

Factors Associated with Condom Use Among Aboriginal People

A Systematic Review

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ABSTRACT

Objectives: To review evidence on factors associated with condom use among Aboriginal people and the methodological quality of studies assessing these factors.

Methods: A systematic review of published and unpublished literature was undertaken. Searches of databases and indexes were performed and authors were contacted directly. Studies reporting on associations between any independent variables and a condom use outcome were included. Data on the quality of each study was extracted, and the strength of evidence for associations between risk factors and condom use outcomes was assessed by counting the number of studies and sample size of each study.

Results: Searches yielded 17 analyses on 10 independent samples that met the inclusion criteria. Most studies were cross-sectional and utilized small non-representative samples. Some evidence for a negative association between condom use and having a steady partner emerged; and a negative association between White male/Alaska Native female sex partner pairs was found. Evidence was insufficient to judge associations between other risk factors and condom use.

Conclusions: The quality and quantity of evidence regarding the predictors of condom use in Aboriginal populations is limited. A concerted effort in primary research on facilitators of and barriers to condom use which are specific to and appropriate for Aboriginal people is needed to inform effective condom promotion interventions for Aboriginal communities.

MeSH terms: Condoms; American Native Continental Ancestry Group; sexually transmitted diseases

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

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In both Canada and the United States (US), combatting high rates of HIV and other sexually transmitted infections within native communities is recognized as a priority by community leaders, health professionals and government. In Canada, Aboriginal peoples have 7 times the rate of HIV infection of the general population,¹ and among American Indians/Alaska Natives, gonorrhoea and chlamydia are more prevalent than among White Americans.² In response, various prevention initiatives have been established by Aboriginal communities and health professionals (e.g., ref. 3).

A cornerstone of sexual risk reduction programs is promotion of condom use. Various explanatory models of condom use have been tested among diverse populations; however, evidence indicates that factors can be differentially predictive across ethnic-gender groups.⁴⁻⁹ In addition, classical models of health behaviour, upon which many health promotion programs are based (e.g., Theory of Planned Behaviour), have neglected the potential influence of contextual variables on health behaviours. Therefore, current programs based on existing research with other populations may not adequately address the specific needs of different Aboriginal peoples.

This work aims to elucidate which factors are associated with male condom use among the indigenous people of Canada and the US in previous studies, and critically evaluate the quality of research available to program developers. Variables examined in the review have been grouped according to an ecological framework with 4 levels: structural/demographic, interpersonal, individual, and situational.

METHODS

A systematic review of the literature was undertaken to determine a) which factors are predictive of condom use among indigenous peoples in Canada and the US, and b) the methodological characteristics and quality of studies examining these factors.

Inclusion criteria

Studies reporting bivariate or multivariate correlations between any independent variable and a male condom use outcome for vaginal, anal or oral sex among Aboriginal

people residing in Canada and the US were included. 'Aboriginal' in this review included all persons who consider themselves to be indigenous – members of diverse First Nations, non-status Indians, Metis, Inuit, and American Indians of different tribal affiliations.

Condom use outcomes included frequency of unprotected sex, consistency of condom use, condom use at last intercourse, and ever-use of condoms. All independent variables were included, as conceptualized by the authors. Language and year of publication were not restricted.

Searching

Ten databases and indexes were searched by KD for articles published in the peer-reviewed literature, grey literature reports and unpublished findings. Where possible, the search terms 'condom' and 'Aboriginal' were mapped to the controlled vocabulary subheadings of each index/database to generate more inclusive search terms appropriate for each reference product (e.g., Mapped to MeSH headings on PubMed). Records were searched from the first entry to August 2004.

Citation lists of individual articles included were searched, as well as the table of contents of the *American Indian and Alaska Native Journal of Mental Health (1998-August 2004)*. Nine experts in the research field were contacted and asked to provide any unpublished studies, and authors of included articles were asked to provide any additional information where necessary (see Appendix for details of search strategy).

Screening

Two reviewers independently screened the abstracts of published and unpublished studies from indexes and databases to assess eligibility for inclusion.

All materials retrieved through citation list searches, directly from authors, hand searching and Internet searches were pre-screened by the first author, due to the large volume of citations identified in these ways. When an article could not be excluded based on its abstract, the full-text version was obtained and screened independently by two reviewers. In total, 64 full-text articles were screened and there were no disagreements on inclusion.

Data extraction

The two reviewers independently extracted data from each of the included articles onto a standardized data abstraction form. Inter-rater reliability was 92% (32 disagreements in 390 data collection fields) for the study characteristics, including quality assessment questions, and 86% (14 disagreements in 101 data collection fields) for associations between various factors and condom use outcomes. Disagreements were mostly due to simple oversight.

Quality assessment

The quality of each study was assessed through a series of questions on possible biases in areas outlined in the Cochrane Reviewer's Handbook, Version 4.2.2¹⁰ (Table I). Whether or not the outcome was measured in the same way for all study participants was assessed. Attrition rates among participants and whether or not these rates were equal across groups of condom users were also assessed in longitudinal studies.

Analysis

Counting Associations

The number of studies showing positive, negative or no correlation with condom use was counted. Each variable was considered separately. When correlations from overlapping subsamples appeared (i.e., more than one analysis was conducted on a sample), the results from the subsample with the largest sample size was counted. If both bivariate and multivariate results were available, multivariate associations were recorded because of the potential for collinearity among exposure variables.

Assessing the Strength of the Evidence

The strength of the evidence for associations between the variable of interest and condom use was assessed using criteria based on those proposed by Ramirez et al.¹¹ Evidence was designated "strong" when a large proportion of studies supported a directional effect; "moderate" when at least 2 studies supported the direction of an effect, but where a new study could affect conclusions; "insufficient" when there were too few studies; and "conflicting" when there was either conflicting directional associations or no association was found.

RESULTS

Description of included studies

A total of 17 articles drawn from 10 independent samples met the inclusion criteria. Three of the samples were Canadian, and 7 were from the US. Ten articles focused exclusively on Aboriginal people, and 7 included other ethnic groups. There was one probability sample of on-reserve Aboriginals,¹²⁻¹⁴ another on-reserve sample was a combination of probability and convenience samples,^{15,16} two urban samples were recruited via cultural events/organizations,¹⁷⁻¹⁹ and one sample was general practice clinic-based.²⁰ Three other samples of American Indian drug users were obtained by convenience methods (street outreach/word of mouth/treatment clinic).²¹⁻²⁵

Outcomes of included studies were: consistency of condom use in 9 analyses;^{12,14,18,19,25-27} condom use at last intercourse in 2 analyses;^{16,21} condom use on specific intercourse occasions in 3 analyses;^{13,22,23} frequency of condom use in 3 analyses;^{15,26,28} and ever-use of condoms in 3 analyses.^{17,21,23} Three studies reported 2 condom use outcome measures,^{21,23,26} and 7 studies reported analyses of subpopulations in their overall sample (stratified by time;¹⁶ stratified by partner type;^{21,24} stratified by recall period;¹⁹ stratified by area;²⁶ stratified by gender and number of sex partners;¹³ stratified by partner type²⁵).

Exposures were assessed mainly by single items, and most studies did not report test-retest reliability coefficients. Studies using the Risk-Behaviour Assessment Questionnaire^{21-23,26,28} were an exception and reported test-retest correlations ranging from 0.66-0.83.²⁹ The Ontario sample¹²⁻¹⁴ performed a test-retest measure of their questionnaire,³⁰ but did not report on correlation coefficients. Other analyses reported Cronbach alpha's or Kuder-Richardson coefficients for scales (ranging from 0.75-0.87,²⁷ 0.78,¹⁷ 0.69-0.86,¹⁸ and factor loadings from 0.32 to 0.94,¹⁵ but no test-retest information for single-item measures.^{16-18,27} For the remaining studies, reliability information could not be obtained.^{19,20,24,25}

To date, most analyses appear to be exploratory and largely atheoretical. One post-colonial trauma model has received some support,^{18,19} but remains to be vali-

TABLE I
Aspects of Quality of Studies Included in Review

Sample	Analysis	Sample Random/Probability*	Missing Data*	Participation/Response Rate*	Inclusion†	Type of Analysis	Number of Associations Reported
Cross-sectional Data Ontario	Calzavara ¹²	y	Excluded	87.3%	y	Multivariate	9
	Myers ¹⁴	y	Excluded	87.3%	y	Multivariate	26
	Myers ¹³	y	Excluded	87.3%	n	Bivariate	5
Vancouver Winnipeg	Miller ²⁴	n	*	*	*	Bivariate	2
	Young ²⁰	n	Excluded	87% (of those approached)	n	Bivariate	2
Alaska NIDA (national US)	Fenaughty ²²	n	*	*	*	Bivariate	2
	Baldwin ²⁸	n	Excluded	*	*	Bivariate	4
	Fenaughty ²³	n	*	*	*	Bivariate	3
Northern Plains (Choices/Voices)	Stevens ²⁶	n	Excluded	At least 80%	y	Bivariate	6
	Mitchell ¹⁵	n	Excluded	At least 59.4%	y	Multivariate	10
NYC PowWow	Walters ¹⁷	n	Excluded	*	n	Bivariate	9
	Walters ¹⁸	n	Excluded	*	n	Multivariate	3
NYC community NY State clinic Portland	Simoni ¹⁹	n	Excluded	*	n	Bivariate	10
	Morison-Beady ²⁷	n	*	*	*	Bivariate	5
Longitudinal Data Northern Plains (Choices/Voices) Vancouver	Song ²¹	n	*	*	y	Multivariate	7
	Mitchell ¹⁶	n	Imputed	82.8%	y	Multivariate	9
	Craib ²⁵	n	Excluded	*	n	Multivariate and Bivariate	6

y=yes; n=no; *= Unknown (not computed, or not reported and information could not be obtained from author)
 † All participants included in final analysis, or excluded and check shows similar characteristics*

dated on larger more representative populations. Other analyses have used Social Cognitive Theory^{15,16} and one chose constructs from the Information-Motivation-Behavioural Skills Model.²⁷

Quality of included studies

Quality ratings are not incorporated into assessments of what factors are correlated with condom use following the recommendations of Juni et al.,³¹ but rather are presented separately (Table I). Too few studies met the inclusion criteria to assess the impact of design or any of the quality features on the associations reported; thus all studies are grouped for further analysis.

All analyses were cross-sectional with the exception of one longitudinal analysis.¹⁶ One other analysis²⁵ collected data longitudinally and provided information on associations between condom use and time to HIV seroconversion as an outcome. Overall quality was low – most studies used non-probability samples and had low or unreported response rates. Where reported at all, confidence intervals for estimates were wide. Missing data were most often excluded from analyses, but most articles did not report checking for differences between those included and excluded. Those studies using an interview format for data collection generally did not report on interviewer effects, or linguistic equivalency of questions; for some it was not clear that measures were standard

across the entire sample. The two longitudinal studies had follow-up rates of 51.5%¹⁶ and 70%.²⁵

Correlates of condom use

Seven types of structural/demographic variables were tested (Table II). Evidence suggesting a negative association between having a steady partner and condom use was uncovered. Only one situational factor, alcohol and/or drug use, was assessed in two studies (Table II), which reported conflicting findings. For interpersonal variables, both partner variables and broader social variables were examined in several studies (Table II). Evidence suggesting a negative association between condom use and White male/Alaska Native female sexual partnerships was obtained in 2 samples. Individual-level variables were the most frequently examined level of variable (Table III); however, no clear evidence of any associations with condom use were found.

DISCUSSION

The evidence summarized in this review provides an overview of condom use research conducted to date with Aboriginal samples. Tentative evidence emerged for a negative association between condom use and having a steady partner, and White male/Alaska female partnerships. Methodologically, most of the studies

included were conducted with unrepresentative samples, were underpowered, and were cross-sectional. Given the generally poor quality and small sample sizes of included studies, no firm conclusions can be drawn about the correlates of condom use in Aboriginal samples.

Limitations of this review

For this analysis, all condom use outcome measures and all independent variables with face similarity were treated equivalently. Though correlations between some of these measures have been examined in other populations,³² it may be that the variance in condom use outcomes and the different ways independent variables were conceptualized and measured has contributed to the heterogeneity observed in the results. Similarly, diversity in cultures, geography, socio-economic status, and recruitment venue among the study populations could also influence results.

Although we made every effort to identify studies, it is not possible to formally exclude publication bias in view of the small number of studies testing each factor, or rule out selective reporting of correlations by study authors. In general, studies that remain unpublished may be of lower quality than those that are published; thus literature that we were unable to obtain may be less likely to affect the conclusions drawn from the available evidence.

TABLE II
Demographic/structural, Situational and Interpersonal Correlates of Condom Use

Factor	Variable:Item	Analysis	Association*† (Confidence Interval)	P-value‡	Sample Size	Strength of Evidence	
Age	Younger age	[14]	0.54 (0.18-1.61)	–	n=428	Insufficient	
Education	Less than high school education	[14]	0.25 (0.04-1.60)	–	n=428	Insufficient	
	More than high school education	[15] [14]	Beta=0.04 0.23 (0.06-0.88)	p>0.05 –	n=706 n=428	Insufficient	
Income	Lower Income	[18]	“no net influence”	p>0.05	n=100	Insufficient	
	Partner Status	[14] [18]	0.63 (0.20-2.01) Beta=-0.40	– p<0.005	n= 428 n=100	Insufficient Moderate evidence for negative association	
Gender	Male gender (unspecified or vaginal sex)	[19]	E_r=-0.33	p<0.005	n=155	Conflicting	
		[14]	1.62 (0.65-4.06)	–	n=428		
		[15] [16]	Beta=-0.05 (female) Latent Growth Curve Modelling Intercept: 0.56 (SE 0.11) (female less likely to use at time 1) Slope: -0.18 (SE 0.07) vs. 0.29 (SE 0.15) (males condom non use increases faster over time)	p<0.05 p<0.05	n=706 n=518		
	Male gender (vaginal or anal sex combined)	[23]	32% men vs. 19% women, Chi ² =2.34	p>0.05	n=110	Insufficient	
		[26]	Number of unprotected episodes: 9.9 male vs. 11.7 female	“not significant”	n=49		
		[26]	Proportion of unprotected episodes 0.65 male vs. 0.64 female Number of unprotected episodes: 12.1 male vs. 25.5 female	“not significant” p=0.000	n=198		
Community Demographics	Location: Rural (vs. urban)	[23]	Proportion of unprotected episodes 0.65 male vs. 0.77 female 77% vs. 45%, Chi²=11.85	p=0.000 p<0.001	n=110	Insufficient	
		[14] [26]	0.68 (0.21-2.21) Number of unprotected episodes: 10.4 rural vs. 15.4 urban Proportion of unprotected episodes 0.65 rural vs. 0.68 urban	– “not significant” “not significant”	n=428 n=247		
	Location: Semi-remote Location: Remote Size: Small Size: Large On/Off-reserve	[14] [14] [14] [14] [15]	0.85 (0.16-4.49) 1.69 (0.15-18.7) 1.40 (0.41-4.76) 2.94 (0.57-15.2) Beta=0.01	– – – – p>0.05	n=428 n=428 n=428 n=428 n=706	Insufficient	
		Culture	[14] [14] [14] [15]	Familiarity with Aboriginal traditions: Some vs. none Familiarity with Aboriginal traditions: Very vs. not Speak Aboriginal language Beta=0.12	– – – p<0.05	n=428 n=428 n=428 n=706	Insufficient Conflicting
Situational Correlates of Condom Use	Alcohol/drug use before sex		[13] [28]	0.0368 vs. 0.0662 McNemar’s Chi ² =2.3 (proportion who change from protected to unprotected sex) r=0.463	p=0.131 p<0.001	n=246 n=63	Conflicting
Interpersonal Correlates of Condom Use	Partner Variables	Partner ethnicity: partnership between White man and Alaska Native woman	[22] [23] [14] [14] [27]	Chi²=24.21 (condom use differs by ethnicity of partners; lowest % use in this pair) Fisher’s Exact=8.51 (df=1) (less condom use) 1.13 (0.35-3.59) 1.24 (0.31-4.96) 2.54 consistent vs. 2.25 inconsistent, t=0.99	p<0.01 p<0.01 – – p=0.33	n=1116 n=157 n=143 n=143 n=53	Moderate evidence of a negative association Insufficient Insufficient
Social Environment	Perceive that peers use some type of birth control Friends verbally encourage use of birth control Adults verbally encourage use of birth control Know someone with HIV/AIDS	[15] [15] [15] [12] [15] [27]	Beta=0.03 Beta=0.16 Beta=-0.06 4.3 (1.2-1.7) Beta=-0.03 2.39 consistent vs. 3.06 inconsistent, t=-2.21	p>0.05 p<0.05 p>0.05 – p>0.05 p=0.04	n=706 n=706 n=706 n=143 n=706 n=53	Insufficient Insufficient Insufficient Conflicting	

*† OR, more condom use unless otherwise specified; significant at 0.05 level boldfaced
 ‡ Where confidence interval not reported.
 Note: Calzavara excluded from young age and gender because of overlap with Myers.

TABLE III
Individual Level Correlates of Condom Use

Domain	Factor	Variable:Item	Analysis	Association*† (Confidence Interval)	P-value‡	Sample size	Strength of Evidence	
Behaviour	Sexual behaviour	Multiple partners: 2-4 lifetime sexual partners (vs. 1)	[14]	0.61 (0.17-2.24)	–	n=428	Conflicting	
		Multiple partners: 5 or more lifetime sexual partners (vs. 1)	[14]	1.13 (0.23-5.68)	–	n=428		
		Multiple partners: Multiple partners, past year	[16]	Latent Growth Curve Model; Intercept = -0.24 (SE 0.07)	–	n=518		
	Substance use behaviour	Condom use at first intercourse		[15]	Beta=0.21	p<0.05	n=706	Insufficient
				[17]	r=0.25	p>0.05	n=38	
		Sex risk behaviours over lifetime	Alcohol/drug use: Drug use in past month	[14]	0.39 (0.13-1.19)	–	n=428	Insufficient
			Alcohol/drug use: Frequency of alcohol consumed	[28]	r=-0.92	p>0.05	n=49	
		Alcohol/drug use: Quantity of alcohol consumed	[28]	r=0.015	p>0.05	n=49		
		Alcohol/drug use: Frequency of drinking until drunk	[28]	r=0.062	p>0.05	n=49		
		Alcohol/drug use: Alcohol or drug use past 6 months	[17]	r=0.09	p>0.05	n=38		
Alcohol/Drug/Sex-risk composite over lifetime	[17]	r=0.22	p>0.05	n=38	Insufficient			
Attitudes	Condom attitudes	Perceived efficacy of condoms in preventing AIDS: Very well (vs. not)	[12]	4.6 (1.2-21)	p<0.1 (trend)	n=143	Insufficient	
		Perceived efficacy of condoms in preventing AIDS: Well (vs. not)	[12]	3.5 (0.93-16)	–	n=143		
	Self-efficacy for safer behaviour	Self-efficacy to enact safer behaviour		[17]	r=0.30	0.05<p<0.10	n=38	Insufficient
				[16]	Latent Growth Curve Model: Intercept:-0.01 (SE 0.04); slope -0.05 (SE 0.03) no association between resistive efficacy and condom non-use	p>0.05	n=518	
	Perceived vulnerability to HIV	Perceived Risk: Some or great risk vs. none		[12]	0.8 (0.1-3.6)	p<0.1 (trend)	n=143	Conflicting
				[12]	0.3 (0.1-0.8)	–	n=143	
				[17]	r=0.04	p>0.05	n=38	
	Readiness to change sexual behaviours	Perceived risk: Greater vs. less		[27]	2.42 consistent vs. 1.80 inconsistent, t=2.09	p=0.04	n=53	Insufficient
				[27]	3.82 consistent vs. 3.14 inconsistent, t=2.07	p=0.05	n=53	
	Knowledge	Sex education	Source of sex information is family	[14]	0.30 (0.10-0.88)	–	n=428	Insufficient
Learn of sex from Aboriginal traditions			[14]	1.65 (0.48-5.74)	–	n=428		
Learn of sex from sex partners			[14]	1.50 (0.52-4.34)	–	n=428		
Learn of sex from health service			[14]	3.59 (1.34-9.64)	–	n=428		
AIDS knowledge		More AIDS knowledge		[12]	4.2 (1.2-20)	p<0.05	n=143	Conflicting
			[27]	32.75 consistent vs. 30.33 inconsistent, t=0.76	p=0.45	n=53		
History	Sexual health experiences	History of non-partner sexual assault	[18]	Beta=-0.27	p<0.05	n=58	Conflicting	
			[19]	r between 0.16 and 0.39	“associated; p between 0.00-0.04”	n=155		
		Ever been sexually abused by a partner		[17]	r=0.12	p>0.05	n=38	Insufficient
				[19]	“Not associated”	p>0.05	n=155	
				[15]	Beta=0.02	p>0.05	n=706	
	STD history		[20]	OR (of HPV by condom use) sometimes vs. never: 1.09 (0.81-1.46)	–	n= 1263	Conflicting	
			[25]	OR mostly vs. never: 1.45 (1.10-2.00)	–	n= 1263		
	Pregnancy Other health history	Has children under own care		[12]	RR (of HIV seroconversion by condom use with regular partners) 0.2 (0.02-1.2)	p=0.08	n=230	Insufficient
				[19]	2.2 (0.88-5.7)	–	n=143	
		Ever been physically abused by a non-partner		[19]	r between 0.16-0.39	“associated; p between 0.00-0.04”	n=155	Conflicting
			[17]	r=-0.01	p>0.05	n=38		
			[19]	“Not associated”	p>0.05	n=155		
	[17]	r=0.17	p>0.05	n=38	Insufficient			

*† OR, more condom use unless otherwise specified; significant at 0.05 level boldfaced
‡ Where confidence interval not reported.

Comparison to other literature

Findings from a meta-analysis of the correlates of condom use among the general

population show that some situational and interpersonal variables have moderate to large bivariate correlations with condom

use,³² yet few studies have explored these types of variables among Aboriginal samples. The need for assessment of culturally

APPENDIX

Search strategy

Database	Dates Searched	Search Terms	Records Returned
PubMed	1951-August 13, 2004	"Condoms"[MeSH] AND ("Oceanic Ancestry Group"[MeSH] OR "Indians, North American"[MeSH] OR "Indians, South American"[MeSH] OR "Indians, Central American"[MeSH])	10
PsycInfo via OVID	1872-August 13, 2004	american indians/ or indigenous populations/ or alaska natives/ or inuit/ or minority groups/ or pacific islanders/ or tribes/ AND condoms/	7
CIHAHL via OVID	1982-August 13, 2004	Condoms/ AND indigenous peoples/ or aborigines/ or eskimos/ or native americans/	11
ERIC Via CSA	1966-August 13, 2004	(de=condoms) AND (de=((indigenous populations) or (aboriginal australians) or (alaska natives) or (american indians) or (canada natives) or (pacific islanders) or (minority groups)))	0
Social Services Abstracts via CSA	1980-August 13, 2004	(de=condoms) AND (de=((indigenous populations) or (aboriginal australians) or (alaska natives) or (american indians) or (canada natives) or (pacific islanders) or (minority groups)))	7
Sociological Abstracts via CSA	1963-August 13, 2004	(de=condoms) AND (de=((indigenous populations) or (aboriginal australians) or (alaska natives) or (american indians) or (canada natives) or (pacific islanders) or (minority groups)))	3
Web Resources Related to the Social Sciences/Humanities via CSA	Updated daily-August 13, 2004	(de=condoms) AND (de=((indigenous populations) or (aboriginal australians) or (alaska natives) or (american indians) or (canada natives) or (pacific islanders) or (minority groups)))	1
EMBASE via OVID	1980-August 13, 2004	CONDOM/ AND aborigine/ or american indian/ or eskimo/ or maori/ or pacific islander/	4
Anthropology PLUS	"late 19th century"-August 13, 2004	Condom? AND American Indian?; Condom? AND Aboriginal?	0
ISI Web of Science (includes Arts & Humanities Citation Index (A&HCI)-1975-present, Social Sciences Citation Index (SSCI)-1965-present, Science Citation Index Expanded (SCI-EXPANDED)-1965-present)	1965-August 13, 2004	TS=condom AND [TS=(aleut) OR TS=(metis) or TS=(dene) or TS=(indian) or TS=(maori) or TS=(inuit) OR TS=(eskimo) OR TS=(Alaska native) or TS=(indigenous people) TS=(Aborig*) or TS=(american indian)]	20
Proquest Digital Dissertations	1861-Sept. 26, 2004	KEY (American Indian) and KEY (condom) KEY (aborig*) and KEY (condom)	0

Unpublished material searches:

Source	Date	Terms Used, If Any	Resources Found
Google	August 15, 2004	aboriginal and condom	
www.caan.ca Canadian Aboriginal HIV/AIDS Network	August 15, 2004		Link to environmental scan
http://www.linkup-connexion.ca/ menu.html Aboriginal HIV/AIDS online information network	August 15, 2004		Link to Tenuous connections report

specific factors that may be associated with condom use is also evident – in particular, the role of pregnancy, which is valued among many Aboriginal cultures.³³

Recommendations and future directions

Future work could utilize an ecological framework to aid in incorporation of contextual factors as determinants of condom use. Attention also should be drawn to factors that are associated with decreased risk of adverse sexual health outcomes. Methodologically, use could be made of

extant large data sets to remedy lack of statistical power evident in many analyses.

CONCLUSION

The quality and quantity of evidence regarding the predictors of condom use in Aboriginal populations are extremely limited. Condom use promotion initiatives in this population are ill equipped to address determinants of condom use that are specific to and appropriate for Aboriginal people. Given the burden of STI facing Aboriginal communities, a concerted effort

in primary research is needed to inform effective condom promotion interventions.

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RÉSUMÉ

Objectifs : Examiner les preuves des facteurs associés au port du condom chez les Autochtones et la qualité méthodologique des études qui évaluent ces facteurs.

Méthode : Nous avons mené une étude méthodique des documents publiés et inédits sur la question. Des recherches dans des bases de données et des répertoires ont été effectuées, et les auteurs ont été contactés directement. Nous avons inclus les études portant sur les associations entre toute variable indépendante et ses conséquences sur le port du condom. Nous avons extrait des données sur la qualité de chaque étude, puis évalué la force des preuves d'associations entre les facteurs de risque et leurs conséquences sur le port du condom, en dénombrant les études et en calculant la taille de l'échantillon utilisé dans chaque cas.

Résultats : Nos recherches ont permis de trouver 17 analyses portant sur 10 échantillons indépendants respectant nos critères d'inclusion. Il s'agissait pour la plupart d'études transversales utilisant de petits échantillons non représentatifs. Quelques preuves d'une association négative entre le port du condom et le fait d'avoir une ou un partenaire stable ont été dégagées; et une association négative a été constatée entre les paires de partenaires sexuels composées d'hommes blancs et de femmes autochtones de l'Alaska. Les preuves étaient insuffisantes pour déterminer des associations éventuelles entre d'autres facteurs de risque et le port du condom.

Conclusions : La qualité et la quantité des preuves concernant les prédicteurs du port du condom dans les populations autochtones sont limitées. Si l'on veut améliorer l'efficacité des mesures de promotion du condom dans les communautés autochtones, il faut pousser de façon concertée la recherche primaire sur les éléments propres aux Autochtones, et adaptés à leur situation, qui favorisent ou qui freinent le port du condom.