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Title

The Virtual Patient Meets the Virtual Medical Student: Telemedicine in the Age of COVID-19

Priority 1 (Research Category)

Education and training

Presenters

Maral Sakayan, MS, Cynthia White, BS, Frederic Leeds, MD, MSc, Timothy Crawford, PhD, MPH, Katharine Conway, MD

Abstract

Context: With the arrival of the COVID-19 pandemic, face-to-face interactions with patients were necessarily reduced; this imposed hardships on medical students with respect to clinical training opportunities. The question, however, was how students would perceive the shift from in-person to “virtual” patient contact. Objective: To compare attitudes of undergraduate medical students who did and did not participate in telemedicine. To evaluate how students would perceive telemedicine utilization in medical education and the perceived impact on postgraduate training and their career. Study Design/Analysis: Survey research. Respondents were stratified into students with and without telemedicine experience. The telemedicine group was further stratified into two subgroups: students with ≤ 5 and students with > 5 telemedicine encounters. Chi-squared analyses were performed with significance at p -value < 0.05 . Setting: Boonshoft School of Medicine. Population Studied: 2nd-4th year medical students. Instrument: Redcap survey, a secure information management system. Outcome Measures: Students’ number of telemedicine encounters and perceptions. Results: Respondents totaled 145 medical students. Of note, 62.8% of students agreed telemedicine would be important for their future career, with telemedicine participants being more likely to agree (70.2% vs 49.0%, $p=0.01$). Telemedicine participants agreed they were more comfortable conducting a telemedicine visit (77.8% vs 40.0%, $p<0.0001$) and performing a limited physical exam (41.6% vs 20.0%, $p=0.01$). About 65% of telemedicine participants believed it would make them better physicians. Further, 66.0% of telemedicine participants agreed they had a positive perception of telemedicine versus 51.0% of non-participants, $p=0.08$. Those with > 5 telemedicine patient encounters were more likely to agree that their communication skills (58.1% vs 29.3%, $p=0.04$) and history-taking skills (53.5% vs 17.0%, $p=0.01$) had improved due to participation versus those with ≤ 5 encounters. Conclusions: COVID-19 has led to a dramatic shift in the use of telemedicine. The question remains: how do medical educators prepare students to enter this rapidly changing industry? We show how exposure to telemedicine during undergraduate training can impact students’ perceptions and increase their confidence in their ability to

utilize telemedicine in the future. This study offers strong support for initiation of telemedicine experiences for medical students.