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Article

Use of standardised patients in the evaluation of a residency mood disorders curriculum: a brief report

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ABSTRACT

Background and objectives The purpose of this paper is to describe the use of resident performance on an observed structured clinical examination (OSCE) as a tool to refine a mood disorders curriculum, and to disseminate a mood disorders OSCE for use in other residency settings.

Methods A depression-focused OSCE and a direct observation evaluation tool were developed and implemented. A total of 24 first-year family medicine residents (PGY1) participated in the OSCE, and their performance was used to direct changes in a mood disorders curriculum.

Results Residents performed well on general interview behaviours, and 67% were able to uncover depression in a patient presenting with headaches. Less than 50% of the residents asked about suicidal ideation and recreational drug use. Curriculum was added that addressed the latter deficiencies.

Conclusions Tracking of resident performance on specific behaviours during OSCE sessions can be used for curriculum evaluation purposes. The mood disorders curriculum in additional family medicine residency programmes can now be evaluated using our depression-focused OSCE and Clinical Performance Checklist.

Keywords: depression, OSCE, residency education

Introduction

Despite its prevalence as a health problem, primary care physicians widely under-recognise depression in their patients.[1,2] Efforts to instil clinical skills in trainees in the assessment and treatment of mood disorders have frequently utilised observed structured clinical examinations (OSCEs) or simulated clinical encounters using standardised patients who act out cases designed to elicit specific trainee behaviours.[3] Within family medicine, OSCEs have been utilised principally as tools for education and evaluation of learners,[4] for example, to evaluate the initial effectiveness of new curricula,[5–8] and to differentiate between trained and untrained residents on a patient safety curriculum.[9] To our knowledge, OSCEs have not been used to make formative changes to an evolving mood disorders curriculum for family medicine residents. This short report describes the development and implementation of an OSCE as a tool for evaluating a mood disorders curriculum as part of a family medicine residency programme.

Methods

Setting and study participants

A total of 24 first-year residents (PGY1) from the Oregon Health and Science University (OHSU) Department of Family Medicine completed the OSCE. This study was approved by the OHSU Institutional Review Board.

Development of the standardised patient depression scenarios

OHSU Family Medicine faculty adapted the initial case script from two sources: (1) depression scenarios used as part of resident clinical skills exams in the Department of Family and Community Medicine, Baylor College of Medicine, and (2) depression scenarios used in a study of physician recognition and management of depression in primary care.[10] The scenario that we created focuses on diagnosing depression in a new patient presenting with headaches. The complete depression scenario for standardised patients can be found in the Appendix at the end of this paper.

Evaluation measure

We developed a Clinical Performance Checklist (CPC) to be completed by standardised patients which elicits dichotomous (yes/no) responses and evaluates resident OSCE performance on specific expected behaviours. The CPC focuses on interview style, ability to assess the presenting complaint, social history and past medical/family history, ability to evaluate depression symptoms and suicide risk, and ability to negotiate a management plan.

Standardised patient training

Standardised patients are asked to dress consistent with the case being portrayed. To ensure consistency in scoring, the CPC and checklist standard are reviewed with the standardised patients. The latter also view a videotaped interaction of the scenario and complete study checklists, which are then compared and discussed until consensus is achieved on scoring.

Observed structured clinical examinations (OSCEs)

OSCE sessions are conducted in the OHSU Clinical Assessment and Learning Center, a digital video laboratory that is used for educational projects. Residents are given information listing the chief complaint and the vital signs for the patient. A period of 15 minutes is allowed for interaction with the standardised patient, who then completes the CPC and has 10 minutes in which to provide feedback (guide template) to the resident on his or her performance. Group performance (mean CPC score) is collated for review by the curriculum team.

Results

Two PGY1 resident classes participated in the OSCEs (n = 24). Table 1 shows the percentage of residents who successfully completed the expected behaviours in the depression scenario. Overall, residents performed well on general interview behaviours. It is notable that two-thirds of the residents discussed the possibility of depression related to the patient's chief complaint. Resident evaluation of individual depression symptoms was variable. Notably, less than 50% of the residents asked about suicidal ideation (46%) or recreational drug use (46%). Also, in items that assessed patient centredness (items 3, 4 and 6), 50% or fewer residents demonstrated these behaviours.

Discussion

We had two goals for developing a depression-focused OSCE, namely to use resident performance to evaluate a mood disorders curriculum, and to develop OSCE tools that other family medicine residency programmes could adopt and use for their specific residency needs. Our results highlight a gap in resident performance in the area of assessing suicidality. We chose to focus on suicidal ideation because of the potential lethality and also because of data which suggest that this might be a problem area for practising physicians.[11] Sessions in the curriculum were added to specifically address the process for assessing suicidal ideation. In addition, in part to address the low scores on assessing recreational drug use, we have since implemented a brief screening and intervention system for alcohol and drugs. In future OSCEs we will be able to evaluate the impact of these curricular changes on resident behaviours.

In total, 50% or fewer of the residents were observed by standardised patients to exhibit behaviours consistent with patient-centred care. Assessment of patient-centred care in clinicians and learners, including such assessment in OSCEs, has

Table 1 Percentage of PGY1s who completed the Clinical Performance Checklist behaviours as assessed by the standardised patients

Clinical Performance Checklist behaviour	OSCE 2010 ($n = 24$) (%)
Interview style	
Used plain language at all times and defined any jargon terms used	92
Used open-ended questions	100
Asked about my concerns	50
Asked if I had any questions in a patient-centred way	42
Gave clear explanations	96
Checked my understanding of key information	17
Assess presenting complaint	
Asked how long I've been having headaches	100
Asked about the character of my headaches	83
Asked where my headache was located	92
Asked if I have had problems with my vision	85
Asked if I have a family history of headaches	59
Social history	
Asked me about my occupation	54
Asked me about my home situation	42
Asked me about my use of alcohol	58
Asked me about my use of recreational drugs	46
Asked me about my use of other medications	96
Past medical/family history	
Asked if anyone in my family has ever had any mental health disorders	8
Asked if I had ever been treated for depression	25
Evaluate for depression symptoms	
Asked me about my sleeping pattern	58
Asked me about my mood	63
Asked me if I had diminished interest or pleasure in most activities	54
Asked me about my energy level	36
Asked me about my ability to concentrate	13
Evaluate suicidal risk	
Asked me whether I have had suicidal thoughts	46
Negotiate a management plan	
Discussed the possibility that I might be depressed	67
Discussed the prognosis/likely course of depression	29
Discussed what treatment options are available	46
Recommended a course of treatment for depression	58
Recommended ongoing counselling for me	50
Recommended a depression medication for me to take	38

been reviewed extensively in the literature.[12–15] The current checklist, while providing some intriguing data about patient-centredness skills in residents, was developed primarily to assess content knowledge and skill. It was not validated to thoroughly assess patient centredness. This would be an area for future research.

Few reports explicitly discuss the use of OSCEs as a tool for curriculum refinement. By intentionally using resident group performance on OSCE behaviour checklists to evaluate curriculum, residencies in family medicine can improve future curricular components. We used the example of mood disorders. However, this technique could be utilised for

any content portion of a larger curriculum, which can be assessed with one or more OSCEs.

Mood disorders are common in primary care, but few robust resident OSCEs have been published addressing the care of these patients. We took advantage of resources available to us, notably a grant from the Health Resources and Services Administration (HRSA), and a Clinical Assessment and Learning Center. In publishing these tools our goal is to make them widely available to other residencies.

This report is limited by the fact that it addressed the experience in only one residency programme. It also encompassed only one evaluation cycle, so the impact of the curricular changes is still uncertain. Use of these tools in similar ways by other residencies would strengthen our conclusions.

Conclusions

Assessment of resident performance on specific behaviours during OSCE sessions can be used for curriculum improvement. Mood disorders curricula in other family medicine residency programmes can be evaluated using our depression-focused OSCE and Clinical Performance Checklist.

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CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

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Editors' commentary

This brief report on the observed structured clinical examination (OSCE) by Kobus *et al* is being used as a lens to direct the readership of, and contributors to, *Mental Health in Family Medicine* to think about the way that we currently educate medical students, family doctors and other health professionals about mental health. The journal is keen to receive manuscripts on the topic of teaching and assessment in mental health.

Appendix

OHSU Department of Family Medicine Resident OSCE
PGY-1 Case: Headaches and mild depression
Pamela Hitchcock
Age: 30 years

Case objectives

1 To identify physicians' history taking/problem analysis in patients with symptoms of mild depression.
2 To identify physicians' approaches to the management of mild depression.

Setting: You have made this appointment with a primary care provider because you have been having headaches pretty consistently for the last 3 months. You'd like advice on what you can take for your headaches.

What brings you to the clinic today?
I've been having headaches.

Can you tell me more about it?
Well, they started a couple of years ago, but now they seem to be getting more frequent.

Standardised patient (SP) presentation and affect

SP dress: You appear somewhat withdrawn. You do not have to cry, but you should display periods of sadness (about topics related to your divorce), which you recover from quickly. Your eye contact is fine and your voice fairly quiet and somewhat monotonous. You are engaged with the provider and may chat and be animated about case-related items that are *not* study variables (e.g. chat about bowling, your job, your room-mates).

Acting tips for new SPs:

Our new SPs find it difficult to discern the difference between how they would act if they thought they were depressed and the person reflected in this case. Our seasoned SPs recommend that as you prepare to play the case during test or actual encounter visits, you take a deep breath and push 'yourself' aside, so that Pamela is present.

Also, you do not offer much information. Let the physician do the work of interviewing you. ***The rule of thumb is not to offer any information that is on the checklist, as those are the items that we are evaluating****.*

In our experience, SPs are often anxious to play the case, which results in them offering too much information. Your greatest challenge is understanding where your 'role' ends and that of the provider whom we are evaluating begins.

Presenting complaint: You've had some trouble with headaches off and on for the last 2 years, but your symptoms have been more consistent in the last 3 months.

The resident may ask you if anything had happened around that time. If this question is asked, answer 'Not that I can think of.'

Your headaches have not really interfered with your daily activities, but are an annoyance. The headaches occur pretty much every day. They begin about an hour or two after you get to work, ease a bit when you take some Tylenol, and they usually reoccur when you're on your way home. You made this appointment because the Tylenol helps somewhat, but does not eliminate the headaches completely. The headaches usually last from 30 minutes to a few hours, and seem to come on when you feel pressure at work. You do not wake up with the headaches in the morning, and they don't wake you up in the middle of the night. You take a few Tylenol, which help somewhat, but the headaches don't go away completely. The headaches also occur over the weekend with a similar pattern. You had your eyes checked 2 weeks ago, thinking that this might be the problem, but your vision is fine (you wear glasses for driving). You do not have double vision or blurring. You don't feel faint, dizzy, nauseated or have any other neurological symptoms (e.g. stars or flashing lights before your eyes). The pain is a dull pain, usually beginning towards the back of your head and then moving forwards towards your forehead. The pain sometimes becomes a squeezing pain. You tend to hold body tension in your shoulders, neck and jaw. You do not have a history of migraine headaches, and have never been in a situation where you have headaches almost every day. You have no aura or other indicators prior to the onset of the headaches. No other symptoms accompany the headache. You are not aware of any associations with weather, food, etc. You think the following may be a cause of the headaches: (1) sleep issues (sleeping more than usual); (2) your divorce and stress related to this. (You will not suggest this, but if the resident offers this possibility, you may agree.)

Other history: You also note that you've gained some weight (about 10 pounds) over the past couple of months. You note that you have been eating more than usual – you go to McDonalds every day at lunchtime, and you eat more junk food (chips, etc.) than usual at home. You have never really exercised regularly. You note a decrease in interest in your usual activities (getting together with friends, bowling, reading, etc.; see social section).

You have no allergies and are not on any medications other than the Tylenol. You have not had any serious illnesses, and you have had all your immunisations. You do not smoke or use recreational drugs, but you drink several (2–3) cups of coffee a day. You have a couple of drinks (wine) over the weekend, sometimes with your room-mates and sometimes alone.

Psychosocial information

Social information: You recently moved back to the area from Seattle, WA (*3 months ago*). About a year ago, you got a divorce from your husband. He was ready to start a family and you were not. You're not sure you will ever be ready to do so. You argued about it for a year and finally split up. The divorce was difficult for you; you had been married for 5 years (you married at the age of 25 years). Your former husband recently remarried, which was a factor that motivated you to leave Seattle. There was no violence or abuse in your marriage. You think you were just too young when you got married. You moved back to this area to be near your family and friends from high school. You have not yet started dating again and have no interest in beginning another relationship.

Right now you are living with some friends, but are in the process of moving to an apartment of your own. Your parents and your sister live 20 minutes away, and a number of your other high school classmates are also living nearby, but you haven't felt much like making the effort to get in touch with many of them. When you moved here you weren't feeling great about things, and you figured you'd get better with time. You thought that moving back here would help things to improve, but the headaches have not got any better. Your friends invite you to join them when they go out, but you only go occasionally. You sometimes enjoy your usual activities (going out with friends, bowling, reading), but this is not consistent. You have never been very physically active. Sometimes you just go home and watch TV, while your friends go out without you.

In Seattle, you worked in the accounting department of a small software company, keeping track of the company's payroll and accounts payable and receivable. You went to Western State Community College for your Associate's Degree in accounting in Bellevue, WA, and think that eventually you'd like to go on with your schooling. You'd like to find a similar job here, but in the mean time you are doing data entry for a friend of your parents. You think about money, but for now you are making ends meet without a problem. Your

insurance will be kicking in soon for your current job. You are having some difficulty concentrating at work but you don't think it's affecting your job performance.

You're sleeping fine but a bit more than usual. You're tired by 8.00 pm, have been going to bed by about 9.00 pm and have been having a hard time getting up at 7.00 am. You normally sleep about 8 hours per night, but lately you have been sleeping about 10 or 11 hours per night. You had some crying/blue spells when you first split up with your husband, but these have lessened in the last couple of months. You sometimes dissolve into tears, usually over 'nothing.' Right now you feel a little lonely and sad sometimes, especially when you think about your ex-husband. You have no contact at all with him.

You have never gone for counselling in the past, and have never thought about depression before. You'd like to do what you can to feel better. You do not feel suicidal and have not been thinking about death. If the provider opens the door on depression, be open to any advice or recommendations. Be open to counselling or to medication use. Agree to any follow-up appointment. If the provider tries to order other tests for you, say that you'd like to wait until your insurance kicks in. Agree to have a urinalysis done if requested.

If the physician does not uncover the divorce and does not focus on anything outside of your headache symptoms, and there is an appropriate opening ('How are you other than the headaches?', 'Did anything happen around the time you started getting the headaches?'), look sad and deliver the prompt: 'It's been a pretty tough year.' If the physician doesn't follow up, just leave it at that. If he or she probes further, talk about the divorce.

Evaluating for suicidal risk: You have never had any thoughts about suicide.

Questions you can ask

- Do you think I could have a brain tumour?
- Is the medication you mentioned expensive?
- How much does counselling cost?