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Original Research

# Self-Management, Health Service Use and Information Seeking for Diabetes Care among Black Caribbean Immigrants in Toronto

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ABSTRACT

*Objective:* The objective of this research was to explore self-management practices and the use of diabetes information and care among Black-Caribbean immigrants with type 2 diabetes.
*Method:* The study population included Black-Caribbean immigrants and Canadian-born participants between the ages of 35 to 64 years with type 2 diabetes. Study participants were recruited from community health centres (CHCs), diabetes education centres, hospital-based diabetes clinics, the Canadian Diabetes Association and immigrant-serving organizations. A structured questionnaire was used to collect demographics and information related to diabetes status, self-management practices and the use of diabetes information and care.
*Results:* Interviews were conducted with 48 Black-Caribbean immigrants and 54 Canadian-born participants with type 2 diabetes. Black-Caribbean immigrants were significantly more likely than the Canadian-born group to engage in recommended diabetes self-management practices (i.e. reduced fat diet, reduced carbohydrate diet, non-smoking and regular physical activity) and receive regular A1C and eye screening by a health professional. Black-Caribbean immigrant participants were significantly more likely to report receiving diabetes information and care through a community health centre (CHC) and nurses and dieticians than their Canadian-born counterparts.
*Conclusions:* CHCs and allied health professionals play an important role in the management of diabetes in the Black-Caribbean immigrant community and may contribute to this group's favourable diabetes self-management profile and access to information and care. Additional research is necessary to confirm whether these findings are generalizable to the Black-Caribbean community in general (i.e. immigrant and non-immigrant) and to determine whether the use of CHCs and/or allied health professionals is associated with favourable outcomes in the Black-Caribbean immigrant community as well as others.


*Mots clés :*
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RÉSUMÉ

*Objectif :* L'objectif de cette recherche était d'examiner les pratiques individuelles de prise en charge, des soins ainsi que le recours aux informations sur le diabète de type 2 auprès des personnes immigrantes issues des Caraïbes.
*Méthode :* La population à l'étude incluait des personnes immigrantes des Caraïbes ainsi que des personnes nées au Canada âgées entre 35 et 64 ans vivant avec le diabète de type 2. Les participants furent recrutés dans des centres de santé communautaires (CSC), des centres d'enseignement sur le diabète, des cliniques de diabète en milieu hospitalier, de l'Association canadienne du diabète et des organismes d'aide aux immigrants. Un questionnaire structuré a été utilisé pour recueillir des données démographiques ainsi que des informations liées au statut diabétique, aux pratiques individuelles de prise en charge, des soins ainsi que le recours aux informations sur le diabète de type 2.
*Résultats :* Les entrevues ont été menées auprès de 48 personnes immigrantes des Caraïbes et de 54 personnes née s au Canada ayant le diabète de type 2. Les personnes issues des Caraïbes étaient

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significativement plus susceptibles que le groupe né au Canada d'adopter les pratiques individuelles de prise en charge du diabète, tel que recommandé, notamment en ce qui concerneun régime faible en gras et en glucides, le tabagisme limité et des activités physiques sur une base régulière. Les personnes immigrantes des Caraïbes étaient également plus à même de faire les de l'A1c ainsi que de passer un examen ophtalmologique. Les personnes immigrantes des Caraïbes ont rapporté plus fréquemment, et ce de façon significative par rapport aux personnes nées au Canada, de recourir aux informations sur les soins liés au diabète de type 2 auprès d'un centre de santé communautaire (CSC) ainsi qu'auprès d'infirmières et de diététistes.

*Conclusions :* Les CSC et les professionnels paramédicaux jouent un rôle important dans la prise en charge individuelle du diabète de type 2 auprès de communautés immigrantes au Canada, favorisant ainsi un meilleur contrôle de cette condition chronique par les personnes elles-mêmes. Il serait important de poursuivre les études sur la contribution des professionnels de la santé ainsi que des centres communautaires pour examiner la prise en charge individuelle du diabète de type 2 des personnes immigrantes de façon générale.



## Introduction

Diabetes is a metabolic disease of major significance due to its increasing prevalence across the globe and its adverse effects on the life expectancy and quality of life (1). It is estimated that the number of people diagnosed with type 2 diabetes will increase by 50% over the next 50 years to reach 438 million, or 8% of the population worldwide (2). In 2009, the estimated prevalence of diabetes in Canada was 6.8%, an increase of 230% from 1998 (3). The prevalence of diabetes is rapidly increasing among Canadian immigrants (4) with pronounced variations across ethnicity and country of origin (5,6). Immigrants from South Asia, Latin America, the Caribbean and sub-Saharan Africa have a 2- to 3-times greater risk of developing diabetes than their counterparts in the general population (7). Several studies suggest that more research is necessary regarding Canadian immigrants with type 2 diabetes in order to self-manage, prevent further complications and provide health care services to this population (8–10). The aim of this paper is to examine diabetes self-management practices and access to diabetes information and care among Black-Caribbean immigrants with type 2 diabetes residing in Toronto, Ontario, Canada.

Self-management practices and regular diabetes care can prevent health complications that may arise as a result of uncontrolled diabetes. Self-management activities include blood glucose monitoring, regular foot checks, smoking cessation, regular physical activity and the adoption of reduced fat and carbohydrate diets (11,12). While American studies have identified significant ethno-racial variation in adherence to diabetes self-management activities (13–15), little research has been conducted in Canada. In 1 study using data from the Canadian Community Health Survey, Grant and Retnakaran (16) concluded that Canadian immigrants with diabetes were significantly less likely to perform regular foot checks and to smoke than their non-immigrant counterparts; however, no significant differences were observed in self-monitoring of glucose or physical activity levels. Nevertheless, this study did not consider the heterogeneity that exists within the Canadian immigrant population by country of origin, length of stay, ethno-racial status or other social markers. A Toronto-based study concluded that recent racialized immigrants from Pakistan, Bangladesh, Sri Lanka and China were more likely to adopt diabetes self-management practices, including enhanced physical activity, smoking cessation, glucose and foot checks and reduced dietary carbohydrates, than the Canadian-born control reference group (17).

Recommended regular diabetes care includes glycated hemoglobin (A1C) testing and foot and eye screening by a health professional (18). However, it is well documented that immigrants and racialized populations experience multiple and intersecting barriers to health care internationally and in Canada (i.e. cultural, financial, linguistic and systemic) (10). A study conducted in the United Kingdom identified several barriers associated with reduced access to diabetes care among Caribbean immigrants (19). This included distrust of doctors and Western medicine, health professionals' lack of cultural sensitivity and knowledge about the Caribbean dietary preferences and a lack of awareness of diabetes-related complications (19). Less research has examined access to diabetes care amongst immigrants residing in Canada. Grant and Retnakaran (16) also did not find significant differences between immigrants and non-immigrants in rates of annual glycated hemoglobin (A1C) testing, foot examination by a physician, urine protein testing or eye examination. Using data from the 1996/97 Ontario Health Survey, 2000/01 CCHS linked with the Ontario Diabetes Database and OHIP data, Shah established that Caucasian, Chinese, Black, South Asian and other ethnic groups were similar in their access to regular primary care and specialist care; however, odds for receiving an eye exam was significantly lower for minority ethnic groups (20).

Access to health information from a variety of sources (e.g. health professionals, family and friends) facilitates the adoption of self-management practices and regular diabetes care (18). Little research has been completed to examine how health information seeking among Canadian immigrants. A recent study of newcomers with diabetes concluded that this group was significantly more likely to rely on family and friends for diabetes information than their Canadian-born counterparts (17).

Building on our previous research examining the experiences of recent racialized immigrants with diabetes, the aim of this research is to explore self-management practices, health services use and information seeking for diabetes care in a more established racialized immigrant community, the Black-Caribbean immigrant community in Toronto.

## Methods

This study employed a cross-sectional research design. The study population included Black-Caribbean immigrants and Canadian-born participants between the ages of 35 to 64 years with a self-reported type 2 diabetes diagnosis in the Greater Toronto Area. Sample sizes and eligibility criteria were predetermined by the Public Health Agency of Canada to ensure consistency with other countries participating in an international study lead by the International Centre for Migration and Health (ICMH) on the effects of migration and diabetes. In the absence of an available population sampling frame, study participants were recruited using the convenient sampling technique from community health centres (CHCs), diabetes education centres, hospital based diabetes clinics, the Canadian Diabetes Association, immigrant-serving organizations, community events (e.g. Caribana) and local businesses (e.g. pharmacies, barbershops). All