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Early action holds the key to diabetes control

As we no longer look at diabetes simply as a blood sugar disorder, the treatment has advanced tremendously. There are newer generations of medicines, including sodium-glucose co-transporter-2 (SGLT2) inhibitors. Another major advancement in diabetes management has been the introduction of GLP-1 receptor agonists.

Professor Dr. F. M. Siddiqui
Vice-Chancellor,
Bangladesh Medical University (BMU).



Bangladesh has an estimated 13–14 million diagnosed diabetes patients, while the number of undiagnosed cases could be three times higher, says Professor Dr. F. M. Siddiqui, Vice-Chancellor of Bangladesh Medical University (BMU). He warns that diabetes often develops without symptoms, making early screening and preventive lifestyle changes essential. In an interview with The Daily Star on the occasion of World Diabetes Day 2026, themed "Early Action on Diabetes", he discusses the country's growing diabetes burden, the risks of obesity, advances in treatment and the need to strengthen preventive healthcare.

The Daily Star (TDS): This year's World Diabetes Day theme is "Early Action on Diabetes". What should this mean in practice for Bangladesh, considering the country's growing burden of diabetes?

Professor Dr. F. M. Siddiqui (FMS): The phrase "Early Action on Diabetes" carries crucial guidance. It is particularly important for Bangladesh because diabetes is a silent killer. Initially, the disease presents no symptoms and can develop inside the body for many years without the patient being aware of it. In most cases, it is diagnosed only when someone undergoes medical tests due to another complication.

The primary goal of diabetes treatment is to prevent or reverse complications. For that, early detection, particularly even before particular symptoms appear, is the most crucial factor. If we identify the disease early, we can initiate several interventions, and medication may not even be necessary in some cases. Before medication, we have to have a lifestyle modification.

According to available data, approximately 13 to 14 million people in Bangladesh have been diagnosed with diabetes. However, in my estimation, there are at least three times as many people who remain undiagnosed. They simply do not know that they have the disease.

For instance, if someone is overweight, smokes or leads a sedentary lifestyle, changing their dietary habits, reducing refined carbohydrates, walking regularly and losing some weight can have a significant impact. These changes can benefit individuals over a long period.

That is why early detection is vital. There is simply no alternative to it when it comes to reducing complications.

TDS: What prevents people in Bangladesh from receiving an early diagnosis? Who should seek screening even if they have no symptoms?

FMS: One of the main reasons for delayed diabetes diagnosis is a lack of personal awareness. Building awareness requires a concerted effort through various communication channels, including social media, electronic media and print media. These are platforms that people engage with every day and can play an important role in bringing health information to public attention.

At the same time, awareness must be strengthened through primary healthcare facilities, hospitals and other existing healthcare structures. The health sector can take initiatives such as distributing leaflets, displaying health information and running public awareness campaigns to encourage people to undergo regular blood sugar tests.

People should be made aware that they do not necessarily need to experience symptoms to get tested. For instance, individuals aged 30 or above, those with hypertension, excess body weight, high cholesterol or a history of smoking, as well as those with a family history of diabetes, should be encouraged to check their blood sugar levels even if they feel perfectly healthy.

The message should be clear: if you fall into any of these risk categories, do not wait for symptoms to appear. Get your blood sugar checked or consult a healthcare professional at your nearest healthcare facility. Early awareness and timely screening can help identify diabetes before complications develop.

- Bangladesh's undiagnosed diabetes burden could be at least three times higher than its estimated 13–14 million diagnosed cases.
- Diabetes screening should not wait for symptoms. People aged 30 and above and those with risk factors need regular blood sugar checks.
- Normal body weight does not necessarily mean low diabetes risk. Abdominal fat can trigger insulin resistance and increase the risk of type 2 diabetes.
- Early detection of prediabetes creates an opportunity to delay or even prevent type 2 diabetes through dietary changes, physical activity and weight management.
- Modern diabetes treatment is moving beyond blood sugar control, with newer medicines offering additional heart and kidney protection and helping manage body weight.

TDS: Diabetes can affect several vital organs, including the heart, kidneys, eyes and nerves. How does this damage develop, and why is early diagnosis essential?

FMS: Diabetes affects several target organs. The first is the nervous system. Once the damage reaches an advanced stage, it may become irreversible. Another major target is the eyes. Diabetes can affect the retina, a condition known as diabetic retinopathy. The heart is another major concern. Diabetes increases the risk of ischaemic heart disease and serious cardiovascular events, including heart attacks. Also, diabetes is one of the leading causes of kidney failure globally.

By the time these organs become significantly damaged, the disease may have progressed considerably. People must understand that they need to get diagnosed before their organs are affected.

TDS: How does obesity increase the risk of type 2 diabetes? Why should people who are not visibly overweight also pay attention to their risk?

FMS: There is a direct link between Type 2 diabetes and obesity.

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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.

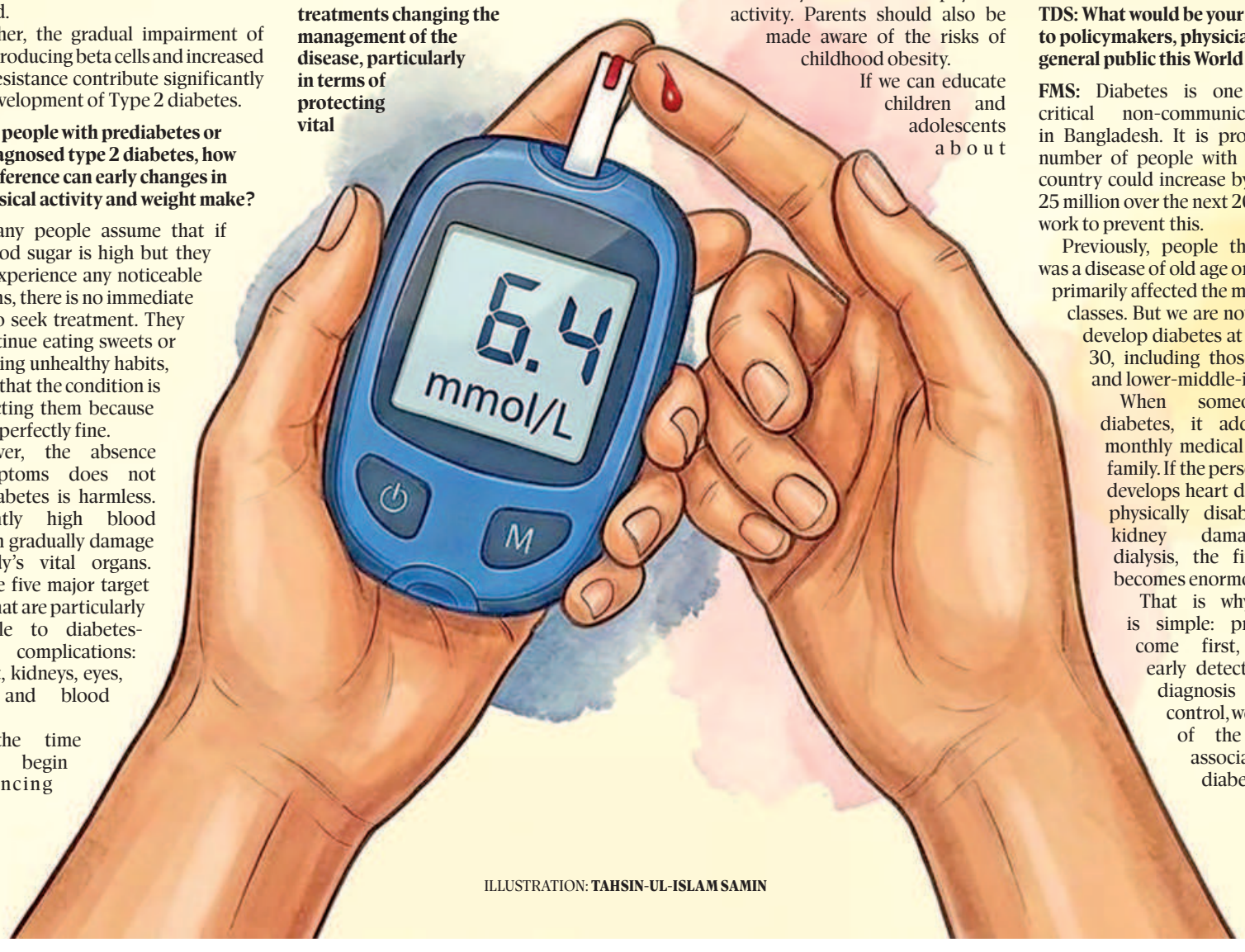


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The compassion and care diabetes requires



Society must replace judgement with understanding and recognize diabetes as a serious but manageable medical condition.

Prof. Dr. Indrajit Prasad
Professor and Head
Department of Endocrinology
Dhaka Medical College Hospital
Secretary General, Association of Clinical Endocrinologist & Diabetologist of Bangladesh (ACEDB)

In an interview with The Daily Star Prof. Dr. Indrajit Prasad, Head of the Department of Endocrinology at Dhaka Medical College Hospital and Secretary General of the Association of Clinical Endocrinologist & Diabetologist of Bangladesh (ACEDB) discusses how diabetes-related stigma, shame and social misconceptions affect patients' emotional well-being and treatment and why families and society must respond with empathy, understanding and support.

The Daily Star (TDS): When we talk about diabetes stigma, what exactly does it mean? How is it different from a general lack of awareness about the disease?

Prof. Dr. Indrajit Prasad: Lack of awareness means not knowing the facts about diabetes. Stigma goes further, involving negative attitudes, unfair judgement and discrimination. People with diabetes may be labelled weak, careless or greedy or blamed for their condition.

In my clinics, I see how shame causes emotional distress, discourages patients from discussing their condition and ultimately keeps them away from necessary treatment.

TDS: In Bangladesh, diabetes is sometimes perceived as a disease of older or wealthy people. How do these misconceptions affect younger patients and people from lower-income backgrounds?

IP: Diabetes knows no age or economic boundaries. Type 1 diabetes usually begins in childhood or adolescence, while type 2 is increasingly diagnosed among people in their twenties and thirties, sometimes even teenagers. South Asians also tend to develop type 2 diabetes at younger ages and lower body weights.

When diabetes is considered an elderly or wealthy person's disease, young people may ignore symptoms out of embarrassment, while lower-income families may assume they are not at risk. Such beliefs delay screening and treatment.

TDS: How often do you encounter patients who hide their diabetes from friends, colleagues or even family members out of fear of social judgement, embarrassment or self-blame? What psychological and medical consequences can this secrecy have?

IP: Many patients hide their condition from colleagues, in-laws or relatives for fear of judgement, appearing physically weak or losing opportunities at work.

Secrecy creates anxiety, social isolation and depression. Patients may skip medication or insulin, avoid glucose monitoring and neglect dietary restrictions to avoid drawing attention. Poor control increases the risk of short-term hypoglycaemia and long-term damage to the eyes, kidneys, nerves, heart and feet. When patients feel safe to be open, they manage diabetes with greater confidence.

TDS: How significantly does family support influence a patient's ability to manage diabetes? Can a supportive family really change the outcome?

IP: Yes, substantially. Diabetes is managed daily at home not just in the doctor's chamber. Families can improve treatment adherence and glucose control by encouraging healthy cooking, exercising together, reminding patients about medication and accompanying them to follow-up visits.

- Shame and secrecy can lead to anxiety, depression, delayed treatment and poor blood glucose control.
- Family support can improve treatment adherence and diabetes management but patients need partnership, not policing.

Emotional support also reduces stress and diabetes burnout. Relatives should learn to recognise low blood glucose and know how to respond. What helps is partnership, not policing.

TDS: In Bangladesh, health conditions can sometimes become a concern during marriage negotiations. Have you encountered cases where a diabetes diagnosis has affected someone's marriage prospects, particularly for women? What misconceptions lie behind this?

IP: Unfortunately, yes. I have seen families hide a young woman's diagnosis, particularly type 1 diabetes, and marriage proposals withdrawn once it becomes known. Men face this too, but the pressure on women is usually greater.

Misconceptions include believing that people with diabetes cannot have normal married lives or children, or that they can transmit the disease to their spouses. Diabetes is not contagious.

TDS: How does diabetes stigma affect women differently from men, particularly in terms of marriage, pregnancy, motherhood and family responsibilities?

IP: Women face additional social pressure, particularly regarding marriage, fertility and pregnancy. Many also priorities their families' health while neglecting their own check-ups.

Women with diabetes should consult their doctors before conceiving so blood glucose can be controlled, medication reviewed and folic acid started. With proper control, monitoring by endocrinologists and obstetricians, and insulin when needed, most can have healthy pregnancies.

TDS: How should society respond when someone needs to check their blood glucose, take insulin or follow a particular dietary routine in a public setting? Why should these everyday practices be normalised?

IP: Checking glucose, injecting insulin, eating a scheduled snack or declining dessert are routine parts of treatment, not reasons for shame.

Schools, offices and social gatherings should accommodate these needs, allowing children to check glucose or eat snacks in class and providing private spaces for injections when preferred. Normalising these practices reduces stress and helps prevent dangerous hypoglycaemia and long-term complications.

TDS: Some patients discontinue medication, avoid insulin or turn to alternative treatments because they fear being judged by family members or society. How serious is this problem?

IP: It is very serious. Stopping treatment can cause uncontrolled glucose and life-threatening emergencies such as diabetic ketoacidosis, particularly among people with type 1 diabetes, who need insulin to survive.

Insulin is surrounded by myths, but it is a natural hormone, not addictive, and starting it early can protect against complications. Some patients also abandon proven treatment for unverified remedies promoted on social media, losing valuable time. Treatment decisions must be guided by medical evidence, not social pressure.

TDS: What is the biggest misconception about diabetes in Bangladeshi society that you believe needs to be challenged, and why?

IP: The biggest misconception is that diabetes results simply from eating too much sugar or living carelessly and is therefore the patient's fault. The reality is more complex. Type 1 diabetes is an autoimmune condition unrelated to diet or lifestyle. Type 2 involves genetic predisposition, family history, ageing, ethnicity and environmental factors. Although lifestyle matters, even people who eat sensibly and stay active can develop it.

Blaming patients creates guilt and discourages treatment. Society must replace judgement with understanding and recognise diabetes as a serious but manageable medical condition, not a personal failure. Families, schools, workplaces and the media all have a role in changing this attitude.

The hidden toll of diabetes on vital organs



The earlier we act, the better we can protect the heart, kidneys, eyes and overall quality of life.

Prof. Dr. Md. Feroz Amin
Department of Endocrinology, BIRDEM Academy
Vice-President, Bangladesh Endocrine Society (BES)

Diabetes can silently damage the heart, kidneys and eyes, often before patients notice any symptoms. Regular screening, early diagnosis and managing risk factors beyond blood sugar are essential to preventing serious complications, says Prof. Dr. Md. Feroz Amin Department of Endocrinology, BIRDEM Academy Vice-President, Bangladesh Endocrine Society (BES). In an interview with The Daily Star, he discusses how diabetes affects vital organs, the importance of routine health checks and the role of early medical intervention.

The Daily Star (TDS): How does diabetes affect multiple organs, particularly the heart, kidneys and eyes?

Prof. Dr. Md Feroz Amin (FA): Diabetes affects more than blood sugar levels. Persistently high blood glucose causes inflammation and damages blood vessel walls, reducing circulation throughout the body.

The small blood vessels in the eyes, kidneys and nerves are particularly vulnerable, potentially leading to vision problems, kidney disease and nerve damage. Diabetes also increases the risk of blockages in larger arteries, which can cause heart attacks, strokes and poor circulation in the legs.

TDS: How common are diabetes-related complications in Bangladesh, and which are often detected too late?

FA: Diabetes is a major health concern in Bangladesh. According to the International Diabetes Federation's 2025 Diabetes Atlas, approximately 13.9 million adults aged 20–79 were living with diabetes in Bangladesh in 2024. Alarmingly, 39.1% were unaware of their condition.

Many patients are diagnosed only after complications develop. Kidney and eye diseases often go undetected because they may not cause noticeable symptoms initially. Nerve damage in the feet is also frequently overlooked until wounds or infections appear. Heart disease can remain unnoticed because warning signs may be mild or unusual in people with diabetes.

TDS: Can serious complications develop without noticeable symptoms? What routine tests are necessary for early detection?

FA: Yes. Serious complications can develop even when a person feels completely healthy. Early kidney and eye damage often causes no symptoms, making regular screening essential.

People with diabetes should monitor their HbA1c every three to six months, depending on their blood glucose control and treatment changes. Blood pressure should be checked at every clinical visit, while lipid profiles should be assessed periodically, generally annually for patients requiring ongoing cardiovascular risk assessment.

Kidney screening should include the urine albumin-to-creatinine ratio (UACR) and serum creatinine with estimated glomerular filtration rate (eGFR). Comprehensive dilated eye examinations and foot assessments are also important, with at least annual checks for the feet. ECGs should be performed when clinically indicated rather than routinely in every asymptomatic patient.

- Diabetes silently damages affecting the heart, kidneys, eyes and nerves.
- Nearly 39.1% of people living with diabetes in Bangladesh were unaware of their condition in 2024.
- Managing blood pressure and cholesterol is just as important as controlling blood sugar in preventing diabetes-related complications.
- Organ damage may not always be reversible but early diagnosis and timely treatment can slow its progression.

TDS: How does diabetes increase the risk of heart attacks and strokes? What precautions should patients take?

FA: People with diabetes have approximately twice the risk of heart attacks and strokes. High blood sugar, high blood pressure, abnormal cholesterol levels and excess weight contribute to fatty deposits building up inside arteries, restricting blood flow to the heart and brain.

Diabetes can also damage nerves, making heart attack symptoms less noticeable. Some patients may experience breathlessness, sweating, unusual tiredness or upper abdominal discomfort instead of chest pain. These symptoms require immediate medical attention.

Patients should avoid tobacco, exercise regularly, maintain a healthy weight and take prescribed medicines consistently. Certain newer diabetes medicines also provide additional heart and kidney protection.

TDS: What are the early signs of diabetic kidney disease and retinopathy? How frequently should patients undergo screening?

FA: Early kidney disease and diabetic retinopathy, which damages the retina, often develop without warning signs. The earliest indication of kidney damage is usually a small amount of protein in the urine, detectable through laboratory tests. Later symptoms may include swelling of the feet or face, foamy urine and high blood pressure.

Early eye disease may also develop without affecting vision. Blurred vision, floating spots or dark patches may appear as the condition progresses.

People with type 2 diabetes should undergo kidney and eye examinations at diagnosis and at least annually afterwards. For type 1 diabetes, screening generally begins five years after diagnosis. More frequent checks may be necessary if complications develop.

TDS: Beyond blood glucose control, how important is managing blood pressure, cholesterol and other risk factors?

FA: Controlling blood pressure and cholesterol is just as important as managing blood sugar. Blood sugar control alone cannot fully prevent diabetes-related complications.

For many patients, a blood pressure target below 130/80 mmHg is recommended, depending on individual health conditions. Reducing harmful LDL cholesterol is equally important, particularly for those with heart disease.

Patients should avoid smoking, maintain a healthy weight, exercise for at least 150 minutes a week, get adequate sleep and follow a balanced diet with less salt, added sugar and refined carbohydrates. Managing these risk factors together significantly reduces the risks of heart attacks, strokes and kidney disease.

I always remind my patients to know three important numbers: blood sugar, blood pressure and cholesterol.

TDS: Once complications develop, how much can early medical intervention slow their progression?

FA: Early diagnosis and treatment can significantly slow the progression of diabetes-related complications. Kidney disease detected early can often be managed through proper blood sugar and blood pressure control, alongside medicines that protect kidney function.

Timely treatment of diabetic eye disease through laser therapy or intravitreal injections of anti-VEGF agents can prevent further vision loss. Even a small foot wound, if treated promptly, can prevent serious infections and possible amputation.

Patients should attend regular follow-up visits, take prescribed medicines and never stop treatment without consulting their doctor. Although existing organ damage may not always be reversed, early intervention can prevent further deterioration.

Why early detection matters

South Asians, including Bangladeshis, often develop diabetes at younger ages and lower body weights. Therefore, screening strategies should consider population-specific risks

Dr. Faria Afsana
Associate Professor and Head, Department of Endocrinology, BIRDEM, Dhaka
President, Bangladesh Endocrine Society (BES)



In an interview with The Daily Star (TDS), Dr. Faria Afsana, Associate Professor and Head of the Department of Endocrinology at BIRDEM, Dhaka and President of the Bangladesh Endocrine Society (BES), discusses the importance of early diabetes detection, timely diagnosis and intervention in preventing long-term complications.

The Daily Star (TDS): Why does diabetes frequently go undiagnosed in its early stages, and what makes early detection particularly important?

Dr. Faria Afsana: Type 2 diabetes often develops silently, without noticeable symptoms. Many people remain unaware of elevated blood glucose until complications appear. Early detection is essential because prolonged high blood glucose can gradually damage vital organs. Timely diagnosis allows lifestyle modifications and appropriate treatment, helping prevent or delay complications such as heart disease, kidney disease, vision loss and nerve damage. Early intervention improves long-term health and quality of life.

TDS: At what age should people in Bangladesh start routine diabetes screening? Considering the rising prevalence of type 2 diabetes among younger adults, should screening guidelines be revised to include younger age groups?

FA: Routine diabetes screening is generally recommended from age 35, while individuals with additional risk factors should be screened earlier. South Asians, including Bangladeshis, often develop diabetes at younger ages and lower body weights. Therefore, screening strategies should consider population-specific risks. Young adults with obesity, family history of diabetes, hypertension or other metabolic abnormalities should undergo screening regardless of age. Risk-based screening can identify diabetes and prediabetes before complications develop.

TDS: Who should be considered at high risk of developing diabetes? How significant are factors such as family history, obesity, sedentary lifestyles, gestational diabetes and polycystic ovary syndrome (PCOS) in determining an individual's risk?

FA: Major risk factors include family history of diabetes, abdominal obesity, physical inactivity, hypertension and abnormal cholesterol. Women with previous gestational diabetes or polycystic ovary syndrome (PCOS) also face increased risk due to underlying insulin resistance. Genetic susceptibility and increasing age further contribute. Individuals with multiple risk factors are particularly vulnerable and should undergo regular screening, even without symptoms. Healthy eating, regular physical activity and weight management can significantly reduce their risk.

TDS: Which tests are most reliable for detecting diabetes at an early stage, and when should each be recommended?

FA: Three standard laboratory tests are used: fasting plasma glucose, HbA1c and oral glucose tolerance test (OGTT). Fasting glucose is affordable and widely available, while HbA1c reflects average blood glucose over approximately three months without requiring fasting. OGTT can detect glucose abnormalities missed by other tests and is particularly useful during pregnancy and in selected high-risk individuals. Test selection depends on clinical circumstances, and abnormal results generally require confirmation in people without symptoms.

TDS: How long can someone live with undiagnosed diabetes before developing complications? Can damage to the kidneys, eyes, heart and nerves begin even when a person has no obvious symptoms?

FA: Type 2 diabetes can remain undiagnosed for several years. During this period, elevated blood glucose may silently damage blood vessels and nerves. Kidney disease, retinal damage and neuropathy can develop before noticeable symptoms appear. Some individuals already have complications at diagnosis. Cardiovascular risk may also increase during prediabetes, particularly alongside obesity or hypertension. Therefore, regular screening is essential, even when someone feels completely healthy.

TDS: There is growing concern about diabetes among younger people in Bangladesh. What lifestyle, dietary and environmental factors are contributing to this trend, and what role should schools, workplaces and primary healthcare facilities play in early identification?

FA: Rapid urbanisation, unhealthy diets and sedentary lifestyles are increasing diabetes risk among younger Bangladeshis. Sugary beverages, fast food, refined carbohydrates, prolonged screen time, physical inactivity and inadequate sleep contribute significantly. Schools should promote balanced nutrition and exercise, while workplaces should encourage healthy lifestyles and risk-based screening. Primary healthcare facilities can identify vulnerable individuals through BMI, waist circumference, family history and appropriate blood glucose assessment.

TDS: Many people rely on home glucose meters or occasional blood sugar tests at pharmacies to assess their diabetes risk. How reliable are these methods for early detection, and when is laboratory-based confirmation necessary?

FA: Home glucose meters and pharmacy-based tests help identify possible blood glucose abnormalities but cannot independently confirm diabetes. Results may vary due to device accuracy, testing technique and meal timing. A single normal reading also does not exclude diabetes. Individuals with abnormal readings or significant risk factors should undergo laboratory testing using fasting plasma glucose, HbA1c or OGTT. Laboratory confirmation ensures accurate diagnosis and appropriate management.

TDS: What measures should Bangladesh prioritise to make diabetes screening more accessible and affordable? How can primary healthcare centres, community clinics and public awareness programmes contribute to identifying people at risk before complications begin?

FA: Bangladesh should integrate affordable, risk-based diabetes screening into routine primary healthcare. Community clinics can identify high-risk individuals, provide initial screening and arrange laboratory confirmation. Public awareness campaigns should highlight that diabetes may develop without symptoms. Workplace screening, community programmes and trained healthcare workers can improve access, particularly in underserved areas. Affordable testing, effective referrals, counselling and regular follow-up are essential to reduce delayed diagnosis, prevent complications and minimise the long-term healthcare burden.

- South Asians, including Bangladeshis are more likely to develop diabetes at younger ages and lower body weights.
- Diabetes can remain undiagnosed for years silently damaging the kidneys, eyes, heart and nerves even without noticeable symptoms.
- Affordable, risk-based screening through primary healthcare facilities and community clinics is essential to identifying diabetes before complications develop.

The link between obesity and prevalence of type 2 diabetes in Bangladesh



> **"Being slim does not necessarily mean being metabolically healthy. Diabetes risk should not be assessed solely through appearance or body weight."**

Prof Dr. M Saifuddin
Professor of Endocrinology, Dhaka Medical College & Hospital; General Secretary, Bangladesh Endocrine Society (BES)

Obesity and type 2 diabetes are closely linked, with excess abdominal fat increasing insulin resistance and the risk of developing diabetes. Unhealthy diets, physical inactivity and changing urban lifestyles are contributing to the growing burden of both conditions in Bangladesh, says Prof Dr. M Saifuddin, Professor of Endocrinology at Dhaka Medical College and General Secretary of the Bangladesh Endocrine Society (BES). In an interview with The Daily Star, he discusses the relationship between obesity and diabetes, the particular risks facing South Asians and the importance of early intervention through healthier lifestyles and stronger healthcare services.

The Daily Star (TDS): How closely are obesity and diabetes connected, and why are they increasingly becoming a public health concern in Bangladesh?

Prof Dr. M Saifuddin (MS): Obesity and type 2 diabetes are closely connected, often described together as "diabesity". Excess body fat, particularly around the abdomen, causes insulin resistance, increasing the risk of diabetes.

In Bangladesh, unhealthy diets, physical inactivity and rapid urbanisation are contributing to both conditions. They also frequently coexist with hypertension, abnormal cholesterol and fatty liver disease, increasing the risk of heart disease, stroke and kidney complications. These conditions place an additional burden on healthcare expenses, productivity and quality of life. Obesity should therefore be recognised as a serious medical condition rather than simply a cosmetic concern.

TDS: Why are South Asians, including Bangladeshis, more vulnerable to developing type 2 diabetes at comparatively lower body weights?

MS: South Asians tend to accumulate more abdominal and visceral fat, even at relatively lower body weights. They also generally have lower muscle mass, greater insulin resistance and increased genetic susceptibility.

Consequently, Bangladeshis may develop type 2 diabetes at a BMI considered normal in other populations. This means body weight alone cannot accurately reflect diabetes risk. Regular screening and monitoring waist circumference, alongside adopting healthier lifestyles, are particularly important for South Asian populations.

TDS: How does excess abdominal fat contribute to insulin resistance, and why should waist circumference be considered alongside BMI?

MS: Excess abdominal fat releases inflammatory substances and fatty acids that interfere with normal insulin action. As a result, body cells become less responsive to insulin, causing blood glucose levels to rise.

BMI indicates overall weight status but cannot identify fat distribution or distinguish fat from muscle. Waist circumference provides additional information about abdominal obesity and metabolic risk. For South Asian adults, waist measurements of 90cm or more in men and 80cm or more in women indicate increased metabolic risk. Assessing both measurements therefore provides a more comprehensive picture of diabetes risk.

- Excess abdominal fat increases insulin resistance and the risk of developing type 2 diabetes.
- South Asians can develop type 2 diabetes at lower body weights than other populations.
- Being slim does not necessarily mean being metabolically healthy.
- Unhealthy diets, sugary drinks and physical inactivity are increasing diabetes risks among younger Bangladeshis.
- Early screening and sustained lifestyle changes can reduce diabetes risk and prevent complications.

TDS: Are younger adults and children increasingly developing obesity-related metabolic problems in Bangladesh? What is driving this trend?

MS: Yes. Obesity-related metabolic problems are increasingly affecting younger Bangladeshis. Unhealthy lifestyles are contributing to type 2 diabetes at younger ages, with frequent consumption of fast food and sugary beverages, prolonged screen time, insufficient physical activity and inadequate sleep being major factors.

Consequently, children and adolescents may develop insulin resistance, fatty liver disease, hypertension and even type 2 diabetes. These problems can continue into adulthood, increasing the risk of future complications. Parents and schools should encourage balanced diets, regular outdoor activities and healthy daily routines from childhood.

TDS: Can someone who appears relatively slim still have excess visceral fat and a high risk of developing diabetes?

MS: Being slim does not necessarily mean being metabolically healthy. Some individuals have normal body weight but excessive visceral fat surrounding internal organs, particularly around the liver and abdomen. This is associated with normal-weight obesity.

Such individuals may have relatively low muscle mass but increased insulin resistance, making them vulnerable to diabetes, fatty liver disease and cardiovascular complications. This pattern is particularly relevant among South Asians. Diabetes risk should therefore not be assessed solely through appearance or body weight. Waist circumference, blood glucose, blood pressure and family history should also be considered.

TDS: What dietary and lifestyle patterns in urban Bangladesh are contributing to the rise of obesity and diabetes, and which habits should people prioritise changing?

MS: Urban lifestyles increasingly involve excessive consumption of refined carbohydrates, fried foods, processed snacks and sugary beverages, alongside prolonged sitting and limited exercise. Irregular sleep and unhealthy eating patterns further increase metabolic risk.

People should prioritise portion control, balanced meals, increased vegetable consumption and reduced intake of added sugar. Adults should aim for at least 150 minutes of moderate-intensity physical activity each week, alongside muscle-strengthening activities. Even a modest weight reduction of 5–7% can significantly improve insulin sensitivity and reduce diabetes risk in high-risk individuals. Consistent lifestyle changes are more beneficial than temporary dieting.

TDS: How should Bangladesh address the overlapping challenges of obesity and diabetes through public awareness, food policies, schools and healthcare services?

MS: Bangladesh needs a comprehensive prevention strategy combining public awareness, healthier food policies and stronger primary healthcare. Schools should promote nutrition education, balanced meals and regular physical activity.

Public campaigns should emphasise waist measurement, healthy lifestyles and early diabetes screening. Policies encouraging healthier food choices and limiting excessive consumption of sugary beverages are also important.

Healthcare facilities should prioritise identifying obesity, prediabetes and other metabolic risk factors before complications develop. Community-based screening, lifestyle counselling and regular follow-up can strengthen prevention. Most importantly, recognising obesity as a chronic medical condition and promoting early intervention can significantly reduce the future burden of diabetes in Bangladesh.

Preventing Type 2 Diabetes: **Act Early, Reduce Your Risk**

Many people remain unaware of their diabetic condition. Regular checks of blood sugar, weight, waist size and blood pressure can help identify those at risk before diabetes develops.

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Type 2 diabetes is increasingly becoming a public health concern in Bangladesh, affecting people at younger ages and putting millions at risk of long-term complications. Early screening, healthier dietary choices, regular physical activity and timely lifestyle changes can significantly reduce the risk of developing it. In an interview with The Daily Star, Dr. Shahjada Selim, Associate Professor of Endocrinology at Bangladesh Medical University (BMU) and President-elect of the Bangladesh Endocrine Society (BES), discusses the major risk factors behind type 2 diabetes, the importance of identifying prediabetes, and steps individuals can take to prevent or delay its onset.

The Daily Star (TDS): What are the major risk factors for developing type 2 diabetes, and how much of the disease can be prevented through early intervention?

Dr. Shahjada Selim (SS): The major risk factors for type 2 diabetes include excess body weight, especially fat around the waist, lack of physical activity, unhealthy eating habits, family history, increasing age, high blood pressure and abnormal cholesterol levels. Women who had diabetes during pregnancy or have polycystic ovary syndrome (PCOS) are also at higher risk. Although we cannot change our age or family history, many other risk factors can be controlled. A major study called the Diabetes Prevention Program showed that people at high risk could reduce their chances of developing diabetes by 58% through modest weight loss and regular exercise.

TDS: Who is most at risk of developing type 2 diabetes in Bangladesh, and at what age should people begin routine screening?

SS: Bangladeshis, like other South Asians, tend to develop type 2 diabetes at a younger age and at a lower body weight than many other populations. People with a family history of diabetes, excess belly fat, high blood pressure, or a physically inactive lifestyle are particularly vulnerable. A body mass index (BMI) of 23 or above also indicates increased risk in our population. Adults should generally begin diabetes screening at age 35, or earlier if they are overweight or have other risk factors. If the results are normal, testing should be repeated at least every three years. People with prediabetes should check their blood glucose at least once a year.

TDS: What are the early warning signs of prediabetes, and how can people identify their risk before developing full-blown diabetes?

SS: Prediabetes means blood sugar is higher than normal but not high enough to be diagnosed as diabetes. It usually causes no noticeable symptoms. Some people may develop dark, thickened skin around the neck or armpits, or gain excess weight around the waist. However, these signs alone cannot confirm prediabetes. A blood test is necessary. An HbA1c level of 5.7% to 6.4%, or fasting blood glucose of 5.6 to 6.9 mmol/L, may indicate prediabetes. Many people remain unaware of their condition. Regular checks of blood sugar, weight, waist size and blood pressure can help identify those at risk before diabetes develops.

- Type 2 diabetes risk can be reduced by 58% through early lifestyle changes.
- South Asians face higher diabetes risk at younger ages and lower body weights.
- Prediabetes often has no symptoms, making regular blood glucose screening essential.
- Losing 5–7% of body weight can significantly reduce the risk of diabetes.

TDS: How do every day dietary habits including high carbohydrate intake, sugary drinks and processed foods, contribute to the growing risk of type 2 diabetes?

SS: Large portions of white rice and other refined carbohydrates foods are digested quickly, causing blood sugar levels to rise rapidly. Over time, excessive calorie intake and weight gain can make the body less responsive to insulin, increasing diabetes risk. Sugary tea, soft drinks and packaged juices add extra sugar and calories without making us feel full. Fried and processed foods also contribute to weight gain because they often contain unhealthy fats and excess calories.

TDS: What role do physical inactivity, poor sleep and stress play in increasing diabetes risk, particularly among urban populations?

SS: Lack of physical activity, poor sleep and ongoing stress significantly increase diabetes risk. However, long office hours, traffic congestion and excessive screen time have made many city residents less active. Poor sleep can disturb hormones that control hunger and blood sugar, while sleeping less than six hours regularly is linked to increased diabetes risk. These factors often occur together in urban life, making city residents particularly vulnerable to type 2 diabetes.

TDS: For someone diagnosed with prediabetes, what practical lifestyle changes should they make to prevent or delay the onset of type 2 diabetes?

SS: Losing just 5–7% of body weight can significantly reduce the risk. For someone weighing 70 kg, this means losing around 4–5 kg. Aim for at least 30 minutes of brisk walking five days a week and avoid sitting for long periods. Reduce rice portions and fill half the plate with vegetables along with fish, eggs, pulses, or lean meat. Choose whole grains when possible and replace sugary drinks with water. Avoid smoking, get seven to eight hours of sleep.

TDS: How effective are preventive interventions such as regular screening, dietary counselling and structured lifestyle programs, and what should Bangladesh do to make them more accessible?

SS: Regular screening helps identify people at risk, while dietary counselling and structured exercise programs can prevent or delay diabetes for many years. In Bangladesh, these services should be more accessible through community clinics, upazila health complexes, workplaces and educational institutions. We need more trained dietitians, health educators, affordable testing and easy-to-understand health information in Bangla.