

## Myths about Diabetes among Adolescents and Their Parents

Maninder Singh

Global Institute of Healthcare Management, New Delhi, India

\*Corresponding author: Maninder Singh, Global Institute of Healthcare Management, New Delhi, India, Tel: +919891288457; Email: [maninder.singh.vk@gmail.com](mailto:maninder.singh.vk@gmail.com)

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### Abstract

Diabetes is a long-term condition that affects the body's ability to process sugar or glucose. It can have serious health consequences. However, with careful management, people with diabetes can continue to lead full, healthy and active lives. For the individual child and the whole family, diabetes changes life. As parents of children with diabetes and children themselves try to gather information about diabetes management but sometimes a given piece of information might be a myth. Therefore it is very important to remove all myths and we must understand that a diabetic child can lead a full and normal emotional life. This article tries to answer important myths about diabetes which could help parents raising their diabetic child and teenagers themselves for better understanding.

**Keywords:** Diabetes; Management; Child; Adolescent

### Introduction

Diabetes is a long-term condition that affects the body's ability to process sugar or glucose. It can have serious health consequences. However, with careful management, people with diabetes can continue to lead full, healthy and active lives. For the individual child and the whole family, diabetes changes life. As parents of children with diabetes and children themselves try to gather information about diabetes management but sometimes a given piece of information might be a myth. Therefore it is very important to remove all myths and we must understand that a diabetic child can lead a full and normal emotional life. This article tries to answer important myths about diabetes which could help parents raising their diabetic child and teenagers themselves for better understanding [1-2].

Diabetes management is well suited to help patients make self-selected changes related to weight, nutrition, physical activity etc and the concept of patient empowerment has become an integral part of diabetes education, an accurate understanding of disease and its management is very important to manage this chronic condition. Therefore, common misconceptions have to be corrected and traditional thinking and myths must be clarified. This would help the patients and empowers them to control their daily diabetes care. Empowerment will increase the capacity of patients to think critically and make autonomous, informed decisions. Empowerment also occurs when patients are actually making autonomous, informed decisions about their diabetes self-management.

Care providers must help patients choose personally meaningful, realistic goals, especially goals related to disease management like weight loss, nutrition, and physical activity [3-6]. To maximize the chance for success, patients must be internally motivated and educated rather than externally motivated/pressurized. However, wide spread misconceptions about the diabetes management constrain its effectiveness. The purpose of this article is to better articulate our view of diabetes management and to correct misperceptions about it in hopes of enhancing its authentic and effective use in diabetes care and education.

In reality, Diabetes Management is perhaps the most misunderstood subject on the planet and it makes the situation even more worse as the number of diabetic patients are increasing significantly. Taking an example of Insulin many people with type-2 diabetes avoid it, and some even accuse it of causing diabetes complications. Yet insulin is one of the best treatments available for getting and keeping blood glucose levels on target. Insulin is a must for treating type-1 diabetes and likely after years with type-2 diabetes. As the body makes less of its own insulin, pills may become less effective over time. Eventually meal plans, exercise, and multiple pills won't cut it anymore. To help lower your blood sugar, your provider may prescribe insulin [7-9]. Here are some of the facts for the diabetes patients to know about the diabetes, its management, medication and other myths attached with it:

#### Myth: Consumption of too much sugar leads to diabetes

Fact: Type-1 diabetes is caused by a destruction of the insulin-producing cells of the pancreas, which is unrelated to sugar consumption. Type-2 diabetes results from the body's inability to respond to insulin normally. Although the tendency to get type-2 diabetes is genetically inherited in most cases, eating too much sugar (or foods with sugar, like candy or regular soda) can cause weight gain, which can increase the risk for developing the disease.

#### Myth: Patients with diabetes can never eat sweets

Fact: Patients with diabetes can eat a certain amount of sugary food as part of a balanced diet, but they need to control the total amount of carbohydrates they eat, which includes sugary treats. Because sweets provide no real nutritional value other than calories, they should be limited but not necessarily eliminated. All Patients should avoid excessive consumption of foods that provide little nutritional value and can crowd out healthier foods.

#### Myth: With certain herbal medicines, patients can outgrow diabetes

Fact: Patients do not outgrow diabetes. In type-1 diabetes, the cells of the pancreas that produce insulin are destroyed. Once they're destroyed, they will never make insulin again. Although Patients with

type-2 diabetes may see an improvement in their blood sugar levels with lifestyle adjustments and stress management [10-15].

#### **Myth: Diabetes is contagious**

Fact: Diabetes is not contagious. You can't catch it from another person. Although researchers think that getting type-1 diabetes may be triggered by something in the environment, like a virus, most people who get type-1 diabetes have inherited genes that make them more susceptible to the disease.

#### **Myth: High blood sugar levels are normal for some people and aren't a sign of diabetes**

Fact: Certain conditions like illness or stress and certain medications like steroids temporarily can cause high blood sugar levels in people without diabetes. But high blood sugar levels are never normal. People who have higher than normal blood sugar levels or sugar in their urine should be checked for diabetes by a doctor.

#### **Myth: People with diabetes can feel whether their blood sugar levels are high or low**

Fact: Although someone with diabetes may feel physical symptoms such as extreme thirst, weakness, or fatigue if blood sugar levels are high or low, the only way to know for sure what the levels are is to test them. Because blood sugar levels have to be very high to cause symptoms, a person who isn't testing regularly may be having blood sugar levels high enough to damage the body without even realizing it.

#### **Myth: All people with diabetes need to take insulin**

Fact: All people with type-1 diabetes have to take insulin injections because their pancreases don't make insulin anymore. Some, but not all, people with type-2 diabetes have to take insulin to manage their blood sugar levels.

#### **Myth: Insulin cures diabetes**

Fact: Taking insulin helps manage diabetes, but does not cure it. Insulin helps get glucose out of the bloodstream and into the cells, where it can be used for energy. This helps keep blood sugar levels under control, but taking insulin doesn't correct the underlying cause.

#### **Myth: Starting insulin is a sign of failure**

Fact: Starting insulin is not a sign of failure. Research has clearly indicated that many people equate insulin with illness. Studies have shown one-third to one-half of people who are prescribed insulin are unwilling or reluctant to take it. While health care providers may blame fear of needles for this response, but No. 1 reason is "the sense that insulin signifies personal failure and a 'worsening' of diabetes. Most people's fears and concerns about insulin are understandable, but are based on false information. Patient empowerment and diabetes education by explaining the patients what science knows about diabetes today will help them to accept their disease state and unload the guilty feeling [15-17].

#### **Myth: Insulin is not safe to use**

Fact: It is definitely not true that a person will develop complications from diabetes faster once you start insulin. In fact, Insulin is the best drug we have to treat diabetes and prevent

complications. The main problem is that people start it too late, after complications are evolving. Patients, families, and society then associate insulin use as a cause of the complications. In reality, if we use it a little earlier in the course of treatment, we could likely to prevent many of those complications by getting patient's blood glucose levels under control more quickly.

#### **Myth: Starting Insulin is Very Difficult and Painful**

Fact: Starting insulin is easy with insulin pens, and very small needles make insulin extremely portable and painless, pens can be either prefilled disposable models or sleek metal creations that hold prefilled cartridges. Pens have a dial that allows the patient to select their dose. To deliver the dose, one can screw on a single-use, they are ultrathin-ultra short pen needle. Insulin is injected into the fat layer below the skin, above the muscle tissue. The injection site is commonly in the abdomen because there are fewer nerve endings there, it's easy to reach, and people tend to have plenty of fat in that location.

Myth: Type-2 Diabetes the less serious type of Diabetes. It is commonly believed that since it is diagnosed later in life, that a few lifestyle changes and a glucose lowering pill, if required is sufficient for management.

Fact: Having type-2 diabetes can be very harmful for anyone; there is a risk of having a heart attack or stroke blindness, kidney disease, or an amputation. Research has shown that people need to fully focus on glucose control, if they want to stay healthy [17]. Younger adults and children are now being increasingly diagnosed with pre-diabetes and type-2 diabetes.

Myth: Blood glucose control is goal number one, and diabetes is all about glucose control

Fact: Till recently, the main focus on Diabetes management has been to control the blood sugar levels. However, Diabetes is more than just increase in blood sugar levels. Several other metabolic pathways are affected and hence good management involves monitoring other useful parameters like blood pressure and blood cholesterol levels. The most common complications of type-2 are heart and blood vessel diseases and type-2 diabetes is an equivalent risk factor to had a heart attack or stroke [18].

#### **Myth: Insulin dose is directly proportional to the degree of illness**

Fact: Every individual's insulin needs are different and insulin dosage don't serve as a barometer of illness. People often judge both their own health and the health of others by the volume of medications they take. The same thought process kicks in when people start comparing insulin doses. It's not accurate to judge one's insulin dose against anyone else's or worry if yours increases than, what would happen? the main aim or goal is to control blood sugar levels.

#### **Myth: Tablets or pills for diabetes are a form of insulin**

Fact: Diabetes medicines taken by mouth are not a form of insulin. Insulin is a protein that would be broken down or destroyed by the acids and digestive enzymes in the stomach and intestines if swallowed. Some people with type-2 diabetes take pills or tablets that help the body make more insulin or use the insulin it makes more effectively. But pills for diabetes cannot help Patients with type-1 diabetes because they are no longer able to make insulin.

### **Myth: Patients with diabetes don't have to take their insulin or pills when they're sick**

**Fact:** When Patients are sick, especially if they are throwing up or not eating much, giving insulin might not seem like the right thing to do. However, it is very important to keep taking insulin during illness. Insulin doses may need to be adjusted during illness (check with your doctor) but they can't be skipped altogether. Patients need energy when they're sick to help the body heal itself, and insulin helps them use that energy properly.

### **Myth: Patients with diabetes can't exercise much**

**Fact:** Exercise is important for all Patients-with or without diabetes! Exercise offers many benefits to Patients with diabetes. It helps them manage their weight and prevents them from gaining excess body fat. It also improves cardiovascular health, boosts mood, relieves stress, and helps blood sugar control.

### **Myth: Low-carbohydrate diets are good for Patients with diabetes because they should avoid carbs**

**Fact:** Carbohydrates (carbs) are the body's preferred source of energy, and carbohydrate-containing foods should provide about 50% to 60% of a person's calories each day [18-19]. Low-carb diets tend to be overloaded with protein and fat. Following a high-fat, high-protein diet over the long term may increase the risks of heart and kidney disease in adulthood. A healthy, balanced diet means adopting a meal plan that helps patients to balance carbohydrate intake with medication and exercise to achieve good diabetes control.

### **Myth: There are cures for diabetes, but doctors and the government are not telling anyone**

**Fact:** No matter what you may hear or see on the Internet, there is no cure for diabetes. The only way to manage diabetes now is to take insulin and medications as prescribed, lifestyle management, eat a balanced diet, get plenty of physical activity, and check blood sugar levels regularly. Until there really is a cure for diabetes, do your best to manage your diabetes with the tools available now.

The conclusion is that Diabetes management should focus on things other than controlling blood sugar only. Patients must talk to their care provider when they see information that doesn't seem quite right, sounds too good to be true, or contradicts what they've told. Never make changes to diabetes management plan without contacting your healthcare provider first.

It's very important to educate oneself about diabetes so that patients can help themselves to manage it. This means arming patients with the right information. Although the Internet has a wealth of content on diabetes, it's not always accurate. Information that's not interpreted correctly, or is inaccurate or misleading, can actually be harmful for someone with diabetes. Even well-meaning family members and friends can give bad information.

The misconception statements above are based on beliefs or on assumptions, they all stem from a fundamental misunderstanding in different cultures and communities about diabetes care and education. The approach of facilitating and supporting patients to reflect on their

experience of living with diabetes. Self-reflection occurring in a relationship characterized by psychological safety, warmth, collaboration, and respect is essential for laying the foundation for self-directed positive change in behavior, emotions, and/or attitudes. Such reflections often leads to their enhanced awareness and understanding of the consequences of their self-management decisions.

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