Don’t sleep on history-taking: reflections from student and teacher in the telehealth era

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Abstract

The COVID-19 pandemic has prompted a new sense of urgency within medical education to adapt to the telehealth era. In this opinion piece, we call for a recommitment to the core tenants of clinical education, namely history-taking skills, that will remain foundational in the telehealth era. We challenge students to seek opportunities to develop these skills in the in-person setting so that they might better translate to telehealth in the future.

Keywords: undergraduate medical education; telehealth; COVID-19 curriculum; history-taking

Introduction

"New admission for you," my senior resident said. "Why don't you plan to present the full history and physical?" Little did I know this would be my final in-person patient interaction before clinical education halted, ironically due to a novel infectious disease that the entire medical community needed to learn. As I approached the patient's room, a young attending grabbed my arm. "Chief complaint bloody stool, recent history of colonic mass," he told me and winked. I smiled and nodded but wasn't sure whether I should thank him for "gifting" me a preliminary diagnosis or ask for the next patient so I could start from scratch.

Clinical Medical Education: Past, Present, and Future

There has always been value to the unknown in clinical medical education. Greek texts dating to the fifth century B.C. point to a system of apprenticeship in medical education in which students would first observe a master at work and then perform all steps of healing beginning from the unknown (Fulton, 1953). This metaphorical blank slate paired with relative abundance of time encourages the twenty-first century learner to organize a thorough history, perform relevant physical exam maneuvers, and formulate a differential diagnosis. Upon leaving the hospital that day, I, like many other students across the world, wondered what the future of medical education would be both in the short and long term.
Even prior to the recent pandemic, the emerging telehealth era had challenged traditional medical school curricula in the realm of clinical education (Waseh and Dicker, 2019). Educational institutions sought to utilize virtual platforms and technologies to prepare their students for an uncertain future. Since COVID-19, medical schools have hastened efforts to integrate telehealth into undergraduate education in ways that could change pedagogy forever (Buckley, 2020).

Telehealth Curriculum

My medical school was among those at the forefront of change, rapidly implementing COVID-19 and telehealth curricula in an effort to adjust to the changing demands of the medical profession. Our professor started the telehealth course with a counterintuitive claim: "Telehealth is the new house call." It is the means by which we, as providers, enter the homes and environments of our patients.

In speaking to providers across many specialties over the course of two weeks, we quickly learned that tele-appointments fit medicine's mantra of "see one, do one, teach one." Numerous guest lecturers introduced themselves in the same way: as a physician who is learning this technology alongside us. Few had received formal training in telemedicine. Fewer claimed to be experts. Most specialties were still learning the basics of telehealth, while others such as the solid organ transplant department were working like a well-oiled machine. Specialties such as electrophysiology had already been familiar with the use of remote monitoring devices.

Twice during the course, we had opportunities to practice with virtual standardized patients, who themselves were learning to role-play in this new environment. These virtual standardized patient appointments exposed a learning curve among medical students who had never previously experienced this type of patient interaction. With limited ability to obtain vital signs, perform a physical exam, and conduct point of care testing, we spent a refreshing majority of the visit speaking with the patient. The lesson was simple: we do better for our patients by listening to their stories anyway. The circumstances of telehealth just force the hand.

I asked my professor about the experience teaching telehealth for the first time. How do you teach something you just learned and are learning still? Her response: "Teaching something completely new means being completely honest with the learners. I am not the master at work in telehealth; I am the doctor trying to make it work for our patients. The course was designed to give a taste of telehealth to our students so that they would have a familiarity that was not afforded to practicing physicians in 2020. Not only was the content new, the teaching format was new as we were teaching remotely. Didactic styles and curriculum design had to also change on the fly to make the course meaningful, practical, and interesting."

Conclusion

In a profession marked by change, we must consider the core tenants of medical education that will endure, as well as skills that future medical practice will demand. In a time of uncertainty, of what can we remain certain? Whether in-person or virtual, excellent history-taking skills must remain a cornerstone of clinical medical education. Many educational interventions have proven efficacious in improving history-taking skills (Keifenheim et al., 2015), and trainees will continue to need rigorous in-person training should these skills translate to telehealth. Accordingly, clinical instructors must continue encouraging their students to undergo full repetitions of the history and physical examination. Such practices are of increased importance when shaping future physicians who will rely heavily on a patient’s story during telehealth appointments where reliable, objective data currently lags behind that of an in-person visit. Don't sleep on history-taking, particularly when it's all we have.
Take Home Messages

- The COVID-19 pandemic has brought a new sense of urgency to development of telehealth curricula in undergraduate medical education
- Many physicians teaching telehealth to trainees are learning the technology for the first time themselves
- History-taking skills must remain a core tenant of clinical medical education whether applied to an in-person or virtual setting

Notes On Contributors

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Bibliography/References


Appendices

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