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Glycemic Warming: A Glycemic Warning

Global warming impacts our environment, and our health, in multiple ways¹. While global warming garners global attention, another challenge continues to grow as a disaster in slow motion. This is the pandemic of diabetes. Similar to global warming, 'glucose warming' or the diabetes epidemic, has affected every country on earth².

Statistics for global warming and glucose warming exhibit striking similarities. The difference is just that climatic change and weather-related disasters are headlined in media, while diabetes-related disease and death are usually not considered newsworthy enough. This is in spite of the fact that diabetes kills, and maims more people than natural disasters do.

Just as global-warming is associated with multiple climatic and weather changes, glucose warming or the diabetes epidemic represents a multifaceted challenge. Managing diabetes means not just keeping glucose levels under control, but ensuring optimal control of blood pressure, cholesterol, and body weight³.

Put together, these four targets are known as the metabolic quadriga. Apart from these, diabetes is linked with various complications such as cardiovascular disease, kidney impairment, fatty liver, and obstructive sleep apnea (OSA). The complex presentation of diabetes can be explained by its equally complex pathophysiology, or development. Many factors, including deficient production as well as function of the hormone

insulin, and inadequate performance of the incretin system, lead to diabetes⁴.

Advances in diagnosis and treatment now allow affected persons to live a healthy life with diabetes. Timely screening, diagnosis, and monitoring of diabetes are essential if optimal health is to be achieved, and maintained.

Newer drugs, which work on all these causative factors, allow multifaceted management of diabetes. By controlling glucose as well as body weight, improving lipids and blood pressure, and reducing the risk of heart and kidney disease, they improve the overall health of the person living with diabetes. Modern medications such as glucagon-like peptide-1 receptor agonists and sodium-glucose cotransporter-2 inhibitors have also been reported to improve liver health and reduces the symptoms of OSA. They have also been found to reduce the risk of cardiovascular disease and improve survival^{5,6}.

Thus, such medications can be viewed as a defense against glycemic warming and its long-term effects. Timely use of these drugs will help reduce the impact of uncontrolled diabetes and its various complications. This benefit will be felt not only at an individual level, but will accrue to the society and nation as well.

We need to view global and glycemic warming, as a global glycemic warning, and act against it; we need to manage diabetes in a timely, and appropriate, manner.

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