

Telemedicine Volunteering Experience as a Medical Student During the COVID-19 Pandemic in Brazil

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The Experience

The coronavirus disease 2019 (COVID-19) pandemic has strongly affected Brazil in many different ways, and the country is considered an epicenter of the new disease. With over 5.5 million confirmed cases and 160 thousand deaths by November 2020,¹ the country's healthcare system has been oversaturated during the pandemic. Since COVID-19 is a highly transmissible disease, to avoid its spread in society, many universities canceled in-person classes for an indefinite period. To deal with both situations (healthcare system oversaturation and high transmissibility of the virus), many Brazilian medical students enrolled themselves as volunteers in telemedicine services across the country. In confronting both the health care saturation and the high transmissibility of the virus, Brazilian medical students immediately jumped to the opportunity to volunteer with the country's telemedicine services. This was a particularly unique opportunity, given the fact that although we have always wanted to volunteer, in medical school it was not a possibility due to our schedules.

Volunteering is not only about giving your time out of solidarity to a cause you believe in. It also has the potential to be profitable for both parts and it increasingly occupies spaces for training, education, and professionalization of those involved.² In this sense, medical students enrolled in telemedicine may enhance their clinical and communication skills in a period when in-person clinical training is not possible to be carried out by many students.

Volunteerism is composed of people who perform social work that reaches areas which the Public Sector is unable to cover effectively.³ The non-governmental organization Médecins Sans Frontières (MSF) announced that Brazil was not testing adequately during the peak of the COVID-19 pandemic, with 7,500 tests per million people.⁴ Thus, during a pandemic where the lack of available healthcare resources may pose risks to many lives, telemedicine plays an essential role in partially relieving the country's overwhelmed healthcare system. Nevertheless, the MSF reported that nearly 100 nurses were dying from the disease per month during the peak of the COVID-19 pandemic in Brazil, being the fastest rate globally.⁴ Given that in-person contact helps spread the disease, telemedicine can be a useful tool to avoid new infections. In this way, some medical care can still be provided without exposing the health professionals and the patients to one another. Many medical decisions are predominantly cognitive, and telemedicine can therefore deal with less severe and non-life-threatening cases, patient follow-up, and patient referral to more specialized health facilities if necessary.

In a nation of considerable size like Brazil, the different regions of the country can face different pandemic phases at different times. In this

regard, since medical students or volunteer doctors do not have to leave their houses, telemedicine is also a great strategy that promotes better allocation of health professionals to more distant areas that are facing a worse pandemic phase and have fewer resources to cope with the health crisis. To date, more than 15 thousand free telemedicine consultations have been carried out in 135 different cities across Brazil through the telemedicine service we are involved in.

In our experience, medical students have been allocated to give telemedicine assistance. We screen patients according to priorities, mainly symptoms and, family and economic history. Then we fill out the patients' medical records and schedule appointments. Contact with patients is very interesting and, in general, they are very receptive, grateful, and friendly. The increased demand for medical services during the pandemic can be an obstacle to formal medical teaching in clinical scenarios since attending physicians may not have enough time to explain the cases to the students because they are busy with too many patients. Even though we have contact with patients and their medical records, our performance is limited to medical screening and succinct history taking. Lacking in this is more direct clinical experience together with an attending physician, which is a disadvantage for medical learning. Despite that, we can still practice our communication and history-taking skills and, improve our medical knowledge by studying the cases we had contact with, leading to a worthwhile learning experience in our medical studies.

Nevertheless, it is known that undertrained medical students in combination with their unfamiliarity of the latest clinical guidelines can pose a risk to the country's public health.⁵ Since telemedicine is a new tool for the majority of students, preliminary and continued training are essential to offer high-quality health services. In this matter, during our volunteering experience, the project's staff offered us materials that guide how to access and deal with the virtual platforms. In addition, at the weekly meetings, those responsible for training explained in detail everything that must be done to ensure patient care was satisfactory and effective. After a certain period of working in the same role, volunteers receive new training to be prepared to assume new roles in the project. With this, the experience becomes broader, allowing a comprehensive knowledge of the project's functioning.

Besides COVID-19 cases, our telemedicine volunteering experience also uses video calls to aid patients with medical conditions across several medical fields, such as pediatrics, obstetrics and gynecology, psychiatry, dermatology, oncology, ophthalmology, allergology, cardiology, sports medicine, geriatrics, otorhinolaryngology, and other infectious diseases. However, we noticed a high prevalence of need for psychological assistance, especially among the elderly. The reasons are

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diverse and often have a deep relationship with the current reality of the pandemic, consisting of social isolation, fear, and the possibility of seeing their relatives dying, something also mentioned in other experiences.⁶ COVID-19 has contributed to a significant increase in stress, anxiety, and depression rates worldwide.⁷ To combat this, online mental health services were widely implemented in China during the outbreak to alleviate psychological distress,⁸ showing how important these aids are during pandemic times.

We believe that telemedicine volunteering is an overall positive experience in medical training that helps to attenuate the deficits from remote teaching. COVID-19 may change the way medicine is performed

in many different manners and it is important to train medical students so that the new generation of medical doctors are capable of using technological support to manage unfavorable situations. Being part of telemedicine and helping people receive high-quality and free health care also generates in us the gratitude for the opportunity to make an impact in people's lives during difficult times.

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