

A Novel Mentorship Resident Curriculum Results in Improved

Medical Student Professional Confidence

Thomas J Caruso, MD, Med;; Nicolas Prionas, MD, PhD.; Nancy Piro, Ph.D.; Rie von Eyben, MS; Laurence Katznelson, MD; Ann Dohn, MA



Introduction

The majority of mentorship literature in medicine focuses on training faculty to become better mentors [1,2,3]. When trainees are studied, they are commonly in the mentee role within specific training programs. Incorporation of a formal mentorship curriculum into residency training is challenging due to the heterogeneity of residency programs. To our knowledge, there is no known mentorship curriculum optimized for trainees, taught through the Graduate Medical Education department (GME).

The primary aim of this study was to evaluate a novel mentorship curriculum for residents. There were 2 secondary aims: 1) To determine whether tele-mentorship via video-conference increased access to mentorship encounters and decreased perceived barriers to access and 2) To identify factors that determine likelihood to maintain mentor relationships.





Methods

- A year-long, randomized, prospective cohort study was conducted with 46 pairs of resident mentors from 7 different training programs and medical student mentees, randomized to telementorship or in-person mentorship.
- The majority of the participants were comprised of residents from the anesthesiology (24.4%) and pediatrics (33.3%) programs.
- The resident curriculum included online learning, in-person interactive seminar, online just-in-time modules, and experiential learning (quarterly meetings with mentee).
- Curriculum efficacy was assessed by resident-reported confidence in mentoring, medical student-reported satisfaction with mentoring, and mentee confidence in core areas of mentorship.
- The number of quarterly mentorship encounters was monitored and demographic predictors of meeting were determined

The proportion of mentorship pairs meeting quarterly decreased from 67.4% in quarter 1 to 30.2% in quarter 4 (p<0.001, Fig. 1). There was no difference in number of mentorship encounters between the telementorship and in-person groups (p=0.35, Fig. 1).

- The proportion of residents very/extremely confident in mentorship skills increased from 37.5% (baseline) to 56.3% (midpoint, p=0.0589); mentee satisfaction increased from 42.5% to 65.4% (p<0.05) (Fig. 2).
- Medical students improved confidence in clinical knowledge (p<0.01), career planning (p<0.001), networking/exposure (p=0.01), sponsorship (p<0.001), and wellness/coping (p=0.02) (Fig 3).
- Operating room-based practice (p<0.05) and higher postgraduate level (p=0.02) decreased the likelihood of meeting. Telementorship did not change attitudes toward barriers to mentorship (time, distance) or likelihood of meeting.

Discussion

A novel, blended curriculum to teach mentorship skills to residents was successfully developed and implemented, resulting in benefits to both mentors and mentees.

Resident physicians enhanced their mentoring skills as demonstrated by an approximately 20% improvement in the satisfaction of mentorship reported by their medical student mentees. Additionally, medical students benefited, reporting significant increases in core domains of mentorship.

Residents of various departmental affiliations were included, demonstrating the potential for broad implementation of this curriculum across medical specialties and training years.

Conclusion

Mentorship is often arranged but rarely explicitly taught. We developed a mentorship curriculum for trainees, targeting them while they have an optimal learning oriented mindset. Blending of multiple communication modalities, including tele-mentorship, may be useful, particularly if inter-institutional mentorship is explored; however, it did not improve likelihood of mentorship encounters.

References

- Chen MM, Sandborg CI, Hudgins L, Sanford R, Bachrach LK. A Multifaceted Mentoring Program for Junior Faculty in Academic Pediatrics. Teach Learn Med. 2016;28(3):320-328. doi:10.1080/10401334.2016.1153476.
 Kashiwagi DT, Varkey P, Cook DA. Mentoring programs for physicians in academic medicine: a systematic review. Acad Med J Assoc Am Med Coll. 2013;88(7):1029-1037. doi:10.1097/ACM.0b013e318294f368.
 Badawy SM, Black V, Meier ER, et al. Early career mentoring through the American Society of Pediatric Hematology/Oncology: Lessons learned
- American Society of Pediatric Hematology/Oncology: Lessons learned from a pilot program. Pediatr Blood Cancer. 2017;64(3). doi:10.1002/pbc.26252.