

## **Learning to be the Patients' Advocates: Evaluation of an Evidence-Based Communication Skills Course**

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### **Abstract**

*Introduction:* A communication skills course to prepare nurses for their roles as patient advocates in the informed consent process was developed based on evidence from education and healthcare research, mostly from Western literature, tailored with evidence from the local context in South-East Asia. This study aimed to evaluate the course and to investigate factors influencing the application of the skills in the real setting.

*Methods:* This was a mixed method study. Subjects were 32 participants who were 'champions' (opinion leaders) at their home institutions. We used a questionnaire to measure the participants' reactions, pre/post/follow-up test to measure knowledge, and Focus Group Discussions (FGDs) to investigate the transfer and impact of the course.

*Results:* Participants perceived the course to be helpful for learning. The post test showed increased knowledge and the follow up test indicated retention. FGDs showed participants' approaches to apply the skills in the informed consent process and different areas of practice. Factors influencing implementation were similar to previous studies.

*Conclusions:* Despite strong contextual factors, a well-designed course underpinned with evidence can contribute to the desired improvement. Application of evidence from Western literature in South-East Asia should be tailored to the local context. A thorough needs assessment is necessary to explore the context.

**Keywords:** Evidence, communication skills, nurse, informed consent, patient advocacy

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### **Introduction**

Evidence-Based Medicine is increasingly practiced in clinical settings, but in general does not strongly influence other aspects of healthcare practice, including education (Davies, 1999; Harden *et al.*, 2000).

In some developing countries, such as in South-East Asia, the implementation of evidence-based practice is considered challenging (Santesso & Tugwell 2006; Martis *et al.*, 2008). One of the reasons is that scientific evidence is perceived as predominantly reflecting Western culture and therefore less applicable to answer local problems (Newman *et al.*, 1998; Haines *et al.*, 2004; Santesso & Tugwell 2006).

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Nevertheless, evidence-based educational interventions are available and applicable, provided they are tailored with a proper local needs assessment (Bartholomew *et al.*, 2006). To support this argument, we conducted a communication skills course to enhance nurses' roles as patients' advocates in the informed consent process. We explored to what extent such a training will work in a context in which evidence-based practice is less recognized. In line with reviews of

learning transfer, the context, design, and trainees were considered in the course development (van den Eertwegh *et al.*, 2012). We applied evidence from education and healthcare research, mostly from Western literature, and tailored this with evidence from the local context about barriers in informed consent (Susilo *et al.*, 2012; 2013a) so as to properly design the course and select trainees.

Evidence from the local context showed that the informed consent process is influenced by culture and organizational policy (Susilo *et al.*, 2012; 2013a). Patients are often reluctant to address their concerns to their doctors who are considered to be higher in the cultural hierarchy (Claramita *et al.*, 2012). Family involvement in decision making is so prominent that patient's wishes are frequently considered secondary (Susilo *et al.*, 2012; 2013a). Influenced by the strong "blame culture", doctors use informed consent process mostly for their own protection (Susilo *et al.*, 2012). The main goal of the informed consent has shifted from providing adequate information and helping patients make wise decisions to obtaining patients signatures for the legal protection of professionals. Hospital policy also influences the daily process by providing an informed consent related policy and creating a supportive atmosphere for patients' encounter, such as provision of private places and decision aids (Susilo *et al.*, 2012). Finally, time constraints in healthcare and the dominant out-of pocket payment system make the decision making process more challenging (Claramita *et al.*, 2011; Susilo *et al.*, 2012).

To ensure that patients have made an voluntary informed decision, involvement of other health professionals, such as nurses, as patient advocates is important (Lee *et al.*, 2009; Susilo *et al.*, 2013a). As patient advocates, nurses need to integrate their clinical skills, legal and ethical knowledge, and communication skills (Leino-Kilpi *et al.*, 2003; Susilo *et al.*, 2013a). Despite previous training during formal education (Foley *et al.*, 2002), nurses are not necessarily prepared to apply these skills in practice (Lee *et al.*, 2009; Susilo *et al.*, 2013a). Adequate professional care thus requires additional training.

Consequently, our course underlined the importance of basic skills in communication with South-East Asian patients and family about informed consent, including exploration and negotiation skills (von Fragstein *et al.*, 2008). Leary's Rose, a model of negotiation in

communication was introduced. When hierarchy and blame culture is strong, this model helps to assertively choose a partnership relation and to facilitate collaboration (Susilo *et al.*, 2013c).

The method of the course is based on research-informed educational principles such as variability, authenticity, increasing the skill-demands from simple to complex, scaffolding (Hmelo-Silver *et al.*, 2007; van Merriënboer & Kirschner, 2013). The 4C/ID (Four Component Instructional Design) model was used as a framework to design the course. The four components were learning task, supporting information, procedural skills, and part-task practice. A more comprehensive description of the use of 4C/ID in a communication skills course is published elsewhere (Susilo *et al.*, 2013b).

This framework underlines the importance of structuring whole learning tasks as the backbone of training design, while lectures are organized around the learning tasks as supportive information (van Merriënboer & Kirschner 2013). Different learning tasks that mimic real-life situations are introduced to ensure variability and authenticity (Guilikers *et al.*, 2004; van Merriënboer & Kirschner, 2013). They proceed from simple to complex and are accompanied by guidance that diminishes from one learning task to the next, a process known as "scaffolding" (van Merriënboer & Kirschner, 2013). These whole learning tasks were introduced as different clinical scenarios that required the integration of clinical, legal, and ethical knowledge in the practice of communication skills in informed consent. A lecture on legal and ethical principles in informed consent was provided as supporting information (Susilo *et al.*, 2013b). Additionally, reflections were embedded in the learning activities as advocated in Experiential Learning Theory (Driessens *et al.*, 2008).

We chose 'champions' as our first trainees, who were expected to accelerate the spreading of the messages from the course (Valente & Pumpuang 2007; Flodgren *et al.*, 2011). A review has shown that involving champions helped to promote evidence-based practice (Flodgren *et al.*, 2011). Champions, also called opinion leaders, are at the center of the interpersonal communication network in an organization. They have different formal and informal approaches to promote particular behavioural change, for example as role model or mediator (Valente & Pumpuang 2007; Flodgren *et al.*, 2011).

We piloted this course and investigated the extent to which it helped learners to achieve the learning objectives, both in communication skills and in teaching of those communication skills, to be better patients' advocates in the informed consent process. The training evaluation incorporated several levels described by Kirkpatrick: the participants' reaction (level 1), the change of knowledge (level 2), the transfer, that is the change of behavior (level 3), and the impact on patients and organization (level 4) (Kirkpatrick, 1998).

## Methods

### Context

This study was conducted in Indonesia, a South-East Asian country with a strong cultural hierarchy and communalism (Hofstede, *et al.*, 2010). Large power distance between people is pervasive and there is a strong influence of the community on personal decisions (Hofstede *et al.*, 2010; Claramita *et al.*, 2011; Susilo *et al.*, 2012). The hierarchy also extends to the relationship between doctors and nurses (Lee *et al.*, 2009; Susilo *et al.*, 2013b).

The course took place in a private 300-bed hospital providing multi-specialist services in a metropolitan city in Indonesia, with approximately 150 physicians and 400 nurses. At this hospital, the policy of informed consent is based on the national regulations. The hospital has published a list of medical procedures that require written consent. It is the responsibility of the doctors to provide information to patients, and this usually takes place after the doctor has made a diagnosis and planned a treatment. When a patient agrees with the proposed treatment, the doctor proceeds to prepare for the procedure. In this phase, patients do not necessarily sign a consent form, but their consent may be implied, for example when they register to the inpatient ward or for surgery. At a later stage, before the actual performance of the procedure, a nurse obtains signatures from the patient or family members, from attending doctors, and from witnesses, as required in the informed consent form.

### Study design

The study used a mixed method approach, involving both qualitative and quantitative methods. The intervention was a communication skills course.

### Participants

The participants were purposively chosen based on three criteria: considered as

champions, recommended by invited institutions, and having sufficient English knowledge to understand the international facilitator. To explore the transferability of this course to a wider context, we invited several participants from other professional domains, from different academic and health care institutions. 35 Participants were invited, of whom three were not available due to previous commitments. Participants had different professional backgrounds (nurses, physicians, pharmacists, a physiotherapist, and a medical record practitioner).

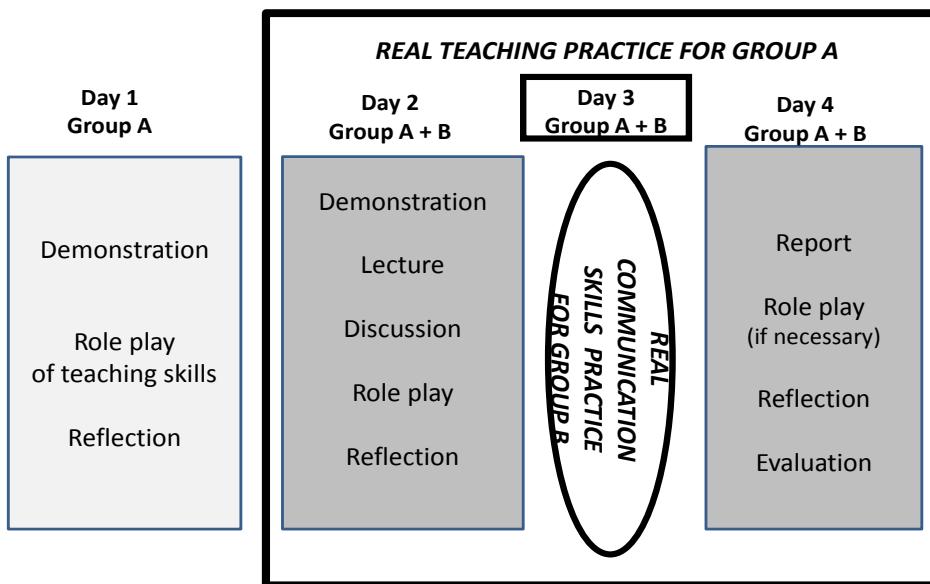
We divided the 32 participants into two groups, 15 in group A and 17 in group B. In the previous year group A was trained for both communication skills and teaching (communication) skills. During the current course they were 'the trainers' for the new group B, addressing the communication skills, and applying the teaching skills they learned the year before. Members of group A also had teaching or leadership responsibilities in their institutions.

### Course design

We conducted a 4-days communication skills course developed using the 4C/ID model as a framework (Susilo *et al.*, 2013b). The course underlined exploration and negotiation skills (von Fragstein *et al.*, 2008) in patient advocacy during the informed consent process and used Leary's Rose as a model to help map the negotiation process (van Dijk 2009; Susilo *et al.*, 2013c). Facilitators were three experts of communication skills training. One was Dutch, while the other two were Indonesian. The course design is illustrated in Figure 1.

Variability, authenticity, proceeding from simple to complex, and scaffolding were the main educational principles underpinning the course (van Merriënboer & Kirschner, 2007). Variability was ensured by use of different clinical scenarios in the role plays. Authenticity was realized by utilizing real life settings for learning tasks, where group A played as real teachers for group B, while group B practiced with real doctors and real patients. The use of real setting also aimed to ensure variability (Guilikers *et al.*, 2004). As described above, the level of complexity of learning tasks was increased, while the guidance diminished at each step. Additionally extensive feedback sessions on participants' performance were in line with experiential learning theory (Driessens, 2008).

**Figure 1: Course design**



**Day 1:** Brushing up the teaching skills of Group A addressed the previous year. A demonstration of how to conduct a communication role played by the facilitator, followed by practice and feedback sessions.

**Day 2:** Group B joined the course as 'the trainees' of group A. A demonstration of a role play in an informed consent setting was provided, led by the facilitator. A lecture on principles of informed consent from a medico-legal expert was also introduced as supporting information, followed by group discussions. Group B had the opportunity to practice in three smaller groups, with group A as trainers. The facilitators were also available in each subgroup to provide additional feedback.

**Day 3:** Each member of group A was teamed with a member of group B. The pairs visited hospital wards without the presence of the facilitators. Members of group B practiced communication skills with real patients and real doctors, while members of group A acted as observers and led the feedback sessions afterward.

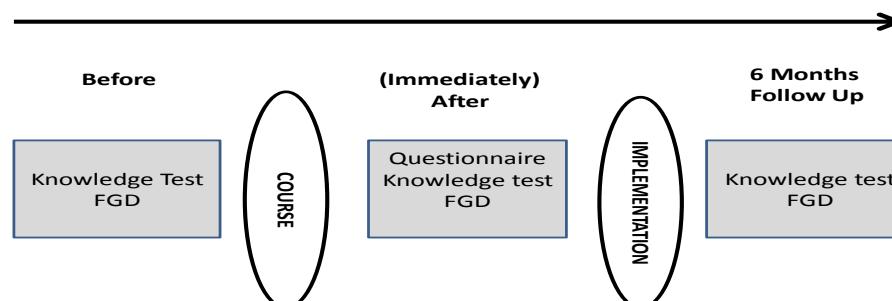
**Day 4:** Reporting back to the class, and feedback provided separately for both communication and teaching skills.

### Data collection

Data was collected at three different time points, as depicted in Figure 2. Questionnaires were used to measure participant reactions (Kirkpatrick level 1), pre/post/follow-up test to measure changes in knowledge (Kirkpatrick level 2), and focus group discussions (FGDs) were conducted to evaluate the transfer and the impact of the courses in real practice (Kirkpatrick levels 3 and 4).

The questionnaire and knowledge tests were prepared by the principal investigator and reviewed by co-authors. In the questionnaire, we asked participants to what extent different components of the course had been helpful for their learning. The true/false test measured knowledge of the informed consent process. Content validity was addressed by means of reviews from a medico-legal expert and two communication skills experts.

**Figure 2: Data collection scheme**



FGDs were chosen as a data collection method since they stimulate participants to respond to each other's opinion and thus will enrich the data obtained from the discussion (Fraenkel & Wallen 2010). We conducted separate FGDs for Group A and Group B as their learning objectives were different. Group A participated in three FGDs (before and after the training, and six months later). Each participant of Group B participated twice (after the training and six months later). FGD guides were prepared by the first author and reviewed by the co-authors

### Data Analysis

Questionnaires were analyzed on SPSS, version 18, using descriptive statistics. As the data of the knowledge test was not normally distributed, a Wilcoxon Sign Rank Test was used in the analysis. However, for the readers' benefit, we report mean, standard deviation, Cohen's D, and effect size. The FGDs were audio-recorded, transcribed and analyzed by two independent researchers using thematic analysis. The researchers independently applied an open coding and developed coding categories to serve as the framework for the analysis. Emerging themes were discussed by the researchers until consensus was reached. As no new information emerged after six transcripts were analysed, saturation was considered to have been reached.

### Results

We will report the results of the questionnaire, knowledge test, and FGD are reported consecutively. All participants (n=32) completed the questionnaires and the knowledge test.

The questionnaire, (Kirkpatrick level 1), showed that participants perceived that most methods were useful to help their learning (Table 1). Cronbach's Alpha was 0.83. For the knowledge test, the Spearman-Brown coefficient of reliability was 0.63 and the test-retest reliability was 0.70. Participants showed increased knowledge on the post-test and follow-up test, compared to the pre-test, (Kirkpatrick level 2) although the level of knowledge was slightly lower 6 months later (Table 2).

Separate analyses for teaching skills and communication skills in the FGD were done and are described in Table 3 and 4. Although we started with open coding, emerging themes were classified according to the Kirkpatrick model: insight, implementation, and impact. 'Insight' was change of knowledge (Kirkpatrick level 2); 'implementation' reflects change in behaviour (level 3), while 'impact' on patients or organization is in line with Kirkpatrick level 4. As group A also practiced communication skills in informed consent practice, quotations about this topic were directed to both groups.

**Table 1: Participants' evaluation of the course and its components**

Please let us know how these following items help you learn:	Mean (SD)
The lecture of legal and ethical of informed consent	3.31 (0.64)
Learning exploration skills in the real practice	3.78 (0.49)
Reflection of the real practice	3.72 (0.46)
Learning negotiation skills in the real practice	3.78 (0.42)
Reflection of real practice in the whole group	3.83 (0.46)
Reflection of real practice in small group	3.90 (0.30)
Reflection of training skills in small group	3.84 (0.37)
Using role plays to learn communication skills	3.91 (0.30)
Using peer as simulated doctor/patient/family in the role play to learn communication skills	3.77 (0.50)
The role play getting more complex from time to time	3.83 (0.38)
The guidance from facilitators decreasing from time to time	3.68 (0.47)
Fun of the training	3.75 (0.44)
Training facilities (room, audiovisual aid, etc)	3.47 (0.57)
Training time management	3.41 (0.61)
Interaction among participants from different professional background	3.61 (0.49)
<b>Mean Score</b>	<b>3.72 (0.25)</b>

Scale 1-4, 1=not supportive, 2=sufficient, 3=supportive, 4=very supportive)

**Table 2: Knowledge test results**

Comparison	Mean	p-value*	Cohen's d	Effect Size
1. Pre Test	9.72 (1.82)	<0.05	2.80	0.81
Post Test	12.31 (1.71)			
2. Pre Test	9.72 (1.82)	<0.05	1.73	0.65
Follow up Test	11.50 (1.97)			
3. Post Test	12.31 (1.71)	<0.05	1.18	0.50
Follow up Test	11.50 (1.97)			

\*Wilcoxon Sign Rank Test, p-value <0.05.

**Table 3: Themes and illustrative quotations from the FGDs on acquired communication skills**

Description	Examples of quotations
<b>Insight</b>	
Participants were able to reflect some principles of communication skills to improve the sound informed consent practice such as mutual trust, partnership, and respecting patients' autonomy. They underlined the importance of exploration prior to explanation and negotiation in communication process. They realized that good clinical knowledge, underpinned with the theory, is also needed in the practice.	<p><i>We did not explore if the patient has understood and did not ask the patient. We have learned here that after information has been provided, we need to ask again if the patient has understood and if there is something that the patient would like to ask (I, nurse, FGD post training, group B).</i></p> <p><i>We want to understand the patient. We don't want to place ourselves above since we are the one who provide the service (A, nurse, FGD follow up, group B).</i></p> <p><i>Perhaps, first, I have to remind myself to come as an empty glass, so I have enough space to be filled in...thirsty of information from the patients. Thus, the goal is to keep searching from the patient, not from my knowledge, or what I want, like to brainwash the patient not to use herbal medicine. I often forget to empty myself. (H, pharmacist, FGD post training, group A)</i></p>
<b>Implementation</b>	
Participants tried to implement the acquired skills in their daily encounters with patients and doctors.	<p><i>A patient with a colostomy was afraid to move. After I approached him slowly, he told me that he is afraid that the fluid is oozing from the stoma. We changed the device of colostomy and I explained the colostomy care to the patient. He was willing to move and he was not afraid anymore....Our colleague did not notice the oozing, but the patient was concerned about it. Doctor had advised mobilization, but the patient was reluctant. (P, nurses, FGD follow up, group B)</i></p> <p><i>I took the patient to visit other patients, to see how nasogastric tubes are used. We provided examples, not only verbal explanation. The patient was a lay person. She could not imagine how it works. By providing examples she noticed how we use nasogastric tube for the feeding and medication administration. (X, nurse, FGD follow up 2, group B)</i></p>
Participants also reported their approach to overcome barriers in the real informed consent setting, such as how they managed the issues of the lack of private	<p><i>In the emergency unit, we have a room for staff to rest, with a sofa. If a major surgery or admission to the ICU is planned, the family demands more explanation. We can take them there, and provide the explanation there....I tell the doctor, "Doctor, shall we explain</i></p>

places and pressures from colleagues.	<i>first? We can use the room". (N, nurse, group B, FGD follow up 2)</i>
	<i>My colleagues did not trust me, "What did you do in the room, you were there for so long!" I told the nurse leader, "Sorry, I will be a little bit long. Do not look for me. I'm in room 39." (M, nurse, group B, FGD follow up 2)</i>
<b>Impact</b>	
Impacts of the skills were perceived to be beneficial for the patients and other colleagues. Although participants reported that doctors might be unhappy if a procedure was cancelled, they thought that it is not a problem as long as patients' wishes were respected. Participant reported that some patients chose them for assistance due to their improved communication skills. It boosted their esteem and professional pride.	<i>In the past, patients complained more easily: "I did not get an explanation why I get an injection. I don't know what is given." However, after we explained from the beginning what we were going to administer, patients felt more at ease and we received fewer complaints." (F, nurse, FGD follow up 1, group B)</i>
	<i>I'm satisfied. Actually my colleagues are also happy after they see the outcome. (J, nurse, FGD follow up, group B)</i>
	<i>I'm delighted that the patient could choose what is best for him. (E, nurse, FGD follow up 2, group B)</i>

In our study, the improved comprehension of group B as reflected in the knowledge test and FGDs is the impact of training the trainers of group A. Therefore we considered it as Kirkpatrick level 4. Additionally, some participants used the teaching skills in different areas of practice; they did not limit their

communication skills to the informed consent process. Participants also reported their approach to overcome barriers in the real informed consent setting, such as how they managed the issues of the lack of private places and pressures from colleagues. Examples are described in Table 4.

**Table 4: Themes and illustrative quotations from FGDs on acquired teaching skills**

Description	Examples of quotations
<b>Insights</b>	
Participants recognize that different delivery methods used in the training are supportive for learning, such as role plays and group discussions. Partnership between teachers and learners and 'no blaming' principle were also reflected as important in teaching.	<i>I learned that it is easier to start a learning process when there is no blame. The positive thinking will energize people to have the courage to try. (Z, medical record staff, group A, post training)</i>
<b>Implementation</b>	
Participants feel their responsibility to introduce what they have learned to their environment. They tried to implement the teaching skills in various ways tailored to their own working context. Some implemented the skills in their assignments to conduct formal course in communication skills. Others tried to integrate the teaching process in the working place.	<i>I first explore their understanding, what they know about communication, and how to communicate with patient and family. In general, they have already recognized communication skills and what should be done to achieve good communication. Afterwards, I tried to conduct role plays. (U, nurse, group A, FGD follow up)</i>
	<i>After the course, Ns K (the head of the nurse in a ward) and I tried to invite some nurses to observe how we explore information and negotiate with the family. We took them to observe us as role models. (O, doctor, group A, FGD follow up)</i>
Some participants used the teaching skills in different areas of practice; they did not limit their communication skills to the informed consent process. For example: a head of a unit used the morning report to teach the skills in group communication to	<i>Sometimes they directly stated "That's the fault of the Ms X!" I emphasize the skills to provide feedback to other people without hurting them and to address their expectation toward their colleagues. It will not do to make their colleagues shameful in front of the public. (T, nurse, group A, FGD follow up)</i>

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her staff members. During the morning report, people discuss problems from the day before. In such a meeting they sometimes blame each other.

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### Impact

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The impact of the teaching performance of group A is reflected in the change of communication skills of group B.

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### Discussion

Although the application of evidence-based practice is considered challenging in South-East Asia (Martis *et al.*, 2008; Santesso & Tugwell 2006) we have developed an evidence-based intervention for health professionals in communication skills and teaching in communication skills training on informed consent practice. We tailored evidence from education and healthcare research, mostly from Western literature, with local evidence about the context, and used them to inform the design of our course and the choice of participants. As learning transfer is influenced by context, design, and transfer (van den Eertwegh *et al.*, 2012), we argue that this tailoring would enhance transfer of the course contents.

The effect of the course varied between participants and spread to all levels of the Kirkpatrick model (Kirkpatrick, 1998). Both qualitative and quantitative measures indicate improvement after the training. Although there was a reduction of knowledge after six months follow up, the score was still significantly higher than the pre-test, indicating retention of knowledge gained in the training. This is also supported by data from the FGDs, in which some participants reported different approaches to apply the acquired skills. Additionally, participants reported the positive impact that they observed in patients and their fellows. This finding serves as a triangulation between the qualitative and quantitative measures, thus supporting our interpretation about the effectiveness of the training (Fraenkel & Wallen, 2010).

Our findings show that participants' learning was beyond the original goal of the course. First, participants were able to apply the skills gained in the course in different situations within their professional tasks. Second, although they encountered barriers in implementation, some were able to overcome the barriers. This indicates that participants had not only transferred the outcomes of the course from the classroom to the workplace, but also achieved 'cross boundary learning' in

which they adapted their learning to different social contexts (Beach, 1999). Based on contemporary literature of transfer, this level of transfer is more satisfying (van den Eertwegh *et al.*, 2012).

Based on theory underlying the 4C/ID model (van Merriënboer & Kirschner 2013), we assume that the strongest elements of the course that helped participants to acquire this level of transfer were the principles of variability and authenticity (van Merriënboer & Kirschner, 2013). Reflection following each learning task was also reported as important for learning (Driessen *et al.*, 2008). By working on different learning tasks, mostly in real settings, and reflecting upon them, participants were able to extract the principles of the skills, choose, and adapt them to answer various challenges during implementation and to transfer the skill to different setting (van Merriënboer & Kirschner, 2013).

Different approaches used by participants in implementation of teaching communication skills were concordant with previous review of champions (Flodgren *et al.*, 2011). Positive responses from colleagues as reported by the participants also support the argument that the choice of champions as initial participants can accelerate transfer at organizational level (Valente & Pumpuang, 2007; Flodgren *et al.*, 2011).

Nevertheless, this study faced some methodological constraints. First, we realize that without a randomized trial it is difficult to state that changes were solely the result of the training. This is a trade-off. The result of a randomized trial is not always easily applicable in different settings (Grol *et al.*, 2002), since evidence in education is not context-free (Davies, 1999). Thus we aimed to provide richer evidence from qualitative and quantitative data, and trust readers to judge the transferability to their own setting.

Second, except for the knowledge test, our data collection methods were mostly self-reports. For example, we were dependent on the subjectivity of our participants in reporting

how the implementation of the acquired skills and how their patients and organization benefited from their changed practice. Further study should involve a control group as well as observation of real practice as measurement (Fraenkel & Wallen 2010).

## Conclusion

In the setting where evidence-based practice is less recognized, evidence from education and healthcare research from Western literature can be applicable, as long as this is tailored to the evidence from the local context. Despite strong contextual factors, a course underpinned with evidence and the appropriate choice of participants can contribute to a successful outcome. The principles of authenticity and variability enhanced transfer, helped participants to overcome barriers and to apply acquired skills in different setting. The choice of champions as initial participants supported the spreading of the message from the course.

## Acknowledgment

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## Ethical considerations

Participation was voluntary. Confidentiality was maintained by ensuring anonymity of participants in the analysis and reports.

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