



Original Article

Effectiveness of a training program on the role recognition and case portrayal of standardized patients

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ABSTRACT

Objective: Standardized patient (SP) scenarios could provide medical situations of high fidelity for teaching or examinations, which would otherwise be difficult with real patients. Moreover, SPs can also be used to reliably evaluate or certify the competence of medical trainees. Since the interactions between examinee and SP are dynamic and complex, SPs need to portray the case reliably and consistently across different examinees. Thus, we developed a 1-day program for newly recruited SPs to teach basic competence in case portrayal. The purpose of this study is to assure the effectiveness of this training program in role recognition as a SP and case portrayal. **Materials and Methods:** A total of 80 SPs were recruited from 2010 to 2013. They were asked to complete questionnaires before and after the training program using a five-point, Likert-type scale (1 – strongly disagree and 5 – strongly agree). The questionnaire comprised 16 items covering SP characteristics, role recognition, and case portrayal. The results were analyzed using PASW Statistics 18, paired *t*-test, to determine the effectiveness of the training program. **Results:** A total of 78 questionnaires were collected for a response rate of 97.5%. The mean age of the SPs was 50.2 ± 7.9 (25–68) years. Most SPs showed improvement in role recognition. In the domain of case portrayal, three of nine items (consistency, obedience, and commitment) showed significant difference ($P < 0.05$). **Conclusions:** This study suggests that this program is useful for reinforcing role recognition in newly recruited SPs. With respect to case portrayal, only consistency, obedience, and commitment were improved.

KEYWORDS: Case portrayal, Role recognition, Standardized patient

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INTRODUCTION

Measurement of student performance is necessary to determine the effectiveness of teaching methods, to recognize individual student difficulties, and to provide the basis for a reasonably satisfactory appraisal of student performance. Since there is general agreement that one must observe students' skills in a physician's role to judge them in that role, a patient-oriented method is needed to test these clinical skills. Furthermore, the test must provide a situation consistent from one student to the next, minimizing possible variables that could interfere with examinees' scores [1].

Conventionally, judgments of clinical competence are based on evaluations by clinical teachers in the setting of patient care. The reliability of this approach is limited by the uncontrolled nature of the clinical environment, especially the lack of standardization among observers, and the infrequent direct sampling of clinical skills [2]. Moreover, variable clinical exposure and ambiguous evaluation criteria could undermine the development of clinical competence in trainees. Standardized

patient (SP) encounters are designed to simulate actual trainee-patient interactions with a high degree of realism. They could provide medical situations of high fidelity for teaching or examinations, which would otherwise be difficult using real patients. Moreover, SPs can also be used to reliably evaluate or certify the competence of medical trainees.

Although SP-based encounters are not a substitute for direct contact with real patients, they can help overcome many of the aforementioned problems [2].

In the past decades, the use of SPs has become more sophisticated and widely applied in the curriculum. SP encounters are very positive experiences for both preclinical and clinical students. The value of these encounters may be enhanced by tailoring the sessions to the level of each examinee, emphasizing

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history taking and the physical examination technique, differential diagnosis, data integration, and problem-solving. The SP provides a transition to the real patient for medical students. Greater emphasis on the assessment of clinical skills also shifts student priorities from textbook-based study to patient-based learning activities.

Since the interaction between examinee and SP is dynamic and complex, SPs need to portray the case reliably and consistently across different examinees. Through proper training, SPs can improve their objectivity and reliability in the measurement of clinical skills, while minimizing inconsistencies inherent to evaluation based on random clinical encounters, where students' knowledge and performance may vary depending on the patient selected [2].

Most of the training and evaluation process emphasizes the acting ability and quality of the SP's performance. However, before engaging newly recruited SPs in scenarios, there is a need to ensure that SPs have some important characteristics, such as enthusiasm and role recognition as a SP. Most of the time, the trainer makes these judgments. However, there might be also a need for SPs to reflect on these characteristics themselves [1,3-5].

Most SPs in Taiwan are volunteers or retirees with no acting or medical professionalism. Their ability to portray a case is another key factor.

In 2008, we developed a 1-day workshop [Table 1] to train newly recruited SPs in basic competence in case portrayal and hopefully, to help them recognize the role of being a SP.

The purpose of this study is to assure the effectiveness of this training program, which consists of acting and case training sessions, on role recognition as a SP and case portrayal through the perception of the SPs.

MATERIALS AND METHODS

We invited 10 SP trainers from Tzu Chi General Hospital to develop questionnaires to measure the aforementioned key elements of SPs' perception. Following discussions and revisions through a meeting of the experts, we developed a questionnaire consisting of 16 items covering three categories, "SP characteristics," "Role recognition," and "Case portrayal" [Appendix 1].

From 2010 to 2013, a total of 80 SPs were recruited. They were asked to complete the questionnaires before and after the training program using a five-point, Likert scale (1 – strongly disagree and 5 – strongly agree).

After data collection, the results were analyzed using PASW Statistics 18, paired *t*-test, to determine the effectiveness of the training program. The $P < 0.05$ was considered statistically significant.

RESULTS

A total of 78 questionnaires were collected with a response rate of 97.5%. The mean age of the SPs was 50.2 ± 7.9 (25–68) years.

The first category of the questionnaire, SP characteristic, is shown in Table 2. Enthusiasm for being an SP was reinforced

Table 1: Standardized patient training program

Time	Topic
8:30-8:50	Registration
8:50-9:50	Overview of standardized patient
9:50-10:50	Acting training course (1): Outside-in and Inside-out*
11:00-12:40	Acting training course (2): Patient images and symptoms
12:40-13:30	Working lunch: Familiarization with a case
13:30-15:00	Case training for SPs
15:10-17:10	Dry run of the case
17:10-17:30	Debriefing of dry run

SPs: Standardized patients

Table 2: Standardized patient characteristics (n=78)

Item	Mean±SD		P
	Pretest	Posttest	
1. I have enthusiasm for being a standardized patient	4.10±0.50	4.31±0.65	0.02*
2. I have good communication skills	4.13±0.67	4.03±0.56	0.27

* $P < 0.05$ was considered statistically significant. SD: Standard deviation

after the workshop. However, there was no difference in communication skills.

Role recognition included five items [Table 3]. Most of the SPs showed improvement in all five items, "importance of SPs in medical education," "how SPs will be treated," "obligation of SPs," "ability in role play strengthened," and "ability to express clinical symptoms strengthened." Three of the nine items related to case portrayal (consistency, obedience, and commitment) showed significant improvement [Table 4]. The other five items showed improvement, but the differences were not statistically significant.

DISCUSSION

As most SPs in Taiwan are volunteers, it is not surprising that they are enthusiastic about their role as an SP [6]. However, Table 2 shows that their enthusiasm could be further reinforced after a training program. It seems that newly recruited SPs are more dedicated when they recognize the importance of SPs in medical education.

Conversely, the average score for "good communication skills" dropped after the training session. This is because after the training and dry run of the SP scenario, the SPs realized it would not be as easy to communicate fluently in the scenario as they had previously thought. The way to communicate in an SP scenario is quite different from usual communication with people.

It is very important for newly recruited SPs to recognize their situation in being a SP. The five items in Table 4 represent the key factors of role cognition. It seems that SPs knew very well their importance in medical education, as well as their rights and obligations, through the program. In addition, they also learned how to simulate the gestalt of a real patient.

The category of "Case portrayal" had diverse results. Only three out of nine items showed improvement. These three items, "high consistency," "act in accordance," and "committed to SP case portrayal," were related to obedience, either

Table 3: Role recognition (n=78)

Item	Mean±SD		P
	Pretest	Posttest	
1. I understand the importance of SPs in medical education	3.90±0.73	4.50±0.53	<0.01*
2. I understand how SPs will be treated	3.91±0.81	4.36±0.56	<0.01*
3. I understand the obligations of SPs	3.74±0.81	4.42±0.52	<0.01*
4. I think the SP training program can strengthen my ability in role play	3.86±0.94	4.46±0.55	<0.01*
5. I think the SP training program can strengthen my ability to express clinical symptoms in case scenarios	4.18±0.64	4.41±0.59	0.02*

*P<0.05 was considered statistically significant. SD: Standard deviation, SPs: Standardized patients

Table 4: Case portrayal (n=78)

Item	Mean±SD		P
	Pretest	Posttest	
1. I can play the role of a real patient	4.18±0.77	4.17±0.65	0.91
2. I can act as the scenario requires	4.03±0.81	4.08±0.66	0.63
3. I can express clinical symptoms with precision	3.88±0.81	3.95±0.69	0.55
4. I can act with high consistency during examinations	3.88±0.87	4.17±0.67	0.01*
5. I can act in accordance with the director	3.99±0.78	4.28±0.58	<0.01*
6. I can avoid personal opinions in role play	4.08±0.70	4.22±0.66	0.21
7. I can commit to SP case portrayal	3.55±1.08	4.27±0.62	<0.01*
8. I can show great professionalism as an SP	4.05±0.77	4.12±0.62	0.53
9. I can reflect and modify my acting skills	3.99±0.81	4.06±0.50	0.50

*P<0.05 was considered statistically significant. SD: Standard deviation, SP: Standardized patient

to the scenario or to the SP trainer, which is characteristic of volunteers and is related to commitment [7]. Since the newly recruited SPs were all volunteers with no acting training, it is expected that the other five items related to acting capabilities did not show statistically significant improvement. They may need more practice to improve their acting abilities. We have acting training sessions 3 times a year in the SP continuing education system at our institution to improve acting abilities.

Through the program, the newly recruited SPs have better cognition of what an SP is and how to be a SP. That is why it showed no improvement in their portrayal abilities because they have known more about their capabilities to be a SP.

Some items related to characteristics of volunteers, “enthusiasm,” “obedience,” and “commitment” were reinforced. It seems that better understanding by SPs can evoke commitment as a SP.

This study not only helped us evaluate our program but also helped us know more about our newly recruited SPs. It provided valuable information for us to improve our program and work with volunteer SPs.

CONCLUSIONS

SP recruitment and training are the cornerstones of successful educational programming [8]. Recruiting an SP depends on several characteristics, including their age, language, gender,

race, body habitus, physical findings, education/literacy levels, and availability [8].

SP trainers also evaluate SPs’ abilities, such as consistency, reliability, resilience, and flexible response, during training and case portrayal.

However, there is seldom self-reflection or self-awareness by SPs on their abilities.

This study suggests that the newly-developed training program is useful for reinforcing role recognition in new SPs. Although most SPs revealed positive changes in some domains of competence of case portrayal, they may need more practice to improve their competence in other domains (realism, accuracy, affect, professionalism, reflection). Hopefully, with an understanding of the perceptions of SPs about role recognition and case portrayal abilities, we can learn more about how to recruit and select the right SPs.

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Conflicts of interest

There are no conflicts of interest.

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Appendix 1: Questionnaire for standardized patient training program

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
SP characteristics					
1. I have enthusiasm for being a standardized patient					
2. I have good communication skills					
Role recognition					
1. I understand the importance of SPs in medical education					
2. I understand how SPs will be treated					
3. I understand the obligations of SPs					
4. I think the SP training program can strengthen my ability in role play					
5. I think the SP training program can strengthen my ability to express clinical symptoms in case scenarios					
Case portrayal					
1. I can play the role of a real patient					
2. I can act as the scenario requires					
3. I can express clinical symptoms with precision					
4. I can act with high consistency during examinations					
5. I can act in accordance with the director					
6. I can avoid personal opinions in role play					
7. I can commit to SP case portrayal					
8. I can show great professionalism as an SP					
9. I can reflect and modify my acting skills					

SPs: Standardized patients