Pharmaceutica Analytica Acta
ISSN: 2153-2435
OPEN ACCESS Freely available online
Editorial

Diabetes: Management strategies

Kate Hopkins*

Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

EDITORIAL

Diabetes is a serious, chronic metabolic disorder which is primarily caused due to insufficient insulin production. However, insufficient use of insulin produced by the body is another major cause of the disease. Diabetes, being one of the important health problems is among one of the four priority non-communicable diseases targeted for action and a serious threat to population health. The prevalence of diabetes is steadily increasing everywhere, mostly in the middle-income countries of the world [1]. According to the International Diabetes Federation (IDF), an estimated 415 million people globally suffered from this condition in 2015. This number is expected to increase to 522 million by 2030 [2]. Diabetes Mellitus (DM) has serious complications which accounts for increased morbidity, disability, and mortality. DM stands among the oldest disease known to mankind. However, proper understanding of it pathogenesis has been known since ancient times, its treatments came to be known since the Middle Ages, and the elucidation of its pathogenesis occurred mainly in the 20th century [3]. DM is classified based on its etiology and clinical presentations. As such, there are two common types of DM viz; type 1 diabetes (T1D), and type 2 diabetes (T2D). T1D which is also known as insulin-dependent, juvenile or childhood-onset diabetes is characterized by insufficient insulin production in the body. Patients with T1D require regular administration of insulin to regulate the amount of glucose in their blood. The cause of T1D is still not well understood and it is currently an untreatable disease. Its symptoms include excessive or frequent urination and thirst, constant hunger, vision changes, weight loss and fatigue. T1D results from complex interaction between genes and environmental factors; though no specific environmental risk factors have been shown to cause a significant number of cases. T1D occurs majorly in children and adolescents [1]. T2D which was formerly and very commonly known as non-insulin-dependent or adult-onset diabetes results from the body's ineffectiveness to use insulin. T2D diabetes accounts for the vast majority of people with diabetes around the world. Symptoms may be similar to those of T1D, but are often less marked or absent . T2D may go undiagnosed for several years, until complications are prominent. For many years, type 2 diabetes was seen only in adults but now it has begun to develop in children. The risk of T2D is determined by interplay of genetic and metabolic factors. Family history of diabetes and previous gestational diabetes combine with older age, overweight and obesity, unhealthy diet, physical inactivity and smoking may increase its risk [1]. The diagnostic criteria for determining diabetes have evolved over the years. Currently, diabetes is diagnosed by a fasting glucose of 126 mg/dl or a random glucose of 200 mg/dl. Biomarkers are biological molecules which can be exploited to diagnose subclinical disease before the development of clinical disease. Various biomarkers are being studied for the early and better diagnosis of diabetes. Being a metabolic issue, diabetes legitimately or in a roundabout way influences numerous organs and therefore further convolutes the circumstance. Diabetes chiefly influences organs like kidney, heart, eyes, foot hand, teeth's and nerves. Diabetic entanglements might be comprehensively grouped into intense and incessant inconveniences. Diabetic inconveniences incorporate retinopathy, nephropathy, neuropathy, cardiovascular, cerebrovascular maladies. Individuals with diabetes are at high hazard for neovascular glaucoma.

REFERENCES

1. Global reports on diabetes- World Health Organization 2016.
2. Jahangir MA, Imam SS, Kazmi I. Type 2 diabetes current and future medications: a short review. Int J Pharm Pharmacol. 2017; 1:101.
3. Piero MN, Nzaro GM, Njagi JM. Diabetes mellitus-a devastating metabolic disorder. Asian J Biomed Pharm Sci. 2015; 5: 1.

***Correspondence to**: Kate Hopkins, Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece, Tel: +30231998998, E-mail: khopkin@chem.auth.gr

Received: August 21, 2019; **Accepted:** August 22, 2020; **Published:** August 29, 2020

Citation: Hopkins K (2020) Diabetes: Management strategies. Pharm Anal Acta 11: e204. doi: 10.35248/2153-2435.20.11.e204.