A Difficult Patient Encounter: Using a Standardized Patient Scenario to Teach Medical Students to Treat Medication-Seeking Patients

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Abstract

Introduction: Substance dependence and the misuse of prescription narcotic medications have recently been a topic of increased national attention. Since this is both a difficult and increasingly important area for medical student training, we created an addition to our psychiatry clerkship curriculum to address this need using a standardized patient scenario. Methods: Standardized patient scenarios are a useful instructional and assessment tool for providing medical students with exposure to specific clinical scenarios that could not be consistently and reliably encountered in clinical rotations. We present a standardized patient scenario designed to challenge psychiatry clerkship students with recognizing and managing substance use disorders in patients with a difficult interaction style and medication-seeking behavior. Our scenario is unique in its expectations of students to appropriately manage a difficult clinical interaction in which collaborative treatment planning and advanced communication skills are critical to treatment success. Results: In a narrative analysis of student postencounter reflections on this experience, most students who provided feedback indicated that the encounter was valuable to their psychiatry clerkship education. Discussion: The inclusion of this learning opportunity in our clerkship has added value by assessing students' interpersonal communication skills and clinical ability to evaluate and manage substance use disorders, as well as by instructing students to manage a common and difficult clinical scenario regardless of their future specialty choice.

Keywords

Substance-Related Disorders, Communication Skills, Opioids, Substance Use Disorders, Benzodiazepines, Substance Dependence

Educational Objectives

By the end of this activity, learners will be able to:

1. Recognize warning signs of substance abuse in patients with mood disorders.
2. Obtain a substance abuse history, including symptoms of tolerance and withdrawal, from patients with a substance use disorder.
3. Discuss a treatment plan with a patient with depression and a substance use disorder.
4. Remain kind and avoid talking down to patients during a difficult encounter.

Introduction

Physicians from across many different medical specialties are often faced with the clinical situation of treating a patient who is requesting or demanding a medically inappropriate or unsafe medication. With the rise in abuse of prescription narcotic medications, especially opiates, physicians are increasingly likely to encounter patients seeking prescriptions for addictive or potentially dangerous medications. According to the American College of Preventative Medicine, seven million Americans abuse or misuse prescription medications, making these the most abused drugs in the country.1 The American College of Preventative Medicine also reports that fewer than 40% of physicians receive training in medical school to identify
prescription drug abuse or recognize the warning signs of drug diversion, and more than 40% of practicing primary care physicians report difficulty discussing the possibility of prescription medication abuse with patients. Managing these difficult clinical situations can pose unique challenges to physicians’ interpersonal and communications skills.

One useful method of providing medical students with exposure to a desired specific clinical situation is the standardized patient (SP) scenario. Numerous guides to various SP scenarios have been previously published, making the use of SPs a well-established and reliable educational tool. Relevant to our project, Yelen, Anderson, Wright, and Fleming published a description of using SPs to assess advanced clinical learners’ skills at screening and treating patients at risk for drug abuse. Similarly, Monteiro and colleagues described the use of an SP scenario as part of an interprofessional workshop on treating opioid misuse. Vestal and colleagues reported that an SP simulation was superior to lecture-based didactics in improving first-year psychiatry residents’ knowledge of and performance in managing patients with acute agitation.

We believe that our SP scenario is a unique contribution to this literature, as the case was developed specifically for third-year students to practice the assessment and treatment skills learned during the psychiatry clerkship. Furthermore, we desired to uniquely challenge our students with an SP interacting in a difficult and demanding manner, to stretch students’ communications skills beyond the typical expectations of their clinical experiences. We developed this SP scenario to provide both an educational experience and an assessment opportunity to help develop these important skills in psychiatry clerkship students. Because of the cost and time involved with creating a meaningful SP scenario, we elected to make this both a formative feedback encounter (on the difficult task of asking specific questions about substance abuse) and a summative evaluation (on the easier and more familiar task of demonstrating good communication and interpersonal skills).

This SP scenario was designed to be implemented in the final week of our 6-week psychiatry clerkship. Prior to the scenario, our students participate in a 2-hour team-based learning (TBL) session on substance use disorders, a 2-hour TBL session on mood disorders, a 2-hour discussion group session on motivational interviewing, and a 30-minute discussion on saying no to a patient who is seeking neurocognitive enhancement and prescription of a stimulant medication as part of an application exercise in another TBL session. Our students have also had 5 weeks of clinical encounters in a variety of psychiatric settings (inpatient, consult-liaison, etc.).

The SP scenario consists of a single 15-minute encounter in our Surgical and Clinical Skills Center. Prior to the encounter, students are given 15 minutes to review a referral note and patient self-report symptom screening forms that clearly document the history of a patient with depression. Immediately before the start of the encounter, students are given a simple door note informing them that they are playing the role of a psychiatrist seeing a patient referred by the patient’s primary care physician for treatment of depression. The SP is instructed to act from a script in which he/she reports a history of depression and anxiety but insists on being treated with alprazolam and hydrocodone due to having been prescribed these medications continuously for years by his/her prior physician following a car accident. Students are tasked with developing a mutually agreeable treatment plan with the patient, which is made difficult by the SP’s instructions to be irritable and resistant to change. Immediately following the encounter, the students receive verbal feedback from the SP and complete a series of brief written questions in which they describe their approach to the patient and assess the patient’s perception of his/her substance use problem. Students are then required to complete a written reflection on their experience and reaction to the scenario.

We developed and implemented this SP scenario at McGovern Medical School, where it has been a part of the final week of each psychiatry clerkship since July 2014. We believe that this SP scenario would be useful for any psychiatry clerkship desiring to enhance its students’ abilities to manage patients with substance use disorders (especially prescription drug abuse) and to improve its students’ abilities to manage difficult clinical interactions. Importantly, we believe that these skills are useful to all medical students.
students regardless of their future specialty plans. The SP scenario could be also implemented as part of fourth-year courses as preparation for the United States Medical Licensing Examination Step 2 Clinical Skills Examination or as general preparation for residency training.

Methods

We chose the SP format to address the specific educational need of managing a difficult clinical situation with a patient with a substance use problem over other forms of instruction (such as role-play or an online module) due to the challenge and educational benefit of encountering a more realistic portrayal of a difficult clinical interaction by professional SPs. While some students may have clinical experiences similar to our scenario during their clerkship rotations, it would be impossible to ensure that students encounter such a situation in the same way we require them to have other clinical experiences, such as seeing a patient with major depressive disorder. Furthermore, we wanted to ensure that students would be faced with the challenge of managing a difficult clinical interaction themselves, without assistance or guidance from a resident or attending, to promote the development of students’ autonomy and confidence. The SP format allows students a controlled and safe environment in which to stretch their clinical abilities beyond their current skill and comfort zones while receiving constructive and supportive feedback.

Prior to the SP encounter, students should have obtained the following prerequisites: medical history, professionalism, and doctor-patient relationship training; psychiatric interview and mental status examination training; an understanding of the evaluation and treatment of mood disorders, including psychopharmacology and psychotherapy; and an understanding of the evaluation and treatment of substance use disorders, including opiates and benzodiazepines.

Logistics

All students in each clerkship group (approximately 28 students every 6 weeks) take part in the SP scenario on the same afternoon in our Surgical and Clinical Skills Center. The activity occurs in the final week of the clerkship and is combined with another evaluation activity involving writing a SOAP (subjective, objective, assessment, and plan) note based on a video patient interview. The group of students is separated into halves, with one completing the SOAP note activity and the other completing the SP scenario, after which the students rotate to the other activity. During our implementation of this resource, the two activities combined have occurred between 12:45 pm and 4:00 pm. Approximately 14 SPs who have been specifically trained on the scenario are required for each session, in addition to two to three Surgical and Clinical Skills Center staff members.

Students are first provided with a brief written orientation to the SP scenario (Appendix A). They are specifically instructed that they will play the role of a psychiatrist in the encounter and that they should develop a specific treatment plan for the patient. Students begin the session by being given 15 minutes to review a detailed referral note from the patient’s primary care physician, as well as patient self-report symptom screening forms (Appendix B).

Immediately prior to the start of the patient encounter, students are given a simple door note (Appendix C) informing them that they are seeing a patient referred by their primary care physician for treatment of depression. The SP acts out the encounter using the SP script (Appendix D), which gives detailed instructions on both the content of the history to be provided and the way to interact with the student. Specifically, the SP is instructed to report a history of several months of depression and anxiety but to insist on being treated with alprazolam and hydrocodone, due to having been prescribed these medications for years by his/her prior physician following an injury from a car accident. The SP is instructed to show subtle signs of abuse and dependence on these medications, to lack insight into the problems associated with the medications, and to be resistant to changes in the treatment plan.

As the encounter progresses, the SP is instructed to become increasingly irritable and to demand to be prescribed the previous medication regimen. If the student is able to maintain therapeutic rapport, sensitively address the patient’s concerns, and provide counseling on an appropriate new treatment plan, the SP is instructed to become more agreeable to change by the end of the interview. At the end of the
encounter, the SP provides immediate verbal feedback to the student based on a scoring checklist (Appendix E) that assesses whether students appropriately screened for symptoms of a substance use disorder, as well as on their interpersonal and communication skills. After exiting the exam room, students complete a brief postencounter form (Appendix F) in which they describe their approach to the patient and assess the patient’s perception of his/her substance use problem. As homework, the students then complete a written reflection exercise (Appendix G) discussing their personal reactions to the patient and how these impacted their physician-patient interaction. These are emailed to the course coordinator and archived. Neither the postencounter form nor the reflection exercise is graded, but responses are monitored by the clerkship director to obtain feedback on the encounter for quality improvement.

The SP encounter checklist (Appendix E) is completed by the SP at the end of the encounter. The first eight items assess whether the student asked questions related to the patient’s current symptoms, including drug abuse symptoms and suicidal ideation. The next four items relate to the student’s discussion of treatment planning, such as the patient’s goals, alternative treatment options, and willingness to pursue psychotherapy. The following six communication items are standard for the SPs at our medical school and are modifications of questions from the American Board of Internal Medicine’s patient satisfaction questionnaire. These are followed by two standard global assessment items. Students are not graded on the first 12 items. A binary method is used instead, with 1 point awarded if the student accomplished the item and 0 points if the student did not. Students are, however, given feedback by the SP if they did not address an item. In this way, students are informed that it is recommended to ask a patient with a drug use history about drug cravings, withdrawal symptoms, and so on.

Additionally, students who choose to continue prescribing the benzodiazepine or opioid medication are noted and reported to the clerkship director so that he may address this with the student and further explore the reasoning behind this choice. Students pass or fail the encounter based on earning a score of either 6 points or less, respectively, on the overall score of the six communication items. Those six items are rated by the SPs on a Likert scale with 1 point for excellent, .8 points for very good, .6 points for good, .4 points for fair, and 0 points for poor. SPs provide detailed verbal feedback to the students on their performance immediately following the encounter. Students are not shown their performance on the checklist itself and do not receive a written report of their performance. This is necessary in order to maintain testing integrity for future sessions.

Students who receive a failing grade on the encounter are required to meet with the clerkship director to review the video recording of their encounter, receive further feedback, and develop a plan for improvement for future SP encounters. As part of the remediation process, a student’s responses to the postencounter form or reflection exercise may be reviewed. We do not require students who fail the encounter to repeat it. All students, regardless of their performance, are invited and encouraged to watch the video of their encounter and receive additional faculty feedback.

SP Case

The details of the SP case are documented in the SP case template (Appendix I).

SP Recruitment Criteria and Training Methods

In preparation for the encounter, the SPs receive detailed training from the Surgical and Clinical Skills Center. Due to the unusual expectations for the SPs to interact with students in a difficult and demanding fashion, special attention was paid to training and coaching their acting style to portray the interaction in a challenging and realistic manner. Jim Power, who is the director of the Surgical and Clinical Skills Center at McGovern Medical School and has 15 years of experience as both an SP and director of the SP program, used a multistage process to train the SPs to portray the case.

Initially, he was instrumental in providing feedback to Dr. Schatte to revise the case for consistency as well as to clarify areas that would likely be confusing to SPs (i.e., eliminating medical jargon). He then organized two 3-hour training sessions to review and train SPs in the case. In the first session, the SPs were provided with a script (Appendix D) and background information for the case and were shown an exemplar video of a student performing optimally from an initial pilot session. The SPs role-played the encounter with each
other while being video recorded, then did a self-assessment exercise to evaluate their performance against the encounter guidelines.

In the second 3-hour session, the SPs again practiced by role-play in a real-time dress rehearsal under the same conditions as the live sessions, using volunteer fourth-year students. Three clerkship faculty members were present to observe this session and provide immediate feedback on the encounter as both a teaching and assessment tool. During the live sessions with students, each of the SPs was monitored and evaluated using a standardized form developed by Jim Power (Appendix H) and received individual coaching and corrective feedback in any observed problem areas. Each SP was observed in real time via camera by faculty, Jim Power, or other SPs. After each training exercise, there was a meeting to discuss problems or questions that arose, and if needed, Dr. Schatte modified the case or clarified expectations. Also, Jim Power meets with the clerkship director, Dr. Findley, annually to review student performance and make any necessary adjustments to the case or SP portrayals.

Results

Since the implementation of the case in 2014, approximately 600 third-year psychiatry clerkship students have participated in the encounter at McGovern Medical School. The encounter remains a required component of the psychiatry clerkship.

The percentage of students failing the encounter has ranged between 5% and 10% for each clerkship group. Failure is based only on the interpersonal and communication skills items, as discussed above. The percentage of students credited by the SPs for successfully completing each history item is detailed in Table 1. The average score for students on the communication items is detailed in Table 2. Based on the first and second educational objectives for this exercise, we had mixed success, with a range of student performance from 19% for item 1 to 71% for item 6. We were more successful with the third objective, as students performed better on this task, with a range from 76% for item 9 to 97% and 98% for items 10 and 11, respectively. Likewise, the fourth objective was met, with average scores of .87 and .89 (in the very good to excellent range) for items 13 and 14, respectively.

We performed a quantitative analysis of 258 student performance results to examine whether a relationship existed between any of the 12 nongraded history items and students’ overall performance on

| Table 1. Percentage of Students Credited by SP for Successfully Completing Each History Item * | History Item Scored by SP | % Students |
|---------------------------------------------------------------------------------------------|---------------------------|------------|
| 1. The student asked me if I ever take more than prescribed.                               | 19                        |
| 2. The student asked me if I ever think about stopping the medicine.                        | 36                        |
| 3. The student asked me if I ever thought that I’m dependent on medication.                 | 44                        |
| 4. The student asked me if I ever had any withdrawal symptoms.                              | 52                        |
| 5. The student asked me if I ever had drug cravings.                                        | 22                        |
| 6. The student asked me if I were aware of the risks and problems with my current medicines. | 71                        |
| 7. The student asked me if I ever considered that an alternative treatment would be effective. | 76                        |
| 8. The student asked me if I ever felt like ending my own life or hurting myself or hurting others. | 50                        |
| 9. The student discussed with me my treatment goals.                                         | 76                        |
| 10. The student discussed with me my treatment options.                                      | 97                        |
| 11. The student asked me if I would try alternative treatments.                              | 98                        |
| 12. The student asked me about my willingness to pursue psychotherapy.                      | 57                        |

Abbreviation: SP, standardized patient.

*All history items are scored as yes/done or no/not done.

| Table 2. Average Student Scores for Communication Items* | Communication Item Scored by SP | Average Score |
|------------------------------------------------------|--------------------------------|---------------|
| 13. The student conducted the encounter in a warm and friendly manner. |                                | 0.87          |
| 14. The student treated me like I was on the same level, never “talking down” to me, or treating me like a child. |                                | 0.89          |
| 15. The student let me tell my story, listening carefully, asking thoughtful questions, and not interrupting. |                                | 0.88          |
| 16. The student showed interest in me as a person, not acting bored or ignoring what I had to say. |                                | 0.89          |
| 17. The student encouraged me to ask questions. |                                | 0.81          |
| 18. The student used easily understood words and explained any technical or medical concepts in plain language. |                                | 0.87          |

Abbreviation: SP, standardized patient.

*All communication items are scored 1 = excellent, 8 = very good, 6 = good, 4 = fair, and 0 = poor.
the graded six-item measurement of communication skills. We found that a regression equation with all 12 history predictors was significantly related to the six-item communication skills score ($R^2 = .16$), $f^2(12, 246) = 3.97, p < .01$, and 16% of the variance in communication skills was associated with the history. This suggests that students who did better overall on the encounter did better on both skill types (specific questions asked and rating of communication skills). However, item 9 was the only significant predictor, $t(246) = 5.27, p < .01$, of communication skills.

Students failing the encounter are generally very receptive to the faculty feedback provided in remediation meetings and readily observe the problems in their encounter when watching their video. A minority of students have difficulty understanding their own role in the negative outcome of their patient interaction and usually attribute their failure to misunderstanding the expectations of the encounter or to a poor SP portrayal of the scenario. Students very often indicate that this is the first time they have watched a video of themselves interviewing a patient during medical school.

We have monitored student feedback on the encounter through responses to the reflective exercise and overall clerkship feedback comments, rather than through a standardized evaluation instrument. In our experience, students often spontaneously provide insightful feedback on the encounter in their reflective exercise, although it is not explicitly requested in the prompt. In a review of 150 student narrative reflections on the encounter, 44 students spontaneously mentioned that the encounter added value, in comparison to three who stated that it did not.

In a reflective exercise, a student wrote,

I’m so glad I got a little practice with this SP before encountering an actual patient who is drug seeking!! It’s easy to read about this and think you know how you’ll respond, but it’s quite a bit more difficult to actually put into practice. This was useful to me especially, because I’m interested in primary care, so this will be something that I know I’ll see again!

Another student commented on the unique challenges of the encounter compared to prior SP experiences, stating, “I really did learn from this interview, as the character of the SP was more dynamic and the situation, more sensitive.” Finally, a student reflected on the opportunity to practice a difficult clinical situation in a safe and controlled environment:

All in all, this encounter, while nerve-racking, was very helpful to me as a student because it gave me exposure to a problem that I am likely to encounter in my practice. The stakes were not high in this situation so I was able to learn from mistakes that I now will not take with me into the real world.

Discussion

The most significant challenge posed by the implementation of this activity was the coordination with the Surgical and Clinical Skills Center, especially in the training of the SPs to perform the scenario. Due to the unusual expectations to interact in a difficult and irritable manner, significant explanation and practice were initially needed to demonstrate our expectations to the SPs. However, feedback from the Surgical and Clinical Skills Center showed that the SPs enjoyed the challenge of the encounter because of the need for more advanced acting techniques. Most commonly, SPs needed guidance to interact in a more difficult or demanding fashion. However, in a small number of instances, SPs required feedback and intervention for acting too aggressively with students, in one instance causing a significant amount of distress for a student with a personal history of trauma. This particular encounter has since been used as an instructional opportunity for continued SP training in order to avoid a similar future incident.

A limitation of our scenario is that we have not yet validated the student performance checklist. However, we have provided our SPs with a detailed and standardized training process, including on the use of the
checklist. Another potential limitation for other institutions in implementing this encounter could be financial considerations. In our experience, the Dean's Office has contributed funds for this activity out of interest in increasing medical students' training with SPs in preparation for the Step 2 Clinical Skills Examination. At our medical school, for a class size of 240 students, the activity currently costs less than $6,000 annually to operate.

We believe that the creation of this SP scenario has been a useful addition to our psychiatry clerkship from both an instructional and an assessment standpoint and that it is a value-adding activity for medical students of all future specialty choices. We also believe that the encounter may be useful for residency training programs in multiple specialties. With the increased national attention on prescription drug misuse and opioid dependence recently, we believe that the structure of this patient scenario is timely and will likely continue to increase in relevance. Narrative feedback from students has indicated that this encounter is novel, challenging, and a realistic representation of situations faced by physicians in clinical practice. Constructive student feedback has suggested that the encounter would be more useful if it occurred earlier in the clerkship, indicating that students see the encounter being more valuable as an instructional exercise rather than simply an assessment tool.

We believe that the addition of this learning opportunity would be valuable for any clinical medical student curriculum interested in improving learners' ability to recognize and manage substance use issues and to successfully navigate difficult clinical interactions.

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References
1. Use, abuse, misuse & disposal of prescription pain medication time tool. American College of Preventive Medicine Web site. http://www.acpm.org/?UseAbuseRxTimeTool. Published 2011. Accessed February 24, 2015.
2. Yelen M, Anderson L, Wright K, Fleming M. Using SPs to teach patients at risk for drug abuse. MedEdPORTAL Publications. 2014;10.9907. https://doi.org/10.15766/mep_2374-8265.9907
3. Monteiro K, Dumenco L, Collins S, et al. An interprofessional education workshop to develop health professional student opioid misuse knowledge, attitude, and skills. *J Am Pharm Assoc.* 2017;57(2)(suppl):S113-S117. https://doi.org/10.1016/j.japh.2016.12.069

4. Vestal HS, Sowden G, Nejad S, et al. Simulation-based training for residents in the management of acute agitation: a cluster randomized controlled trial. *Acad Psychiatry.* 2017;41(1):62-67. https://doi.org/10.1007/s40596-016-0559-2

5. Chessman AW, Blue AV, Gilbert GE, Carey M, Mainous AG III. Assessing students’ communication and interpersonal skills across evaluation settings. *Fam Med.* 2003;35(9):643-648.