



## **Diabetes, a Global Threat with the Worse Outcome in COVID-19 Pandemics**

Diabetes, one of the global health threats of the 21<sup>st</sup> century has become much more alarming with the outbreak of COVID-19.

According to the latest information of International Diabetes Federation (IDF Diabetes Atlas, 10<sup>th</sup> edition, 2021), 536.6 million people of 20 to 79 age group were living with diabetes in 2021 which were 10.5 % of the population of this age group. IDF has predicted that the number of the people with diabetes will be increased to 642.7 million in 2030 and 783.2 million in 2045, which is alarmingly higher than the previous prediction. It was predicted before that worldwide 578 million people of this age group would live with diabetes in 2030 and 700 million in 2045 (Ref: IDF DIABETES ATLAS, Ninth edition, 2019). Therefore, it can very reasonably be predicted that the real-world scenario is likely to be worse than currently apprehended. Type 2 diabetes accounting for more than 90% of all diabetes.

Situation over Bangladesh is even more alarming. Bangladesh was in the 10<sup>th</sup> position in world diabetes ranking in 2019 with an estimated 8.4 million diabetic people and was predicted to be promoted to the 9<sup>th</sup> position in 2030 with 11.4 million in 2030 and 15.0 million in 2045. Regrettably, the latest data are more horrifying. As per the latest data, Bangladesh was in the 8<sup>th</sup> position with 13.1 million in 2031 and will occupy the 7<sup>th</sup> position in 2045 with 22.3 million diabetic population. This number of diabetic people undoubtedly put a huge mental, physical, social, economic and treatment burden.

It's a matter of great concern that 44.7% of the diabetic persons are undiagnosed worldwide, the highest percentage in Africa (53.6%), followed by Western Pacific (52.8%) and South-East Asia (51.3%) region. These large number of undiagnosed people often present with life threatening and disabling complications like

ischemic heart disease, stroke, nephropathy, neuropathy and retinopathy.

COVID-19 pandemic has brought a worldwide disaster and it's a nightmare for diabetic population. Initial studies suggested that people with diabetes had a particularly high risk of developing severe complications from COVID-19 infection, including COVID-19 pneumonia, acute respiratory distress syndrome (ARDS) and respiratory failure. In a systematic review of 300 studies, it was found that individuals with diabetes had a 3.8-fold higher likelihood of being hospitalized due to COVID-19, compared to those without diabetes. Moreover, 282 studies suggested that people with diabetes who were hospitalized with COVID-19 are 2.3 times more at risk of death than people without diabetes who were admitted into the same hospital or health system. Estimates were similar in both high and low to middle income countries. Studies have found that poorer glycemic control, as measured by a higher HbA1c, was associated with worse COVID-19 endpoints including hospitalization, ICU admission and deaths.

So, it can be inferred that the diabetes and COVID-19 situation is not only alarming but also disastrous. But still we are hopeful, we will have to combat jointly to tame the monsters. We need to do it without further delay, not only controlling but also preventing diabetes. The theme of World Diabetes Day for 2021-23 reflects the reality of the current situation. The theme is 'Access to Diabetes Care: if not now, when?'. We all need to act now.

---

**Prof. Mir Mosarraf Hossain**

Professor and Head of the Department of Endocrinology, Sir Salimullah Medical College Mitford Hospital, Dhaka

