

Student Attitudes Toward the Use of Standardized Patients in a Communication Course¹

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Pharmaceutical care requires sufficient communication skills necessary to develop relationships with patients which will positively affect drug therapy outcomes. Standardized patients (SPs) are uniquely qualified for teaching interpersonal skills. Advantages of using SPs in teaching communications include: (i) allowing instructors to design a core set of communication encounters, ensuring students see the desired range of interpersonal challenges; (ii) providing students the opportunity to learn how to deal with difficult situations in a controlled environment; (iii) allowing students to practice communicating with difficult persons in a controlled environment; (iv) having the SP give constructive feedback to the student concerning his or her interpersonal skills from the perspective of the SP; and (v) providing the necessary practice required for competent patient counseling. This report discusses our experience using SPs in a communication course and presents students' attitudes toward interacting with SPs.

INTRODUCTION

The recognition of communication skills as a necessary component of pharmacy practice dates back to at least 1975 with publication of the Millis Report(1). This report redefined the pharmacist as one who develops a trusted and enduring relationship with patients. The pharmacist was responsible for more than dispensing medications; he or she reinforced physicians' instructions about drug therapy and was concerned with drug use as a whole. Fifteen years later, Congress, through OBRA '90, clearly illustrated their de-

sire to more actively include pharmacy in patient care(2). Now, pharmaceutical care further involves the pharmacist with physicians(3). Pharmacists work with physicians and other healthcare professionals to ensure the desired outcome of drug therapies is realized. Clearly, pharmacists must possess sufficient interpersonal communication skills to develop relationships with both patients and healthcare professionals in a way that will positively affect drug therapy outcomes.

When asked which educational methods of communication training pharmacists saw as beneficial in preparing them for their practice, pharmacists ranked role playing, along with group discussion, as first(4). Students, too, stated

¹This work utilizing standardized patients was developed while all authors were at the University of Arkansas for Medical Sciences.

Table I. Laboratory topics

Interpersonal Communications
Nonverbal Communications
Empathy and Listening
Conflict Management and Self-regulation in Conflict
Information Gathering and Compliance
Information Giving and Patient Counseling

practicing communication principles is important preparation for the future(5). Therefore, colleges of pharmacy are responsible for designing communication courses with sufficient person-to-person interaction. This interaction is necessary for the development of communication skills required by pharmaceutical care. Standardized patients may be employed to provide this person-to-person interaction. Standardized patients are uniquely qualified for teaching and assessing interpersonal skills. By definition, a standardized patient is a person so well trained to simulate a case that he or she cannot be detected by a skilled clinician(6). In pharmaceutical education, the standardized patient is more a standardized participant (SP), because he or she may be a patient, physician or nurse with whom pharmacists interact(7). Advantages of using SPs in teaching communications include(6,8):

1. allowing instructors to design a core set of communication encounters, ensuring students see the desired range of interpersonal challenges;
2. providing students the opportunity to learn how to deal with difficult situations in a controlled environment;
3. allowing students to practice communicating with difficult persons (patient or healthcare professional) in a controlled environment;
4. having the SP give constructive feedback to the student concerning his or her interpersonal skills from the perspective of the SP (patient or healthcare professional); and
5. providing the necessary practice required for competent patient counseling.

Standardized participants may be the best instructional method available for teaching communication skills. This report discusses our experience using SPs in a communication course and presents students' attitudes toward interacting with SPs during this course.

COURSE DESCRIPTION

The communication course comprises one element of a second semester class for third year entry-level PharmD students. The communication module was designed to improve the communication effectiveness of the pharmacy student. It focuses on professional communication (e.g., patient counseling, patient interviewing, presentation skills) while emphasizing that communication occurs daily and interpersonal skills (e.g., empathy, listening, nonverbal communication) are as important as professional skills in creating an effective professional interaction. The module utilizes lecture format with a laboratory.

SPs are used in the laboratory. The standardized patient program in the affiliated college of medicine recruited and helped train SPs. The objectives of the laboratory were four-fold: (i) employ a laboratory to enhance the lecture format; (ii) provide students with a secure environment to practice communication skills, e.g., dealing with difficult persons, nonverbal communication, etc.; (iii) provide students with person-to-person interaction designed to give them practice in dealing

with patients and healthcare professionals; and (iv) make the person-to-person encounters as realistic as possible.

Table I lists the six laboratory topics scheduled during the course. Each two-hour laboratory session met twice a week. Laboratory experiences occurred in parallel with lectures and were designed to combine student practice (i.e., role playing) with group discussion. Each laboratory was divided into three sessions: observation and discussion, time in/time out and participant counseling.

Session I. Observation and Discussion: Students viewed a SP demonstration in which two SPs interacted in an encounter focusing on the laboratory topic. For example, nonverbal communication was displayed, either in a professional or nonprofessional environment, and students were instructed to watch for various uses and how these uses influenced the communication process. A group discussion followed.

Session II. Time In/Time Out: Students were "invited" up in front of the class to participate with the SP in an encounter focusing on the laboratory topic. For example, nonverbal communication was the topic, either in a professional or nonprofessional environment, and students were instructed to act out the pharmacist's role, keying in on the nonverbal cues displayed by the SP. The instructor used "time in/time out" to manipulate the encounter for educational purposes(9). After the encounter progressed to a point to be emphasized, the instructor called "time out." The SP froze, remaining in character (e.g., patient, physician, nurse or other), but ignoring the surroundings. At this point, the students and instructor discussed the encounter, critiqued the communication skills of the student interacting with the SP, and suggested other communication technique to try. At the end of the discussion, the instructor called "time in," and the encounter continued as if uninterrupted. Time in/time out permitted to modify the student's experience in real time (i.e., during the encounter) instead of retrospectively after the encounter was completed(9).

Session III. Participant Counseling: Students were "invited" in front of the class to participate in a counseling encounter with a SP (e.g., patient, physician, nurse) focusing on the laboratory topic. For example, nonverbal communication was the topic, always in a professional environment, and students were instructed to act out the pharmacist's role keying in on nonverbal cues displayed by the SP. Discussion followed each encounter to highlight strong and weak communication techniques employed by the student.

Specific outlines were developed for each laboratory. Outlines defined the focus areas for the laboratory and for each session, as well as defined the specific activities/scenarios to be used in sessions to illustrate the focus areas. These outlines were further used in training laboratory SPs and identifying when time in/time out would best be employed in emphasizing key points. Training occurred twice before each laboratory. An example of a laboratory outline is provided in Appendix A.

SPs were also used during the laboratory's final examination. Each student was required to go through one station employing an SP encounter focusing on communication skills in counseling similar to a process previously described(7). All SPs were trained by the case writer and a trainer from the college of medicine standardized patient

²Data presented in a Special Sessions presentation "The Use of Standardized Patients in Pharmaceutical Education" at AACP's 97th Annual Meeting, July 17, 1996, Reno, Nevada.

Table II. Student attitudes of standardized patients in a communications laboratory

Number	Question	Mean (\pm SD) ^a	Median
1	The communications laboratory emphasized the major skills discussed in the lecture portion of the course	4.10 (0.87)	4.00
2	I think this laboratory section increased my confidence level in communication skills	2.35(1.12)	2.00
3	The communications laboratory was not beneficial because it did not enhance the lecture portion of the class	2.38 (1.08)	2.00
4	I enjoyed the innovative nature of the laboratory	2.93 (1.05)	3.00
5	I did not like the communications laboratory because the goal seemed to be entertainment rather than education	3.13 (1.20)	3.00
6	I would have preferred a traditional communications laboratory	3.78 (1.05)	4.00
7	I enjoyed the opportunity to try out the communication techniques we learned in class	2.55(1.09)	2.00
8	This laboratory did not help prepare me to counsel patients	3.05 (1.30)	3.00
9	The communications laboratory enhanced the lecture portion of the class	3.48 (1.04)	4.00
10	I wish more courses would incorporate new teaching methods	3.68 (0.97)	4.00
11	I feel this laboratory strengthened my counseling abilities	2.55(1.18)	2.00
12	The communications laboratory using standardized patients enhanced the lecture portion of the class	3.25 (1.10)	4.00
13	I would recommend the continued use of this laboratory in communications	2.75 (1.19)	3.00

^a Strongly Disagree = 1, Disagree = 2, Undecided = 3, Agree = 4, Strongly Agree = 5.

program. SPs were trained to present the case in a consistent and accurate manner to all students and to assess student performance using a modified Interpersonal Skills (IPS) Rating Scale(10). The modified IPS Rating Scale (Appendix B) was designed to assess, from the SPs' perspective, students' interpersonal and professional skills. The scale was used to assess the manner in which a student communicated information, not the accuracy of that information. Specific directions were used in training each SP. An example of SP directions from one of the test stations is included in Appendix C.

Previous data we generated using SPs demonstrated good interrater reliability (values greater than 0.80).² Therefore, only the evaluation completed by the SPs was used in determining the laboratory final examination scores. All test stations were videotaped so that if a discrepancy or question occurred regarding a specific student's performance, a faculty member could review the student-SP interaction. Laboratory participation and the final examination together made up one-third of the course final grade.

METHODS

A questionnaire was used to determine, from the student's viewpoint, if the laboratory objectives were met. At the end of the course, students voluntarily completed a five-point Likert scale questionnaire assessing their attitudes toward the use of SPs in the laboratory. The questionnaire (Table II) was designed to assess student consistency in responding. Questions three and nine plus eight and 11 were paired as opposites in order to determine if responses were consistent. Further, question 12 reflected question one except incorporating the nomenclature standardized patients. This question was included to identify if terminology affected student response in a negative manner. Descriptive analysis was performed on each question, with mean and standard deviation reported. Further, median responses for all items were reported to compensate for response extremes(11). At the end of the questionnaire, students added positive and negative comments about the laboratory, as well as recommendations for improvement.

Table III. Student comments regarding use of standardized participants (SPs) in a communication laboratory

Positive
Need "hands-on" experience and this laboratory offered hands-on practice
Enjoyed the examples of how to deal with difficult patients and other confrontations; this information will be useful for guiding our future responses
Enjoyed seeing the concepts from lecture demonstrated in various ways
Laboratory clarified, via demonstration, the concepts from lecture
The SPs made it seem real-life
Negative
Too worried about being called on to learn from the laboratory
Acting before the class was of no benefit at all
Not enough practice opportunities with the SPs for everyone in the class
The laboratory was too long; one-half the time would have been sufficient
Recommendations
Make all the examples used in the laboratory centered around a professional environment
Use small groups; this will increase laboratory participation for everyone
Use small groups; this will decrease the fear of being called on and having to act in front of the entire class
Make this a first year course
Allow us to practice in a non-threatening environment; in other words, use small groups so that we are not called on to practice in front of the entire class
Spent less time on interpersonal communication skills and more on patient counseling

RESULTS

Forty of the 67 students (approximately 60 percent) completed the Likert scale questionnaires. Results are summarized in Table II. Based on item analysis, students felt the laboratory utilizing SPs enhanced the lecture format of the course and emphasized the major communication skills

discussed in lectures. Students did not like the innovative nature of the laboratory though they wished more classes would incorporate new teaching methods. Students reported they would have preferred a traditional communication laboratory even though what constitutes a traditional laboratory was never defined in lecture or laboratory. Students did not like the opportunity of practicing the communication techniques discussed during lectures. Students did not feel the laboratory increased their confidence level in communicating nor clearly strengthen their counseling abilities. Students were undecided if they would recommend the continued use of this laboratory. Table III summarizes student comments regarding the SP laboratory. Questions designed to analyze response consistency [3,9 and 8,11] demonstrated student responses were consistent. Also, the nomenclature standardized patients did not affect response consistency.

DISCUSSION

Healthcare reform may impact professional services offered by pharmacists. Future roles may include monitoring patient outcomes, developing and managing treatment protocols, prescribing and selecting therapeutic alternatives and providing routine medical care and preventive services(12). In order to prepare future pharmacists for these roles, effective teaching of communication and professional interaction skills must occur(12). When surveyed about communication used in practice, pharmacists stated skills related to patients and other healthcare professionals were most important(4). Further, pharmacists stated they were most uncomfortable communicating with physicians, confirming the need for educational programs which include physician encounters. Our intention was to develop a communication course which gave students practical experience communicating with patients and healthcare professionals as realistically as possible. For this reason, we chose to incorporate SPs.

Laboratory outlines defined how topic material would be demonstrated through SP interaction, as well as defined areas to employ time in/time out (see Appendix A). In the actual laboratories, time in/time out became an informal process, providing spontaneous discussion and feedback based on student-SP interactions. SP performance criteria (*i.e.*, directions) for laboratory demonstrations and laboratory counseling sessions were defined in the outlines, but not rigidly so. Rigid directions and training to ensure a standard stimulus to all students was employed only for the stations used during the final examination process.

Main criticisms associated with the use of standardized patients to teach or assess clinical skills, including interpersonal communication, are the time and financial expense involved(13,14). Significant time and some expense were invested in our use of SPs, therefore we wanted to assess if their use met our laboratory objectives. We determined student attitudes would aid in assessing if these objectives were met.

Students stated the SP laboratory enhanced comprehension of the lecture material. Student comments (Table III) illustrated that the laboratory did provide "hands-on" experience, provided examples of difficult communication scenarios and embodied the concepts from lecture. But, in their opinion, the laboratory failed to improve their communication confidence and did not clearly strengthen their counseling skills. Student comments (Table III) identified

two design flaws in organizing the laboratory which may account for this opinion: communication apprehension and lack of small-group exercises. In both negative comments and recommendations to improve the laboratory, students stated that by not using small groups, they were forced to interact with SPs in front of the entire class which generated anxiety. And, by not using small groups, insufficient SP interaction was available to all students. Only about five students per laboratory were provided an opportunity to practice with an SP.

Communication apprehension, by definition, is the student's level of fear or anxiety associated with person-to-person communication(15). This fear can be generated by actual person-to person interaction or simply the anticipation of communication. At least one out of every four to five (approximately 25 percent) pharmacy students suffers from severe communication apprehension(15). These persons are not apt to engage in communication and traditional communication skills training. Calling on a student with severe communication apprehension to come before a group and practice may make the problem worse. This was reflected in student comments. Students stated they were too worried about interacting before the class to gain benefit from the laboratory. We neglected to take this into account and organized the laboratories around student participation in front of the entire class. This produced significant student anxiety and, based on their comments, interfered with the educational process and decreased benefits from SP interaction. Knowledge and skills are insufficient; one must reduce communication apprehension to produce effective communication(5). Results indicate the laboratory objectives (enhance lecture format, provide a secure practice environment for communication, provide "real" communication practice) were met. Unfortunately, because of communication apprehension, the laboratory was not perceived as beneficial.

One suggestion to reduce communication apprehension is the use of small groups(5,15). Small groups "personalize" the exercise and reduce communication apprehension(15). Our students, too, suggested small group interactions, but for a different reason. Students believed that their confidence in counseling did not improve because insufficient SP interaction was available to all class participants. Breaking students into small groups with an SP would decrease communication apprehension and increase person-to-person (*i.e.*, SP-student) interaction. This would decrease communication apprehension and increase practice opportunities for students. Unfortunately, more SPs will be required and this will increase costs.

RECOMMENDATIONS

Based on student feedback, a communication laboratory utilizing SPs should provide enough SPs so that the majority (if not all) of students will be given the opportunity to interact with the SPs. Also, our students believed that more (if not all) laboratory activities/scenarios centering on professional encounters would aid in developing their confidence as patient counselors (see Table III).

A communication laboratory employing SPs will enhance the lecture format and provide necessary person-to-person interaction needed to equip pharmacists with the communication skills required by pharmaceutical care. Small groups in the laboratory will maximize benefit by increasing student contact with SPs and minimize student communication apprehension. If alternative interventions, other than

the employment of small groups, are beneficial, are not known. It remains to be determined whether time and financial constraints will limit the incorporation of SPs into communication courses at other institutions.

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References

- (1) *Pharmacists for the Future: The Report of the Study Commission on Pharmacy*, Health Administration Press. Ann Arbor MI (1975).
- (2) Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, 4401, 104 Stat. 1388, 1990.
- (3) Hepler, CD. and Strand, L.M., "Opportunities and responsibilities in pharmaceutical care," *Am. J. Hosp. Pharm.*, **47**, 533-543(1990).
- (4) Oliver, C.H. and Barnes, B.A., "Communication attitudes, practices, and training needs of working pharmacists," *Am. J. Pharm. Educ.*, **47**, 119-122(1983).
- (5) Smith, D.L., "Knowledge + skills — apprehension = effective communication," *Can. Pharm. J.*, **113**, 255-258(1980).
- (6) Barrows, H.S., *Simulated (Standardized) Patients and Other Human Simulations: A Comprehensive Guide to Their Training and Use in Teaching and Evaluation*, Health Sciences Consortium, Chapel Hill NC (1987).
- (7) Monaghan, M.S., Vanderbush, R.E., McKay, A.B., "Evaluation of clinical skills in pharmaceutical education: past, present and future," *Am. J. Pharm. Educ.*, **59**, 354-358(1995).
- (8) Anon., "Highlights of group discussion of the uses of standardized patients," *Acad. Med.*, **68**, 451-453(1993).
- (9) Barrows, H.S., "An overview of the uses of standardized patients for teaching and evaluating clinical skills," *ibid.*, **68**, 443-451(1993).
- (10) Schnabl, G.K., Hassard, T.H. and Kopelow, M.L., "The assessment of interpersonal skills using standardized patients," *ibid.*, **66**(Sept suppl), S34-S36(1991).
- (11) Colton, T., *Statistics in Medicine*, Little, Brown and Company, Boston MA, (1974) p. 29.
- (12) McCombs, J.S., Nichol, M.B., Johnson, K.A., Hay, J.W., Ebin, V.J., Lawrence, G.D. and Schneider, J.S., "Is pharmacy's vision of the future too narrow?" *Am. J. Health-Syst. Pharm.*, **52**, 1208-1214(1995).
- (13) Reznick, R.K., Smee, S., Baumber, J.S., Cohen, R., Rothman, A., Blackmore, D. and Berard, M., "Guidelines for estimating the real cost of an objective structured clinical examination," *Acad. Med.*, **68**, 513-517(1993).
- (14) King, A.M., Perkowski-Rogers, L.C. and Pohl, H.S., "Planning standardized patient programs: case development, patient training and costs," *Teach. Learn. Med.*, **6**, 6-14(1994).
- (15) Berger, B.A. and McCroskey, J.C., "Reducing communication apprehension in pharmacy students," *Am. J. Pharm. Educ.*, **46**, 132—136(1982).

APPENDIX A. EXAMPLE OF A LABORATORY OUTLINE

Outline: Nonverbal Communication

Key points

1. Improve students' awareness of the importance of nonverbal communication in everyday human interactions.
2. Demonstrate that counseling is most effective in "personal space," or in the range of 18 inches to four feet versus "intimate space" (zero to 18 inches) or "social space" (four to 12 feet).
3. Demonstrate that nonverbal communication is believed more than verbal communication, especially if the nonverbal and verbal components do not match.
4. Illustrate how major elements of nonverbal communication (physical environment, facial expressions, body movement, space, gestural language, vocal characteristics and touch) intertwine to affect one's "trust" level in a patient/pharmacist interaction.

Session I

Scenario: SP's nonverbal communication while buying a car. Students: Observers. Also, at the end, students identify nonverbal cues used throughout the interaction.

Purpose: Demonstrate the importance of nonverbal communication in everyday interactions.

Areas to include in the demonstration:

1. Personal space.
2. Nonverbal communication is believed by the recipient more than verbal communication.
3. How salespersons will use the major elements of nonverbal communication (physical environment, facial expressions, body movement, space, gestural language, vocal characteristics and touch) to affect the "trust" level of the buyer.

Session II

Scenario: Games (*i.e.*, To Tell the Truth)

Students: Will participate as contestants, etc.

Purpose: To demonstrate nonverbal communication and its importance.

Areas to include in the demonstration:

1. Same as above.
2. Have students act out emotions (*e.g.*, anger, joy, surprise, suspicion, despair, nervousness) using only nonverbal behavior. Each student selects a slip of paper on which is written the emotion to be portrayed. The other students observe and try to determine what emotion is intended.

Session III

Scenario: Cases involving students and laboratory staff. Will include professional interactions between pharmacists and others (*i.e.*, patients, health care workers, etc.).

Students: Will participate and identify the importance of nonverbal communication in the interaction.

Purpose: To allow students to feel nonverbal cues during professional interactions.

Areas to include:

1. Physician (SP) and pharmacist (student) — The physician needs a recommendation from the pharmacist for a P&T addition to the hospital formulary. The MD needs the pharmacist's justification for Drug A over Drug B. The pharmacist has researched the choice and decides Drug B is the best one for the formulary. When he/she presents this to the doctor, the MD has an outside vested interest in Drug Company A and that is the one he really wants on the formulary, despite what the pharmacist recommends.
2. Patient (SP) and pharmacist (student) - A new prescription for Diabeta (diabetes medicine- they should know this). As part of the counseling, the pharmacist should go over the dietary changes necessary as part of the patient's treatment. Patient outwardly replies that he understands and will comply, but nonverbal messages reveal that he is not convinced that diet modification is necessary as a treatment modality. He feels that he is not really that sick; and, even if he is sick, how can diet changes help?
3. Patients (SPs) with prescriptions for Percodan - Patient 1 is legitimate. Patient 2 is not. The case is to demonstrate the nonverbal differences between the two and how the pharmacist (student) reads these and handles the situations.

Summary

During the entire laboratory, Time-in/Time-out will be employed by the faculty to emphasize areas to students.

APPENDIX B. MODIFIED INTERPERSONAL SKILLS RATING SCALE

Checklist of Student Communications Skills

	Yes	No
Introduces self and/or shakes hands	<input type="checkbox"/>	<input type="checkbox"/>
Identifies purpose of interaction	<input type="checkbox"/>	<input type="checkbox"/>
Maintains eye contact	<input type="checkbox"/>	<input type="checkbox"/>
Questions, if any, were open-ended	<input type="checkbox"/>	<input type="checkbox"/>

Did the SP feel as though he received an appropriate professional service? (It is not important whether the patient particularly likes the student, what is important is that the SP feel that a satisfactory service was performed?)	<input type="checkbox"/>	<input type="checkbox"/>
Would the SP want to see this student again if the student could be his pharmacist?	<input type="checkbox"/>	<input type="checkbox"/>
Would the SP comply with the treatment plan provided?	<input type="checkbox"/>	<input type="checkbox"/>
Was the student well-paced, gracious or organized?	<input type="checkbox"/>	<input type="checkbox"/>
Did the student place the SP at ease?	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX C. DIRECTIONS TO THE STANDARDIZED PARTICIPANT

You are Sherry Walker, a 49-year-old patient of Dr. Tobien and he just gave you a prescription for warfarin. Dr. Tobien has asked the pharmacy student to counsel you on the appropriate use of this drug. You have chronic atrial fibrillation and do not understand why you need a "blood thinner." You are to take 7.5 mg today and 5 mg/day after that.

Make sure you ask why I have to be on a blood thinner if I have "irregular heartbeats." Act somewhat concerned.

The student will ask you about other medications you take. Just tell the student what you do take now (Prozac chronically, Tylenol for aches and pains, no aspirin or ibuprofen).

Also, be sure to ask:

1. Isn't warfarin rat poison?
2. What will this do to my periods?

Remember, you are grading on the human interaction aspects only, not on content.
