Homeless youth's overwhelming health burden: A review of the literature

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Homelessness has reached epidemic proportions in Canada. Canadian children and adolescents are the most vulnerable because youth comprise the fastest growing segment of the homeless population. A systematic literature review was undertaken using MEDLINE, Web of Science and the Homeless Hub (www.homelesshub.ca) to encompass the time frame from January 1990 to June 2009. The following terms were used as key words: 'homelessness', 'homeless youth', 'poverty', 'street youth' and 'runaway'. The present review identified an intersection among education deficits, social service insufficiencies, and poor mental and physical health in homeless youth. Health care delivery to homeless youth was often nonanticipatory, inconsistent and perceived as discriminatory. However, street youth were identified as requiring health care for pregnancy, mental health concerns, sexually transmitted illnesses, respiratory conditions, substance abuse and a myriad of other illnesses. Plenty of work is still required to reduce health inequalities and improve the daily living conditions of Canadian youth living in poverty.

Key Words: *Homeless; Homelessness; Poverty; Street youth; Youth*

Une analyse bibliographique de l'énorme fardeau de santé des jeunes sans-abri

L'itinérance a atteint des proportions épidémiques au Canada. Les enfants et adolescents canadiens sont les plus vulnérables, car ils constituent le segment à la plus forte croissance de la population de sans-abri. Les auteurs ont effectué une analyse bibliographique systématique à l'aide de MEDLINE, *Web of Science* et *Homeless Hub* (www.homelesshub.ca), entre janvier 1990 et juin 2009. Ils ont utilisé les mots-clés suivants : *homelessness*, *homeless youth*, *poverty*, *street youth* et *runaway*. La présente analyse a permis de repérer une intersection entre les déficits d'éducation, les carences des services sociaux et une mauvaise santé mentale et physique chez les jeunes sans-abri. Souvent, la prestation des soins de santé aux jeunes sans-abri n'était ni préventive, ni uniforme et était perçue comme discriminatoire. Cependant, les auteurs ont établi que les jeunes de la rue ont besoin de suivi de grossesse, de soins à l'égard des troubles de santé mentale, des infections transmises sexuellement, des troubles respiratoires, de la consommation de drogues et d'alcool et d'une myriade d'autres maladies. Il reste beaucoup à faire pour réduire les inégalités en santé et améliorer les conditions de vie quotidiennes des jeunes canadiens qui vivent dans la pauvreté.

Socioeconomic restructuring in Canada throughout the 1990s and early 2000s led to funding and budget cuts to housing, social programming, welfare and unemployment insurance (1). It has been argued that children and adolescents comprise the fastest growing segment of the homeless population in Canada, with the increasing number of runaway and street youth accounting for this significant growth (2,3).

Life on the streets is incredibly difficult for young people who become homeless, and one of the main challenges they face is maintaining their health and well-being. The Social Determinants of Health, published by the WHO (4), stresses that economic and social conditions shape the health of individuals and communities. As such, our analysis seeks to link the social, economic and cultural factors that not only produce and sustain youth homelessness, but have an impact on health.

The purpose of the present review is to highlight the health issues of homeless youth in Canadian communities, and their associated medical and social needs. We hope to illustrate that services focused on providing consistent and appropriate care for youth in their communities is needed for this large and vulnerable population.

METHODS

A systematic literature review was undertaken using MEDLINE, Web of Science and the Homeless Hub (www.homelesshub.ca). The latter search engine was used because of its focus on homelessness and its cross-disciplinary breadth. A broad search of the English language and French (Canadian) literature was conducted using the following key words: 'homelessness', 'homeless youth', 'poverty', 'street youth' and 'runaway'. These were cross referenced with our key conceptual categories such as health, nutrition, mental health, addictions, victimization and accessing services. When selecting articles, priority was given to Canadian research and meta-analysis studies. We limited our search to articles published from 1990 to June 2009.

UNDERSTANDING YOUTH HOMELESSNESS

Our definition of homeless youth included people younger than 25 years of age who are "living in extreme poverty, and whose lives are characterized by the inadequacy of housing, income, health care supports and importantly, social supports that we typically deem necessary for the successful transition from childhood to adulthood" (5). Once homeless, street youth may live in emergency shelters or on the streets (in alleyways, parks, rooftops, etc), temporarily stay with friends or family (a practice known as 'couch surfing'), or rent apartments or motel rooms. Most youth who are chronically homeless will move between these different situations over the course of a year (5). The street youth population based on shelter use is likely underestimated (6), making it difficult to calculate the exact number of homeless youth living in Canada.

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'Raising the Roof' has recently estimated the number of homeless youth in Canada to be approximately 65,000 (7).

Homeless youth face incredible challenges in maintaining their health and well-being. The WHO's Social Determinants of Health stresses that economic and social conditions shape the health of individuals and communities (4). As such, our analysis seeks to link the social, economic and cultural factors that not only produce and sustain youth homelessness, but have an impact on health.

Research in Canada and elsewhere has identified that the pathways to homelessness for young people are complex, and shaped by a range of individual and structural factors that result in unique circumstances for different individuals (8,9). Difficult family situations and a history of physical, sexual and emotional abuse are identified as significantly contributing to youth homelessness. Other contributing factors include parental addictions, psychiatric disorders and criminality (10-14). Parental substance abuse is not only a predictor of youth homelessness but also of youth substance abuse (15). There is also a relationship between youth homelessness and previous involvement with the child welfare system (6,16,17), which is significant because many youth lose access to services and support as they 'age out' of the system.

Thus, when youth become homeless, they bring to the streets a range of emotional and psychological challenges that may impact their well-being and behaviour. They also face additional barriers to moving forward with their lives including difficulties obtaining shelter, staying in school and earning an income. Many are forced to drop out of school at an early age, and the street youth population is characterized by high rates of learning disabilities, illiteracy, innumeracy, poor academic achievement and alienation from school systems (13,18,19). Additional barriers to school success include transient living situations and consequent disruptions in schooling, emotional impacts of witnessing or experiencing violence, the stigma of living in a shelter, and inadequate access to quiet space for studying or computer use (20). This lack of education leads to a deficiency of skills and training, with minimal credentials, making sustainable employment difficult or impossible to achieve (6,21).

While research demonstrates that most homeless youth are not avoiding work and want regular jobs, the vast majority face significant barriers to obtaining and maintaining stable employment (21). As a result, many street youth engage in quasilegal activities such as panhandling, and illegal activities such as theft and drug dealing to generate income (9,21-23). Key Canadian research demonstrates that criminal activities street youth engage in are the consequences of situational factors associated with poverty and homelessness, rather than an inherent tendency toward criminality (13,23). Income-generating activities such as these can also be regarded as both a cause of health problems (criminal victimization and injury, and sexually transmitted illnesses [STIs]) and a consequence of them (low energy levels or low self-esteem) (13,21).

In recent years, researchers have begun to pay more attention to the diversity of the street youth population in Canada. Most research shows that two-thirds of street youth are male, and one-third are female (13,23). Some ethnoracial groups are overrepresented, including aboriginal youth and black youth (6,21,24). Several studies have found that 20% to 40% of street youth identify themselves as gay, lesbian or transgender. These young people commonly report being evicted from their family homes because of their sexual orientation (18,25).

THE HEALTH OF HOMELESS YOUTH

Maintaining health is a significant challenge for street youth, and evidence in Canada demonstrates that homelessness is associated with poor health status (26-30). This includes, but is not limited to, greater incidences of illness and injury, increased rates of STIs, pregnancy, substance abuse, mental health concerns, mortality, poor nutrition (31-33), dental and periodontal disease (34), and increased future risk of diabetes, heart disease, arthritis and musculoskeletal disorders (29,30).

A lack of opportunities to maintain personal hygiene results in lice, scabies, fungal infections, foot blisters, sores and other illnesses (3,21). This, along with poor nutrition, stress and living in congregate settings, increases the risk of exposure to a range of respiratory tract infections, viruses and diseases (3,18,30,35,36). In 2005, Goldberg (37) found that 74% of youth living on the street in British Columbia reported having one or more chronic medical conditions. In 2003, Higgitt et al (18) found that street youth experience a large number of medical problems that are exacerbated by living on the street. They described a common ailment that they termed 'street sickness', suggesting that exposure to the elements, food insecurity, sleep deprivation and the inability to maintain personal hygiene leads to constant malaise.

Issues relating to sex and reproductive health are also key considerations because street youth are more likely to have multiple sexual partners and begin having sex at a younger age (38-41). As a consequence of both background experiences (11) and the rigours of life on the streets (41,42), many homeless youth are forced to engage in sex where sexual activity is used as a commodity to obtain money, food, drugs or shelter (13,39-44).

One of the key outcomes of the sexual patterns of homeless youth is pregnancy (44-46). In 1998, Greene and Ringwalt (44) evaluated pregnancy histories of homeless young women 14 to 17 years of age. They found that the lifetime occurrence of pregnancy for those who were absolutely homeless (48.2%) or living in shelters (33.2%) was high compared with nonhomeless youth (7.2%), and that 20% had two or more pregnancies. Similarly, in 2004, Haley et al (46) found a history of pregnancy in 41.8% of their sample of 225 adolescent street youth. Ever-pregnant street youth were more likely to have histories of sexual abuse and early injection drug use than never-pregnant youth. In Canada, approximately one-half of women living on the street, many of whom are youth, will become pregnant each year – in sharp contrast to the national average of 10% per year (6). There are 300 live births known to occur among street youth per year. The mortality rate for these infants is 10%, compared with the national infant mortality rate of 0.53% (5.3/1000 live births) (6).

Another significant outcome of the sexual patterns of street youth is the increased risk of sexually transmitted diseases and infections including HIV, hepatitis, chlamydia trachomatis and gonorrhea infections (47-49). Haley et al (47) and Johnson et al (50) demonstrated that youth involved in the sex trade are at high risk for contracting HIV as a result of unprotected commercial sexual activities, noncommercial high-risk sexual activities, sexual abuse and drug abuse (47-50). As a result, some have estimated the HIV risk to be six to 12 times higher for this vulnerable population (51,52). One study showed that while 10% of street youth identified sex work as their primary means of earning money, nearly one-third reported exchanging sex for survival needs (food, shelter or money) at one time (21). In 2005, Boivin et al (28) reviewed available literature concerning street youth in Canada and found that homeless youth have significantly higher rates of hepatitis B (OR 4.5), hepatitis C (OR 3.3) and STIs such as chlamydia (9% of Montreal [Quebec] street youth versus 4% of the general population in the United States) and HIV (OR 7.09). These risks are particularly acute for young people involved in the sex trade, and may be further complicated by factors such as injection drug use or crack cocaine use.

Considerable research identifies that homeless youth experience a variety of mental illnesses including post-traumatic stress disorder, psychiatric disorders and mood disorders (52-55). In a Toronto (Ontario) study conducted in 2009, McCay (56) found that street youth exhibited very high levels of depression, anxiety (obsessive/compulsive and phobic), hostility, paranoia and psychoticism. For many people (housed or not), adolescence is a difficult period characterized by self-doubt and low self-esteem. Street youth are particularly vulnerable in this way; the precursors to homelessness (physical and sexual abuse) lead to diminished self-worth (28), and the constant barrage of abuse on the streets (from passersby, the police and other young people) leads to worsening of their self-image. As a result, Kidd (53) and others (9,28,54,57) have demonstrated elevated rates of depression and other psychiatric disorders among homeless youth. Several research studies have demonstrated that street youth have a high rate of suicidal ideation (53,54,57,58) and that this risk is particularly pronounced among gay, bisexual and transexual youth (25,59). Although some youth associated the onset of their mental illness with experiencing life on the street, others found that their pre-existing illnesses worsened with the stress associated with homelessness.

Addictions can be both a cause and a consequence of life on the streets, and a growing body of research attests to higher rates of substance use among street youth populations (8,15,47-52,60-65). In 1999, Baron (60) argued that substance use by street youth is influenced by the complex intersection of a number of background, situational, lifestyle and economic factors. Negative health consequences of drug use and addictions among street youth include a link between injection drug use and HIV/AIDS, hepatitis A and C infection, and other diseases (47-52), resulting in the increased need for access to health care. In 2004, Millson et al (17) identified that intravenous drug users perceive their mental and physical health to be poorer than the general population. Researchers such as Roy et al (49) and Bailey et al (65) demonstrated a link between substance use, 'survival sex' and sexual activity with multiple partners (46,47,49,65). In 2004, Baer et al (66) pointed out that homeless youth experience barriers to accessing traditional prevention and treatment programs for drug use, and even when they do have access, these youth are not always responsive to such programs. Receiving access to treatment can also be problematic because wait times for treatment and detoxification centres limit access to care.

In spite of the existence of shelters and soup kitchens in many Canadian cities, there is strong evidence that people who are homeless suffer from food deprivation and malnutrition (3,36,67-70). Poor nutrition exacerbates underlying medical conditions including mental health illnesses such as depression, substance use and psychosis, as well as tuberculosis, hepatitis B infection, HIV and other STIs (3). In 2005, Tarasuk et al (69) found a high prevalence of nutrient inadequacy in 261 homeless youth in downtown Toronto. Homeless youth demonstrated lower intakes of all nutrients and calories than the general population. One-half demonstrated inadequate intakes of folate, vitamins A and C, magnesium and zinc, and more than one-half of the females had inadequate levels of vitamin B_{12} and iron stores. The importance of poor nutritional intake is demonstrated by high rates of growth delay without wasting in this population (71).

One of the most severe consequences of life on the streets is early mortality. A study by Roy et al (72) demonstrated a mortality rate of 0.89/100 person-years among 1013 street youth in Montreal over a two-year period – 11 times greater than the age- and sex-matched rate in the province of Quebec. Of those with a known cause of death, the most common causes were suicide (52%), overdose (32%) and trauma (8%) (72). Later, Boivin et al (28) found a similar mortality rate of 921/100,000 person-years among street youth in downtown Montreal – a rate exceeding 11 times the general population average. In Toronto, a similar study demonstrated a mortality ratio of 8.3 (31). Recent homelessness, daily alcohol use, intravenous drug use and male sex were also strong predictors of mortality. The leading causes of death in this population are suicide, unintentional poisonings and accidents.

DISCUSSION

The experience of being homeless produces a range of negative health outcomes for youth, who generally experience worse physical and mental health than the general population. For youth who are doubly marginalized by racism, sexism and homophobia, for instance, the outcomes can be worse.

Access to appropriate and satisfactory health care is also an issue for street youth. Despite the extreme vulnerability for developing respiratory diseases, substance abuse problems and other mental health issues while living on the street (28-30), they face considerable challenges in accessing traditional or mainstream health care services (73-77). The barriers they experience in accessing health care are well documented (29,30,74-77), and include a lack of health cards due to theft or loss, resulting in no contact address, lack of money, and the perception of discrimination and judgemental attitudes by health care providers in traditional health care settings.

As a result, medically underserved Canadian children and adolescents are more likely to experience health care that is delayed, fragmented and episodic (28). The care homeless youth receive is often reactive and inconsistent, and these young people are not likely to be seen for chronic health problems. It is for these reasons that anticipatory guidance, preventive medicine and screening interventions are uncommon in this population. Without primary care follow-up, growth status, immunization records, and developmental and behavioural monitoring may not be followed adequately. These efforts have the benefit of illness prevention and early disease detection – opportunities that may be missed in this vulnerable population.

Significant work must be done to minimize this health burden. This work begins with the recognition that homeless youth would benefit from enhanced health care including a focus on prevention strategies, treatment for acute and chronic conditions and continuity of care that is often lacking. Inadequate nutrition, vulnerability to assault, trauma, stress and addictions are all connected to the experience of being homeless.

Addressing the health burden of street youth, therefore, requires a shift in the Canadian response to homelessness. There is a need for the federal government and communities across Canada to adopt a more strategic approach to youth homelessness (7) – one that not only focuses on an investment in emergency services, but also on prevention (so that young people do not become homeless in the first place) and on providing supports that allow homeless youth to move quickly into safe, supportive housing (7,78,79). This means an investment in affordable housing that street youth have access to, as well as training and education opportunities targeted toward marginalized youth. Using a framework that focuses on prevention, emergency supports and transitional supports, we propose the following recommendations to best improve the health status of homeless youth in Canada:

- Improve access to health care for homeless youth by providing services at times and locations that are accessible to them, and in ways that are socially and culturally relevant. A cross-sectional, collaborative, community-based

initiative involving health care providers and housing, social and mental health workers enables the most effective provision of care to these youth.
- Support peer-led practices involving health ambassadors. Credible young people with street life experience are best able to reach and engage current street youth.
- Consider health care in a more holistic way. Supplying housing, food, clothing and other essentials is of greater benefit to street youth than providing medical care alone.
- Enhance health care providers' understanding of street youth issues through training and volunteer opportunities to heighten awareness and develop appropriate strategies to working with marginalized populations.
- Increase investment in intervention and prevention strategies to reduce the factors that produce youth homelessness. Counselling for high-conflict families, including instruction on parenting skills as well as programs to assist with mental illness within the family, may be approaches to decreasing family conflict.
- Ensure that young people have access to supportive adults who they can trust and approach with problems and concerns. This is essential for maintaining healthy connections and promoting resiliency.
- Make prevention and treatment of mental health problems a major health priority in Canada to reduce morbidity and mortality among adolescents living on the street, and perhaps, to prevent more youth from leaving home.
- Provide additional free access to sexual health advice and contraception counselling for homeless youth.
- Invest in an adequate supply of affordable and supportive housing that young people can access. The best way to improve the health of street youth is to remove them from the world of homelessness.
- Develop appropriate education and training opportunities to help marginalized youth achieve their goals and emerge from poverty.

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