

**The diabetes and COVID 19 pandemics association
with climate change and the role of Telehealth**

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Diabetes was considered the pandemic of the 3rd millennium until the Covid-19 pandemic. Recent evidence has highlighted how both pandemics are strongly associated: obese and diabetic patients are at increased risk of COVID 19 infection and have a worse prognosis when infected due to the impairment of the immune response to infections and due to the mechanical limits that make the management of these patients more difficult. There is also evidence that both pandemics are the cause and effect of climate change. Indeed, population growth, urbanization, motorized transportation and agricultural productivity increase greenhouse gas emission and consequently global warming. These factors are also incriminated in the diabetes pandemic by the promotion of the nutrition transition and physical inactivity. It has also been

suggested that the emergence and dissemination of the COVID 19 outbreak, as well as other zoonosis, could be linked to this population and urban growth, encroaching into wildlife habitats leading to an increased interaction between humans and animals, providing opportunities for inter species infection. Telehealth interventions have proven to be effective in tackling both pandemics, by providing care to both patients with COVID-19 infections and for those with obesity and diabetes, without increasing the risk of potential exposure for patients, clinicians, and staff. Furthermore, these tools have shown to be a potent carbon reduction strategy in the health sector which can significantly reduce greenhouse gas emission. However, several barriers still need to be overcome for a widespread use of eHealth solutions. These require important adaptation on the part of the caregivers and their therapeutic approach, as well as the patient.