Original Publication

OPEN ACCESS

Use of a Standardized Patient in Teaching Medical Students to Assess for PTSD in Military Veteran Patients

Jennifer Fabrizio, PhD*, Kathleen DeNardi, PhD, Michael Boland, MEd, Jo-Anne Suffoletto, MD

*Corresponding author: Jennifer.Fabrizio@va.gov

Abstract

Introduction: The purpose of this resource is to introduce first- and second-year medical students to the psychiatric concerns of military veterans. The number of veterans receiving care outside of the Veterans Health Administration (VHA) results in many nonVHA medical doctors treating military veterans; thus, it is important that medical students have exposure to military veterans and their unique issues during medical training. A noncombat veteran with posttraumatic stress disorder (PTSD) was specifically chosen for this training to highlight the fact that PTSD can result from a number of different traumatic events that one may experience during military service. **Methods:** The student learners were presented with an hour-long didactic on PTSD, depression, and suicide in military veterans. They subsequently engaged in an hour-long simulation with a standardized patient who was trained in the symptom presentation of PTSD. Each student in the class had an opportunity to complete a medical interview with the standardized patient (SP) and receive feedback from both their peers and the SP. The student learners then evaluated the learning experience. **Results:** Feedback for the course was overwhelmingly positive. The average response to the quality of the presentation question was 4.83 out of 5 (with 1 = *poor*; 5 = *outstanding*). **Discussion:** The results indicate that using SPs is a valuable learning modality for teaching medical students about psychiatric concerns in the veteran population.

Keywords

Standardized Patient, Post-Traumatic Stress Disorders, Psychiatry, Medical Student Training, Post-Traumatic, Military Veterans

Educational Objectives

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

1. Identify the four major symptom areas of posttraumatic stress disorder.
2. Identify four symptoms of depression.
3. Identify five risk factors for suicide.
4. Increase skills in interviewing a patient with posttraumatic stress disorder (e.g., asking open-ended questions in order to ascertain whether the signs and symptoms of posttraumatic stress disorder are present).
5. Demonstrate active listening skills (e.g., making eye contact, positive body language, and paraphrasing).

Introduction

A review of the literature indicates that there is a paucity of data regarding the exposure that first and second-year medical students have to psychiatric issues. Similarly, there is little data regarding how much education medical students receive related to the unique needs and issues of military veterans. There are currently an estimated 21.6 million male and female military veterans across the country, and approximately 8.5 million are enrolled to receive medical care through Veterans Health Administration (VHA).¹ Thus, there are approximately 13 million veterans who do not receive medical care through VHA and therefore receive their medical care from nonVHA providers.

Citation: Fabrizio J, DeNardi K, Boland M, Suffoletto JA. Use of a standardized patient in teaching medical students to assess for PTSD in military veteran patients. *MedEdPORTAL*. 2017;13:10608.

https://doi.org/10.15766/mep_2374-8265.10608

Copyright: © 2017 Fabrizio et al. This is an open-access publication distributed under the terms of the Creative Commons Attribution-NonCommercial-Share Alike license.

Appendices

- A. PowerPoint Presentation .pptx
- B. Standardized Patient Template.docx
- C. Standardized Patient Symptom Checklist.docx
- D. Consents for Standardized Patient.docx
- E. Standardized Patient Facilitation Guidelines.docx
- F. Standardized Patient Medical Student Instructions.docx
- G. Standardized Patient Exercise Content Checklist .doc

All appendices are peer reviewed as integral parts of the Original Publication.

Posttraumatic stress disorder (PTSD) is a condition in which a medical provider treating a military veteran should ideally have some knowledge. Prevalence rates for PTSD for Vietnam veterans is estimated to be 15.2%,² whereas prevalence rates for Operation Enduring Freedom and Operation Iraqi Freedom veterans is estimated to be 13.8%.³ PTSD is a psychiatric disorder characterized by avoidance of thoughts and feelings associated with traumatic events; therefore, symptoms might not be directly reported to medical providers despite the potential for causing clinically significant distress or impairment for patients. Given this, medical providers that treat veterans should have a basic understanding of this disorder to ensure appropriate assessment and referrals for treatment are made.

Some symptoms of PTSD overlap with symptoms of depression, particularly as the negative alterations in cognition and mood symptom cluster have been added to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*' diagnostic criteria for PTSD.⁴ There is often significant comorbidity between PTSD and depression, and one group of researchers found that the co-existence of PTSD and depression increases the risk of suicidal ideation more than if the individual had PTSD or depression alone.⁵ Suicidal ideation is one of the symptoms of depression, and it has been found that veterans who screened positive for PTSD were four times as likely to endorse having suicidal ideation than those who screened negative for PTSD.⁶ Additionally, it has been found that the risk of suicidal ideation increases almost six-fold in veterans who have two or more comorbid psychiatric conditions than veterans with PTSD alone.⁶ Research has shown that the risk of suicide is 21% higher among military veterans than civilians after adjusting for differences in age and gender.⁷ Additionally, data show that 20 veterans die by suicide each day, with six of those veterans receiving services from VHA.¹ Given that the other 14 veterans who commit suicide each day are not involved in medical care through VHA, it is imperative that nonVHA medical providers have experience in how to identify PTSD, depression, and suicidal ideation in military veterans so they can make appropriate treatment referrals.

In this module, medical students were provided with a 1-hour seminar on PTSD, depression, and suicide in military veterans. The overlap between PTSD, depression, and suicide is often complex, and we wanted to introduce the medical students to PTSD and these two frequently comorbid conditions. We specifically designed the standardized patient (SP) exercise to focus on PTSD and not on suicide screening, with the rationale that this is a formative experience that was not meant to be too challenging or overwhelming for first or second-year medical students who likely have had little-to-no exposure to the veteran population or psychiatric conditions. Additionally, the goal of the SP exercise was not to practice screening for suicide or depression. Rather, we chose to focus on how a veteran with PTSD symptoms may present in a primary care clinic so as to provide the medical students with the opportunity to practice their interviewing, communication, and military history-taking skills. The addition of suicidal ideation into the SP exercise would be appropriate for advanced learners, and presents a direction for future SP scenarios.

Our work provides a unique contribution to the field by expanding upon past SP publications, which have focused on the veteran population or on PTSD more generally.^{8,9} Our SP exercise specifically addresses the combination of working with military veterans who have PTSD. Given that the National Board for Medical Education has recently partnered with both the United States Department of Veterans Affairs and Department of Defense to generate questions about military medicine for addition to the USMLE, providing medical students with educational and experiential opportunities related to military medicine is imperative. The results of our SP exercise illustrate that first- and second-year medical students, who have had limited-to-no experience working with military veterans or with individuals with PTSD, can acquire knowledge and skills related to working with this unique population through use of experiential learning.

Methods

The session involves a 1-hour didactic (Appendix A) and a 1-hour experiential learning exercise tailored to first and second-year medical students at the University of Pittsburgh School of Medicine. A timeline of the 60-minute didactic presentation is provided in [Table 1](#). The didactic presentation provides instruction

regarding PTSD, depression, and suicide in military veterans. The second hour was devoted to experiential learning with the SP. A sample breakdown of the SP exercise is provided in Table 2. Each student had the opportunity to practice medical interviewing skills with a SP with PTSD symptoms. Ideally, the faculty presenting the didactic portion of the class and facilitating the SP exercise would have expertise in the areas of clinical interviewing, behavioral health, and PTSD.

Table 1. Timeline of 60-Minute Didactic Presentation

Time	Activity
5 mins	Instructor introductions
20 mins	PTSD overview
20 mins	Depression and suicide overview
15 mins	Questions and discussion

Table 2. Sample Breakdown of SP Exercise

Time	Activity
5 mins	First student volunteer – discusses expectations/goals
10 mins	First student interaction with SP
10 mins	Feedback and discussion and with group and SP
5 mins	Second student volunteer – discusses expectations/goals
10 mins	Second student interaction with SP
10 mins	Feedback and discussion and with group and SP
10 mins	Overall group discussion/wrap up

Appendix A relies on a PowerPoint presentation to convey content to the students. While the purpose of the SP exercise was to highlight PTSD symptoms in military veterans, it was important to also provide education about common co-occurring conditions. The authors felt it imperative to highlight in this presentation that PTSD is not the only mental health condition experienced by military veterans, and the inclusion of information about depression and suicide showcases other mental health issues often experienced by veterans.

Creation of the SP

A group of psychologists and education staff with expertise in the area of PTSD developed an SP that exhibited symptoms of PTSD commonly experienced by military veterans (Appendix B). A noncombat presentation was specifically chosen to highlight the various ways in which a person may develop PTSD. Presenting symptoms were specifically chosen to emphasize the crucial role that medical providers play in identifying psychiatric conditions and making subsequent referrals to specialty care when indicated. A detailed psychosocial and medical history was developed to assist the SPs in realistically portraying a military veteran with PTSD. In addition, a comprehensive psychosocial and medical history provided multiple avenues for the learner to explore while conducting the interview. This also enabled the scenario to be unique for each subsequent learner in the same training session.

Training of the SP

Faculty met with SPs for approximately 1 hour prior to the course in order to provide education about PTSD and answer questions as to how to best portray a veteran struggling with this condition (Appendix B). The SPs were well-versed in the psychosocial history of the patient as well as his psychiatric symptoms (Appendix C). Additionally, SPs completed the copyright, confidentiality, and consent forms (Appendix D) prior to participating in the exercise, in accordance with University of Pittsburgh Medical Center policy.

Implementation of the SP Exercise

One of the faculty served as the facilitator and provided the general instructions and guidelines for the experience (Appendix E & Appendix F). As stated previously, the facilitator should ideally have expertise in the areas of clinical interviewing, behavioral health, and PTSD to ensure that students receive feedback consistent with the content areas. Each student had approximately 10-15 minutes with the SP, and the facilitator would indicate when to pause the exercise to allow for feedback from the group as well as

questions from the student. At the conclusion of the overall exercise, feedback was provided to the students from the faculty and the SP, utilizing the Standardized Patient Exercise Content Checklist (Appendix G). Students were given the opportunity to ask questions of the SP and faculty. Given that this was a formative exposure exercise, the learners were not graded on their performance.

Deployment and Lessons Learned

We have successfully utilized this methodology for teaching this class over the past 3 years. Evaluations from the students indicate that they find the SP exercise to be extremely beneficial, and that they would appreciate additional opportunities to practice their interviewing skills with SPs. We also learned that if there is a larger class size, having two SPs and two facilitators would enable each student to have ample time to practice with the SP. Our recommendation is that the session be tailored to allow each learner at least 10 minutes with the SP in order to fully benefit from the experience.

Limitations

This course provided only a brief introduction to a very complex topic. Additionally, the experiential exercise was conducted immediately after the didactic portion, which may have limited the learner's ability to fully synthesize the material presented. Due to time constraints, learners were limited to approximately 10 minutes with the SP, although they likely would have benefitted from more interaction time.

Results

To date, this class has been offered three times over a 3 year period to a total of 13 students. At the conclusion of each class, students were asked to provide a rating regarding the overall quality of the class, which included both the didactic portion and the SP exercise. The average response to the quality of the presentation rating was 4.83 out of 5 (1 = *poor*; 5 = *outstanding*). Students were also given the opportunity to provide qualitative feedback regarding the course and the instructors. No negative comments were provided, and there were no suggestions for improvement.

Selected comments about the SP experience are listed below:

- “LOVED the standardized patient interviewing session. Being in a small group with experienced teachers who were personable and had great stories to share of their experiences really made me more engaged in the course.”
- “I also really enjoyed the standardized patient interviews we did during the PTSD/depression session.”
- “This course was a fantastic mini-elective. I don’t have much experience with the military or with [veteran] medicine, but I am seriously considering veteran medicine as a career path now.”
- “The standardized patient interactions were very helpful in giving us an experience working with someone who has PTSD and trying to help navigate their care.”
- “Practice sessions with standardized patients [were helpful in learning the skills].”
- “Our discussions with the instructors were absolutely awesome. I also really enjoyed the standard patient case. It allowed me to experience what interviewing a veteran might be like.”

Overall, this course was well-received by student learners. Students reported that the didactic presentation was comprehensive and provided enough information to allow for success during the experiential exercise. Additionally, their feedback indicated that the interactive exercise with the SP increased their learning in this domain. Several students reported feeling nervous at the onset of the SP exercise, specifically related to concerns about being “evaluated” by peers. However, these concerns generally dissipated early in the exercise, as the classes often adopted a collaborative approach to learning. Students reported benefiting from having the opportunity to receive real-time feedback from peers, faculty, and the SP regarding their interview skills.

Instructors noticed that during the first class offered, there was a tendency by students to try to “game” the scenario with the SP. The first group of learners expressed a belief that there was a correct way to interact with the SP for the exercise to be deemed successful and engaged with the SP in a way to display that they had the right answer. Instructors observed that this over-emphasis on “doing it right” interfered with the potential learning benefits of the exercise. During subsequent offerings of the course, the student learners were encouraged to not focus on a right answer but on the experiential exercise itself.

The instructors considered this resource effective overall. In addition to the quantitative ratings and comments stated above, several students expressed their satisfaction with the class verbally to the instructors. It should be noted that the information about satisfaction is limited by the format of the evaluation which only asked the students’ overall satisfaction with the combined didactic and experiential exercise course. Several students indicated an interest in pursuing further training experiences with veterans as a direct result of participation in the course. One student expressed an interest in shadowing the instructor in the PTSD clinic at the veterans’ hospital, as she was interested in learning more about this patient population. Another student asked for a reading list to expand knowledge of PTSD and suicide in the veteran population. A possible direction for future offerings of this course is to include pre- and postcourse assessments to measure whether or not students are learning the information and skills covered in the didactic and experiential exercise. Having this pre- and postcourse data would also enable us to collect information at a later point in time to assess long-term retention of the knowledge and skills learned through this class.

Discussion

This utilization of SPs in medical or graduate training provides a unique learning opportunity to students. It allows for students to have a formative experience with various patient presentations prior to clinical rotations. In addition, this learning modality allows for education and training with complex topics in a variety of patient populations.

Feedback from students enrolled in this class was overwhelmingly positive, with several students emphasizing the value of experiential learning with the SP. This unique learning experience allows students to develop and practice diagnostic interviewing skills and provides the opportunity to identify mental health concerns in a primary care setting. Moreover, the scenario was created with enough detail to ensure that each learner had a unique experience while interviewing the SP, which maximized the experience for each participant in the class.

While this course focused on a patient with PTSD, the interviewing skills acquired can generalize to other mental health presentations as well, as several presenting symptoms in the scenario overlap with other mental health diagnoses. Thus, the scenario can easily be altered to incorporate a variety of mental health diagnoses such as depression, anxiety, psychotic disorders, and substance use disorders. In addition, this format allows educators to create SPs for a variety of treatment settings and disciplines. For example, the SP template could easily be modified to create a female SP or an active duty service member SP with the same presenting issues. Additionally, this course was designed for first and second-year medical students but can certainly be utilized in training for psychology, social work, or nursing. Additional training scenarios can be created or modified to address needs specific to individual learners.

Based on our experience of teaching this course for 3 years, we offer the following considerations for implementation. To provide maximum benefit of the experiential portion of the course, we recommend that each learner be granted a minimum of 10 minutes with the SP, with an additional 5-10 minutes allotted for feedback from peers and the SP. While this course affords only 1 hour of experiential learning, additional time with the SP would likely result in increased skill development. Given that time with the SP is critical to the acquisition of skills, it is recommended that the ratio of SP-to-learner not exceed one-to-three for an hour session. If the group is larger, faculty must recognize that not all learners will have a chance to

interview the SP and additional faculty attention will be needed to facilitate an active learning experience for those learners who don't have an opportunity to interview. There is some evidence in the simulation literature that supports the idea that a high level of learning can occur in the observer role, not just the active participant role.¹⁰

Although traditionally limited to medical training, this scenario highlights the utility of SPs in training learners about mental health issues. The feedback received from students not only supports the utilization of this methodology, but also emphasizes the need for exposure to mental health concerns early in medical training. This PTSD SP scenario can easily be altered to incorporate a multitude of mental health symptoms, thus creating numerous training opportunities for students. For example, the didactic presentation highlights the importance of assessing for suicide; however, the time restriction and focus of this course precluded including suicide assessment in the SP exercise. Future scenarios could easily incorporate suicide assessment and risk management skills as learners advance in their academic careers.

Our experience of utilizing a SP with PTSD contributes to the growing body of literature which showcases SPs as a valuable augmentation to traditional didactic instruction. In this instance, our goal was to provide training related to mental health issues in a veteran population. As noted above, our veteran population is a unique subset of health care consumers who often seek treatment outside of VHA. Additionally, military medicine has recently been added as a content area to the USMLE, which will require medical students to have some basic knowledge in this area. Our didactic and experiential learning course provides an opportunity for medical students to increase their knowledge and skills with regard to common military veteran issues, and prepare them so they may provide services to this significant subset of the veteran population.

Jennifer Fabrizio, PhD: Clinical Psychologist, Veterans Affairs Pittsburgh Healthcare System

Kathleen DeNardi, PhD: Clinical Psychologist, Veterans Affairs Pittsburgh Healthcare System

Michael Boland, MEd: Training Specialist, Veterans Affairs Pittsburgh Healthcare System

Jo-Anne Suffoletto, MD: Associate Chief of Staff for Education, Veterans Affairs Pittsburgh Healthcare System

Disclosures

None to report.

Funding/Support

None to report.

Ethical Approval

Reported as not applicable.

References

1. Office of Suicide Prevention. Suicide among veterans and other Americans 2001-2014. Department of Veterans Affairs Web site. <https://www.mentalhealth.va.gov/docs/2016suicidedatareport.pdf>. Updated August 3, 2016.
2. Kulka RA, Schlenger WE, Fairbank JA, et al. *Contractual Report of Findings from the National Vietnam Veterans Readjustment Study: Volumes 1-4*. Research Triangle Park, NC; Research Triangle Institute: 1988. Available at <http://www.ptsd.va.gov/professional/research-bio/research/nvvr-docs.asp>. Updated February 23, 2016.
3. Tanielian T, Jaycox LH, eds. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. Santa Monica, CA: RAND Corporation; 2008.
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association; 2013.
5. Shalev AY, Freedman S, Peri T, et al. Prospective study of posttraumatic stress disorder and depression following trauma. *Am J Psychiatry*. 1998;155(5):630-637. <https://doi.org/10.1176/ajp.155.5.630>
6. Jakupcak M, Cook J, Imel Z, Fontana A, Rosenheck R, McFall M. Posttraumatic stress disorder as a risk factor for suicidal ideation in Iraq and Afghanistan War veterans. *J Trauma Stress*. 2009;22(4):303-306. <https://doi.org/10.1002/jts.20423>

7. Kemp JE. Suicide rates in VHA patients through 2011 with comparisons with other Americans and other veterans through 2010. Department of Veterans Affairs Web site. https://www.mentalhealth.va.gov/docs/Suicide_Data_Report_Update_January_2014.pdf. Updated January 2014.
 8. Doolen J, Guizado de Nathan G, Johnson M, Perna C, Giddings M. The development of a PTSD standardized patient encounter. *MedEdPORTAL Publications*. 2015;11:10265. https://doi.org/10.15766/mep_2374-8265.10265
 9. Goldenberg M, Hamaoka D, Money K, Flanagan Risdal A, Darby E. Standardized patient case: a troubled soldier. *MedEdPORTAL Publications*. 2011;7:8597. https://doi.org/10.15766/mep_2374-8265.8597
 10. Alinier G, Harwood C, Hardwood P, et al. Immersive clinical simulation in undergraduate health care interprofessional education: knowledge and perceptions. *Clin Simul Nurs*. 2014;10(4):e205-e216. <https://doi.org/10.1016/j.ecns.2013.12.006>
-

Received: February 13, 2017 | **Accepted:** June 21, 2017 | **Published:** July 26, 2017