# Non-Japanese Simulated Patient Sessions in an English Course for Japanese Nursing Students



Original Article

# Non-Japanese Simulated Patient Sessions in an English Course for Japanese Nursing Students

Jeffrey HUFFMAN[1)]　Mami INOUE[1)]　Binzee GONZALVO[2)]　Kerry SUZUKI[2)]

## 日本の看護学生を対象とする外国人模擬患者を活用した看護英語プログラム

Jeffrey HUFFMAN[1)]　井上　麻未[1)]　Binzee GONZALVO[2)]　Kerry SUZUKI[2)]

〔要 旨〕

米国の看護教育においては，コミュニケーションスキルと異文化理解能力の向上に向け，模擬患者を活用したシミュレーション教育がますます一般的になってきている。本稿は，文献レビューとあわせ，看護英語の必修科目における外国人模擬患者を活用したプログラムのデザイン，導入，評価について論ずる。本プログラムは，模擬患者を外国人とし，医療の場での英語でのコミュニケーション能力と異文化理解能力の養成を教育目的とする。授業実施後に，プログラムの教育的効果についての受講者の認識を把握するため受講者全員（89名）を対象にアンケートを行った（回答率38.2%）。結果として，同プログラムは外国人患者と英語でのコミュニケーション能力の自己認識を促し，その能力を高めるよう学生に動機づけを与えていることがわかった。外国人模擬患者を活用したプログラムは看護英語の授業で学ぶ英語と医療現場で実際に必要とされる英語との間のギャップをつなぐ重要な役割を果たすことが明らかになった。

〔キーワーズ〕 模擬患者，看護英語，異文化理解能力，看護コミュニケーション

〔Abstract〕

Simulation education employing standardized or simulated patients is becoming more common in nursing education in the U.S., particularly for the purpose of improving communication skills and cultural competence. This article presents a literature review and describes the design, implementation, and evaluation of simulated patient (SP) sessions conducted during a required nursing English course at St. Luke's International University, College of Nursing. The SP actors were non-Japanese and the educational objective was the cultivation of English communication skills and cultural competence in healthcare settings. A post-session questionnaire was administered to 89 nursing students (response rate: 38.2%) to assess their perceptions regarding the educational benefit of the sessions. Results indicate that the sessions raised students' awareness of their current ability to communicate and interact with non-Japanese patients and motivated them to improve in these areas. SP experiences focusing on English-language communication and cultural competence can serve as an important transition between classroom English and the English required in real-life clinical settings.

〔Key words〕 Simulated patients, Standardized patients, Nursing English, Cultural competence, Nursing communication

1）St. Luke's International University, Graduate School of Nursing Science・聖路加国際大学大学院看護学研究科
2）St. Luke's International University, College of Nursing (Part-time Lecturer)・聖路加国際大学看護学部（非常勤講師）

受付　2018年9月28日　　受理　2018年11月12日

## Ⅰ. Introduction

The number of foreign visitors to Japan has increased rapidly, quadrupling over the past ten years to over 28 million in 2017. The government hopes to increase this number to 40 million by 2020[1]. The number of foreigners residing in Japan also increased 7.5% in 2017 to reach an all-time high of over 2.56 million[2]. It is not surprising, then, that Japanese hospitals and other healthcare institutions have seen a sharp rise in non-Japanese and non-Japanese-speaking patients. Healthcare professionals and hospital employees increasingly find that communicating with foreign patients is an important part of their daily work responsibilities.

Hospitals that see large numbers of tourists have scrambled to provide medical translation assistance, but these efforts are so far falling short[1]. Doctors in Japan have traditionally needed a certain level of English proficiency (or at least knowledge of medical terminology), but nursing and other healthcare professions have not placed high importance on English communication ability.

Even at nursing schools that emphasize English or international education, the extent to which even a rigorous four-skills English curriculum with a heavy English for Specific Purposes (ESP) component can yield substantial and meaningful improvement in English communication ability via classroom instruction alone is limited, and this is particularly true in an English as a Foreign Language (EFL) environment.

With this in mind, the authors designed and implemented non-Japanese simulated patient (SP) sessions in order to give Japanese nursing students an opportunity to test and improve their English communication skills in a realistic and motivating way. The students' perceptions of the educational benefits of the SP sessions were assessed via a questionnaire.

## Ⅱ. Literature Review

In his discussion of the potential and importance of simulation in healthcare education in general, David Gaba defines simulation as "a technique, not a technology, to replace or amplify real experiences with guided experiences, often immersive in nature, that evoke or replicate substantial aspects of the real world in a fully interactive fashion"[3]. Indeed, simulation has become well-established in the field of medicine, where it is seen as an essential tool for improving safety, quality, and efficiency[3]. The use of standardized or simulated patients (SPs) in medical education began as early as the 1960s[4], and is currently used in high-stakes examinations, such as those required for passing courses and/or graduating, in more than half of North American medical schools[5].

It is only since the late 1990s that the use of SPs has gained currency in nursing education and research[4]. This development has come with the increased focus on patient-centered communication and the realization that the quality of communication between healthcare providers and patients can affect patient health, adherence, and satisfaction[6], as well as safety[7]. SPs have also been used to train nursing students in culturally competent care, which has been incorporated in nursing curricula since the mid-1980s in the U.S.[8].

According to an integrative review conducted by MacLean et al., SPs are most often employed as "active facilitators" in the teaching and learning process, and less often as "passive facilitators" in student assessment[7]. Shin et al. conducted a meta-analysis of 20 studies, finding a medium-to-large pooled effect size indicating improved learning outcomes from simulation education compared with traditional educational approaches[9].

While a number of studies have reported on the beneficial effect of simulation education to improve healthcare communication skills in native-language environments, studies on English-language SP use in non-English speaking environments are nearly nonexistent. An exception is Guvenc et al., who recently conducted a mixed methods study of Turkish nursing students' experience with an English-speaking standardized patient. They found that the experience helped students recognize the need to improve their English ability and learn about different cultures[10].

The terms "standardized patient" and "simulated patient" are often used interchangeably in the literature; however, the term "standardized" is more often used when multiple actors are trained to enact the same scenario in a highly standardized way, which becomes necessary when used for high-stakes assessment of students' knowledge and skills. When the goal is to simulate unpredictable real-world situations for educational and training purposes rather than assessment, "simulated patient" is more often used, and a high

degree of standardization may not be desirable. For this reason, we use "simulated patient" in the current study.

Since 2012, the Japan Association of Simulated Patients in English (JASPE) has maintained and trained a pool of simulated patients for use in English medical interviews[11, 12]. These SPs have primarily been used in medical schools, with St. Luke's International University, College of Nursing being one of the first nursing schools in Japan to conduct regular SP sessions in English as part of the nursing English curriculum. A 2015 report by Hirano et al. about SP sessions conducted with nursing students at Seirei Christopher University found that the sessions did not improve the confidence of some students; the authors recommended having the SPs provide feedback to students after the sessions[13]. Ochiai et al. reported on a pilot study at Yokohama City University in 2015 in which 11 nursing students participated in SP sessions, and both the students and the SPs evaluated the students' performance. Rather than focus on language proficiency, their goals were improving nursing communication skills and attitude, and the SPs were asked to provide primarily positive feedback. Students were able to successfully achieve those goals, and this led to increased confidence[14]. In the current study, we describe the design and implementation of SP sessions and present the results of a questionnaire which assessed students' perceptions of the educational benefits thereof. As far as the authors are aware, no similar studies (involving Japanese nursing students) currently exist in the English-language literature.

## Ⅲ. Methods

### 1. The SP sessions: Design and implementation

English SP sessions have been a regular part of the English I-S and II-S (English for Healthcare Communication) curricula at St. Luke's since 2014. Undergraduate nursing students participate in these sessions as a culminating experience at the end of their first-year and second-year speaking courses. During the semester, they use the *English for Healthcare Communication* textbook[15] to develop their vocabulary, listening, and communication and roleplaying skills in a variety of clinical situations, from outpatient care to women's and family health to chronic illness and inpatient care.

The authors developed five scenarios each for the first- and second-year students. The scenarios were designed to incorporate the situations, skills, and linguistic content that the students had practiced week by week during the semester. Some of the scenarios incorporated specific cross-cultural challenges, such as religious and dietary considerations. Ten trained, experienced SP actors from JASPE were recruited to conduct the sessions. Their training consisted of a review of tips for giving feedback to student doctors/nurses followed by a role-playing session in which new SPs were given feedback regarding their performance by more experienced SPs. SPs were given a detailed version of each scenario in advance describing the setting, patient information, complaint, brief medical/family history, and key points to keep in mind. Students were given a much briefer introduction to the scenario in addition to a list of tasks designed to guide them through the scenario without giving away too much of the information they should be eliciting during the scenario itself. A sample scenario (SP version and student version) is provided in Figure 1. Students were also provided with and encouraged to study in advance a list of useful English expressions for use in clinical encounters, as well as a number of informational articles regarding medical and nursing topics directly related to the scenarios.

In order to make the scenarios as realistic as possible, the sessions were held in a state-of-the-art medical simulation center (complete with to-scale operating theater, ward rooms, examination room, ICU beds, and even a reception counter) and students wore their nursing uniforms. Each SP was stationed in a room or location befitting the scenario, and groups of 4-5 students rotated through the 5 scenarios. For each scenario, one student took on the role of nurse, while the other students observed. Students were encouraged not to use written materials, but observing group members were allowed to offer quiet advice if the "nurse" ran into serious communication obstacles. After 5-7 minutes of acting out the scenarios, the SP then led a 7-8 minute feedback session. SPs provided their own feedback while staying in character as the patient, and also elicited feedback from the observing students as well as self-evaluation from the "nurse". At the very end of all the sessions, each SP was given the opportunity to provide overall feedback to the entire class.

### 2. Participants and Questionnaire

Ethical approval for this study was obtained from the

**A sample SP scenario**

*SP Version*

**Setting:** Hospital bed in post-operative (knee surgery after a fall) patient's room. The patient is going to be discharged tomorrow. She tells the nurse that the prescribed medicine causes nausea. She is also worried about how she will take care of herself after discharge, because she lives alone.

**Patient name:** Karolina Marek　　**Age:** 68

**Nationality:** Poland

**Complaint:** Nausea and anxiety about leaving the hospital and living alone. The oral medication is also difficult to swallow.

**Medical/Family History:** Family history of high blood pressure.

**Key points:** Nurse should explain the importance of taking Opioid pain medication as prescribed (one pill before meals). Slight nausea is a possible side effect. Since the oral medication is difficult to swallow, nurse should offer to check and see whether a skin patch can be prescribed instead. Nurse should remind patient when next appointment is. Patient wonders whether and when she can take a shower and/or bath. Nurse should inform to change bandage daily and to call 119 if patient gets chest pain or shortness of breath. Patient is quite concerned about not being able to move around easily and not being able to take care of herself, especially since she lives alone.

*Student Version*

Patient's hospital room. Karolina Marek, a woman from Poland who had knee surgery after a fall, is due to be discharged tomorrow.

*What you should do:*

1. Greet her and ask how she is feeling.
2. Explain that it is important for her to keep taking her pain medication even if it causes nausea. If it is difficult to swallow, you can offer to check and see whether a skin-patch version is available.
3. Remind her to change her bandage every day, and tell her that she can start taking showers but no baths until doctor gives permission.
4. Inform her that her physical therapy sessions will start in a few days, and reassure her that these will help her to gradually regain her ability to move around and do everyday tasks and take care of herself.
5. Tell her that if she gets chest pain or shortness of breath, she should call the hospital or 119 immediately.
6. Remind her of her next appointment with the doctor in 1 week, which will focus on wound care and pain management.
7. Help her get into a wheelchair to take her to the hospital entrance, and think about how you can ease her anxiety and make her feel positive about leaving the hospital.

Figure 1. A sample SP scenario

St. Luke's International University Ethics Committee (Approval Number 17-A089). A total of 47 first-year and 42 second-year undergraduate nursing students participated in English SP sessions in January 2018, and the end of their second-semester English I-S course. Immediately following the sessions, a questionnaire was sent by e-mail to all participants.

The questionnaire first informed students of the purpose of the study, and then gave them an opportunity to consent and participate, or not consent and not continue to the questions. Students who consented were then asked to complete the 17-item questionnaire consisting of one item to identify their year and class, 13 items evaluating various aspects of the SP sessions on a

four-point Likert scale from "disagree" to "agree", and three free-response items. Of the 13 Likert-scale items, the first eight focused on different types of educational benefits the students may have felt that they received from the SP experience. The last five items, on the other hand, elicited the degree to which students found specific aspects of the experience to be beneficial.

The reliability of the instrument was assessed via Rasch item response theory (Winsteps v. 3.73) as well as classical test theory (SPSS v. 25). Percentages of student responses to each item were used to generate horizontal stacked bar charts for easy visual accessibility.

## Ⅳ. Results

Thirty-four students (16 second-year; 18 first-year) provided their responses to the questionnaire, a response rate of 38.2% (38.1% of second-year students; 38.3% of first-year students).

Two analyses of test reliability were conducted. Cronbach's alpha was .89, indicating that the instrument demonstrated very good internal consistency under classical test theory. The equivalent measurement in Rasch item response theory, person reliability, was .80, which confirms the reliability of this questionnaire. Rasch item analysis uncovered no misfitting items, with the infit mean square statistic for all items falling within the acceptable .5-1.5 range[16].

The percentage of student responses to each item are reported via stacked bar charts in Figures 2 and 3. Comparing the combined "agree" and "somewhat agree" responses with the combined "disagree" and "somewhat disagree" responses reveals that 75% of the respondents felt that the experience resulted in improved English communication ability, while 100% felt that the experience resulted in recognition that their current English communication ability is lacking. This recognition also led 100% of respondents to feel motivated to improve their English communication ability. Similarly, while 66.7% felt that their ability to interact with non-Japanese patients improved, 97.2% were motivated to improve that ability. The percentage of respondents who felt the SP sessions raised their cultural sensitivity and awareness was 88.9%.

Students' responses to the free response items supported these results. One student stated:

> *I learned that when push comes to shove, communicating face to face with foreigners is difficult. This experience made me want to increase my motivation by making more opportunities to communicate with foreigners.*

Another commented:

> *Even if I had planned out in my mind how I was going to proceed during the scenario, in the heat of the moment I found myself unable to*

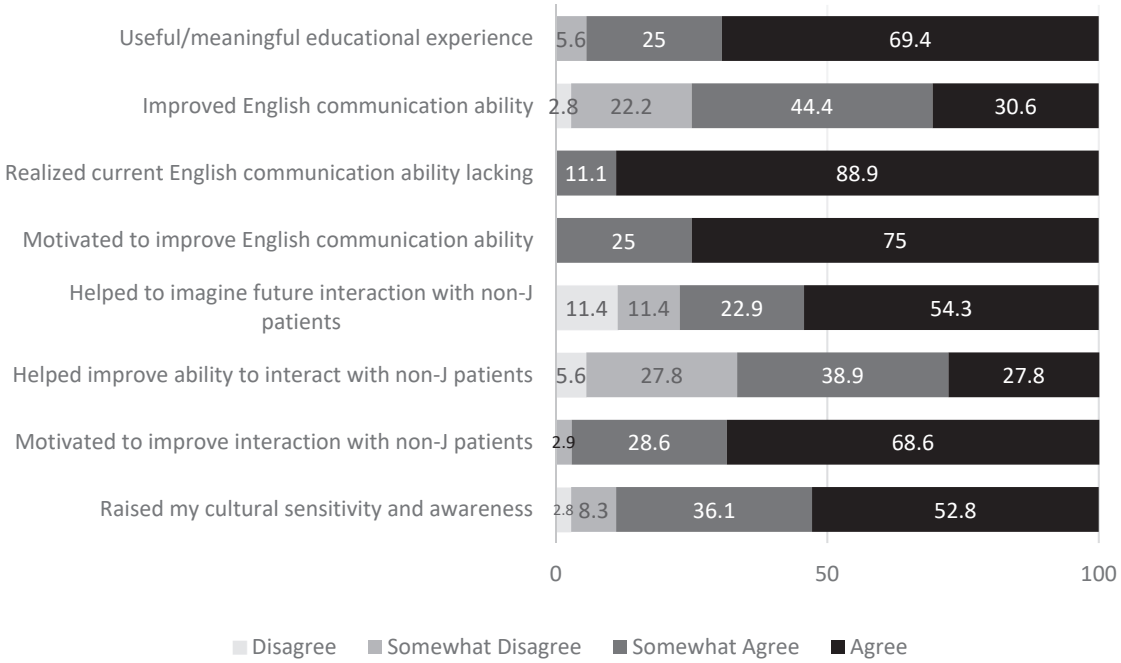


Figure 2. Students' perceptions of the benefits of the SP sessions (n = 34) (percentages)

*come up with the words; anything that was even a little different than I had planned caused me to forget everything. If this were a real situation, and there was no one else around to help, it's frightening to think what would have happened. I realized that knowing the words is not enough—what's important is being able to use them.*

Regarding specific aspects of this educational program that respondents felt were beneficial, 97.2% agreed that the English I-S or II-S course (instructor, textbook, and roleplay activities) had helped them prepare for the SP sessions, 94.4% thought the scenarios were realistic and useful, and 88.9% found the feedback provided by the SPs to be meaningful and helpful.

One student described the educational benefit of these sessions in this way:

*Even more than I imagined, I realized that communicating with foreign patients in English requires not only medical knowledge, but also the confidence to truly reassure the patient. I was nervous, but I want to take the kind advice provided by the SPs and use it as my English learning goal, so that I can learn to speak "living English".*

## Ⅴ. Discussion

Despite the nonresponse bias indicated by the low response rate for this questionnaire, which was likely due to conducting the questionnaire by e-mail as well as the end-of-semester timing, the results reveal a strongly positive response by the students to the SP sessions. They found the preparation useful, the scenarios realistic, and the feedback from the SPs valuable. The strongest message to be gained from the results of this questionnaire, however, is that the SP sessions increased students' awareness of their current abilities, and this awareness in turn led to heightened motivation to improve their abilities in the future. In terms of both English communication ability and interaction with non-Japanese patients, the responses were far more positive for "realization" and "motivation" than for actual "improvement". This result is in line with expectations, as substantial improvement in any skill, and particularly in language skills, requires far longer than one 90-minute session or even one 90-minute class per week for a semester. However, it is possible that the responses also reflect a cultural disposition among Japanese students to downplay their English ability. These results are also consistent with the findings of Guvenc et al. regarding Turkish nursing students, as mentioned in the Literature Review above[10].

## Ⅵ. Conclusion

In addition to developing appropriate communication skills in their native language, Japanese nursing students are also faced with the expectation of being able to communicate effectively with non-Japanese patients, usually in English, while also being sensitive to cultural differences. English communication skills develop to a high level only after many years of study and practice, so textbook study and even classroom practice can only take students so far. At some point, as one of the students in this study commented, they need opportunities to cultivate their "living English" skills. SP experiences that focus on English-language communication and

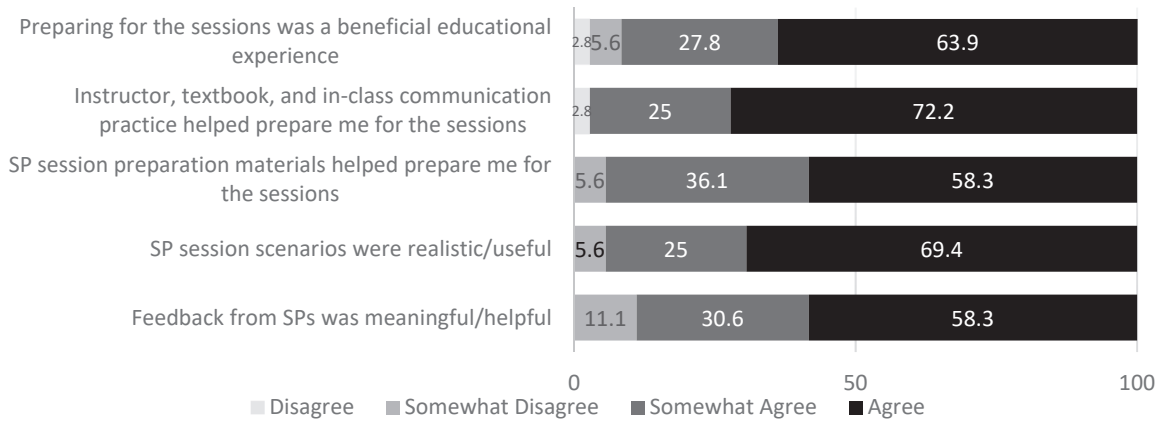


Figure 3. Students' evaluation of preparatory materials, scenarios, and SP feedback) (n = 34) (percentages)

developing cultural competence can serve as an important stepping stone between classroom English training and using English in real clinical settings with real patients.

## REFERENCES


1) Yoshida R. Japan adopts steps to support hospitals in treating foreign tourists. The Japan Times. 2018/06/14. [Internet] https://www.japantimes.co.jp/news/2018/06/14/national/japan-adopts-steps-support-hospitals-treating-foreign-tourists/#.W6hEIWjN2Uk [cited 2018-09-24]

2) Komatsu R. Foreign resident number in Japan hits record high of 2.56 million. The Asahi Shimbun. 2018/03/28. [Internet] http://www.asahi.com/ajw/articles/AJ201803280042.html [cited 2018-09-24]

3) Gaba DM. The future vision of simulation in healthcare. Sim Healthcare. 2007 ; 2 : 126-35.

4) Bolstad AL, Xu Y, Shen JJ, et al. Reliability of standardized patients used in a communication study on international nurses in the United States of America. Nurs Health Sci. 2012 ; 14 : 67-73.

5) Becker KL, Rose LE, Berg JB, et al. The teaching effectiveness of standardized patients. J Nurs Educ. 2006 ; 45(4) : 103-11.

6) O'Hagan S, Manias E, Elder C, et al. What counts as effective communication in nursing? Evidence from nurse educators' and clinicians' feedback on nurse interactions with simulated patients. J Adv Nurs. 2014 ; 70(6) : 1344-56.

7) MacLean S, Kelly M, Geddes F, et al. Use of simulated patients to develop communication skills in nursing education: an integrative review. Nurse Educ Today. 2017 ; 48 : 90-8.

8) Bahreman NT, Swoboda SM. Honoring diversity: developing culturally competent communication skills through simulation. J Nurs Educ. 2016 ; 55(2) : 105-8.

9) Shin S, Park J-H, Kim J-H. Effectiveness of patient simulation in nursing education: meta-analysis. Nurse Educ Today. 2015 ; 35(1) : 176-82.

10) Guvenc G, Unver V., Basak T, et al. Turkish senior nursing students' communication experience with English-speaking patients. J Nurs Educ. 2016 ; 55(2) : 73-81.

11) JASPE: Japan Association of Simulated Patients in English [Internet]. http://www.sp-english.org/ [cited 2018-09-24]

12) Kuramoto C, Ashida R, Otaki J. English-speaking SPs in medical education: the motivation factor. Igaku Kyoiku (Journal of the Japanese Society for Medical Education). 2014 ; 45(6) : 421-3.

13) Hirano M, Shinozaki E, Ono S. [Kango gakusei ni yoru eigo o tsukatta gaikokujin mogi kanja sankagata jugyo no furikaeri]. Nursing students' reflection on an participatory class with foreign simulated patients using English. Nihon Kango Kenkyu Gakkai Zasshi (Journal of Japanese Society of Nursing Research). 2015 ; 38(3) : 184. Japanese.

14) Ochiai R, Matsumoto Y, Okochi A, et al. [Kango daigaku 1nensei o taisho to shita kango eigo kyoiku puroguramu ni kansuru jissen hokoku] English education program for the first-year nursing students. Yokohama Kangogaku Zasshi (Yokohama Journal of Nursing). 2017 ; 10(1) : 29-35. Japanese.

15) Inoue M, Matsuoka R, Ashida R, et al. English for healthcare communication. Tokyo: Medical View; 2016. Japanese.

16) Linacre JM. A user's guide to Winsteps Ministep Rasch-model computer programs: program manual 4.1.0. 2018.