Chapter

29

Simulated/standardised patients

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Introduction

Lay people who have been trained to portray patients have come under many names for over 40 years. Initially they were called *programmed patients* in the early 1960s, followed by *simulated patients* in the 1970s. When used for assessment of medical students, they came to be known as *standardised patients* and, in good medical acronym fashion, came the term SP. The term 'standardised' eventually replaced the original term 'simulated' to reinforce the fact that the patient's situation can be made fundamentally the same for every student encounter. This terminology is attributed to Canadian psychometrician Geoffrey Norman (Wallace 1997). People who are portraying parents or relatives of a patient, or other healthcare members in a clinical situation, who are not the patient, are termed a standardised participant (Monaghan et al 1997).

☛ A standardised patient is always simulating, but a simulated patient is not always standardised

In this chapter, SP will be used interchangeably to mean standardised patient, simulated patient or standardised participant.

SPs are particularly useful for teaching beginning students who are developing their interviewing and examination skills in preparation for interactions with real patients. Medical students often lack clinical experience with real patients. By learning through realistic SP scenarios, they increase their experience and faculty are able to see how students practically use their new knowledge. With SPs, students can learn to take a patient history and perform a physical exam in a structured and efficient manner. Students learn to ask questions about medical, surgical and social histories in a systematic way. SPs are also helpful with upper level students, assuring that what has been taught in the curriculum has been integrated by students ready to go out into practice.

☛ In what areas of your curriculum would SPs enhance a student's understanding and proficiency?

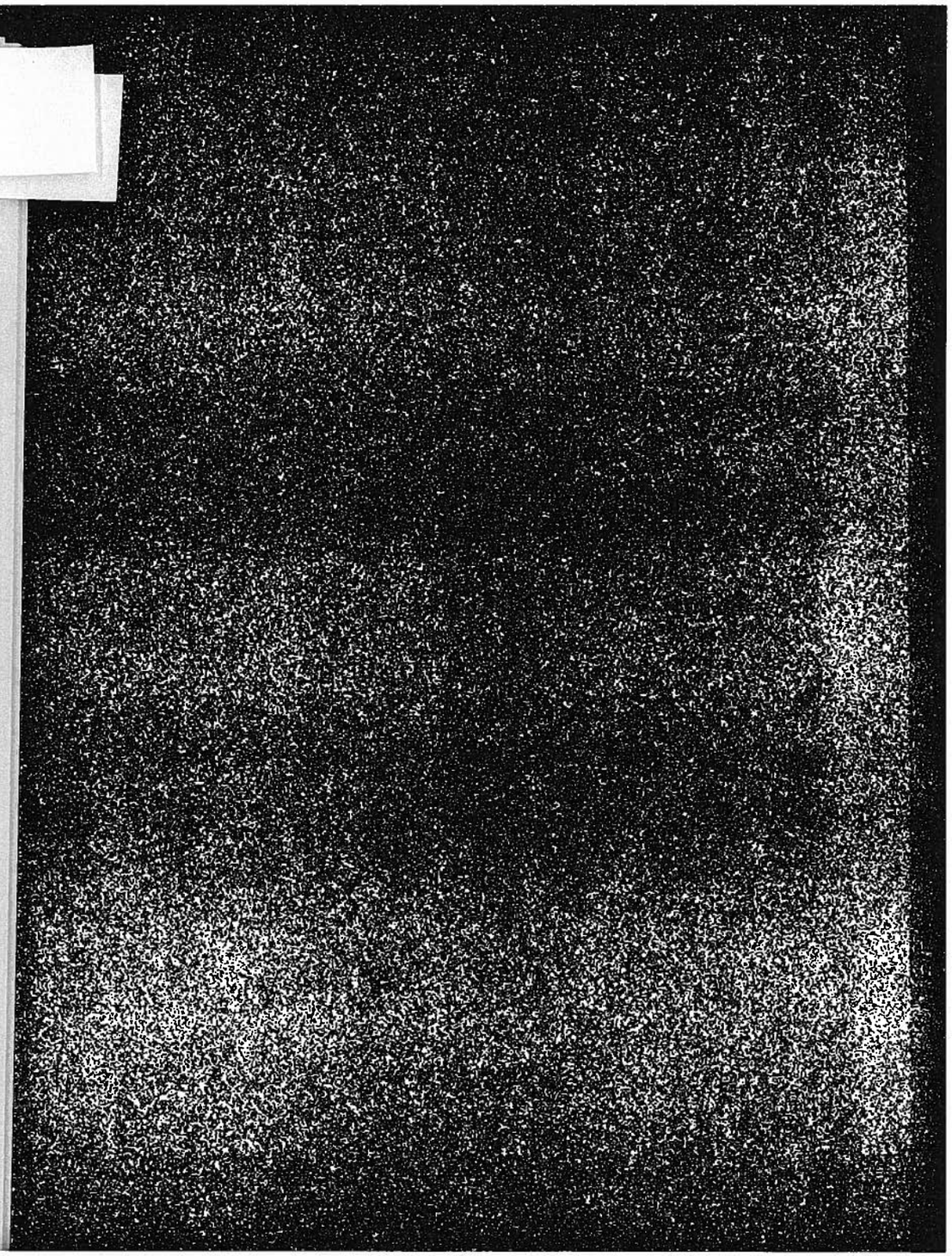
What can an SP do?

> "An SP is defined as a person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician"
>
> *Barrows 1993*

The SP can replay a case over and over again in a consistent and believable way. An SP can be trained to give information on a patient case, display physical findings in an examination, and give feedback to the student in the form of verbal feedback or by filling out a checklist.

The best way to see if a medical student can perform a medical interview or physical exam in a correct way is to observe them as they interview or examine a patient. Any student who works with patients will behave in the same way with an SP as they do in the actual clinic setting. This accurate reflection of their actions, decisions and behaviours has been thoroughly researched and validated by many professionals (Barrows 1993). Since it can be difficult to find real patients with the diseases and findings necessary for students to see, using SPs guarantees that students study the preferred patient cases. An added benefit of using SP cases is the ability to schedule them as needed.

SPs can give information and also be scripted to ask for any information that is needed in the case. They can have examinations performed on them including breast, pelvic and male genitourinary examinations. There is special training for those exams, and special attention should be given to how many exams are performed daily. An SP can be trained to successfully record an encounter on a written checklist, recalling what happens and stating factually what they have experienced. In their written recording, they are not



able to address the medicine behind any procedure performed during the encounter. For example, in a heart exam, the SP can record on a checklist where the student placed the stethoscope during the exam, but cannot make a judgment about what the student heard or diagnosed in regard to heart disease.

The SP can also score a communication checklist based on his/her experience during the encounter with the student. For example, the SP can comment on a student's degree of caring or lack of eye contact, based on the SP's experience during the encounter.

In general, the use of SPs allows faculty control of clinical content and assurance that patients are available on schedule. In addition, using SP cases is:

- Convenient – available anytime, any place
- Reliable – cases are standardised and reproducible
- Valid – comparable to real patients
- Controllable – faculty can adjust the learning objectives
- Realistic – faculty can integrate psychosocial issues into a case
- Corrective – learner can receive feedback immediately
- Practical – learners can practice invasive exams (pelvic or breast exams)
- Repeatable – learners can rehearse clinical situations they are not ready to manage alone
- Measurable – learners' performances can be compared
- Safe – limits inconvenience, discomfort or potential harm to real patients
- Efficient – may provide a longitudinal experience in a compressed time frame and reduce time demands on physician teaching faculty.

SPs are used in many medical schools around the world as well as other healthcare educational programmes including pharmacy, nursing and dentistry. Any healthcare team member who interacts with patients can benefit from working with an SP in order to evaluate how they actually work with patients in their field.

If an institution has an SP programme, then a valuable resource is already available. Contacting the institution's SP educator can save time and make case and curriculum development a much easier process.

If the institution does not have an SP programme, it is still worth the time and effort to use an SP to teach medical students how to conduct an interview, communicate with a patient or family member, and examine a patient. It is also helpful to teach clinical reasoning and can take a student through an entire disease state from diagnosis to treatment and follow-up. This can all be completed in 2 hours instead of 2 weeks, 2 months or longer.

What kind of patient cases would translate to SP methodology?

How to use an SP

SP recruitment

Finding a person who becomes a successful SP is not always easy. Recruitment requires imagination! Most programmes start small and gradually build a pool of well trained and dependable SPs. It is necessary to find people who are intelligent and can understand that this work is educational. The use of people from outside the institution creates a better outcome of a realistic encounter for the learner. When students know the SP, whether a colleague or the staff secretary, they are less likely to take the simulation seriously. People outside of the medical profession can easily be trained to portray cases without having an understanding of medical knowledge. Friends, neighbours, and family members who are interested in the programme's success are often a good initial source for recruitment.

Retired teachers and educators make excellent SPs because they understand educational objectives. Other reliable SPs have been homemakers, students in undergraduate non-medical programmes, health club members, part-time teachers, waiting staff, and actors. There is a caution to take when using actors. This work is not about their ego or applause, but it is strictly about education. When actors are hired as SPs, they must clearly understand their role is in the field of education, not theatre.

A good SP is intelligent and can understand that SP work is about education not entertainment.

Once there is a core group of SPs, they will spread the word about the programme and recruit individuals with whom they would like to work. When a more formal approach is needed, place small posters near elevators in hospitals and clinics. When special populations are needed, like adolescents or elderly persons, approach schools or assisted living facilities. Advertising in local papers can produce an adverse response to recruitment. People who respond to advertising for 'fake or pretend' patients are often not the most mentally stable or reliable employees. This seems to be especially true for cases involving psychiatric issues, when the applicant responding to the advert requests psychiatric cases, this is very often.

When recruiting SPs, these characteristics are of primary importance:

- appropriate for role (age/gender/physical characteristics)
- accurate (on time, every time)
- accessible (by telephone, e-mail)
- able to accept/use constructive feedback/criticism
- able to maintain confidentiality.

SP training

Schedule the first training approximately 2 weeks before the event. It is suggested that the SP have multiple training sessions, with the first session covering an introduction of the case being portrayed and the SP's educational role in that portrayal. At the first training, give the SP a brief orientation to the activity and describe the role. During training, an SP should be given information in small bites. Ask the SP to write down everything said about who the character is and what he/she knows about the patient; this is a good way to reinforce their knowledge of the case. After the first training, allow the SP a few days to study the material independently.

The next training will consist of answering any questions about the case and introducing the SP to other educational components of the case such as checklists and feedback processes. Next, walk the SP through the physical encounter if there is one associated with the case. Let the SP feel where he/she will be in the room and where to enter/exit. Allow the SP to experience each item on the checklist. When confident, the SP should practice the encounter under the observation of the author or trainer. During this second training, the SP should practice a sufficient number of times to ensure accuracy.

A third and fourth training will be used for running the case repeatedly until the SP is portraying the case in a consistent and reliable way. A final run-through, or dry-run, of the case allows the medical faculty to experience the encounter from the student's perspective and to make small adjustments to the case as needed. Allow the case author to see the dry-run using an upper level student with no prior knowledge of the case to see how it will flow during teaching or testing. This dry-run also allows the checklist to be clarified and, if necessary, adjusted by the faculty prior to the student encounters. Showing an audio/visual (A/V) recording play back to the SP will validate his/her progress in portraying the encounter. The ability to capture an A/V recording of the SP/student encounters makes this methodology very efficient. Faculty can review the recordings based on their own schedules. Students can review their encounters privately to reflect on and self-assess their performance.

Remember that the overarching goal of SP training is that the SP will be so carefully coached that the simulation cannot be detected by a skilled clinician. General training tips for SPs include:

- Dress the part – Make sure you are dressed just like the patient might be with the same props, such as bags, purse, shoes, etc.
- Don't answer before question is finished (telegraph information)
- Speak slowly
- Use conversational style when appropriate – don't sound like a robot only spitting out checklist items as if reading
- Only answer the questions that you have been asked (don't volunteer information)
- Answer question by using the checklist item as your statement, not just yes or no. This will help with recall. ('No, I am not on any medications.')
- Pay attention to your body language.

Teaching with an SP

Teaching students to work with SPs

The key to interacting with SPs is to relate to them exactly as a real person who has either a professional or personal relationship to the simulation. SPs will not interrupt a learner during an encounter, nor will they volunteer any information unless directed to do so. Learners should not attempt to communicate with an SP out of role. This is unprofessional and will embarrass both the SP and the learner.

When SPs are used in small group teaching sessions, the 'time-in/time-out' format is used. The guidelines are very simple.

- Imagine that the SP is sitting in a clinic room, waiting to be seen. The SP will not acknowledge the group until addressed as a real patient.
- One student begins the interview by introducing him or herself and eliciting the reason for the visit (or the chief complaint).
- If the student in the encounter becomes uncomfortable or does not know what to say, he/she can signal by saying 'time-out'. The SP will go into suspended animation and act as if waiting for the doctor. When the student is ready to resume, he/she will call 'time-in'.
- The student can ask for help in 'time-out', but this is not the time for a lecture or lengthy discussion.
- If a preceptor needs to correct a student or to emphasise something the student has done, he/she may also call 'time-out'.
- Only the facilitator or student in the encounter can call 'time-out'.
- Once all the students who wish to interview the patient have done so, the preceptor will ask the SP to step out of role and give feedback to each student who participated in the encounter.

Teaching associates (TAs)

These are professional patients who have been trained to teach physical examination manoeuvers on their own bodies. SPs facilitate 'hands on' teaching of

clinical skills while avoiding inconvenience, discomfort, or potential harm to real patients. TAs provide specific guidance about examination techniques, such as appropriate palpation pressures and sequencing for patient comfort, and this immediate feedback enhances the learning process. TAs can make awkward first-time exams more comfortable. They can also serve as expert recorders in testing situations. TAs need to have careful training and coaching by physicians in order to teach exactly how these exams should be done. Coaching is also very important for how they will communicate with the student. They will need to be reminded that what they are teaching is a technique and not medicine. It is helpful to have a physician on hand during these exams to answer any medical questions that might arise.

Feedback and debriefing

Students should receive immediate and constructive feedback at all levels of training. A well trained SP can give constructive feedback based on how they feel during the encounter. Using the model, 'When you did this, I felt this' keeps the feedback on a communication level and not about the student's medical knowledge. An example of this might be, 'When you walked in the exam room and forgot my name, I felt angry.'

☛ Using the patient's unique perspective, the SP can tell the student what the physical exam actually felt like and how well the student communicated.

Practicing this with the SP during the training will help the SP develop feedback skills that can work with almost any student encounter. A debriefing process with the faculty helps students learn by reflecting, analysing, and talking about the SP experience. A faculty member or trained facilitator should guide the process by asking questions, giving feedback, or clarifying information. In most teaching simulation, we recommend debriefing participants immediately after the simulation, while the experience is fresh and it is easy to demonstrate a key point or repeat part of the simulation (Schwid et al 2001).

Testing with an SP

Insuring accuracy

When SPs are used for testing, consistency and accuracy are much more important than for a teaching session. SPs must portray each encounter in a consistent way so that each student would describe the exact same person in their encounter. Important to each case is the checklist and what responses elicit each checklist item. Writing a simple checklist guide for the SP will help with accuracy. For example, if the checklist item is 'I only take a baby aspirin and a multivitamin each day, nothing else', you might list the questions a student would ask to get that checklist item correctly, such as 'Are you on medications?', 'Do you take any kind of pills regularly?', 'What kind of drugs do you take?' or 'Are you on medication right now?'. The case writer should be the one to give the guidelines to the SP in order for the SP to consistently and accurately be able to answer questions in a standardised way.

☛ We can standardise the patients but not always the student

Considerations

Testing also requires more SP training than teaching encounters. When using SPs for testing, make sure the checklist is introduced in the first or second training and make sure complete checklist items are spoken when they are portraying the patient. Simply answering yes and no to questions does not make for easy scoring or recall of the checklist item. For testing, there may be more than one dry-run training needed. To insure checklist accuracy, have the SP portraying the case fill out a checklist whenever he/she watches an encounter or watches a replay of the encounter. The case author and anyone helping with the case should complete a checklist as well so that comparisons can be made and inconsistent scores of checklist items can be discussed and agreed upon. If an SP cannot consistently score, consider replacing them or have the SP do more training.

Hybrid or multimodality simulation

SPs represent the wide variety of roles that are represented in healthcare encounters. These SPs may portray nurses, physicians, allied health professionals, and/or the patient's friends and family (Monaghan 1997). Many patients are not alone when they come into a hospital setting. This is especially true in paediatric hospitals. With a movement towards patient and family centered care, there can be many players in the exam room and hospital setting. When SP methodology is integrated into high-fidelity simulation using manikins, the realism of a scenario increases and standardisation of the simulation makes it reproducible for multiple learners. Some things to consider when adding a SP to a simulation encounter with a manikin are the level of emotion the encounter will have and what kind of feedback the SP will give to students. Manikin simulation often relates to crisis situations and how a medical team reacts in a crisis. Adding the SP to the crisis provides a richer, more complex encounter for the team. For example, the team may need to deliver bad news to the family about what happened during the crisis situation. The learning objectives now include not only team communication but the family centered care communication that make the encounter more holistic.

Another use of hybrid simulation is to incorporate partial task trainers with SPs so that students can practice both clinical procedures and patient communication skills (Kneebone et al 2002). This technique is done by putting the SP and task trainer together so that the task trainer becomes an extension of the SP's body. Examples of this include seating an SP behind a pelvic trainer or catheterisation model and then draping the SP to the model. The student must then perform the procedure and talk the patient through the procedure as it is being done. Other possible hybrid simulations can include using simulated skin tissue strapped to an SP's arm or leg for wound care or injections. The risk of the SP being stuck or harmed can be avoided by paying special attention during the encounters.

Summary

While SPs do not replace real patients in the curriculum, they provide a dynamic educational resource for a safe and supportive medical learning environment. They are a useful tool for clinical demonstrations, interactive small group sessions, physical examinations, high fidelity simulation using manikin, and video portrayals. Students generally respond well to experiences with SPs, and a well trained SP can provide valuable feedback that is more authentically given from the patient's perspective. Imaginative and creative minds can always find new ways to incorporate standardised patients into any kind of simulation education. An institution with a strong SP programme allows its faculty to expand curriculum and enhance teaching.

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