

Rising trend of youth-onset diabetes: A new challenge to the nation

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A paradigm shift has been observed in the field of diabetes. It is no longer predominantly associated with older adults. Nowadays the younger population is making alarming inroads into it. This surge in diabetes among the young is the consequence of the rising prevalence of obesity and type-2 diabetes (T2DM). Once upon a time, immune-mediated type-1 diabetes (T1DM) was the prime concern. However, Mustafa et al. has reported GAD65 positivity in less than one third of the participants with youth-onset diabetes in Bangladesh.¹ In past years, T2DM in youth has been on the rise, related mostly to lifestyle and environmental factors. This shift marks a significant public health concern that demands urgent attention and comprehensive action.

The effects of early-onset diabetes are profound and extensive. There is rapid deterioration of beta cell function and diabetes control. In fact, the glycemic excursion at diagnosis in youth-onset diabetes is observed to be related more to the beta cell dysfunction.² The diabetes-related complications such as cardiac disease, renal failure, and neuropathy start early in the course.³ Consequently, many of them suffer from psychiatric ailments like depression, anxiety, and reduced quality of life. Another important issue related to obesity, impaired glucose intolerance, and diabetes is an increase in the prevalence of polycystic ovary syndrome and diabetes in pregnancy, resulting in fertility problems and bad obstetric outcomes respectively. It is worth noting that the prevalence of gestational diabetes is also on the rise, and infants born to GDM mothers are at risk of having diabetes at a younger age.⁴ As a result, there will be increased annual healthcare expenses and a loss of potential manpower in society.

The rise in the prevalence of diabetes in young is greatly influenced by the changing lifestyle with a lack of physical activity and increased consumption of processed foods, sugary beverages, and fast food. There is limited availability of playfields due to rapid urbanization and at the same time, addiction to gadgets and increased screen time have doubled the risk. T2DM is a complex, multifactorial disease, affected by both

environmental and genetic factors.

We need to undertake a nationwide survey in Bangladesh to find out the true prevalence scenario. The etiological basis for young-onset diabetes should be explored to take preventive measures. The complex interaction between environmental and genetic factors needs to be addressed. Obesity is a known risk factor. Therefore, changing the lifestyle of children and adolescents could be a big step toward diabetes prevention - and it's never too late to start.

Schools and communities should come forward to educate children and adolescents about healthy lifestyles including nutrition, the importance of physical activity, and the risks associated with an unhealthy lifestyle. The government can enforce policies to control the promotion of unhealthy foods to kids, enhance the nutrient value of school tiffin, and provide adequate places and secured playgrounds. Both the school and the guardian can take responsibility for limiting the excessive burden of coaching and encouraging more physical activity. Controlling screen time and ensuring early bedtime must be taken care of at home. Healthcare interventions with regular screening for diabetes and its risk factors can lead to early detection and appropriate intervention. Screening and appropriate management of pregnancy diabetes is important to reduce the incidence of obesity and diabetes in the offspring. It is crucial to carry out continued research activities on the causes and prevention of diabetes in young people.

The rise of diabetes among the youth demands an urgent call for action. By addressing the root causes and implementing necessary steps, we can halt the pace of this growing epidemic. We must ensure a healthy life for the next generation.

References

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