

## Homelessness: reducing health disparities

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**H**omelessness, a phenomenon with complex causes and potential for tragic consequences, is a public health and societal problem in cities, towns and rural areas worldwide. Men, women and children — be they refugees in Eastern Europe, street children in Uganda or what the developed world thinks of as “the homeless” — make up a growing vulnerable population that is at an unacceptably high risk for preventable disease, progressive morbidity and premature death.

In the developed world homelessness and poverty are inextricably linked:

The working poor live on a precipice that can tumble them into homelessness any time. An illness, or an unexpected layoff, brings missed paychecks, which leads to skipped utility or rent payments, which snowballs into penalties, which ends in shutoffs or eviction. That leaves a Hobson’s choice between no place at all or city-run homeless shelters, which often are dirty, noisy and unsafe.<sup>1</sup>

Subgroups of people who live in poverty are at particularly high risk for becoming homeless. They include people with mental disability or post-traumatic stress syndrome, people who have been victimized, especially through domestic violence, people with drug and alcohol addiction and people who lack sufficient social support to tide them over during potentially long, or repeated, periods of crisis.

Into the mix of poverty and these other “comorbidities,” homeless people are also plagued by multiple internal and external barriers to obtaining effective primary care.<sup>2</sup> Internal barriers include the denial of health problems and the intense pressure to fulfill competing needs, such as obtaining food, clothing and shelter and maintaining safety. External barriers include unavailable or fragmented health care services, and misconceptions, prejudices and frustrations on the part of health care professionals who care for homeless people.

With poverty, complex comorbidities and multiple barriers to care, it is no wonder that homeless people have excessively high mortality rates. In Philadelphia homeless people had an age-adjusted mortality rate 3.5 times higher than that of the general population,<sup>3</sup> and in New York City they had a rate 2 to 3 times higher.<sup>4</sup> A recent study of mortality rates among men using shelters in Toronto showed that the rates were higher than those in the general population of Toronto but much lower than those reported in the

homeless populations of New York City, Boston and Philadelphia.<sup>5</sup> Contributing factors leading to the differences in mortality rates in Canada and the United States possibly include Canada’s universal health insurance and access to health care and its lower homicide rates, particularly among young men, and the differential health effects of short-term versus chronic homelessness. Short-term homelessness, more prevalent in Canada, is less likely to be associated with death. Despite the differences between the 2 countries, the mortality rates in both are unacceptably high. What are the factors that can modify these rates?

In this issue (page 161) Stephen Hwang and Ann Bugeja take a detailed look at one of the chronic diseases leading to the excessive mortality rate, by systematically studying the issues related to the management of diabetes mellitus in homeless people.<sup>6</sup> They surveyed 50 people with diabetes at homeless shelters in Toronto and qualitatively analysed the difficulties participants reported having in managing their diabetes. Of the 50 people surveyed, 72% reported experiencing difficulties. Glycemic control was inadequate in 44% of subjects tested, even with “relatively good” access to health care.

Given the complex lives of homeless people, in and out of shelters, and the chaos and crowded conditions that exist in shelters, it is not surprising that the most common difficulties in diabetic management were related to diet (type of food in shelters and inability to make dietary choices), and scheduling and logistics (inability to access insulin and diabetic supplies when needed and inability to coordinate medications with meals). Even under the best of circumstances, diabetes management is complicated.

The feasibility of creating health care services in places where homeless people congregate, particularly services focused on treating hypertension and tuberculosis, is well established.<sup>7</sup> A case-management approach, involving a nurse and dietitian and modelled along the lines of the Diabetes Control and Complications Trial,<sup>8</sup> was successful in enhancing diabetes care in a low-income, high-risk population in California.<sup>9</sup>

Hwang and Bugeja suggest changes in shelter procedures to address the scheduling and logistics issues, including providing safe storage and ready access to medications and supplies and establishing a secure place for people to self-administer insulin and use glucose-monitoring devices.

They also suggest an objective assessment of meals in shelters. An innovative program in Philadelphia linked students at a restaurant school with staff from shelter kitchens to review food selection and preparation, which resulted in more healthy food choices.<sup>10</sup> These sound like simple measures, but the chaos of many shelters may make them somewhat impractical.

Care management, shelter modification and other strategies are all well and good, but effective disease prevention or treatment in homeless people also requires effective prevention of homelessness. With 10% of single adults accounting for half of each year's shelter dollars in cities across the United States,<sup>1</sup> new approaches that involve shifts in funds from shelters to innovative neighbourhood homeless-prevention programs have been developed in pilot projects in Philadelphia and New York City. These programs aim to identify neighbourhoods from which a disproportionate number of homeless people come and to focus comprehensive revitalization efforts, including job training, housing development, health care services, and drug and alcohol treatment, in these neighbourhoods.<sup>1</sup>

Focused care management, shelter modification and homeless-prevention programs should help to reduce the excessive mortality and morbidity from chronic disease such as diabetes. For the men, women and children who are without shelter, the toll is unacceptably high — anywhere, anytime.

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## References

1. Take-Charge Program [editorial]. *Philadelphia Inquirer* 1997 Mar 29; **Sect A:23**.
2. Stark LR. Barriers to health care for the homeless. In: Jahiel RI, editor. *Homelessness: a prevention-oriented approach*. Baltimore: Johns Hopkins University Press; 1992. p. 151-64
3. Hibbs JR, Benner L, Klugman L, Spencer R, Macchia I, Mellinger A, et al. Mortality in a cohort of homeless adults in Philadelphia. *N Engl J Med* 1994;331:304-9.
4. Barrow SM, Herman DB, Cordova P, Struening EL. Mortality among homeless shelter residents in New York City. *Am J Public Health* 1999;89:529-34.
5. Hwang SW. Mortality among men using homeless shelters in Toronto, Ontario. *JAMA* 2000;283:2152-7.
6. Hwang SW, Bugeja AL. Barriers to appropriate diabetes management among homeless people in Toronto. *CMAJ* 2000;163(2):161-5.
7. Brickner P, McAdam J, Vivic WJ, Doherty P. Strategies for the delivery of medical care — focus on tuberculosis and hypertension. In: Robertson MJ, Greenblatt M, editors. *Homelessness: a national perspective*. New York: Plenum; 1992. p. 165-74.
8. Diabetes Control and Complications Trial Research Group. The effect of intensive therapy of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. *N Engl J Med* 1993;321:977-86.
9. Friedrich MJ. Enhancing diabetes care in a low-income, high-risk population. *JAMA* 2000;283:467-8.
10. Plumb JD, McManus P, Carson L. A collaborative community approach to homeless care. In: Perkel RL, Wender R, editors. *Models of ambulatory care*. Philadelphia: WB Saunders; 1996. p. 17-30.

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