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## Observational Study

# Disruptive behavior in the workplace: Challenges for gastroenterology fellows

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## Abstract

### AIM

To assess first-year gastroenterology fellows' ability to address difficult interpersonal situations in the workplace using objective structured clinical examinations (OSCE).

### METHODS

Two OSCEs ("distracted care team" and "frazzled intern") were created to assess response to disruptive behavior. In case 1, a fellow used a colonoscopy simulator while interacting with a standardized patient (SP), nurse, and attending physician all played by actors. The nurse and attending were instructed to display specific disruptive behavior and disregard the

fellow unless requested to stop the disruptive behavior and focus on the patient and procedure. In case 2, the fellow was to calm an intern managing a patient with massive gastrointestinal bleeding. The objective in both scenarios was to assess the fellows' ability to perform their duties while managing the disruptive behavior displayed by the actor. The SPs used checklists to rate fellows' performances. The fellows completed a self-assessment survey.

## RESULTS

Twelve fellows from four gastrointestinal fellowship training programs participated in the OSCE. In the "distracted care team" case, one-third of the fellows interrupted the conflict and refocused attention to the patient. Half of the fellows were able to display professionalism despite the heated discussion nearby. Fellows scored lowest in the interprofessionalism portion of post-OSCE surveys, measuring their ability to handle the conflict. In the "frazzled intern" case, 68% of fellows were able to establish a calm and professional relationship with the SP. Despite this success, only half of the fellows were successfully communicate a plan to the SP and only a third scored "well done" in a domain that focused on allowing the intern to think through the case with the fellow's guidance.

## CONCLUSION

Fellows must receive training on how to approach disruptive behavior. OSCEs are a tool that can assess fellow skills and set a culture for open discussion.

**Key words:** Disruptive behavior; Fellowship education and training; Objective structured clinical examinations

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**Core tip:** Disruptive behavior in the hospital setting is associated with adverse events. Fellows must be able to effectively communicate with attending physicians and ancillary staff when there is a difficult situation to prevent such occurrences. Our study seeks to assess gastroenterology fellows' ability to address such behavior in the workplace using an objective structured clinical examination. We found that fellows had difficulty navigating the situations and inconsistently mediated conflicts between others. Using this pilot data, we believe it is important that fellows receive training to handle disruptive behavior so as to set an expectation and a culture of open communication.

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## INTRODUCTION

Disruptive behavior is defined by the American Medical Association as a healthcare provider's interaction with other healthcare personnel, patients, or family that interferes with patient care<sup>[1]</sup>. This can manifest as verbal abuse (foul language, threats, *etc.*) or non-verbal expressions (facial expressions, *etc.*). Many studies have linked disruptive behavior to adverse patient outcomes, such as surgical errors, medication errors, delayed treatment, and death<sup>[2-6]</sup>. Faulty communication and lack of teamwork has been estimated to cause 24% of events leading to a patient's death, injury, or disability<sup>[7]</sup>.

The Accreditation Council for Graduate Medical Education (ACGME) uses the Milestones to assess trainees<sup>[8]</sup>. The objective structured clinical examination (OSCE) is a validated tool recommended by the ACGME to both evaluate and teach trainees effective communication and interpersonal skills<sup>[9,10]</sup>. Our pilot study used an OSCE to assess communication, professionalism and systems-based practice among gastroenterology fellows in the context of handling disruptive behavior. Note, this OSCE occurred before the implementation of ACGME Next Accreditation System and the use of milestones for assessment of trainees.

## MATERIALS AND METHODS

### Simulation center

The OSCE was conducted at the New York Simulation (SIM) Center for the Health Sciences. After reading a brief prompt about the encounter posted outside of each station, the fellow entered the room and an audible alert indicated that the encounter had begun.

### Participants

Twelve first year fellows from four GI training programs in New York City participated in this OSCE. This work was considered a performance improvement project and approval was not indicated by the NYU School of Medicine Institutional Review Board. The scores for each fellow were de-identified and linked only to the school/training program of each fellow.

### OSCE case development and implementation

Case 1 was specifically designed to test the fellow's ability to safely navigate through a colonoscopy and simultaneously demonstrate team building and conflict resolution skills in a high stress environment ("distracted care team"). Professional actors were hired to portray the standardized physician, nurse and standardized patients (SP). Additional rehearsal time as well as the use of a concealed ear piece for continued coaching during the scene from an experienced gastroenterology attending (who observed



the scene *via* a one-way mirror) was implemented to aide these actors.

Case 2 focused on a phone call from a distraught intern in the middle of the night who was asking for help on a patient presenting with a gastrointestinal hemorrhage in the intensive care unit ("frazzled intern"). A medical student portrayed the intern in this case and was trained as above.

All cases were developed by members of this team and reviewed by medical educators and local academic gastroenterologists for realism, content, and difficulty level. The cases were designed to assess each fellow's ability to communicate, engage in meaningful teamwork, and handle situations of disruptive behavior. The cases were not designed to assess the clinical implications of either adequate or inadequate communication skills. Each scenario ran for 20 min. The fellows did not know the nature of the cases prior to participation. All SPs spent one hour reviewing the checklists and standardizing their ratings before the event.

### Cases

**Case 1: Distracted care team:** The fellow was instructed to use a colonoscopy simulator to navigate to the cecum, while interacting with a team of actors. The SP in this case was a 61-year-old male who had been referred for outpatient colonoscopy due to a cecal mass found on abdominal CT scan. The nurse and attending were instructed to display disruptive behavior (*i.e.*, talk on the phone, argue) and ignore the fellow unless specifically asked to stop the disruptive behavior and focus on the patient care. The goals for the fellow were as follows: safely complete the procedure and ensure patient comfort, while displaying professionalism in managing the surrounding conflict.

**Case 2: Frazzled intern:** In this case, an intern was managing a patient with a gastrointestinal hemorrhage while her resident was attending to another patient. The intern contacted the on call GI fellow seeking assistance with patient management. Due to the acuity of the problem and the lack of perceived backup from her senior resident, the intern was panicked and distressed. The patient had been treated previously with endoscopic therapy and appeared to be re-bleeding with hemodynamic instability and bright red blood per rectum. The goals for the fellow were as follows: assess the clinical scenario, elicit all the necessary information, and to devise a plan of care while maintaining professionalism resulting in some teaching under pressure. This scenario was run in a specialized area of the SIM center designed to allow assessment of phone communication as the fellow was in a separate room from the standardized intern and spoke to the intern *via* a telephone prop.

### Evaluation

Following each encounter, the SP evaluated the

participants using a validated checklist that assessed the fellow's skills in four domains: information gathering, relationship development, communication and team management/professionalism. In the "distracted care team" case the SP that served as the patient evaluated the fellow to be consistent with our other OSCE cases. Each of these domains included two to four items/case representing very specific, observable behaviors that could be readily rated as not done (the fellow did not perform the behavior or task at all), partially done (the fellow attempted, but did not fully complete the task), or well done (the fellow completed the task adequately). Behavioral descriptors were provided for each response option to facilitate consistent rating. Domain scores for individual fellows were calculated as the percent of items within that domain rated as well done. Across all participants, mean percent well done scores were calculated.

### Post-OSCE

At the conclusion of OSCE, the fellows met with faculty for a debriefing session to assess for realism and applicability of the scenarios. All participants completed a written exit survey evaluating performance and perceptions of each case.

## RESULTS

In case 1, we aimed to assess the fellows' ability to perform the procedure while navigating the dispute between the distractions while maintaining professionalism. Four of the 12 fellows acknowledged difficulty during the case. Only one fellow asked the attending to get off the phone and assist her; one fellow asked for assistance in tattooing the lesion in an attempt to interrupt the conflict. Neither of these trainees directly addressed the unprofessional behavior or refocused the quarrelling parties. The artificial nature of the endoscopy scenario did not allow us to assess endoscopic competence or ability to achieve safe, adequate sedation based on use of a simulator with a fixed time interval.

Fellows scored lowest in the team management/professionalism domain (47% well done). This domain assessed the fellow's ability to keep calm throughout the conflict, ask for assistance effectively, manage the conflict between the attending and nurse, and remain neutral throughout the scenario. Fellows scored an average of 67% well done across all communication domains, which included establishing rapport with the SP and communicating their own needs during the procedure, such as asking for the nurse's or attending's assistance, vital signs, *etc.* (Table 1) Post-OSCE surveys revealed that nine out of 12 felt that they were adequately prepared for the colonoscopy portion of the case. Eight out of twelve (75%) perceived that they did well in this challenging scenario.

In Case 2, fellows performed best in relationship development, which assessed their ability to calm



**Table 1** Fellows scored an average of 67% well done across all communication domains

Domain	Score	Components
Distracted care team case		
Information gathering	86%	Verify identity Perform timeout Verify patient history
Relationship development	68%	Establish rapport with patient Acknowledge patient complaints/discomfort
Communication	67%	Asked nurse for assistance with biopsy Asked attending for assistance Communicated needs during scenario ( <i>i.e.</i> , need for anesthesia, vitals, <i>etc.</i> )
Team management/professionalism	47%	Did not appear impatient Remained neutral during conflict Clearly communicated need for assistance Effective management of conflict
Frazzled Intern Case		
Information gathering	32%	Did not use leading questions Allowed the intern to speak without interrupting
Relationship development	68%	Acknowledged the intern's emotions Attempted to calm the intern down
Communication	51%	Had an accepting and nonjudgmental attitude Provided clear explanations and information Communicated concern and intention to help Successfully elicited the intern's question
Team management/professionalism	73%	Collaborated with the intern in identifying the next possible steps in care Focused the discussion on the best interests of the patient

the intern down and have a nonjudgmental attitude towards the panicking intern. Sixty-eight percent scored well done in this domain, however despite the ability of the participants to acknowledge the intern's emotions and manage them, the majority of the participants performed poorly in information gathering. Only 32% of fellows scored "well done" on information gathering, which assessed the fellow's ability in allowing the intern to speak without interruptions and avoiding the use of leading questions when assisting the intern in thinking through the case. Half of the participants performed well in the communication domain, which evaluated the fellow's ability to provide clear explanations of the plan, communicate an intention to help, and success in eliciting the intern's question (Table 1).

There was a difference between the fellows' average performance in the two stations focusing on team management/professionalism as compared with their performance at other stations focused on doctor-patient communication, where fellows performed better than in the scenarios described above. Averaged across all domains, fellows scored an average 69% in case 1 and 60% in case 2.

## DISCUSSION

Disruptive behavior is a common occurrence with potentially serious outcomes. The majority of adverse effects are secondary to inadequate or distracting communication between providers, leading to loss of concentration, medication errors, and poor handoffs<sup>[3,11]</sup>. One study demonstrated distracting communication

accounted for most of the major errors made by surgical trainees during a simulated laparoscopic cholecystectomy<sup>[4]</sup>. Little information exists regarding the incidence and effects of disruptive behavior in the endoscopy suite setting.

A culture of disruptive behavior impacts residents and fellows as well and our study demonstrates reluctance of fellows to address unprofessional behavior from attending physicians. Trainees depend on positive evaluations from attending physicians for career advancement and evaluations may impact the trainee's standing in their program. One survey suggests that interns, residents, and fellows felt their appearance of competence to a superior superseded patient safety, preventing them from pursuing clinical support or guidance from supervisors<sup>[12]</sup>.

Our pilot study using OSCEs revealed unexpected deficits in leadership skills among fellows, who had demonstrated proficiency in the ACGME competencies prior to graduation from their residency. These deficits lie in effective communication and team management/professionalism with junior team members, staff, and senior faculty members. Based on our results, there may be a loss of such skills upon entering fellowship which may be attributed to a focus on mastering a new skill set impacting their ability to act as a leader. In addition, the trainees should have been comfortable asking for assistance if they did not know how to manage a complex GI issue, which may represent a deficit in communication skills.

One problem may lie in a trainee's self-assessment of his or her leadership ability. Most of the fellows perceived their performance in the exercise as good,

despite the majority not addressing the hostile environment. This is similar to other fields where self-assessment surveys from surgery residents also show a high level of confidence from trainees in their leadership skills; 69% of surgery residents felt comfortable with negotiation and conflict resolution and 75% were confident in their team building and management<sup>[13]</sup>.

Despite this level of confidence, our results show that fellows do not demonstrate adequate communication and team leadership skills that are necessary to defuse a potentially dangerous situation. Other literature from simulated exercises in the operating room setting support that nontechnical skills, including teamwork and leadership, were scored as unexpectedly mediocre and could use improvement<sup>[14,15]</sup>. This may persist into physicians' careers<sup>[16]</sup>.

A variety of different methods have been developed to teach communication and leadership skills. OSCEs are widespread and used across multiple specialties to evaluate medical students and residents; in addition, trainees have found them useful as feedback tools to help improve their physical examination and communication skills<sup>[9,17-19]</sup>. Other methods have also been found effective. Two studies combined OSCE-type sessions with SP feedback and a concomitant curriculum series to teach communication skills<sup>[20,21]</sup>. Both studies showed improvements in empathy, overall professionalism, and overall SP satisfaction in post-curriculum OSCE scores<sup>[20,21]</sup>. Residents also rated these workshops as useful in their training.

Surveys continue to demonstrate that residents use role models as the primary modality to learn communication skills<sup>[22,23]</sup>. It is imperative that mentors display desirable characteristics in modelling the team-building and conflict resolution skills given the impact of role-modeling in this group<sup>[24]</sup>.

We acknowledge several limitations of our study. The generalizability of our study is limited as we only enrolled first year fellows. Graduating senior residents possess leadership and communication abilities which are specific to their training in internal medicine and these are not necessarily transferable to a fellow's role. Furthermore, these new fellows must learn a very different skillset in performing procedures and in being consultants as opposed to primary providers. A broader experience pool would likely affect the results as fellows complete the transition to subspecialist while maintaining the leadership skills that were learned previously. We expect that including other levels of training would increase overall performance scores as fellows will have gained experience as proceduralists and as consultants, which should reflect in their OSCE score. There is an understandable focus among first-year fellows on learning these new roles and procedures instead of learning to apply their previously learned abilities to communicate and control difficult

situations to their new job. Nevertheless, we do want to bring attention to phenomenon given the published evidence of disruptive behavior affecting clinical outcomes.

Furthermore, this study was designed to obtain pilot data and guide future directions in developing OSCE-based evaluation curricula prior to the introduction of the milestones. The study was deliberately designed to solely assess a fellow's ability to communicate and did not account for the clinical sequelae of suboptimal communication and thus, quality measures for colonoscopy such as polyp detection rate, success in removing and tattooing the lesion were not recorded. We believe that a future direction of study should address the possible connection between suboptimal communication and clinical outcomes. Lastly, this study was unable to examine improvements in ACGME core competency scores pre and post-OSCE except amongst our own trainees.

Our pilot project assessed a gastroenterology fellow's communication skills in the context of disruptive behavior and found unexpected gaps in communication skills and leadership critical to building a culture of safety and respect in the workplace. Future directions in this area should focus on effective methods to identify those who require further instruction and remediation in improving leadership skills as well as developing a comprehensive team training curriculum to improve inter-professional communication at the fellowship level. Specific aspects in such curricula for fellows should include instruction directly from faculty leadership establishing the importance of assertiveness and conflict management in unsafe situations, effective ways to communicate with junior and senior physicians as well as ancillary staff, and emphasizing the importance of good communication and teamwork in the procedural setting.

## COMMENTS

### Background

Disruptive behavior in the healthcare setting is linked to adverse patient outcomes, such as surgical errors, medication errors, delayed treatment, and death. Faulty communication and lack of teamwork has been estimated to cause a quarter of events leading to a patient's death, injury, or disability. In gastroenterology, it is important to possess the ability to lead multidisciplinary teams through potentially risky procedures to minimize the risk of adverse events. First-year gastroenterology fellows graduate from their respective residency programs having been evaluated and deemed to have adequate professionalism, communication, and interpersonal skills with which to lead a team. This study seeks to assess these fellows' interpersonal communication in difficult situations which require the adept use of such skills. Notably, it was not designed to assess adverse clinical events and only focused on communication skills.

### Research frontiers

There is surgical and medical literature examining resident-level methods of assessing and teaching competency in leadership skills, though none concerning gastroenterology fellows specifically. Objective structured

clinical examinations (OSCEs) have been well-established validated tools recommended by the ACGME to both evaluate and teach trainees effective communication and interpersonal skills. Methods of teaching leadership skills are considerably more diverse and thus far, no one method has been shown as superior to others.

### Innovations and breakthroughs

This is the first study that seeks to assess gastroenterology fellows' leadership skills and professionalism when faced with disruptive behavior. In this study, the authors have found that fellows struggled to manage disruptive behavior between their seniors and ancillary staff when evaluated objectively by observers, revealing unexpected deficits in communication and teamwork. The fellows themselves, however, did not recognize the challenges they had and perceived that they performed well in this scenario. This dichotomy was present in other studies conducted with residents, suggesting a systemic problem in teaching both self-assessment and necessary leadership skills.

### Applications

This pilot study using OSCEs revealed unexpected deficits in leadership skills among fellows, who had demonstrated proficiency in the ACGME competencies prior to graduation from their residency. These deficits lie in effective communication and team management/professionalism with junior team members, staff, and senior faculty members. Based on our results, there may be a loss of such skills upon entering fellowship which may be attributed to a focus on mastering a new skill set impacting their ability to act as a leader. Future directions in this area should focus on effective methods to identify those who require further instruction and remediation in improving leadership skills as well as developing a comprehensive team training curriculum to improve inter-professional communication at the fellowship level.

### Terminology

Disruptive behavior is defined as a healthcare provider's interaction with other healthcare personnel, patients, or family that interferes with patient care. An OSCE is a simulated case or situation using standardized patients and actors designed to assess a specific set of skills as determined by the simulation's design.

### Peer-review

Reviewers commented that this is an interesting work as it reflects a real situation that is frequent and can produce potentially serious complications directly related with loss of concentration that can cause patient's injury; they also commented that this is a well done and novel study looking at first year fellow's ability to address difficult interpersonal situations in workplace using OSCE.

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