Coaching Surgeons

Is Culture Limiting Our Ability to Improve?

Dorotea Mutabdzic, MD, MEd,* Maria Mylopoulos, PhD,†‡§ Michael Lucas Murnaghan, MD, MEd,*¶ Priyanka Patel, MSc, || Nathan Zilbert, MD, MEd,* Natashia Seemann, MD,* Glenn Regehr, PhD,** and Carol-Anne Moulton, MBBS, PhD, MEd*ࠠ

Objective: To explore surgeons' perceptions of and potential concerns about coaching.

Background: There is growing recognition that the traditional model of continuing professional development is suboptimal. This has led to increasing interest in alternative strategies that take place within the actual practice environment such as coaching. However, if coaching is to be a successful strategy for continuing professional development, it will need to be accepted by surgeons.

Methods: This was a qualitative interview-based study using a constructivist grounded theory approach. Participants included 14 surgeons from University of Toronto-affiliated hospitals.

Results: Participants expressed 3 main concerns about coaching: questioning the value of technical improvement ("As you get older if you don't have the stimulation from surgery to get better or to do things that are different and you are so good at so much, why bother [with coaching]?" P009), worry about appearing incompetent ("I think it would be perceived as either a sign of weakness or a sign of inability" P532), and concern about losing autonomy ("To me that would be real coaching where it's self-identified, I'm motivated, I find the person and then they coach me" P086).

Conclusions and Relevance: Coaching faces unique challenges in the context of a powerful surgical culture that values the portrayal of competency and instills the value of surgical autonomy. This study suggests that hanging on to these tightly held values of competency and autonomy is actually limiting the ways, and extent to which, surgeons can improve their practice.

Keywords: coaching, continuing professional development, expertise, lifelong learning, surgery

(Ann Surg 2015;262:213–216)

ecognizing the rapid advancements in medicine and the evidence that provision of care can often be substandard, many professional bodies have mandated physician engagement in formal ongoing learning activities.² Continuing professional development (CPD)

From the *Department of Surgery, University of Toronto, Toronto, Ontario, Canada; †Department of Pediatrics, University of Toronto, Toronto, Ontario, Canada: †The Wilson Centre, University of Toronto, Toronto, Ontario, Canada: §SickKids Learning Institute, Hospital for Sick Children, Toronto, Ontario, Canada; ¶Division of Orthopedics, Hospital for Sick Children, Toronto, Ontario, Canada; ||Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada; **Department of Surgery and Centre for Health Education Scholarship, University of British Columbia, Vancouver, British Columbia, Canada; and ††Division of General Surgery, University Health Network, Toronto, Ontario, Canada.

Disclosure: Supported by the Canadian Medical Protective Association Grant Program. Dr Mutabdzic was supported by the Royal College Fellowship for Studies in Medical Education. The authors have nothing to disclose.

Reprints: Dorotea Mutabdzic, MD, MEd, Department of Surgery, University of Toronto, The Wilson Centre, 200 Elizabeth St 1ES-559, Toronto, Ontario, Canada M5G 2C4. E-mail: dorotea.mutabdzic@gmail.com.

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ISŜŇ: 0003-4932/15/26202-0213

DOI: 10.1097/SLA.0000000000001247

has been defined as "a process of lifelong learning in practice" and encompasses the development of managerial, social, and personal skills in addition to the advancement of medical knowledge.³ The traditional model of CPD assumes that physicians are self-directed learners and able to identify their own knowledge gaps, select appropriate educational activities to address these gaps, and incorporate newly learned material into their practice.4

Several authors have pointed out flaws in the assumptions made about learners in the traditional CPD model.⁵⁻⁸ Furthermore, the effectiveness of traditional lectures and workshops in achieving practice change has been limited and inconsistent, leading many to suggest alternative formats of CPD.^{9,10} Thus, there has been increasing interest in elaborating and formalizing educational strategies that take place within the actual practice setting.^{6,7} One growing area of interest in this regard is the practice of coaching.^{7,11–13} Although coaching has had widespread uptake in athletics, the transfer of coaching to other professions such as teaching and medicine has met significant challenges. For example, some teachers have felt that coaching was used by administrators to standardize teaching and improve school ratings rather than to develop teachers. 14,15 If coaching is to be a successful strategy for CPD in medicine, it must be willingly accepted and adopted by clinicians. The purpose of this study was to explore clinicians', and in particular surgeons', responses to the idea of having a coach in the operating room (OR) and to examine their concerns and sources of resistance.

METHODS

This study used a constructivist grounded theory approach, which recognizes contextual influences on data and allows theoretical constructs to emerge from the data, from the ground up. 16 After receiving approval from the University Health Network and University of Toronto Research Ethics Boards, participants were recruited by e-mail. Purposive sampling was used to enroll surgeons from a variety of surgical subspecialties with varied levels of experience, as previous data have shown that coaching techniques differ with surgeon experience level. 13 Twenty-four e-mail invitations were sent: 6 surgeons did not respond, 2 declined to participate (1 due to illness, 1 lack of interest), 2 responded with interest but were unable to find time to participate, and 14 agreed to participate and were subsequently interviewed. We conducted semistructured interviews to explore surgeons' perceptions and attitudes toward coaching. Participants were offered an honorarium of \$75 for their time. Because no unified definition of coaching existed in the literature, 12,17 we derived our definition from a conceptual analysis of literature on developmental interactions such as teaching, coaching, and mentoring.¹⁷ We defined coaching to be a social interaction that aims to develop expertise by setting specific goals and providing feedback to achieve those goals.

Interviews took place between November 2013 and August 2014. The first interview was co-conducted by C.A.M. (staff surgeon) and D.M. (surgery resident), with subsequent interviews conducted by D.M. Interviews were audio recorded and transcribed. Participants were assigned a randomly generated 3-digit ID number. Each transcript was read by 2 members of the research team, D.M. and an additional member (1 or more of C.A.M., P.P., N.Z., N.S.) who had training and experience with coding in constructivist qualitative studies. Transcripts were coded using NVivo software (2007; QSR International Pty Ltd, Doncaster, Australia) to facilitate separating, sorting, and synthesizing the data. 16 Disagreements in code assignment were resolved by discussion until consensus was reached. Coding and analysis took place in an iterative fashion so that analysis of each transcript directed the concepts to be explored in subsequent interviews. At regular intervals, the larger research team met to refine, build, and discuss the emergent thematic structure.

In the initial interviews, we noted a predominant resistance toward coaching in surgery, with only a few participants expressing a positive attitude. To ensure that both perspectives were heard, we used a snowballing method to deliberately find participants with more positive attitudes toward coaching. 18,19 The last 3 interviews were used in part for member checking, to examine whether the emerging results resonated with participants.¹⁹ After completing 14 interviews, we felt that data saturation had been achieved because fresh data no longer led to new insights or revealed new properties of existing theoretical categories. 16,18

RESULTS

Participants included 14 staff surgeons from 7 University of Toronto-affiliated hospitals. Six participants had less than 10 years of practice experience, whereas 8 had more. The surgical subspecialties represented in the sample were general surgery (n = 6), orthopedics (n = 3), urology (n = 2), thoracies (n = 1), otolaryngology (n = 1), and gynecology (n = 1). Three participants were female. Although interviews also explored coaching for other aspects of surgical practice, they focused predominantly on coaching for performance in the OR.

All participants described activities they have engaged in for the purposes of improving their technical skills, beyond formal training. These included seeking out colleagues' advice, attending seminars and courses to learn new procedures or techniques, and learning from their involvement with surgical trainees. Many surgeons felt their technical skills had improved over time simply due to the experience of performing more operations. Although some of these activities involved external feedback, they did not fit the more formal definition of coaching used in this study.

Throughout the interviews, most participants expressed ambivalence toward coaching as a strategy for CPD. Many understood the benefit of coaching, and a few expressed excitement at its potential, but all presented a multitude of reasons why it might be difficult to implement coaching in their practice environment. Further exploration led to the identification of 3 main concerns. Two participants perceived relatively little value in actively pursuing technical improvement. For the remaining participants who clearly expressed a desire to improve technically, a worry about image and loss of self-regulatory control emerged as significant concerns.

The Value of Technical Improvement

Two surgeons very candidly expressed no interest in actively pursuing improvement in operative performance but rather described a desire to invest their time and effort into improving other aspects of their practice. They elaborated that the academic surgeon has many roles, and they personally experienced greater enjoyment in research or teaching than in operating.

I think I'm very good at what I know ... as you get older if you don't have the stimulation from surgery to get better or to do things that are different and you are so good at so much, why bother [with coaching]? (P009)

Furthermore, these participants were not convinced that improving their already very good operative skills would result in improved patient outcomes, which depend to a large extent on other factors. One participant, who was renowned for managing patients with a particularly complex condition, expressed understanding that he could improve in an unrelated operation. However, this surgeon decided that he would rather limit his surgical repertoire to maintain a level of expertise in one specific area rather than increase his scope of practice at this stage of his career.

Is that really how I want to spend my time? Do I want to do that case? Why am I learning to do it? Maybe I should just stick with things that other people aren't doing that I have expertise in, maybe that's a more valuable use of my time. (P086)

Other participants noted that operative mastery was not valued in the academic surgical culture as much as research productivity or leadership positions. Technical skills were not evaluated on performance reviews apart from ensuring that the surgeon did not have an aberrant rate of complications.

You are expected to teach, expected to do research, you are expected to write grants and that is the metric by which you are sort of gauged. The quality of your technical skills is not a measure of which anyone gives sort of enough weight. So it's very easy to say I'm pretty good or I am good, my outcomes are fine, I've got bigger fish to fry. (P516)

In a context where a variety of skills are valued alongside technical ability, some participants felt that their operative skills were sufficient and that, given their limited time, there were different challenges they would prefer to take on as part of improving their practice.

Concerns About Image and Authority

The majority of participants nonetheless expressed a desire to actively pursue technical improvement that they felt was central to surgical expertise. However, many were also concerned that having a coach would be synonymous with incompetence.

There would be a high risk of it having negative perceptions by people, so whether it's nurses, residents, fellows I think it would be perceived as either a sign of weakness or a sign of inability or a sign of lack of confidence because it's not the norm. (P532)

Surgeons described cultural expectations to be "all-knowing, all-seeing, and a little God like" (P333), to excel in their practice, and to make no mistakes ("we are supposed to be perfect, we're surgeons" P619). Participants felt pressure to portray this image of competence to their colleagues and questioned the possibility of maintaining that image while being critiqued by a coach in the OR.

You are supposed to be the big dog expert and so I think it takes a lot of pride swallowing to the next day have a coach come in and critique you openly in front of people and then the day after that you are back to being the only one in the room and you need everyone to take you just as seriously and with as much respect as they took you the day before. (P043)

A few surgeons suggested that coaching would work best if it were broadly implemented for all surgeons in their division or group so that no one surgeon would be singled out. On the basis of a similar justification, some surgeons suggested they would be more comfortable reviewing videos of their surgical procedures with a coach in private, rather than being critiqued in the OR.

Some participants seemed less concerned about how having a coach would make them appear. They described strategies for helping others to "save face" in these situations. One surgeon, recounting an

experience of operating with a senior colleague, described how the senior colleague directed teaching comments at his trainees, but this participant knew the comments were meant for him:

He would often couch the comments teaching the resident or the fellow in the room but I would know or I assumed that he knows that I'm listening in and it's as much for me as it is for the resident. (P043)

In similar ways, this participant felt a coach could use strategies for saving face in front of trainees, nurses, and other colleagues. This was not, however, a uniformly appreciated or assumed expectation, with most participants assuming that coaching would risk loss of authority among other members of the OR team.

Loss of Self-regulatory Control

Another important issue that participants raised was a concern that, by accepting a coach, they would lose control over the self-regulation of their learning agenda. Thus, for coaching to be considered, they expressed a desire to control many aspects of the coaching process. In particular, they wanted to control the parts of their practice that would be open to coaching. They wanted to avoid getting advice on trivial matters, such as selection of suture material, and did not want to be coached to simply conform to the coach's preferences. Most participants worried they would not be able to retain the "final say" in the moment for determining whether advice from the coach worked for them. Moreover, participants wanted control over the selection of a coach, someone they respected and trusted; they were reluctant to accept coaching from "just anyone."

To me that would be real coaching where it's self-identified, I'm motivated, I find the person and then they coach me. Then I decide when I have had enough coaching. (P086)

Although participants appeared concerned about the loss of control, they did appear to be open to coaching providing they were able to retain autonomy.

DISCUSSION

Our findings raise key issues about the assumptions built into current conceptions of coaching and its place in CPD. Some participants expressed no desire to pursue formalized mechanisms for operative improvement, expressing the view that surgical expertise is more than technical mastery. Those who did report wanting to improve technically raised important concerns about whether coaching would risk portraying an image of incompetence or would restrict their autonomy and control over decisions, both of which were felt to be important aspects of their professional life. A better understanding of these issues could help the development of novel and potentially more effective CPD strategies, such as coaching.

In the exploration of the perceptions and attitudes of surgeons toward coaching, this study challenged the assumption that all surgeons would be motivated to improve technically. The desire to improve is often viewed as a vital component of expertise. Bereiter and Scardamalia,²⁰ for example, drew a distinction not between expert and novice but rather between a true expert and experienced nonexpert. They suggested that true experts continually push themselves to progressively improve their practice, whereas experienced nonexperts gradually constrict their practice to fit into the routines they have already learned. Taking this definition of expert, those surgeons who expressed no desire to devote explicit time and energy to improve operatively might not be viewed as true experts. However, our results highlight that surgical expertise is a complex interaction of multiple competencies rather than simply technical skills. In our study, there was variability in the perceived value of pursuing technical improvement compared with pursuing improvement in other domains. One participant who did not express a desire to pursue technical improvement had recently hired a leadership coach. Rather than being viewed as generally complacent, these participants felt it was impossible to challenge oneself to improve at everything at all times (as Bereiter and Scardamalia²⁰ also conceded). It appeared that the academic surgeons we sampled chose areas in which to focus their formal efforts at ongoing improvement, and some were not convinced they should prioritize technical expertise at this stage in their career.

Of the surgeons who did clearly express a desire to improve technically, one of the primary concerns about being coached was image. Participants worried that simply by having a coach they would be portraying incompetence and wondered how having a coach might affect their ability to command respect from their colleagues and maintain authority in the OR. The importance of portraying a certain image in surgical culture has previously been explored.²¹ The concept of image management was used to explain the pressures surgeons might feel in portraying an image of competence as they struggle with the decision about whether to call for help in the OR.²¹ Because of strong social pressures to behave a certain way, surgeons sometimes choose behaviors that allow them to manage their image despite a desire to act differently.21,22 Previous work has also highlighted the importance of appearing competent in learning, with such concerns sometimes becoming barriers to physicians asking for and learning from feedback.^{23,24} Interestingly, Watling et al²³ found differences in learning cultures between medicine and music in that medicine's emphasis was on performance of competence compared with music's emphasis on improvement. Consistent with these results, the participants in our study who expressed concern about image appeared to value the projection of competence over actual improvement

Related to this concern that simply having a coach could portray incompetence, our participants also expressed concerns that the nature of the interactions with a coach in the OR might make them look incompetent. This speaks importantly to an aspect of feedback that is not well represented in the medical education literature. That is, the existing literature on feedback delivery has tended to focus on how to deliver feedback in a manner that effectively stimulates behavior change.²⁵ In our study, participants' concerns regarding feedback delivery seemed to focus more on the sensitivities involved with preserving a surgeon's credibility and authority. Specifically, participants stressed that the coach would need to provide feedback in a way that would allow the surgeon to save face. In another study, general practitioners, when asked about whether they would challenge their colleagues' prescribing practices if they did not agree, highlighted the importance of respecting "clinical etiquette" in these situations.²⁶ This was based on the need to protect a colleague's clinical autonomy which precluded them from interfering, scrutinizing, or even influencing that colleague's practice. In the setting of shared practice formularies and previously agreed upon treatment regimens, there seemed more freedom to discuss general prescribing preferences among colleagues than to discuss details around specific patient care.²⁶

In contrast to previously explored concerns about feedback delivery in a context where feedback is given in private, the participants in our study identified a unique concern about feedback delivery when it is given in front of colleagues. These results raise questions regarding the balance between feedback being immediate, clear, and explicit and subtle and contextually sensitive to saving face—following a code of acceptable behavior or "etiquette." In addition, it leads to questions regarding the extent to which such issues need to be negotiated in the context of a coaching relationship so as to engender trust between the learner and the coach.

Finally, our data highlighted our participants' strong desire to maintain a sense of control in the context of the coaching process.

This desire for control manifested itself in almost every aspect of the situation including who might be chosen as a coach, the areas of learning that might be addressed, and the decision of how, and even whether, to incorporate the coach's advice into practice. In fact, viewed in light of this concept of control, the participants who did not want to actively pursue operative improvement were, in effect, exercising the desire for control of their learning agenda by choosing to focus on areas other than operative technique. Of course, there are multiple lines of evidence to suggest that physicians' current model of independent self-directed learning could be improved with collaboration. For example, studies have demonstrated that physician self-assessment is often inaccurate,5,8 that self-guided learners fail to optimize learning without some form of external direction,²⁷ and that many physicians have difficulty engaging with negative feedback on their own. 7,28 Yet, the desire for maintaining a sense of control appears to be an important consideration that must be acknowledged if effective coaching is to be enacted in the medical (or at least the surgical) arena. It seems necessary that coaching programs in surgery start with some negotiation over control because coaching in its traditional sense could not be achieved with the surgeon "as learner" having full control.

It might be considered ironic that a surgeon's culturally embedded value of performing competence may be the very thing that prevents further development of competence. Although there may be many reasons why certain values have become so important in surgical culture, they may also limit the format of CPD that surgeons pursue, leading them to favor independent learning. It seems a cultural shift may be necessary so that those who chose to collaborate with a coach to optimize learning might be congratulated for their wisdom rather than be judged and labeled as incompetent.

CONCLUSIONS

For those surgeons who are motivated to improve technically, coaching may be a useful strategy if concerns about image and autonomy are addressed. One potential way to allow surgeons to preserve an image of competence may be for coaches to deliver feedback that is constructive but allows the surgeon to save face. Coaches should be sensitive to a surgeon's need to be in control of the learning process and explicit negotiation of control is suggested. It is worthy to note that at certain times of a surgeon's career, the surgeon may not choose to actively pursue technical improvement, choosing instead to focus on other perceived desirable competencies.

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