

## **A Review of Type 2 Diabetes and Diabetes-Related Cardiovascular Disease in Zambia**

**Authors :** Mwenya Mubanga, Sula Mazimba

**Abstract :** Background: In Zambia, much of the focus on nutrition and health has been on reducing micronutrient deficiencies, wasting and underweight malnutrition and not on the rising global projections of trends in obesity and type 2 diabetes. The aim of this review was to identify and collate studies on the prevalence of obesity, diabetes and diabetes-related cardiovascular disease conducted in Zambia, to summarize their findings and to identify areas that need further research. Methods: The Medical Literature Analysis and Retrieval System (MEDLINE) database was searched for peer-reviewed articles on the prevalence of, and factors associated with obesity, type 2 diabetes, and diabetes-related cardiovascular disease amongst Zambian residents using a combination of search terms. The period of search was from 1 January 2000 to 31 December 2016. We expanded the search terms to include all possible synonyms and spellings obtained in the search strategy. Additionally, we performed a manual search for other articles and references of peer-reviewed articles. Results: In Zambia, the current prevalence of Obesity and Type 2 diabetes is estimated at 13%-16% and 2.0 - 3.0% respectively. Risk factors such as the adoption of western dietary habits, the social stigmatization associated with rapid weight loss due to Tuberculosis and/ or the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and rapid urbanization have all been blamed for fueling the increased risk of obesity and type 2 diabetes. However, unlike traditional Western populations, those with no formal education were less likely to be obese than those who attained secondary or tertiary level education. Approximately 30% of those surveyed were unaware of their diabetes diagnosis and more than 60% were not on treatment despite a known diabetic status. Socio-demographic factors such as older age, female sex, urban dwelling, lack of tobacco use and marital status were associated with an increased risk of obesity, impaired glucose tolerance and type 2 diabetes. We were unable to identify studies that specifically looked at diabetes-related cardiovascular disease. Conclusion: Although the prevalence of Obesity and Type 2 diabetes in Zambia appears low, more representative studies focusing on parts of the country outside of the main industrial zone need to be conducted. There also needs to be research on diabetes-related cardiovascular disease. National surveillance, monitoring and evaluation on all non-communicable diseases need to be prioritized and policies that address underweight, obesity and type 2 diabetes developed.

**Keywords :** type 2 diabetes, Zambia, obesity, cardiovascular disease

**Conference Title :** ICE 2017 : International Conference on Endocrinology

**Conference Location :** Cape Town, South Africa

**Conference Dates :** November 02-03, 2017