

Impact of Telehealth on the Environment During the COVID-19 Pandemic in Indonesia

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Dear Editor,

The COVID-19 pandemic of the past several years has had a major impact on life in Indonesia. The pandemic has resulted in at least one sustainability improvement in public health practice: the increased use of telehealth. The use of telehealth may also help reduce greenhouse gas emissions into the atmosphere. To minimize environmental impacts, changes in service delivery are required.

Before and during the pandemic, transportation was often a barrier to accessing health care. Indonesia has 16 771 islands, with long distances and ocean crossings sometimes making access difficult. Telehealth is one way to reduce that barrier, and 20% of hospitals now provide this service. Fifteen million people used telehealth services to access information about the COVID-19 during the first year of the pandemic.¹

Utilizing telehealth can have positive effects on improving health services, and the use of telehealth can reduce the use of transportation and avoid carbon emissions. Telehealth may also be advantageous in urban areas, where it will likely reduce traffic jams and emissions from all types of motor vehicles, especially in areas with poor air quality and a high prevalence of traffic accidents. For example, big cities in Indonesia often experience congestion and telehealth may reduce environmental problems that often occur due to the use of transportation to health facilities. Offsetting these advantages may be the need to deliver medications to patients, and for many clinical conditions face-to-face consultation will still be required.^{2,3}

Digital technology used for health records and the transmission of records also reduces unnecessary environmental impacts. The usage of telehealth during the pandemic was a driving force behind the introduction of e-signature technology at healthcare facilities, with doctors employing the tool to expedite patient paperwork and health care service activities.

A paradigm shift in which telehealth is viewed as an integral part of routine health care activities rather than just a service for the few who lack access to treatment because of distance, isolation, or other factors may be necessary to significantly contribute to the mitigation of climate change.

Author's Note

This letter was submitted to Indonesian health facilities as a form of response to providing health services for the Indonesian people, especially during the COVID-19 pandemic.

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References

1. Alexandra S, Handayani PW, Azzahro F. Indonesian hospital telemedicine acceptance model: the influence of user behavior and technological dimensions. *Heliyon*. 2021;7(12):e08599.
2. Indria D, Alajlani M, Fraser HSF. Clinicians perceptions of a telemedicine system: a mixed method study of Makassar City, Indonesia. *BMC Med Inform Decis Mak*. 2020;20(1):233.
3. Nindrea RD. Omicron: the government of Indonesia and telemedicine services for patients in self-isolation. *Asia Pac J Public Health*. 2022;34(5):598-599.

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