



Cancer Care in the Era of COVID-19: Changing Rules of Engagement of Social Media Applications to Support Cancer Patients in LMICs

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A patient texts a picture of his neck (Fig. 1a and b) showing no tumor from 240 miles away. Even though he could not come to hospital due to lockdown, he is able to continue his tyrosine kinase inhibitor therapy with the support of a social media (SoMe) application. Another patient in Uganda sends a photograph, which aids in home-based evaluation of her post-mastectomy wound (Fig. 1c).

COVID-19 pandemic has been a crucial wake-up call for many high-income countries (HICs), as it has brought to the fore the fragility of their healthcare systems [1]. Yet, the situation in low- and middle-income countries (LMICs) can only be left to imagination as healthcare system was already fragile here. Amidst the pandemic, care of cancer patients has suffered a substantial setback. It is now apparent that cancer and COVID-19 form a deadly duo as patients having both are at very high risk of severe event [2]. Patients with cancer are at higher risk with severe events occurring in 7 (39%) of 18 patients with cancer vs 124 (8%) of 1572 patients without cancer.

Hospital-based telemedicine systems are already being used to carry out continuity of care [3, 4]. Although cost-effective in comparison with hospital-based follow-up, this system requires infrastructure and prior appointment. Conventional telemedicine also requires physical presence of the patient at a nearby telemedicine center. This is where social media can fill the gap by providing continuity of care without any physical visit.

Author RKL reports that in Uganda, lockdown measures which have followed the present pandemic include cessation of public transport used by most cancer patients to attend hospital, as well as restriction of pedestrian movements. Inevitably, this has led to either increased use or adoption of alternative communications to ensure continuity of care. The health workers are now utilizing regular radio broadcasts (by Uganda Cancer Institute) to issue advice and programs to cancer patients; telephonic follow-up of patients is also on the increase and so is the use of social media platforms. WhatsApp has become the most popular application because it is easy to learn and use and offers real-time communication—allowing even images to be shared, in addition to the privacy it offers. This is further boosted by the recent roll-out of a country-wide 4G network. Unfortunately, telemedicine which allows a more direct interface is poorly developed in our setting because of the technicalities and costs involved in set-up and maintenance.

Since 2016, Armenia became a part of Global Cancer Institute's big family, and the doctors have presented plenty of breast and gynecological cancer cases, thus helping to improve cancer care in Armenia [5]. Author VH reports that they have conducted several online tumor boards' with their colleagues from US cancer centers, where they have discussed not only particular cancer cases but also a general treatment recommendations of cancer patients during COVID-19 pandemic. Such online meetings are valuable, especially nowadays, when there is no opportunity to travel.

In India, author SKY has conducted a longitudinal trial on use of SoMe application for remote monitoring of cancer patients, and it was as effective as conventional follow-up [6].

It is imperative that while providing clinical care via SoMe, physicians should have the ability to balance principles of privacy in these settings as we cannot afford the same standards as HICs. All we need to do is look at one of the several examples mentioned above where SoMe has showcased to understand the importance of continued communication by any means available. India was planning to release stringent

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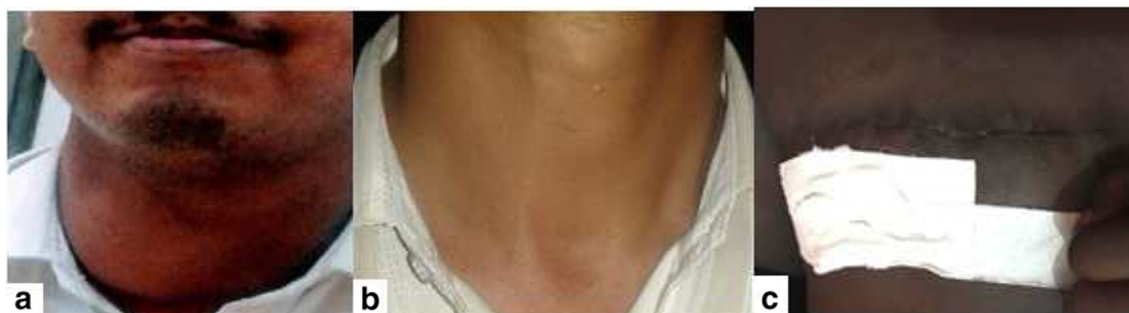


Fig. 1 **a** Pre-TKI therapy inoperable–differentiated thyroid cancer. **b** Clinical picture after 6 weeks of TKI. **c** Post-mastectomy wound evaluation through WhatsApp in Uganda

“Digital Information Security in Healthcare, act (DISHA)” to protect the privacy of healthcare data till 2019. However, due to pandemic, they rather had to devise lenient telemedicine guidelines allowing use of any telemedicine tool suitable for carrying out patient consultation, e.g., mobile phones and chat platforms like WhatsApp, Facebook Messenger [7].

Health innovation is often developed in response to local challenges, fueled from frontline health workers by unique needs and opportunities. Yet, the power to scale up innovation is often vested in high-level authorities who have limited understanding of local contexts [8]. In our opinion, high-level authorities in LMICs should seize this opportunity to develop telemedicine practices.

In conclusion, social media is an effective modality in remote monitoring of cancer patients in LMICs especially at a time when there are restrictions not only between countries but also within the country. In the absence of appropriate resources, this simple frugal innovative use of social media is supporting cancer patients at this time of global turmoil in LMICs.

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NY, SJ- writing, revision, and editing of manuscript.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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