

# COVID-19 and Diabetes—A View From India

Viswanathan Mohan, MD, FRCP, PhD, DSc, DSc (Hon.Causa),  
FNASc, FASc, FNA, FACE, FTWAS, MACP, FRSE<sup>1</sup> 

## Keywords

COVID 19, diabetes, teleconsultation, telemedicine

I have learned a bitter truth recently—that one just cannot take life for granted. This is the one lesson the COVID-19 pandemic has taught me as a doctor, diabetologist, and entrepreneur. Life was cruising along well and 2020 bloomed as all New Year's do, full of hope and promise. But as we ushered in the New Year, little did I, or probably any of you reading this, realize how much our lives were going to change even in the first quarter of the year. We in India had read about SARS, MERS, and EBOLA, but luckily none of these epidemics really affected India in a serious way. However, COVID-19 was different. As I write this piece, the numbers of cases are going up rapidly in India; although for several reasons, known and unknown, India seems to be in a slightly slower trajectory in the epidemic graph compared to several other countries. However, these are still early days and it is too premature to make any predictions at this stage.

So what is the connection between COVID-19 and diabetes? There are several questions that have been raised, and we may not have the answers to all of them at this point. For example, are people with diabetes more prone to COVID-19 infection? Are they likely to develop a more serious form of the disease? Will the morbidity and mortality be higher in those with diabetes? Are there any special precautions that people with diabetes should take? Do people with type 1 diabetes and type 2 diabetes carry the same risk? Is the prognosis the same in both forms of diabetes? Can the usual medications they are on be continued or should any particular class of drugs be avoided? Is there any need to switch to insulin if there is evidence of the infection? All these remain unanswered questions, but I am confident that by the end of the epidemic we will be wiser with respect to all and more of such questions. I am sure that a spate of papers will emerge and several journals may publish special editions of the journal dedicated to COVID-19 and diabetes.

But what about use of technology? This is where I have already learned lessons that might change my practice forever. In India at the time of writing this commentary, on March 31, 2020, we are in a state of complete lockdown for

three weeks. We run a chain of over 50 diabetes clinics across 32 cities and 9 states of India. We see on an average close to 1000 patients a day, across all of our centers. Typically patients come in, do their blood tests and other investigations for eyes, feet, heart, and kidneys and see the Diabetologist the same day (usually within two to three hours) and leave with their prescriptions and pharmacy supplies. With the lockdown in force, nobody could leave their homes—patients, our staff, or the doctor. We therefore had to quickly change our method of working. After getting special permissions from the authorities, we started home services, that is, sending our staff to patients' homes to draw blood. Teleconsultation and Telemedicine, which were not legal in India up until then, were legalized by the Government of India and Guidelines for Telemedicine were quickly introduced. For the first time in the history of our institution, our diabetologists worked from home, reviewing the patient's electronic records on their mobile phones and offering audio or video consultations by WhatsApp, Skype, or Zoom, based on the patient's choice. A new revolution had started in treating diabetes thanks to COVID-19. Who said there is no silver lining to every cloud? Obviously this worked well for a review patient but according to the present guidelines, we are not supposed to treat new patients who are not yet registered with our clinic.

In the future, I predict that the present model of running diabetes clinics will change, at least partly due to COVID-19. People

Journal of Diabetes Science and Technology  
2020, Vol. 14(4) 760–761  
© 2020 Diabetes Technology Society



Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/1932296820928108  
journals.sagepub.com/home/dst



<sup>1</sup>Madras Diabetes Research Foundation & Dr. Mohan's Diabetes Specialities Centre, Chennai, Tamil Nadu, India

## Corresponding Author:

Viswanathan Mohan, MD, FRCP, PhD, DSc, DSc (Hon.Causa), FNASc, FASc, FNA, FACE, FTWAS, MACP, FRSE, President & Chief of Diabetes Research, Madras Diabetes Research Foundation & Dr. Mohan's Diabetes Specialities Centre, ICMR Centre for Advanced Research on Diabetes & WHO Collaborating Centre, Non-Communicable Disease Prevention & Control & IDF Centre of Excellence in Diabetes Care, No. 6, Conran Smith Road, Gopalapuram, Chennai, Tamil Nadu 600 086, India.  
Email: drmohans@diabetes.ind.in  
Website: www.drmohans.com, www.mdrf.in

may opt to have home visits or other ways of getting their tests done and avoid waiting at diabetes clinics. Self monitoring blood glucose (SMBG) results Continuous glucose monitoring (CGM) tracings, retinal pictures taken with handheld cameras on their cell phones, reading of the images using artificial intelligence, prediction of diabetes types by deep learning, and algorithms to decide the best group of antidiabetic drug for a particular patient are all going to enter the diabetes clinic quite soon. These are indeed changing times. COVID-19 with all its ill effects might, after all, leave us with positive take-home lessons for those of us who live, to tell the tale.

### **Declaration of Conflicting Interests**

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

### **Funding**

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

### **ORCID iD**

Viswanathan Mohan  <https://orcid.org/0000-0001-5038-6210>