The Unmet Health Needs of East Asian High School Students: Are Homestay Students at Risk?

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ABSTRACT

Objectives: Most “homestay” high school students come to Canada from East Asian countries such as China, Korea and Japan to attend school while living with another family. Our objectives were to examine: 1) the characteristics of homestay youth compared to immigrant and Canadian-born East Asian youth and 2) whether their health risk behaviours are similar to immigrant or Canadian-born East Asian youth.

Methods: We used the 2003 British Columbia Adolescent Health Survey to examine characteristics of East Asian youth and their health risk behaviours, including sexual behaviours, substance abuse, abuse history, and health status. Homestay students were those not born or raised in Canada and not living with their parent(s) or in foster care. Multivariate models tested for the independent association of student group, controlling for age.

Results: Homestay students (weighted $n=3,085$) were older, on average, than immigrant or Canadian-born youth and spoke a language other than English at home ($p<0.001$). Multivariate analyses showed that homestay students were more likely to engage in sexual behaviours than other youth and over 4 times more likely to have used cocaine. Female homestay students were 3 times more likely to be a victim of sexual abuse and were also 3 times more likely to use a substance prior to sex.

Conclusion: Homestay students remain a forgotten and extremely vulnerable group of youth, in part because they have special living arrangements. No one is currently held accountable for their health or safety. In the absence of health policy about homestay students, public health officials and providers have a central role in ensuring the former's health is not threatened.

Key words: Chinese; Japanese; Korean; immigrant; high school student; health behavior; homestay student

La traduction du résumé se trouve à la fin de l'article.

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Canada is internationally known as a destination country to learn English. Private companies teaching English and provincial governments actively encourage foreign students to learn English in Canada.¹ English language education is a multi-million-dollar business. High school tuition for foreign students is approximately \$12,000 CDN and those who are placed in “homestay” accommodation pay an additional \$7,000 CDN per year.² In British Columbia (BC), the homestay youth industry is estimated at over \$60 million, including their tuition, room, and board.

At any one time, between 20% and 30% of all foreign students in Canada, aged 14-19 years, are completing high school. The majority come from East Asian countries such as China, Korea and Japan. About 10% of foreign-born students are placed in a homestay, which consists of living with a family who provides a furnished private bedroom, meals, shared amenities, and easy access to public transit, while the student's biological parents remain in his or her home country.^{3,4} Homestay families are supposed to include the student in daily routines so that he/she can learn about “Canadian culture” and continue learning English outside the classroom.⁵ The homestay industry remains largely unregulated, with multiple private organizations or Canadian relatives providing this service.

Researchers have examined the health of foreign-born Asian high school students in North America. Indeed, the health of new immigrants is an epidemiological paradox that has been well documented.⁶ Asian youth living in North America for fewer years and/or who do not speak English at home are less likely to use sub-

stances,^{7,8} have sexual intercourse or start sexual intercourse at younger ages,^{7,9,10} or engage in delinquent behaviour.^{11,12} Past work has also examined acculturative stress,^{13,14} socio-cultural adjustment,¹⁵ and depression and suicidal ideation¹⁶ among international high school students from Asia.

Less is known about the characteristics or health risk behaviours of homestay youth. Homestay families are considered custodians, not legal guardians, and have no legal obligation to nurture youth (e.g., extracurricular activities, demonstration of caring) or provide guidance on emotional issues. Most agencies have rules about not talking to students about health issues, especially reproductive and sexual health.

In light of our limited understanding of the health of homestay students, the objectives of this study were to examine: 1) the char-

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Table 1. Description of Variables

Variables	Description	Scores
<ul style="list-style-type: none"> • Speaking a language other than English at home • Working at a paid job • Weekly extracurricular physical activities in the past year • TV watching on an average school day • Recreational computer use on an average school day • Family connectedness • School connectedness • Truancy in the past month • Ever had sexual intercourse • Multiple lifetime sexual partners • Substance use before last sex • Used a condom at last sex • Smoked cigarettes in the past 30 days • Binge drinking in the past 30 days • Used marijuana in the past 30 days • Ever used drugs other than marijuana • Sexual abuse history • Physical abuse history • Self-reported health status • Emotional distress 	<ul style="list-style-type: none"> • Played sports or participated in dance or aerobic classes or lessons, other than in gym class • Watching TV or videos • Using a computer for playing games, e-mailing, chatting and surfing the Internet • Extent to which family understands you, has fun together, pays attention to you, etc. • Extent to which teachers care about you, treat you fairly, you feel like you are part of your school, etc. • Missed full days of school because of skipping classes • Had sexual intercourse with 2 or more partners in lifetime • Drank alcohol or used drugs before having sexual intercourse the last time • Had 5 or more drinks of alcohol within a couple of hours • Ever been sexually abused, including being forced to have sexual intercourse • Ever been physically abused or mistreated • During past 30 days, extent of feeling sad, discouraged, hopeless, nervous, stressed 	<ul style="list-style-type: none"> • 0 = never or sometimes, 1 = most of the time • 0 = no, 1 = yes • 0 = never or less than once a week, 1 = once or more a week • 0 = less than 4 hours, 1 = 4 or more hours • 0 = less than 4 hours, 1 = 4 or more hours • 1-3 (higher scores = higher connectedness), 11 items; $\alpha = 0.87$ (male), 0.88 (female) • 1-5 (higher scores = higher connectedness), 6 items; $\alpha = 0.80$ (male), 0.81 (female) • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = 1 partner, 1 = 2 or more partners • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = no, 1 = yes • 0 = excellent or good, 1 = fair or poor • 1-5 (higher scores = higher distress), 3 items; $\alpha = 0.74$ (male), 0.78 (female)

Source: 2003 British Columbia Adolescent Health Survey

acteristics of homestay youth compared to immigrant and Canadian-born East Asian youth and 2) whether homestay youths' health risk behaviours are similar to immigrant or Canadian-born East Asian youth.

An ecological framework placing emphasis on the social context of youth provided the theoretical grounding for this study since this approach suggests that family and other environmental processes (e.g., school) may affect youth.^{17,18} Application of a social context lens aids in gaining insights into the *how and why* East Asian homestay youth could be more vulnerable to risk behaviours. Important aspects of family context are the presence of parental monitoring¹⁹ and caring and supportive parents.²⁰ Past evidence suggests a strong association between more parental monitoring and better adolescent psychosocial adjustment. Yet, monitoring is insufficient; youth who feel cared about and connected to parents and other family members are significantly less likely to engage in risky behaviours.^{20,21}

METHODS

The British Columbia Adolescent Health Survey (BCAHS) is a periodic cluster-stratified province-wide survey of youth in school conducted by the McCreary Centre Society (<http://www.mcs.bc.ca/>). The survey consists of questions about physical and emotional health, and factors that can influence health. The 2003 BCAHS sampled students from 1,557 classrooms in 45 participating school districts, which contain 72% of all Grade 7-12 students in BC. Data were weighted and scaled to provincial enrollment. More details on the sample and procedures can be found elsewhere.^{22,23} We included students from 9 of the 16 BC Health Service Delivery areas (weighted N=47,781) who marked "East Asian (Chinese, Japanese, Korean, etc.)" as their ethnic background. Seven areas were excluded because there were few (<5) or no homestay student respondents.

Homestay students were compared to: a) immigrant youth living with their parent(s) and b) Canadian-born East Asian youth liv-

ing with their parent(s). Homestay students were defined as those who were a) raised outside of Canada and b) not living with their parent(s) or in foster care. Canadian-born* students not living with their parent(s) were excluded due to small sample sizes.

Descriptive factors of interest included individual, family, and social context variables, and specific risk behaviours (Table 1). Dichotomized variables included language spoken at home, working, extracurricular activities, TV watching, recreational computer use, and truancy. Continuous measures were age, family connectedness, school connectedness, and emotional distress. Family connectedness – caring from parents and feeling close to them and family members – was measured using 11 items; school connectedness – teacher caring and sense of school belonging – was measured using 6 items; a higher score indicated more of the concept. We also examined East Asian youth's sexual behaviours, substance abuse, abuse history, and health status.

Data analyses were completed using SPSS Complex Samples 15.0 that adjusts for complex survey designs, including classroom clustering. Analyses were stratified by sex and weighted to adjust for the probability of selection, response rates, and the school district enrollment. Descriptive statistics included frequencies and means. Logistic/multiple regression models tested for the independent association of student group, controlling for age, with the presence of risky health behaviours. Missing data (<5% of all data) were excluded from analyses.

RESULTS

There were an estimated 1,531 male and 1,554 female homestay students in the weighted sample (Table 2). Most homestay students were older on average than immigrant or Canadian-born youth and spoke a language other than English at home ($p<0.001$) compared to their Canadian-born East Asian counterparts. Fewer homestay students were engaged in weekly extracurricular activities compared

* "Canadian-born" in this article refers to "Canadian-born East Asian".

Table 2. Characteristics of the East Asian Student Sample

	Male			Female		
	Homestay	Immigrants	Canadian-born	Homestay	Immigrants	Canadian-born
N (weighted)	1531 (6.1%)	15,372 (61.2%)	8203 (32.7%)	1554 (6.9%)	12,590 (55.5%)	8531 (37.6%)
Mean age† (years)	16.1	15.3***	15.0***	16.0	15.2***	14.8***
Speaking a language other than English at home, most of the time (%)	71.8	70.5	25.0***	60.4	72.5*	25.0***
Working at a paid job (%)	11.6	16.6	23.6*	12.5	17.3	25.5
Weekly extracurricular physical activities in the past year (%)	68.3	73.3	83.9***	53.7	62.2	75.9**
TV watching for 4 or more hours on an average school day (%)	15.0	15.6	24.3	14.8	17.5	18.2
Recreational computer use for 4 or more hours on an average school day (%)	53.9	29.5***	34.7***	34.9	21.0*	20.6*
Family connectedness score (mean)	2.51	2.56	2.56	2.52	2.55	2.52
School connectedness score (mean)	3.58	3.58	3.65	3.38	3.73**	3.71**
Skipped school in the past month (%)	46.3	27.0**	25.2**	57.7	26.2***	27.1***

Source: 2003 British Columbia Adolescent Health Survey. Missing response rates were <5%.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (compared to Homestay students)

Table 3. Health Risk Behaviours and Risk Exposure

	Male			Female		
	Homestay (1531)	Immigrants (15,372)	Canadian-born (8203)	Homestay (1554)	Immigrant (12,590)	Canadian-born (8531)
(Weighted N)						
Sexual Behaviours						
Ever had sexual intercourse (%)	24.5	9.3***	11.9***	25.2	8.6***	12.0**
Multiple lifetime sexual partners† (%)	67.1	51.9	41.4	28.1	34.4	32.1
Substance use before last sex‡ (%)	—	—	—	20.0	10.4	6.6*
Used a condom at last sex† (%)	54.8	57.2	71.0	80.1	56.9*	57.1**
Substance Use						
Current cigarette smoking§ (%)						
Never-smokers	70.1	78.1	80.7	65.7	81.6	79.7
Non-current smokers	8.6	14.2	10.5	15.5	13.4	14.2
Current smokers	21.3	7.6**	8.8**	18.8	5.1***	6.1***
Binge drinking on 3 or more days in the past 30 days (%)	5.4	3.2	3.4	6.9	1.6*	2.4**
Current marijuana use§ (%)						
Never-users	87.3	88.9	79.6	87.1	94.1	79.5
Non-current users	7.5	5.2	9.4	5.7	4.3	11.7
Current users	5.2	5.9	11.0	7.2	1.6**	8.8
Ever used (%):						
Cocaine	9.1	5.5	1.8***	9.4	6.4	2.9**
Hallucinogens‡	—	—	—	6.9	3.4	7.9
Mushrooms	7.2	3.1	5.6	6.1	1.3**	4.1
Amphetamines‡	—	—	—	2.7	1.4	2.4
Abuse History						
Sexually abused (%)	5.9	3.9	2.2**	23.3	8.9**	8.0***
Physically abused (%)	4.8	10.3	14.5*	13.1	12.7	14.9
Health Status						
Self-reported health status (%)						
Fair/Poor	12.9	11.9	11.0	24.9	22.9	15.1*
Emotional distress score¶ (mean)	2.20	2.43	2.19	2.74	2.66	2.57

Source: 2003 British Columbia Adolescent Health Survey

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (compared to Homestay students)

† Among students who reported having ever had sexual intercourse.

‡ The number of male students in at least one of the three groups who endorsed the item was too small to generate stable estimates.

§ Never-smokers/users have never smoked a cigarette/used marijuana. Non-current smokers/users have ever smoked/used marijuana but not in the past 30 days.

|| Current smokers/users smoked a cigarette/used marijuana on at least one day in the past 30 days.

¶ Defined as having 5 or more drinks of alcohol within a couple of hours.

¶ Adjusted for age.

to their Canadian-born counterparts ($p < 0.01$). Male students spent less time watching television ($p < 0.01$) and more time using the computer ($p < 0.001$) compared to Canadian-born males. All students had similar family connectedness scores. However, female homestay students had lower school connectedness ($p < 0.01$). Many more homestay students reported skipping school compared to their immigrant or Canadian-born counterparts.

Table 3 shows the risk exposures and behaviours of homestay, immigrant and Canadian-born East Asian youth in four areas: sexual behaviours, substance abuse, abuse history, and health status. Male homestay students more frequently engaged in sexual behaviours, with one quarter reporting ever having sex ($p < 0.001$); three quarters of these students reported multiple partners, but only about half reported using a condom. Almost 1 in 5 homestay males

was a current smoker; the proportion was higher than in other East Asian males ($p < 0.01$). Male homestay students were just as likely to take part in binge drinking. However, more male homestay students reported ever using cocaine compared to Canadian-born males ($p < 0.001$) but were less likely to report physical abuse ($p < 0.05$) than immigrant or Canadian-born youth. About 1 in 10 homestay males reported being in fair or poor health, although their emotional distress scores were similar to immigrant and Canadian-born youth.

A higher percent of female homestay students reported ever having sexual intercourse than immigrant ($p < 0.001$) or Canadian-born peers ($p < 0.01$); one in five reported substance use before the last time they had sex; and 80% used a condom at last sex. Compared to other East Asian females, homestay females were more likely

Table 4. Logistic Regressions of Health Risk Behaviours and Risk Exposure

Reference Groups	Male Homestay Students				Female Homestay Students			
	Immigrants		Canadian-born		Immigrants		Canadian-born	
	OR*	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Sexual Behaviours								
Ever had sexual intercourse	2.47	1.29-4.72	1.35	0.77-2.38	2.71	1.36-5.36	1.10	0.47-2.53
Multiple lifetime sexual partners†	1.95	0.60-6.35	3.20	0.74-13.78	0.75	0.33-1.71	0.82	0.27-2.47
Substance use before last sex‡	—	—	—	—	2.54	0.63-10.20	3.67	1.24-10.87
Used a condom at last sex‡	0.93	0.36-2.43	0.51	0.24-1.11	3.21	1.14-9.08	3.66	1.47-9.14
Substance Use								
Smoked cigarettes in the past 30 days	2.49	0.93-6.64	1.70	0.76-3.77	3.52	1.95-6.36	2.00	0.96-4.16
Binge drinking§ on 3 or more days in the past 30 days	1.09	0.34-3.45	0.90	0.32-2.56	3.25	0.96-10.93	1.64	0.74-3.61
Used marijuana in the past 30 days	0.67	0.23-1.98	0.26	0.09-0.79	3.79	1.23-11.72	0.49	0.21-1.15
Ever used:								
Cocaine	2.06	0.92-4.63	6.44	2.28-18.21	1.81	0.82-4.02	4.14	1.32-12.95
Hallucinogens‡	—	—	—	—	1.88	0.69-5.14	0.50	0.16-1.53
Mushrooms	2.20	0.75-6.42	0.72	0.27-1.92	5.65	1.75-18.26	1.07	0.33-3.41
Amphetamines‡	—	—	—	—	1.60	0.54-4.73	0.82	0.27-2.49
Abuse History								
Sexually abused	1.44	0.49-4.21	2.17	1.08-4.37	2.77	1.41-5.45	3.16	1.55-6.45
Physically abused	0.44	0.17-1.16	0.28	0.09-0.82	1.05	0.53-2.09	0.84	0.38-1.81
Health Status								
Self-reported health status, Fair/Poor	0.94	0.42-2.12	1.07	0.45-2.53	0.94	0.59-1.48	1.40	0.78-2.50

Source: 2003 British Columbia Adolescent Health Survey

* Odds ratios (ORs) were adjusted for age.

† Among students who reported having ever had sexual intercourse.

‡ The number of male students in at least one of the three groups who endorsed the item was too small to generate stable estimates.

§ Defined as having 5 or more drinks of alcohol within a couple of hours.

($p < 0.001$) to be a current smoker. More female homestay students reported binge drinking than other students. Homestay females were more likely than Canadian-born females ($p < 0.01$) to report ever using cocaine and more likely than immigrant females ($p < 0.01$) to report ever using mushrooms. Of concern, one in four female homestay students reported sexual abuse ($p < 0.01$) and being in "fair/poor health" ($p < 0.05$), a much higher percent compared to other students.

After adjusting for age, homestay students were just as likely to report ever having had sex and having three or more lifetime sexual partners compared to Canadian-born students (Table 4). Compared to immigrant peers, homestay students were over 2 times more likely to engage in sexual behaviours. Of those who have had sexual intercourse, female homestay students were over 3 times more likely to use a substance prior to sex and also to use a condom. Strikingly, significant associations remain between being a female homestay student and substance use. These girls were over 3 times more likely to smoke cigarettes and use marijuana in the past 30 days compared to immigrant youth. All homestay students were over 4 times more likely to have used cocaine compared to Canadian-born youth. Female homestay students were also more than 5 times more likely to use mushrooms compared to immigrant youth and nearly 3 times more likely to be a victim of sexual abuse.

DISCUSSION

To our knowledge, this is the first study examining the characteristics and health risk behaviours of homestay youth. Homestay students are less connected to a nurturing social context. In particular, female homestay students feel more isolated than any other group and are more vulnerable to poor health outcomes given the number of sexual and substance use behaviours. What is most troubling is the significantly higher likelihood of sexual abuse and cocaine use among female homestay students. Although we cannot determine when the abuse happened, the much higher rates of abuse among homestay students raises concerns, especially considering

their higher rates of ever having sex and having sex under the influence of alcohol and drugs. Regardless of timing of first abuse, female homestay students may be at higher risk for additional sexual abuse or exploitation, as adolescents who have been sexually abused are at increased risk for re-victimization.²⁴ Sexually assaulted or abused teens may be unwilling to disclose this to their parents, who thought they were placing their children in safe environments, yet those youth who have been sexually abused need significant support.²⁵

Some limitations should be noted in interpreting these results. Causation cannot be inferred. We constructed the homestay category because no BCAHS question asks students to identify if they live in a homestay. The category includes few East Asian youth living alone since youth must have a custodian sign the lease in order to rent a place in the host country.

Homestay students remain a "forgotten" and extremely vulnerable group of youth, in part because they have special living arrangements. No one is held accountable for monitoring their health or safety. Homestay parents provide room and board and schools are responsible for providing standard curriculum with support for learning English. Public health is responsible for health promotion at a population level, with no targeted programs for homestay youth, and child welfare and protection only become involved if an actual complaint is filed.

There are concerns beginning to surface in other countries (e.g., Taiwan, Australia) about the need to regulate homestay programs. Regulations can help to decrease "moral hazard" and balance public welfare with private consumer choice.²⁶ While many families may provide safe environments, others require more guidance in providing a nurturing environment for youth. Simply requiring a criminal record check and a room is insufficient; in the absence of regulations, public health officials have a role in ensuring these students' health is not threatened.

More work is needed in understanding homestay youths' perspectives and their challenges living in a foreign country. Some recommendations can be made, however, particularly for the safety

of female homestay youth. Strengthening school-level support to assist homestay youth in making healthy decisions and providing a strong social network could help them feel less isolated. Reproductive health curriculum for these students could be strengthened to include more on emotional well-being. Host families need more training on maintaining a healthy, nurturing environment, resources on parenting adolescents, and ongoing support such as regular scheduled check-ins with a youth counselor or public health nurse.

Finally, increasing support given to homestay youth's parents is warranted. Biological parents remain several thousand miles away and have no involvement in their child's day-to-day activities. Much trust is placed in host families' abilities to recognize when these youth need help, physically and emotionally. Measures could be implemented to give biological parents a better understanding of adolescent life in the host country, and familiarize them with the local host area. Requiring regular host and biological family conferences could be beneficial for providing better care for homestay youth.

REFERENCES

1. BC Government. WelcomeBC: International students. Available at: <http://www.welcomebc.ca/en/come/students/study.html> (Accessed June 2009).
2. Vancouver Island University. Malaspina High School: International students. Available at: <http://www.viu.ca/highschool/international/tuition.asp> (Accessed June 2009).
3. Langara College. Langara College homestay. Available at: <http://www.langara.bc.ca/student-services/homestay/index.html> (Accessed December 2009).
4. Alpha-Omega Homestay & Rental Services. Alpha-Omega Homestay & Rental Services. Available at: <http://www.alphaomegahomestay.ca/index.php> (Accessed December 2009).
5. Pacific Language Institute. PLI: English for international students. Available at: <http://www.pli.ca/> (Accessed June 2009).
6. Newbold K. Self-rated health within the Canadian immigrant population: Risk and the health immigrant effect. *Soc Sci Med* 2004;60:1359-70.
7. Greenman E, Xie Y. Is assimilation theory dead? The effect of assimilation on adolescent well-being. *Soc Sci Res* 2008;37(1):109-37.
8. Hahm H, Lahiff M, Guterman N. Acculturation and parental attachment in Asian-American adolescents' alcohol use. *J Adolesc Health* 2003;33(2):119-29.
9. Hahm H, Lahiff M, Barreto R. Asian American adolescents' first sexual intercourse: Gender and acculturation differences. *Perspectives in Sexual Reproductive Health* 2006;38(1):28-36.
10. Homma Y, Saewyc E. Acculturation and sexual behavior among East Asian youth in British Columbia, Canada. *J Adolesc Health* 2008;42(2):S45.
11. Nagasawa R, Qian Z, Wong P. Theory of segmented assimilation and the adoption of marijuana use and delinquent behavior by Asian Pacific youth. *Sociological Q* 2001;42(3):351-72.
12. Wong S. Acculturation, peer relations, and delinquent behavior of Chinese-Canadian youth. *Adolescence* 1999;34(133):107.
13. Kuo B, Roysircar G. Predictors of acculturation for Chinese adolescents in Canada: Age of arrival, length of stay, social class, and English reading ability. *J Multicultural Counseling and Development* 2004;32(3):143-54.
14. Kuo B, Roysircar G. An exploratory study of cross-cultural adaptation of adolescent Taiwanese unaccompanied sojourners in Canada. *Int J Intercultural Relations* 2006;30(2):159-83.
15. Yashima T, Tanaka T. Roles of social support and social skills in the intercultural adjustment of Japanese adolescent sojourners in the USA. *Psychol Rep* 2001;88(3 Pt 2):1201-10.
16. Yang B, Clum G. Life stress, social support, and problem-solving skills predictive of depressive symptoms, hopelessness, and suicide ideation in an Asian student population: A test of a model. *Suicide and Life-Threatening Behavior* 1994;24(2):127-39.
17. Bronfenbrenner U. *The Ecology of Human Development: Experiments by Nature and Design*. London, UK: Harvard University Press, 1979.
18. Bronfenbrenner U. Ecological systems theory. In: Vasta R (Ed.), *Annals of Child Development, Six Theories of Child Development: Revised Formulations and Current Issues*. London, UK: JAI Press Inc., 1989.
19. Jacobson K, Crockett L. Parental monitoring and adolescent adjustment: An ecological perspective. *J Res Adolesc* 2000;10(1):65-97.
20. Saewyc E, Tonkin R. Surveying adolescents: Focusing on positive development. *Pediatric Child Health* 2008;13(1):43-47.
21. Homma Y, Saewyc E. The emotional well-being of Asian-American sexual minority youth in school. *J LGBT Health Res* 2007;3(1):67-78.
22. Saewyc E, Taylor D, Homma Y, Ogilvie G. Trends in sexual health and risk behaviours among adolescent students in British Columbia. *Can J Human Sexuality* 2008;17:1-12.
23. Devries K, Free C, Morison L, Saewyc E. Factors associated with the sexual behavior of Canadian Aboriginal young people and their implications for health promotion. *Am J Public Health* 2009;99(5):855-62.
24. Grauerholz L. An ecological approach to understanding sexual revictimization: Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment* 2000;5:5-17.
25. Debellis M. Developmental traumatology: A contributory mechanism for alcohol and substance use disorders. *Psychoneuroendocrinology* 2002;27:155-70.
26. Brennan T. The role of regulation in quality improvement. *Milbank Q* 1998;76:709-31.

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RÉSUMÉ

Objectifs : La plupart des élèves du secondaire hébergés en milieu familial viennent au Canada de pays d'Asie de l'Est (Chine, Corée, Japon) pour fréquenter l'école tout en vivant dans une autre famille. Nos objectifs étaient d'examiner : 1) les caractéristiques des jeunes hébergés en milieu familial comparativement aux jeunes immigrants et aux jeunes d'origine est-asiatique nés au Canada et 2) leurs comportements présentant des risques pour la santé, pour voir s'ils sont semblables à ceux des jeunes immigrants ou des jeunes d'origine est-asiatique nés au Canada.

Méthode : À l'aide de l'enquête sur la santé des adolescents de la Colombie-Britannique (*British Columbia Adolescent Health Survey*, 2003), nous avons examiné les caractéristiques des jeunes Asiatiques de l'Est et leurs comportements présentant des risques pour la santé (comportements sexuels, toxicomanie, antécédents d'abus et état de santé). Les élèves hébergés en milieu familial étaient ceux qui n'étaient pas nés et n'avaient pas grandi au Canada et qui ne vivaient ni avec un ou deux parents, ni en famille d'accueil. Des modèles multivariés ont contrôlé l'association indépendante des groupes d'élèves en tenant compte des effets de l'âge.

Résultats : Les élèves hébergés en milieu familial (nombre pondéré n=3085) étaient plus vieux en moyenne que les jeunes immigrants ou les jeunes nés au Canada, et ils parlaient une langue autre que l'anglais à la maison ($p<0,001$). Des analyses multivariées ont montré que les élèves hébergés en milieu familial étaient plus susceptibles de s'adonner à des comportements sexuels que les autres jeunes et plus de 4 fois plus susceptibles d'avoir consommé de la cocaïne. Les filles hébergées en milieu familial étaient 3 fois plus susceptibles d'avoir été victimes de violence sexuelle et 3 fois plus susceptibles de consommer de l'alcool ou de la drogue avant d'avoir des relations sexuelles.

Conclusion : Les élèves hébergés en milieu familial forment un groupe extrêmement vulnérable qui est encore négligé, en partie en raison de leurs conditions de logement particulières. Personne n'a actuellement de comptes à rendre sur leur santé et leur sécurité. En l'absence d'une politique de santé pour les élèves hébergés en milieu familial, les autorités et les intervenants de la santé publique ont un rôle crucial à jouer pour veiller à ce que la santé de ces jeunes ne soit pas menacée.

Mots clés : Chinois; Japonais; Coréens; immigrants; élèves du secondaire; comportements liés à la santé; élèves hébergés en milieu familial