



## Commentary on Effect of Cardiovascular Risk Factors on Diabetes

Jean-Louis Chiasson<sup>1\*</sup>, Sophie Bernard<sup>1</sup> and Brian K Irons<sup>2</sup>

<sup>1</sup>Department of Diabetes and Metabolic Regulation, University of Montréal, Montréal, Canada

<sup>2</sup>Department of Pharmacy Practice, Texas Tech University Health Sciences Center School of Pharmacy, Lubbock, USA

\*Corresponding author: Dr. Jean-Louis Chiasson, Department of Diabetes and Metabolic Regulation, University of Montréal, Montréal, Canada, E-mail: jean.louis.chiasson@umontreal.ca

Received: November 05, 2021; Accepted: November 19, 2021; Published: November 26, 2021

Citation: Chiasson JL, Bernard S, Irons BK (2021) Commentary on Effect of Cardiovascular Risk Factors on Diabetes. J Card Pulm Rehabil 5: 150.

Copyright: © 2021 Chiasson JL, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Description

In the United States, Cardiovascular Disease (CVD) is the leading cause of morbidity and death linked with diabetes. CVD occurs at a 2-fold to 3-fold higher rate in type 1 and type 2 diabetics than in non-diabetic individuals. Recent positive findings showing a decrease in CVD mortality in the overall US population follow some methods such as decrease in the diabetic population, particularly in women. Diabetes duration and hyperglycemia, as well as hypertension, dyslipidemia, insulin resistance, gender, coagulation disorders, and other variables, all increase the risk of CVD. Health care practitioners must advocate for an unwavering, multi-pronged attack on all modifiable risk factors for CVD, including glucose management, in people with diabetes. This review focuses on modifiable risk factors for CVD linked with diabetes, as well as prospective primary and secondary preventive approaches.

Type 2 diabetes mellitus is especially preceded by a state that has been termed pre-diabetes also called as IGT, which is defined as impaired fasting glucose and/or impaired glucose tolerance [1]. In most nations, especially in low-income countries, the prevalence of impaired fasting glucose is as high, if not higher, than that of diabetes. In IGT patients, hyperglycemia is increasingly recognized as an independent risk factor for illness. Furthermore, it's usually related to other cardiovascular risk factors like obesity, hypertension and dyslipidemia, all features of the metabolic syndrome. Only a few studies have looked at the effects of treating these cardiovascular risk factors on cardiovascular events and death in people with impaired fasting glucose. It's been more difficult to establish that controlling hyperglycemia in diabetic people reduces cardiovascular events and death and dyslipidemia in diabetic and non-diabetic populations. It's been well demonstrated in those populations that treating hypertension with most antihypertensive drugs and dyslipidemia with statins resulted during a significant reduction in cardiovascular events and mortality [2]. However, it has been more difficult to demonstrate that controlling hyperglycemia in diabetic individuals lowered cardiovascular events and death. A new meta-analysis suggests that rigorous glycemic therapy is associated with a reduction in nonfatal myocardial infarction and coronary heart disease but had no effect on stroke or all-cause mortality. Observational studies also imply that treating obesity should be associated with a

disorder discount. Since impaired glucose tolerance is associated with the same cardiovascular risk as newly diagnosed Type 2 diabetes, it has been advocated that impaired fasting glucose be evaluated in high-risk groups and that all cardiovascular risk factors be treated similarly to patients with Type 2 diabetes.

The Current diabetes guidelines list the disorder as a cardiovascular risk equivalent or risk factor [2]. Treatment for hypertension and cholesterol, as well as the suggested use of aspirin, are widely used, however opinions differ, and some suggestions are based on insufficient clinical evidence. Some patients may benefit from a population-based strategy that includes specified therapeutic targets for many people with diabetes, but not all. Patients are at risk from therapy or pharmacological recommendations, since they may increase the likelihood of adverse medication reactions and drug-drug interactions. They'll also increase drug costs to patients and lower medication adherence. The goals also have ramifications for healthcare practitioners and systems. While population-based recommendations make some therapeutic decisions more feasible, they do not take an individual's total cardiovascular risk into account. Individualized risk assessment to guide therapeutic options might help to maximize benefit while lowering risk.

### Conclusion

According to a new meta-analysis, strict glycemic control lowers nonfatal myocardial infarction and coronary heart disease but has no effect on stroke or all-cause mortality. The condition is included as a cardiovascular risk equivalent or risk factor in the current diabetes recommendations. A population-based strategy that includes specific therapy objectives may assist certain individuals. Drug or pharmacological advice put patients at risk since they raise the possibility of harmful pharmaceutical responses.

### References

1. Chiasson JL, Bernard S (2011) Reducing cardiovascular risk factors in patients with prediabetes. *Diabetes Manag* 1: 423-438.
2. Irons BK (2011) Diagnosis of diabetes mellitus as a cardiovascular risk equivalent or risk factor and implications in drug therapy management. *Diabetes Manag* 1:615-626.