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Obesity is generally classified based on Body Mass Index (BMI) with overweight and obesity falling into different categories. However, abdominal obesity-which is measured by waist circumference is another important indicator of diabetes risk.

For Asian populations, abdominal obesity can be present even in individuals whose body weight falls within the normal BMI range. This is why waist circumference is an important factor in assessing the risk of Type 2 diabetes.

Previously, abdominal fat was considered simply excess fat. However, research has shown that it is metabolically active and can contribute to disease. Abdominal fat releases free fatty acids, which can negatively affect the vascular endothelium and the pancreas. Over time, this may damage the pancreatic beta cells, which produce insulin.

Another important link is insulin resistance. People with abdominal obesity are more likely to develop insulin resistance, a condition in which the body's cells, particularly muscle cells, do not respond properly to insulin. Normally, insulin helps transport glucose from the bloodstream into these cells for energy. However, when insulin resistance develops, this process becomes less effective, causing glucose to accumulate in the blood.

Together, the gradual impairment of insulin-producing beta cells and increased insulin resistance contribute significantly to the development of Type 2 diabetes.

TDS: For people with prediabetes or newly diagnosed type 2 diabetes, how much difference can early changes in diet, physical activity and weight make?

FMS: Many people assume that if their blood sugar is high but they do not experience any noticeable symptoms, there is no immediate reason to seek treatment. They may continue eating sweets or maintaining unhealthy habits, thinking that the condition is not affecting them because they feel perfectly fine.

However, the absence of symptoms does not mean diabetes is harmless. Persistently high blood sugar can gradually damage the body's vital organs. There are five major target organs that are particularly vulnerable to diabetes-related complications: the heart, kidneys, eyes, nerves and blood vessels.

By the time patients begin experiencing noticeable problems in these organs, the disease may already have progressed significantly. Therefore, it is essential to raise awareness about the importance of early diagnosis and treatment rather than waiting for complications to develop.

One way to identify people at risk is through the haemoglobin A1c (HbA1c) test, which measures average blood glucose levels over approximately the previous three months. Even when a person's blood sugar levels do not meet the diagnostic criteria for diabetes, an HbA1c test may reveal prediabetes. Identifying this stage is particularly important because it provides an opportunity to intervene before the condition progresses to Type 2 diabetes.

If we can identify people with prediabetes early, we can encourage them to make necessary lifestyle changes, including improving their diet, increasing physical activity and managing their body weight. Through timely intervention, the progression to Type 2 diabetes can often be delayed or even prevented.

Ultimately, people need to understand that diabetes should be detected and managed before it causes damage to vital organs. We should not wait for complications to appear before taking action; prevention and early diagnosis must be our priorities.

TDS: How are newer diabetes treatments changing the management of the disease, particularly in terms of protecting vital organs and controlling weight?

FMS: As we no longer look at diabetes simply as a blood sugar disorder, the treatment has advanced tremendously. It is increasingly understood as a cardiometabolic disease because it is interconnected with several other conditions.

Many new medicines have emerged that do more than lower blood sugar. They also protect the kidneys and heart and help reduce body weight.

There are newer generations of medicines, including sodium-glucose co-transporter-2 (SGLT2) inhibitors, which provide protection for the heart and kidneys and may also improve fatty liver disease. Another major advancement in diabetes management has been the introduction of GLP-1 receptor agonists.

TDS: How effective are Bangladesh's existing NCD policies in supporting diabetes prevention and early treatment? What reforms should be prioritised?

FMS: Diabetes is a priority among non-communicable diseases, and I find the government's increasing focus on primary healthcare and prevention encouraging.

We need to invest more in prevention and awareness. For instance, students in every type of institution should be taught about healthy food habits and physical activity. Parents should also be made aware of the risks of childhood obesity.

If we can educate children and adolescents about maintaining a healthy weight and staying physically active, we can prevent a significant proportion of future diabetes cases.

People who lead sedentary lifestyles should also be encouraged to incorporate physical activity into their daily routines. Even household chores, cleaning, running errands or taking short walks can help burn calories.

Another important issue is evaluating our existing diabetes-care network. Bangladesh has BIRDEM and the National Diabetes Network, which have received considerable government support and investment over the years.

If the prevalence of diabetes has continued to increase despite the expansion of these networks, we must examine whether they are functioning effectively, particularly in terms of prevention. We need to audit, reevaluate and strengthen the system. This requires proper checks and balances from the government.

We also need to make public awareness campaigns more effective.

As far as manpower for preventive awareness is concerned, I believe the existing workforce is sufficient. We do not necessarily need additional manpower or major investment in this area. What we need is to make better use of the resources and workforce already available.

TDS: What would be your message to policymakers, physicians and the general public this World Diabetes Day?

FMS: Diabetes is one of the most critical non-communicable diseases in Bangladesh. It is projected that the number of people with diabetes in the country could increase by approximately 25 million over the next 20 years. We must work to prevent this.

Previously, people thought diabetes was a disease of old age or something that primarily affected the middle and upper classes. But we are now seeing people develop diabetes at the age of 25 to 30, including those from middle- and lower-middle-income families.

When someone develops diabetes, it adds a recurring monthly medical expense to the family. If the person subsequently develops heart disease, becomes physically disabled or suffers kidney damage requiring dialysis, the financial burden becomes enormous.

That is why my message is simple: prevention must come first, followed by early detection. With early diagnosis and proper control, we can avoid many of the complications associated with diabetes.

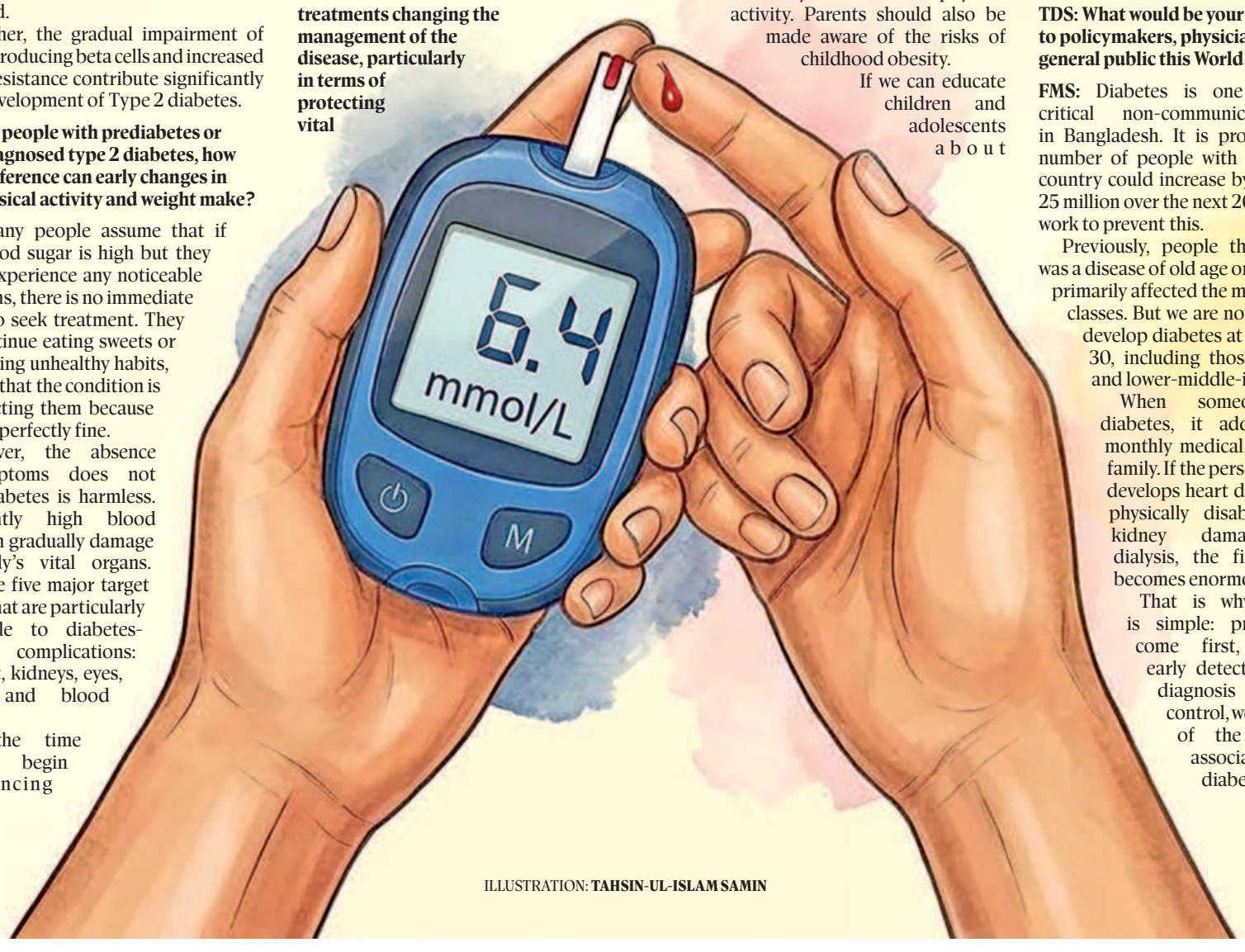


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