

# Telemedicine and COVID-19 Pandemic: Current status, Issues, Challenges and Opportunities

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COVID-19 Pandemic has drastically changed our lives. It has brought in restrictions in the practice as health care providers. It offers opportunities such as virtual patient-physician consultations to continue to assist the patients.<sup>1-3</sup> It has placed health care providers at increased risk of acquiring COVID-19 infection due to close physical contact with the patients and their families.<sup>4</sup> A substantial number of health care providers have got infected with COVID-19-infection and precious lives have been lost. Due to an increased number of health care providers getting sick due to covid-19 infection, several health care facilities and their services have been compromised.<sup>2</sup> Social distancing and limiting exposure to potential or actual COVID-19 patients, have moved physical patient-physician encounters to virtual teleconsultations. Due to the increased risk to health care providers getting COVID-19 infection, tele-clinic consultations are being increasingly offered to patients. This is a new experience for health care providers which has offered challenges and opportunities during the current difficult covid-19 pandemic.<sup>5</sup>

Being physically away from the patients during the consultation process has challenges in itself. The warmth and humane aspects of the health care provision are compromised. Both patient and physician satisfaction are reduced due to lack of physical closeness. Nonverbal cues are missed, and responses of the patient and physician are not communicated to each other. Effective communication is key to good quality and safe health care, and physician and patient satisfaction can be compromised during teleclinic Consultations.<sup>6</sup> Physical examination is not feasible as it is during physical encounters between physician and patient. Multiple aids have been developed to physically assess the patient during tele-consultation, but are not deemed as effective as a physical clinical examination. This can affect the quality of health care and safety issues with reduced physician-patient satisfaction. Appropriate quality internet service is mandatory to ensure patients' care acceptable quality which may not be available in remote areas.<sup>7</sup>

To develop a trusting and strong patient-physician relationship can be a challenge during COVID-19 pandemic by using the teleconsultation model. Traditional models of patient-physician consultation promote rapport, trust, and continuity of care practice. Such an outcome is less likely with online consultation due to inherent deficiency in the model. During a physical encounter between patient and physician, appropriate use of opportunities such as tapping on shoulder to comfort a depressed patient can be utilised. The patient feels reassured more by the physical presence of a physician rather than being online. The traditional patient-physician consultation model, from meet and greet till consultation closure offers several opportunities to build patient-physician rapport and a trusting relationship. Such opportunities are less available and less likely to be effective in a virtual model of patient-physician consultation. On the contrary, patients are reporting satisfaction with virtual consultation which means that patient satisfaction can be achieved if such consultations are appropriately managed.<sup>8</sup>

Teleconsultations are being used during COVID-19 pandemic, to temporarily replace traditional out-patient face-to-face clinical encounters due to the need for social distancing and reducing exposure. Its use has been expanded to provide acute care<sup>9</sup> as well as intensive room advice.<sup>10</sup> There are uses of this model mostly in areas of clinical practice and should be explored and implemented.

During the COVID-19 pandemic crisis period, with a partial transformation to the virtual patient-physician consultation model, a substantial number of patients have reported positive experiences with telehealth. The future for virtual consultations is very bright. Offering telehealth in a post covid era, has the potential to increase timely and safe access to primary health care for many patients.<sup>11</sup>

The rise in the use of teleconsultation for patients during the COVID-19 pandemic offers alternate models for health care service delivery.

The health care sector and patients were not prepared for the rapid increase in the use of teleconsultations that occurred during COVID-19. It brought into focus challenges as well as opportunities for health care delivery.

It is important to conduct research into the virtual teleconsultation model and come up with solutions identified during its execution in the current COVID-19 pandemic era. Different uses of this technology can be explored and models can be devel-

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oped and tested for their usefulness, effectiveness, and acceptance by the stakeholders. The experience during the current COVID-19 pandemic has offered us insight on how to move forward with the use of virtual model of tele-consultation.<sup>12</sup>

The current traditional model of physical patient-physician consultation does have its age-old proven benefits, yet it is not fully applicable in all circumstances. Alternate models, such as virtual patient-physician consultations, offer opportunities to make use of limited resources to resolve health care issues from a remote distance. It saves time and energy of the patients spent during traveling to health facility, waiting time to see a health care provider, and cost of physical facility that adds to the cost incurred by patient.

It's important to offer user-friendly and cost-effective virtual patient-physician consultation services to the patients. The lesser costs associated with teleclinic services should be passed on to patients. The model should allow access and continuity of care with proper documentation of the services including audit and quality assurance services.

Technological advances offer health care services to be offered in ways that are convenient, of acceptable quality, safe, cost-effective and acceptable to all the stakeholders, most importantly to the patients and health care providers.

Today we stand at the crossroads with opportunities to diversify the way we conduct clinical practice. Teleconsultation is a health care delivery model, if used appropriately, can revolutionise the way we practice clinical medicine.

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