Editorial
Volume 7:2, 2022

Journal of Diabetic Complications and Medicine

ISSN: 2475-3211 Open Access

Editorial Note on Diabetes and Cardiovascular Disease

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Editorial

The major causes of death worldwide are cardiovascular disease (CVD) and diabetes. The global burden of CVD and diabetes is rising, and while the incidence of cardiovascular events is down in certain high-income countries (HICs), it is growing in many middle-income countries (MICs) and low-income nations (LICs). It's crucial to comprehend the factors that cause this discrepancy. Microvascular and macrovascular problems can occur in people with diabetes who have chronically poor metabolic control, posing a considerable burden for both the individual and society. This burden comprises both direct and indirect medical costs, such as lost productivity as a result of diabetes-related illness and mortality. Health-care costs for those with diabetes are more than double those for people without diabetes; in 2007, the direct and indirect costs of diabetes in the United States were conservatively estimated at $174 billion, with chronic consequences from diabetes costing somewhat more than diabetes care. According to the International Diabetes Federation (IDF), diabetes accounts for 5-10% of many countries' overall healthcare budgets [1,2].

The global burden of chronic respiratory disorders is rising, and obstructive lung diseases such as asthma and chronic obstructive pulmonary disease (COPD) are among the leading causes of death and morbidity. COPD and concomitant disorders become more common as people become older, although asthma is the most common chronic disease among children in Western countries, and it can be diagnosed at any age. Much comorbidity, particularly cardiovascular disease, has been linked to chronic obstructive pulmonary disease (CVD). Patients with COPD and CVD had a stronger relationship than those with asthma and CVD. The processes behind the link between obstructive pulmonary disease and cardiac illness are complex, although they could be linked to systemic inflammation, chronic infections, shared risk factors (such as smoking), or other unknown causes. However, determining the impact of these systems is difficult. We used data from the Vermont Diabetes Information System (VDIS) study to investigate the relationship between obstructive lung disease and the prevalence of related CVD in this cross-sectional investigation [3,4].

Diabetes is a serious chronic disease whose prevalence is rising worldwide and is now considered an epidemic. In 1985, the World Health Organization (WHO) projected that 30 million individuals globally had diabetes. By 1995, the number had risen to 135 million, and by 2005, it had risen to 217 million. WHO estimates that by 2030, this number will have risen to at least 366 million. Diabetes is becoming more common in both emerging and developed countries, owing to an increase in the frequency of type 2-diabetes (T2D). Type-1 diabetes (T1D) is on the rise in the same way as type 2 diabetes (T2D).

Cardiovascular diseases (CVD) are the leading cause of death and morbidity among T2D and T1D patients. In the United States, CVD and stroke were discovered in 68% and 16% of diabetes-related deaths among adults over 65 years old, respectively, in 2004. Adults with diabetes have two to four times the risk of death from heart disease and stroke than those who do not have diabetes. The National Cholesterol Education Program considers diabetes to be a coronary heart disease risk equivalent because patients with T2D without a previous history of myocardial infarction have the same risk of coronary artery disease (CADs) as nondiabetic subjects with a history of myocardial infarction. However, if the cardiovascular risk posed by diabetes is genuinely similar to that posed by a previous myocardial infarction remains a question. Patients with diabetes are more likely to have other comorbidities such as obesity, hypertension, and dyslipidemia, all of which contribute to an increased risk of CVD. Between 2005 and 2008, the American Diabetes Association (ADA) projected that 67% of diabetics over the age of 20 had blood pressure readings over 140/90 mmHg or were using antihypertensive medications. Despite the fact that there is strong evidence supporting the efficacy and cost effectiveness of programmes aimed at improving glycemic control and other cardiovascular risk factors in patients with T2D and T1D, the majority of these patients never achieve the goals set by diabetes societies' guidelines [5].

Conflicts of Interest

The authors declare no conflict of interest.

References

1. Roth, Gregory A., George A. Mensah, Catherine O. Johnson, and Giovanni Addolorato, et al. "Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study." *J Am Coll Cardiol* 76 (2020): 2982-3021.
2. Cho, N.H., J.E. Shaw, Suvi Karuranga, and Yafang Huang, et al. "IDF Diabetes Atlas: Global estimates of diabetes prevalence for 2017 and projections for 2045." *Diabetes Res Clin Pract* 138 (2018): 271-281.
3. Xu, Guifeng, Buyun Liu, Yangbo Sun, and Yang Du, et al. "Prevalence of Diagnosed type 1 and type 2 diabetes among US Adults in 2016 and 2017: Population based study." *BMJ* 362 (2018): k1497.
4. Miller, Rachel G., Aaron M. Secrest, Ravi K. Sharma, and Thomas J. Songer, et al. "Improvements in the life expectancy of type 1 diabetes: The Pittsburgh epidemiology of diabetes complications study cohort." *Diabetes* 61 (2012): 2987-2992.
5. Susan, Laing, and Anthony Swerdlow. "Mortality from heart disease in a cohort of 23,000 patients with insulin-treated diabetes," *Diabetologia* 46 (2003): 760-765.

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Received: 10-Mar-2022, Manuscript No. jgcm -22-62902; **Editor assigned:** 12-Mar-2022, Pre QC No. P-62902; **Reviewed:** 18-Mar-2022, QC No. Q-62902; **Revised:** 23-Mar-2022, Manuscript No. R-62902; **Published:** 28-Mar-2022, DOI: 10.37421/2475-3211.2022.7.171

How to cite this article: Brown, Oliver. "Editorial Note on Diabetes and Cardiovascular Disease." *J Diabetic Complications Med* 7 (2022): 171.