Cannabis Use in Adults and Adolescents with Diabetes

Summary

Diabetes Canada's position statement on "Recreational Cannabis Use in Adults and Adolescents with Type 1 and Type 2 Diabetes" gives an overview of the latest evidence about the effects of cannabis consumption on Canadians living with diabetes.

Diabetes Canada believes that people with diabetes should have the best information available to guide their choices about diabetes management and this review will not only inform them of the most current research conducted on recreational cannabis use and diabetes, but also offer some recommendations for care.

Background

Recreational cannabis (marijuana) was legalized in Canada on October 17, 2018. Although the federal minimum age to use cannabis in Canada is 18 years, and all but 2 provinces (Alberta and Quebec) suggest 19 years as a minimum age of use, the National Cannabis Survey reported in February 2019 that the highest prevalence of recreational consumption was among those 15 to 24 years old. Use of recreational cannabis, specifically among Canadians living with diabetes, is unknown.

Limited research has shown a potential link between cannabis use and changes in metabolic factors, and knowledge of these associations among health-care providers is lacking. Cannabis use may be associated with alterations in calorie intake and body mass index values or may interfere with self-management behaviours in youth living with type 1 diabetes.

We hope that this update will facilitate meaningful communication between health-care teams and people with diabetes and clearly identify key safety issues and clinical monitoring requirements.

Summary of the Research

Research on recreational cannabis use suggests it may negatively impact diabetes metabolic factors and self-management behaviours. The safety of recreational cannabis use has not been demonstrated, whereas regular cannabis use is associated with worsening glycemic control, more diabetes-related complications, and poorer self-care behaviours, such as adequate glucose monitoring, adherence to medications, and compliance with dietary and physical activity recommendations for people living with both type 1 and type 2 diabetes.

The review found a limited amount of published or presented literature, with gaps in the direct evidence linking cessation of cannabis use to improved outcomes in diabetes. There were sufficient data to begin developing recommendations for type 1 and type 2 diabetes about education, counseling, and management related to recreational cannabis use.

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Cautions

The majority of evidence reviewed did not consider or report the route of administration for marijuana (smoking vs vaping vs edibles), which may have different risks for people with diabetes. Smoking cessation is a key pillar of diabetes management because of increased risk for cardiovascular disease. Edibles containing carbohydrates may present an additional challenge for glycemic control, in addition to the appetite-stimulating effects of cannabis.

This position statement has focused on risks specific to people with diabetes. Clearly, other risks associated with recreational cannabis use, such as psychiatric disorders, perturbation in the neurologic development of adolescents, lung disorders, intoxication, risk-taking behaviour, impairment of driving ability and risk for motor vehicle accidents, other substance abuse and illegal procurement of drugs, etc., are highly relevant for people with diabetes.

Recommendations

- 1. Health-care professionals should engage their patients in discussion about substance use on a regular basis, with a non-judgemental approach.
- Use of recreational cannabis is not recommended for adolescents and adults with diabetes.
- **3.** People with type 1 diabetes should avoid recreational cannabis use because of the increased risk of diabetic ketoacidosis (DKA).
- 4. For adults with type 1 or type 2 diabetes who intend to use cannabis recreationally, individualized assessment and counselling should be offered to inform them of the general risks of cannabis with a focus on harm reduction and reduction of the risk for potential adverse effects on diabetes management and complications.
- 5. People with type 1 or type 2 diabetes should be offered education on and encouraged to read public information available through resources from various Canadian health authorities about general risks of cannabis use, to reduce the risk of non-diabetes-related adverse effects of cannabis consumption.

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For More Information: Please visit www.diabetes.ca

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