Journal of Nursing Science

Journal homepage: www.jns.vn

Communication skills in standardized patient and peer assessment: A cross-sectional study

Hien Thi Bui[1,2], Thi Hoa Huyen Nguyen[2], Duong Thuy Tran[3], Van Lan Hoang[2]
[1]Taipei Medical University, Taipei, Taiwan.
[2]College of Health Sciences, VinUniversity, Hanoi, Vietnam.
[3]School of Nursing and Midwifery, Edith Cowan University, Australian

ABSTRACT

***Introduction**: In simulation-based education in healthcare, while standardized patients will provide a summary for constructive verbal or written post-encounter feedback to the doctors or nurses from the patient's viewpoint, peers are also valuable resources to provide accurate and rapid feedback in the view of other healthcare professionals. **Objectives**: To compare SPs' and peers' feedback in assessing communication skills. **Methods**: A cross-sectional study was conducted on trainees (doctors and nurses) and standardized patients who participated in the communication skills training in 2019. A convenience sampling method was applied to collect data using the self-designed questionnaire. **Results**: 889 pairs of SPs' and peers' feedback were included in this study. Peers and standardized patients did not agree on communication skills by scenarios, $p > 0.05$. By subscales, there was also no agreement between peers' and standardized patients evaluations of trainees' communication skills. **Conclusions**: This finding supports the continued use of both training methods to help trainees have diverse perspectives in their self-reflection process as healthcare professionals.*

***Keywords**: Standardized patients; Peer; Feedback; Communication skills training.*

INTRODUCTION

Effective communication, as a bidirectional process between the healthcare system and the patient, certainly contributes to high-quality healthcare services. If either healthcare providers or patients lack clear information exchange, the delivery of care will be compromised [1]. Therefore, communication skills are gradually integrated into training courses for both undergraduate health students and healthcare professionals.

In health education, there are several different methods applied in communication skills training depending on available resources and specific requirements, such as the use of real patients, standardized patients (SP), peer role-play, etc. Among these, SPs are becoming more widely applied as they could create an environment that is closer to reality for trainees during medical encounters [2]. In particular, standardized patients are the actors and actresses who play the role of patients aiming to provide a more realistic learning environment for

Cor. author: Bui Thi Hien
Email: hienbui.hmu@gmail.com
DOI: 10.54436/jns.2025.01.887

Received: Oct 02, 2024
Accepted: Feb 24, 2025
Published: Feb 25, 2025

trainees during medical encounters. The trained SPs could stand in the patients' perspectives to reflect their concerns and emotions, which all force learners to immediately respond to patients' demands.

In addition, based on adult learning theory, it is necessary to provide trainees with feedback that helps them acknowledge their behaviour and reflect on themselves, as adults will be more motivated to learn by their internal drives than external ones [3]. Following the report of F. Daniel Duffy et al [4], there are three basic assessment methods for communication skills: checklists for observers, surveys of patients, and examinations through oral essays or multiple-choice questions. Each technique is applied depending on the trainee, training objectives, abilities of the training institution, and assessor [5]. While SPs will provide a summary for constructive verbal or written post-encounter feedback to the doctors or nurses from the patients' viewpoint [6], the observers as their peer are also valuable resources to bring benefit to both students and instructors by providing them with accurate and rapid feedback as other healthcare professionals [7]. A previous study conducted on an advanced communication skills course for senior medical students in America revealed that there was fair to good agreement among same-level peers, self, SP, and faculty in assessing communication skills [8].

From its benefits, an 8-hour training workshop was built for trainees as healthcare providers in the VinUniversity Medical Simulation Center following the consultant of the Israel Center for Medical Simulation [9]. Until now, more than 2000 healthcare staff in the Vinmec Healthcare System across Vietnam have participated in these courses to share their experiences regarding communication skills in healthcare. In this course, both peers' and SPs' evaluations are used to assess trainees' communication skills, and this feedback is used to discuss in the debriefing sessions. Since a large number of classes were conducted in the VinUniversity Medical Simulation Center, it raises a question regarding the level of agreement between both types of methods and how effectively they could be utilized in the debriefing. Thus, the objective of this study is to compare SPs' and peers' feedback in assessing communication skills at VinUniversity Medical Simulation Center. Once completed, it will provide practical evidence for recommending a training plan and the necessary methods to approach healthcare professionals' communication skills in our center.

METHODS

This study invited all trainees and SPs who participated in the communication skills training at VinUniversity Medical Simulation Center (VMSC) in 2019 (from January to December 2019). After completing the pre-debriefing session and consent form, each trainee was given a short piece of information regarding patients' problems and encountered the SP. When the scenario had finished, observers and SPs were asked to evaluate the trainee's communication skills, which were all used for the debriefing session later.

Communication skills training program: The communication skill training course was conducted for doctors and nurses in the five Vinmec international hospitals across Vietnam (three in the north, one in the center and one in the south). Following the concept

of "jumping into the water", trainees participated in severe scenarios after theory learning. Specifically, each participant had 3 minutes to read and prepare for the scenario and 10 minutes to communicate with SP. We also videotaped each encounter for the video-based debriefing as a small group discussion with other trainees and patient's educators later.

Scenarios: To ensure the reality of the clinical context, six scenarios were developed based on the patient's complaints and piloted with doctors and nurses (table 1).

Table 1. List of scenarios

Scenario Name	Purpose	Participants
Delivering the medical diagnosis	Delivering the bad news	Doctor, nurse
Communicating with an abdominal pain patient	Delivering information about the next step of treatment	Doctor, nurse
Communicating with a back pain patient	Delivering information about the next step of treatment	Doctor
Delivering the wrong diagnosis	Apology	Doctor
Re-taking a blood sample	Trust building	Nurse
Dealing with a problem with the intravenous drip	Apology	Nurse

Standardized patient: Eight SPs from the VMSC Standardized Patient Program who had joined a specific SP training course as a requirement of the program participated in this study. All had significant experience assessing medical staff's communication skills using the feedback forms.

Participants and sampling: A convenience sampling method was used to collect data among SPs and observers who were willing to participate. Specifically, in each encounter, the study chose an SP's feedback and one peer's feedback (among all observers collected in each scenario) to include in this study. The data was collected until December 2019. This study included 889 pairs of SPs' and peers' feedback during the data collection period.

Measurement: To evaluate trainees' abilities regarding communication skills, the questionnaire was developed based on the literature on communication skills in healthcare, patients' expectations for information and emotional support [10], as well as overall course aims. To be specific, the 16-item scale comprises five components: (1) Giving information (3 questions), (2) Listening (3 questions), (3) Responding to the patient's emotion (3 questions), (4) Gesture (4 questions), and (5) General Communication Skills (3 questions). Each question was scored on a 5-point Likert scale (5 = very good; 4 = good; 3 = acceptable; 2 = poor; 1= = very poor). Data was calculated with an aggregated mean score of 1 to 5 for each of the five subscales and the overall scale. The higher score indicated better communication skills. This questionnaire was piloted among 30 doctors and nurses. The Cronbach's alpha in each subscale and the overall scale were above 0.80, which indicated good internal consistency and reliability.

Data collection: At the end of each medical encounter, the SP completed the rating scale and gave trainees verbal feedback. The other trainees, as observers, also immediately scored each encounter on the same evaluation form. All of these evaluations were collected for research purposes.

Statistical analysis: The data was analyzed by Stata 16.1. Descriptive statistics were used to describe the participants' characteristics and abilities regarding communication skills. To detect the level of agreement between SPs and peers and any difference in SPs' and peers' perspectives, we performed the Fleiss' kappa and Spearman rho correlation coefficients, respectively. Significant levels are set at p-values < 0.05.

Ethics approval: The Institutional Ethical Review Board of the Vinmec International General Hospital JSC-VinUniversity approved the study on January 25, 2022, no. 07/2022/QD-VMEC.

RESULTS

Demographic characteristics of participants

Table 2. Demographic characteristics of participants (n = 889)

Variables		N	%
Name of scenarios	Delivering the medical diagnosis	237	26.66
	Communicating with an abdominal pain patient	206	23.17
	Communicating with a backpain patient	108	12.15
	Delivering the wrong diagnosis	62	6.97
	Re-taking a blood sample	146	16.42
	Dealing with a problem with the intravenous drip	130	14.62
Training location	Vinmec Times City international hospital	469	52.76
	Vinmec Ha Long international hospital	87	9.79
	Vinmec Hai Phong international hospital	85	9.56
	Vinmec Da Nang international hospital	156	17.55
	Vinmec Nha Trang international hospital	92	10.35

In this study, 8 SPs and 6 scenarios were used in the communication skills training (Table 2). Of the 889 pairs of SPs and peers' feedback, a large number of trainees experienced the scenarios of delivering bad news (N = 237) and communicating with an abdominal pain patient (N = 206). The majority of the training sessions (N = 469) were conducted in Vinmec Times City International Hospital.

The level of agreement in the evaluation of communication skills between standardized patients and peers

Table 3. The level of agreement in the evaluation of communication skills between standardized patients and peer by scenarios

Name of scenarios	Peers' feedback	SPs' feedback	Fleiss' kappa		Spearman	
	Mean ± SD	Mean ± SD	kappa	p	rho	p
Delivering the medical diagnosis	4.00 ± 0.56	3.94 ± 0.80	0.01	0.11	0.16	**0.01**
Communicating with an abdominal pain patient	3.44 ± 0.68	3.55 ± 0.93	0.01	0.27	0.21	**0.003**
Communicating with a back pain patient	3.81 ± 0.58	3.80 ± 0.70	0.002	0.45	-0.01	0.94
Wrong diagnosis	3.64 ± 0.60	3.89 ± 0.76	-0.02	0.9	-0.03	0.84
Re-taking a blood sample	3.56 ± 0.57	3.88 ± 0.80	0.01	0.14	0.04	0.60
Dealing with a problem with the intravenous drip	3.35 ± 0.66	3.68 ± 0.90	0.001	0.48	0.28	**0.001**

The results revealed that trainees had well-developed abilities in delivering bad news based on both peers' (M = 4.00, SD = 0.56) and SPs' (M = 3.94, SD = 0.80) feedback (table 3). Meanwhile, scenarios of communicating with abdominal pain patients and dealing with a problem with the intravenous drip were rated at lower scores. In addition, peers and standardized patients did not agree on communication skills by scenarios, $p > 0.05$. It also witnessed positive correlations between peers' and SPs' evaluation in scenarios of delivering bad news (rho = 0.16, $p < 0.05$), communicating with an abdominal pain patient (rho = 0.21, $p < 0.05$), and leakage of intravenous fluid (rho = 0.28, $p < 0.05$).

Table 4. The level of agreement in the evaluation of communication skills between standardized patients and peer by subscales

Name of scenarios	Peers' feedback	SPs' feedback	Fleiss' kappa		Spearman	
	Mean ± SD	Mean ± SD	kappa	p	rho	p
Delivering information	3.50 ± 0.80	3.68 ± 0.85	0.02	0.05	0.32	**0.00**
Listening	3.65 ± 0.69	3.77 ± 0.88	0.02	0.05	0.15	**0.00**
Responding to patients' emotion	3.69 ± 0.77	3.75 ± 0.88	0.04	**0.002**	0.24	**0.00**
Non-verbal expression	3.70 ± 0.70	3.86 ± 0.90	0.01	0.21	0.22	**0.00**
General Communication Skills	3.71 ± 0.72	3.84 ± 0.89	0.02	0.06	0.24	**0.00**
The total score	3.65 ± 0.66	3.78 ± 0.85	0.01	**0.03**	0.26	**0.00**

In Table 4, the mean of the total score of peers' feedback was 3.65 (SD = 0.66), whereas SPs rated trainees' ability regarding communication skills at a lower level (M = 3.78, SD = 0.85). In general, the lowest scores were of information delivery in both peers' (M = 3.50, SD = 0.80) and SPs' (M = 3.68, SD = 0.85) evaluations. The results also reported that SPs were rated at higher mean scores than peers throughout all subscales and the total scores. There were also poor and no agreement between peers' and SPs' evaluations of trainees' communication skills. Additionally, by the Spearman test, the study findings indicated that the higher the score of communication skills by SPs' feedback, the more positive evaluation by peers, at all $p < 0.05$.

DISCUSSION

This present study assesses their abilities in various cases, and the results showed that the highest mean score was on delivering the bad news based on peers' and SPs' feedback. Literature showed that the trainees' performance should be evaluated according to their competency and the complexity of the scenario [11]. Healthcare professionals are expected to be competent to independently perform essential situations in communication (information delivery, breaking bad news, counselling, and patient education). This finding was inconsistent with the previous result, as breaking bad news was the most challenging scenario for undergraduate medical students [12]. Delivering bad news is one of the most stressful tasks, impacting not only patients but also healthcare professionals' emotional states [13]. The present study assessed healthcare workers in private hospitals with more real-life communication experience than medical students; thus, this scenario could be more straightforward for them to deal with. However, the present finding reported that delivering simple information was the trainees' weakness. This finding provides evidence to help educators develop appropriate training plans to address their weak communication points with patients.

In addition, non-verbal language was rated at a higher score than other communication skills. It supports a previous finding in which medical students expressed eye contact and nonverbal facilitation well [12 14]. In the medical encounter, both verbal and non-verbal language are leading contributors to the development of trust and rapport between healthcare professionals and patients [15]; non-verbal interaction allows doctors and nurses to respond and contextualize the meaning of patients' verbal utterances and communicate a hidden agenda in particular [16].

The study findings revealed very poor and no agreement between peers' and SPs' evaluations of communication skills by scenarios and subscales. In contrast, an American study found fair to good overall agreement among SP, same-level peer, self, and faculty assessments of communication skills [8]. This difference could be explained by the fact that although both studies used trained SPs, our study assessed communication skills abilities among healthcare professionals, while the fourth-year medical students were recruited in a previous study. Starting from here, it is unclear how these arguments and comments contribute to the discussion of the findings mentioned here. In our training course, the fundamental purpose of using both types of feedback is to help doctors and nurses have diverse perspectives in their self-reflection. Specifically, the peer's feedback would

bring trainee comments about the aspects of other healthcare providers. A safer learning environment is desired because peer-assist learning would benefit students in situations with high cognitive challenges [17]. Additionally, the SP would evaluate trainees' performance in the patient's eyes, and the efforts to teach healthcare providers using SPs could, in turn, result in the subjective improvement of trainees' self-awareness, knowledge, and confidence in communication [18,19]. Training sessions or programs using SPs could achieve good outcomes in which students improve their communication skills [20]. This finding has supported our simulation training design using both feedback methods for trainees as healthcare workers.

Moreover, our study witnessed a significant correlation between observers' and SPs' feedback. SPs were likely more satisfied with medical encounters than peers, as their mean scores were higher than other healthcare providers in the class. In contrast with our results, the previous authors found that the SPs' evaluations differed completely from peers, tutors, and himself/ herself. Peers were rated at the highest scores (M = 21.7, SD = 1.8), followed by the SP (M = 20.5, SD = 2.9), then self-score (M = 19.9, SD = 2.4) and educator (M = 19.4, SD = 2.7) [21]. The existing significant correlation would be explained by the course design. These previous investigators did not train SPs using the assessment criteria, while the SPs in our study, who were actors and actresses, participated in a specific SP training workshop. However, we kept a feedback form secret among students to ensure the educational value of our training program. As noted above, the finding suggested that the level of training on assessment tools may affect evaluation results between assessors.

The current study has two limitations. Since our research aims to assess communication skills, the study results cannot be generalized to clinical skills training such as physical examination and clinical procedure training. Secondly, this study was conducted in private healthcare hospitals, so further studies are encouraged to assess communication skills among doctors and nurses in other public healthcare settings.

CONCLUSION

This study reported poor or no agreement between peers' and SPs' feedback in communication skills training. This finding supports the continued use of both training methods to help trainees have diverse perspectives in their self-reflection process as healthcare professionals. While standardized patients will help trainees understand patients' emotion, the feedbacks from other observers as the peer should recommend trainees appropriate professional strategies to assess patients during medical encounters.

REFERENCES

1. Ratna H. The importance of effective communication in healthcare practice. Harvard Public Health Review. 2019;23:1-6. DOI:10.54111/0001/W4.

2. 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 Medical Education. 2010;10(1):1-9. doi: 10.1186/1472-6920-10-27.

3. Wang EE. Simulation and adult learning. Disease-a-month. 2011;57(11):664-678. doi: 10.1016/j.disamonth.2011.08.017.

4. Duffy FD, Gordon GH, Whelan G, Cole-Kelly K, Frankel R. Assessing competence in communication and interpersonal skills: the Kalamazoo II report. Academic medicine. 2004;79(6):495-507. doi: 10.1097/00001888-200406000-00002.

5. Modi JN, Chhatwal J, Gupta P, Singh T. Teaching and assessing communication skills in medical undergraduate training. Indian Pediatrics. 2016;53(6):497-504. doi: 10.1007/s13312-016-0879-z.

6. Shankar PR, Dwivedi NR. Standardized patient's views about their role in the teaching-learning process of undergraduate basic science medical students. Journal of clinical and diagnostic research: JCDR. 2016;10(6):JC01. doi: 10.7860/JCDR/2016/18827.7944.

7. Ramsey PG, Wenrich MD, Carline JD, Inui TS, Larson EB, LoGerfo JP. Use of peer ratings to evaluate physician performance. Jama. 1993;269(13):1655-1660.

8. Talwalkar JS, Murtha TD, Prozora S, Fortin AH, Morrison LJ, Ellman MS. Assessing advanced communication skills via objective structured clinical examination: a comparison of faculty versus self, peer, and standardized patient assessors. Teaching and Learning in Medicine. 2020;32(3):294-307. doi: 10.1080/10401334.2019.1704763.

9. Gullo CA, Vu NT. A Simulation Center for continuous professional development in Vietnam-A 21st Century skill approach for patient safety and quality of care. MedEdPublish. 2018;7 https://doi.org/10.15694/mep.2018.0000122.1.

10. Makoul G. The SEGUE Framework for teaching and assessing communication skills. Patient education and counseling. 2001;45(1):23-34. doi: 10.1016/s0738-3991(01)00136-7.

11. Sullivan S, Campbell K, Ross JC, et al. Identifying nontechnical skill deficits in trainees through interdisciplinary trauma simulation. Journal of surgical education. 2018;75(4):978-983. doi: 10.1016/j.jsurg.2017.10.007.

12. Qureshi AA, Zehra T. Simulated patient's feedback to improve communication skills of clerkship students. BMC Medical Education. 2020;20:1-10. doi: 10.1186/s12909-019-1914-2.

13. Delvaux N, Merckaert I, Marchal S, et al. Physicians' communication with a cancer patient and a relative: a randomized study assessing the efficacy of consolidation workshops. Cancer: Interdisciplinary International Journal of the American Cancer Society. 2005;103(11):2397-2411. doi: 10.1002/cncr.21093.

14. Karabilgin OS, Vatansever K, Caliskan SA, Durak Hİ. Assessing medical student competency in communication in the pre-clinical phase: objective structured video exam and SP exam. Patient education and counseling. 2012;87(3):293-299. https://doi.org/10.1016/j.pec.2011.10.008.

15. Roter DL, Frankel RM, Hall JA, Sluyter D. The expression of emotion through nonverbal behavior in medical visits: mechanisms and outcomes. Journal of general internal medicine. 2006;21:28-34. doi: 10.1111/j.1525-1497.2006.00306.x.

16. Ishikawa H, Hashimoto H, Kinoshita M, Fujimori S, Shimizu T, Yano E. Evaluating medical students' non-verbal communication during the objective structured

clinical examination. Medical Education. 2006;40(12):1180-1187. doi: 10.1111/j.1365-2929.2006.02628.x.

17. Sammaraiee Y, Mistry RD, Lim J, Wittner L, Deepak S, Lim G. Peer-assisted learning: filling the gaps in basic science education for preclinical medical students. Advances in physiology education. 2016;40(3):297-303. doi: 10.1152/advan.00017.2015.

18. Gunderson A, Mayer D, Tekian A. Breaking the cycle of error: patient safety training. Medical education. 2007;41(5):518-519. doi: 10.1111/j.1365-2929.2007.02746.x.

19. Oh P-J, Jeon KD, Koh MS. The effects of simulation-based learning using standardized patients in nursing students: A meta-analysis. Nurse education today. 2015;35(5):e6-e15. doi: 10.1016/j.nedt.2015.01.019.

20. Bachmann C, Barzel A, Roschlaub S, Ehrhardt M, Scherer M. Can a brief two-hour interdisciplinary communication skills training be successful in undergraduate medical education? Patient education and counseling. 2013;93(2):298-305. doi: 10.1016/j.pec.2013.05.019.

21. Cave J, Washer P, Sampson P, Griffin M, Noble L. Explicitly linking teaching and assessment of communication skills. Medical Teacher. 2007;29(4):317-322. doi: 10.1080/01421590701509654.