

Improving Education of Medical Students Through Telehealth

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Abstract

Telehealth can be used in medical education to promote teaching-service integration as a low-cost solution to broaden the field of medical practice, especially in rural areas of low and middle-income countries. This article presents our experience in the use of telehealth to broaden the practice field of medical students. In 2017, two itinerant actions were carried out in municipalities in the state of Pernambuco. In both actions, 396 patients were assisted by a team of professionals, teachers and students in various specialties, with emphasis on mental health and dermatology. 9 students experimented with the use of an electronic patient record system, telehealth platform and a mobile application for tracking of disorders and diseases. The students reported high satisfaction with digital distance practices, and the enrichment of their learning. This digital approach to medical education has fostered greater collaboration among students, faculty and staff, teaching students the skills necessary for their future digital practices.

Keywords:

Medical education; Telehealth; Digital Health

Introduction

Health has changed faster than other areas of knowledge and in this scenario, preparing health professionals to succeed in their careers is the greatest challenge for universities. One strategy to improve students' learning is to broaden their field of practice by learning from other health realities, but for this to happen it is necessary to ensure supervision of these students by university teachers. We present our experience with collaborative interprofessional practice at a distance, in which students participate in an itinerant health service provided by the Telehealth Centers Network of Pernambuco [1] connected to the university through the telehealth service.

Methods

Students of the Medicine Course were invited to participate in field actions carried out by the university Telehealth Center. These actions aim to assist patients who were waiting for medical attention in vulnerable municipalities. In 2017, 9 students participated in two itinerant actions in small towns in the rural area of the state of Pernambuco. The students and staff were previously trained and had access to notebooks, tablets, diagnostic equipment, an electronic health record system (EHR) and a telehealth platform.

Results

In the first itinerant action, 3 medical students participated, where 335 patients were attended in the areas of medical clinic, ophthalmology, cardiology (consultation and ECG test) and

mental health. The students used the EHR systems and performed mobile device screening in 26 elderly patients (Figure 1).



Figure 1 - Medical student screening mental disorders in elderly patients during the itinerant health service event.

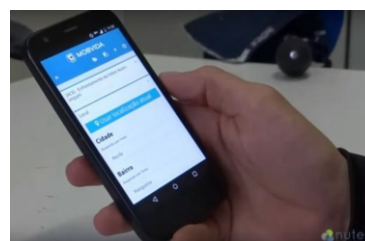


Figure 2 - Mobile data collection interface for telehealth platform tracking.

In the second one, 6 medical students participated in an itinerant action in Dermatology, where 61 consultations were carried out and educational activities in skin cancer prevention were performed for patients who were waiting. Skin exams were performed and those altered were launched on the telehealth platform for evaluation and discussion by experts and students.

In both action students and staffs analyzed the data. Exams results for ECG and Dermatoscopy were returned to patients through the primary care units delivered by the internet using the telehealth platform (Figure 3).

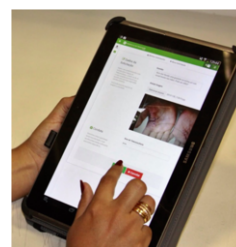


Figure 3 - Telehealth Platform interface used by students to connect with teams and access test results.

Conclusion

The use of telehealth as a strategy to strengthen the teaching-learning process is being implemented at our university. The students who participated in the telepathic-supported activities were reported to have high satisfaction, had access to a greater number of patients in different health situations, including the digital practices that they would not have if they were only in the hospital unit, and this enriched their training. Since 2003, the Telehealth Center, in partnership with the Health Informatics Discipline of the Medicine Course, has made efforts to insert telehealth in the pedagogical project of the Medicine Course. So far, these insertions have been carried out in a non-systematic way, but from 2017, with the good results by itinerant actions, the high level of satisfaction of the students who participated, followed by evidence in the literature of the benefits of distance health practices [2; 3], we believe we are on the right path for the future.

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