Journal of Diabetes Science and Technology
2020, Vol. 14(4) 714–715

DOI: 10.1177/1932296820929391
journals.sagepub.com/home/dst
SAGE

Teleconsultation and Diabetes Care Amid COVID-19 Pandemic in India: Scopes and Challenges

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Keywords
COVID-19, diabetes mellitus, telemedicine, teleconsultation

I have learned that a novel coronavirus disease (COVID-19) has spread to over 200 nations, affecting more than 972 000 people and claiming more than 50 000 lives globally.[1] The disease has also breached the Indian borders. Hitherto, 2650 positive cases and 68 deaths have been reported by the Government of India, Ministry of Health and Family Welfare.[2]

Although the overall mortality rate is low (1.4%-7.2%),[3,4] people with diabetes mellitus (DM) are at an increased risk of severe disease and increased mortality.[3-6] Good glycemic control might help in reducing the disease severity.[7] However, curtailment of pandemic entails implementation of strict social distancing, thereby implying that people with DM will not be able to comply with routine clinic visits, and hence, diabetes care will be compromised. The current scenario is similar in India wherein the Government has rightly implemented a nationwide lockdown. With an overall prevalence of diabetes of 7.3%,[8] it is expected that a major section of community will be deprived of optimum diabetes care during this period. Herein comes the role of teleconsultation.

Teleconsultation refers to the electronic communication between a physician and a patient or between two physicians for the purpose of diagnosis and/or treatment.[9] Consultations may be either synchronous (real time) via texts/phone calls or asynchronous over e-mails/fax. With smartphones being a norm in most households, there seems to be no dearth of scope for teleconsultation in the present era.

Teleconsultation can be a boon to people with DM. Aided by patient specified self-monitoring of blood glucose (SMBG) values, physicians can help fine-tune their antidiabetic medications, thereby avoiding prolonged periods of sustained hyperglycemia as well as recurrent episodes of hypoglycemia. Use of telemedicine has been shown to be associated with a mean Glycated hemoglobin decline of −0.44% as compared to usual care alone.[10] Good glycemic control would in turn strengthen the innate immune system and probably help prevent the gruesome consequences of COVID-19.[7,11] Physicians can also help patients modify antihypertensive medications provided they are able to monitor their blood pressures at home using semi-automated sphygmomanometers. Apart from DM, hypertension has also been shown to be associated with severe disease and increased mortality in COVID-19[3,12,13]; whether optimum blood pressure control can help reduce the disease severity is however a matter of speculation. A physician can help an anxious patient overcome the dilemma of whether to continue angiotensin-converting enzyme inhibitors (ACEi) or angiotensin-receptor blockers (ARBs). Till date, all international organizations have advocated the continuation of ACEi/ARBs during COVID-19 outbreak[14,15]. In addition, teleconsultation ensures drug compliance and continuous diabetes education including reinforcement of sick-day guidelines.[16] Each teleconsultation offers an additional advantage of counseling patients about their high-risk status and need for stringent adoption of social distancing and hand hygiene. Educating them about common symptoms of COVID-19 would help them report to concerned health authorities so that the "test, treat, isolate, and contact tracing" policy of World Health Organization can be implemented at the earliest.

Teleconsultation is however facing many challenges. Patients in India are conventionally used to physical visits to hospitals/clinics and may find it difficult to accept a medical advice being conveyed over telephone.[16] Internet services are still not widely available in many rural areas, hence depriving them of teleconsultation services. Patients might not be able to operate smartphones by themselves. Patients are often unwilling to perform SMBG at home, thereby

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making it difficult for physician to offer relevant advice. Even slightest error in communication can result in grave consequences. Before responding to patient's queries, the physician should double-check the existing drugs and dosages often with the help of photographs of drug blister packs.

Teleconsultation is also fraught with many legal issues, notably, obtaining explicit patient consent, ensuring patient's secrecy, exempting necessary in-person physical examination, advising medicines without an appropriate diagnosis/provisional diagnosis, and prescribing medicines that are prohibited by the Government. There exists no specific legislation on telemedicine practice in India currently; existing laws pertain to general medical profession and information technology.[17] However, in the wake of COVID-19 pandemic, the Ministry of Health and Family Welfare has recently come forth with Telemedicine Practice Guidelines that clearly states the role and limitations of teleconsultations.[18]

In the future, I predict that teleconsultation has immense scope in the field of optimum diabetes management. Proper telecommunication between patients and physicians would result in overall good diabetes care while ensuring social distancing and minimizing viral exposure. The legal nitty-gritties should however be kept in mind even in the current scenario.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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