Guiding the Way: Faculty Perceptions on the Roles of Mentoring, Advising, and Coaching in Graduate Medical Education

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Submitted to: JMIR Medical Education
on: May 06, 2024

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Abstract

Background: Background/

Objective: Mentoring, advising, and coaching play vital roles in supporting resident education and development. However, limited data exists regarding how anesthesia faculty view these practices. This study explored faculty perspectives on the importance, implementation, and barriers related to these resident support modalities.

Methods: A survey was distributed to 93 anesthesia faculty at Washington University eliciting perceptions regarding mentoring, advising, and coaching. Both quantitative Likert scale and qualitative short answer questions examined the value, optimal format, necessary skills, potential to fulfill multiple roles, impact of staff shortages, training needs, and recruitment potential of these resident support practices.

Results: The response rate was 44% (N=41). Mentoring was viewed as most important (88%), followed by coaching (78%). Majority felt one faculty member can effectively hold multiple roles for a given trainee. All roles were seen as facilitating recruitment and retention. Barriers included faculty burnout, confusion between roles, time constraints, and desire for specialized training, especially in coaching skills

Conclusions: Conslusion: Implementing structured mentoring, advising, and coaching can profoundly impact resident education but requires role clarity, protected time, culture change, leadership buy-in, and faculty development. Targeted training and operational investments could enable programs to actualize immense benefits from high-quality resident support modalities. Respondents emphasized that resident needs evolve over time, necessitating flexibility in assigning appropriate faculty guidance. While coaching demands unique skills, advising hinges on expertise and mentoring on relationship-building. Systematic frameworks outlining expectations, assignments, documentation procedures, and success tracking could unlock immense potential. However, realizing this vision demands surmounting barriers like burnout, productivity pressures, confusion about logistics, and culture change. Ultimately, prioritizing resident support through high-quality personalized guidance can re-center graduate medical education on nurturing learners amidst competing service obligations.

(JMIR Preprints 06/05/2024:60255)
DOI: https://doi.org/10.2196/preprints.60255

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Introduction

The COVID-19 pandemic has introduced numerous complexities into residency education. Traditional didactic methods were disrupted as residents were required to focus more on clinical duties. The once vibrant collegial academic atmosphere was dampened by isolation. Burnout began to erode professionalism and empathy among residents. As we navigate beyond the pandemic's impact, residency medical education stands at a pivotal juncture. The current landscape of medical education is influenced by both medical culture and shifting demographics among learners. Factors such as medical provider burnout (1), a nationwide shortage of medical staff (2), and the evolving characteristics of different generations of learners are reshaping medical education (3). It's imperative that the well-being and guidance of learners, both personally and professionally, are re-centralized as the core of medical education. Emphasizing principles like advising, mentoring, and coaching is crucial to support learners in their journey towards academic and personal fulfillment. These principles should be thoroughly examined and reevaluated to empower learners to pursue paths of academic and personal success, foster self-assessment, ensure a nurturing learning environment, and encourage a commitment to lifelong learning (1,2).

Literature Review

The education and welfare of medical residents hinge upon a multifaceted network of connections. Residents at different stages of their training will necessitate varying forms of engagement: mentoring, advising, or coaching. While these three avenues are distinct, they all share the common aim of nurturing education, wellness, and career progression. (2,3) Each approach serves its unique purpose and employs diverse methodologies. (2) Identifying the most suitable modality for the learner is paramount. Facilitators must adeptly involve themselves and customize sessions to ensure that expectations and objectives resonate with the learner. (2)

Traditionally, mentoring has been the primary means of providing guidance (4). It entails a sustained personal relationship between mentor and mentee, with the learner's overarching aspirations guiding the interaction. Conversations, career mapping, and counsel are derived from the mentor's experiences and expertise. (2,3) Typically, mentors possess knowledge in the pertinent field and share their insights with the learner. The mentor guides sessions, posing direct questions with long-term goals as the focal point. In residency education, mentoring often follows a structured format, though informal mentorships may naturally evolve. Institutions may request mentors to provide feedback or document these sessions for accreditation purposes. (2,3)

Advising typically comprises a single, informal session focused on a specific issue or inquiry. The advisor leads the session and provides solutions or strategies based on their own experiences. The learner has the autonomy to decide whether to heed the advice. Unlike mentoring, a sustained relationship is not necessarily a prerequisite for advising, and subsequent follow-up is usually with independence and self-driven by the needs of the advisee (5). Advisors may possess limited insight into the learner's personal or academic strengths and weaknesses, resulting in advice limited to specific scenarios (6).

Academic coaching differs from advising and mentoring in that it prioritizes the learner's agency. Coaches refrain from offering advice or engaging in decision-making. Instead, their role is to facilitate self-discovery and create a supportive atmosphere for self-assessment and future planning. (2) Coaches assist learners in identifying actions that may lead to success or failure. Unlike mentors and advisors, coaches may not necessarily possess expertise in the medical field. Coach engagement is supported by actively listening to the learner and offering questions to encourage self-awareness. Coaching fosters a consistent, enduring relationship characterized by an educational partnership between coach and learner. (2)

No single form of guidance is adequate to meet the needs of today’s students and students’ needs evolve as they move through residency (7). Faculty must be facile in their ability to intuit what type of guidance is appropriate for a specific student or situation, and be able to provide that guidance, or refer the student to someone who can (8). For this reason, faculty development programs play a crucial role in supporting faculty as they rise to meet the challenges of guiding medical students, and faculty training in these support modalities may be lacking (9). Training educators on how to target student needs by utilizing the most effective guidance strategy will help decrease role confusion (8). Training and developing faculty in advising, mentoring and coaching helps cultivate an ongoing culture of scholarship (10), and can help faculty navigate the competing challenges of their clinical and non-clinical roles (11). Faculty report that lack of support from leadership and lack of proper training are barriers to their role as advisors, coaches, and mentors (11), and training and assessment tools for faculty members is crucial (7,9).

Methods

A survey was sent to 93 Washington University School of Medicine Anesthesiology clinical educator faculty. This survey was developed based on core competencies and conceptual

differentiations outlined for the roles of advisors, coaches, and mentors in medical education (5,6,8,9). Drawing from Wolff et al., (9), support modality definitions and key characteristics were designed to reflect critical distinctions regarding focus, relationship context, longevity, skillsets, and objective alignment (9). Survey questions were formulated to assess physician perspectives across these theoretical domains for each resident support role.

Quantitative items examined perceptions of importance and optimal configurations applying Wolff et al.'s (9) principles regarding situational demands and need for role clarity (9). Qualitative questions elicited feedback on specialized skills, training interests, and implementation barriers grounded in advising, coaching, and mentoring competency frameworks (5-9). The sequence of survey topics reflects established theory comparing and contrasting these support avenues (5-8).

After a brief textual description of the difference between the roles of Mentor, Advisor, and Coach, respondents were asked how important they thought each role is in graduate medical training, whether one individual can fulfill all three roles, what kind of training is needed for faculty to perform these roles, and does resident needs for different form of faculty relationship change over time. In addition, faculty were asked if they had ever performed any of the three roles. Questions were both quantitative on a Likert scale, and open-ended short response. 41 surveys were completed (44 percent).

This study employed utilizing both quantitative and qualitative data collection and analysis. The study was approved by the Institutional Review Board (IRB) at Washington University. IRB # 202310164. Faculty were informed about the study via an initial email announcement, followed by two reminder emails.

Quantitative data were collected using the Research Electronic Data Capture (REDCap) platform, a secure web-based application designed to support data capture for research studies. Data were analyzed using descriptive statistics.

Qualitative data were collected through open-response questions included in the REDCap survey. The text from these open-response questions was analyzed using the Dedoose coding themes

platform. One author (KB) conducted the initial coding and analysis of the qualitative data in Dedoose. After the initial coding, two members of the research team (KB & SN) met to reconcile coding impressions and identify common themes that emerged from the data.

Results

Respondents had varying opinions about the importance of mentoring, advising, and coaching in graduate medical education. Mentoring was seen as most important, with 88 percent of respondents indicating that they agreed or strongly agreed that it was important, and coaching was seen as less important, with only 78 percent of respondents indicating agreement or strong agreement that it was important. See Figure 1.

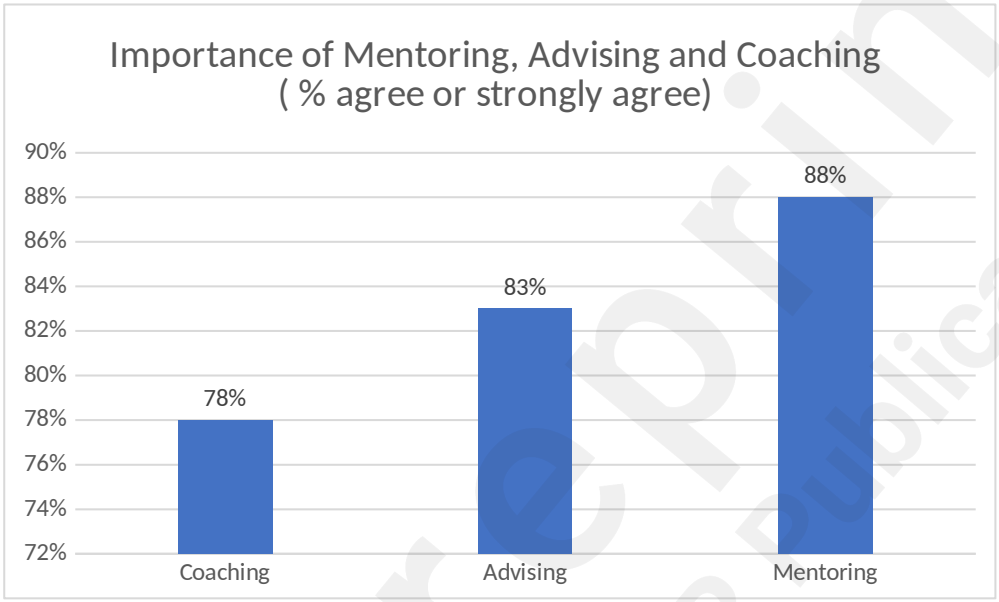

Figure 1. Importance of Mentoring, Advising and Coaching

90 percent of respondents agreed that one faculty member could fulfill two or more roles for a single resident. For example, respondent 2 replied, “Faculty can possess more than one skill set and/ or the relationship between a faculty and resident may benefit from a multi-faceted focus once trust has been developed.” However, others noted that there may be conflicts between roles and that the unique skills required for each role are not always possessed by the same person. Respondent 3 noted, “This works sometimes, I think, but can't dependably work all the time. Some faculty are better at one role or another. Obviously, some coaching and advising can only be done by faculty with certain skills or areas of expertise.”

Respondents identified barriers to faculty holding two or more roles for the same resident. These barriers included faculty burnout, time limitations, and confusion for the resident and faculty member if roles are not clearly defined. Respondent 10 said, “The residents have so many rotations. It's rare to have consistent clinic time to coach and mentor/advise. Coaching off hours is very time consuming.” Lack of time, especially for coaching, was mentioned by many respondents.

Most respondents agreed that specialized training in all three roles was important, especially for coaching, which was seen as requiring a unique skill set. Some formal training for all three roles was endorsed, especially for coaching. Some respondents noted that the skills required for the roles came naturally to some faculty. For the advising role, having career experience and expertise in the graduate education process was seen as especially useful. For example, respondent 10 noted, "Knowing the residency experience well and knowing what challenges residents face. Also, it's important to know career options after." Mentoring was regarded as being based on relationship building and interpersonal skills, as well as emotional intelligence. Having experience with past mentoring was also viewed as key to mentoring success, although as one participant noted, being a good clinician did not guarantee teaching skills. Respondent 21 explained,

> Teach the teacher/instructor courses are helpful. Being a good clinician and/or researcher do not provide us the skills of being a good teacher. A bit of more understanding, empathy, and psychological support are necessary for knowing ourselves better and using these abilities for others. Patience, more listening, time, sharing experiences, sometimes coming up with a challenging scenario to discuss, widen the horizon, show other possibilities never thought of before as options.

Most respondents indicated that they would be interested in targeted training about coaching (63 percent), but were less interested in specialized training in advising and mentoring skills. See Figure 2.

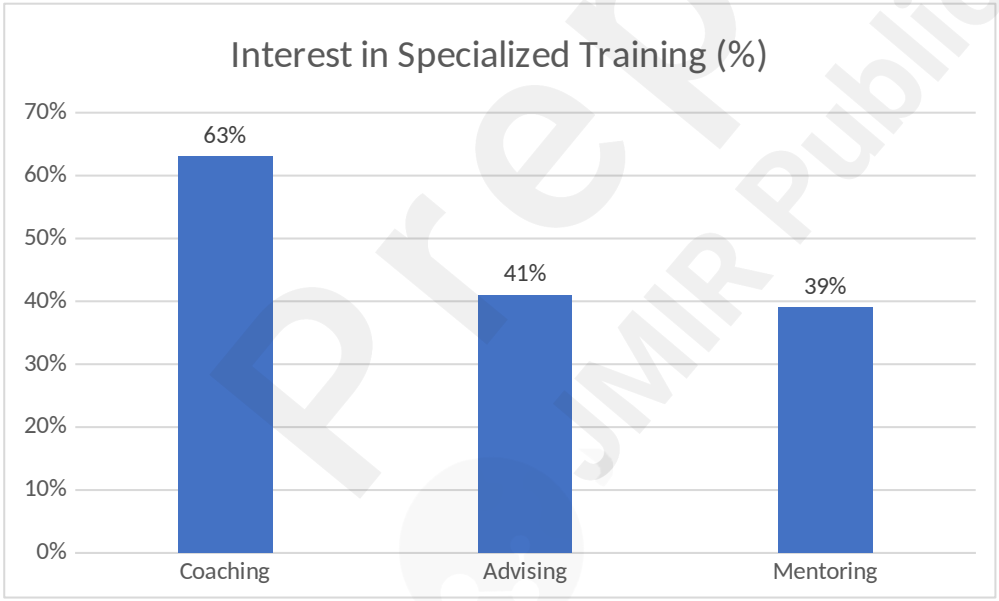

Figure 2. Interest in Specialized Training in Coaching, Advising, and Mentoring

Nearly88 percent of respondents had fulfilled one or more of these roles in their career, and they noted that holding all three roles was personally and professionally rewarding. Of the 36 faculty members who reported fulfilling these roles in the past, 15 mentioned the satisfaction of watching students progress through their training and career. Coaching was noted as being the most challenging, but also the most rewarding. For example, respondent 22 said, "Honestly, I think that serving in this role for strong residents is one of the most rewarding parts of my job. I love to see people be successful in their careers." Barriers to good mentoring, coaching, and advising were also brought up, as respondent 29 explained "I was a terrible mentor. Never could find time to meet with my mentee."

Respondents had mixed responses about whether the national anesthesia provider shortage had impacted their engagement with or performance of any of these roles. Respondents noted lack of time in general, and lack of protected time more specifically, as factors influencing their ability to engage in these roles. For example, respondent 17 said,

> These 3 are probably even more important for our trainees and may be beneficial to expand these past trainees and onto faculty as well. The shortage has decreased faculty time to provide these aspects, may be important for departments to assign a subgroup of faculty to serve these roles so time is protected.

Finally, respondents expressed that providing these roles to residents would support the medical school's ability to attract and retain residents and faculty. For example, respondent 3 noted, "if it were made clear that we offered thoughtful assignment of each of these roles, with examples for coaching and advising, I think that would likely be seen as a significant benefit." Others agreed that providing these roles to residents in a systematic way would be beneficial for recruitment, but noted barriers to implementation, as respondent 33 explained,

> I think that these three roles are important to recruit residents for fellowships and faculty. Fostering a supportive environment through these roles is very important for recruitment; however, other factors such as the job market and hours worked often overshadow these aspects in recruiting.

However, many barriers to implementation were mentioned, including faculty burnout, lack of protected time, staffing shortages, and lack of training. Respondent 23 noted that other issues were more pressing, and said,

> No wonder you have a hard time recruiting. This is a factory and not an academic institution anymore. These three roles are only topping. The base is to be fixed - less productivity push, more recognition to clinicians from leadership, better teamwork better communication among teams.

Key Themes and Representative Quotes	
Faculty Can Fulfill All Roles	I think coaching and mentoring can easily overlap with some goals, particularly clinical goals, falling more into a coaching category but other longer-term goals requiring a mentoring relationship. (#41)
Faculty Should Not Fulfill All Roles	Generally speaking, limited experience and time of faculty member to

	meaningfully contribute to multiple roles. Trainees would probably benefit from developing relationships with other faculty members. (#12)
What Barriers to Fulfilling All 3 Roles	Time is number one. OR can be busy and patient care must be priority. Some relationships cannot be forced especially with mentorship. I think there has to be a bond between the mentor and the mentee before a meaningful mentorship will ensue. (#30)
Did you Find the Advising/Mentoring/Coaching Experience Rewarding	Yes-I have provided all three. Honestly, I think that serving in this role for strong residents is one of the most rewarding parts of my job. I love to see people be successful in their careers. (#22)
How has National Provider Shortage Impacted your Delivery of these Roles?	Yes. No time to do it and push for productivity rather than excellence. Dark times. (#23)
Would These Roles Help Recruitment?	Mentoring through long-term development of relationship the faculty member demonstrates the value of a long-term career relationship at WU. (#7)

Table 1. Main Themes and Representative Quotes

Discussion and Conclusion

This study explored perceptions of anesthesia faculty regarding the roles of mentoring, advising, and coaching in graduate medical education. The results highlight the perceived benefits of these practices as well as barriers to implementation.

The survey results indicate that faculty view mentoring, advising, and coaching as important for resident education and development. These practices have been shown to improve resident wellbeing, promote career planning, facilitate reflection and self-assessment, and identify knowledge gaps (5,6). Furthermore, implementing structured programs in these areas can aid recruitment and retention of both residents and faculty.

To actualize these practices, each department must clearly define the roles of mentor, advisor, and coach. Expectations, training requirements, time commitments, and documentation procedures should be delineated. Assignments can be made between faculty and residents based on alignment of

career goals, personalities, and logistics. Protected non-clinical time should be designated for these meetings separate from clinical work. Success stories and positive impacts on residents should be tracked and celebrated.

This study has several limitations. First, the response rate was only 44%, which may limit the generalizability of the findings. Non-responders may have had different perspectives on the importance and implementation of mentoring, advising, and coaching. Second, the study was conducted at a single academic medical center, so the results may not be representative of other institutions. Third, the survey relied on self-reported perceptions and experiences, which are subject to recall bias and social desirability bias. Fourth, the study did not explore the perspectives of residents themselves on these support modalities. Future research should examine resident experiences with and preferences for mentoring, advising, and coaching. Finally, while the study identified perceived barriers to implementing these practices, it did not evaluate specific strategies for overcoming these obstacles. Further work is needed to develop and test interventions to enhance faculty engagement in resident support roles.

Barriers like faculty burnout, confusion about roles, time constraints, and need for training must be addressed. Providing faculty development programming to improve skills in these areas is essential, especially for coaching which requires unique techniques. Leadership should protect time for faculty to participate without compromising clinical productivity. Culture change may be needed in programs overly focused on service obligations. Prioritizing resident support and promoting work-life balance can improve morale. With investments in faculty, infrastructure, and culture change, graduate medical education programs can unlock immense benefits from high-quality mentoring, advising, and coaching.

Acknowledgements: None

Conflict of interest: None for all authors

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