BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Managing diabetes the figital way!

November 2, 2020 | Opinion

In future we will see a new wave of innovations in the area of digital health, smart data, telemedicine and home care delivery models



The outbreak of COVID-19 has posed several new challenges to diabetes care and has also provided an opportunity for transforming the treatment of diabetic patients. Lockdowns caused by the coronavirus disease have up-turned the lives of people everywhere. Yet, for those living with diabetes, the movement restrictions have raised a whole series of extra questions: how can they seek advice; how can their health be monitored; and how can they continue to manage their condition?

Because of the containment and mitigation measures, people with diabetes found themselves without essential services. This has been disrupting the practices for preventing diabetes-related complications. However, Government bodies and Healthcare professionals and those who support people with diabetes have rallied really well during the lockdown to find innovative ways to help.

People with diabetes most vulnerable during COVID-19

Some of the issues and challenges that have emerged include the reported high incidence of COVID-19 infections among persons with diabetes resulting in a higher number of ICU admissions and higher mortality reported in them. The increased predisposition of patients with diabetes to COVID-19 infections is believed to be related to a compromised innate immunity that accompanies uncontrolled diabetes. The situation would be worse if there are other co-morbidities such as hypertension, chronic kidney disease, or coronary artery disease which often co-exist with diabetes and are also associated with more aggressive COVID-19 infections.

Furthermore, because people with diabetes represent a fragile population that is at an increased risk of mortality from COVID-19, it is recommended to avoid unnecessary diabetes-related hospital admissions to reduce the risk of COVID-19 exposure in the hospital.

People with diabetes need to be GlucoVigilant

In current times, people with diabetes have to be even more vigilant about their health. They should practice GlucoVigilance, which is to keep a regular watch on their sugar levels: eat a balanced diet, exercise regularly, take medicines properly and monitor sugar regularly with a glucometer. A high degree of alertness with frequent self-monitoring of blood glucose levels is certainly advisable in known diabetic patients, particularly insulin users, to reduce the risk of being affected with COVID-19 infection and avoid any undesirable consequence should they get infected.

At the level of healthcare providers, it is important to detect fresh cases of diabetes early—something which is very difficult at a time when the medical fraternity is struggling to manage the COVID-19 pandemic. Just as it is important that people with diabetes make every effort to achieve good glycemic control during these COVID times, it is equally important that healthcare provider identify diabetes co-morbidities and complications early and effectively manage them.

A huge challenge

Diabetes management is challenging for the patient as well the healthcare provider. It is not always easy to keep up with exercise schedules, diabetes meal plans, blood sugar check, medications, and much more. Diabetes care demands a lot of self-management on a day-to-day basis. This is where the real challenge begins for a person with diabetes.

On the other side, doctors too have a tedious task of analysing blood sugar fluctuations, medication adherence and other factors that influence the outcome of diabetes care. Thinking through the present operational challenges, restrictions imposed by the lockdown and changing attitudes and behaviours, it appears that technology has been provided with an opportunity to prove its worth and can play an important role more than ever before in times of COVID-19.

In India, management of diabetes and its complications is a big challenge due to problems such as lack of awareness, scarcity of healthcare specialists and lack of data that helps in therapeutic decision-making.

Going digital could be the answer

In the modern world today, technology governs almost every aspect of our lives and healthcare is no exception. With development of advanced technologies such as health apps, pedometers, food trackers and glucometers, data tracking has become manageable. Social media is another evolved technology that many patients with diabetes use to educate themselves and drive motivation to bring lifestyle change.

With the emergence of health apps, smartphones may be used to address many aspects of healthcare. Most diabetes apps take care of diabetes self-management part as they allow manual entry for blood glucose, food intake, exercise time and insulin intake.

During this global pandemic, remote patient monitoring (RPM) is emerging as an effective and sustainable solution for precaution, prevention, and treatment to stem the spread of COVID-19 known as telemedicine. It has been on the rise during the pandemic which refers to remote consultation where a doctor and patient can exchange health information through electronic communication such as video calls or SMS. Telehealth can provide several benefits particularly related to chronic illnesses such as diabetes. A patient can get treated from a specialist of choice without having to travel. Telehealth has

suddenly reached the widespread adoption many of us wouldn't have even thought about.

Recognising the necessity of telehealth considering the current crisis. Authorities have also relaxed certain restrictions regarding its use across clinical specialties. Moreover, the WHO recently mentioned telehealth among essential services in strengthening the health systems response to COVID-19 policy. According to this new policy, within the optimising service delivery action, Telehealth could be one of the alternative models for clinical services and clinical decision support.

Future of diabetes management will be FIGITAL (F2F and Digital)

As the pandemic forces healthcare systems across the globe to respond rapidly to the crisis, many are adopting digital solutions such as digital medicine products, telehealth, and remote monitoring. A new report, published by IQVIA, has now highlighted how the COVID-19 pandemic is also an opportunity to transform diabetes care with digital innovation.

Looking ahead, technology will play a greater role in diabetes treatment and management once lockdowns ease, particularly through advances in medical apps and devices linked to smartphone and tablet computer cameras. A lot of what happens can be delivered through technology-enabled approaches, whether that's through uploading symptoms, weight, blood pressure, or blood sugar meter readings from home so that healthcare professionals can review them and give feedback remotely. There are many ways technology can keep people on track whilst we limit face-to-face (F2F) contact.

Managing diabetes has been made easier by recent developments in digital medicine products and smart diabetes management. One such diabetes treatment is a wearable insulin patch pump that can monitor insulin levels, however, managing the condition can be difficult when face-to-face care is restricted.

Home care could be practiced in future. Home-based medical care could be the F2F management ensuring less risk and high level of treatment satisfaction for wide ranges of acute and chronic conditions including Diabetes Management.

In summary, in future we will see a new wave of innovations in the area of digital health, smart data, telemedicine and home care delivery models. These innovations will for sure transform the current model of care and will facilitate triaging those who need to come to hospitals, supporting care at home, and even creating mobile clinics to support care for patients.

Last but not the least, during these times of lockdown and even post lockdown, all caregivers will have to deliver diabetes care more innovatively and increasingly use telemedicine and other novel approaches to be in touch with the diabetic patient while keeping face-to-face consultations to a minimum. This will ensure maximum benefit with minimum risk.

Omar Sherief Mohammad, GM, Roche Diabetes Care, India