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Barriers to Health & Social Services for Street-Involved Youth in a Canadian Setting

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Abstract

Although street-involved youth contend with many health and social problems, the extent to which vulnerable youth engage with supportive services has not been well described. This study sought to examine the prevalence and correlates associated with having difficulty accessing health and social services among a prospective cohort of street-involved youth in Vancouver, Canada. Among 1019 street-involved youth, 650 (64%) reported having difficulty accessing services during the study period. In a multivariate analysis, youth who reported having difficulty accessing services were significantly more likely to be socially and economically vulnerable. Specifically, they were more likely to report severe housing instability, high-intensity drug use, recent interactions with law enforcement, drug dealing, and histories of violence and physical abuse. Study findings point to opportunities to improve access to services among vulnerable youth through removal of blanket age restrictions for youth services, establishing youth-centric social housing, and supporting peer-driven, low-threshold services.

Keywords

street youth; service access; homelessness; drug use

Introduction

Among the estimated 150,000 homeless youth in Canada,¹ substance use, mental health issues, hospitalization, and incarceration are common.^{2–8} Street-involved youth engage in high-risk behaviours such as syringe sharing, sex work, unprotected sex, and as a result, are at high risk of acquiring HIV and hepatitis C (HCV) infections.^{9–13} The population health impacts of contracting, at an early age, a lifelong disease such as HIV or HCV are considerable; both the burden on the healthcare system and the potential to transmit to other individuals over a lifetime are greater.^{14, 15}

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At the population level, previous research indicates that health and social service use among individuals who are homeless correlates with better health-related outcomes, including, decreased substance use, improved mental health and social stability, decreased hospitalizations, and improved housing status.^{16, 17} Greater access to methadone treatment, for example, reduces HIV risk behaviour, and decreases HIV incidence rates overall.^{18, 19} Researchers also found lower rates for discontinuing antiretroviral treatment among drug using populations receiving health and social services.²³

Given street-involved youth's heightened vulnerability to health and social harms and the benefits of service use, ensuring the availability and accessibility of health and social services for this vulnerable population is critical. It is unclear, however, whether health and social services are currently meeting the demands of street-involved youth who use drugs. Existing literature has tended to focus on individual behavioural-based reasons for why youth experience barriers to using the health and social services they seek.^{2, 6, 20} Less is known about the structural factors that may hinder optimal levels of service engagement among vulnerable youth.

To address these gaps, we undertook this study to examine the prevalence and correlates, among street-involved youth who use drugs, of reporting having had difficulty accessing health and social services. By 'difficulty accessing' we mean being unable to use a service that a youth needed due to the service being unavailable, or inaccessible for any reason (hours of operation, wait times, unwelcoming environment, strict requirements for participation, etc.) or not existing.

Methods

We used data for our study (September 2005 to May 2012) from the At-Risk Youth Study (ARYS), a prospective cohort of street-involved youth in Vancouver, Canada. Eligible youth were between the ages of 14–26 at enrolment, had used illicit 'hard' drugs in the past 30 days (such as crack, cocaine, heroin, or crystal methamphetamine), provided written informed consent, and were 'street-involved' which was defined as being absolutely or temporarily without stable housing or having used a service for street-youth in the past year. ARYS' methodology and study design, including community-based recruitment procedures and study objectives were described by Wood *et al.*²¹ In brief, at enrolment, and at semi-annual follow-ups, participants completed an interviewer-administered questionnaire to capture demographics, drug use patterns, and use of health and social services. At each study visit, the study team paid a \$20CAN stipend to each participant. The University of British Columbia's Research Ethics Board has approved the study.

The outcome of primary interest to us was, 'difficulty accessing services' based on responses to the question: "In the last six months, was there a time you were in need of a service (e.g., housing, counselling, police) but could not obtain it?" We understood this to include any instance where youth were in need of service but it was nonexistent or inaccessible for any reason. We asked participants who responded 'yes' to identify the type of service(s) they could not access. Response categories included: counselling, drug treatment, medical, dentistry, optometry, housing, needle exchange, peer-support groups,

police, education, social assistance, vocational, legal, food assistance services, or other. We comprised the comparison group from those who did not report any instances of having had difficulty accessing any service in the last six months, either because they did not identify a need for a service or they were able to access the services they sought. While youth in our study engaged in high-risk behaviours and were at a heightened risk for contracting communicable diseases, most were relatively early in their drug use careers and had not yet contracted HIV or HCV or did not yet require treatment in the early stages of the disease; thus, our service review did not examine engagement with HIV or HCV treatment.

Our independent variables include described socio-demographic, behavioural and drug use characteristics. We chose ones for their potential explanatory power and relevance, and because evidence in the literature suggesting that these variables may be associated with difficulty in accessing health and social services among street populations (Table 1 provides a list of the variables and the associated definitions).^{2, 3, 5, 6, 9, 22, 23}

Because analyses of factors potentially associated with difficulty accessing health and social services included serial measures for each study participant, we used generalized estimating equation logistic regression (GEE) for binary outcomes with a logit link function for the analysis of correlated data.²⁴ This method determined factors associated with difficulty accessing health and social services throughout the study period and provided standard errors adjusted by multiple observations per person using an exchangeable correlation structure. We addressed missing data through the GEE estimating mechanism that uses ‘all available pairs method’ for missing data from dropouts or intermittent appointment missing.

We used GEE bivariate analysis to identify factors associated with having difficulty accessing health and social services; then, to adjust for potential confounding variables and identify factors that were independently associated with our outcome of interest, we considered all variables significant at $p < 0.10$ in the bivariate analysis in the full multivariate model. Finally, we used a ‘backward model selection procedure’ to identify the model with the best overall fit as indicated by the lowest ‘quasilikelihood’ under the independence model criterion value.²⁵ We performed all statistical analyses using SAS software version 9.3 (SAS, Cary, NC). All p -values are two-sided.

Results

During the study period, we enrolled 1019 street-involved youth, 320 (31%) female, 241 (24%) self-identified as being of Aboriginal ancestry, with a median age of 21 (interquartile range [IQR]: 19–23). These 1019 youth contributed a total of 3347 study observations. The median number of study visits was 3 (IQR: 1–5), with 690 (68%) participants who returned for at least one follow-up visit and provided a median number of 25 months (IQR 17–33) under study follow-up. At enrolment, 451 (44%) of the 1019 participants reported having had difficulty accessing services in the last six months and at some point over the study period, 650 (64%) youth reported having had difficulty accessing services in the last six months.

Table 2 presents characteristics of the study sample stratified by difficulty accessing health and social services. The bivariate and multivariate GEE analyses of factors associated with difficulty accessing services appear in Table 3.

In a multivariate analysis, factors that remained independently associated with difficulty accessing services included: older age (adjusted odds ratio [AOR] = 1.05, 95% Confidence Interval [CI]: 1.01–1.09); Aboriginal ancestry (AOR = 0.78, 95% CI: 0.64–0.96); homelessness (AOR = 2.00, 95% CI: 1.69–2.38); employment (AOR = 1.21, 95% CI: 1.04–1.41); binge drug use (AOR = 1.20, 95% CI: 1.02–1.42); cocaine use (AOR = 1.36, 95% CI: 1.15–1.62); recent encounters with the police (AOR = 1.40, 95% CI: 1.18–1.67); being a recent victim of violence (AOR = 1.90, 95% CI: 1.62–2.23); having a history of physical abuse (AOR = 1.57, 95% CI: 1.17–2.11); and drug dealing (AOR = 1.20, 95% CI: 1.01–1.43).

Services that youth most frequently reported having difficulty accessing included: housing or services related to helping youth gain housing (n=622, 52%), dental services (n=248, 21%), welfare services (n=190, 16%), addiction treatment (n=181, 15%), food services (n=138, 12%), medical services (n=138, 12%), counselling and mental health services (n=115, 10%).

Discussion: *Need for youth-centric, easy to access services*

Among our sample, more than sixty percent of youth reported difficulty accessing at least one health or social service during the study period. Youth who had difficulty were generally high-risk; that is, they were more likely to use stimulant drugs, be binge drug users, be homeless, have encounters with law enforcement, engage in drug dealing, be recent victims of violence and have a history of physical abuse.

Past research examining low service access rates among street youth in Canada and abroad identified many reasons why youth frequently do not, or are unable to, access vital services. These include: difficulty establishing and maintaining trust with adults, authority figures, and institutions; perceived and actual discrimination by service providers; trepidation to approach or use youth services due to real or perceived involvement of government agencies, parents, or law enforcement in services; lack of knowledge about existing services; lacking provider requirements (e.g., have a fixed address or personal identification); long waitlists and transportation issues – all of which are frequently exacerbated by substance use and mental health issues.^{2–4, 6, 20, 22}

Age restrictions have been noted as a barrier for street-youth accessing services elsewhere.²⁶ Among our sample, each additional year of age was statistically associated with a greater likelihood of reporting difficulty in accessing services. In this study setting, youth services typically terminate between the ages of 21–24, compelling young adults to turn to adult services that may be problematic and present dangers.²⁶ For example, some adult supportive housing environments are characterized by violence and illegal activities²⁷ and may be unwelcoming and even dangerous for some young adults. Similarly, adult addiction treatment programs are often comprised of older clients who have likely been entrenched in their drug use for a much longer period of time. This divide may make it difficult for some

young adults to relate to fellow clients and the treatment setting, which may undermine the therapeutic process of addiction treatment for these young adults. The establishment of a continuum of services with gradual age transitions for street-involved youth could improve service access for those who now ‘age-out’ of youth services and find adult services inappropriate or suboptimal.

Our findings about housing (housing was the most frequently reported difficulty for service access and homeless youth had twice the odds of reporting difficulty in accessing services than those who were housed) are consistent with those in earlier studies: 1) reporting that individuals who are homeless, particularly youth, frequently do not access health and social services^{4, 6, 28} and 2) transitioning out of homelessness can be difficult for youth.^{29, 30} Stable housing is associated with a decrease in health-related harms among drug users³¹ and a reduction in mortality among street youth.³² A recent Canadian multi-site randomized controlled trial found a number of positive outcomes associated with a ‘housing first’ strategy (i.e., providing immediate access to housing without requiring abstinence from drugs or alcohol). There was decreased substance use, improved mental health, improved quality of life, increased community functioning, and improved long-term housing stability.³³ Where there are dwindling public housing stocks, health researchers have urged governments to carve out youth-centric social housing to provide street-involved youth a viable alternative to street life.^{22, 23}

We found an inverse relationship between reported difficulty accessing services and Aboriginal ancestry. (Aboriginal ancestry was self-defined and in this context refers to all status and non-status First Nations, Inuit, and Métis peoples.) While this may suggest that current services are better at addressing the needs of Aboriginal youth who have previously been characterised as a difficult-to-reach and overrepresented population among at-risk youth,^{34–36} our findings may conversely reflect that Aboriginal street-involved youth are less likely to report experiencing difficulty because they do not have a positive view of current services and therefore do not identify a need for them to the same degree as other youth in our sample.^{20, 28, 37} The legacy of colonization, residential schools, and institutional racism has been associated with institutional and provider distrust among Aboriginal populations.^{28, 30, 35, 37} Prior studies suggest that Aboriginal populations are more likely to experience difficulty accessing addiction treatment and other health services, including HIV treatment.^{34, 36, 38} Given signals that Aboriginal youth continue to face suboptimal health outcomes,^{28, 37} it appears more efforts are needed to meet the health and service needs of Aboriginal street-involved youth.

We found certain drug use patterns to be associated with greater difficulty accessing services. Past research has identified service access barriers faced by drug using populations, including, presence of law enforcement, attitudes of providers, abstinence requirements, and personal safety.^{20, 29, 38} As drug using populations are at heightened risk of HIV transmission through practices such as sharing drug paraphernalia and unprotected sex,¹¹ and prior studies have found that peer-driven, low-threshold services are effective in facilitating access for high-risk drug users.^{2–4, 6} Our study findings highlight the importance of adopting these types of innovative approaches. The World Health Organization has recommended in several policy analyses that health and social services should progress from

youth-friendly projects to “adolescent-responsive health systems” by developing national quality standards, training an adolescent-competent workforce, and moving beyond sexual and reproductive health to address a wider range of needs.³⁹

We found that street-youth who experience difficulty accessing services were more likely to have been a recent victim of violence and to have a history of physical abuse. Similarly, youth in our study who engage in drug dealing were also more likely to report having difficulty accessing services. Using prohibited means of income generation such as drug dealing, is a common survival strategy for marginalized individuals excluded from mainstream services.⁹ In addition, youth in our study who reported recent encounters with law enforcement were more likely to report difficulty accessing services. This is particularly problematic because prior studies found that interactions with law enforcement among street-involved youth were associated with drug paraphernalia confiscation.²¹ Given that youth in our study who report difficulty accessing services are more likely to be socially and economically vulnerable, efforts to improve access to services for at-risk youth are urgently required.

This study has several limitations. As with all community-recruited cohorts, ARYS is not a random sample and may not generalize to other populations of street youth. Data based on self-reports may be subject to response biases, including socially desirable responding or recall bias, and result in underreporting of drug use and other stigmatized behaviours. However, self-reported risk behaviour has been shown to be largely accurate among adult drug-using populations,⁴⁰ and among various youth populations.⁴¹ Our measure of what constitutes a barrier is limited to proximal or immediate barriers, not more distal ones that may prevent access to health services and thus would not be reflected in this analysis.

Conclusion

More than sixty percent of our sample of youth reported being unable to access a particular service during the study period. Youth in our study with markers of vulnerability, specifically severe housing instability, high-intensity drug use, recent interactions with law enforcement, drug dealing, violence, and histories of physical abuse, are more prone to have difficulty accessing services. As service use has been previously shown to be associated with better health outcomes, including a reduction in infectious disease transmission among vulnerable populations, it is a priority to facilitate service use for street-involved youth known to engage in high-risk behaviours.

Our findings highlight opportunities for structural level initiatives including: removal of blanket age restrictions for youth services and introduction of a continuum of services that have gradual age transitions; establishing youth-centric social housing; and supporting the further development of peer-driven, low-threshold services in line with WHO's recommendations of ‘adolescent-responsive health systems’. Ultimately, these public health and policy initiatives to improve service access can improve health-related outcomes at the population level.

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Table 1

Explanatory variables of interest

| Variable Name | Variable Definition (if applicable) |
|--|--|
| Age | At first study visit, per year older |
| Gender | Female vs. male |
| Aboriginal ancestry | Self-identified as Inuit, Métis, First Nations vs. other |
| Living in a family environment^a | Defined as living with a member of your family (parents, sibling, grandparents, adopted, foster, or other family) on a regular basis; yes vs. no |
| Homeless^a | Defined as no fixed address, sleeping on the street, couch surfing, or staying in a shelter or hostel; yes vs. no |
| Incomplete high school education | Yes vs. no |
| Employed^a | Defined as having at least one source of income from a regular job, temporary job, or self-employment (distinguished from non-legal forms of income generation by a separate response option); yes vs. no |
| Heavy alcohol consumption^a | Defined for females as four drinks in one day in the last week or seven drinks containing alcohol per week and for males as five drinks in one day in the last week or fourteen drinks containing alcohol per week; yes vs. no |
| Binge drug use^a | Self-defined as using injection or non-injection drugs more frequently than usual (e.g., going on 'runs' for long periods); yes vs. no |
| Heroin use^a | Defined as any injection or non-injection heroin use; yes vs. no |
| Crack smoking^a | Yes vs. no |
| Cocaine use^a | Defined as any injection or non-injection cocaine use; yes vs. no |
| Crystal methamphetamine use^a | Defined as any injection or non-injection crystal methamphetamine use; yes vs. no |
| Non-fatal overdose^a | Self-defined as having an adverse reaction from consuming too much of a drug; yes vs. no |
| Encounters with law enforcement^a | Defined as being stopped, searched or detained without arrest by police; yes vs. no |
| Any injection drug use^a | Yes vs. no |
| Recent victim of violence^a | Defined as being attacked, assaulted, or suffering violence; yes vs. no |
| Physical abuse | Defined as ever being a victim of physical abuse; yes vs. no |
| Sexual abuse | Defined as ever being a victim of sexual abuse; yes vs. no |
| Sex work^a | Defined as exchanging sex for money, shelter, drugs or other commodities; yes vs. no |
| Drug dealing^a | Yes vs. no |

^aDenotes activities in the last six months

Table 2

Characteristics^a of study sample stratified by difficulty accessing health and social services (n=1019).

| Characteristic | Difficulty Accessing Services | | Odds Ratio, (95% CI ^b) | p-value |
|-------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|---------|
| | Yes n = 650, n (%) | No n = 369, n (%) | | |
| Age Per Year Older | 22 ^c , 20–23 ^d | 21 ^c , 19–23 ^d | 1.07 (1.02–1.12) | 0.012 |
| Female Gender | 198 (30) | 122 (33) | 0.89 (0.67–1.17) | 0.390 |
| Aboriginal Ancestry | 151 (23) | 90 (24) | 0.94 (0.70–1.27) | 0.676 |
| Living w/ Family ^e | 63 (10) | 68 (18) | 0.48 (0.33–0.69) | <0.001 |
| Homeless ^e | 514 (79) | 230 (62) | 2.28 (1.72–3.03) | <0.001 |
| High School Incompletion | 512 (79) | 257 (70) | 1.62 (1.21–2.16) | 0.001 |
| Employed ^e | 357 (55) | 172 (47) | 1.40 (1.08–1.80) | 0.011 |
| Heavy Alcohol Use ^e | 238 (37) | 133 (36) | 1.03 (0.79–1.34) | 0.855 |
| Binge Drug Use ^e | 283 (44) | 134 (36) | 1.35 (1.04–1.76) | 0.024 |
| Heroin Use ^e | 221 (34) | 123 (33) | 1.03 (0.79–1.35) | 0.829 |
| Crack Smoking ^e | 383 (59) | 191 (52) | 1.34 (1.03–1.73) | 0.027 |
| Cocaine Use ^e | 312 (48) | 177 (48) | 1.00 (0.78–1.29) | 0.992 |
| Crystal Meth Use ^e | 292 (45) | 157 (43) | 1.10 (0.85–1.43) | 0.463 |
| Drug Overdose ^e | 75 (12) | 38 (10) | 1.14 (0.75–1.72) | 0.545 |
| Encounters with Police ^e | 258 (40) | 98 (27) | 1.82 (1.38–2.41) | <0.001 |
| Injection Drug Use ^e | 200 (31) | 112 (30) | 1.02 (0.77–1.35) | 0.900 |
| Victim of Violence ^e | 336 (52) | 128 (35) | 2.01 (1.55–2.62) | <0.001 |
| Physical Abuse | 569 (88) | 279 (76) | 2.53 (1.76–3.62) | <0.001 |
| Sexual Abuse | 475 (73) | 221 (60) | 1.86 (1.41–2.46) | <0.001 |
| Sex Work ^e | 71 (11) | 26 (7) | 1.62 (1.01–2.59) | 0.043 |
| Drug Dealing ^e | 334 (51) | 169 (46) | 1.25 (0.97–1.62) | 0.087 |

^a Characteristics for individuals who had difficulty accessing health and social services were measured at their first visit (during the study period) which involved a report of difficulty accessing services. Characteristics for all other participants were measured from the first study visit during the study period;

^b CI = Confidence Interval;

^c Median Age;

^d Interquartile Range;

^e Denotes activities in the last six months. Interpretation of findings using the female gender variable as an example: *of the total number of females in this study, 198 (30%) reported difficulty in accessing services, whereas, of the total number of males in this study 122 (33%) reported difficulty in accessing services.*

Table 3

Bivariate and multivariate GEE analyses of factors associated with difficulty in accessing health and social services among street-involved youth (n=1019).

| Characteristic | Unadjusted Odds Ratio | | Adjusted Odds Ratio | |
|-------------------------------------|--|-----------------|----------------------------|-----------------|
| | OR ^a (95% CI ^b) | <i>p</i> -value | AOR (95% CI ^b) | <i>p</i> -value |
| Age Per Year Older | 1.05 (1.02–1.08) | 0.003 | 1.05 (1.01–1.09) | 0.007 |
| Female Gender | 0.99 (0.82–1.20) | 0.942 | | |
| Aboriginal Ancestry | 0.77 (0.64–0.94) | 0.010 | 0.78 (0.64–0.96) | 0.018 |
| Living w/ Family ^c | 0.62 (0.50–0.79) | <0.001 | 0.85 (0.66–1.10) | 0.209 |
| Homeless ^c | 2.64 (2.26–3.09) | <0.001 | 2.00 (1.69–2.38) | <0.001 |
| High School Incompletion | 1.15 (0.93–1.41) | 0.192 | | |
| Employed ^c | 1.27 (1.11–1.46) | 0.001 | 1.21 (1.04–1.41) | 0.015 |
| Heavy Alcohol Use ^c | 1.08 (0.93–1.26) | 0.320 | | |
| Binge Drug Use ^c | 1.70 (1.46–1.98) | <0.001 | 1.20 (1.02–1.42) | 0.031 |
| Heroin Use ^c | 1.22 (1.03–1.45) | 0.022 | | |
| Crack Smoking | 1.59 (1.37–1.86) | <0.001 | | |
| Cocaine Use ^c | 1.76 (1.51–2.05) | <0.001 | 1.36 (1.15–1.62) | <0.001 |
| Crystal Meth Use ^c | 1.45 (1.24–1.69) | <0.001 | | |
| Drug Overdose ^c | 1.63 (1.26–2.11) | <0.001 | 1.22 (0.91–1.63) | 0.187 |
| Encounters with Police ^c | 2.01 (1.71–2.35) | <0.001 | 1.40 (1.18–1.67) | <0.001 |
| Injection Drug Use ^c | 1.16 (0.97–1.39) | 0.101 | | |
| Victim of Violence ^c | 2.42 (2.08–2.80) | <0.001 | 1.90 (1.62–2.23) | <0.001 |
| Physical Abuse | 1.89 (1.42–2.52) | <0.001 | 1.57 (1.17–2.11) | 0.003 |
| Sexual Abuse | 1.44 (1.18–1.75) | <0.001 | | |
| Sex Work ^c | 1.40 (1.05–1.86) | 0.022 | | |
| Drug Dealing ^c | 1.76 (1.51–2.05) | <0.001 | 1.20 (1.01–1.43) | 0.036 |

^aOdds Ratio;

^bConfidence Interval;

^cRefers to activities in the previous six months