This session was the second session of the workshop in the morning which lasted 45 minutes. All participants in both PRP and SP groups attended this teaching session. The teaching methods were interactive lecture and VDO demonstration. The learning objective for this session was an introduction to principle of BBN and SPIKES protocol. The content of the session was included the importance of BBN skills, the concepts and methods of delivering bad news with the main focus on the caring of cancer patients and a detailed instruction on the “SPIKES” protocol. The invited speaker used a ten-minute VDO demonstration to illustrate how to use “SPIKES” protocol.

3.6.4.3 Workshop of BBN with PRP or SP (Intervention session)

The next sessions were intervention sessions of this research. The teaching methods were role plays to practice BBN skills with using PRP and SP. The learning objective for this session was to practice BBN with using the SPIKES protocol with PRP or SP. These sessions took place after a breaking session. After the

speakers teach an overview of the principle of communication and the concepts of delivering bad news, all participants were assigned into two groups practiced BBN using either PRP or SP. These sessions lasted two hours for practicing BBN with two training cases. These sessions were set in parallel sessions in order to prevent the contamination between the studies groups.

The two parallel sessions were taught by invited speakers and were designed so that they contained a similar proportion of speakers and facilitators and training cases - the training cases including discussion and role-plays carried out in small groups. The intervention session took two hours for practicing BBN with two training cases.

To begin with the PRP group, each small group comprised with five physicians. One of the group members was assigned to play in the physician's role and one for the patient's role. The rest of the members in each group were the observers. The physicians, who received the patient role, took time to review the script for the patient. Then, the facilitators briefed the training cases. Next, the participants in the physician role conducted a twenty-minute interview for each case. The rests of the group were observers. Each group discussion of how doctors delivered bad news and how these interviews could be improved. Follow with the discussion within the large group and repeat of role play with roles exchanged in the second training case. Discussion of the role plays took place both within the small groups and in the large group. Finally, the facilitator gave the concluded feedbacks, followed by the group discussion and debriefing.

For the SP arm, each small group consisted of five physicians and two SPs. One participant playing the doctor deliver bad news to one SP, the rest observing, followed by discussion within the group and repeat of role play with roles exchanged. The rests of the group were observers. Each group discussion of how doctors delivered bad news and how these interviews could be improved. Follow with the discussion within the large group and repeat of role play with roles exchanged in the second training case. Discussion of the role plays took place both within the small groups and in the large group. Finally, the facilitator gave the concluded feedbacks, followed by the group discussion and debriefing.

3.6.4.4 Advanced care planning and the end-of-life discussion (Didactics and discussion in a full group)

Although the advanced care planning and the end-of-life discussion were not under the scope of this study, both topics were useful for the participants. The time allocated for this workshop of both topics was in the afternoon to provide the appropriate knowledge and proper experiences among the participants. These sessions were conducted by using the didactics method as well as a discussion with the whole group. Questions and discussion were encouraged throughout these sessions.

All participants in both PRP and SP groups attended both teaching sessions. The advanced care planning session lasted 75 minutes. Moreover, the end-of-life discussion session lasted 90 minutes in the afternoon. The learning objectives for these sessions were overview the advanced care planning and the end-of-life discussion. The content of the sessions were included the importance of advanced care planning, the concepts and methods of the end-of-life discussion with the main focus on the caring of cancer patients.

3.6.5 Communication skill assessment and post training assessment

After the workshop, the participants filled in questionnaires to assess their ratings for the satisfaction and the perceived effects of the training. Moreover, an equal number of 17 participants in each group of the PRP and the SP successfully completed the post training SP encounters. Reasons for not participating in the post training SP encounters were that 1 physician in the PRP group moved to work in another hospital and 1 physician in the SP group did not have sufficient time available. Finally, a total of 34 physicians participated in the present study until the completion. The GKCSAF was used for rating of the SP encounters. (see Appendix B).

3.6.6 The SP encounter sessions

The SP encounters were used to assess the BBN skills of participants. This method allowed physicians to encounter the simulated scenarios of doctor-patient communication in a standardized setting. The SP encounters were parts of the pre-training assessment and the post-training assessment.

A literature review in Chapter II demonstrated that the well-constructed OSCE format with 14–18 stations of 5–10 minute duration of each station provided the good reliability.⁽⁹⁹⁾ However, there were some challenges for the organization of OSCE in this study; namely, time consumption and man-power limitations. Therefore, the assessment of the SP encounter for communication skills was necessary in this study. Each SP encounter was video recorded. In the meantime, the use of standardized scoring rubrics was to improve the consistency of scoring between the candidates and the raters.⁽¹⁰⁰⁾ Moreover, there were some evidences suggesting that the rater training reduces the rater variation in scoring⁽¹⁰¹⁾ and improves the consistency of the rater's behavior.

There was only one SP encounter for the baseline and two SP encounters for the evaluation of post intervention. The cases were written in a way to guide the SPs to play their roles. The SP encounters focused on the delivering of bad news to the cancer patients. The objective of SP encounters was formative in purpose. The observation time for each encounter was 10 minutes. In each station, one SP portrayed one role. The physician–patient interactions were video-recorded after the participants provided their written consents. Eight SPs were recruited from our social workers and medical personnel who volunteered to participate. They received their scenarios one week before the workshop so that they could get proficient at portraying the patient's script on their own.

Three raters were invited from the external faculty members. None of the raters was a trainer of BBN in this study. They received an introduction to the use of the assessment tool. I trained all raters on the use of the GKCSAF before rating with using the frame of reference training (FORT). Each video-recorded SP encounter was rated by three independent raters. All of the pre-training and the post-training SP encounters were assigned in random order to three raters. The raters were blinded to the sequence of encounters (pre-training and post-training) and the group allocation (PRP or SP). The pre-training SP encounters were pilot-tested with 18 physicians

3.6.7 Characteristics of raters

The raters were comprised with two clinical instructors and one specialist physicians. All of them were active in the fields of internal medicine and family

medicine. Moreover, they had experiences in BBN and took care of cancer patients for eight to fifteen years. (see Table 3.2) Each simulated encounter lasted in an average of five minutes. All raters responded to all VDO's of the simulated encounters.

Table 3.2 Raters characteristics

Rater	Age	Gender	Professional experience	Working experience (years)	Rater experience
A	40	Female	Internal medicine physician	15	yes
B	35	Male	Internal medicine physician	10	yes
C	33	Female	Family medicine physician	8	yes

3.6.8 Rater training

Frame-of-reference training (FORT) focuses on developing a mutual understanding or frame of reference amongst raters. The aim is to assist all raters with the same performance model that they can use as a tool when rating SP encounters. ^(98,104) This goal can be reached by defining the dimensions to be evaluated, providing and describing appropriate behavioral examples of the dimensions to be evaluated, providing opportunities for practicing evaluations, and finally providing feedback to assessors relating to their evaluations. ^(98,102,104)

In this study, I used the Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF) for communication skills assessment. This tool comprised with 5-point Likert-type scale (1 = poor, 5 = excellent) of nine domains of communication skills. ⁽⁹³⁾ I produced the sample videos which three physicians BBN to SPs with poor, average, and excellent performances. Each VDO lasted about 10 minutes. These videos were designed to use in the process of rater training and the FORT.

I described the processes of designing the sample videos which three physicians BBN to SPs with poor, average, and excellent performances in this study as follow. First, I designed the VDO which represent the poor performance in communication skills of physician. I set up the performance of doctor which

represented the rating of one in all nine domains of communication skills according to GKCSAF. I wrote the script for the poor performance in communication skills. Then, I asked one physician who did not participate in this study to play this role in SP encounter.

Second, I also designed the VDO which represent the average performance in communication skills of physician. I set up the performance of doctor which represented the rating of three in all nine domains of communication skills according to GKCSAF. Then, I wrote the script and asked one physician to play this role with SP.

Third, I designed the VDO which represent the excellent performance in communication skills of physician. I set up the performance of doctor which represented the rating of five in all nine domains of communication skills according to GKCSAF. Again, I wrote the script and asked one physician to play this role with SP.

The processes of FORT in this study started by having all raters studied the detailed of each item in the GKCSAF and how to use the GKCSAF. A trainer defined the dimensions to be evaluated, providing and describing appropriate behavioral examples of the dimensions to be evaluated. All raters in this study were experts in this field. The raters were comprised with two clinical instructors and one specialist physician. All of them were active in the fields of internal medicine and family medicine. Moreover, they had experiences in BBN and took care of cancer patients for eight to fifteen years. Therefore, they could develop a gold standard by themselves.⁽¹⁰²⁾

Next, raters were asked to view three videos of SP encounters which three physicians BBN to SPs with poor, average, and excellent performances. Raters spent about one hour studying these videos and practiced scoring on these videos without making spontaneous comments. Then, they discussed their markings. The trainer indicated the target rating for each performance dimension. The trainer also pointed out specific behaviors that led to each particular rating. The raters could ask if they had any questions. After discuss for the first practice video, the protocol was repeated for the second and third practice videos. Raters and trainer discussed their markings and reach a consensus. The goal was to calibrate the raters' opinions and enable discussion about the performance scoring.

3.6.9 SP training

There were eight SPs to portray the cases. All of them were the allied health professionals, including five social workers and three physical therapists. Their working experiences in their field were 2-10 years. Seven of these SPs were females at the age of 25-40 years. Only one SP was male, aged 28 years. All eight SPs were Thais. Only a 40-year old female social worker had experience for being SP and joined the communication skill training workshop of this hospital in last year. While others were SPs for the first time. All of them received only a special gift set for devoting their time. (see Table 3.3)

Each SP took for one patient's role. The SP training comprised a three-step approach.⁽⁹⁵⁾ The first step was a self-study. The second step was the SP and the trainer working out their roles together. The third step was the training in which the SP took the patient's role and the trainer assumed the physician's role.^(18, 95)

Two weeks before the day of workshop, eight SPs received the SP training on how to portray the cases. All SPs obtained their cases approximately one week prior to the training and performed one hour of home study. It allowed the SP's to familiarize with the case and prepared any questions prior to the training session. All SPs participated in the 2-hour training session to learn how to portray their cases. The training in small group sessions provided the opportunity for every SP to practice portraying the clinical cases under their supervision. All SPs reviewed the cases with guidance and feedback on the contents of the cases and portrayals.

Through the cycles of practice and feedback, each SP developed his/her expertise in portraying the cases. Each SP portrayed the cases throughout the training sessions. Every SP could consistently portray the cases before allowing them to participate in the actual communication skill training workshop. All SPs portrayed the same clinical cases. This format of SP assignments required each SP only to memorize one patient script and allowed each SP to gain the expertise and feel comfortable in portraying that case.

Table 3.3 SP characteristics

SP	Age	Gender	Professional experience	Working experience (years)	SP experience
A	40	Female	Social worker	10	yes
B	25	Female	Social worker	2	no
C	28	Female	Social worker	3	no
D	26	Female	Social worker	2	no
E	27	Female	Social worker	4	no
F	25	Female	Physical therapist	3	no
G	25	Female	Physical therapist	5	no
H	28	Male	Physical therapist	5	no

3.6.10 Case scenarios

The diagnosis of cancer induces far greater emotional reaction than diagnosis of any other diseases. Patients may express sadness, shock, denial, fear, frustration, or anger.⁽¹⁰⁵⁾ This study used the SP encounters to assess the interns or the physicians' communication skills. The scopes of three clinical cases were the disclosure of bad news with a focus on a new diagnosis and recurrence of cancer to SPs. The emotional responses of SP encounters were sad and denial emotional responses (see Table 3.4 and Appendix A). The reason for choosing these emotional responses for the SP encounters in this study because both responses were commonly found in medical practice of delivering bad news to cancer patients. The clinician should recognize the patient's feelings. Doctors should identify and address emotional responses.⁽¹⁰⁵⁾

Four experts in the medical setting assessed the contents of the case scenarios, instructions, scripts for SP, and provided their suggestions for each document (i.e. 3 clinical instructor physicians and 1 specialist nurse, as in appendix J). The feedbacks from the experts were used to the revision process of the

questionnaires. In addition, the linguistics needed the clarification on the questionnaire comments by the main advisor, co-advisor and experts.

Table 3.4 Description and communication challenge of SP encounters in BBN focusing on cancer

Case	Description	Communication challenge
Pretest 1	A 30-year-old woman who presents with bloody stool. The biopsy result shows cancer of colon	BBN to a new cancer patient. (sad)
Training case 1	A 30-year-old man who presents with abdominal discomfort. The CT result shows hepatoma.	BBN to a new cancer patient. (silent)
Training case 2	A 35-year-old lung cancer patient, after treatment for his disease is in remission. Now, he comes to the clinic with recurrence lung cancer.	BBN to a recurrence cancer patient. (angry)
Posttest 1	A 30-year-old woman comes to the clinic with nasal congestion; biopsy results show cancer in nasal cavity.	BBN to a new cancer patient. (denial)
Posttest 2	A 35-year-old lymphoma patient, after treatment her disease is in remission. Now, she comes to the clinic with recurrence lymphoma.	BBN to a recurrence cancer patient. (sad)

3.6.11 Personnel requirements

The pre-training of SP encounters required two to three SPs to portray one case. For a workshop, each intervention arm needed three faculty facilitators and one

coordinator. Moreover, the SP arm required total eight SPs; each group used two SPs. Additionally, the post training SP encounters used four SPs to portray two cases.

3.7 Data collection

After the workshop session, the participants completed questionnaires. Demographic data were collected, including the specialty, age, gender and experience of formal teaching in BBN. Questionnaires asked them to rate their satisfaction on the training and the perceived effects of the training. (see Appendix C for the post training questionnaire). The video-record SP encounters of delivering bad news were conducted in one station before the training and two stations within 2 weeks after the training. Three independent raters scored each VDO performance of the BBN by using the GKCSAF (see Appendix B). All raters were blinded to the group assignment.

Data were collected with the ethical approaches. The participants' names were not attached to any of information. All information was identified by the code number and stored in the researcher's office. All data was presented in the group format.

3.8 Data analysis

This study conducted to investigate the difference in the score from SP encounters and satisfaction, perspectives on communication training between the PRP and SP group. I used Statistical Package for Social Science (SPSS) software package for Windows version 18.0 for data collection and statistical analysis. All statistical tests were two-tailed with an alpha level of 0.05. This study include following variables: independent variable: participation in a training program (PRP or SP group); and multiple dependent variables: (a) the score from SP encounters (the pretest score, the pretest score, the change score, the change scores for each domain of communication) (b) observed measures on the questionnaire of satisfaction and perspectives on the acceptability and the perceived effect of communication training. The change scores for each measure of the communication performance were determined by subtracting the pretest scores from the posttest scores.

I analyzed the reliability for all SP encounters and the overall questionnaire with calculating the internal consistency statistic Cronbach's alpha. I analyzed the inter-rater reliability for all SP encounters with calculating the intra-class correlation coefficients (ICC).

The demographic characteristics of participants namely gender, age group, and professional experience met the basic assumptions for using the Chi-Square; (1) each observation is independent of all the others (i.e., one observation per subject); (2) no more than 20% of the expected counts are less than 5 and all individual expected counts are 1 or greater ⁽¹⁰⁶⁾ Then, I analyzed the differences in demographic characteristics between PRP and SP group in terms of gender, age group, and professional experience by using the Chi-Square.⁽¹⁰⁶⁾

The pretest score, the change score and the change scores for each domain of communication and the ratings for satisfaction and the perceived effects of the training between the PRP and SP groups met the basic assumptions for using independent samples t-test ⁽¹⁰⁷⁾; (1) The data were normally distributed; (2) Data were measured at least at the interval level; (3) Variances in these populations were roughly equal (homogeneity of variance); (4) Scores were independent.⁽¹⁰⁷⁾ Thus, I used independent samples t-tests to compare the pretest score, the change score, the change scores for each domain of communication and the ratings for satisfaction and the perceived effects of the training between the PRP and SP groups. Moreover, I calculated the effect sizes to determine the magnitude of the differences between the pretest scores and the posttest scores using Cohen's d.

In addition, the pretest and posttest score of SP encounters within PRP and SP group met the basic assumptions for using paired samples t-test ⁽¹⁰⁷⁾; (1) The data were normally distributed; (2) Data were measured at least at the interval level. I used paired samples t-tests when I analyzed pre-and post-intervention assessments in the same participants take part in both conditions.⁽¹⁰⁷⁾

3.9 Ethical consideration

I took the Human Subjects Research Social and Behavioral Researchers: HSR-SBR course on "Collaborative Institutional Training Initiative" (CITI program)

online training program was completed before this study. The ethical approval for this project was given by Siriraj Institutional Review Board and Human Research Ethics Committee, Chulabhorn Research Institute (see Appendix D and E for the certificate of approval). This study was conducted after obtaining the approval. This study was designed and conducted meticulously to ensure that the programs provided the proper experiences and appropriate knowledge for participants. The fairness and justice was recognized and entitled for all persons who participated in this study. This research was performed with precautions to ensure that there were no potential biases. The selection and randomization was also equitable.

The rights of individuals were respect. Some of the participants were vulnerable subjects because the interns were under the faculty's supervision. For this reason, the recruitment was performed by the researcher assistants who were not being parts of the faculty. These researcher assistants helped to enroll the participants into this study, as well as informed the participants about the procedure and the purpose of the research. The participants had their rights to withdraw from the research and decline to participate. They were informed also about potential risks or discomfort, any research benefits and contact persons for questions about the research. We obtained the informed consent from all participants for their participation and permission for recording their images and voices. (see Appendix G). The written instructions for investigation and the objectives of this study were given to all participants. The autonomy of the participants was addressed by advising all participants that they could choose not to be a part of the study and they could withdraw from the study at any time. The participants read an information sheet before they agreed to take part (see Appendix F).

The participants' communication skills were evaluated only for the basis of research purposes. The scores from SP encounters were not evaluated for the summative evaluation. The privacy of all participants was respected. All information was identified by the code number. All collected data were kept confidentially throughout the study in the researcher's personal computer, which had a password that prevented others from opening it. All the data that has been collected were destroyed at the end of the study.

There were no known physical harms to the participants. However, there might be a cause for emotional stress or discomfort to the participants when confronted with scenarios that were difficult and associated with BBN skill training and assessments. Moreover, the participants in the PRP group spent more time than those in the SP group for training to study the scenarios and do the rehearsals of their roles in the role playing.



CHAPTER IV

RESULTS

This chapter presents and describes an overview of the research methods, the participant's characteristics, the findings and the statistical analyses.

4.1 Overview of the research methods

The purposes of this present study were to examine the effect of training physicians to deliver bad news using PRP compared to SP on the communication skill performance of participants. Moreover, this study aimed to examine the participant's satisfaction and the perceived effect of the communication training with PRP and SP.

The scope of bad news in this study was defined as the news of diagnosis of cancer and recurrence of cancer. The participants in this study were limited to those working in this hospital. The training included didactic materials, small group discussion, large group discussion, video demonstration. Then, all participants were randomly allocated to one of the two study groups. Each group received the training with either PRP or SP. The communication skill performance of the participants was assessed with one SP encounter before the workshop and two SP encounters after two weeks of the workshop.

Each participant completed questionnaires after the training. The questionnaires inquired about the participants' age, gender, specialty, and formal teaching in BBN, as well as explored the participant's perspectives on the satisfaction of the training and the perceived effects of the training. All outcomes were evaluated after the training session.

4.2 Participant characteristics

Fifty two (49.5%) of 105 physicians resumed the consent form; whereas, the others chose not to join, of whom 26 were randomized to the PRP group and 26 were randomized to the SP group. All 52 physicians completed the baseline assessment of communication skills. An independent-samples t-test showed that the mean pretest scores at baseline were not significantly different for the SP group ($M = 29.2$, $SD = 3.39$) and the PRP group ($M = 27.9$, $SD = 2.59$), $t(50) = 1.58$, $p = 0.12$.

A total of 34 (65.4%) physicians completed the follow-up assessment, of whom 17 were in the PRP group and 17 were in the SP group. Table 4.2 provided the relevant sample characteristics. No significant group differences were detected based on gender, age group, and professional experience. Also, no significant within group differences were found with respect to the participants' gender ($\chi^2(1) = 1.07$, $p = 0.30$). Additionally, no significant within group differences were found with respect to the participants' age group ($\chi^2(2) = 2.75$, $p = 0.25$). Both PRP and SP groups consisted of 5 interns and 12 medical staffs. An independent-samples t-test indicated that the mean pretest scores at baseline were significantly higher for the SP group ($M = 29.2$, $SD = 2.36$) than for the PRP group ($M = 27.4$, $SD = 1.99$), $t(32) = 2.41$, $p = 0.02$ (Table 4.2).

Table 4.1 Participant characteristics

Characteristics	PRP group (n=17)	SP group (n=17)	<i>p</i>
Gender			
Male	6	9	
Female	11	8	0.30
Age group			
25-30	8	5	
31-40	9	10	
>40	0	2	0.25
Interns	5	5	
Medical staffs	12	12	
Total pretest score ($M \pm SD$)	27.4 ± 1.99	29.2 ± 2.36	0.02*

PRP=peer role play, SP=standardized patient, *Significant difference was set at the level of $P < 0.05$.

4.3 Reliability of instruments

The internal consistency of the SP encounters resulted in the Cronbach's alpha of 0.88. The inter-rater reliability ranged from 0.13 to 0.54 for each aspect of communication. The lowest ICC was noted for the domain of "information gathering" (0.13), while the domains with the highest ICC's were "empathy" and "understanding patient" (0.54 and 0.52, respectively). (Table 4.2) Regarding the participant's perspectives on the satisfaction and the perceived effect of communication training, the internal consistency of the questionnaire resulted in the Cronbach's alpha of 0.86.

Table 4.2 Intraclass correlation coefficient (ICC) for communication domains

Communication domains	ICC
Relationship building	0.43
Discussion opening	0.49
Information gathering	0.13
Understand patient	0.52
Information sharing	0.45
Agreement	0.46
Closure	0.41
Empathy	0.54
Accurate Information	0.35

4.4 Research findings

I used SPSS for Windows, Version 18.0 in order to analysis the data. The results indicated that all data were normally distributed. The inter-rater reliability was examined using the intra-class correlation coefficients (ICC). The internal consistency reliability (Cronbach's alpha) was intended to provide an overall alpha for the SP

encounter rating. The assessment of communication skills for each participant used one SP encounter at the pretest and two SP encounters at the posttest. Then, all three raters received and scored all video-record SP encounters in this study. This study blinded all raters for the subject identity and the group assignment. The change score for each participant was determined by subtracting pretest score of the SP encounter from mean posttest score of the SP encounter for each participant. The change scores were compared between the two groups (SP and PRP) using an independent-samples t-test. The effect sizes were calculated using Cohen's *d* to determine the extent of the differences between the baseline scores and the posttest scores.

After the workshop session, the participants completed questionnaires which asked for their ratings of the satisfaction of the training and the perceived effects of the training. The ratings for the satisfaction and the perceived effects of the training between the two groups were compared using an independent-samples t-test. The internal consistency (Cronbach's alpha) was calculated to provide an overall alpha for the ratings of the satisfaction and the perceived effects of the training. All statistical tests were two-tailed with an alpha level of 0.05.

The first question addressed in this study was whether the physicians trained to deliver bad news using PRP demonstrated the statistically significant higher communication performance than those trained with SP. It was hypothesized that physicians trained to deliver bad news using PRP demonstrated statistically significant higher score in communication skill performance than those trained with SP.

To evaluate the hypothesis, we reviewed the video-record SP encounters of delivering bad news for one station before training and two stations within two weeks after training for each participant. Three independently trained raters scored all VDO performance of BBN by using the Gap-Kalamazoo Communication Skill Assessment Form (GKCSAF). All raters were blinded to the subject identity and the group assignment. The change score for each participant was determined by withdrawing the pretest score of the SP encounter from the mean posttest score of the SP encounter for each participant. The change scores were compared between the two groups (PRP and SP) using an independent-samples t-test.

4.4.1 Effects of BBN training on the overall participant communication skills performance

A paired-samples t-test showed that scores were significantly higher for the posttest ($M = 36.2$, $SD = 2.35$) than for the pretest ($M = 28.3$, $SD = 2.34$), $t(33) = 15.9$, $p < 0.001$, (see Table 4.3) The average increased score was 7.90 ($SD = 2.90$).

Table 4.3 The pretest and posttest scores for overall participants

	n	$M \pm SD$	<i>P</i>
Pretest score	34	28.3 \pm 2.34	
Posttest score	34	36.2 \pm 2.35	<0.001*

*Significant difference was set at the level of $P < 0.05$.

4.4.2 Effects of BBN training with PRP and SP on communication skills performance

An independent-samples t-test showed that the mean pretest scores were significantly higher for the SP group ($M = 29.2$, $SD = 2.36$) than for the PRP group ($M = 27.4$, $SD = 1.99$), $t(32) = 2.41$, $p = 0.02$ (see Table 4.4). However, the posttest score were not significantly different between the two groups. (PRP group ($M = 35.7$, $SD = 1.75$) and the SP group ($M = 36.7$, $SD = 2.78$), $t(32) = 1.29$, $p = 0.21$. Levene's test indicated the unequal variances ($F = 4.48$, $p = 0.04$). Finally, an independent-samples t-test indicated that the improved score were not significantly different between the two groups (the PRP group ($M = 8.28$, $SD = 2.17$) and the SP group ($M = 7.51$, $SD = 3.52$), $t(32) = 0.77$, $p = 0.45$ (see Table 4.4)).

Table 4.4 The pretest and posttest score for the PRP group and the SP group.

	PRP (n=17) ($M \pm SD$)	SP (n=17) ($M \pm SD$)	<i>P</i>
Total Pretest	27.4 \pm 1.99	29.2 \pm 2.36	
Total Posttest	35.7 \pm 1.75	36.7 \pm 2.78	
The change scores	8.28 \pm 2.17	7.51 \pm 3.52	0.45

*Significant difference was set at the level of $P < 0.05$.

4.4.3 Effects of BBN training with PRP and SP on communication skills performance for each domain.

The change scores between the posttest and the pretest for each domain of the PRP group as compared to the SP group were shown in Table 4.5. Among the posttest, the change scores were significantly higher for the PRP group than the SP group in the domain of agreement. An independent-samples t-test showed that the change scores were significantly higher for the PRP group ($M = 1.05$, $SD = 0.31$) than for the SP group ($M = 0.74$, $SD = 0.40$), $t(32) = 2.47$, $p = 0.02$, $d = 0.85$ (see Table 4.5). While an independent-samples t-test indicated that the improved scores were not significantly different for the PRP group and the SP group in other domains.

4.4.4 Findings from end-of-program evaluation questionnaires

The second aim of this research was to study the participant's perspectives on the satisfaction and the perceived effect of communication training with PRP and SP. After the workshop session, the participants completed questionnaires which asked for their ratings of the satisfaction of the training and the perceived effects of the training. The independent sample t-test was used to assess the differences in scores from the questionnaires between the two groups.

Of the 34 participants, 16 (47.0%) participants responded to the questionnaires for the assessment of the participant's perspectives on the satisfaction and the perceived effect of communication training. A questionnaire response rate was 58.8% in the PRP group and 35.3% in the SP group. The satisfaction for the training session was high in both groups (4.70 ± 0.48 for PRP group, 4.33 ± 0.52 for SP group) with no significant difference in both groups. (Table 4.6) Moreover, the time spent in training was seen as worthwhile by both groups (5.00 ± 0.00 for PRP group, 4.67 ± 0.52 for SP group). Both groups found the training to be very useful (4.90 ± 0.32 for PRP group, 4.67 ± 0.52 for SP group). Both groups agreed with the training applicability for future BBN (5.00 ± 0.00 for PRP group, 4.67 ± 0.52 for SP group).

In sum, the participant's perspectives on the satisfaction and the perceived effect of communication training in all three aspects showed no significant difference in both groups. (see Table 4.6)

Table 4.5 Communication skills performance for each domain

Domains	Peer role play group (n=17)			Standardized patient group (n=17)			Change score PRP vs. SP		
	Pretest M (SD)	Posttest M (SD)	Change score M (SD)	Pretest M (SD)	Posttest M (SD)	Change score M (SD)	<i>t</i>	<i>d</i>	<i>p</i>
Relationship building	3.2 (0.37)	4.00 (0.32)	0.79 (0.49)	3.18 (0.43)	3.91 (0.35)	0.73 (0.63)	0.25	0.09	0.80
Discussion opening	3.37 (0.44)	4.09 (0.27)	0.73 (0.42)	3.25 (0.45)	4.15 (0.33)	0.90 (0.61)	0.99	-0.34	0.33
Information gathering	2.92 (0.38)	3.74 (0.26)	0.82 (0.39)	3.16 (0.37)	4.00 (0.32)	0.85 (0.46)	0.20	-0.07	0.84
Understand patient	2.51 (0.47)	3.69 (0.34)	1.18 (0.45)	2.98 (0.65)	3.91 (0.52)	0.93 (0.76)	1.15	0.39	0.260
Information sharing	3.21 (0.39)	4.05 (0.18)	0.83 (0.42)	3.51 (0.31)	4.09 (0.30)	0.58 (0.39)	1.84	0.63	0.08
Agreement	3.00 (0.26)	4.05 (0.20)	1.05 (0.31)	3.35 (0.25)	4.09 (0.29)	0.74 (0.40)	2.47	0.85	0.02*
Closure	3.18 (0.41)	4.18 (0.20)	1.00 (0.43)	3.37 (0.28)	4.20 (0.30)	0.83 (0.32)	1.28	0.44	0.21
Empathy	2.92 (0.36)	3.81 (0.27)	0.89 (0.42)	3.09 (0.51)	4.15 (0.51)	1.05 (0.58)	0.90	-0.31	0.38
Accurate Information	3.08 (0.25)	4.08 (0.21)	1.00 (0.28)	3.31 (0.30)	4.19 (0.35)	0.88 (0.39)	1.01	0.35	0.32

*Significant difference was set at the level of $p < 0.05$, M was mean, SD was standard deviation, t was t value and d was effect size.

Table 4.6 Satisfaction and perceived effect of communication training

Domain	PRP group Mean \pm SD	SP group Mean \pm SD	<i>p</i>
Satisfaction of the training	4.70 \pm 0.48	4.33 \pm 0.52	0.17
Training is worthwhile	5.00 \pm 0.00	4.67 \pm 0.52	0.18
Training is usefulness	4.90 \pm 0.32	4.67 \pm 0.52	0.35
Training is applicable	5.00 \pm 0.00	4.67 \pm 0.52	0.18

*Significant difference was set at the level of $p < 0.05$.

CHAPTER V

DISCUSSION

This chapter discusses and summarizes this study in the following sections: (a) results, (b) limitations and suggestions (c) implication, and (d) conclusion.

5.1 Discussion of the results

The aims of this study were to examine the effect of training physicians to deliver bad news using PRP compared to SP on communication skill performance of the participants. The results showed that the improved BBN skills in cancer were the achieved outcomes through a one-day training workshop in both the PRP and the SP groups when compared to the baseline BBN skills. However, there was no significant difference in score improvement between the two groups.

In addition, the participants rated high satisfaction on the communication training with PRP and SP. The satisfaction for the workshop was high in both PRP and SP group. There was no significant difference between the two groups. Moreover, the participants in both PRP and SP group rated highly agreed with the statements that the training was useful and worthwhile for time spent. Furthermore, both groups agreed that the training was applicable for future BBN. However, there was no significant difference between the two groups.

5.1.1 The communication skill performance

The first question that this study addressed was whether the physicians trained to deliver bad news by using PRP demonstrated the statistically significant higher communication skill performance than those trained with SP.

From the literature review, PRP is a potent educational approach to teach the communication skills. PRP allows learners to experience the perspectives of both a

clinician and a patient. Moreover, there is evidence from the previous study which demonstrated that PRP enhance the empathy to participants⁽¹⁸⁾ Bosse and colleague conducted a randomized controlled trial on the teaching communication skills to medical students by comparing the effects of teaching between PRP and SP.⁽¹⁸⁾ Their study revealed that the post training OSCE score of PRP was higher than SP. This was due to the significantly higher performance in the domain of understanding the parents' viewpoints.⁽¹⁸⁾ The authors reported that the switching roles between acting as a doctor and a patient could help the students understand the feelings of patients. They concluded that PRP instruction provides a methodological advantage of enhancing empathy to patients concerns.⁽¹⁸⁾

These considerations will make the teaching with PRP better than the training with SP. PRP fosters the changes in attitudes and perceptions, as well as can facilitate the modification of behaviors. It is ideally suited to doctors for practicing their communication skills.

However, empathy is only one of the many elements of communication skills. The Kalamazoo Consensus Statement reported the seven essential skills for communication tasks.⁽²⁵⁾

Our results were different from the findings from Bosse et al. who compared the use of SP and PRP in the teaching of a broad medical context of communication problems in outpatient medical care to medical students.⁽¹⁸⁾ Bosse et al. showed that the PRP training better improved trainees' performance. They suggested that PRP led to better result because of the understanding of the parents' perspectives. Thus, PRP may offer a benefit in promotion a more empathic approach.⁽¹⁸⁾

Our study compared the use of SP and PRP in teaching communication skills to interns and physicians, with a focus on one specific challenge in communication – breaking bad news in cancer. There was no significant difference in score improvement between the two groups. Our results concurred with the findings from previous studies of Papadakis⁽²¹⁾, Mounsey⁽²²⁾ and Lane⁽²³⁾. These studies also compared the use of SP and PRP in the training communication skills to medical students and health professionals.⁽²¹⁻²³⁾ (see Table 5.1) Their results showed that there

was no significant differences in the scores between the PRP and the SP groups. They concluded that the effectiveness of both methods were comparable.

Table 5.1 : Summary of communication skills training using PRP vs SP

Authors	Training Method	Participants	Assessment	Results
Papadakis ⁽²¹⁾	Lecture and small group w/PRP vs. SP Two-day workshop in motivational interviewing (MI) (smoking cessation)	Medical students (n=72) PRP vs. SP	- assessment exercise using SPs	- no significant difference of score between the two groups
Mounsey ⁽²²⁾	Lecture and small group w/PRP vs. SP Two-day workshop in motivational interviewing (MI) (smoking cessation)	Medical students (n=93) PRP vs. SP	-Videotaped SP consultation -Tool : motivational interviewing code (MITI)	-no significant difference of score between the two groups
Lane ⁽²³⁾	Lecture and small group w/PRP vs. SP Total time: two-day workshop in motivational interviewing (MI) (smoking cessation)	Health care professionals (n=70) PRP vs. SP	-Audiotaped SP consultation -Tool : Behavior Change Counseling Index -Each station 8 min, Pre 1, Post 1	- no significant difference of score between the two groups

Table 5.1 : Summary of communication skills training using PRP vs SP (cont.)

Authors	Training Method	Participants	Assessment	Results
Bosses ⁽¹⁸⁾	Lecture and small groups with PRP or SP or control group Total time: three weeks	Fifth year medical students (N = 103) PRP or SP or control group	-OSCE with SP : six-station -Tool : Calgary-Cambridge-Observation-Guide Checklist	- Higher posttest score after PRP than SP (due to higher score in the domain understanding of parents' perspective ($p < .001$).
This study	Lecture and small group w/PRP vs. SP Total time: one-day BBN training workshop.	Medical staffs and interns (n=34) PRP vs. SP	-VDO recorded SP encounters -Tool : GKCSAF -Each station 10 min Pre 1 station Post 2 station	-For PRP, the posttest were significantly higher (35.7 ± 1.75) than for the pretest (27.4 ± 1.99), $p < .001$. -For SP group, the posttest (36.7 ± 2.78) than for the pretest (29.2 ± 2.36), $p < .001$. -The increased score were not significantly different for the PRP group (8.28 ± 2.17) and the SP group (7.51 ± 3.52), $p = .445$. -The participant's perspectives on the satisfaction and the perceived effect of communication training showed no significant difference in both groups.

There were some similarities among their studies⁽²¹⁻²³⁾ and our present study. All three studies and our study conducted as a one to two-day training workshop with using Lecture and small group with PRP compared to SP. Moreover, all studies used SP consultation for communication skills assessment. Furthermore, the participants in the study of Lane et al. were health care professionals similar with our study which conduct in interns and medical specialists.

However, these studies limited to one task of communication specifically motivational interviewing for smoking cessation.⁽²¹⁻²³⁾ While our study focused on one specific challenge in communication – breaking bad news in cancer.

There were some differences when compared our study with the study from Bosse et.⁽¹⁸⁾ This may be due to many issues. First, there was the presence of the professional feedback provided by SPs in the study of Bosse, but it was absent in this study.⁽¹⁸⁾ Second, the amount of training time in the study of Bosse was larger than this study. Third, the sample size in this study was smaller. Fourth, the participants in the study of Bosse were medical students, but our study conducted in practicing physicians. Fifth, this study used VDO recorded SP encounters for communication skills assessment while Bosse used OSCE for assessment. Last, the subject characteristics in Bosse's study focused on teaching broad medical context of communication problems for the outpatient medical care to medical students, which differed from this study.

In real-life practice, communication skills training which take time one to two days is more practical approach. This study evaluated the effectiveness of communication skill training for the physicians with PRP or SP teaching methods. The communication skills, as measured by the GKCSAF scores, showed that both the PRP and the SP groups had the improvement on the GKCSAF scores significantly from the pretest to the posttest. These findings concurred with the results from previous studies that communication skill training with PRP or SP improve communication skills.^(8, 108)

5.1.2 The participant's perspectives on satisfaction and the perceived effect of communication training.

The second aim of this research was to study the participant's perspectives on satisfaction and the perceived effect of communication training with PRP and SP.

The satisfaction for the training session was high and no significant differences were present in both PRP and SP groups. Moreover, both groups stated that the BBN training was worthwhile, useful and applicable. Although the satisfaction for the training and all parts of the perceived effectiveness were rated higher in the PRP group, the small numbers of participants may cause no statistically significant difference between the two groups.

The findings of the previous study on teaching communication skills with PRP and SP for the undergraduate medical students reported that all of the perceived effectiveness were rated higher in the SP group.⁽³¹⁾ Whereas, the use of the same training cases and the extent of training time were equal across the groups. Also, the role of tutors was limited to just being the resource persons who helped facilitate in both groups. But the SP's in this study were not assigned to give feedback to the participants. Therefore, the main learning experiences came from the discussions of group members in the training with PRP and SP methods.^(19, 32, 34) The review of literature suggested that the structuring feedback from SP's was useful for the learning process.^(32, 33) One reason which might elucidate the higher ratings of the perceived effectiveness in the SP group was the existence of professional feedback from SP in the previous study, but that was absent in the present study.⁽³¹⁾

5.2 Limitations and suggestions for future research

This section discussed the limitations and suggestions for future research. The limitations should be noted while interpreting the findings of this study.

5.2.1 Limitations

5.2.1.1 Study sample issues

First, 52 participants indicated that they were interested in participating in this study after the enrollment. All participants were randomly assigned to receive training to deliver bad news with either PRP or SP. At baseline, there was no significant difference between the pretest scores of the PRP and SP group. Although the participants were randomized prior to the workshop, they could withdraw from the post-randomization experiment, which may have resulted in a

selection bias. When the drop out occurred, there were significant differences in the pretest scores between the remaining PRP and SP groups. However, the change scores were determined by deducting the baseline communication skill performance score of the SP encounter from the posttest score. This study compared the change scores between the two groups.

Second, the sample size was small, which also did not provide the generalization of the findings in this study. The rate of participation was only 50% of recruited physicians. Many physicians accepted to join this CST workshop but declined to participate in this research. It will be need the study in a larger number of clinicians to draw more precise conclusions about the effectiveness of both teaching methods.

Third, this study was conducted in a single institution with the context of comprehensive cancer center hospital and all participants were postgraduates. These conditions limited the generalization of the findings. It would be necessary to conduct the study with other group of doctors, including undergraduates in order to generalize the findings of the study. However, this study demonstrated the benefits of the CST for experienced participants with experience of oncology in a cancer center.

5.2.1.2 Instrumentation issues

First, this study arranged only one SP encounter for baseline and two post-training SP encounters for communication skill assessment due to time consuming and man-power limitations.

Second, the communication skills in this study were collected at two-week intervals after the intervention. There was no evidence that this change of BBN skills after training would continue over a longer time frame. Therefore, a future research should address the effect of both teaching approaches for the sustainability.

Third, the inter-rater reliabilities of the SP encounters were low to intermediate, ranged from 0.126 to 0.535 for each aspect of communication. The reason for a low ICC would be that the rater training in this study was not true and ideal frame of reference training. Raters would not have the same understanding of a specific dimension for each domain of communication.

Fourth, the raters were not totally blinded to the sequence of encounters (pre-training and post-training). It may be source for biases and make the limitation in interpretation of the post-training score.

Next, in spite of the acceptable reliability of the English version of the GKCSAF instruments, there were no existing translated instruments in the Thai version for the assessment of BBN skills. There was no translation of the GKCSAF from English into Thai because of the time limitations. The reproduction of this study in the future may require the translation and the edition of tools from the English language into the native language in order to improve the outcomes of the assessment.

5.2.2 Suggestions for future research

First, I suggested the investigation for the influence of the training in long term because the outcome in this study was collected at only one time; at two-week intervals after the intervention. There was no evidence that this change of BBN skills after training would continue over a longer time frame. Therefore, a future research should address the effect of both teaching approaches for the sustainability of effect.

Second, a future research should be conducted in more diverse groups of subjects, ranging from the inexperienced medical students to the practicing specialists. Due to this study was conducted in only a single institution with the context of comprehensive cancer center hospital and all participants were postgraduates. This condition limited the generalization of the findings. By conducting the study with other group of doctors, including undergraduates may have benefit to enhance a conclusion to support the use of PRP and SP in teaching communication skills.

Third, because the appropriateness of a given communication behavior might differ from one cultural context to the next, a multi-center trial of using PRP and SP with the cooperation from medical schools in other geographical regions within Thailand and/or outside Thailand might provide a new perspective on how to modify the use of PRP and SP to better serve diverse populations and relevant stakeholders, as well as to help improve the generalizability of the findings.

Fourth, another interesting area for future research was to examine the effects of using PRP and SP for the communication skill training, including the use of

OSCE or the more number of SP encounters, and various participants' characteristics (e.g., age, gender, specialty, number of years in the training program). These extraneous factors had the potential to influence the effectiveness of using both teaching methods.

Future research can be conducted on the qualitative aspects, such as a focus group or interview, and should obtain more data from SPs to add on more interesting information for the use of PRP and SP.

Finally, for researchers interested in the use of PRP and SP in teaching communication skills, the training workshops should be conducted in other issues of doctor-patient communication such as informative counseling, giving informed consent, advanced care planning or breaking bad news in other diseases. In this study, there was only one focus on breaking bad news in cancer. In the future, researchers should expand the scope of both teaching methods.

5.3 Implications

The findings from this research showed that the communication skill training for physicians with either PRP or SP was effective in increasing the communication skills. This study also supported the effectiveness of using PRP or SP in the BBN training workshop in different cultural settings. Despite the differences in cultures and academic structures between the western countries and Thailand, it was evident that the use of PRP or SP could be conducted with a significant improvement in BBN skills following the training. Both teaching methods were very well accepted with highly perceived effectiveness. These findings supported the results from the previous researches on the effectiveness of both approaches.

Moreover, both PRP and SP were useful approaches for communication training. The PRP was easy to conduct, required less resource, and was equally effective for teaching BBN in a cancer background compared to the training with the SP. Given the cost, time, and resource, the SP can be vital, and the PRP may be a good alternative.

In addition, it was unusual for Thai physicians to be trained in an interactive and organizing training workshop with peer discussion, small group

activities and role-playing. However, the satisfaction for the training session was high and there was no significant difference in both approaches. The BBN training with either PRP or SP was worthwhile, useful, and applicable. Both teaching methods seemed to be comparable for the BBN communication skill training and very well accepted.

5.4 Conclusion

This study evaluated the effect of PRP and SP for teaching breaking bad news of cancer for physicians. The study was conducted in Thailand based on a quantitative method. A one-day training workshop, where physicians practiced with either PRP or SP, could produce a significant improvement in the BBN skills following the training. There was no significant difference between the use of the PRP and SP in the BBN training workshop. Both teaching methods seemed comparable for the BBN communication skill training and very well accepted with the high perceived effectiveness. The obtained experiences from this research could provide useful information for future studies.

REFERENCES

1. Deveugele M, Derese A, De Maesschalck S, Willems S, Van Driel M, De Maeseneer J. Teaching communication skills to medical students, a challenge in the curriculum? *Patient Educ Couns*. 2005;58(3):265-70.
2. Laidlaw A, Hart J. Communication skills: An essential component of medical curricula. Part I: Assessment of clinical communication: AMEE Guide No. 51. *Med Teach*. 2011;33(1):6-8.
3. Keller VF, Carroll JG. A new model for physician-patient communication. *Patient Educ Couns*. 1994;23(2):131-40.
4. Rider EA, Hinrichs MM, Lown BA. A model for communication skills assessment across the undergraduate curriculum. *Med Teach*. 2006;28(5):e127-34.
5. Fallowfield L, Jenkins V. Communicating sad, bad, and difficult news in medicine. *Lancet*. 2004;363(9405):312-9.
6. Modi JN, Chhatwal J, Gupta P, Singh T. Teaching and assessing communication skills in medical undergraduate training. *Indian Pediatr*. 2016;53(6):497-504.
7. Rosenbaum ME, Ferguson KJ, Lobas JG. Teaching medical students and residents skills for delivering bad news: a review of strategies. *Acad Med*. 2004;79(2):107-17.
8. Aspegren K. BEME Guide No. 2: Teaching and learning communication skills in medicine-a review with quality grading of articles. *Med Teach*. 1999;21(6):563-70.
9. Gysels M, Richardson A, Higginson IJ. Communication training for health professionals who care for patients with cancer: A systematic review of training methods. *Support Care Cancer*. 2005;13(6):356-66.

10. Gysels M, Richardson A, Higginson IJ. Communication training for health professionals who care for patients with cancer: A systematic review of effectiveness. *Support Care Cancer*. 2004;12(10):692-700.
11. Berkhof M, van Rijssen HJ, Schellart AJM, Anema JR, van der Beek AJ. Effective training strategies for teaching communication skills to physicians: An overview of systematic reviews. *Patient Educ Couns*. 2011;84(2):152-62.
12. Alelwani SM, Ahmed YA. Medical training for communication of bad news: A literature review. *J Educ Health Promot*. 2014;3(1):51.
13. Shapiro SM, Lancee WJ, Richards-Bentley CM. Evaluation of a communication skills program for first-year medical students at the University of Toronto. *BMC Med Educ*. 2009;9(1):11.
14. Cleland JA, Abe K, Rethans JJ. The use of simulated patients in medical education: AMEE Guide No 42. *Med Teach*. 2009;31(6):477-486.
15. Adamo G. Simulated and standardized patients in OSCEs: Achievements and challenges 1992-2003. *Med Teach*. 2003;25(3):262-270.
16. Bosse HM, Nickel M, Huwendiek S, Schultz JH, Nikendei C. Cost-effectiveness of peer role play and standardized patients in undergraduate communication training. *BMC Med Educ*. 2015;15(1):183.
17. Ziv A. Simulators and simulation-based medical education. In: Dent JA, Harden RM, editors. *A practical guide for medical teachers*. Edinburgh: Elsevier Churchill Livingstone; 2005.p.211-220.
18. Bosse HM, Schultz J-H, Nickel M, Lutz T, Möltner A, Jünger J, et al. The effect of using standardized patients or peer role play on ratings of undergraduate communication training: A randomized controlled trial. *Patient Educ Couns*. 2012;87(3):300-6.
19. Nestel D, Tierney T. Role-play for medical students learning about communication: Guidelines for maximising benefits. *BMC Med Educ*. 2007;7(1):3.
20. Lane C, Rollnick S. The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. *Patient Educ Couns*. 2007;67(1/2):13-20.

21. Papadakis MA, Croughan-Minihane M, Fromm LJ, Wilkie HA, Ernster VL. A comparison of two methods to teach smoking-cessation techniques to medical students. *Acad Med.* 1997;72(8):725-7.
22. Mounsey AL, Bovbjerg V, White L, Gazewood J. Do students develop better motivational interviewing skills through role-play with standardised patients or with student colleagues? *Med Educ.* 2006;40(8):775-780.
23. Lane C, Hood K, Rollnick S. Teaching motivational interviewing: Using role play is as effective as using simulated patients. *Med Educ.* 2008;42(6):637-44.
24. Kolb D. *Experiential education: Experience as the source of learning and development.* Englewood Cliffs, NJ. 1984.
25. Makoul G. Essential elements of communication in medical encounters: the Kalamazoo consensus statement. *Acad Med.* 2001;76(4):390-3.
26. Hedin N. *Experiential learning: Theory and challenges.* *Christ Educ.* 2010;7(1):107.
27. Peterson EB, Calhoun AW, Rider EA. The reliability of a modified Kalamazoo Consensus Statement Checklist for assessing the communication skills of multidisciplinary clinicians in the simulated environment. *Patient Educ Couns.* 2014;96(3):411-8.
28. Rider EA, Hinrichs MM, Lown BA. A model for communication skills assessment across the undergraduate curriculum. *Med Teach.* 2006;28(5):127-34.
29. Joyce BL, Steenbergh T, Scher E. Use of the Kalamazoo Essential Elements Communication Checklist (Adapted) in an Institutional Interpersonal and Communication Skills Curriculum. *J Grad Med Educ.* 2010;2(2):165-9.
30. Calhoun AW, Rider EA, Peterson E, Meyer EC. Multi-rater feedback with gap analysis: an innovative means to assess communication skill and self-insight. *Patient Educ Couns.* 2010;80(3):321-6.
31. Bosse HM, Nickel M, Huwendiek S, Jünger J, Schultz JH, Nikendei C. Peer role-play and standardised patients in communication training: A comparative study on the student perspective on acceptability, realism, and perceived effect. *BMC Med Educ.* 2010;10(1):27.

32. Barrows HS. An overview of the uses of standardized patients for teaching and evaluating clinical skills. *Acad Med.* 1993;68(6):443-51.
33. Veloski J, Boex JR, Grasberger MJ, Evans A, Wolfson DB. Systematic review of the literature on assessment, feedback and physicians' clinical performance: BEME Guide No. 7. *Med Teach.* 2006;28(2):117-128.
34. Joyner B, Young L. Teaching medical students using role-play: Twelve tips for successful role-plays. *Med Teach.* 2006;28(3):225 - 9.
35. Baile W, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka A. SPIKES - A six-step protocol for delivering bad news: Application to the patient with cancer. *Oncologist.* 2000;5(4):302-311.
36. Chan CKY. Exploring an experiential learning project through Kolb's learning theory using a qualitative research method. *Eur J Eng Educ.* 2012;37(4):405-15.
37. Maguire P. Improving communication with cancer patients. *Eur J Cancer.* 1999;35(14):2058-65.
38. Brown JB, Boles M, Mullooly JP, Levinson W. Effect of clinician communication skills training on patient satisfaction. A randomized, controlled trial. *Ann Intern Med.* 1999;131(11):822-9.
39. Billings J, Block S. Palliative care in undergraduate medical education: Status report and future directions. *JAMA.* 1997;278(9):733-8.
40. Rosenbaum ME, Kreiter C. Teaching delivery of bad news using experiential sessions with standardized patients. *Teach Learn Med.* 2002;14(3):144-9.
41. Lenzi R, Baile WF, Costantini A, Grassi L, Parker PA. Communication training in oncology: Results of intensive communication workshops for Italian oncologists. *Eur J Cancer Care (Engl).* 2011;20(2):196-203.
42. Harden RM. Twelve tips on teaching and learning how to break bad news. *Med Teach.* 1996;18(4):275-8.
43. Back AL, Arnold RM, Baile WF, et al. Efficacy of communication skills training for giving bad news and discussing transitions to palliative care. *Arch Intern Med.* 2007;167(5):453-60.

44. Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES-A six-step protocol for delivering bad news: application to the patient with cancer. *Oncologist*. 2000;5(4):302-11.
45. McFarland K, Rhoades D, Roberts E, Eleazer P. Teaching communication and listening skills to medical students using life review with older adults. *Gerontol Geriatr Educ*. 2006;27(1):81-94.
46. Knox JD, Thomson GM. Breaking bad news: Medical undergraduate communication skills teaching and learning. *Med Educ*. 1989;23(3):258-61.
47. Wykurz G, Kelly D. Developing the role of patients as teachers: Literature review. *BMJ*. 2002;325(7368):818-21.
48. Al Odhayani A, Ratnapalan S. Teaching communication skills. *Can Fam Physician*. 2011;57(10):1216-8.
49. Ungar L, Alperin M, Amiel GE, Beharier Z, Reis S. Breaking bad news: Structured training for family medicine residents. *Patient Educ Couns*. 2002;48(1):63-8.
50. Rosenbaum ME, Ferguson KJ, Lobas JG. Teaching medical students and residents skills for delivering bad news: A review of strategies. *Acad Med*. 2004;79(2):107-17.
51. Howley L, Szauter K, Perkowski L, Clifton M, McNaughton N. Quality of standardised patient research reports in the medical education literature: Review and recommendations. *Med Educ*. 2008;42(4):350-8.
52. Kiessling C, Tsimtsiou Z, Essers G, van Nuland M, Anvik T, Bujnowska-Fedak MM, et al. General principles to consider when designing a clinical communication assessment program. *Patient Educ Couns*. 2017;100(9):1762-8.
53. Wass V, Van der Vleuten C, Shatzer J, Jones R. Assessment of clinical competence. *Lancet*. 2001;357(9260):945-9.
54. Ram P, van der Vleuten C, Rethans JJ, Schouten B, Hobma S, Grol R. Assessment in general practice: The predictive value of written-knowledge tests and a multiple-station examination for actual medical performance in daily practice. *Med Educ*. 1999;33(3):197-203.

55. Humphris GM, Kaney S. The Objective structured video exam for assessment of communication skills. *Med Educ.* 2000;34(11):939-45.
56. Kogan JR, Holmboe ES, Hauer KE. Tools for direct observation and assessment of clinical skills of medical trainees: A systematic review. *JAMA.* 2009;302(12):1316-26.
57. Essers G, Kramer A, Andriess B, van Weel C, van der Vleuten C, van Dulmen S. Context factors in general practitioner-patient encounters and their impact on assessing communication skills--an exploratory study. *BMC Fam Prac.* 2013;14(1):65.
58. Carraccio C, Englander R. The objective structured clinical examination: A step in the direction of competency-based evaluation. *Arch Pediatr Adolesc Med.* 2000;154(7):736-41.
59. Rushforth HE. Objective structured clinical examination (OSCE): Review of literature and implications for nursing education. *Nurse Educ Today.* 2007;27(5):481-90.
60. Baig LA, Violato C, Crutcher RA. Assessing clinical communication skills in physicians: Are the skills context specific or generalizable. *BMC Med Educ.* 2009;9(1):22.
61. Reinders ME, Blankenstein AH, van Marwijk HW, Knol DL, Ram P, van der Horst HE, et al. Reliability of consultation skills assessments using standardised versus real patients. *Med Educ.* 2011;45(6):578-84.
62. Boon H, Stewart M. Patient-physician communication assessment instruments. *Patient Educ Couns.* 35(3):161-76.
63. Van Nuland M, Van den Noortgate W, van der Vleuten C, Jo G. Optimizing the utility of communication OSCEs: Omit station-specific checklists and provide students with narrative feedback. *Patient Educ Couns.* 2012;88(1):106-12.
64. van Zanten M, Boulet JR, McKinley D. Using standardized patients to assess the interpersonal skills of physicians: six years' experience with a high-stakes certification examination. *Health Commun.* 2007;22(3):195-205.

65. Vu NV, Marcy ML, Verhulst SJ, Barrows HS. Generalizability of standardized patients' satisfaction ratings of their clinical encounter with fourth-year medical students. *Acad Med.* 1990;65(9 Suppl):S29-30.
66. Yudkowsky R, Downing SM, Sandlow LJ. Developing an institution-based assessment of resident communication and interpersonal skills. *Acad Med.* 2006;81(12):1115-22.
67. Cohen DS, Colliver JA, Marcy MS, Fried ED, Swartz MH. Psychometric properties of a standardized-patient checklist and rating-scale form used to assess interpersonal and communication skills. *Acad Med.* 1996;71(1 Suppl):S87-9.
68. Guiton G, Hodgson CS, Delandshere G, Wilkerson L. Communication skills in standardized-patient assessment of final-year medical students: a psychometric study. *Adv Health Sci Educ Theory Pract.* 2004;9(3):179-87.
69. Newble D. Techniques for measuring clinical competence: Objective structured clinical examinations. *Med Educ.* 2004;38(2):199-203.
70. Epstein RM. Assessment in medical education. *N Engl J Med.* 2007;356(4):387-96.
71. Roter DL, Hall JA, Kern DE, Barker LR, Cole KA, Roca RP. Improving physicians' interviewing skills and reducing patients' emotional distress. *Arch Intern Med.* 1995;155(17):1877-84.
72. Boulet JR, De Champlain AF, McKinley DW. Setting defensible performance standards on OSCEs and standardized patient examinations. *Med Teach.* 2003;25(3):245-9.
73. Bokken L, Linssen T, Scherpbier A, van der Vleuten C, Rethans JJ. Feedback by simulated patients in undergraduate medical education: A systematic review of the literature. *Med Educ.* 2009;43(3):202-10.
74. Branch WT, Jr., Paranjape A. Feedback and reflection: Teaching methods for clinical settings. *Acad Med.* 2002;77(12 Pt 1):1185-8.
75. Liénard A, Merckaert I, Libert Y, Bragard I, Delvaux N, Etienne AM, et al. Is it possible to improve residents breaking bad news skills? A randomized study assessing the efficacy of a communication skills training program. *Br J Cancer.* 2010;103(2):171-7.

76. Szmuilowicz E, el-Jawahri A, Chiappetta L, Kamdar M, Block S. Improving residents' end-of-life communication skills with a short retreat: A randomized controlled trial. *J Palliat Med.* 2010;13(4):439-52.
77. Gorniewicz J, Floyd M, Krishnan K, Bishop TW, Tudiver F, Lang F. Breaking bad news to patients with cancer: A randomized control trial of a brief communication skills training module incorporating the stories and preferences of actual patients. *Patient Educ Couns.* 2017;100(4):655-66.
78. Fujimori M, Shirai Y, Asai M, Kubota K, Katsumata N, Uchitomi Y. Effect of communication skills training program for oncologists based on patient preferences for communication when receiving bad news: A randomized controlled trial. *J Clin Oncol.* 2014;32(20):2166-72.
79. Merckaert I, Liénard A, Libert Y, Bragard I, Delvaux N, Etienne AM, et al. Is it possible to improve the breaking bad news skills of residents when a relative is present? A randomised study. *Br J Cancer.* 2013;109(10):2507-14.
80. Kurtz S, Silverman J, Benson J, Draper J. Marrying content and process in clinical method teaching: enhancing the Calgary-Cambridge guides. *Acad Med.* 2003;78(8):802-9.
81. Lang F, McCord R, Harvill L, Anderson DS. Communication assessment using the common ground instrument: psychometric properties. *Fam Med.* 2004;36(3):189-98.
82. Kalet A, Pugnaire MP, Cole-Kelly K, Janicik R, Ferrara E, Schwartz MD, et al. Teaching communication in clinical clerkships: models from the macy initiative in health communications. *Acad Med.* 2004;79(6):511-20.
83. Makoul G. The SEGUE Framework for teaching and assessing communication skills. *Patient Educ Couns.* 2001;45(1):23-34.
84. van Thiel J, Kraan HF, Van Der Vleuten CP. Reliability and feasibility of measuring medical interviewing skills: The revised Maastricht history-taking and advice checklist. *Med Educ.* 1991;25(3):224-9.
85. Iramaneerat C, Myford CM, Yudkowsky R, Lowenstein T. Evaluating the effectiveness of rating instruments for a communication skills assessment

- of medical residents. *Adv Health Sci Educ Theory Pract*. 2009;14(4):575-94.
86. Epstein RM, Dannefer EF, Nofziger AC, Hansen JT, Schultz SH, Jospe N, et al. Comprehensive assessment of professional competence: the Rochester experiment. *Teach Learn Med*. 2004;16(2):186-96.
87. Novack DH, Dube C, Goldstein MG. Teaching medical interviewing. A basic course on interviewing and the physician-patient relationship. *Arch Intern Med*. 1992;152(9):1814-20.
88. Schirmer JM, Mauksch L, Lang F, Marvel MK, Zoppi K, Epstein RM, et al. Assessing communication competence: A review of current tools. *Fam Med*. 2005;37(3):184-92.
89. Frankel RM, Stein T. Getting the most out of the clinical encounter: The four habits model. *J Med Pract Manag : MPM*. 2001;16(4):184-91.
90. Whelan GP. Educational Commission for Foreign Medical Graduates: Clinical skills assessment prototype. *Med Teach*. 1999;21(2):156-60.
91. Lipner RS, Blank LL, Leas BF, Fortna GS. The value of patient and peer ratings in recertification. *Acad Med*. 2002;77(10 Suppl):S64-6.
92. Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, et al. The impact of patient-centered care on outcomes. *J Fam Pract*. 2000;49(9):796-804.
93. Calhoun AW, Rider EA, Meyer EC, Lamiani G, Truog RD. Assessment of communication skills and self-appraisal in the simulated environment: Feasibility of multirater feedback with gap analysis. *Simul Health*. 2009;4(1):22-9.
94. Perera J, Perera J, Abdullah J, Lee N. Training simulated patients: Evaluation of a training approach using self-assessment and peer/tutor feedback to improve performance. *BMC Med Educ*. 2009;9(1):37.
95. Furman GE. The role of standardized patient and trainer training in quality assurance for a high-stakes clinical skills examination. *Kaohsiung J Med*. 2008;24(12):651-5.

96. Feldman M, Lazzara EH, Vanderbilt AA, DiazGranados D. Rater training to support high-stakes simulation-based assessments. *J Contin Educ Health Prof.* 2012;32(4):279-86.
97. Woehr DJ, Huffcutt AI. Rater training for performance appraisal: A quantitative review. *J Occup & Organ Psychol.* 1994;67(3):189-205.
98. Bernardin HJ, Buckley MR. Strategies in rater training. *Acad Manag Rev.* 1981;6(2):205-12.
99. Khan KZ, Gaunt K, Ramachandran S, Pushkar P. The Objective Structured Clinical Examination (OSCE): AMEE Guide No. 81. Part II: Organisation & Administration. *Med Teach.* 2013;35(9):e1447-63.
100. Smee S. Skill based assessment. *BMJ.* 2003;326(7391):703-6.
101. Newble DI, Hoare J, Sheldrake PF. The selection and training of examiners for clinical examinations. *Med Educ.* 1980;14(5):345-9.
102. Preusche I, Schmidts M, Wagner-Menghin M. Twelve tips for designing and implementing a structured rater training in OSCEs. *Med Teach.* 2012;34(5):368-72.
103. Mulder G, Jorgensen LI, Nel JA, Meiring D. The evaluation of a frame-of-reference training programme for intern psychometrists. *Hum Resourc Manag.* 2013;11(1):506.
104. Hauenstein NMA, McCusker ME. Rater training: Understanding effects of training content, practice ratings, and feedback. *Int J Select Assess.* 2017;25(3):253-66.
105. Dias L, Chabner BA, Lynch TJ, Jr., Penson RT. Breaking bad news: A patient's perspective. *Oncologist.* 2003;8(6):587-96.
106. Moore DS, McCabe, George P. Introduction to the practice of statistics: W.H. Freeman, New York; 1999.
107. Field AP. *Discovering Statistics Using SPSS for Windows: Advanced techniques for beginners*: Sage Publications, Inc.; 2000.
108. Kurtz SM, Silverman J, Draper J. *Teaching and learning communication skills in medicine*: Radcliffe Pub.; 2005.



APPENDIX A

MATERIALS FOR TRAINING SESSIONS AND SP ENCOUNTER

1. Script for simulated patient in training case
2. Instruction for training case 1
3. Script for simulated patient in training case 2
4. Instruction for training case 2
5. Script for simulated patient in pre-training SP encounter
6. Instruction for pre-training SP encounter
7. Script for simulated patient in post-training SP encounter case 1
8. Instruction for post-training SP encounter case 1
9. Script for simulated patient in post-training SP encounter case 2
10. Instruction for post-training SP encounter case 2

1.กรณีศึกษาที่ 1 (training case 1): ตรวจพบว่าเป็นมะเร็งตับ

ชื่อผู้ป่วย: คุณสมควร อายุ : 30 ปี อาการสำคัญ: แน่นท้อง วินิจฉัย: มะเร็งตับ

ระดับของผู้เรียน: แพทย์ใช้ทุนและแพทย์ทั่วไป

สถานที่ : ห้องตรวจผู้ป่วยนอก

วัตถุประสงค์:

- 1.ใช้ทักษะการสื่อสารในการแจ้งข่าวร้าย
2. เรียนรู้ปัญหาที่เกิดขึ้นเมื่อแจ้งข่าวร้ายแล้วผู้ป่วย**ตอบสนองโดยการเงียบ**

บทคุณสมควร

คุณสมควร อายุ 30 ปี อาชีพ พนักงานบริษัท ยังไม่สมรส มีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัว เป็นคนใจกว้าง และเครียดง่าย คุณดูแลสุขภาพอยู่เสมอและออกกำลังกาย ไม่เคยคิดว่าตนเองจะเจ็บป่วยรุนแรง สถานการณ์เงินอยู่ในระดับพอใช้จ่าย พักอาศัยอยู่กับบิดามารดา เป็นบุตรคนเดียว

กำหนดให้ผู้แสดงเป็นคุณสมควร แสดงบทบาทดังนี้

- 1.คุณมีอาการปวดแน่นท้องมา 2 เดือน ท้องโต ผอมลง ปวดท้อง เบื่ออาหาร คุณได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมควรไปตรวจเลือดและเอกซเรย์คอมพิวเตอร์เมื่อ 2 สัปดาห์ก่อน วันนี้ท่านมาโรงพยาบาลตามนัดเพื่อฟังผลการตรวจเลือดและเอกซเรย์คอมพิวเตอร์
- 2.แต่งตัวสุภาพ ฐานะพอใช้ มีความรู้ ทำให้อ่อนนุ่มต่อแพทย์และตั้งใจฟังสิ่งที่แพทย์พูด และเชื่อมั่นในแพทย์และการให้บริการของโรงพยาบาล วันนี้ท่านมารพ คนเดียว.ท่านกังวลมากว่าจะเป็นมะเร็ง
3. วันนี้มาฟังผลตรวจเลือดและเอกซเรย์คอมพิวเตอร์ ถามแพทย์ว่าผลตรวจเลือดและเอกซเรย์คอมพิวเตอร์เป็นอย่างไร มีโอกาสเป็นมะเร็งมากน้อยแค่ไหน แต่ในใจก็คาดหวังว่าผลตรวจจะปกติและไม่เป็นมะเร็ง แพทย์จะแจ้งผลตรวจเลือดและเอกซเรย์คอมพิวเตอร์ว่าคุณมีก้อนที่ตับและผลการตรวจเลือดและเอกซเรย์คอมพิวเตอร์เข้าได้กับมะเร็งตับ
4. เมื่อได้ยินข่าวว่าผลตรวจเลือดและเอกซเรย์คอมพิวเตอร์เข้าได้กับมะเร็งตับคุณตกใจ รู้สึกตกใจ เครียดมาก **เงียบไปนาน 1 นาที** ไม่พูดอะไรกับแพทย์เลย ในใจคิดแต่เพียงว่าไม่อยากเป็นโรคมะเร็ง คิดถึงและเป็นห่วงครอบครัว เมื่อมาถึงจุดนี้แพทย์ควรใช้เวลาและแสดงความเห็นใจต่อคุณ ไม่เร่งรีบ ก่อนครบ 1 นาที หากแพทย์ถามคำถามคุณ ให้คุณนั่ง หยุดคิด ไม่พูดอะไรกับแพทย์เลย หลังจากครบ 1 นาที ให้พูดกับแพทย์ได้ แต่ถามคำตอบคำ โดยการสนทนาส่วนใหญ่จะเป็นการนั่งเงียบ
5. ถ้าแพทย์ถามว่ามีอะไรสอบถามเพิ่มเติมไหม ให้สอบถามว่า "มีโอกาหายาใหม่" และ "ฉันจะต้องทำอะไรต่อจากนี้?"
6. ถ้าแพทย์ถามว่ามีอะไรที่กังวล ให้แจ้งว่าเป็นห่วงครอบครัว ไม่รู้จะบอกครอบครัวอย่างไร
7. สุดท้ายแพทย์อาจพูดถึงว่าจะให้คุณมาตรวจเพิ่มเติมและแพทย์เฉพาะทางต่อไป ให้สังเกตความ

ยาวและความยืดหยุ่นของบทสนทนา หากบทสนทนายืดหยุ่นและไม่มีประเด็นอะไรใหม่ ให้จบบทสนทนาด้วยการตอบตกลงว่าจะมาตรวจติดตามเพิ่มเติมต่อไป

2. โจทย์คำสั่งกรณีศึกษาที่ 1 (training case 1)

สถานการณ์: คุณสมควรอายุ 30 ปี มีอาการปวดแน่นท้องมา 2 เดือน ท้องโต ผอมลง ปวดท้อง เบื่ออาหาร น้ำหนักลด ได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์สั่งตรวจเลือดและเอกซเรย์คอมพิวเตอร์ วันนี้มาตามนัดเพื่อฟังผลการตรวจซึ่งพบว่า **เป็นมะเร็งตับระยะที่ 4** ผลการตรวจเลือด AFP 5,000 และเอกซเรย์คอมพิวเตอร์พบก้อนที่ตับขนาดใหญ่และมีน้ำในช่องท้อง โดยจะมีการวางแผนการตรวจเพิ่มเติมและปรึกษาแพทย์เฉพาะทางต่อไป **ขอให้ท่านแจ้งคุณสมควรเกี่ยวกับผลการตรวจและการวินิจฉัยดังกล่าว** เวลา 10 นาที

3. กรณีศึกษาที่ 2 (training case 2): ตรวจพบว่าเป็นมะเร็งปอดกลับเป็นซ้ำ

ชื่อผู้ป่วย: คุณสมหมาย อายุ: 35 ปี อาการสำคัญ: ไอเรื้อรัง วินิจฉัย: มะเร็งปอดกลับเป็นซ้ำ
ระดับของผู้เรียน: แพทย์ใช้ทุนและแพทย์ทั่วไป
สถานที่: ห้องตรวจผู้ป่วยนอก

วัตถุประสงค์:

1. ใช้ทักษะการสื่อสารในการแจ้งข่าวร้าย
2. เรียนรู้ปัญหาที่เกิดขึ้นเมื่อแจ้งข่าวร้ายแล้วผู้ป่วยตอบสนองด้วย **อารมณ์โกรธ**

บทคุณสมหมาย

คุณสมหมาย อายุ 35 ปี อาชีพ ทำธุรกิจส่วนตัว สมรสแล้ว มีบุตร 1 คนอายุ 6 เดือน ก่อนหน้านี้คุณมีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัวอื่น คุณเคยป่วยเป็นมะเร็งปอดระยะที่ 1 เมื่อ 3 ปีก่อน รับการรักษาที่รพ.A ด้วยการผ่าตัด แพทย์แจ้งว่าหายขาดแล้ว คุณยังคงสูบบุหรี่มาตลอด

กำหนดให้ผู้แสดงเป็นคุณสมหมาย แสดงบทบาทดังนี้

1. คุณมีอาการไอเรื้อรังมา 6 เดือน คุณเบื่ออาหาร รู้สึกผอมลง คุณได้ไปพบแพทย์ที่รพ.A เดิมที่เคยรักษาประจำอยู่ แพทย์บอกว่าไม่มีอะไรน่าห่วง นัดเอกซเรย์คอมพิวเตอร์ซึ่งได้คิวอีก 2 เดือนข้างหน้า คุณกังวลและใจร้อนอยากรู้ผลเร็วๆเกรงจะล่าช้า เนื่องจากอาการเหมือนที่เคยเป็นมะเร็งตอนแรกกลัวมะเร็งกลับมาอีก จึงได้ย้ายมาพบแพทย์ที่รพ.B แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณไปเอกซเรย์คอมพิวเตอร์พบก้อนที่ปอดและส่งคุณไปส่องกล้องหลอดลมเมื่อ 2 สัปดาห์ก่อน ครั้งนี้แพทย์นัดมาฟังผลตรวจชิ้นเนื้อ

2. คุณสมหมาย เป็นคนซีโมโท อารมณ์ฉุนเฉียว และเครียดง่าย สูบบุหรี่ 1 ของต่อวันมาตลอด ปัจจุบันยังสูบบุหรี่ไม่คอยดูแลสุขภาพ ไม่ออกกำลังกาย ไม่เคยคิดว่าตนเองจะเจ็บป่วยรุนแรง พักอาศัยอยู่กับคู่สมรสและบุตร
3. แต่งตัวสุภาพ ฐานะอยู่ในระดับร่ำรวยมาก มีความรู้ ไม่อ่อนน้อมต่อแพทย์ วันนี้คุณมารพ.คนเดียว คุณคิดอยู่ตลอดว่าโรคมะเร็งปอดระยะที่ 1 ที่เป็นเมื่อ 3 ปีก่อนและได้รับการรักษาด้วยการผ่าตัดนั้นหายขาดแล้ว
4. วันนี้มาฟังผลส่องกล้องหลอดลมและผลชิ้นเนื้อ
- ถามแพทย์ว่าผลส่องกล้องหลอดลมและผลชิ้นเนื้อเป็นอย่างไร มีโอกาสเป็นมะเร็งมากน้อยแค่ไหน
5. เมื่อได้ยินข่าวว่าผลส่องกล้องหลอดลมและผลชิ้นเนื้อเข้าได้กับมะเร็งปอดกลับเป็นซ้ำ แพทย์จะแจ้งการวินิจฉัยให้แก่คุณว่าเป็นมะเร็งปอดกลับเป็นซ้ำ แพทย์จะให้ข้อมูลทั่วไปเกี่ยวกับการดูแลรักษาและแผนการตรวจเพิ่มเติม เมื่อได้ยินว่าเป็นมะเร็งปอดกลับเป็นซ้ำ คุณรู้สึกโกรธและไม่พอใจรพ.แห่งแรก พูดว่า “ดีที่ฉันย้ายมาที่นี่ ถ้ารพ.เก่าคงตายไปแล้ว” “ฉันบอกแล้วว่าอาการเหมือนที่ฉันเคยเป็น ฉันกลัวมะเร็งกลับมาอีก หมอก็ให้รอคิวเอกซเรย์คอมพิวเตอร์อีก 2 เดือน” “ยังงั้นก็จะเอาเรื่องหมอและรพ. A”
6. ถ้าแพทย์ถามว่ามีอะไรสอบถามเพิ่มเติมไหม
- ให้สอบถามว่า “หมอและรพ. A ละเลย สะเพร่าใช่ไหม” “ฉันเอาเรื่องหมอและรพ. A เลยดีไหม”
7. สุดท้ายแพทย์อาจพูดถึงว่าจะให้คุณมาตรวจเพิ่มเติมและแพทย์เฉพาะทางต่อไป
- ให้สังเกตความยาวและความยืดหยุ่นของบทสนทนา หากบทสนทนายืดเยื้อและไม่มีประเด็นอะไรใหม่ ให้จบบทสนทนาด้วยการตอบตกลงว่าจะมาตรวจติดตามเพิ่มเติมต่อไป

4. โจทย์คำสั่งกรณีศึกษาที่ 2 (training case 2)

สถานการณ์: คุณสมหมาย อายุ 35 ปี เคยป่วยเป็นมะเร็งปอดระยะที่ 1 เมื่อ 3 ปีก่อน รับการรักษาที่รพ.อื่นด้วยการผ่าตัด แพทย์แจ้งว่าหายขาดแล้ว ยังคงสูบบุหรี่มาตลอด ครั้งนี้มีอาการ ไอเรื้อรังมา 6 เดือน เบื่ออาหาร รู้สึกท้อแท้ ไปพบแพทย์ที่รพ. A เดิมที่เคยรักษาประจำอยู่ แพทย์บอกว่าไม่มีอะไรน่าห่วง นัดเอกซเรย์คอมพิวเตอร์ซึ่งได้คิวอีก 2 เดือนข้างหน้า ผู้ป่วยกังวลอยากรู้ผลเร็ว จึงได้ย้ายมาพบแพทย์ที่รพ. B แล้ว 1 ครั้ง แพทย์ท่านแรกส่งเอกซเรย์คอมพิวเตอร์พบก้อนที่ปอดและส่งไปส่องกล้องหลอดลมเมื่อ 2 สัปดาห์ก่อน ผลการส่องกล้องและผลชิ้นเนื้อซึ่งพบว่า เป็นมะเร็งปอดกลับเป็นซ้ำ ขอให้ท่านแจ้งคุณสมหมายเกี่ยวกับผลการตรวจและการวินิจฉัยดังกล่าว เวลา 10 นาที

5. กรณีศึกษา (pre-training SP encounter): ตรวจพบว่าเป็นมะเร็งลำไส้ใหญ่

ชื่อผู้ป่วย: คุณสมหญิง/สมชาย

อาการสำคัญ: "ฉันมีเลือดปนในอุจจาระ"

วินิจฉัย: มะเร็งลำไส้ใหญ่

เวลา: 5-10 นาที

วัตถุประสงค์:

1. ใช้ทักษะการสื่อสารในการแจ้งข่าวร้าย
2. เรียนรู้ปัญหาที่เกิดขึ้นเมื่อแจ้งข่าวร้าย

บทคุณสมหญิง/สมชาย

คุณสมหญิง/สมชาย อายุ 30 ปี อาชีพ พนักงานบริษัท ยังไม่สมรส มีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัว คุณสมหญิง/สมชาย เป็นคนใจกว้าง และเครียดง่าย ดูแลสุขภาพอยู่เสมอและออกกำลังกาย ไม่เคยคิดว่าตนเองจะเจ็บป่วยรุนแรง สถานการณ์เงินอยู่ในระดับพอใช้จ่าย พักอาศัยอยู่กับบิดามารดา เป็นบุตรคนเดียว

กำหนดให้ผู้แสดงเป็นคุณสมหญิง/สมชาย แสดงบทบาทดังนี้

1. คุณสมหญิง/สมชาย มีอาการมีเลือดปนในอุจจาระ คุณได้สังเกตเห็นมานานเป็นปี คุณปวดท้องและเมื่ออาหาร น้ำหนักลด ได้มาพบแพทย์แล้ว 1 ครั้ง เนื่องจากถ่ายมีเลือดปนในอุจจาระ มีปวดท้อง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมหญิง/สมชาย ไปทำการส่องกล้องลำไส้ใหญ่เมื่อ 2 สัปดาห์ก่อน
2. แต่งตัวสุภาพ ฐานะพอใช้ มีความรู้
3. วันนี้มีมาฟังผลชิ้นเนื้อและผลการส่องกล้องลำไส้ใหญ่ ถามแพทย์ว่าผลการส่องกล้องลำไส้ใหญ่เป็นอย่างไร และต้องการคำอธิบายโดยละเอียด ให้ซักถามว่าก้อนที่พบที่ลำไส้มีโอกาสเป็นเนื้อร้ายมากน้อยแค่ไหน แต่ก็คาดหวังว่าผลตรวจจะปกติและไม่เป็นมะเร็ง แพทย์จะแจ้งเกี่ยวกับผลการตรวจของคุณ โดยแพทย์จะนำเสนอผลการวิจัยว่าคุณมีก้อนที่ลำไส้และผลการตรวจชิ้นเนื้อเข้าได้กับมะเร็งลำไส้ใหญ่ แพทย์จะให้ข้อมูลทั่วไปเกี่ยวกับการดูแลรักษาและแผนการตรวจเพิ่มเติม
4. เมื่อได้ยินข่าวว่าผลการตรวจชิ้นเนื้อเข้าได้กับมะเร็งลำไส้ใหญ่
คุณตกใจและเสียใจไป ไม่อยากเป็นโรคมะเร็ง เมื่อมาถึงจุดนี้แพทย์ควรตอบคำถามของคุณและยืนยันว่าคุณได้รับการวินิจฉัยว่าเป็นโรคมะเร็ง คุณเครียดและเศร้า ใช้เวลาสักครู่และ "คุณตั้งสติ" และพูดว่า "ฉัน/ผมจะต้องทำอะไรต่อจากนี้?"
5. ถ้าแพทย์ถามว่ามีอะไรสอบถามเพิ่มเติมไหม
ให้สอบถามว่ามีโอกาสหายไหม "ฉัน/ผมจะต้องทำอะไรต่อจากนี้?"
6. ถ้าแพทย์ถามว่ามีอะไรที่กังวล
ให้แจ้งว่าเป็นห่วงครอบครัว ไม่รู้จะบอกครอบครัวอย่างไร

7. สุดท้ายแพทย์อาจพูดถึงว่าจะให้คุณมาตรวจเพิ่มเติมและแพทย์เฉพาะทางต่อไป ให้สังเกตความยาวและความยืดหยุ่นของบทสนทนา หากบทสนทนายืดหยุ่นและไม่มีประเด็นอะไรใหม่ ให้จบบทสนทนาด้วยการตอบตกลงว่าจะมาตรวจติดตามเพิ่มเติมต่อไป
8. ตลอดกระบวนการ แพทย์ควรใช้ทักษะการสื่อสารที่ดีเพื่อแจ้งข่าวร้ายนี้ให้กับคุณ โดยสร้างบรรยากาศและน้ำเสียงที่เห็นอกเห็นใจ (เช่น เงียบ เตรียมคุณสำหรับความจริงที่ว่าผลการตรวจไม่ดี และแสดงความเห็นใจแก่คุณเกี่ยวกับความกังวลของคุณ

6. โจทย์คำสั่งกรณีศึกษา (pre-training SP encounter):

ผู้ป่วย คุณสมหญิง/สมชาย

สถานการณ์: ท่านเป็นแพทย์ทั่วไปที่ทำงานในโรงพยาบาลแห่งหนึ่ง วันนี้ท่านกำลังจะแจ้งข่าวร้ายกับคุณสมหญิง/สมชาย ผู้ป่วยอายุ 30 ปี คุณสมหญิง/สมชายได้มาพบแพทย์แล้ว 1 ครั้ง เนื่องจากถ่ายมีเลือดปนในอุจจาระ มีปวดท้องและเบื่ออาหาร น้ำหนักลด แพทย์ท่านแรกที่ตรวจได้ส่งไปทำการส่องกล้องลำไส้ใหญ่เมื่อ 2 สัปดาห์ก่อน ผลการตรวจการส่องกล้องลำไส้ใหญ่ พบว่ามี Polyp หลายเม็ดที่อยู่ในลำไส้ใหญ่ ผลการตรวจชิ้นเนื้อพบมะเร็งลำไส้ใหญ่ โดยจะมีการวางแผนการตรวจเพิ่มเติมและปรึกษาแพทย์เฉพาะทางต่อไป **ขอให้ท่านแจ้งคุณสมหญิง/สมชายเกี่ยวกับผลการตรวจและการวินิจฉัยว่าเป็นโรคมะเร็งลำไส้ใหญ่** เวลา: 10 นาที

7. กรณีศึกษา (post-training SP encounter case 1): ตรวจพบว่าเป็นมะเร็งในโพรงจมูก

ชื่อผู้ป่วย: คุณสมพร อายุ : 30 ปี อาการสำคัญ: "หายใจไม่สะดวก" วินิจฉัย: มะเร็งในโพรงจมูก
ระดับของผู้เรียน: แพทย์ใช้ทุนและแพทย์ทั่วไป

สถานที่ : ห้องตรวจผู้ป่วยนอก

วัตถุประสงค์:

1. ใช้ทักษะการสื่อสารในการแจ้งข่าวร้าย
2. เรียนรู้ปัญหาที่เกิดขึ้นเมื่อแจ้งข่าวร้ายแล้วผู้ป่วย**ตอบสนองด้วยการปฏิเสธ**

บทคุณสมพร

คุณสมพร อายุ 30 ปี อาชีพ พนักงานบริษัท ยังไม่สมรส มีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัว เป็นคนอารมณ์ดี ดูแลสุขภาพอยู่เสมอและออกกำลังกาย ไม่เคยคิดว่าตนเองจะเจ็บป่วยรุนแรง สถานการณ์เงินอยู่ในระดับพอใช้จ่าย พักอาศัยอยู่กับบิดามารดา เป็นบุตรคนเดียว

กำหนดให้ผู้แสดงเป็นคุณสมพร แสดงบทบาทดังนี้

1. คุณสมพร มีอาการคัดจมูก หายใจไม่สะดวกมาหลายเดือน คุณเบื่ออาหาร รู้สึกท้อแท้ คุณได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมพรไปตรวจโพรงจมูกเพิ่มเติม และพบก้อนในโพรงจมูก ได้ผ่าตัดก้อนในโพรงจมูก เมื่อ 2 สัปดาห์ก่อน ครั้งนี้แพทย์นัดมาฟังผลตรวจชิ้นเนื้อ
2. แต่งตัวสุภาพ ฐานะพอใช้ มีความรู้ ทำให้อ่อนน้อมต่อแพทย์และตั้งใจฟังสิ่งที่แพทย์พูด และเชื่อมั่นในแพทย์และการให้บริการของโรงพยาบาล
3. วันนี้มาฟังผลชิ้นเนื้อ
ถามแพทย์ว่าผลตรวจชิ้นเนื้อเป็นอย่างไร ให้ซักถามว่าก้อนในโพรงจมูกมีโอกาสเป็นเนื้อร้ายมากน้อยแค่ไหน แต่ในใจก็คาดหวังว่าผลตรวจจะปกติและไม่เป็นมะเร็ง คิดว่าอาจเป็นแค่หวัดหรือภูมิแพ้ แพทย์จะแจ้งว่าผลการตรวจชิ้นเนื้อจากก้อนในโพรงจมูกเข้าได้กับมะเร็งในโพรงจมูก แพทย์จะให้ข้อมูลทั่วไปเกี่ยวกับการดูแลรักษาและแผนการตรวจเพิ่มเติม
4. เมื่อได้ยินข่าวว่าผลการตรวจชิ้นเนื้อเข้าได้กับมะเร็งในโพรงจมูก คุณตกใจและเสียใจไป คุณไม่เชื่อว่าผลการตรวจจะเป็นมะเร็ง ในใจยังคิดว่าอาจเป็นแค่หวัดหรือภูมิแพ้ คุณเครียด ใช้เวลาสักครู่และแสดงอารมณ์ผิดหวัง ไม่อยากเชื่อว่าผลการตรวจจะเป็นมะเร็ง
5. ถ้าแพทย์ถามว่ามีอะไรสอบถามเพิ่มเติมไหม
ถามแพทย์ว่า "นี่ไม่ใช่ความจริงใช่ไหม" "ผลการตรวจถูกคนแล้วหรือคุณหมอ?"
เมื่อมาถึงจุดนี้แพทย์ควรตอบคำถามของคุณและยืนยันว่าคุณได้รับการวินิจฉัยว่าเป็นโรคมะเร็ง
6. ถ้าแพทย์ถามว่ามีอะไรที่กังวล
ให้สอบถามว่า "หมอแน่ใจไหม" "ขอตรวจยืนยันอีกครั้ง"
7. สุดท้ายแพทย์อาจพูดถึงว่าจะให้คุณมาตรวจเพิ่มเติมและแพทย์เฉพาะทางต่อไป
ให้สังเกตความยาวและความยืดหยุ่นของบทสนทนา หากบทสนทนายืดเยื้อและไม่มีประเด็นอะไรใหม่ให้จบบทสนทนาด้วยการตอบตกลงว่าจะมาตรวจติดตามเพิ่มเติมต่อไป

8. โจทย์คำสั่งกรณีศึกษา (post-training SP encounter case 1):

ผู้ป่วย : คุณสมพร อายุ 30 ปี

สถานการณ์: ท่านเป็นแพทย์ทั่วไปที่ทำงานในโรงพยาบาลแห่งหนึ่ง วันนี้ท่านกำลังจะแจ้งข่าวร้ายแก่คุณสมพร ผู้ป่วยอายุ 30 ปี มีอาการคัดจมูก หายใจไม่สะดวกมาหลายเดือน คุณเบื่ออาหาร น้ำหนัก คุณได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมพรไปตรวจโพรงจมูกเพิ่มเติม และพบก้อนในโพรงจมูก ได้ผ่าตัดก้อนในโพรงจมูก เมื่อ 2 สัปดาห์ก่อน ครั้งนี้แพทย์นัดมาฟังผลตรวจชิ้นเนื้อ ผลการตรวจชิ้นเนื้อพบมะเร็งในโพรงจมูก โดยจะมีการวางแผนการตรวจ

เพิ่มเติมและปรึกษาแพทย์เฉพาะทางต่อไป ขอให้ท่านแจ้งคุณสมบัติเกี่ยวกับผลการตรวจและการวินิจฉัยว่าเป็นโรคมะเร็งในโพรงจมูก เวลา: 10 นาที

9. กรณีศึกษา (post-training SP encounter case 2):

ชื่อผู้ป่วย: คุณสมปอง อายุ : 30 ปี

อาการสำคัญ: "ฉันมีก้อนที่คอโต"

วินิจฉัย: มะเร็งต่อมน้ำเหลืองกลับเป็นซ้ำ

ระดับของผู้เรียน: แพทย์ใช้ทุนและแพทย์ทั่วไป

สถานที่: ห้องตรวจผู้ป่วยนอก

วัตถุประสงค์:

1. ใช้ทักษะการสื่อสารในการแจ้งข่าวร้าย
2. เรียนรู้ปัญหาที่เกิดขึ้นเมื่อแจ้งข่าวร้าย

บทคุณสมปอง

คุณสมปอง อายุ 30 ปี อาชีพ พนักงานบริษัท ยังไม่สมรส มีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัว เป็นคนขี้กังวล และเครียดง่าย ดูแลสุขภาพอยู่เสมอและออกกำลังกาย ไม่เคยคิดว่าตนเองจะเจ็บป่วยรุนแรง สถานการณ์เงินอยู่ในระดับพอใช้จ่าย พักอาศัยอยู่กับบิดามารดา เป็นบุตรคนเดียว ก่อนหน้านี้คุณมีสุขภาพแข็งแรงดี ไม่มีโรคประจำตัวอื่น คุณเคยป่วยเป็น โรคมะเร็งต่อมน้ำเหลืองระยะที่ 2 เมื่อ 5 ปีก่อน และได้รับการรักษาด้วยการให้เคมีบำบัดจนครบตามแผนการรักษา แพทย์แจ้งว่ารักษาหายแล้ว ช่วงติดตามอาการทุก 6 เดือน อาการทุกอย่างปกติ แพทย์แจ้งว่าโรคสงบดีมาตลอด

กำหนดให้ผู้แสดงเป็นคุณสมปอง แสดงบทบาทดังนี้

1. คุณสมปองมีก้อนที่คอโต คุณสังเกตเห็นมา 2 เดือน คุณเบื่ออาหาร น้ำหนักลด คุณได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมปอง ไปผ่าตัดต่อมน้ำเหลืองที่คอเมื่อ 2 สัปดาห์ก่อน ครั้งนี้แพทย์นัดมาฟังผลตรวจชิ้นเนื้อ
2. แต่งตัวสุภาพ ฐานะพอใช้ มีความรู้ ทำให้อ่อนนุ่มต่อแพทย์และตั้งใจฟังสิ่งที่แพทย์พูด และเชื่อมั่นในแพทย์และการให้บริการของโรงพยาบาล
3. วันนี้มาฟังผลชิ้นเนื้อ

ถามแพทย์ว่าผลการตรวจชิ้นเนื้อต่อมน้ำเหลืองเป็นอย่างไร ให้ซักถามว่าก้อนที่ต่อมน้ำเหลืองมีโอกาสจะกลับมาเป็นมะเร็งใหม่มากน้อยแค่ไหน แต่ก็คาดหวังว่าผลตรวจจะปกติและไม่มีโรคมะเร็ง

กำเริบ แพทย์จะแจ้งผลการตรวจชิ้นเนื้อต่อมน้ำเหลืองเข้าได้กับมะเร็งต่อมน้ำเหลืองกลับเป็นซ้ำ แพทย์จะให้ข้อมูลทั่วไปเกี่ยวกับการดูแลรักษาและแผนการตรวจเพิ่มเติม

4. เมื่อได้ยืนยันว่าผลการตรวจชิ้นเนื้อเข้าได้กับมะเร็งต่อมน้ำเหลืองกลับเป็นซ้ำ

คุณตกใจและเจ็บใจไป เนื่องจากคาดหวังว่าโรคมะเร็งหายขาดแล้ว ไม่คาดคิดว่าจะกลับมาเป็นอีก เมื่อมาถึงจุดนี้แพทย์ควรตอบคำถามของคุณและยืนยันว่าคุณได้รับการวินิจฉัยว่าเป็น โรคมะเร็ง คุณเครียดและเศร้า ใช้เวลาสักครู่ และถามแพทย์ว่า "ฉันคาดหวังว่าโรคมะเร็งหายขาดแล้ว ไม่คาดคิดว่าจะกลับมาเป็นอีก"

5. ถ้าแพทย์ถามว่ามีอะไรสอบถามเพิ่มเติมไหม

ให้สอบถามว่า "ฉันทำอะไรผิดพลาดหรือไม่?" "ทำไมถึงเกิดเรื่องเลวร้ายแบบนี้ขึ้นกับฉันอีก" แสดงออกถึงความเศร้าและความผิดหวังของคุณ

6. ถ้าแพทย์ถามว่ามีอะไรที่กังวล

ให้แจ้งว่าเป็นห่วงครอบครัว ไม่รู้จะบอกครอบครัวอย่างไร

7. สุดท้ายแพทย์อาจพูดถึงว่าจะให้คุณมาตรวจเพิ่มเติมและแพทย์เฉพาะทางต่อไป

ให้สังเกตความยาวและความยืดหยุ่นของบทสนทนา หากบทสนทนายืดเยื้อและไม่มีประเด็นอะไรใหม่ ให้จบบทสนทนาด้วยการตอบตกลงว่าจะมาตรวจติดตามเพิ่มเติมต่อไป

8. ตลอดกระบวนการ แพทย์ควรใช้ทักษะการสื่อสารที่ดีเพื่อแจ้งข่าวร้ายนี้ให้กับคุณ โดยสร้างบรรยากาศและน้ำเสียงที่เห็นอกเห็นใจ (เช่น เจ็บ เกรียมคุณสำหรับความจริงที่ว่าผลการตรวจไม่ดี และแสดงความเห็นใจแก่คุณเกี่ยวกับความกังวลของคุณ)

10. โจทย์คำสั่งกรณีศึกษา (post-training SP encounter case 2):

ผู้ป่วย : คุณสมปอง อายุ 30 ปี

สถานการณ์: ท่านเป็นแพทย์ทั่วไปที่ทำงานในโรงพยาบาลแห่งหนึ่ง วันนี้ท่านกำลังจะแจ้งข่าวร้ายแก่คุณสมปอง คุณสมปองเคยป่วยเป็นโรคมะเร็งต่อมน้ำเหลืองระยะที่ 2 เมื่อ 5 ปีก่อน และได้รับการรักษาด้วยการให้เคมีบำบัดจนครบตามแผนการรักษา แพทย์แจ้งว่ารักษาหายแล้ว ช่วงติดตามอาการทุก 6 เดือน อาการทุกอย่างปกติ แพทย์แจ้งว่าโรคสงบตีมาตลอด ครั้งนี้คุณสมปองมีก้อนที่คอโต สังเกตพบมา 2 เดือน เบื่ออาหาร น้ำหนักลด ได้มาพบแพทย์แล้ว 1 ครั้ง แพทย์ท่านแรกที่ตรวจได้ส่งคุณสมปองไปผ่าตัดต่อมน้ำเหลืองที่คอเมื่อ 2 สัปดาห์ก่อน ครั้งนี้แพทย์นัดมาฟังผลตรวจชิ้นเนื้อผลการตรวจชิ้นเนื้อเข้าได้กับมะเร็งต่อมน้ำเหลืองกลับเป็นซ้ำ โดยจะมีการวางแผนการตรวจเพิ่มเติม

ขอให้ท่านแจ้งคุณสมปองเกี่ยวกับผลการตรวจและการวินิจฉัยว่า เป็นโรคมะเร็งต่อมน้ำเหลืองกลับเป็นซ้ำ เวลา: 10 นาที

APPENDIX B

COMMUNICATION SKILLS RATING FORM

Appendix Case record Form

Gap-Kalamazoo Communication Skills Assessment Form* – Faculty/Peer Assessment

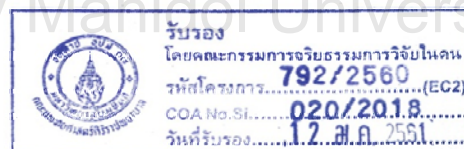
Date	Participant Code	Rater code
Title of Case:		Title of Conversation:

How well did the participant(s) do the following (please select one):

	1 Poor	2 Fair	3 Good	4 Very Good	5 Excellent
A: Builds a relationship (includes the following): <ul style="list-style-type: none"> • Greets and shows interest in the patient's family • Uses words that show care and concern throughout the interview • Uses tone, pace, eye contact, and posture that show care and concern • Responds explicitly to patient and family statements about ideas and feelings 			✪		
B: Opens the discussion (includes the following): <ul style="list-style-type: none"> • Allows patient and family to complete opening statement without interruption • Asks "is there anything else?" to elicit full set of concerns • Explains and/or negotiates an agenda for the visit 					
C: Gathers information (includes the following): <ul style="list-style-type: none"> • Addresses patient and family statements using open-ended questions • Clarifies details as necessary with more specific or "yes/no" questions • Summarizes and gives family opportunity to correct or add information • Transitions effectively to additional questions 					
D: Understands the patient's and families perspective (includes the following): <ul style="list-style-type: none"> • Asks about life events, circumstances, other people that might affect health • Elicits patient's and family's beliefs, concerns, and expectations about illness and treatment 					
E: Shares information (includes the following): <ul style="list-style-type: none"> • Assesses patient's/family's understanding of problems and desire for more info • Explains using words that family can understand • Asks if family has any more questions 					
F: Reaches agreement (includes the following): <ul style="list-style-type: none"> • Includes family in choices and decisions to the extent they desire • Checks for mutual understanding of diagnostic and/or treatment plans • Asks about acceptability of diagnostic and/or treatment plans • Identifies additional resources as appropriate 					
G: Provides closure (includes the following): <ul style="list-style-type: none"> • Asks if patient and family have questions, concerns or other issues • Summarizes • Clarifies future time when progress will again be discussed • Provides appropriate contact information if interim questions arise • Acknowledges patient and family, and closes interview 					
H. Demonstrates Empathy (includes the following): <ul style="list-style-type: none"> • Clinician's demeanor is appropriate to the nature of the conversations • Shows compassion and concerns • Identifies/labels/validates patient's and family's emotional responses • Responds appropriately to patients and family's emotional cues 					
I: Communicates accurate information (includes the following): <ul style="list-style-type: none"> • Accurately conveys the relative seriousness of the patient's condition • Takes other participating clinician's input into account • Clearly conveys expected disease course • Clearly presents and explains options for future care • Gives enough clear information to empower decision making 					

*Adapted from: Essential Elements: The Communication Checklist, © 2001 Kalamazoo Consensus Statement Group, and from: Rider EA. Interpersonal and Communication Skills. In: Rider EA, Nawotniak RH. A Practical Guide to Teaching and Assessing the ACGME Core Competencies, 2nd edition. Marblehead, MA: HCPRO, Inc., 2010. © 2010 HCPRO, Inc. Used with permission. Contacts: Elizabeth Rider, MSW, MD - elizabeth_rider@hms.harvard.edu (member, Kalamazoo Consensus Statement Group) and Aaron Calhoun, MD - aaron.calhoun@louisville.edu (PERCS

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Appendix Appendix Case record Form (continued)

What did the participant(s) do best? (Please pick three choices)

- Builds a Relationship
- Opens the Discussion
- Gathers Information
- Understands the Patient's and Family's Perspective
- Shares Information
- Reaches Agreement
- Provides Closure
- Demonstrates Empathy
- Communicates Accurate Information

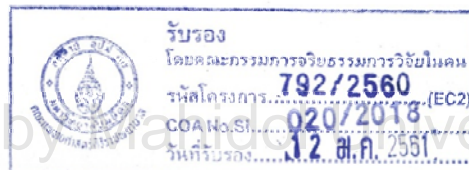
Why did you choose those particular answers?

In which domains could the participant(s) improve? (Please pick three choices)

- Builds a Relationship
- Opens the Discussion
- Gathers Information
- Understands the Patient's and Family's Perspective
- Shares Information
- Reaches Agreement
- Provides Closure
- Demonstrates Empathy
- Communicates Accurate Information

What could have been done better?

*Adapted from: Essential Elements: The Communication Checklist, © 2001 Kalamazoo Consensus Statement Group, and from: Rider EA. Interpersonal and Communication Skills. In: Rider EA, Nawotniak RH. *A Practical Guide to Teaching and Assessing the ACGME Core Competencies*, 2nd edition. Marblehead, MA: HCPro, Inc., 2010. © 2010 HCPro, Inc. Used with permission. Contacts: Elizabeth Rider, MSW, MD - elizabeth_rider@hms.harvard.edu (member, Kalamazoo Consensus Statement Group) and Aaron Calhoun, MD - aaron.calhoun@louisville.edu (PERCS Program)



APPENDIX C

POST-TRAINING QUESTIONNAIRE

Code _____

แบบสอบถามความคิดเห็นที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย

ส่วนที่ 1 จดหมายนำ

เรียน แพทย์และแพทย์ใช้ทุนทุกท่าน

ด้วยทีมนักวิจัยเป็นนักศึกษาหลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาการศึกษาวิทยาการศึกษาศาสตร์สุขภาพ คณะแพทยศาสตร์ศิริราชพยาบาล กำลังดำเนินการสำรวจความคิดเห็นที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย โดยมีวัตถุประสงค์เพื่อศึกษาความคิดเห็นของผู้เข้ารับการฝึกอบรมที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย ซึ่งข้อมูลที่ได้รับจากท่านในครั้งนี้จะเป็นประโยชน์ในการจัดการฝึกอบรมทักษะการแจ้งข่าวร้ายให้มีประสิทธิภาพ ทีมนักวิจัยจึงขอเวลาท่าน 10 นาที และขออนุญาตสอบถามท่าน เกี่ยวกับเรื่องข้อมูลทั่วไป ความคิดเห็นที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย และข้อเสนอแนะเพิ่มเติม โดยข้อมูลที่ท่านให้จะถูกเก็บรักษาไว้เป็นความลับ และจะใช้เพื่อการวิจัยเท่านั้น ข้อมูลจะถูกนำไปวิเคราะห์ในภาพรวมและนำเสนอเป็นรายงานการวิจัยที่ไม่ปรากฏชื่อผู้ให้ข้อมูล ในการสำรวจครั้งนี้ท่านมีสิทธิ์ที่จะให้หรือไม่ให้ข้อมูลก็ได้แล้วแต่ความสมัครใจของท่าน ไม่ส่งผลต่อการฝึกอบรมหรือการประเมินการปฏิบัติงานของท่าน โดยที่ระหว่างที่ท่านตอบแบบสอบถามแล้วบางส่วน ท่านมีสิทธิ์ที่จะไม่ตอบคำถามข้อใดข้อหนึ่ง หรือหยุดตอบแบบสอบถามเมื่อไรก็ได้ ทีมนักวิจัยหวังเป็นอย่างยิ่งว่าจะได้รับความร่วมมือจากทุกท่าน และขอขอบคุณมา ณ โอกาสนี้ หลังจากตอบแบบสอบถามเสร็จเรียบร้อยแล้ว ขอความกรุณาส่งแบบสอบถามที่เลขาแพทย์อาคารหอพักชั้น 4

ส่วนที่ 2 คำชี้แจง


แบบสอบถามชุดนี้มีวัตถุประสงค์เพื่อสำรวจความต้องการในเรื่องรูปแบบการจัดการฝึกอบรมทักษะการแจ้งข่าวร้ายต่อผู้ป่วยมะเร็งให้แก่แพทย์ ประกอบด้วยคำถาม 3 ตอน คือ

ตอนที่ 1 ข้อมูลทั่วไป

ตอนที่ 2 ความคิดเห็นที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย

ตอนที่ 3 ข้อเสนอแนะเพิ่มเติม

โปรดทำเครื่องหมาย ลงใน และเติมข้อความลงในช่องว่างที่ตรงกับข้อมูลของท่าน

	รับรอง
	โดยคณะกรรมการบริหารงานวิจัยในแผน
	รหัสโครงการ 792/2560
	COA No.Si 020/2018 (EC2)
วันที่รับรอง 1.2.2561	

Code _____

ส่วนที่ 3 ข้อคำถาม

ตอนที่ 1 ข้อมูลทั่วไป

1. เพศ ชาย หญิง
2. อายุ น้อยกว่า 25 ปี 25 - 30 ปี 31 - 40 ปี มากกว่า 40 ปี
3. ผู้ประเมิน แพทย์ใช้ทุน แพทย์ผู้เชี่ยวชาญ สาขา
4. ท่านเคยเข้าร่วมการฝึกอบรมการแจ้งข่าวร้ายมาก่อนหรือไม่ เคย ไม่เคย

ตอนที่ 2 ความคิดเห็นที่มีต่อการจัดการฝึกอบรมทักษะการแจ้งข่าวร้าย

คำชี้แจง กรุณาใส่เครื่องหมาย ✓ ลงในช่องว่างที่ตรงกับความเห็นของท่าน

รายการ	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	น้อยที่สุด (1)
1. ความพึงพอใจต่อการฝึกอบรมครั้งนี้					
2. การเข้ารับการฝึกอบรมครั้งนี้มีคุณค่า					
3. การเข้ารับการฝึกอบรมครั้งนี้เป็นประโยชน์					
4. ทักษะที่ได้จากการฝึกอบรมสามารถนำไปใช้ในการแจ้งข่าวร้ายแก่ผู้ป่วยในอนาคต					

MAHIDOL UNIVERSITY
 10120/2561

รับรอง
 โดยคณะกรรมการจรรยาบรรณการวิจัยในคน
 รหัสโครงการ... 792/2560... (EC2)
 COA No.Si.... 020/2018
 วันที่รับรอง..... 12... ๒๕๖๑.....

Code _____

ตอนที่ 3 ข้อเสนอแนะเพิ่มเติม

หากท่านมีข้อเสนอแนะเพิ่มเติมในการจัดการฝึกอบรมโปรดระบุ

1. ท่านชอบสิ่งใดในการฝึกอบรมครั้งนี้

.....
.....
.....

2. ในการฝึกอบรมครั้งนี้มีสิ่งใดที่ควรเปลี่ยนแปลง และหากมีควรเปลี่ยนแปลงอย่างไร

.....
.....
.....

3. ข้อเสนอแนะอื่นๆ ในการจัดกิจกรรมครั้งนี้

.....
.....
.....

ขอขอบพระคุณทุกท่านที่สละเวลาอันมีค่าของท่านตอบแบบสอบถาม



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APPENDIX D
CERTIFICATE OF ETHIC APPROVAL SIRIRAJ HOSPITAL

2 WANGLANG RD. BANGKOKNOI
BANGKOK 10700



Tel. +66 2419 2667-72
Fax. +66 2411 0162

Siriraj Institutional Review Board
Certificate of Approval

COA no. Si 020/2018

Protocol Title(English) : Training physicians to deliver bad news using peer role play compared to standardized patients

Protocol Title(Thai) : การฝึกอบรมแพทย์ในการแจ้งข่าวร้ายด้วยการใช้การแสดงบทบาทสมมติโดยผู้เข้าอบรมเปรียบเทียบกับผู้ป่วยมาตรฐาน

Protocol number : 792/2560(EC2)

Principal Investigator/Affiliation : Assoc. Prof. Cherdasak Iramaneerat, M.D., Ph.D. / Department of Surgery Faculty of Medicine Siriraj Hospital, Mahidol University

Research site : Faculty of Medicine Siriraj Hospital

Approval date : January 12, 2018

Expired date : January 11, 2019

This is to certify that Siriraj Institutional Review Board is in full compliance with international guidelines for human research protection such as the Declaration of Helsinki, the Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

(Prof. Chairat Shayakul, M.D.)
Chairperson

19 JAN 2018

date

(Prof. Dr. Prasit Watanapa, M.D., Ph.D.)
Dean of Faculty of Medicine Siriraj Hospital

22 JAN 2018

date

Approval includes :

1. SIRB submission form
2. Participant information sheet
3. Case Record Form
4. Questionnaire
5. Curriculum Vitae

APPENDIX F

PARTICIPANTS INFORMATION SHEET

เอกสารหมายเลข 3ก

เอกสารแจ้งผู้เข้าร่วมการวิจัย/อาสาสมัคร
(Participant Information Sheet)

ในเอกสารนี้อาจมีข้อความที่ท่านอ่านแล้วยังไม่เข้าใจ โปรดสอบถามหัวหน้าโครงการวิจัยหรือผู้แทนให้ช่วยอธิบายจนกว่าจะเข้าใจดี ท่านอาจจะขอเอกสารนี้กลับไปอ่านที่บ้านเพื่อปรึกษา หรือกับญาติพี่น้อง เพื่อนสนิท แพทย์ประจำตัวของท่าน หรือแพทย์ท่านอื่น เพื่อช่วยในการตัดสินใจเข้าร่วมการวิจัย

ชื่อโครงการวิจัย การฝึกอบรมแพทย์ในการแจ้งข่าวร้ายด้วยการใช้การแสดงบทบาทสมมติโดยผู้เข้าอบรมเปรียบเทียบกับผู้ป่วยมาตรฐาน

ชื่อหัวหน้าโครงการวิจัย รศ.ดร.นพ.เชิดศักดิ์ ไอรอมณิรัตน์
 สถานที่ทำงาน รพ.ศิริราช สถานีวิจัย รพ.จุฬารัตน์
 ระยะเวลาในการวิจัย 4 เดือน ผู้สนับสนุนทุนวิจัย ไม่มี การมีส่วนได้ส่วนเสียกับแหล่งทุน ไม่มี
 หมายเลขโทรศัพท์ของหัวหน้าโครงการวิจัยที่ติดต่อได้ทั้งในและนอกเวลาราชการ 0241988005 และ 0628234418

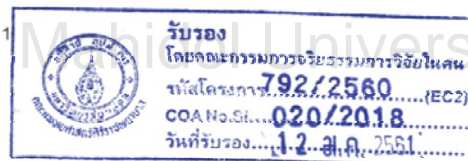
ที่มาของโครงการวิจัย

ทักษะการสื่อสารเป็นทักษะที่สำคัญสำหรับการเป็นแพทย์ เนื่องจากช่วยเสริมสร้างความสัมพันธ์ที่ดีระหว่างแพทย์และผู้ป่วย เป็นองค์ประกอบที่สำคัญของการบรรลุเป้าหมายการรักษาทางการแพทย์ ทักษะการสื่อสารเป็นสิ่งจำเป็นสำหรับการดูแลผู้ป่วย จึงมีความจำเป็นในการเพิ่มพูนทักษะการสื่อสารของแพทย์ โดยทักษะการสื่อสารนั้นสามารถสอนและฝึกฝนให้พัฒนาได้ การสอนการสื่อสารที่มีประสิทธิภาพควรใช้รูปแบบของการสอนภาคปฏิบัติ ตัวอย่างเช่นวิธีการแสดงบทบาทสมมติโดยผู้เข้าอบรมและวิธีแสดงกับผู้ป่วยมาตรฐาน โดยรูปแบบการสอนทั้งสองวิธีนี้ต่างก็ส่งเสริมการเรียนรู้ในการสื่อสารทั้งสิ้น การสอนโดยการแสดงบทบาทสมมติโดยผู้เข้าอบรมนั้นเป็นวิธีที่มีประสิทธิภาพ ทำได้ง่ายและใช้ทรัพยากรน้อย แต่ข้อจำกัดคือผู้เรียนอาจแสดงไม่สมจริง หรือบางคนรู้สึกอึดอัดหากต้องแสดงบทบาทสมมติกับเพื่อน ในขณะที่การสอนโดยวิธีแสดงกับผู้ป่วยมาตรฐาน ซึ่งเป็นผู้ป่วยสมมติที่ได้รับการฝึกอบรมก็เป็นวิธีการสอนทักษะการสื่อสารที่มีประสิทธิภาพ ใช้ได้ทั้งการสอนและการประเมินทักษะการสื่อสาร แต่มีข้อจำกัดคือมีค่าใช้จ่ายสูง และต้องใช้เวลาในการฝึกฝนผู้ป่วยมาตรฐานให้เข้าใจบทบาท แสดงให้ถูกต้องและสมจริง โดยจากการทบทวนการศึกษาก่อนหน้านี้ยังไม่พบการศึกษาเชิงทดลองแบบสุ่มที่เปรียบเทียบผลของการสอนทักษะการสื่อสารการแจ้งข่าวร้ายด้วยการแสดงบทบาทสมมติโดยผู้เข้าอบรมเปรียบเทียบกับผู้ป่วยมาตรฐาน

วัตถุประสงค์ของโครงการวิจัย

เพื่อศึกษาผลของการฝึกอบรมทักษะการสื่อสารของแพทย์ด้วยวิธีการแสดงบทบาทสมมติโดยผู้เข้าอบรมเปรียบเทียบกับผู้ป่วยมาตรฐานที่มีต่อทักษะการสื่อสารและความคิดเห็นของแพทย์

เอกสารหมายเลข 3ก วันที่ 6 มกราคม 2558



ท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เนื่องจากท่านเป็นแพทย์และแพทย์ใช้ทุนโรงพยาบาลจุฬารัตน์ การศึกษาครั้งนี้จัดทำขึ้นเพื่อฝึกอบรมและพัฒนาทักษะการสื่อสารของแพทย์ต่อผู้ป่วย โดยจะมีผู้ร่วมวิจัยอาสาสมัครทั้งสิ้นประมาณ 50 คน โดยจัดแบ่งเป็น 2 กลุ่ม คือ กลุ่มที่รับการฝึกอบรมทักษะการสื่อสารด้วยวิธีการแสดงบทบาทสมมติโดยผู้เข้าอบรม และอีกกลุ่มฝึกอบรมทักษะการสื่อสารกับผู้ป่วยมาตรฐาน ใช้เกณฑ์การจัดเป็น 2 กลุ่มให้มีความใกล้เคียงกันและไม่เหลื่อมล้ำ

หากท่านตัดสินใจเข้าร่วมการวิจัยแล้ว จะมีขั้นตอนการวิจัยดังต่อไปนี้คือ

- 1) ก่อนเข้ารับการฝึกอบรม ผู้เข้าร่วมวิจัยรับการทดสอบทักษะการสื่อสารในการแจ้งข่าวร้ายให้แก่ผู้ป่วยมาตรฐาน 1 ข้อ ภายใน 1 สัปดาห์ก่อนเข้ารับการอบรม โดยจะมีการขอบันทึกวิดีโอที่ศรัทธาเพื่อนำมาใช้ในการประเมินทักษะการสื่อสารต่อไป
- 2) ผู้วิจัยจะใช้คะแนนทดสอบทักษะการสื่อสารก่อนเข้ารับการฝึกอบรมเป็นเกณฑ์ในการจัดผู้เข้าร่วมวิจัยออกเป็น 2 กลุ่มให้มีความใกล้เคียงกันและไม่เหลื่อมล้ำกัน
- 3) ทีมวิทยากรจัดการอบรมเชิงปฏิบัติการเพื่อให้ความรู้และฝึกฝนทักษะการสื่อสารการแจ้งข่าวร้ายให้แก่ผู้เข้าร่วมการวิจัย จำนวน 50 คน เป็นเวลา 1 วัน
- 4) ในช่วงการฝึกทักษะการสื่อสารจะแบ่งผู้เข้าร่วมวิจัยออกเป็น 2 กลุ่ม กลุ่มละ 25 คน โดยกลุ่มแรกฝึกปฏิบัติด้วยการแสดงบทบาทสมมติโดยผู้เข้าอบรม และกลุ่มที่ 2 ฝึกปฏิบัติโดยวิธีแสดงกับผู้ป่วยมาตรฐาน
 - 4.1) กลุ่มที่ฝึกปฏิบัติโดยการแสดงบทบาทสมมติโดยผู้เข้าอบรม จะมีการแบ่งผู้เข้าร่วมการอบรม ออกเป็นกลุ่มย่อย กลุ่มละ 5 คน โดยจะฝึกปฏิบัติแจ้งข่าวร้ายทั้งหมด 2 เรื่อง ในแต่ละกลุ่มย่อยจะมอบหมายให้ผู้เข้าร่วมการอบรม กลุ่มละ 1 คนรับบทเป็นแพทย์ และ 1 คนรับบทเป็นผู้ป่วย ทำการฝึกแจ้งข่าวร้าย หลังจากนั้นให้หมุนเวียนสลับบทบาทหน้าที่กันเพื่อฝึกปฏิบัติในกรณีศึกษาที่ 2 ต่อไป โดยแต่ละท่านจะได้รับบทบาทไปทำความเข้าใจล่วงหน้า 1 สัปดาห์ โดยมีผู้เข้าร่วมการอบรมที่เหลือเป็นผู้สังเกตการณ์ให้ความคิดเห็นและข้อเสนอแนะ ร่วมกับมีทีมวิทยากรให้คำแนะนำ
 - 4.2) กลุ่มที่ฝึกปฏิบัติโดยการแสดงกับผู้ป่วยมาตรฐาน จะมีการแบ่งผู้เข้าร่วมการอบรมออกเป็น กลุ่มย่อย กลุ่มละ 5 คน และแต่ละกลุ่มจะได้รับผู้ป่วยมาตรฐานกลุ่มละ 1 คน และมอบหมายให้ผู้เข้าร่วมการอบรมกลุ่มละ 1 คนรับบทเป็นแพทย์แจ้งข่าวร้ายให้แก่ผู้ป่วยมาตรฐาน หลังจากนั้นให้หมุนเวียนสลับบทบาทหน้าที่กันเพื่อฝึกปฏิบัติในกรณีศึกษาที่ 2 ต่อไป โดยแต่ละท่านจะได้รับบทบาทไปทำความเข้าใจล่วงหน้า 1 สัปดาห์ โดยมีผู้เข้าร่วมการอบรมที่เหลือเป็นผู้สังเกตการณ์ให้ความคิดเห็นและข้อเสนอแนะ ร่วมกับมีทีมวิทยากรให้คำแนะนำ
- 5) หลังเข้ารับการฝึกอบรม ผู้เข้าร่วมวิจัยเข้าร่วมทดสอบทักษะการสื่อสารในการแจ้งข่าวร้ายให้แก่ผู้ป่วยมาตรฐาน 2 ข้อ ภายใน 2 สัปดาห์หลังเข้ารับการอบรม โดยจะมีการขอบันทึกวิดีโอที่ศรัทธาเพื่อนำมาใช้ในการประเมินทักษะการสื่อสารต่อไป และผู้เข้าร่วมการวิจัยตอบแบบสอบถามความคิดเห็นในเรื่องการยอมรับและการรับรู้ต่อการฝึกอบรม
- 6) ในการฝึกอบรมและการทดสอบทักษะการแจ้งข่าวร้ายจะมีการขออนุญาตบันทึกเสียงและภาพของท่านในรูปแบบวิดีโอ เพื่อนำมาวิเคราะห์ทักษะในการสื่อสารต่อไป โดยวิดีโอและคะแนนสอบก่อนและหลังเข้ารับการอบรม



APPENDIX G INFORMED CONSENT

หนังสือแสดงเจตนายินยอมเข้าร่วมการวิจัย
(Consent Form)

เอกสารหมายเลข 3ข

วันที่..... เดือน..... พ.ศ.....

ข้าพเจ้า..... อายุ.....ปี

อาศัยอยู่บ้านเลขที่..... ถนน..... แขวง/ตำบล.....

เขต/อำเภอ..... จังหวัด..... รหัสไปรษณีย์.....

โทรศัพท์.....

ขอแสดงเจตนายินยอมเข้าร่วม โครงการวิจัยเรื่อง การฝึกอบรมแพทย์ในการแจ้งข่าวร้ายด้วยการใช้การแสดงผลบทบาทสมมติ โดยผู้เข้าอบรมเปรียบเทียบกับผู้ป่วยมาตรฐาน โดยข้าพเจ้าได้รับทราบรายละเอียดเกี่ยวกับที่มาและจุดมุ่งหมายในการทำวิจัย รายละเอียดขั้นตอนต่างๆ ที่จะต้องปฏิบัติหรือได้รับการปฏิบัติ ประโยชน์ที่คาดว่าจะได้รับของการวิจัย และความเสี่ยงที่อาจจะเกิดขึ้นจากการเข้าร่วมการวิจัย รวมทั้งแนวทางป้องกันและแก้ไขหากเกิดอันตรายขึ้น ค่าใช้จ่ายที่ข้าพเจ้าจะต้องรับผิดชอบจ่ายเอง โดยได้อ่านข้อความที่มีรายละเอียดอยู่ในเอกสารชี้แจงผู้เข้าร่วมการวิจัยโดยตลอด อีกทั้งยังได้รับคำอธิบายและตอบข้อสงสัยจากหัวหน้าโครงการวิจัยเป็นที่เรียบร้อยแล้ว

ข้าพเจ้าจึงสมัครใจเข้าร่วมในโครงการวิจัยนี้และอนุญาตให้บันทึกทัศนคติและเสียงเพื่อนำมาใช้ในการวิจัยต่อไป

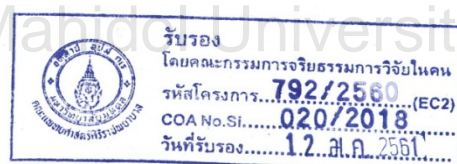
หากข้าพเจ้ามีข้อข้องใจเกี่ยวกับขั้นตอนของการวิจัย หรือหากเกิดผลข้างเคียงที่ไม่พึงประสงค์จากการวิจัยขึ้นกับข้าพเจ้า ข้าพเจ้าจะสามารถติดต่อกับ รศ.ดร.นพ.เชิดศักดิ์ ไอรมณีรัตน์ โทรศัพท์ 024198005 และ 0628234418 โรงพยาบาลศิริราช และ แพทย์หญิงกมลทิพย์ เลิศชัยสถาพร โรงพยาบาลจุฬารัตน์ โทรศัพท์ (ติดต่อได้ทั้งในและนอกเวลาราชการ) 0864417105, 025766791 หากข้าพเจ้าได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ในเอกสารชี้แจงผู้เข้าร่วมการวิจัย ต้องการปรึกษาปัญหา ข้อกังวล มีคำถาม หรือต้องการข้อมูลเพิ่มเติมเกี่ยวกับการวิจัย ข้าพเจ้าสามารถติดต่อกับประธานคณะกรรมการจริยธรรมการวิจัยในคนได้ที่ สำนักงานคณะกรรมการจริยธรรมการวิจัยในคน อาคารเฉลิมพระเกียรติ 80 พรรษา 5 ธันวาคม 2550 ชั้น 2 โทร.02419 2667-72 โทรสาร 0 24110162

ข้าพเจ้าได้ทราบถึงสิทธิที่ข้าพเจ้าจะได้รับข้อมูลเพิ่มเติมทั้งทางด้านประโยชน์และโทษจากการเข้าร่วมการวิจัย และสามารถถอนตัวหรือแจ้งเข้าร่วมการวิจัยได้ทุกเมื่อโดยไม่ต้องแจ้งล่วงหน้าหรือระบุเหตุผล โดยจะไม่ผลกระทบต่อการบริการและการรักษาพยาบาลที่ข้าพเจ้าจะได้รับต่อไปในอนาคต และยินยอมให้ผู้วิจัยใช้ข้อมูลส่วนตัวของข้าพเจ้าที่ได้รับจากการวิจัย แต่จะไม่เผยแพร่ต่อสาธารณะเป็นรายบุคคล โดยจะนำเสนอเป็นข้อมูลโดยรวมจากการวิจัยเท่านั้น

ข้าพเจ้าได้เข้าใจข้อความในเอกสารชี้แจงผู้เข้าร่วมการวิจัย และหนังสือแสดงเจตนายินยอมนี้โดยตลอดแล้ว จึงลงลายมือชื่อไว้

ลงชื่อ..... ผู้ร่วมวิจัย/อาสาสมัครหรือผู้แทน โดยชอบธรรม/วันที่.....
(.....)

ลงชื่อ..... ผู้ให้ข้อมูลและขอความยินยอม/หัวหน้าโครงการวิจัย/วันที่.....
(.....)



APPENDIX H
PERMISSION TO USE GAP-KALAMAZOO COMMUNICATION
SKILLS ASSESSMENT FORM

Name: Kamoltip Lertchaisataporn

Institution: Chulabhorn Hospital

54 Kampangetch 6 road

Laksi, Bangkok, Thailand

City/State/Zip: Bangkok 10210

Dear Assistant Professor Elizabeth Rider and Associate Professor Aaron Calhoun:

I am a Master degree student from Mahidol University, Thailand writing my thesis titled “Training physicians to deliver bad news using peer role play compared to standardized patients”, under the direction of my thesis committee chaired by Dr. Cherdsak Iramaneerat, who can be reached at Cherdsak.ira@mahidol.ac.th or +66 2 419 8005. Human Research Protection Unit Committee Chair, Mahidol University can be contacted at siethics@mahidol.ac.th or +66 2 419 2667

I would like your permission to use the The Gap-Kalamazoo Communication Skills Assessment Form tool in my research study. I would like to use and print your tool under the following conditions:

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- I will include the copyright statement on all copies of the instrument.
- I will send my research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: Kamoltip.ler@pccms.ac.th

Sincerely,

Kamoltip Lertchaisataporn

Master degree student

Kamoltip,

It's good to hear from you. Please feel free to use the tool. I have attached the most updated copy for your use. If you are interested, I also have a spreadsheet that I use to analyze results. I can send that if you like. If you need any other assistance with it, just let me know.

Thanks,

Aaron

APPENDIX I
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May 10, 2018

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APPENDIX J

LIST OF EXPERTS TO CHECK RESEARCH INSTRUMENT

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