

Sexual Health of Adolescents in Quebec Residential Youth Protection Centres

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ABSTRACT

OBJECTIVES: To document risk behaviours and prevalence of chlamydia and gonorrhoea infections among adolescents aged 14 to 17 years entering care in Quebec Youth Protection Centres (YPC).

METHODS: From July 2008 to May 2009, adolescents residing in six YPCs completed a questionnaire during a face-to-face interview. Questions covered sexual and substance use behaviours prior to admission, as well as other health issues affecting respondents' mental and physical health. Urine samples were tested for *Chlamydia trachomatis* genital infection (CTGI) and *Neisseria gonorrhoea* genital infection (NGGI).

RESULTS: Among 578 participants aged 14 to 17 years, 89% had had consensual sexual relations. Sexual risk behaviours included early sexual initiation (66% at <14 years); multiple partners (median lifetime number: girls 5, boys 8); 50% or more of sexual relations under the influence of drugs or alcohol (girls 43%, boys 48%); group sex (girls 38%, boys 43%); and sex in exchange for money or other goods (girls 27%, boys 8%). Only a quarter of boys and girls used double protection (condom and a contraceptive method) during the most recent vaginal relation. A history of pregnancy was reported by 28% of girls. Prevalence of CTGI was 9.3% (CI: 5.5-14.5) among girls and 1.9% (CI: 0.6-4.4) among boys. Prevalence of NGGI gonorrhoea was 1.7% (CI: 0.3-4.8) among girls and 0% (CI: 0.0-1.4) among boys.

In multivariate analyses, factors significantly associated with chlamydia infection among sexually active girls were: hospitalization for alcohol intoxication; and a history of suicidal ideation with plan.

CONCLUSION: Sexual risk behaviours are common among adolescents entering YPCs, resulting in high levels of chlamydia infection. Mental health issues such as substance misuse and serious depressive symptoms are associated with these high rates. A youth's stay in these facilities is an opportune time to screen not only for sexual risk behaviours but also for mental health problems; appropriate risk reduction education and referrals can then be provided as needed.

KEY WORDS: Sexual health; adolescent health; mental health; sexual behaviours; sexually transmitted infections; youth protection

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

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Every year, four to five thousand adolescents are admitted to residential units in Quebec Youth Protection Centres (YPCs) either for protection or because of delinquency or behavioural problems.¹ Their health is often compromised due to difficult life circumstances that may have led to inconsistent health care and preventive measures.²⁻⁹ Risky behaviours are prevalent among these youth, making them vulnerable to sexually transmitted and blood-borne infections (STBBIs), unplanned pregnancy and other health problems.¹⁰⁻¹²

In Quebec, from 2000 to 2010, reported *C. trachomatis* genital infections (CTGI) increased by 73% and 132% respectively among women and men aged 15-24 years. *N. gonorrhoeae* genital infections (NGGI) increased by 300% among young women and 250% among men.^{13,14}

Given the increasing burden of STBBIs in Quebec, the objectives of this study were to document sexual health risk behaviours and the prevalence of CTGI and NGGI among youth residing in Youth Protection Centres.

METHODS

The study took place from July 2008 to May 2009. The study population consisted of adolescents aged 14 to 17 years, living in residential care in six Québec YPCs located in or near Montréal. Survey promotional material was distributed and youth attended an information session, during which they were invited to participate. The

ethical committees of both the Agence de la santé et des services sociaux de Montréal (CÉR) and the Centre jeunesse de Montréal – Institut universitaire issued a certificate of ethical acceptability.

Data collection and laboratory procedure

The study questionnaire was developed following a literature review of articles related to risk factors associated with STBBIs among adolescents in general as well as among vulnerable youth. Questionnaires from major health surveys of adolescents in Quebec were consulted.¹⁵⁻¹⁷ Standardized questions were used for drug use

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Conflict of Interest: None to declare.

Table 1. Characteristics of Study Population by Gender

	Girls %	Boys %
Age (years)		
14-15	55.1 (n=134)	38.1(n=140)
16-17	44.9 (n=109)	53.1 (n=195)
Ethnocultural group		
French-Canadian	63.8	56.1
English-Canadian	8.6	8.7
Others	27.6	35.2
Current school status		
Regular academic program	55.2	45.6
Delayed or special schooling*	31.5	36.0
Vocational training or skilled trades	3.7	4.2
Not attending school	9.5	14.1
Family history of problematic alcohol use†	75.6	67.2
Family history of problematic drug use†	73.8	59.3
History of physical intrafamilial violence‡		
At least once, lifetime	72.4	61.8
Average age of first violence	6.7 years	7.3 years
History of "running away"		
At least once, lifetime	70.8	55.2
Before 12 years of age	30.1	33.3
Placement under Youth Criminal Justice Act (YCJA)		
Current placement	15.0	42.6

* Delayed or special schooling: delay of at least 2 years in regular academic program, multi-grade training or special education class.

† Self-reported by youth: "In your biological family (father, mother, brother, sister, aunts, uncles or grandparents), does anyone have (or have had) a problem with alcohol?" "With drug use?"

‡ Physical intrafamilial violence: "Being hit, thrown to the ground, beaten or attacked by a family member, a relative, or by someone in a position of parental authority (i.e., mother's boyfriend, father's girlfriend or the father in a foster family)."

behaviours¹⁸ and eating disorders.¹⁹ A panel of health professionals working with youth reviewed the questionnaire. Variables studied included socio-demographic characteristics, sexual history and behaviours, substance use, and several other health issues such as history of abuse, violence and mental health issues. The time frame for variables was "lifetime" or "during the year before admission to the YPC". The questionnaire was pretested with nine youth living in YPCs to assess comprehensiveness and duration.

Face-to-face interviews took place at the YPCs to complete the 60-minute multiple-choice questionnaire. Participants then provided urine samples for CTGI and NGGI testing by nucleic acid amplification test (NAAT).²⁰ After completing the interview, each participant was given an information kit, local contact resources, and a gift certificate.

Statistical analyses

Questionnaires from individuals who had been in a YPC >2 years (n=82) were excluded from analyses when the observation period was "the year preceding admission to the youth centre". Missing data were excluded from the percentages presented (<1% for any question).

Associations between positive chlamydia test and diverse characteristics of female participants were studied using univariate analysis. Variables that were significant at the 0.2 level were introduced into a multivariate model.

RESULTS

Study population

The population consisted of a convenience sample of adolescents aged 14-17 living in six Québec YPCs. At the time of the recruitment, an estimated 850 youth were living in the eligible units of these centres and approximately 80% attended the study information sessions. Among those who attended, 79% agreed to participate (n=586); 8 participants were excluded because of the questionable validity of their answers.

Table 2. Lifetime Sexual Activities by Gender

	Girls % n=243	Boys % n=335
Among All Participants		
Consensual sexual activities* and age at initiation		
Oral, vaginal or anal sexual relations ≥ once	89.3	88.7
First relation before age 14	65.6	66.0
Oral sexual relations ≥ once	76.5	83.3
First relation before age 14	58.4	59.6
Vaginal sexual relations ≥ once	84.0	86.2
First relation before age 14	57.6	59.6
Anal sexual relations ≥ once	25.9	27.2
First relation before age 14	20.6	20.0
Among Sexually Active Participants†	n=217	n=297
Number of sex partners		
Median number	(5)	(8)
≥6 partners	45.2	61.5
Sexual relations with a person of the same sex ≥ once	31.8	5.0
Alcohol or drug use during 50% of sexual relations or more		
Alcohol	18.9	17.2
Cannabis	33.2	39.7
Drugs other than cannabis	23.5	14.5
Alcohol or drugs	42.9	47.8
Group sexual relations‡ ≥ once		
One or more episodes	38.4	43.2
Average number of episodes	(2.9)	(2.0)
Most recent group sexual relation under the influence of alcohol or drugs	67.5	71.1
Money or other goods in exchange for sexual relations ≥ once		
Received money in exchange	16.1	4.7
Received other goods (drugs, presents, a place to sleep, etc.) in exchange	22.6	6.1
Received money and/or goods other than money in exchange	27.2	8.1

* Consensual sexual activities only; activities that occurred in a context of incest, sexual abuse or rape were excluded.

† Consensual sexual activity once or more during lifetime.

‡ Group sexual relations: sexual relations with more than one person at a time.

Table 3. Use of Protection (Condom and/or Other Contraceptive Method), Lifetime and Most Recent Vaginal Relation

	Girls % n=217	Boys % n=297
Among Sexually Active Participants		
Lifetime condom use		
Condom use during vaginal sexual relations	n=217	n=297
Never	9.9	5.9
Occasionally	22.7	13.2
Often	41.4	40.4
Always	26.1	40.4
Condom use during anal sexual relations	n=62	n=90
Never	43.5	24.4
Occasionally	11.3	8.9
Often	6.5	7.8
Always	38.7	58.9
Most recent vaginal relation, protection used, any type of partner*	n=203	n=285
Double protection (condom and other method of contraception)	23.8	25.1
Condom only	27.0	35.1
Contraceptive only	20.6	18.8
Neither condom nor contraceptive	28.0	20.5

* Any type of partner: regular, occasional or one-night stand.

Table 1 presents the characteristics of the study population. Among the 578 respondents (girls 40%, boys 60%; average age 15.7 years), the majority were French-Canadian. Over three quarters of youth (girls, 87%; boys, 78%) reported a family history of problematic substance use (alcohol or drugs).^{*} Physical abuse by a family member was reported by 72% of girls and 62% of boys.

* "In your biological family (father, mother, brother, sister, aunts, uncles or grandparents), does anyone have (or have had) a problem with alcohol?"; "With drug use?"

Table 4. Sexual Health History and Consequences Among Sexually Active Youth

	Girls % n=243	Boys % n=335
Among All Participants		
Sexual abuse* \geq once in lifetime		
Intrafamilial (by family members or people in positions of parental authority)	32.0	5.7
Extrafamilial (by other people)	52.7	7.2
Either intrafamilial or extrafamilial	67.8	12.6
Among Participants Who Reported Having "Gone Out With a Boy or Girl" During That Period	n=179	n=156
Violence (psychological, sexual and/or physical) in intimate relationships ≥ 2 times during the year preceding admission		
Subjected to violence	56.7	55.1
Inflicted violence	47.3	29.8
Among Sexually Active Participants	n=217	n=297
Sexual health prevention history (lifetime)		
Chlamydia trachomatis genital infection screening \geq once	61.1	28.9
Cervical cancer screening (PAP test) \geq once	75.0	n/a
Hepatitis B vaccination ≥ 1 dose	88.9	83.0
Reproductive health history (lifetime)		
Lifetime history of ≥ 1 sexually transmitted or blood-borne infection (STBBI) (diagnosis given by a doctor or nurse)	17.6	3.4
Pregnancy \geq once, lifetime	27.9	n/a
Median age at first pregnancy	14 years	
First pregnancy < 14 years of age	30.5	
Study prevalence: chlamydia and gonococcal infections (urine PCR)	n=183 (95% CI)	n=270 (95% CI)
Prevalence of <i>C. trachomatis</i> genital infection	9.3 (5.5-14.5)	1.9 (0.6-4.4)
Prevalence of <i>Neisseria gonorrhoea</i> genital infection	n=181 1.7 (0.3-4.8)	n=270 0.0 (0.0-1.4)

* Sexual abuse: Intrafamilial sexual abuse (perpetrated by a family member, blood relative, or person in a position of authority); extrafamilial sexual abuse (by someone who was not a family member or blood relative). Abuse does not necessarily mean that force was used nor that penetration occurred.

Sexual activities

Among 89% of youth who had ever had a consensual sexual relation (lifetime), two thirds had their first sexual activities before the age of 14 (Table 2). Nearly half of youth had used alcohol or drugs during 50% or more of their sexual relations. Group sexual activities (at least once) were reported by 4 out of 10 youth. Three times more girls than boys had exchanged sex for money and/or other goods.

During the year prior to admission, 90% of youth had access to Internet and a significant percentage reported using the Internet for sexual purposes (at least once during the year prior to admission): visiting pornographic sites – girls 19%, boys 52%; posting or sending sexually explicit photos – girls 12%, boys 8%; looking for sexual partners on the Internet – girls 7%, boys 2%.

A small percentage of youth (girls, 9.1%; boys, 1.2%) reported "erotic dancing in a nightclub" (≥ 2 times, lifetime). Their first episode of "erotic dancing" occurred before age 14 for 27% of girls, and 33% of boys.

Use of protection

Among sexually active respondents, 26% of girls and 40% of boys reported having "always" used a condom during their vaginal relations (lifetime). During anal relations (lifetime), 39% of girls and 59% of boys "always" used a condom (Table 3).

During the most recent vaginal sexual relation with any type of partner (regular, occasional or "one night" stand), double protection (condom and another contraceptive method) was used by a quarter of youth, and varied little according to partner types.

Among youth using condoms during most recent vaginal relation, 20% reported problems: penetration before putting a condom on, condom pierced or torn, premature removal of condom.

Among girls using contraception during most recent vaginal relation, 61% used the contraceptive pill and 32% used longer-acting contraceptives such as the patch (11%), hormone injections (12%)

or the contraceptive ring (8%). A small percentage (8%) used "withdrawal" as their contraceptive method.

Sexual health history

Sexual Abuse

Many youth had experienced sexual abuse* in or outside their family (Table 4): 32% of girls and 6% of boys had experienced intrafamilial sexual abuse and 53% of girls and 7% of boys reported extrafamilial sexual abuse. Two thirds of girls (68%) and 13% of boys had experienced either interfamilial or extrafamilial sexual abuse.

Violence in Intimate Relationships

Almost nine out of ten (87%) girls and boys reported having gone out with a boy or girl during the year preceding admission to the YPC. Among them, over half (girls 58%, boys 57%) reported having been subjected to violence (psychological, sexual or physical) in their intimate relationships† twice or more during the year preceding admission. About half of girls (48%) and a third of boys (30%) reported having inflicted violence twice or more on their intimate partners during this period.

* Sexual abuse: Intrafamilial sexual abuse (perpetrated by a family member, blood relative or person in a position of authority); extrafamilial sexual abuse (by someone who was not a family member or blood relative). Abuse does not necessarily mean that force was used nor that penetration occurred.

† Violence in intimate relationships:

Psychological violence: "Having your feelings hurt, for example by being insulted in front of other people, or being prevented from seeing your friends."

Sexual violence: "Being forced to have sexual contact – kiss, caress, touch, sexual relation – without wanting to, being threatened with physical force or being subjected to physical force."

Physical violence: "Being pushed, grabbed, hurt with a fist, foot or weapon, being slapped, having something thrown at you."

Table 5. Multivariate Model, Variables Associated With *C. trachomatis* Infection

Among Sexually Active Girls (At Least Once, Lifetime) 14-17 Years		Multivariate Model (n=212) Positive Urine Test for <i>C. trachomatis</i>			
Variables (controlling for age)*		%	P-value	aOR	95% CI
Family history (biological) of problematic drug use	Yes	7.5	0.102	NS	
	No	15.9			
Number of sexual partners (lifetime)	1-4	9.1	0.102	NS	
	5-8	2.0			
	9-12	7.7			
	13+	17.6			
Group sex (at least once, lifetime)	Yes	15.4	0.042	NS	
	No	6.1			
Erotic dancing (at least once, lifetime)	Yes	26.3	0.008	NS	
	No	7.5			
Sexual relations in exchange for money (at least once, lifetime)	Yes	18.8	0.099	NS	
	No	7.4			
Hospitalization for alcohol intoxication (at least once, lifetime)	Yes	38.5	0.001	9.76	2.46-38.74
	No	4.3		1	
Suicidal ideation with plan (at least once, lifetime)	Yes	12.9	0.02	4.35	1.23-15.42
	No	1.2		1	

* Variables significant at the 0.2 level for girls in the univariate analysis were introduced into a multivariate model.

Sexual Health Prevention

Among youth who had ever had sexual relations, 61% of girls and 29% of boys had had a *C. trachomatis* (chlamydia) screening test. Hepatitis B vaccination \geq one dose was reported by 89% of girls and 83% of boys (Table 4).

Reproductive Health History

Among sexually active youth, 18% of girls and 3% of boys stated that "a doctor or nurse had told them they had a sexually transmitted or blood-borne infection (STBBI)" at least once in their lives. The most common STBBIs reported were chlamydia (girls 13%, boys 2%), gonorrhea (girls 3%, boys 1%) and condylomas (girls 2%, boys 0%). A little over a quarter of girls (28%) who were sexually active had been pregnant at least once and most pregnancies (86%) were unplanned.

Prevalence Rates of Chlamydia and Gonococcal Genital Infections

Urine samples from participants who had never had sexual relations (n=62), who had "taken an antibiotic either orally or by injection in the month prior to testing" (n=57), or who had urinated less than two hours before the test (n=5) were excluded from analysis, as was one undetermined test result.

Among the 453 participants whose samples were tested by nucleic acid amplification test (NAAT), 22 were positive for chlamydia and 3 for gonococcal infection. Prevalence of *C. trachomatis* genital infection (CTGI) was 9.3% among girls and 1.9% among boys; prevalence for *N. gonorrhoeae* genital infection (NGGI) was 1.7% and 0%, respectively.

The possible association between diverse characteristics of female participants and positive urine test for chlamydia (dependent variable) was studied using univariate analysis. The number of male participants with chlamydia infection was low and did not allow for a valid multivariate analysis. The following variables were considered: socio-demographic and family characteristics, sexual behaviours (condom use, age at first intercourse, number of partners, group sex, and others), substance use behaviours as well as several mental health indicators.

Variables that were statistically significant at the 0.2 level for girls in the univariate analysis were introduced into a multivariate model (Table 5). While controlling for age, the girls who had been

hospitalized for alcohol intoxication at least once during their lifetime, and those who reported having had serious suicidal thoughts with a plan (at least once, lifetime) were significantly more likely to have a positive urine test for chlamydia.

DISCUSSION

Risky sexual behaviours are prevalent among youth entering residential care, resulting in significant health problems such as STBBIs and unplanned pregnancies. Youth entering care are sexually active at an earlier age, have more partners, use condoms less and engage in more risky sexual practices than their peers in the general school population in Quebec.¹⁷ Sexual relations under the influence of alcohol and/or drugs are very prevalent among these youth, and participation in risky sexual scenarios such as "group sex", reported by nearly 40% of youth, usually occurs when they are under the influence of drugs or alcohol.

Despite high-risk sexual activities, participants in this study use little protection. Only 26% of girls and 40% of boys consistently used condoms during vaginal sexual relations. As well, among participants using condoms, 20% reported problems associated with condom use during their most recent sexual activity. Double protection (condom and contraception use) is still not the norm among youth in care, with only a quarter of youth currently using both means of protection.

Many youth experienced significant health consequences related to risky sexual behaviours. Over a quarter of girls in the study (28%) reported at least one pregnancy (lifetime), a rate 15 times higher than in the general population of Quebec adolescents aged 14-17 years.²¹ As well, 18% of girls and 3% of boys had already been diagnosed with an STBBI.

Prevalence of CTGI in this youth population was 9.3% among girls and 1.9% among boys. These rates are high compared with the general population of Quebec youth aged 15 to 19 years, among whom observed incidence of reported cases was 1.0% for girls and 0.3% for boys in 2010.¹³ Prevalence of NGGI among participants was 1.7% for girls and 0.0% for boys. Recent increases in gonorrhoea infection have been noted among young women in Quebec,^{13,14} and this study was done at the beginning of this trend.

In a multivariate analysis controlling for age, the two independent factors significantly associated with positive urine test for

chlamydia infection among sexually active girls were history of hospitalization for alcohol intoxication (≥ 1 time, lifetime), and a history of suicidal ideation with plan (≥ 1 time, lifetime).

These variables can be considered indicators or proxies for serious substance use problems and mental health distress. These findings are consistent with recent studies showing closely woven interactions among risk of acquiring a sexually transmitted infection, mental health problems and substance misuse.^{11,12,22,23}

In the National Longitudinal Study of Adolescent Health (USA), depressive symptoms were predictive of subsequent sexual risk behaviour.¹² For boys, high depressive symptom levels were predictive of condom and birth control non-use and substance use at most recent relation. For girls, moderate depressive symptoms were associated with substance use at most recent intercourse. Among high school students surveyed in Nova Scotia, risk of depression in girls was significantly associated with unplanned sex and non-use of effective contraception at most recent intercourse. For males, risk of depression was associated with having unprotected sex when using substances and having more than one partner.¹¹ A study among detained youth showed that the odds of having an STBBI among girls increased by 23% with each one-unit increase in the alcohol/drug subscale score of a mental health screening tool.²³

Other factors known to be linked to risky sexual behaviours are histories of childhood sexual abuse and experience of intimate partner violence, which were very prevalent in our study population.²⁴⁻²⁸

Several researchers have highlighted the links between sexual health outcomes and diverse psychosocial factors. Kirby²⁹ reviewed over 400 studies on STIs and unplanned pregnancies among teens. He synthesized his findings in a model that integrates non-biological factors, individual, familial, environmental, etc. that act as risk and protective factors for these health outcomes. Our study confirms the important role that mental health and substance misuse have in influencing STI rates among youth and that these merit consideration when clinicians are evaluating a youth's sexual health.

Limitations and biases

These results have certain limitations. The six participating YPCs were all within a 3- to 4-hour drive from Montreal, and therefore may not reflect the reality of YPCs located in eastern or northern Quebec, or in other parts of Canada. Risk behaviours were self-reported, however care was taken to train the interviewers to be supportive and non-judgemental to decrease social desirability biases. The nature of the interview (i.e., private, face-to-face, with the answers noted by the interviewer, memory aids) allowed for greater understanding and validity of the responses. Certain answers to questions such as "family history of substance use problems" were the youth's perception and not documented in social service or medical records. Therefore these rates may be under- or over-estimated.

It is important to note that, as a second-generation surveillance study, the primary purpose of this work was to describe behaviours and prevalence. Therefore we did not use a complete model of behaviour adoption to understand and explain prevalence rates. The study is not exhaustive but rather attempts to explore associated factors.

CONCLUSION

Sexual risk behaviours are common among adolescents entering YPCs, resulting in high levels of chlamydia infection. Mental health

issues such as substance misuse and serious depressive symptoms are associated with these high rates. A youth's stay in these facilities is an opportune time to screen not only for sexual risk behaviours but also for mental health problems; appropriate risk reduction education and referrals can then be provided as needed.

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RÉSUMÉ

OBJECTIFS : Décrire les comportements à risque et la prévalence des infections à chlamydia et de la gonorrhée chez les adolescents de 14 à 17 ans placés dans les centres québécois de protection de la jeunesse (CPJ).

MÉTHODE : Entre juillet 2008 et mai 2009, des adolescents placés dans six CPJ ont rempli un questionnaire au cours d'une entrevue en personne. Les questions portaient sur les comportements sexuels des répondants, leur consommation de substances avant le placement et d'autres enjeux ayant une incidence sur leur santé physique et mentale. Des échantillons d'urine ont été prélevés pour détecter les infections génitales à

Chlamydiae trachomatis (IGCT) et les infections génitales à *Neisseria gonorrhoeae* (IGNG).

RÉSULTATS : Sur les 578 participants de 14 à 17 ans, 89 % avaient eu des relations sexuelles consensuelles. Les comportements sexuels à risque étaient l'initiation sexuelle précoce (66 % à <14 ans); les partenaires multiples (nombre médian à vie : filles 5, garçons 8); 50 % ou plus de relations sexuelles avec facultés affaiblies par la drogue ou l'alcool (filles 43 %, garçons 48 %); les activités sexuelles en groupe (filles 38 %, garçons 43 %); et les relations sexuelles en échange d'argent ou de cadeaux (filles 27 %, garçons 8 %). Seulement le quart des garçons et des filles avaient utilisé une double protection (condom et méthode anticonceptionnelle) au cours de leur dernière relation vaginale. Des antécédents de grossesse ont été déclarés par 28 % des filles. La prévalence des IGCT était de 9,3 % (IC : 5,5-14,5) chez les filles et de 1,9 % (IC : 0,6-4,4) chez les garçons. La prévalence des IGNG était de 1,7 % (IC : 0,3-4,8) chez les filles et de 0 % (IC : 0,0-1,4) chez les garçons.

Dans nos analyses multivariées, les facteurs présentant une corrélation significative avec les infections à chlamydia chez les filles sexuellement actives étaient : l'hospitalisation pour intoxication alcoolique; et des antécédents d'idées suicidaires avec des plans.

CONCLUSION : Les comportements sexuels à risque sont courants chez les adolescents placés dans les CPJ, ce qui entraîne des niveaux élevés d'infections à chlamydia. Des troubles de santé mentale, comme l'abus de substances et les symptômes de dépression grave, sont associés à ces taux élevés. Le séjour d'une ou d'un jeune dans ces centres est un moment opportun de dépister non seulement ses comportements sexuels à risque, mais aussi ses troubles de santé mentale; on peut alors sensibiliser la personne à la réduction des risques et la diriger vers les ressources appropriées.

MOTS CLÉS : santé sexuelle; santé des adolescents; santé mentale; comportement sexuel; infections transmissibles sexuellement; protection de l'enfance