PUBLIC HEALTH 176 (2019) 163–171

Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe

Themed Paper – Original Research

A national study of Indigenous youth homelessness in Canada

S.A. Kidd [a,*], J. Thistle [b], T. Beaulieu [c], B. O'Grady [d], S. Gaetz [e]

[a] University of Toronto Department of Psychiatry, Toronto, Canada
[b] York University Department of History, Toronto, Canada
[c] Toronto Centre for Addiction and Mental Health, Toronto, Canada
[d] University of Guelph Department of Sociology, Toronto, Canada
[e] York University Faculty of Education, Toronto, Canada

ARTICLE INFO

Article history:
Received 10 November 2017
Received in revised form
19 March 2018
Accepted 12 June 2018
Available online 22 August 2018

Keywords:
Indigenous
First Nations
Aboriginal
Homeless
Youth
Marginalized

ABSTRACT

Objective: This study was designed to address the need for more detailed information about Indigenous homeless youth, a group overrepresented in the homeless population, using a national-level data set.

Study design: The study used a cross-sectional, self-report survey design.

Methods: Surveys were used to gather demographic, mental health, and quality of life data from a sample of 1103 Canadian youth accessing homeless services with data collected in 2015. This article focused on the 332 Indigenous respondents, using both comparisons with non-Indigenous youth and within-group comparisons across key domains.

Results: These findings suggested greater mental health and addiction challenges among Indigenous homeless youth compared with non-Indigenous respondents as well as evidence of a more problematic role of child protection. Within-group comparisons suggested that female and sexual and gender minority youth are particularly at risk among Indigenous youth with some added child protection and justice implications for reserve-raised youth. Child protection history and street-victimization were particularly relevant to the current distress levels.

Conclusion: Overall, such findings reinforce calls for Indigenous-specific interventions for these populations—including policy-driven prevention initiatives to address the legacy of colonization.

Introduction

Youth homelessness is a major global problem with annual North American prevalence estimates of 25–35,000 in Canada[1] and more than one million in the United States.[2] As a population, a majority report neglect, physical, and/or sexual violence before becoming homeless and prehomelessness challenges in the form of school-related adversity, family

* *Corresponding author*. Complex Care and Recovery Program, Division Chief - Psychology, Centre for Addiction and Mental Health, University of Toronto Department of Psychiatry, 1001 Queen St. W., Unit 2-1, #161, Toronto, Ontario M6J 1H1, Canada. Tel.: +1416 535 8501 #36295.
E-mail address: sean_kidd@camh.net (S.A. Kidd).

https://doi.org/10.1016/j.puhe.2018.06.012
0033-3506/

discord, poor mental health, and juvenile criminal justice and child protection involvement.[3,4] Once homeless, youth face continued exposure to adversity including violence, exploitation, and concomitant declines in health including high rates of mortality.[5,6] Most youth trajectories involve multiple cycles of being housed, precariously housed, and homeless over several years with pathways out of homelessness challenged by poorly funded and designed service systems and policy-related barriers.[7]

However, summary research belies the marked diversity within homeless youth populations. Subgroup analyses consistently show large differences in subsistence and social patterns[8] and differences in risk as a function of gender and sexual identity.[9] The paucity of research into Indigenous youth homelessness is particularly striking. At a general level, Indigenous youth have consistently been found to face greater adversity in all social determinants of health.[10] Indigenous children and youth are also greatly overrepresented in child welfare systems[11] in a manner many consider to be reflective of systematic discrimination.[12]

Indigenous youth are also overrepresented in homeless youth populations.[13,14] Furthermore, a very small number of comparative studies have indicated that, relative to other homeless youth, Indigenous homeless youth are at a greater risk of incarceration,[15] engaging in survival sex,[16] and becoming HIV positive.[17] While most studies in this area are Canadian, similar trends have been found in other jurisdictions, such as Australia.[18] The term 'Indigenous,' in the Canadian context, refers to the 'First Peoples,' that is, First Nations, Inuit, and Métis people, in Canada. There are approximately 1.6 million Indigenous people in Canada, accounting for 4.9% of the total population.[19] While there is significant diversity (e.g. historical, cultural, community structures, and systems) within and between the three First Peoples, there are also shared experiences and narratives across the groups, such as experiences with residential school attendance, child welfare apprehension, and removal from traditional lands. As a result of the disruption to traditional ways of life and living, such as the Canadian government's creation of the reserve system and the denial of Indigenous peoples' inherent rights to land, many Indigenous people have migrated to urban centers over time, while others remain connected to home or reserve communities.[19] The term 'born and raised on reserve' refers to Indigenous youth who have been reared within Indigenous communities that are geographically located on 'reserve lands' for that respective community. Indigenous youth who have been raised off reserve may have varied experiences with cultural, family, and community connections; many urban youth build and maintain connections to ancestral communities and traditional knowledge systems through alternate avenues, such as established cultural gathering spaces and connecting with Indigenous knowledge keepers from ancestral communities.[20]

Any informed inquiry into Indigenous youth homelessness must account for histories of colonialism. Countries like Australia and New Zealand have long understood Indigenous homelessness as an expression of settler colonization, and the dispossession from traditional lands inflicted on Indigenous peoples.[21,22] Within the Canadian context, colonial processes impacted the spiritual, emotional, physical, and mental health domains of well-being for Indigenous people. European contact resulted in the introduction of infectious diseases (e.g. smallpox, measles), and the evolution to chronic disease (e.g. diabetes), which continues to impact Indigenous peoples at significant rates.[23] The introduction of legislation and policy, such as the 'British North America Act' and the 'Indian Act', enabled the Canadian government to exercise ultimate control over Indigenous identity, eradicate traditional forms of governance, obtain title to land and its resources while displacing Indigenous people from traditional lands, and outlaw Indigenous culture, including spiritual practices and traditional healing.[24] Racist ideologies further fueled attempts to 'civilize the savage' and assimilate Indigenous people to Euro–Canadian customs and norms through the establishment of the residential school system, where Indigenous children were forcibly removed from their homes and placed in schools where abuse and illness were rampant.[25] The apprehension of Indigenous children was perpetuated during the 1960s; commonly referred to as the 'Sixties Scoop', Indigenous children were removed from their homes and communities and placed into the child welfare system, a colonial practice that continues today at alarming rates.[26] The ultimate goal of the colonial effort was to dismantle and eradicate Indigenous knowledge systems through attacks on Indigenous culture, family and communal systems, and identity. Colonization can be understood as a distal determinant of health for Indigenous people,[27–29] who continue to experience the long-lasting legacy of intergenerational trauma and inequities across proximal determinants of health (e.g. housing, employment, food security).[30]

More specifically, emergent literature in Canada asserts that Indigenous homelessness is a product of a breakdown of healthy Indigenous relationships brought to bear by historic processes of colonization, such as land displacements, disconnection from identity, loss of cultures, linguicide, domicide, and a loss of Indigenous cosmology, among others.[31] Indigenous youth, in many ways, have taken the brunt of Canadian nation state-building projects, expressions of which are found in the institutions such as residential schools and child welfare. Taking Indigenous children and placing them into state-run institutions—historically and contemporarily—has caused a deep cultural destabilization, destroyed institutions responsible for the socialization of Indigenous peoples, and has had the effect of traumatizing generations of First Nations, Metis, and Inuit.[31] Dealing with both loss of kin and identity, coupled with the extreme emotional and psychological pressures of being in care, and underlying intergenerational trauma, are key contributors to Indigenous youth homelessness.

The present study was designed to address the dearth of research into Indigenous youth homelessness. Using a large Canadian data set afforded a degree of representativeness that has been lacking. Furthermore, the comprehensiveness of the survey afforded both the breadth of inquiry and the opportunity for within-group comparisons as a function of variables such as being raised on reserve, child protection involvement, gender, and sexual and gender identity.

Methods

Design and analysis

This study focuses on an exploratory analysis of Indigenous participant findings from the 2015 Leaving Home—National Youth Homelessness Survey. This survey was administered through 57 agencies serving homeless youth (emergency shelters, day programs) in 42 communities across Canada. This self-report survey assessed demographic information and an array of prehomelessness and posthomelessness variables considered retrospectively through a cross-sectional design. After a descriptive analysis of key demographic and scale findings, there were three steps of data analysis. First, Indigenous youth findings were compared with non-Indigenous–identified youth. Second, within-group comparisons were made for the Indigenous participants. Both steps used independent sample *t*-test analysis for continuous variable comparisons and Chi-squared analysis for binary variable comparisons. In both steps, dependent variables were age at first homeless episode, reason given for homelessness, criminal justice involvement, child protection involvement, quality of life (QOL), psychiatric symptoms, substance abuse, suicide attempt history, resilience, social support, victimization, and vocational engagement. Binary group independent variables were Indigenous identification (for step 1); growing up on reserve; lesbian, gay, bisexual, transgender, queen, two spirit (LGBTQ2S) status; and gender (for step 2 within-group comparison). Associations and comparisons with significance less than $P = 0.05$ are reported, even though associations greater than $P = 0.01$ likely need to be treated cautiously given multiple comparisons. In step 3, principle component factor analysis was used to derive regression scores for each participant tapping key distress/risk variables that could be helpful for service providers in identifying youth most likely to be at risk. These include psychiatric symptomatology, substance abuse/dependence, and QOL. These scores, in turn, formed the dependent variable for blockwise linear regression analysis. The blocks entered were (1) static demographic gender, raised on reserve, LGTBQ2S, and age at first homeless episode; (2) early experiences including prehomeless exposure to physical and sexual violence and child protection involvement; and (3) exposure to physical and sexual violence while homeless.

Recruitment and data collection

This study used a convenience sampling strategy. Agency participation was determined by responses to invitations sent out through both formal (Canadian Observatory on Homelessness) and informal networks. Individual participant responses within agencies were voluntary with youth engaged individually and in groups by service providers in common spaces. While extending reach, this strategy did not allow for a systematic capture of refusal rates or response rates against service recipient population estimates. Survey packages were distributed by mail with paid return envelopes to homeless youth–serving organizations, with participating organizations receiving orientation to the survey and administration instructions. Staff were instructed on administration logistics and ethics (emphasis that completing the survey was voluntary and refusal would in no way impact services received). Surveys were provided to youth to complete with pen and paper, sealing their completed survey and signed consent form in an envelope which was given back to agency staff. Survey collection occurred over a 4-week period between October and November, 2015. All participants received $10 for their participation, and the study was reviewed and approved by York University's Human Participants Review committee (Office of Research Ethics; #e2015—090).

Measures

Brief measures were used due to the relevance of survey fatigue among this population and the number of domains assessed. Basic demographic information was collected of age, ethnicity, race, gender, sexual identity, and age of first homeless episode with binary responses obtained for the occurrence of physical and sexual violence in prestreet and street contexts. Binary responses were obtained with respect to a history of one or more drug overdoses requiring hospitalization and a history of one or more suicide attempts specifying 'an intent to end your life.'

To assess mental health symptomatology, the 6-item internalizing scale from the Global Appraisal of Individual Needs (GAIN) Short Screener (GAIN-SS; ver. 3.0.1 CAMH)[32] was used. This scale uses a 5-point Likert scale, has established psychometrics with adolescent populations,[33] and in the present study demonstrated internal consistency at alpha = 0.79. To assess subjective QOL, seven items from the well-validated WHOQOL-BREF[34] were administered. The seven items were chosen through investigator consensus with respect to population relevance with attention given to covering general life satisfaction and items from physical health, environment, and psychological subscales. Items were answered on a 5-point scale with reliability at alpha = 0.86. Substance use problems were assessed using three items derived from the GAIN-SS[32] tapping substance use interference with activities of daily life, relationships, and withdrawal symptoms. These items used a 5-point Likert scale and had alpha = 0.82. Resilience was assessed using the 14-item Resilience Scale,[35] which has established psychometrics and answered on a 5-point scale (alpha = 0.90). Social support from friends was assessed with nine items from the Hemingway Measure of Adolescent Connectedness[36] that uses a 5-point Likert scale (alpha = 0.95). Three additional general support items were added to tap domains relevant to this population, using the same scale, referring to people who can be counted on in an emergency, for emotional support, and who check in on them.

Results

Participants and key descriptives

Completed surveys were returned for a total of 1103 youth of whom 332 were Indigenous identified—the following descriptive statistics focus on the latter subgroup. For a complete description of findings from all respondents see

Ref.[9] Data were collected from Nunavut territory and all provinces except for Prince Edward Island. The largest amount of data were collected from Ontario (n = 482 total/n = 100 Indigenous), British Columbia (n = 238/103), and Alberta (n = 154/81) and the least from Nunavut (n = 2/2) and Manitoba (n = 16/4), and from primarily large urban centers such as Toronto (n = 193/33), Vancouver (n = 167/79), Edmonton (n = 82/55), Ottawa (n = 67/19) and St. John's (n = 67/12). Among Indigenous respondents, 116 were identified as cisgender female (38.9%) and 182 as cisgender male, and 34 did not indicate gender. As noted previously, the majority of participants were recruited from urban centers in Western Canada and 75 (22.6%) reported being born and raised on a reserve. Mean age was 19.87 years (standard deviation [SD] = 2.58; range 12–26), mean age of first homeless episode was 15.67 years (SD = 2.53), with 178 (53.6%) indicating having discontinued education after some time in high school and 29 (8.7%) reporting less than grade 9 education. The most common place of residence in the month before the survey included couch surfing (residing temporarily with friends or family) n = 62 [18.7%], own place (n = 53 [16%]), emergency shelter (n = 65 [19.6%]), and group home/supervised residence (n = 46 [13.9%]). A total of 95 reported LGBTQ2S identity (28.6%) and 234 (70.5%) reported child protection involvement.

Mean QOL fell in the middle of the 5-point scale (3.09/5; SD = 0.84) with item means ranging from 2.88 (satisfaction with self) to 3.34 (satisfaction with access to health services). On the GAIN-SS, 89.2% (n = 296) of participants fell in the 'high' symptom/distress category with a mean of 2.92 on the 0–4 scale (SD = 1.04), and the mean response on the three pooled substance abuse and dependence GAIN items was 2.71 (SD = 1.46). At least one suicide attempt was reported by 56.3% of participants, and 45.1% reported having at least one drug overdose requiring hospitalization. On the 14-item Resilience Scale, the mean score of 3.54 (SD = 0.72) falls between the low (3.43) and moderately low to moderate resilience cutoffs (3.57).[37]

Between-group comparisons

Comparisons were made between Indigenous-identified youth and all other respondents (Table 1). *T*-test analyses of continuous and ordinal variables revealed no significant differences in the areas of support from friends, QOL, and resilience. Indigenous youth did, however, report a lower age of first homeless (t (1017) = −2.47, $P = 0.013$) and higher psychiatric symptomatology (t (962) = 2.77, $P = 0.006$) and substance abuse/dependence (t (1003) = 4.02, $P < 0.001$). Considering reasons given for becoming homeless, Indigenous youth reported problems getting along with parents less than others (t (1040) = −3.48, $P = 0.001$), although reported as more important child protection removal from the home (t (1044) = 4.21, $P < 0.001$), negative child protection experiences (t (1030) = 3.59, $P < 0.001$), and both personal (t (1031) = 3.15, $P = 0.002$) and parental (t (1023) = 3.86, $P < 0.001$) drug/alcohol abuse. Across binary categorical variables, street sexual assault and current contact with family emerged as nonsignificant. Areas of significant difference included greater prehomeless experience with child protection (χ^2 [1, N = 1020] = 30.50, $P < 0.001$) and physical (χ^2 (1, N = 913) = 6.41, $P < 0.013$) and sexual (χ^2 (1, N = 925) = 6.44, $P < 0.011$) abuse. Differences of experience while homeless included Indigenous youth reports of greater physical victimization (χ^2 (1, N = 920) = 13.72, $P < 0.001$), more frequent overdose requiring hospitalization (χ^2 (1, N = 994) = 7.90, $P < 0.005$), and a higher suicide attempt rate (χ^2 (1, N = 948) = 11.01, $P < 0.001$).

Within-group comparisons

For within-group analyses, subgroups of focus were those born and raised on vs off reserve, cisgender male vs female, and LGBTQ2S status. Looking first at *t*-test analyses for continuous and ordinal variables comparing youth raised on vs off reserve, no significant difference was observed for age at first homeless episode, support from friends, QOL, psychiatric symptoms and resilience. Growing up on a reserve was, however, associated with more substance and alcohol abuse challenges (M = 3.04 [SD = 1.53] vs M = 2.59 [1.37]; t (232) = 2.29, $P = 0.023$) and differing emphases regarding reasons for homelessness. Reasons that reserve-raised youth reported as relatively more important included exposure to sexual abuse (M = 1.74 [SD = 1.34] vs M = 1.41 [1.09]; t (235) = 2.00, $P = 0.047$), trouble with the law (M = 3.04 [SD = 1.53] vs M = 2.59 [1.37]; t (232) = 2.29, $P = 0.023$), being taken away by child protection services (M = 2.71 [SD = 1.74] vs M = 1.98 [1.55]; t (241) = 3.25, $P = 0.001$), a difficult time in child protection services (M = 2.24 [SD = 1.55] vs M = 1.75 [1.32]; t (238) = 2.48, $P = 0.014$), and parental drug or alcohol abuse (M = 2.71 [SD = 1.60] vs M = 2.11 [1.56]; t (239) = 2.72, $P = 0.007$). Considering binary categorical variables, growing up on reserve was not associated with increased frequency of report of child protection involvement, report of prehomelessness physical or sexual abuse, current contact with family, suicide attempt, overdose, or victimization while homeless either physical or sexual.

A greater number of group differences emerged in considering gender (Table 2). It was found that female youth reported an earlier age of first homeless experience (t (278) = −3.02, $P = 0.003$) and higher levels of psychiatric symptoms (t (258) = 3.21, $P = 0.001$) and reported different emphases than males in the reasons given for becoming homeless. Specifically, leaving to work had less of an emphasis (t [276] = −3.20, $P = 0.002$) as did trouble with the law (t (280) = −3.03, $P = 0.003$), while physical (t (276) = 4.75, $P < 0.001$) and sexual (t (274) = 4.31, $P < 0.001$) abuse were emphasized more as were own mental health issues (t (280) = 2.43, $P = 0.016$), parent mental health (t (278) = 4.03, $P < 0.001$), and drug/alcohol use (t (279) = 3.10, $P < 0.001$). Furthermore, females reported a greater frequency of prestreet physical (χ^2 (1, N = 242) = 7.96, $P = 0.006$) and sexual (χ^2 (1, N = 247) = 24.45, $P < 0.001$) abuse, street physical (χ^2 (1, N = 246) = 7.22, $P = 0.008$) and sexual (χ^2 (1, N = 251) = 19.85, $P < 0.001$) assault, and a higher suicide attempt rate (χ^2 (1, N = 255) = 5.56, $P = 0.018$). No difference was noted for social support from friends, QOL, substance abuse, overdose rate, resilience, child protection engagement, and contact with family.

Considering LGBTQ2S-identified youth (Table 3), they reported an earlier age of first homelessness (t (302) = −2.34, $P = 0.020$), lower QOL (t (309) = −2.98, $P = 0.003$), higher psychiatric symptoms (t (280) = 4.27, $P < 0.001$), and substance abuse (t (294) = 2.34, $P = 0.020$). They also reported different

Table 1 – Indigenous - non-indigenous comparisons.

Variable (continuous)	Indigenous [M (SD)]	Non-Indigenous [M (SD)]	t	df	P value
Age in years of first homelessness	15.67 (2.53)	16.09 (2.48)	−2.47	1017	0.013
Social support by friends[a]	3.50 (1.13)	3.47 (1.18)	0.37	976	ns
QOL[a]	3.09 (0.84)	3.16 (0.86)	−1.13	1054	ns
Psychiatric symptoms[a]	2.92 (1.04)	2.71 (1.11)	2.77	962	0.006
Substance abuse/dependence[a]	2.71 (1.46)	2.32 (1.39)	4.02	1003	<0.001
Resilience[a]	3.54(0.72)	3.43(0.83)	1.90	937	ns
Reasons for leaving home[a]					
Could not get along	3.46 (1.53)	3.80 (1.40)	−3.48	1040	0.001
Child protection removal	2.19 (1.63)	1.77 (1.40)	4.21	1044	<0.001
Negative child protection experiences	1.94 (1.43)	1.63 (1.22)	3.59	1030	<0.001
Own drug and alcohol use	2.80 (1.61)	2.46 (1.62)	3.15	1031	0.002
Parent drug and alcohol use	2.32 (1.57)	3.10 (1.52)	3.86	1023	<0.001
Variable (binary)	**Indigenous (% yes)**	**Non-Indigenous (% yes)**	**χ^2**	**df**	**P value**
Child protection	74.8	56.6	30.50	1	<0.001
Prestreet physical abuse	54.4	45.4	6.41	1	0.013
Prestreet sexual abuse	23.3	16.3	6.44	1	0.011
Street physical assault	34.8	22.2	13.72	1	<0.001
Street sexual assault	16.9	13.6	1.70	1	ns
Contact with family	73.7	71.0	0.759	1	ns
Overdose requiring hospitalization	45.1	35.7	7.90	1	0.005
Suicide attempt	56.3	44.6	11.01	1	0.001

df, degree of freedom; M, mean; ns, not significant; QOL, quality of life; SD, standard deviation.
[a] Results from a 5-point Likert scale.

emphases for reasons to become homeless including more physical (t (301) = 4.64, $P < 0.001$) and sexual (t (297) = 6.30, $P < 0.001$) abuse, more child protection removal (t (308) = 2.23, $P = 0.026$), and negative child protection experiences (t (303) = 2.46, $P = 0.014$). LGBTQ2S youth also reported a greater emphasis on their own mental health challenges (t (305) = 5.05, $P < 0.001$) as a reason for becoming homeless along with parent mental health issues (t (302) = 5.00, $P < 0.001$), along with own drug and alcohol use (t [305] = 2.65, $P = 0.008$) and parent drug and alcohol use (t (304) = 4.16, $P < 0.001$). LGBTQ2S youth also reported greater exposure to prestreet physical violence (χ^2 (1, N = 264) = 11.48, $P = 0.001$)

Table 2 – Male - female indigenous youth comparisons.

Variable (continuous)	Female cis. [M (SD)]	Male cis. [M (SD)]	t	df	P value
Age in years of first homelessness	15.20 (2.51)	16.12 (2.50)	−3.02	278	0.003
Social support by friends[a]	3.51 (1.21)	3.52 (1.07)	0.10	269	ns
QOL[a]	3.04 (0.84)	3.22 (0.81)	−1.78	286	ns
Psychiatric symptoms[a]	3.13 (0.77)	2.71 (1.67)	3.21	258	0.001
Substance abuse/dependence[a]	2.84 (1.45)	2.58 (1.44)	1.37	274	ns
Resilience[a]	3.54 (0.67)	3.58 (0.72)	−0.50	246	ns
Reasons for leaving home[a]					
Left to look for work	1.72 (1.20)	2.23 (1.37)	−3.20	276	0.002
Physical abuse	2.75 (1.67)	1.91 (1.29)	4.75	276	<0.001
Sexual abuse	1.77 (1.38)	1.22 (0.76)	4.31	274	<0.001
Trouble with law	1.94 (1.44)	2.49 (1.52)	−3.03	280	0.003
Own mental health issues	2.74 (1.55)	2.30 (1.41)	2.43	280	0.016
Parent mental health issues	2.61 (1.65)	1.89 (1.32)	4.03	278	<0.001
Parent drug and alcohol use	2.60 (1.68)	2.02 (1.42)	3.10	279	<0.001
Variable (binary)	**Female cis. (% yes)**	**Male cis. (% yes)**	**χ^2**	**df**	**P value**
Child protection	78.9	70.3	2.51	1	ns
Prestreet physical abuse	62.5	44.2	7.96	1	0.006
Prestreet sexual abuse	34.6	8.4	24.45	1	<0.001
Street physical assault	41.2	25.0	7.215	1	0.008
Street sexual assault	23.8	4.8	19.85	1	<0.001
Contact with family	78.1	72.7	1.06	1	ns
Suicide attempt	64.4	49.4	5.56	1	0.018
Overdose requiring hospitalization	49.6	40.5	2.20	1	ns

cis., cisgender; df, degree of freedom; M, mean; ns, not significant; QOL, quality of life; SD, standard deviation.
[a] Results from a 5-point Likert scale.

Table 3 – LGBTQ2S indigenous youth comparisons.

Variable (continuous)	LGBTQ2S [M (SD)]	Non-LGBTQ2S [M (SD)]	t	df	P value
Age in years of first homelessness	15.12 (2.46)	15.85 (2.50)	−2.34	302	0.020
Social support by friends[a]	3.49 (1.15)	3.51 (1.13)	0.18	290	ns
QOL[a]	2.87 (0.85)	3.18 (0.82)	−2.98	309	0.003
Psychiatric symptoms[a]	3.32 (0.69)	2.78 (1.10)	4.27	280	<0.001
Substance abuse/dependence[a]	3.05 (1.46)	2.61 (1.45)	2.34	294	0.020
Resilience[a]	3.49 (0.70)	3.56 (0.71)	−0.78	267	ns
Reasons for leaving home[a]					
Physical abuse	2.95 (1.67)	2.08 (1.42)	4.64	301	<0.001
Sexual abuse	2.20 (1.65)	1.27 (0.87)	6.30	297	<0.001
Child protection removal	2.23 (1.58)	2.06 (1.57)	2.23	308	0.026
Negative child protection experiences	1.94 (1.43)	1.79 (1.34)	2.46	303	0.014
Own mental health issues	3.22 (1.55)	2.31 (1.42)	5.05	305	<0.001
Parent mental health issues	2.90 (1.67)	1.98 (1.39)	5.00	302	<0.001
Own drug and alcohol use	3.17 (1.65)	2.65 (1.56)	2.65	305	0.008
Parent drug and alcohol use	2.88 (1.69)	2.09 (1.46)	4.16	304	<0.001
Variable (binary)	**LGBTQ2S (% yes)**	**Non-LGBTQ2S (% yes)**	**χ^2**	**df**	**P value**
Child protection	77.5	73.6	0.51	1	ns
Prestreet physical abuse	69.9	47.5	11.48	1	0.001
Prestreet sexual abuse	43.4	14.1	27.44	1	<0.001
Street physical assault	45.0	29.1	6.35	1	0.012
Street sexual assault	33.7	9.5	24.06	1	<0.001
Contact with family	72.8	74.0	0.04	1	ns
Suicide attempt	78.6	46.9	23.91	1	<0.001
Overdose requiring hospitalization	55.2	40.4	5.43	1	0.020

df, degree of freedom; LGBTQ2S, lesbian, gay, bisexual, transgender, queen, two spirit; M, mean; ns, not significant; QOL, quality of life; SD, standard deviation.
[a] Results from a 5-point Likert scale.

and poststreet physical violence (χ^2 (1, N = 269) = 6.35, P = 0.012), as well as prestreet sexual violence (χ^2 (1, N = 267) = 27.44, P < 0.001) and poststreet sexual violence (χ^2 (1, N = 272) = 24.06, P < 0.001). They also reported higher rates of suicide attempt (χ^2 (1, N = 278) = 23.91, P < 0.001) and overdose (χ^2 (1, N = 295) = 5.43, P = 0.020).

Principal component factor analysis was used to generate global distress regression scores. Entering the variables QOL, substance and alcohol abuse and dependence, and psychiatric symptoms produced a single factor with an eigenvalue of 1.67 explaining 55.76% of variance (correlations were QOL −0.66, substance abuse 0.74, and psychiatric symptoms 0.83). The resulting factor regression scores formed the dependent variable in regression analyses (Table 4). Entry of static demographic variables in the first block (LGBTQ2S, gender, age of first homelessness, reserve) did not produce a significant model (F = 1.56). At the second step, the entry of early experiences of adversity made the model significant (F = 2.96, P = 0.007; Adj R^2 = 0.10), with prestreet physical abuse (beta = 0.24, P = 0.02) and child protection (beta = 0.22,

Table 4 – Blockwise linear regression associations with distress.

Variables	Step 1			Step 2			Step 3		
	B	SE	Beta	B	SE	Beta	B	SE	Beta
Block 1 (static demographics)									
LGBTQ2S	0.23	0.24	0.10	0.16	0.24	0.07	0.13	0.23	0.06
Cis. male/female	0.04	0.21	0.02	−0.01	0.20	<0.01	−0.04	0.20	−0.02
Age of first homelessness	−0.62	0.04	−0.16	−0.05	0.04	−0.13	−0.05	0.04	−0.13
Reserve	−0.082	0.19	−0.04	−0.10	0.19	−0.05	−0.18	0.19	−0.09
Block 2 (early experiences)									
Prestreet physical abuse				0.47	0.20	0.24*	0.35	0.20	0.18
Prestreet sexual abuse				0.13	0.27	0.53	−0.06	0.29	−0.03
Child protection				0.49	0.20	0.22*	0.49	0.19	0.22*
Block 3 (violence-homeless)									
Street physical violence							0.48	0.19	0.23*
Street sexual violence							0.48	0.31	0.15
(Constant)	0.96	0.74		1.04	0.75		1.07	0.73	
Regression F	1.56			2.96**			3.70***		

cis., cisgender; LGBTQ2S, lesbian, gay, bisexual, transgender, queen, two spirit; SE, standard error.
* P < .05, ** P < .01, *** P < .001.

$P = 0.01$) being significant. Entry of street adversity further strengthened the model ($F = 3.70$, $P < 0.001$; Adj $R^2 = 0.17$) with street physical violence being significant (beta = 0.23, $P = 0.01$).

Discussion

The results of this Canadian national study of Indigenous homelessness to a large extent support the findings of smaller, local studies that have observed higher levels of individual and systemic indicators of adversity among Indigenous youth.[14] Indeed, this study expands the number of indicators to include mental health and victimization variables not examined previously. Of particular note is the finding of a suicide attempt rate of 56.3%. It is difficult to identify a meaningful point of comparison because of the convenience sampling strategy used here and the difficulty with identifying accurate population data. Such data are challenged because of the nature of suicide attempts, which may present with ambiguity and may or may not require hospitalization. Nonetheless, the finding in the present study is many orders of magnitude larger than the approximately 75/100,000 self-inflicted injuries requiring hospitalization observed among Canadians aged 20–24 years in the general population.[38] The lack of significant difference compared with non-Indigenous homeless youth in social support, resilience, and QOL is of note, given the higher levels of adversity Indigenous youth face. They may be reflective of the personal and cultural resources of Indigenous homeless youth commented on in previous qualitative studies.[39]

The within-group comparisons in this study point to clear and large disparities in the types of adversity and level of distress experienced by female and LGBTQ2S-identifying Indigenous youth compared with other Indigenous youth. These youth become homeless earlier, face more victimization in all contexts, and face greater mental health and addiction challenges. It is clear that these youth have unique needs that require specific attention in policy and service design. While starting to be addressed in the broader youth homelessness context,[40] study into the needs of sexual and gender minority Indigenous youth is lacking. Systemic indicators of adversity were also observed for reserve-raised youth who were exposed to more child protection and justice involvement and parents facing greater addiction challenges. Such findings likely reflect the heightened poverty and systemic adversity that many reserve-based Indigenous communities experience, as well as their central role in the colonial legacy.[14] Considering current distress, however, reserve status and static demographics emerged as less important than prestreet exposure to violence and child protection and exposure to violence while homeless. These findings support other work emphasizing the key role of violent victimization in the distress of homeless youth[9] and the systemic challenge that the child protection system represents for Indigenous communities.[11] Indeed, this thread of severe systemic adversity is evident in the finding that age of first homelessness is not the strong predictor of current distress that it is for non-Indigenous youth. This might suggest that the juxtaposition between pre–post street adversity is less pronounced for Indigenous youth for whom prestreet poverty, discrimination, and victimization exposure may be more severe.

Limitations of this study included the use of a cross-sectional design, the use of abbreviated measures, and questions of representativeness, given the administration of surveys in agencies by agency staff. The convenience sampling approach coupled with a lack of systematically collected local population data challenged a meaningful comparison of these findings against population norms. Additionally, the poorly defined nature of homelessness and street involvement among this population makes a detailed characterization difficult, particularly when relying on retrospective self-report. As such, proxy indicators such as the presence of homeless youth–serving organizations and age of first reported homeless episode must be used. Finally, a major limitation lies in the lack of articulation of subpopulations that identify as Indigenous—in Canada, this refers to First Nations, Inuit, and Métis. While within each of these three populations there is considerable diversity, between these nations the diversity is marked with respect to culture and history of colonization. Methodologically, there would be clear benefit to qualitative research that would unpack process and generate theory, longitudinal and comparative designs to deepen inquiry into the issues raised here, and research into service and policy models that can better prevent and intervene for these populations in culturally relevant ways. Additionally, better attention to capturing subpopulation difference, as noted previously, should be a priority for research in this area. Such work is clearly optimized through active collaboration from design through to dissemination. In this article, this collaboration engaged at the data analysis and dissemination stage.

Public health implications

Indigenous homelessness has recently been defined as lacking stable cultural and social matrixes—it is not merely about lacking a brick and mortar home residence.[21] For instance, the forcible removal of Indigenous children from their homes during the residential school and 'Sixties Scoop' eras, and the ongoing overrepresentation of Indigenous children in the child welfare system today,[26] can be understood as leaving many Indigenous children, and in turn adults, experiencing cultural, communal, and spiritual forms of homelessness.[41] This new interpretation of homelessness helps to guide primary prevention approaches that might address Indigenous youth homelessness. Promising directions include bolstering Indigenous language programs, having rural and urban education and labor training programs aimed at youth, investing in culturally specific shelters and substance use intervention services in urban and rural centers, investing in projects of reconnecting youth with consanguineal family members and affinal kin, reconnecting youth with elders, and helping youth understand historical processes of dispossession to explain generational traumas. These endeavors strengthen a sociocultural relationship web—an Indigenous worldview known as 'All My Relations'—that can catch youth before entrenched patterns of absolute homelessness occur in later life. Sociologists have long known that healthy human living is grounded in having meaningful emplacement within society.[42] Indigenous scholars and elders, likewise, have always understood

that positive social networks create healthy productive community members.

Additionally, given the significant impact and interaction between Indigenous youth homelessness and experiences with the child protection system, a policy that seeks to amend the child welfare system, including a revision of current funding models to address inequitable services and ensuring that service delivery is culturally informed,[43] is needed. Ultimately, Indigenous communities must be equipped with appropriate resources to ensure that Indigenous people have equitable access to education, employment, and healthcare services, as well as basic standards of living (e.g. clean drinking water, housing, food security). To reconcile the significant impacts of colonization, and address the various health disparities that Indigenous people continue to experience, Indigenous communities must be respected and permitted to act as self-governing nations. Recognizing that self-determination is a critical factor for the health of Indigenous peoples, it is paramount that Indigenous communities and nations are supported in assuming leadership and control over identifying the ways forward for addressing health disparities and homelessness. Within the era of reconciliation in Canada, a restoration of Indigenous self-governance, and a return to traditional knowledge systems in which Indigenous peoples and communities' capacity to identify their needs and pathways toward healing is recognized, is of tantamount importance—therein lies the promise of preventing homelessness.[21,44]

The findings of this study also speak to the need for clinical interventions for Indigenous youth focused on concurrent substance use and complex trauma, which are rooted within a framework that examines the impacts of colonization and historical and intergenerational trauma. Both preventative and intervention-based programming should be culturally and communally based and led by Indigenous communities. Additionally, the development of family and community interventions are needed as treatment and healing for Indigenous people includes multiple systems of relationship.[23]

In conclusion, this study and the relevant literature indicate that policy and service system delivery must reflect the need for specialized approaches to homelessness, healthcare, and well-being that are grounded in the distinct cultures and traditions of First Nations, Inuit, and Métis communities, which draw on the diverse strengths and knowledge systems of Indigenous peoples.

Author statements

Ethical approval

Ethical approval was obtained from the York University Human Participants Review committee (Office of Research Ethics; #e2015 - 090).

Funding

This study received funding from the Home Depot Foundation.

Competing interests

None declared

REFERENCES

1. Gaetz S. *Coming of age: reimagining our response to youth homelessness in Canada*. Toronto: Homeless Hub Research Paper Series #11; 2013.
2. Hammer H, Finkelhor D, Sedlak A. *Runaway/thrownaway children: national estimates and characteristics*. US Department of Justice; 2002. https://www.ncjrs.gov/pdffiles1/ojjdp/196469.pdf.
3. van den Bree MB, Shelton K, Bonner A, Moss S, Thomas H, Taylor PJ. A longitudinal population-based study of factors in adolescence predicting homelessness in young adulthood. *J Adolesc Health* 2009;**45**(6):571–8.
4. Kidd SA. Mental health and youth homelessness: a critical review. In: Gaetz S, O'Grady B, Buccieri K, Karabanow J, Marsolais A, editors. *Youth homelessness in Canada*. Toronto: Canadian Homelessness Research Network; 2013. p. 217–27.
5. Roy É, Haley N, Leclerc P, Sochanski B, Boudreau JF, Boivin JF. Mortality in a cohort of street youth in Montreal. *JAMA* 2004;**292**(5):569–74.
6. Hodgson KJ, Shelton KH, van den Bree MB, Los FJ. Psychopathology in young people experiencing homelessness: a systematic review. *Am J Publ Health* 2013; Jun;**103**(6):e24–37.
7. Kidd SA, Frederick T, Karabanow J, Hughes J, Naylor T, Barbic S. A mixed methods study of recently homeless youth efforts to sustain housing and stability. *Child Adolesc Soc Work J* 2016;**33**(3):207–18.
8. Toro PA, Lesperance TM, Braciszewski JM. *The heterogeneity of homeless youth in America: examining typologies*. Washington, DC: National Alliance to End Homelessness; 2011 Sep.
9. Kidd SA, Gaetz S, O'Grady B. The 2015 national Canadian homeless youth survey: mental health and addiction findings. *Can J Psychiatr* 2017;**62**(7):493–500.
10. Ruttan L, LaBoucane-Benson P, Munro B. Home and Native Land": aboriginal young women and homelessness in the city. *First Peoples Child Fam Rev* 2010;**5**(1):67–77.
11. Barker B, Alfred GT, Kerr T. An uncaring state? The overrepresentation of First nations children in the Canadian child welfare system. *Can Med Assoc J* 2014;**186**(14):E533–5.
12. Baskin C. Aboriginal youth talk about structural determinants as the causes of their homelessness. *First Peoples Child Fam Rev* 2007;**3**(3):31–42.
13. Goldberg M, Eberle Planning and Research, Woodward J & Associates, Deborah Kraus Consulting, Graves J, Infocus Consulting Talbot J and Associates. *On our streets and in our shelters: results of the 2005 greater vancouver homeless count*. Vancouver: Social Planning and Research Council; 2005.
14. Patrick C. *Aboriginal homelessness in Canada: a literature review*. Canadian Homelessness Research Network; 2014.
15. Barker B, Alfred GT, Fleming K, Nguyen P, Wood E, Kerr T, et al. Aboriginal street-involved youth experience elevated risk of incarceration. *Publ Health* 2015;**129**(12):1662–8.
16. Miller CL, Fielden SJ, Tyndall MW, Zhang R, Gibson K, Shannon K. Individual and structural vulnerability among female youth who exchange sex for survival. *J Adolesc Health* 2011;**49**(1):36–41.
17. Marshall BD, Kerr T, Livingstone C, Li K, Montaner JS, Wood E. High prevalence of HIV infection among homeless and street-involved Aboriginal youth in a Canadian setting. *Harm Reduct J* 2008;**5**(1):35.

18. McNamara P. Young people at risk of lifelong poverty: youth homelessness in Australia. In: *Theoretical and empirical insights into child and family poverty*. Springer International Publishing; 2015. p. 217–38.
19. Statistics Canada. Aboriginal peoples in Canada: Key results from the 2016 census. https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.pdf. Retrieved March 19th, 2018. (Accessed July 13, 2018)
20. Beaulieu T. Promising practices in the treatment of Aboriginal youth substance use and concurrent disorders, circle of light 2011. In: *A first nation, Metis and Inuit education conference*. Toronto, ON: Ministry of Education; 2011, November.
21. Memmott P, Long S, Chambers C. *Categories of Indigenous' homelessness' people and good practice responses to their needs*. 2003. Retrieved from, https://www.ahuri.edu.au/__data/assets/pdf_file/0007/2113/AHURI_Final_Report_No49_Categories_of_Indigenous_homeless_people_and_good_practice_responses.pdf.
22. Young Keys, Young Susan, Wallace Alison, Pigott Rohan, Reed-Gilbert Kerry, Craigie Cathy. *Homelessness in the Aboriginal and Torres Strait Islander context and its possible implications for the supported Accommodation Assistance Program*. Department of Health and Family Services, Supported Accommodation Assistance Program (SAAP); 1998 (Canberra, 1998): 1–215. Via Homeless Hub Website, http://homelesshub.ca/resource/homelessness-aboriginal-and-torres-strait-islander-context-and-its-possible-implications. [Accessed 3 August 2017].
23. Kirmayer LJ, Brass GM, Tait CL. The mental health of Aboriginal peoples: transformations of identity and community. *Can J Psychiatr* 2000;**45**(7):607–16.
24. Steckley J, Cummins B. *Full circle: Canada's First Nations*. Toronto: Prentice Hall; 2001.
25. Truth and Reconciliation Commission of Canada. Honouring the truth, reconciling the future: summary of the final report of the Truth and Reconciliation Commission of Canada. http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Exec_Summary_2015_05_31_web_o.pdf. Retrieved March 19, 2018. (Accessed July 13, 2018)
26. Sinclair R. The Indigenous child removal system in Canada: an examination of legal decision-making and racial bias. *First Peoples Child Fam Rev* 2016;**11**(2):8–18.
27. Czyzewski K. Colonialism as a broader social determinant of health. *Int Indig Pol J* 2011;**2**(1). https://doi.org/10.18584/iipj.2011.2.1.5. 2001.
28. Reading C. Structural determinants of aboriginal peoples' health. In: Greenwood M, deLeeuw S, Lindsay NM, Reading C, editors. *Determinants of indigenous peoples' health in Canada*. Toronto, ON: Canadian Scholars' Press; 2015. p. 3–15.
29. Stewart S. Supporting indigenous youth experiencing homelessness. In: Kidd S, Slesnick N, Frederick T, Karabanow J, Gaetz S, editors. *Mental health & addictions interventions for youth experiencing homelessness: practical strategies for front-line providers*. Toronto: National Observatory on Homelessness; 2018. p. 89–100.
30. Loppie Reading C, Wien F. *Health inequalities and social determinants of Aboriginal peoples' health*. National Collaborating Centre for Aboriginal Health; 2009. Retrieved March 19, 2018, https://www.ccnsa-nccah.ca/docs/determinants/RPT-HealthInequalities-Reading-Wien-EN.pdf.
31. Thistle J. *The national definition of indigenous homelessness in Canada*. Canadian Observatory on Homelessness. Homeless Hub.ca; October 27, 2017.
32. CAMH Provincial Systems Support Network. *Brief mental health and substance use screening tools for non-clinicians in the criminal justice population*. 2014. http://eenet.ca/wp-content/uploads/2014/11/JSC-Screening-tools_June2014FINAL.pdf. [Accessed 12 October 2016].
33. Dennis M, Chan Y-F, Funk R. Development and validation of the GAIN Short Screener (GSS) for internalizing, externalizing and substance use disorders and crime/violence problems among adolescents and adults. *Am J Addict* 2006;**15**(Suppl 1):80–91.
34. Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Qual Life Res* 2004;**13**(2):299–310.
35. Wagnild GM. *The resilience scale user's guide for the US English version of the resilience scale and the 14-item resilience scale (RS-14)*. Worden, MT: The Resilience Center; 2010.
36. Karcher MJ, Sass D. A multicultural assessment of adolescent connectedness: testing measurement invariance across gender and ethnicity. *J Counsel Psychol* 2010;**57**(3):274–89.
37. Wagnild G. A review of the resilience scale. *J Nurs Meas* 2009;**17**(2):105–13.
38. Skinner R, McFaull S, Draca J, Frechette M, Kaur J, Pearson C, et al. Suicide and self-inflicted injury hospitalizations in Canada (1979 to 2014/15). *Health Promot Chronic Dis Prev Can Res Pol Pract* 2016;**36**(11):243.
39. Ruttan L, Laboucane-Benson P, Munro B. "A story I never heard before": aboriginal young women, homelessness, and restoring connection. *Pimatisiwin J Aborig Indig Community Health* 2008;**6**(3):31–54.
40. Keuroghlian AS, Shtasel D, Bassuk EL. Out on the street: a public health and policy agenda for lesbian, gay, bisexual, and transgender youth who are homeless. *Am J Orthopsychiatry* 2014;**84**(1):66–72.
41. Beaulieu T, Stewart SL. The life transition needs of Métis homeless peoples. In: *Paper presentation at Indigenous education network mental health symposium*; 2014, May. Yellowknife, NWT.
42. Durkheim E. *The division of labour in society, translated by W.D. Halls*. London: Macmillian; 1984.
43. Blackstock C. The Canadian human rights tribunal on first nations child welfare: Why if Canada wins, equality and justice lose. *Child Youth Serv Rev* 2011;**33**(1):187–94.
44. Loppie Reading C, Wien F. *Health inequalities and social determinants of aboriginal peoples' health*. National Collaborating Centre for Aboriginal Health; 2009. Retrieved from, http://ahrnets.ca/files/2011/02/NCCAH-Loppie-Wien_Report.pdf.