Discussion of 2021-1767

Public Humiliation in the Surgical Clerkship: Qualitative Analysis of Responses to the Association of American Medical Colleges Graduation Questionnaire

**DR KEITH D LILLEMOE** (Boston, MA): I would like to congratulate the authors for a very thorough analysis using such sophisticated technique to address this important issue. This presentation is important, as it can clearly influence the pipeline of recruiting students into surgery, and it provides further evidence that surgeons, particularly in the operating room (OR), are not bad people. I can also assume that if this mistreatment occurs to medical students, it happens to our residents as well as the younger faculty.

I was not aware of the Association of American Medical Colleges (AAMC) graduation questionnaire until 5 years ago. I learned of it when Harvard Medical School leadership confronted all clinical leaders to show how poorly Harvard Medical School (HMS) did in terms of the learning environment for medical students, in comparison with other schools. It was no surprise that the surgical rotations performed the worst of all specialties. This has led to dramatic efforts to improve, but we still have a long way to go.

The study provides more evidence as to where the problem is, and hope to offer some clues as to what we might do to improve on this difficult problem. Most of the problem arises in the OR, and the attendings are clearly the number 1 source of this public humiliation. Thus, any solution to this problem needs to start with a culture change at the top, in the OR as well as all other areas of the clinical realm.

Surgeons have the unique advantage of often having many hours where medical students encounter attendings in the OR. We must figure out how to use this to our advantage and not to detract from the greatness of the OR experience for our students as, clearly, what happens in the OR does not stay in the OR.

How do we fix what is broken that leads to this problem? What have you done at the University of Alabama at Birmingham (UAB) to provide either carrots or sticks to change faculty behavior as to the treatment of medical students?

I would also like you to comment on how the problems you observed in this study relate to interaction with other departments. The worst area of performance in the AAMC survey at HMS was negative comments related to other specialties, such as bad‑mouthing our colleagues in medicine or in the emergency room as we deal with consulting services.

**DR JULIE ANN FREISCHLAG** (Winston‑Salem, NC): In my role as a medical school dean, I have found student mistreatment to be one of the most concerning, and simultaneously most complex, problems we face as educators. As a surgeon, I find the surgical clerkship's contribution to student reports of public humiliation alarming, and the mixed-methods analysis performed by Dr Lindeman and colleagues provides significant insight into the nature of these events to focus our efforts on prevention.

Schools and surgical clerkships have access to the graduation questionnaire data from their students about mistreatment, discrimination, and harassment. However, even in 2015, to ensure anonymity, free-text responses about mistreatment events were not provided to schools. Therefore, this group's work is a fascinating window into the nature of these events and serves as a call to action.

Particularly disturbing are the findings that over half of mistreatment events reported as free-text occurred in the setting of the surgical clerkship. Perioperative treatment included verbal abuse, including yelling, and abuse involving physical contact was more common in the perioperative setting. Often, we assume that students misattribute events that occur during normal teaching, but this work demonstrates that only a small minority of incidents reported could possibly represent "routine education."

I appreciate the use of the grounded theory approach to develop a more comprehensive understanding of the medical student experience, especially in the perioperative period. I have a few questions about the methodology.

An important element of your approach was the use of independent coders with different experiences and perspectives in medical education. At several points in the coding process, it was important to reach consensus. How did you manage power differences between your raters? Is there concern that the medical student coder would defer to the more experienced members of your group in these conversations?

Thematic saturation was reached after 2,411 events were coded, and the remaining responses were not coded. You then analyzed the location and the perpetrator of events in the coded responses. Can you be confident that the sample you tested is representative of the remainder of the data with respect to these characteristics of the events?

Clearly, there is something different about the perioperative learning environment that creates a higher risk for student mistreatment. I do not believe that surgeons are any less committed to teaching medical students, and I do not buy into the stereotype that surgeons as a group are more prone to incivility than other physicians. These behaviors are not what we expect from our trainees. What is your theory about what is happening here? Are there elements of the hidden curriculum involved? Finally, what are potential areas for intervention?

We are also working on this issue at Wake Forest using our Wake Active Bystander training that teaches team members to interrupt episodes of incivility. However, one of the papers you cite in your manuscript describes a 13‑year effort to prevent mistreatment without much success. Is there a way to make a meaningful impact in our clerkships?

**DR TIM NELSON** (Tulsa, OK): What are you going to suggest we do with this data going forward? One of the concerns I have is that people are going to read the full paper, and they are going to say the students just do not understand what it is like to be on a surgery clerkship, and they are misinterpreting it.

I will point to other work done by Dr Russell, where we did a study and showed that the students understood what unprofessional behavior was. This was not a misinterpretation by them. So how are we going to be sure that people will understand that?

My second question is regarding some of the humiliation and shame. One of the problems is that it can work in the short‑term. So, the people who implement it may see that it benefits their agenda, even though I think it hurts in the long‑term. You sort of win the battle and lose the war. How are we going to help those people come around to see a difference?

**DR DAN STANLEY** (Chattanooga, TN): I really appreciate this as a clerkship director, working with faculty and development, and speaking to the students about what to expect. It has gotten to the point where I tell the faculty to not even touch a student unless you are given permission. We have had situations where someone would guide someone's hand to feel an aneurysm, and that led to an incident report. There are many nuances here.

How do you guide the students about reporting instances of abuse? In other words, coaching them. We are always telling them to tell us if there is anything at all to discuss, because we want to know what is going on. On the other hand, I sometimes wonder if important details are left out and there are allegations. How do you handle this in terms of how to coach the students to give appropriate feedback, and how do you then coach faculty members to do better?

**DR DAN DENT** (San Antonio, TX): I have done some work locally and nationally in faculty development. What I hear is our profession ties holding high standards to bad behavior and vice versa. We are doing it to push the students to be better, but we have traditionally done so in ways that are just not acceptable. Do you have any insight on how to break that tie? I have worked on it some with some mixed results, and I think there is a lot of room for improvement.

Is "perpetrator" the optimal word to have in this discussion? At least one national leader in surgical education has told me that the moment that word is heard, people get defensive and that we could probably come up with a better word.

**DR BARBARA GAINES** (Pittsburgh, PA): I was wondering if, by using this survey, we have additional information about the respondents. In other words, which individuals are at a higher risk for humiliation, so that we can also use that information to help change our behaviors?

**DR WILL CHAPMAN** (St. Louis, MO): I have no doubt that many of the comments submitted are valid. I do think that in some circumstances, it is in the eye of the beholder. We have had an individual reported for asking a question in front of others that the person did not know the answer to, and they felt humiliated.

At our institution, if a medical student gets a high pass in surgery, they will come back to understand what they did wrong. So, the trend is the students seem to me to be very sensitized. What this can lead to is hands-off for the students. What does that mean? That means they are in an observership. They can observe what happens, and it is not 8 weeks anymore, it is 4 weeks, or sometimes 2. So, come to your observership; you can see what happens here. It will be a pass‑fail system. We are not going to have grades, and over the long term, the education piece to me disappears.

**DR BRENESSA LINDEMAN** (Birmingham, AL): Regarding the power differences between raters, I think one unique thing about the study is, a priori there was not a correct answer one may assume to be driving toward. I think that really helped to eliminate any sort of power differences.

Additionally, our strategy was to ensure that when there was a conflict, every person, not just the 1 or 2 people who disagreed, but every person, had to state their rationale for why they rated as they did, and a group consensus was achieved in that way.

In terms of our coded sample being representative of the whole, thank you so much for pointing out that important question that highlights an area of omission. We did look at the demographic information between the coded and non‑coded responses and identified there were no significant differences in terms of race, sex, or age between those that were coded and non‑coded. If anything, the coded sample was slightly enriched for individuals who were from underrepresented in medicine backgrounds.

In terms of whether this is a function of the perioperative environment, we agree with particularly Dr Freischlag's observation that surgeons are no less dedicated educators than other types of physicians.

In earlier work from our institution, which I had the privilege of doing with Dr Martin Heslin, we analyzed disruptive behaviors by physicians at our institution. With that framework, we found that urgent competing responsibilities were responsible for many of the scenarios in which those disruptive behaviors occurred and were most commonly one-off events rather than an ongoing pattern of behavior by specific bad actors.

I believe that a similar phenomenon is occurring; that the perioperative environment is one in which there are frequently urgent competing responsibilities, which sets up a situation of high stress that can lead to the types of behaviors we have described.

With that said, however, I also believe there is a seldom-discussed culture within surgery that can set up adversarial types of relationships that may also foster these behaviors if students find themselves on the wrong side of that relationship. As surgeons–and I can raise my hand and say that I do this as well–we often position ourselves as our patient's best or sometimes last advocate, pushing things to get done within the health system, and sometimes that is out of necessity. But if what this fosters is an "us vs them" mentality, and students find themselves on the wrong side of that alignment, it could also potentially foster some of the behaviors that we have been discussing today.

I will now move toward what everyone is more interested in, myself included–thinking about solutions. Given our belief that most of these events were one‑offs, centered around the stress of urgent competing responsibilities, I would put forward that it is likely not simply a matter of coaching students about expectations for the perioperative environment; we likely need more interdisciplinary training. I did not speak as much about events from other members of the team, but other members of the team were frequently implicated in perioperative events. So, we need more interdisciplinary training on how to manage high-stress situations, ideally using a shared language and a shared mental model to confront these situations more directly in an interprofessional manner.

I wanted to address both of Dr Lillemoe’s questions together, because this is something we have discussed at our institution. I would tell you that the finding that the surgery clerkship performs most poorly on the graduation questionnaire is a national phenomenon, but one mechanism we have discussed–and this was inspired by Dr John Cameron and some of the tactics that he had used when he was chair at Johns Hopkins–is to leverage a surgeon's competitive nature to our advantage.

We cannot act upon these data that are gathered and only reported back annually, but most of our institutions collect internal data. So, using that internal data, feeding that back to the faculty, and publicly showing which services or which divisions are performing best is at least one way to begin to develop a strategy for the low‑hanging fruit, especially around things like specialty choice bias. Students believe they are being targeted when they tell us that they are not planning to apply to surgery, or they tell us they want to be a family medicine physician. They receive comments like, "Well, why would you want to do that? You are too smart to do that."

I think those are some of the ways we can begin to address this, but I also think we need to take a very proactive approach. As I said before, it is not simply about coaching the students about expectations for the perioperative environment. I think what students need, and what we all can benefit from is, to Dr Chapman's point; they need a defined role. We need to understand what the expectations of students are, and we need to implement principles of good feedback.

Regarding the examples on routine education, I do not know where your opinions landed, but to me, those were not mistreatment events. However, the students believed that they were, and that all of them could have been addressed differently if the student had been taken aside and addressed in private rather than in a public setting.

Finally, to Dr Dent's point about high standards being equated with bad behavior, I agree with you that this has been a cultural paradigm which has been long-standing, but one I believe can also be addressed with coaching in advance. What I mean by that is to tell people, “This is what I expect of you, and if I am telling you that you are not meeting the expectation, it is because I only want to help you get better.” I think this is an area where we need further robust studies as we move forward toward these types of solutions.

Lastly, regarding the word "perpetrator," I agree; it gave me a little bit of discomfort as well. I do not have an alternative to offer at the tip of my tongue, otherwise I would have used it. Perhaps we may need to frame these events in terms of the accused and the accuser, or alleged mistreatment, so we recognize that these are not written in stone and a verdict has not already been reached before the incident is further investigated.