

Training Medical Students as COVID-19 first contact responders: Integrating Telemedicine and Medical Education during a Health System Crisis in Sri Lanka

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Introduction

Any healthcare system can face a crisis during an epidemic where the need for manpower exceeds the capacity. Medical students have the potential to be an asset in such situations, where the health sector, patients and the medical students themselves would benefit. Medical students have contributed to patient care during the Spanish flu outbreak in 1918 and the polio epidemic in Denmark in 1952 (Starr, 1976). Medical students' involvement in service provision during the current pandemic addressed the potential shortage of frontline workforce and contributed to reduction of the overall burden on clinical teams (Starr, 1976, West, 2005, Miller *et al.*, 2020). This paper discusses an innovative approach to integrate telemedicine and medical education during the COVID-19 pandemic response in Sri Lanka.

Sri Lanka's COVID-19 situation saw a rapid rise in case numbers from July 2021. During the peak of the surge, the number of daily reported test- positive patients exceeded 5000 with 220

cases per million population and a ranking of 50 in the world-wide affected country list (MOH, 2021). The number of deaths too were rapidly increasing. The numbers of healthcare workers available for optimal functioning of the system too declined with a significant proportion acquiring the infection and the remaining workforce having to contend with physical and mental exhaustion. Therefore, the healthcare system of the country was reaching a tipping point, with an unprecedented rise in demand for the rapidly dwindling resources (Jensen *et al.*, 2020). It was necessary to prevent overburdening the already fraught hospitals as well as staff (MOH, 2021; Karunathilake *et al.*, 2021; Karunathilake, 2020; Karunathilake *et al.*, 2020).

One option to respond to the situation was to establish a virtual triaging system for the identification and evacuation of those who needed hospitalization and to facilitate home management for mildly symptomatic and asymptomatic patients.

The intervention

The Doc Call 247 Service under the Sri Lanka Medical Association (SLMA) has been in operation since 2020 to provide telephone based medical advice for COVID-19 directly to patients and catered to their needs. As the number implies, it is a twenty-four hour, seven days a week service, made available in all three national languages, Sinhala, Tamil and English, used in Sri Lanka. Doc Call 247 service consists entirely of volunteers ranging from

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DOI: <http://doi.org/10.4038/seajme.v15i2.378>



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