

Diabetes and the Homeless: Reducing Health Inequities through Social Determinants of Health Approach

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It is widely recognized that physical and mental well-being and access to healthcare, to a large extent, are determined by a variety of situational factors referred to as social determinants of health (1). These factors have a significant impact on the causes of chronic disease and its care, particularly in the context of the most vulnerable segments of the population, such as Aboriginals, ethno-cultural groups and the homeless, who are disproportionately affected by diabetes and often struggle with many social determinants of health (2) (Table 1).

Homelessness is rapidly escalating in both rural and urban Canada and is associated with serious implications for public health and our healthcare system. Homelessness can be defined in terms of specific housing situation (absolute, hidden or relative) and/or time, persistency and frequency of homeless episodes (chronic, cyclical, and temporary) (4). True homelessness however, refers to

individuals who are absolutely homeless and live on the streets, in parks, and in emergency shelters.

The latest federal estimate conservatively places the number of homeless individuals in Canada at about 150 000 (5). Most homeless advocates, however, estimate Canada's true homeless population, not just those living in emergency shelters, to be 300 000 (6). Youth homelessness in particular is an unacknowledged national crisis. An estimated 65 000 young people are homeless in Canada (7). The majority of this socially and emotionally vulnerable group have not completed high school and are quickly becoming part of the street culture of violence and addiction. Homelessness occurs as a result of complex factors affecting all ages, ethnicities and families, and both genders (8).

Homelessness, diabetes and inequities

The risk factors and lifestyle associated with homelessness both causes and exacerbates poor health (9). Chronic physical and mental conditions such as heart disease and stroke, hypertension, respiratory problems, mental illness, drug/alcohol dependency, tuberculosis and HIV/AIDS are more prevalent and severe among the homeless (10). Children and youth experiencing homelessness are also more likely to have acute and chronic health conditions due to psychosocial risks, family instability, poverty and limited access to social and health services (11).

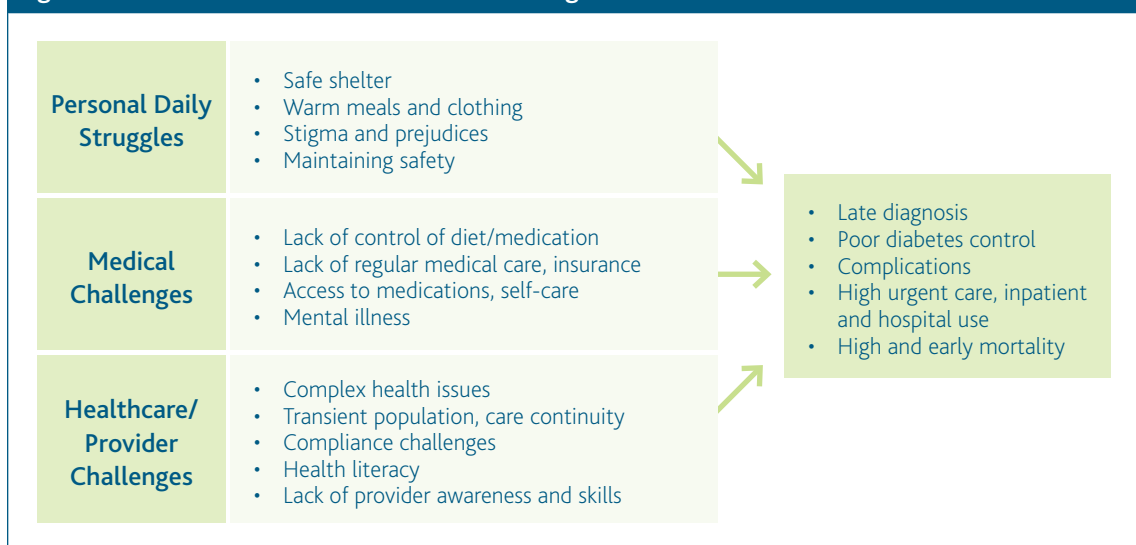
Diabetes is a significant health issue among the homeless (12). Lack of equitable access to both preventative and remedial healthcare among the homeless is associated with higher risk for late diagnosis, poor glycemic control and more severe cases of complications, and is accompanied by frequent emergency and inpatient visits, hospitalization and early mortality, particularly if they live on the streets.

Diabetes—another obstacle among many

As shown in Figure 1, disparities in life-long management of diabetes among the homeless is due

Table 1. Social determinants of health (3)
1. Aboriginal status
2. Disability
3. Early life
4. Education
5. Employment and working conditions
6. Food insecurity
7. Health services
8. Gender
9. Housing
10. Income and income distribution
11. Race
12. Social exclusion
13. Social safety net
14. Unemployment and job security

Figure 1. Barriers to effective diabetes care among the homeless.



to a complex interaction between environmental, physical, psychosocial and economic determinants, including transience, food insecurity, poverty, struggle with meeting basic survival needs, limited resources to follow a treatment plan, mistrust of providers and lack of access to healthcare services. Homeless people who suffer from mental illness and addictions may experience additional challenges in adhering to a treatment plan. Factors such as lack of a safe storage place for medications, secure place for insulin injection, coordination of meals with diabetes medications, and the stigma attached to homelessness may create additional obstacles for homeless people with diabetes. Homelessness also complicates delivery of health services (13).

Addressing diabetes care through social determinants—rethinking our roles

Like any other complex social and public health issue, diabetes services for homeless people are most effective when they are integrated, innovative, broad-based and holistic, addressing clients' medical and psychosocial needs. The emergence of limited initiatives aimed at addressing the unique health and social needs of the homeless is encouraging. These programs show the presence of empathetic and respectful relationships in which integration and coordination of care take place through creative strategies. However, there has been inadequate commitment at multiple levels to implement policies and dedicate resources to the programs that deliver sustainable and integrated

diabetes prevention and management services.

The Alberta Health Services Chronic Disease Program for homeless people in Calgary represents an innovative and collaborative service delivery model that has adequately addressed broader determinants of health by working with the community and homeless people. We previously reported that while standard diabetes pathways focusing on medical management of diabetes is effective for the mainstream population, a community-driven and supportive case-management approach provided by a compassionate multidisciplinary team at a large homeless shelter in Calgary where homeless people congregate was more effective in enhancing access and health outcomes for this uniquely challenged population (14). The Calgary model has identified and responded to specific, immediate and long-term needs of the homeless related to social determinants and has actively engaged and mobilized the community resources.

Implications for diabetes practice

The long-term and effective strategies that address the links between homelessness and diabetes lie in modifying the trends in our healthcare and social system that creates disparities for the homeless and other vulnerable individuals.

More specifically,

At the program level

- The standard clinical practice guidelines and diabetes-care pathways need to be adapted

in a way that adequately addresses the social determinants of health (15). A psychosocial and holistic approach, treating the “whole person” rather than a bio-medical approach treating “the disease” is recommended.

- Meeting people “where they’re at” and providing diabetes services in places where homeless people congregate would help to reduce obstacles to care.
- Promoting healthy foods in the shelters, a secure place to self-administer insulin and use glucose-monitoring devices, and timely access to medications are critical.
- An enduring and trusting patient/provider relationship is a fundamental part of the care for homeless people.
- Providers should seize every opportunity to engage the homeless and to earn trust through patience, compassion and consistency.
- A combination of case management and a multi-disciplinary team is needed to ensure that the special and complex needs of the homeless are met.
- The system of care needs to be welcoming and accepting of people as they are—not just accessible.

At the healthcare system level

- To effectively prevent and manage diabetes in vulnerable communities, there is a critical need for coordinated and collaborative efforts between key stakeholders—communities, healthcare organizations, policy and decision makers, and researchers.
- There is a serious gap in research and knowledge related to healthcare needs and interventions for the homeless, particularly youth and families with children. More research is needed to understand how broader social determinants impact the health of vulnerable people. This understanding is paramount for informed decision making, planning and resource allocation.

Final note

No two people, situations stories are the same. Each individual wants to be seen, heard, acknowledged, understood, and recognized as a whole person, with a name and with a life. Such recognition creates the foundation for respect and dignity which, in turn, are the pillars for a caring connection. (Crocker & Johnson. 2006. *Privileged Presence*)

References

1. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Final report of the Commission on Social Determinants of Health*. Geneva: World Health Organization. 2008. http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf. Accessed June 6, 2012.
2. Chiu S, Hwang SW. Barriers to healthcare among homeless people with diabetes. *Diabetes Voice*. 2006;51(4):9-12.
3. Mikkonen J, Raphael D. Social determinants of health: the Canadian facts. Toronto: York University School of Health Policy and Management. 2010. <http://www.thecanadianfacts.org/>. Accessed June 6, 2012.
4. Begin P, Casavant L, Chenier NM, Dupuis J. Homelessness. Ottawa: Library of Parliament, Political and Social Affairs Division, Document PRB 99-1E; 1999. <http://www.parl.gc.ca/information/library/PRBpubs>. Accessed June 6, 2012.
5. A snapshot of homelessness in Canada. National Homelessness Initiative. 2006. <http://www.hrsdc.gc.ca/eng/homelessness/index.shtml>. Accessed June 6, 2012.
6. Gordon L. Shelter homelessness in a growth economy: Canada's 21st century paradox. 2007. Calgary: Sheldon Chumir Foundation for Ethics in Leadership. <http://www.chumirethics-foundation.ca/files/pdf/SHELTER.pdf>. Accessed June 6, 2012.
7. Street youth in Canada: findings from enhanced surveillance of Canadian street youth, 1999-2003. Ottawa: Public Health Agency of Canada. 2006. http://www.phac-aspc.gc.ca/std-mts/reports_06/pdf/street_youth_e.pdf. Accessed June 6, 2012.
8. Miller P, Donahue P, Este D, Hofer M. Experiences of being homeless or at risk of being homeless among Canadian youths. *Adolescence*. 2004;39:735-755.
9. Frankish CJ, Hwang SW, Quantz D. Homelessness and health in Canada: research lessons and priorities. *Can J Public Health*. 2005;96:23-29.
10. Hwang SW. Homelessness and health. *CMAJ*. 2001;164:229-33.
11. Raising the Roof. Youth Homelessness in Canada: The road to solutions. 2008. Toronto: Raising the Roof. Available at: http://www.raisingtheroof.org/RaisingTheRoof/media/RaisingTheRoofMedia/Documents/RoadtoSolutions_full-rept_english.pdf. Accessed June 6, 2012.
12. Lee TC, Hanlon JG, Ben-David J, et al. Risk factors for cardiovascular disease in homeless adults. *Circulation*. 2005;111:2629-2635.
13. Hwang SW, Bugeja AL. Barriers to appropriate diabetes management among homeless persons in Toronto. *CMAJ*. 2000;2:161-165.
14. Davachi S, Ferrari I. Homelessness and diabetes: reducing disparities in diabetes care through innovations and partnerships. *Can J Diabetes*. In press.
15. Brehove T, Bloominger MJ, Gillis L, et al. Adapting your practice: treatment and recommendations for homeless patients with diabetes mellitus. Nashville: Health Care for the Homeless Clinician's Network; 2002.
16. Crocker L, Johnson B. *Privileged Presence: Personal Stories of Connections in Health Care*. Boulder, CO: Bull Publishing Company; 2006.