



Observational Study

Assessing cultural competency skills in gastroenterology fellowship training

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Abstract

AIM: To assess and teach cultural competency skills at the fellowship training level through the use of objective structured clinical examinations (OSCEs).

METHODS: We revised four scenarios to infuse a specific focus on cross-cultural care, and to render them appropriate for gastroenterology fellows. Three are discussed here: (1) Poor Health Literacy; (2) Disclosing/Apologizing for a Complication to a Patient Who Mistrusts the Healthcare System; and (3) Breaking Bad News to a Fatalistic Patient. A fourth case emphasizing shared decision-making will be described elsewhere. Four stations were completed by fellows and observed live by four faculty members, and the fellows' performance was assessed.

RESULTS: Eleven fellows from four programs participated in the four OSCE. In the "Poor Health Literacy" case, 18% (2/11) of participants recognized that the standardized patient (SP) had below-basic health literacy. None successfully evaluated the SP's reading skills in a culturally-sensitive manner. In "Disclosing/Apologizing for a Complication", 4/11 (36%) personally apologized for the complication. 1/11 recognized the SP's mistrust of the medical system. With "Breaking Bad News", 27% (3/11) explored the patient's values to identify her fatalistic beliefs.

CONCLUSION: OSCEs can be used to assess deficiencies in culturally-competent care at the fellowship level. OSCEs also afford fellowships the opportunity to inform future training curricula.

Key words: Patient care; Physician-patient relations; Gastroenterology; Cultural competency; Education; Patient care; Health literacy; Health care; Graduate; Objective structured clinical examination; Trainees

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Core tip: Cultural competency is an integral skill set vital to a fruitful physician-patient relationship. However, we lack tools necessary to assess and teach such skills, especially at the fellowship level. We designed an objective structured clinical examination (OSCE) on specific criteria essential to the delivery of culturally-competent care. Our findings suggest that although the participating trainees' can adequately provide some aspects of culturally-competent care, their ability to wholly execute such care is subpar. The current fellowship program curricula may not adequately prepare its trainees to successfully employ culturally-competent care, and OSCEs provide a means to assess and teach this complex skill set.

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INTRODUCTION

There is an increasing recognition of the need for medical training programs to improve physician-patient communication and to counter the ethnic and racial disparities that exist in health care, which potentially result in poorer patient satisfaction and outcomes^[1]. In 2001, the Accreditation Council for Graduate Medical Education (ACGME) identified interpersonal and communication skills, and professionalism as two of its six core competencies for residents and fellows. Cultural competency is defined as the ability of health care professionals to communicate with and effectively provide high-quality care to patients from diverse socio-cultural backgrounds^[2]. Objective structured clinical examinations, or OSCEs, serve as a valid tool to measure the performance of trainee physicians in various aspects of patient care^[3-5]. This observation has been extended to gastroenterology training with great success^[6-8]. Still, to date, studies to assess the competency level of gastroenterology (GI) fellows in providing cross-cultural care have yet to be performed.

Therefore, the aim of this project was to use OSCEs to formally assess the ability of gastroenterology fellows who train in an urban, socioeconomically diverse population such as New York City, to implement cultural competency as a skill in a variety of challenging clinical scenarios. Here, we present

three clinical cases that we have modified from cases previously described that address specific facets of cultural competency: Poor Health Literacy, Disclosing and Apologizing for a Complication to a Patient Who Mistrusts the Healthcare System, and Breaking Bad News to a Religiously Fatalistic Patient.

MATERIALS AND METHODS

Participants

Using validated OSCE checklists, we revised the clinical elements of 3 previously described cases (Health literacy, Disclosing and apologizing for a complication, and Breaking bad news) to make them more suitable for GI fellows, and to add a specific focus on various aspects of cultural competency. Four faculty members from two GI training programs in New York City (NYU School of Medicine and Icahn School of Medicine at Mount Sinai) observed the four-station OSCE and 11 fellows (from the programs listed above, as well as Lenox Hill Hospital and St. Luke's-Roosevelt Hospital Center) participated. The standardized patients (SPs) were trained for 3 h with scripts and role-playing to standardize their case portrayals and fellow ratings.

OSCE cases

Poor Health Literacy (Health Literacy Case): The clinical scenario was of a 27 year-old new mother of Chinese descent with below-basic health literacy who was diagnosed with chronic hepatitis B virus infection during her pregnancy. The goals of the GI fellow were the following: identify the patient as health-illiterate, and successfully convey health information to her about her disease.

Disclosing and Apologizing for a Complication to a Patient Who Mistrusts the Healthcare System (Apologizing for a Complication Case):

The clinical scenario was of a 50-year-old African-American male patient with a harbored mistrust of the healthcare system who undergoes an average-risk screening colonoscopy with polypectomy, subsequently complicated by a perforation. The goals of the GI fellow were the following: recognize this patient's mistrust of the medical system and how it impacted his response to the complication, admit that a medical error was made, and regain the patient's trust, and have him willingly agree to stay for follow-up care.

Breaking Bad News to a Religiously Fatalistic Patient (Breaking Bad News Case):

The clinical scenario was of a 54 year-old African-American female patient with a family history of a first-degree relative with colon cancer who had just undergone a screening colonoscopy during which a likely colon cancer is found. When informed of this finding, she believes that succumbing to colon cancer is God's will for her and she refuses to consider further work-up or

Table 1 Health literacy *n* (%)

Competency areas and specific skills	Distribution of responses, <i>n</i> = 11		
	Not done	Partly done	Well done
Communication			
Information gathering			
Elicited responses using appropriate questions	0	5 (45)	6 (55)
Clarified information by repeating	4 (36)	5 (45)	2 (18)
Allowed patient to talk without interrupting	0	0	11 (100)
Relationship development			
Communicated concern, intention to help	0	4 (36)	7 (63)
Non-verbal behavior enriched communication	0	1 (9)	10 (91)
Acknowledged emotions appropriately	5 (45)	2 (18)	4 (36)
Was accepting, non-judgmental	0	6 (55)	5 (45)
Used words patient understood, explained jargon	2 (18)	3 (27)	6 (55)
Patient education			
Educated patient on Hep B in a culturally sensitive manner	0	6 (55)	5 (45)
Explained risks of transmission: unsafe contact and safe contact	0	4 (36)	7 (63)
Discussed general health education	2 (18)	9 (82)	0
Assessment			
Evaluated reading skills in a compassionate and culturally sensitive manner	11 (100)	0	0
Evaluated patient's understanding of risks of transmission prior to explaining unsafe contact and safe contact	5 (45)	6 (55)	0
Treatment plan			
Clearly discussed next step of follow up plan	1 (9)	9 (82)	1 (9)

therapy. The goals of the GI fellow were the following: recognize the patient's strong religious beliefs, negotiate her belief system into an agreeable clinical plan of care, and ensure that the patient is amenable to following through with the treatment plan.

Evaluation

Each of the eleven GI fellows participated in all three scenarios detailed above. All OSCE stations were videotaped and observed live by faculty through the use of video media in the NYU School of Medicine Simulation Center for the Health Sciences. The fellows were allotted 15 min for each encounter with the standardized patient. Immediately following each case, feedback was provided to the fellow by the faculty observer and the SP. Data, in the form of checklists and questionnaires were collected from the fellow to specifically address cultural competency as it pertained to each of the given cases. Checklists were created to provide SPs and faculty observers with specific criteria to rate the fellows' performance. The fellows were rated with the use of a three-point scale for each assessed task: (1) "not done" (the fellow did not perform the task); (2) "partly done" (the fellow attempted to perform the task, but was unsuccessful); and (3) "well done" (the fellow addressed and performed the task successfully).

Table 2 Apologizing for a complication *n* (%)

Competency areas and specific skills	Distribution of responses, <i>n</i> = 11		
	Not done	Partly done	Well done
Patient activation			
Helped patient understand the cause of health condition	0	3 (27)	8 (73)
Helped patient understand the different available treatment options	0	3 (27)	8 (73)
Helped patient feel able to follow the recommendations or take the next steps	0	4 (36)	7 (63)
Accountability			
Disclosed complication directly	0	0	11 (100)
Fully explained the complication	0	0	11 (100)
Personally apologized for this complication	7 (63)	0	4 (36)
Took responsibility for situation and recovery	7 (63)	0	4 (36)
Delivering bad news			
Gave opportunity for patient to respond emotionally	0	0	11 (100)
Responded to patient's emotions.	0	0	11 (100)
Shared decision making			
Explored patient's beliefs, values, and preferences	0	5 (45)	6 (55)
Engaged patient in the decision making process	0	1 (9)	10 (91)
Allowed for explicitly deferred decision making	0	4 (36)	7 (63)
Assessment			
Reassured patient that care is appropriately supervised and executed, established trust	8 (73)	a	3 (27)
Elicited understanding that patient mistrusts system, negotiated trust in future quality of care	10 (91)	a	1 (9)

^aScored by faculty observer as performed or not performed.

Post-OSCE

After the case scenarios were completed, a debriefing session involving each training program's respective fellows and the faculty observers was held in order for the fellows to provide feedback about the OSCE itself and its relevance as an education tool.

RESULTS

Four faculty members from two academic institutions and eleven fellows from four GI training programs participated. All participants were first-year GI fellows. Four fellows from NYU School of Medicine participated; three from the Icahn School of Medicine at Mount Sinai's training program, and two each from St. Luke's-Roosevelt Hospital Center and Lenox Hill Hospital. Table 1 shows a detailed breakdown of the performance of the fellows in each of the categories assessed by the SP and the faculty observers in the Health literacy Case, as well as the results of the post-OSCE computer-based questionnaire completed by the fellows. Tables 2 and 3 show the results from the second and third cases, respectively.

In the Health Literacy Case, 18% of participants (2/11 fellows) recognized that the patient had below-

Table 3 Breaking bad news *n* (%)

Competency areas and specific skills	Distribution of responses <i>n</i> = 11		
	Not done	Partly done	Well done
Patient education			
Gave results of colonoscopy effectively	3 (27)	7 (63)	1 (9)
Explained procedures already done during colonoscopy	0	8 (73)	3 (27)
Explained next necessary steps, how results fit into longer term plans	0	7 (63)	4 (36)
Checked patient's understanding of treatment options	4 (36)	7 (63)	0
Delivering bad news			
Physically set the tone for receiving bad news	3 (27)	8 (73)	0
Assessed your readiness to receive news, gave warning shot	4 (36)	7 (63)	0
Gave opportunity for patient to respond emotionally	1 (9)	7 (63)	3 (27)
Responded to patient's emotions.	1 (9)	7 (63)	3 (27)
Accountability			
Conveyed accountability, assured appropriate treatment and follow up	1 (9)	5 (45)	5 (45)
Shared decision making			
Explored patient's beliefs, values, and preferences	1 (9)	7 (63)	3 (27)
Engaged patient in the decision making process	3 (27)	6 (55)	2 (18)
Allowed for explicitly deferred decision making	1 (9)	6 (55)	4 (36)
Assessment			
Explained and apologized for complication	3 (27)	8 (73)	0
Engaged patient in a discussion about next steps	0	7 (63)	4 (36)
Elicited understanding that patient has different beliefs, negotiated common goals	4 (36)	a	7 (63)

^aScored by faculty observer as performed or not performed.

basic health literacy. Below-basic health literacy is defined as the ability to perform only simple and concrete literacy activities (a commonly cited example: the ability to read a set of short instructions, and identify what is permissible to drink before a medical test)^[9]. None (0/11) of the fellows evaluated the SP's reading skills. Though none of the fellows thoroughly discussed the SP's general health education and assessed her level of health literacy, nearly 82% (9/11) partly performed the task, while the remaining 18% did not perform this task at all. What was done partly well by more than half of the participants (6/11) and done well by 5/11 of the fellows was the education of the SP on hepatitis B virus in a culturally sensitive manner. Despite the fellows' overall deficient performance on this OSCE station, nearly 73% (8/11) of fellows reported receiving some type of training during their medical school or post-graduate training in patient health literacy.

In the Apologizing for a Complication Case, 4/11 (36%) participants personally apologized for the complication and took responsibility for the situation. Seventy-three percent failed to reassure the patient

that the quality of care was appropriately supervised and executed. Finally, only 1/11 (9%) participants recognized that the SP harbored a mistrust of the medical care system. Similar to the previous case, nearly 73% (8/11) of fellows reported receiving some type of training during their medical school or post-graduate training in disclosing medical errors.

With the Breaking Bad News Case, 100% of the fellows agreed that this was the most challenging OSCE of the three scenarios. We found that 2/11 fellows (18%) engaged the SP in the decision-making process. According to the SP's rating, only 27% (3/11 fellows) explored the patient's beliefs, values, and preferences to recognize that she possessed strong religious and fatalistic beliefs. However, faculty observers reported that 63% of fellows effectively elicited understanding that the SP had different beliefs and used this understanding to negotiate a common goal. Only 18% of participants (2/11 fellows) were able to gain the patient's trust and have her agree to pursue further medical care.

DISCUSSION

Cultural competency is central to an effective physician-patient relationship, but teaching its tenets has proven to be a challenge^[10]. This skill set has historically been taught implicitly, through observation of faculty and mentors, and by means of self-reflection. Though this hidden curriculum prepares trainees for some aspects of culturally-competent care, it is not without flaws^[11]. Current curricula are non-standardized, informal, and sometimes unavailable, leading to a growing interest in teaching cultural competency.

Substantial effort has been afforded to identify and eliminate cultural barriers that impede effective cross-cultural care^[12,13]. It is understood that physicians cannot apply a "one-size-fits-all" approach to patient care, especially as our patient population grows increasingly diverse. There is a need for practicum that accurately grasp the educational deficiencies in cultural competency in medical education training. The goal of this OSCE is to fill this void.

The OSCE is a validated tool for measuring performance in various aspects of patient care, particularly with the more difficult-to-measure core competencies^[14]. This project is the first of its kind to formally assess and measure gastroenterology fellows' ability to approach challenging clinical scenarios with an attuned understanding and practice of cultural competency in a standardized fashion.

It has long been cited that the lack of culturally-conscious medical care plays a pivotal role in health and health care disparities, and that there is a need to incorporate cultural awareness into the academic setting^[13]. Previous, now abandoned, efforts in cultural competency education employed a "categorical approach". The major pitfall of this approach is the concern for stereotyping care for patients based on

socio-cultural backgrounds. The fear has been that this type of educational method assumes cultural “norms” and oversimplifications, thereby sacrificing the physician-patient relationship^[2,10]. An alternative approach has since been embraced. By recognizing culturally competency as a skill set, health care providers can effectively deliver care to those of diverse backgrounds in an individualized and more culturally-aware manner^[12]. This project systematically assessed and measured areas of strength and weakness in competencies deemed necessary by the ACGME. Our intent is to inform future training curricula for fellows, so that they may provide meaningful cross-cultural care after training.

The literature shows that despite the perceived importance to teach and deliver cross-cultural care, there is little clinical time allotted to honing this skill. Moreover, a large majority of trainees felt unprepared for such challenges^[15,16]. In 2008, Lopez *et al.*^[17] conducted a survey of 2047 residents from seven different specialties and 563 residency programs to determine whether resident physicians’ socio-cultural characteristics influence self-perceived preparedness and skill in delivering cross-cultural care. With training received during medical school and/or residency controlled for, the most important factor associated with improved perceived skill level in practices believed to be of use in treating a culturally-diverse patient population was cross-cultural skills training during residency (OR: 1.71-4.22). Our project is a novel and formal assessment of trainees’ cross-cultural skills at the fellowship level. The three areas of cultural competency that we chose to focus on included health literacy, disclosing and apologizing for a complication in a patient who harbors mistrust in the health care system, and bearing unfavorable medical information to a patient with a strong religious belief system. The Health Literacy station revealed that few fellows were able to identify the patient as having below-basic health literacy^[18], while none of the eleven fellows explored her general health knowledge in order to effectively gauge how best to educate her about her new diagnosis of hepatitis B virus. When the nuances of patient understanding are left unrecognized or unacknowledged by the physician, patient adherence becomes less likely. With the Apologizing for a Complication Case, the majority of the fellows failed to formally apologize or take responsibility for the complication. Moreover, only one fellow was successful in identifying the patient’s mistrust in the health care system, which inherently compromised the physician-patient relationship. In recognizing and confronting the grounds for mistrust in a non-threatening, honest manner, effective communication between clinician and patient is far more likely. Finally, the Breaking Bad News station was equally informative. The majority of fellows failed to include the patient in the decision-making process for the next step in management, and only two parti-

cipants elicited a trustful agreement with the SP.

Our performance-improvement program is not without limitations. Though four different institutions in New York City participated, the number of fellows in this pilot program was small. A longitudinal assessment of cultural competency as a skill set has not yet been performed, and so the utility of assessment with an OSCE remains to be studied. Finally, the Breaking Bad News station illustrated that there is a discrepancy between the standardized patient and faculty observers’ perception of fellows’ abilities. Therefore, there may be a role for cultural competency training for faculty who are involved in teaching fellows. Expanding the employment of the OSCE into the GI fellowship curriculum for reinforcement of such competencies is an eventual goal that has already shown to be of benefit in this cross-institution initiative, but should be explored further. Awareness and formalized assessment of deficiencies in cultural competency with OSCEs is an important step in developing the appropriate skills for serving a diverse patient population.

With the advent of the ACGME’s Next Accreditation System (NAS), it is incumbent upon training programs to evaluate the impact of their training methods on educational outcomes. This is accomplished by assessing trainees based on a number of important outcome-based milestones incorporated within the six domains of physician competence. The scenarios tested in the OSCE mostly directly reflect milestones within the professionalism [Responds to each patient’s unique characteristics and needs (PROF3)] and interpersonal communication [Communicates effectively with patients and caregivers (ICS1)] competencies. Implementation of these cultural competence OSCEs into the GI fellowship program curriculum serves a dual purpose. Not only do such OSCEs allow fellowship programs to assess GI fellows according to these milestones during the educational event, but they also permits us to examine the longitudinal impact on the fellows’ practice, permitting further assessment of a practice-based learning and improvement milestone [Learns and Improves *via* feedback (PBLI1)]. Therefore, the next step will be to evaluate the trainees’ performance in ongoing clinical care to assess the impact of institution of the OSCE on their continued use of cultural competence. In this way, we can be assured that we are meeting our goals of training professional fellows who excel at interpersonal communication in a culturally-competent manner.

OSCEs serve as a validated tool to assess the performance of training physicians’ ability to carry out complex clinical skills. The ability to provide cross-cultural care encompasses two of the six core competencies outlined by the ACGME, namely interpersonal skills and communication, and professionalism. This program is novel in its employment of the OSCE to formally test and measure cultural competency as a

vital skill set at the fellowship level. This educational tool informs fellowship curricula, and can be extended to academic faculty as well. More study is necessary to assess why and to what degree such deficiencies in cross-cultural care and educational training exist, and if the implementation of the OSCE as an educational tool improves culturally-competent patient care in the long-term.

COMMENTS

Background

Cultural competency is recognized as an essential component of a productive physician-patient relationship. Despite this recognition, our ability to effectively assess and teach these complex communication and interpersonal skills to medical trainees has not been formalized or standardized, particularly at the fellowship training level.

Research frontiers

Objective structured clinical examinations, or OSCEs, have been validated as a means of assessing complex skill sets in a measurable, reproducible context. Its novel application in cultural competency training at the fellowship level satisfies many of the core competencies set forth by the Accreditation Council for Graduate Medical Education (ACGME).

Innovations and breakthroughs

This experiential learning endeavor for the explicit purpose of both assessing and teaching cultural competency at the fellowship level is the first of its kind. OSCEs have shown to be a wonderful tool to teach complex skill sets. The use of the OSCE during a training physician's advanced stage of formal training works to build upon and potentially reinforce any cultural competency training he or she has been exposed to through both his/her formal and hidden curricula during medical school and residency.

Applications

An eventual result of such an OSCE is to inform further medical curricula in the inclusion of such experiential learning that is centered on cultural competency.

Peer-review

For assessing the performance of training physicians' ability to carry out complex clinical skills, authors designed an OSCE on specific criteria. And the authors also addressed it was vital to providing culturally-competent care.

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