

**To the Expert Committee at the World Health Organisation regarding the application for A. 18 Insulin, analogue rapid-acting- diabetes mellitus**

My name is Nkiruka Okoro, and I am a T1International #insulin4all advocate in Nigeria. I believe in a world where everyone who needs insulin, no matter where they live, has access to it. I am writing this letter in support of adding rapid-acting insulin analogues to the WHO Model List of Essential Medicines for the treatment of children and adults living with type1, type 2 diabetes and gestational diabetes.

The complete access of insulin to me is important, because I live with type 1 diabetes, and solely powered by insulin and we are still far from achieving the goal of #insulin4all. One in four persons living with diabetes and require insulin for treatment have been forced to ration their insulin due to cost of purchase, thereby leading to significant debilitating health complications. For individuals living with type 1 diabetes, insulin is the mainstay of therapy and a common treatment therapy for persons living with type 2 and for women with gestational diabetes. Globally, so many people cannot afford this life-sustaining medication, I am one of those persons who cannot afford this life-sustaining medication in Nigeria due to affordability. In my country Nigeria, the pharmaceutical companies have all moved out, leaving us to source insulin from the black-market vendors who sell at very outrageous prices that we cannot afford to buy most times. This chaotic situation has left us no other alternative than to ration the insulin by skipping doses, which has its debilitating impact on overall glucose control and diabetes management. In addition to the limited availability of insulin pens in my country, Nigeria, so many persons are saddled with the use of biphasic isophane insulin which does not give good glycaemic control, especially in persons living with type 1 diabetes that are meant to match up insulin to carbohydrate ratio.

As a person living with type 1 diabetes for 37 years, I cannot over emphasize the importance of being able to access insulin on a regular basis. My very existence is solely dependent on insulin and being able to access it on a regular basis. Without it, I will die.

After my diagnosis at age 7, I only had access to Lente, a bovine insulin. My body rejected it, so I spent most of childhood in the hospital dealing with diabetic ketoacidosis. From the age of 10, I had to switch to human insulin which we sourced

from the black-market in Nigeria, and we had to pay an arm and a leg to get it. I had no choice but to, because the animal insulin wasn't working for me, and I spent more days in hospital than at home. Which was another kettle of fish, we also paid out of pocket for that. Not having access to the right type of insulin in those early days, had the severe consequences of the secondary complications I now must live with for the rest of my life.

As an individual living with type 1 diabetes, I must inject myself daily with insulin injections. When the supply of my insulin becomes inaccessible and very unaffordable, the consequences become dire. In my lifetime, I have had to ration insulin, not by choice, but because of conditions beyond my control, such as inefficient healthcare systems, supply constraints, unaffordability, socioeconomic and political factors. Accessing insulin on a regular basis was never guaranteed, and as such, I had to ration my insulin doses. This resulted in my blood sugar levels being all over the place, a lot of vomiting, poor appetite, and upset stomach which was accompanied by high fevers. In this state of unwell, I was incapable of doing anything and I was consuming gallons upon gallons of water but still felt very dry and the sweet-corn smell overwhelmed me. I was running out of insulin and just waiting to die. So many other persons in this same situation, never lived to tell the tale, but I am lucky that I somehow survived this horrible ordeal of rationing my insulin injections.

Finally, there was some light at the end of the tunnel when different insulin options became available to me, this changed and transformed my quality of life. I could not believe how well I felt. It really felt like I was in a dream. In low-and-middle-income countries, the choice of different insulin options isn't available. We must accept the cheapest option, which isn't always the best for persons living with diabetes on insulin treatment. Having the ability to choose from a list of options of insulin will give us some bit flexibility and help us channel our attention to making better of our lives. For me, choice is extremely important, as having the option of the rapid-acting insulin analogue will allow me to live better outside diabetes complications and hospital visits and focus on improving other aspects of my life.

Adding rapid-acting analogue insulin to the World Health Organisation's Essential Medicines, can decrease the number of persons living with type 1 diabetes rationing insulin, the number of deaths associated with insulin rationing, and ease the burden

of diabetes on type 1's by using its mechanism of action which mimics the normal insulin function in the human body.

We urge the World Health Organization to recognise that every form of insulin, including the rapid-acting analogues, is essential for our survival as persons living with diabetes. No one should be left behind, because access to insulin is a right and not a privilege.

Yours sincerely,

Nkiruka Okoro

Person living with type 1 diabetes

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