Level of Street Involvement and Health and Health Services Use of Calgary Street Youth

Catherine A. Worthington, MSc, PhD, RSW, Bruce J. MacLaurin, MSW

ABSTRACT

Objectives: To examine differences in health risks, health outcomes and health services use of Calgary street-involved youth by level of street involvement to inform services planning.

Method: 355 street-involved youth (61% male, 26% Aboriginal) completed surveys at a variety of outdoor and agency locations: 46% currently lived on the street, 33% had lived on the street in the past, and 20% were street-involved but had not lived on the street. Odds Ratios (OR) adjusted for sex, ethnocultural group, and age group were calculated for each health/health risk and health service factor by level of street involvement.

Results: With the exception of condom use, significant health and health risk outcome differences were seen by level of street involvement. Use of hospitals and walk-in clinics did not differ significantly by level of street involvement; however, youth living on the street were less likely (OR 0.2) than those who had not lived on the street to use a physician during office hours, and those who had lived on the street were more likely (OR 10.1) to use mobile clinics, services that are targeted to street-involved people.

Conclusion: Street-involved youth who had not lived on the street showed better health/health risk outcomes than those who currently or had lived on the street, and health services use showed some differences by level of street involvement. Public health and other service providers need to be cognizant of their role in providing prevention, safety or stabilization services for youth at different stages of street life.

Key words: Street youth; health risks; health services utilization; community-based research

Health issues faced by street youth in Canada are of growing concern for public health, as homelessness and health become critical social issues. The health risks of street-involved youth are many, and may arise from street environmental risks (including inadequate shelter, poor diet, and violence); and risks resulting from street experiences, including those related to sexual activity (including survival/obligatory sex or prostitution) such as high rates of STIs (HIV, chlamydia, gonorrhoea, hepatitis B) and high-risk pregnancy; substance use, such as drug overdoses, or hepatitis B, C, or HIV infection through sharing of needles or injection drug equipment; and isolation and lack of social support, which may lead to mental health problems or exacerbation of mental health issues (including depression and suicide attempts). While many street youth use hospital emergency and health clinics, they typically turn to these only when seriously injured or ill, and often cannot afford medicines.

A variety of definitions of street youth have been used, but most health research in Canada focuses on youth under 25 who face some degree of precarious housing (e.g., those “couch surfing” at friends’ homes or in hotels) or absolute homelessness (those living outdoors, in abandoned buildings or shelters) over a given time period and who use street services. A more inclusive perspective defines street-involved youth as young people under 25 who spend considerable amounts of time on the street, participate extensively in street lifestyle practices, and who may live or have lived independently of parents or guardians in marginal or precarious situations. This approach acknowledges diversity among the street-involved youth population, and includes youth who may not be accessing services as well as youth who may be street-involved, but who have not lived on the street. This approach also considers factors that lead to street involvement, such as family conflict, violence or maltreatment, individual issues (such as mental health issues and substance use), or child welfare or educational systems issues. Within the last decade, there has been a growing recognition in the literature that for youth, involvement with the street is episodic, and may follow one or repeated cycles of entry, equilibrium on the street, and extrication or disengagement. Studies have thus recently begun to examine health risks, health outcomes, and street services use according to the levels and types of street involvement. The objective of this study was to describe health risks, outcomes and health services use of Calgary street-involved youth and investigate differences in these by their level of street involvement.
level of street involvement in order to inform health and street services delivery.

**METHODS**

This study used a community-based research approach, and included a self-administered survey of street-involved youth. Community members (including 3 street-involved youth and representatives of 14 agencies) acted as research team members, and contributed to the development of study questions and survey and interview instruments, survey collection, and data interpretation. Community-based research promotes study community relevance and direct uptake of study results by agencies, and provides research training and skills-building for community members. The study was approved by the University of Calgary Conjoint Faculties Research Ethics Board.

**Study sample**

Nonprobability, purposive sampling was used to achieve variation in the 371 survey participants in terms of gender, ethnic group, level and type of street involvement, and geographic location within the city. Research-trained youth outreach workers recruited survey participants from sites across the city, including indoor and outdoor gathering places, public transportation stations, agency locations and youth shelters. Targeted street-involved youth were 24 or younger, although youth up to age 29 were not excluded if they clearly identified and engaged with youth street practices. Study participants were required to be English speaking, and not under the influence of drugs or alcohol at the time of participation.

**Survey instrument and data collection**

The self-administered survey instrument (70 questions in booklet format) was designed to capture demographic characteristics; life experiences; street experiences; perceived physical, mental and emotional health; social, employment and educational activities; coping strategies and social support; future goals; and use of and opinions about health and street services. Survey items were based on questions used in previous surveys of street youth in Canada, and were modified to fit the local context and street language. The brief social support scale constructed for this study used 7 items from the MOS-SSS deemed most relevant for street-involved youth, and drew from tangible, affection, positive social interaction and emotional/informational subscales of the MOS-SSS. (Internal consistency for this scale among this sample was high (Cronbach’s alpha = 0.93).) The survey instrument was pretested with 24 street-involved youth who indicated they were 25 21 6% 19 182 51% 20-24 151 43% ≥25 21 6% Ethnic group White/European background 216 61% Aboriginal/Métis 90 25% Other (Black, Asian, mixed) 42 12% Level of street involvement Street-involved, never lived on street 71 20% Street-involved, lived on street in past 117 33% Currently living on the street 163 46% Reason began spending time on street† Friends were on the street 131 37% Buy or use drugs or alcohol 115 32% Somewhere to go when skipping/not in school 63 18% Travel 57 16% Earn money 70 20% Parent(s)/guardian(s) asked me to leave 116 33% Parent(s)/guardian(s) too strict 43 12% Ever experienced abuse or neglect 243 69% Lived on the street in another city 182 52%

**Health Factors**

**General and Physical Health**

Self-reported health

Excellent 65 18%

Very good 95 27%

Good 112 32%

Fair 62 18%

Poor 21 6%

**Mental Health**

Attended suicide

132 37%

Diagnosed childhood mental health condition

118 33%

Social support (0-28)‡ mean 16.6 (sd 7.9)

**Sexual Health**

Pregnancy (been pregnant/caused pregnancy)†‡ 162 46%

Engaged in survival/obligatory sex 86 24%

Asked to be involved in prostitution 70 20%

**Health Risks**

Always use condoms§ 83 25%

Drug or alcohol use in last two weeks 329 93%

Ever injected drugs 73 21%

**Health Services Use**

Do not use medical services 59 17%

Hospital 82 23%

Walk-in clinics 223 66%

Doctor during business hours 67 19%

Street mobile clinic (bus/van) 45 13%

HIV or STI test (ever) 245 69%

* percentages may not add to 100 due to rounding and item non-response
† responses not mutually exclusive
‡ scale created by summing responses on 7 items from the MOS-SSS (scores 0 [none of the time] – 4 [all of the time]): “How often is each of the following available from anyone if you need it: …someone to listen to you when you need to talk, …someone to give you advice in a crisis, …someone who shows you love and affection, …someone to have a good time with, …someone to take you to the doctor if you need it, …someone you can talk to about your problems, …someone who makes you feel wanted”
§ Excludes 23 youth (7%) who indicated they had never had sex (vaginal/anal intercourse)

12% couch surfing/at a friend’s house, 6% camping, 5% on the move; 12% other); those who indicated they did not currently live on the street but had lived on the street in the past (street-involved, lived on the street in past); and those youth who indicated they spent time on the street but had never lived on the street (street-involved, lived on the street in past). The study was approved by the University of Calgary Conjoint Faculties Research Ethics Board.

**Study sample**

Nonprobability, purposive sampling was used to achieve variation in the 371 survey participants in terms of gender, ethnic group, level and type of street involvement, and geographic location within the city. Research-trained youth outreach workers recruited survey participants from sites across the city, including indoor and outdoor gathering places, public transportation stations, agency locations and youth shelters. Targeted street-involved youth were 24 or younger, although youth up to age 29 were not excluded if they clearly identified and engaged with youth street practices. Study participants were required to be English speaking, and not under the influence of drugs or alcohol at the time of participation.

**Survey instrument and data collection**

The self-administered survey instrument (70 questions in booklet format) was designed to capture demographic characteristics; life experiences; street experiences; perceived physical, mental and emotional health; social, employment and educational activities; coping strategies and social support; future goals; and use of and opinions about health and street services. Survey items were based on questions used in previous surveys of street youth in Canada, and were modified to fit the local context and street language. The brief social support scale constructed for this study used 7 items from the MOS-SSS deemed most relevant for street-involved youth, and drew from tangible, affection, positive social interaction and emotional/informational subscales of the MOS-SSS. (Internal consistency for this scale among this sample was high (Cronbach’s alpha = 0.93).) The survey instrument was pretested with 24 street-involved youth.

In all, 371 surveys were collected by trained outreach workers over a seven-month period (June 2005-January 2006). Participating youth were offered a Calgary street survival guide, condom and lubricant packet, refreshments, and a choice of transit tickets/cof- fee shop gift certificates.

**Data entry and statistical analysis**

Sixteen surveys were excluded due to inadequate completion (less than 50% complete), for a final sample of 355 surveys. Descriptive statistics were used to summarize participant characteristics, and three categories of street involvement were created for analyses: youth who indicated they were currently living on the street (of whom 48% reported they spent the last night in a shelter, 15% outside, street-involved, lived on street in past); and those youth who indicated they spent time on the street but had never lived on the street (street-involved, lived on the street in past); and those youth who indicated they spent time on the street but had never lived on the street (street-involved, lived on the street in past).
never lived on the street). Logistic regression analyses (SPSS 16.0) were used to estimate unadjusted and adjusted (for sex, ethnocultural group and age group) odds ratios (OR) for each health and health service use factor by level of street involvement. Three transgendered youth were excluded from the adjusted analyses that controlled for sex, ethnocultural group and age group. Given the cross-sectional nature of the data and sample size, these regression results were checked for robustness by running the logistic regression models (unadjusted and adjusted) with collapsed levels of street involvement (two categories: currently living on the street; not currently living on the street).

### RESULTS

Survey participant characteristics, their health factors, and health services use are detailed in Table 1. Seventy-six percent (280 respondents) had lived on the street at some point, and 182 (52%) reported they had lived on the street in another city. Pregnancy involvement did not differ significantly by sex (52% for females; 46% for males), but a significantly larger percentage of females (33%) than males (20%) reported survival/obligatory sex (i.e., sex in exchange for food or shelter).

Health risks, health outcomes and health services use of participating street-involved youth by level of street involvement are detailed in Table 2.
played in Table 2. Significant and consistent health and health risk outcomes were seen by level of street involvement in terms of reported general and physical health, mental health, sexual health, and health risks for both unadjusted and adjusted models. For example, youth who had lived on the street in the past (adjusted OR 3.1), or were currently living on the street (adjusted OR 3.2) were 3 times more likely than youth who had never lived on the street to report attempting suicide. The one exception was condom use (always) which did not differ significantly among the three groups.

For health services use, results were more variable. Use of hospitals and walk-in clinics did not differ significantly by level of street involvement; however, there were significant differences in use for other health services, with those currently living on the street 80% less likely (adjusted OR 0.2) than street-involved youth who had never lived on the street to use a physician during business hours, and 10 times more likely (adjusted OR 10.1) to use street mobile clinics. There were significant differences from those who had never lived on the street for both other groups (currently living on the street and lived on the street in the past) in terms of those who did not use health services and those who had received HIV or STI testing. For all but self-reported health, regression results remained consistent when the regressions were run with two levels of street involvement (currently living on street compared with not currently living on street; results not shown).

**CONCLUSION**

Survey participants showed similar characteristics to street-involved youth surveyed in other Canadian cities in terms of demographics (approximately two thirds male, with an over-representation of Aboriginal youth) and similar health and health risk experiences to other samples of North American street-involved youth – with high levels of reported abuse or neglect, experience of street violence, childhood mental health conditions, attempted suicide, pregnancy, involvement in survival/obligatory sex or prostitution, drug and alcohol use, and low/inconsistent condom use. Our results for health services use are also consistent with the small number of existing North American studies, and show fairly low levels of formal health services use, with the exception of walk-in clinics (66%) and HIV or STI testing (69%).

To our knowledge, our study is the first Canadian survey study to examine street youth health and services use by level of street involvement. Our results show clear differences according to level of street involvement – with those who had not lived on the street showing better health outcomes than those who were currently living on the street or those who had lived on the street in the past – and are consistent with the small body of emerging research.

Our results for differences in health services use by level of street involvement show some differences by level of street involvement, and this is also consistent with existing international research. Most notable in our results was the lower likelihood that youth currently living on the street would use a physician during regular office hours, and higher likelihood of use of street mobile clinics, services that are targeted to street-involved individuals.

Like most studies conducted with street youth, in addition to some measurement error that may result from self-report data, our study faces two key limitations. Street-involved youth are a difficult population to access, and thus we do not claim our sample is representative of Calgary street-involved youth. However, our sample was recruited from a wide variety of targeted locations by street outreach workers with considerable rapport with youth (including 11% youth who had not accessed any street services in the past three months), and thus the sample was more broadly based than many previous studies which predominantly utilized agency-based samples. In addition, as our study was cross-sectional, we present associational data, and are not claiming that living on the street in and of itself – or itself alone – produces poorer health outcomes and higher health risks. While clear differences exist by level of street involvement, street involvement itself is a product of complex, multiple risks, including family violence, mental health/drug use issues, previous difficulties in the educational system, and child welfare services involvement, all of which may contribute to poor health practices and elevated risks for poor health outcomes. There is very little longitudinal research that has examined health risks and outcomes for street youth or homeless adults – this small body of work suggests that the relationships between homelessness and poor health outcomes (e.g., mental illness) and health risks (e.g., injection drug use) is bidirectional.

Given the results of this study, it is clear that youth with different levels of street involvement may access different types of services. Thus, public health and other service providers need to be cognizant of their role in providing prevention, safety or stabilization services for youth at different stages of street life. Barriers to health services for street-involved youth are many, and include accessibility issues, lack of medical coverage and prescription costs, and perhaps most importantly, health care professional attitudes. Public health plays a critical role in providing services for street-involved youth, but many other sectors need to be engaged as well, including mental health and addictions, education, child welfare, and correctional services.

**REFERENCES**

Unissez votre voix aux nôtres.

Joignez-vous à l’ACSP dès aujourd’hui.

Téléphonez-nous en composant le (613) 725-3769, poste 118,
envoyez-nous un courriel à l’adresse membership@cpha.ca
ou visitez-nous en ligne sur le site http://www.cpha.ca/adhesion