Diabesity - The 'Achilles Heel' of our modernized society

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Diabesity – a term coined by Dr. Francine Kaufman to cover a constellation of signs, including obesity, insulin resistance, metabolic syndrome, and diabetes – is ready to become the largest rapidly escalating pandemic in human history. The statistics are grim and shocking – diabesity affects more than one billion people worldwide, including 100 million Americans, and 50% of Americans over the age of 65. Mortality from diabetes stands at approximately 4.6 million people per year worldwide. More than 366 million people are currently affected by this disease. According to current statistics, by the year 2020 diabesity will be the leading cause of chronic disease and death in the world.

The "sugar disease" has evolved from merely affecting rich, industrialized countries to the status of a global economic and chronic disease catastrophe in the making. The World Health Organization (WHO) predicts that, by 2030, developing countries will have three-fourths of the world's estimated 900 million diabetics.

The conventional way to see developing countries was to observe the 'want' – for food, for money, for life – with millions struggling below the poverty line. But now the other side of the coin tells the story of their newfound excesses. The mantra is: make good money, buy cars, buy houses, eat out, get obese, get diabetes. According to the latest United Nations (UN) statistics, there are more patients overweight than undernourished.

Both India and China are already home to more diabetics than any other country. Forsaking paddy fields for a city lifestyle clearly has a downside, especially in populations with a pronounced genetic vulnerability to the disease. These populations contract the disease ten years earlier than people in developed countries. The future of diabetes in 'young' countries such as India, where half the population is under 25, is chilling.

The pressing and urgent is that we put a HALT to this rapidly evolving sinister scenario by finding the answers for a few simple questions.

- 1. What is the ROOT cause of the current diabesity epidemic?
- 2. Why are our current approaches to treat it failing miserably?
- 3. What new initiatives do we need to implement to more effectively treat the problem?

In our viewpoint, we are trying to mop up the floor while the sink overflows. It is as important, if not more, to treat the root causes of diabesity as it is to treat the mere symptoms and risk factors. The diabesity complex originates from the interaction of our modern western sedentary lifestyle, dietary and environmental toxins, micronutrient deficiencies, chronic stress, and altered gut microflora with our unique genetic susceptibilities. These root causes are intricately interlinked to each other. The best news - they are 100% preventable and in most cases, entirely reversible.

Research should focus on the underlying environmental and genetic risk factors for diabetes and obesity worldwide, especially in susceptible populations. A greater focus on epigenetics and early life risk factors such as maternal nutrition may lead to more effective strategies to curb diabesity. Developmental plasticity, fetal programming, and intergenerational risk means that a stimulus applied in utero establishes a permanent response in the fetus, leading to enhanced susceptibility to later diseases such as type 2 diabetes and CVD.

We are sure that not a single person reading this editorial has been left untouched by the effects/consequences of the 'diabesity poison', either directly or indirectly.

Our focus needs to encompass 'PREVENTION' rather than just 'CURE', by educating the masses about comprehensive diet/lifestyle change programs, developing research programs to analyze the environmental-gene interactions leading to diabesity, and by initiating an intense unified global initiative to target this pandemic.

Isn't it about time we took steps to turn the faucet off before this diabesity storm drowns the world?