Attitudes and behaviours of young Indigenous people in Townsville concerning relationships, sex and contraception: the "U Mob Yarn Up" project

Sarah L Larkins, R Priscilla Page, Kathryn S Panaretto, Robert Scott, Melvina R Mitchell, Valerie Alberts, P Craig Veitch and Suzanne McGinty

ABSTRACT

Objective: To gain some understanding of the attitudes and behaviours of Indigenous young people in Townsville concerning relationships, contraception and safe sex.

Design: Cross-sectional study using a computer-assisted self-administered survey and single-sex focus group discussions designed by a Young Mums' Group operating on participatory action principles and acting as peer interviewers.

Participants and setting: 171 Indigenous students in Years 9–11 at three high schools and 15 residents of a homeless youth shelter in Townsville, Queensland, 27 April – 8 December 2004.

Main outcome measures: Self-reported attitudes and behaviour about relationships, sexual intercourse and contraception.

Results: 84/183 participants (45.9%) reported past sexual intercourse, with 56.1% commencing intercourse at age 13–14 years. The likelihood of having had sex increased with being male ($P = 0.001$), increasing age, increased perceived sexual activity of peer group (both $P = 0.000$), and drinking alcohol at least weekly ($P = 0.015$). Young women were more likely to report unwanted sexual touching ($P = 0.031$), and less likely to report enjoying sexual intercourse ($P = 0.001$). The main qualitative themes concerned females' reputations, coercion, and denial of female desire. Only 49/80 participants (61.3%) reported always using condoms. The main reasons for not using contraception were "just not thinking about it", shame, and problems with access. Despite having reasonable knowledge about contraception, most lacked the confidence and negotiation skills to communicate with partners about condom use.

Conclusions: Like teenagers elsewhere, Indigenous teenagers in Townsville are becoming sexually active at a young age, and not practising safe sex reliably. The need to protect their reputations puts young women at risk by not being prepared for safe sex by carrying condoms.

MJA 2007; 186: 513–518

Adolescence is a time when many young people experiment and start to engage in sexual activity. Individual psychological factors,[1,2] peer norms,[3] family structure,[4] neighbourhood factors,[5] poverty, school engagement[6] and cultural values about sexuality may all exert powerful influences on a teenager's decisions (or absence of decisions) about sex.[7]

The high teenage fertility rate among Indigenous women of 69 per 1000 is more than four times the rate among all Australian teenage women;[8] 20.2% of pregnant women seen at the Mums and Babies section of Townsville Aboriginal and Islander Health Services are teenagers.[9] Indigenous young people are considered a priority group for sexually transmitted infection (STI) strategies[10] and teenage pregnancy programs,[11] and have lower rates of contraceptive use than non-Indigenous young people.[12] Indigenous adolescents deal with youth transitions and sexual maturation in a society that is often hostile,[13] facing socioeconomic and educational disadvantage while working through tasks integral to forming their Indigenous cultural identity.[14] Relations between males and females, and family and cultural norms for sexual behaviour may be different in Indigenous communities compared with non-Indigenous communities, and a pattern of earlier transitions and parenthood may be encouraged.[15]

Understanding the attitudes and behaviours of young people concerning relationships, contraception and safe sex, together with broader views about aspirations and parenthood, is integral to understanding factors around teenage pregnancy.

The Townsville region of Queensland has a large Indigenous population of 16 750 (5.2% of the population);[16] 70% of these are Aboriginal and 30% are Torres Strait Islander people. We aimed to gain a broad, contextual understanding of the attitudes of Indigenous teenagers in Townsville to pregnancy and parenthood, and the relationships between attitudes, behaviours and outcomes. We report data collected from non-pregnant Indigenous teenagers in three high schools and a homeless youth shelter.

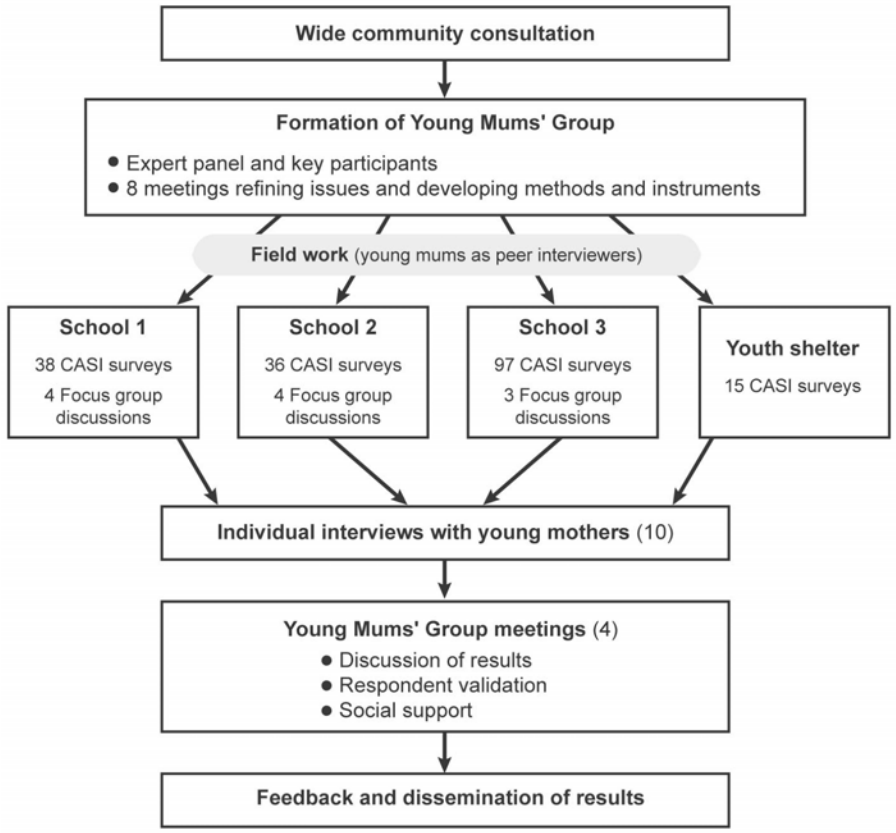
METHODS

We chose a mixed-methods study design with an inductive qualitative approach. Data collection involved a computer-assisted self-interview (CASI) and focus group interviews. The innovative consultative methods of the project are outlined in Box 1. Briefly, a Young Mums' Group operating on a participatory action model[17,18] served to design the project, and act as key participants and peer interviewers, and as a social support group.

Data were obtained between 27 April and 8 December 2004 from CASI surveys and focus group discussions with Indigenous Year 9–11 students at the three public high schools in Townsville with the highest enrolments of Indigenous students (although Year 12 students were included at one school at the request of students, staff and parents), and Indigenous residents of a homeless youth shelter. The laptop-based CASI, originally designed with input from other surveys,[19-21] used appealing multimedia technology to ask questions about home, school, general health and substance use, relationships, sex and contraception, and attitudes towards childbearing. Participants completed the CASI in privacy, but with a peer interviewer ready to assist. Focus group discussions, facilitated by an Indigenous and a non-Indigenous researcher, covered similar areas. These were held with a subgroup of survey participants in single-sex friendship groups, chosen according to principles of theoretical sampling.[22] Focus group sessions were audiotaped and transcribed in full. Consent was obtained from participants and their parents for high school students, and from participants alone for youth shelter residents.

The project received ethical approval from the James Cook University Human Research Ethics Committee, Education Queensland,

1 "U Mob Yarn Up*" project structure



* Local Indigenous slang for "let's talk about it" and the name chosen by participants for the project.
CASI = computer-assisted self-interview. ◆

and the Townsville Aboriginal and Islander Health Services Board of Directors.

Quantitative data were analysed with univariate descriptive measures and *t* tests or χ^2 tests (with continuity correction) using SPSS version 11.0 for Windows (SPSS Inc, Chicago, Ill, USA). A two-tailed *P* value of less than 0.05 was considered significant. Qualitative data were managed within NVivo qualitative data analysis software (version 1.0; QSR International, Melbourne, Vic) and analysed thematically using inductive methods based on grounded theory.[23] Triangulation, respondent validation and exploration of deviant cases were all used to strengthen our findings.[22]

RESULTS

Overall, 186 completed CASI surveys were received; 171 from the three high schools and 15 from the homeless youth shelter. There were few missing data for most variables. Uncertainty about the number of eligible Aboriginal or Torres Strait Islander students attending schools made it difficult to accurately calculate response rates. Estimated response rates for each school are listed in Box 2. We compared respondents with non-respondents at each school in terms of Year level and sex, and found no significant differences.

Eleven focus group discussions were held at the three schools; nine had between four and eight participants while two were small groups of two at the request of participants. Fifty-nine students participated in focus group discussions — 41 girls (in 8 groups) and 18 boys (in 3 groups). No focus group discussions were held at the youth shelter for logistical reasons.

One hundred survey participants (53.8%) were female, and 86 (46.2%) were male. The age range was 12–18 years (mean, 14.91 years; SD, 1.13). However, 66.3% were aged 14 or 15 years, reflecting lower Indigenous senior high school retention rates.[24,25] Almost 56% of participants were identified as Aboriginal, with smaller groups identified as Torres Strait Islander (17.8%), Aboriginal and Torres Strait Islander (20.0%) and South Sea Islander (3.8%). South Sea Islanders were included at the request of students and parents, and did not differ significantly from other participants in terms of age or ethnicity by sex.

Although few in number, youth shelter participants were significantly younger ($P = 0.004$), more likely to use marijuana (9/15; $P = 0.000$) and to be unhappy with their lives ($P = 0.000$) than school students, and were disengaged from regular formal schooling. Despite their younger age, a larger proportion were sexually active (11/15; $P = 0.051$), with a tendency to have experienced more unwanted sexual touching (6/14), and fewer had used condoms at first sexual intercourse.

Sexual intercourse

In survey responses, 84/183 participants (45.9%) reported having had sexual intercourse. Most commenced at 13–14 years of age (46/82; 56.1%), although 16 participants commenced at 12 years or younger. There were some differences between males and females in responses to the survey (Box 3). The likelihood of having had sex increased with being male (χ^2, 11.667;

2 Estimated survey response rates

	Respondents			Estimated total eligible Indigenous students*	Estimated response rate
	Male	Female	Total		
School 1	17	21	38	61 (28M, 33F)	62.3%
School 2	12	24	36	63 (28M, 35F)	57.1%
School 3†	49	48	97	172 (87M, 85F)	56.4%
Total for schools	78	93	171	296 (143M, 153F)	57.8%
Youth shelter	8	7	15	17‡ (9M, 8F)	88.2%
Overall total	86	100	186	313 (152M, 161F)	59.4%

* Figures derived from most recent high school enrolment figures for Indigenous students obtained from school Community Education Counsellors. † Year 12 included as well at school's request. ‡ Total number of residents present during our visits to the youth shelter. ◆

df = 1; $P = 0.001$), increasing age (χ^2 test for trend, 17.246; df = 2; $P = 0.000$; Box 4), increasing perceived sexual activity of the peer group (χ^2 test for trend, 40.769; df = 2; $P = 0.000$), and drinking alcohol at least weekly (χ^2, 5.865; df = 1; $P = 0.015$). A younger age of sexual initiation was associated with idealisation of parenthood ($P = 0.003$), while a later age at sexual initiation was associated with personal plans and reported parental expectation for tertiary education ($P = 0.03$ and 0.016, respectively).

Sixty-one of 83 participants (73.5%) reported having used a condom for their first sexual experience. For most (55/83; 66.3%), the first sexual experience was wanted, and most of the remainder "didn't mind", but for three young women (3.6%), it was unwanted. Thirty participants (36.1%) said their first sexual experience involved alcohol or drugs, and for 8/81 (9.9%), their first sexual partner was more than 5 years older than they were. Most respondents reported four or fewer sexual partners, but 17.1% (14/82; 11 male) had more than 12.

In the focus groups, sex was perceived as having a different role in relationships and different consequences for young women and young men (main themes summarised in Box 5). Older students were better able to resist coercion and negotiate the onset of a sexual relationship and the use of contraception. Some young people, especially the older ones, resisted the stereotypes about young women and desire, and the demonising of young men as sexual predators.

> A lot of people make out as if girls never want sex, or whatever, it's just the guys that always want sex, whereas most girls do, it's just … A lot of people make out as if the guys are always the bad ones and stuff. They are in a way, because they're boys … but a lot of chicks are, like, wanting it … (School 3, focus group 10 with 6 girls)

3 Differences between males and females in self-reported sexual behaviour and attitudes

	Females ($n = 100$*)	Males ($n = 86$*)	P†
Mean age (95% CI)	14.86 (14.64 to 15.08)	14.98 (14.74 to 15.22)	0.473
Positive responses to questions (95% CI)			
Most or almost all friends having sex	29.9% (20.8% to 39.0%)	54.8% (44.2% to 65.4%)	0.003
Ever had sex	33.7% (24.3% to 43.1%)	60.0% (49.6% to 70.4%)	0.001
First sex at age 12 years or younger	9.7% (−0.7% to 20.1%)	25.5% (13.5% to 37.5%)	0.143
Condom use at first sex‡	62.5% (45.7% to 79.3%)	80.4% (69.5% to 91.3%)	0.123
Eight or more sexual partners‡	9.7% (−0.7% to 20.1%)	39.2% (25.8% to 52.6%)	0.015
First sex was wanted or very much wanted‡	56.3% (39.1% to 73.5%)	72.5% (60.2% to 84.8%)	0.053
Enjoy sex very much or a lot‡	32.3% (15.8% to 48.8%)	68.6% (55.9% to 81.3%)	0.001
First sex involved alcohol or drugs‡	33.3% (17.2% to 49.4%)	38.0% (24.5% to 51.5%)	0.842
Unwanted sexual touching	31.1% (21.5% to 40.7%)	15.6% (7.5% to 23.7%)	0.031
Not happy or satisfied with life	25.0% (16.5% to 33.5%)	9.4% (3.2% to 15.6%)	0.018

* Denominators vary slightly because of small numbers of missing responses. † t test or χ^2 test.
‡ These questions were asked only of those who reported they had had sexual intercourse — denominators fell to a maximum of 33 for females and 51 for males. ◆

drawal. Most participants obtained advice about contraception from family and friends. The most common reported reason for not using contraception was "I don't think about it" (37/84 participants), although other reasons included "I don't think she/I will get pregnant" (15), "having sex was unexpected" (19), and "I'm gay/lesbian" (10/84 participants; 11.9%; eight male; six of these always used condoms). Despite inconsistent condom use, only three participants (two female; two from the youth shelter) reported having had an STI. In comparison, 67.9% of female participants said that at least one of their friends had been pregnant, four girls had been pregnant themselves, and five boys reported impregnating a partner.

In the focus groups, discussions reflected inconsistent contraceptive use. Students expressed some understanding about safe sexual practices, but, in practice, did not use them, especially in the context of alcohol use at parties. Barriers to contraceptive use are summarised in Box 6. Older girls often felt able to insist on condom use, but, in practice, often did not.

> I've been in the situation before where I've been under the influence of alcohol, and met up with a guy or whatever, but there has been no condom around, so, I have had unprotected sex before, I'll admit … You get really worried after it, because, like, I was drunk at the time, I didn't know what had happened or whatever … (School 3, focus group 10 with 6 girls)

For both boys and girls, avoiding pregnancy was a more salient reason for using a condom than fear of STIs, and this was related to the higher reported prevalence of pregnancies compared with known STIs in their peer groups. For girls, carrying condoms implied premeditation of sex, and thus rendered them "sluts", so it was better for sex to "just happen" in the absence of protection. Thus they preferred risking their health to protect their reputations.

Sex and contraception

In survey responses, 73 sexually active participants reported on use of hormonal contraceptives, with 19 (26.0%) always using them and 32 (43.8%) never using them. Forty-nine of 80 respondents (61.3%) always used condoms when having sex, while three never did. Seven of the 84 sexually active participants reported only using unreliable methods such as with-

4 Respondents reporting sexual intercourse by age and sex

		Participants reporting sexual intercourse			
	Number	Aged ⩽ 14 years	Aged 15 years	Aged ⩾ 16 years	P*
Female	98	6/38 (15.8%)	13/35 (37.1%)	14/25 (56.0%)	0.004
Male	84	13/31 (41.9%)	19/29 (65.5%)	18/24 (75.0%)	0.033
Total	182	19/69 (27.5%)	32/64 (50.0%)	32/49 (65.3%)	0.000

* χ^2 for trend. ◆

5 Main themes from focus groups about sexual relationships

Role of sex in relationships

- Mostly the logical next step in ongoing relationships, but frequent casual encounters in some groups, often related to alcohol use

  Participant 1: It's like when you have sex, it's not like you're just looking for something to do . . .
  Participant 2: The girls will more likely want to get to know them, like, first . . .
  Participant 1: But the boys just like to have sex, cos it's just the thing you do . . . (School 1, focus group 2 with 6 girls)

Advantages and disadvantages of sex

- Girls were unable to list advantages, but were quick to list disadvantages of sexual activity

  Participant 1: Pregnancy, illnesses, AIDS, name calls, reputation . . .
  Participant 2: Yeah, see there's a whole heap of them negatives, but there's not much positives . . . (School 2, focus group 7 with 4 girls)
- Boys listed the advantages of pleasure and the build-up of trust in relationships, and few disadvantages, but girls were not able to talk about desire

  . . . although there's a huge amount of trust needed to actually, like, have sex in a relationship, I reckon like you trust each other even more after that . . . (School 2, focus group 8 with 4 boys)

Reputation

- Boys gained positive reputations, especially among male peers, while girls were "dissed" (disrespected) and labelled as promiscuous by boys and other girls

  . . . It's different for the boys, cos they get called a stud, and all the boys praise up to them cos they slept with all these girls, but if it's a girl they get called a slut or a 'ho [whore] . . . (School 2, focus group 7 with 4 girls)
- Getting "carried away" more acceptable than pre-planning sex and contraception

Coercion in relationships

- Pressure from boys to commence sexual relationships

  Interviewer: So are the boys prepared to wait, even if they want it more?
  Participant 1: Only if they like you enough . . .
  Participant 2: Like, if they're going to hook you up for a one-night stand then, yeah, they're going to put it on you . . . (School 1, focus group 2 with 6 girls)
- Both physical and emotional coercion were salient for some girls, with some having sex to "keep the boy"

  . . . like, first they'll say they'll clobber you [if you don't have sex], or don't be mean, or I'll dump you . . . (School 1, focus group 1 with 6 girls) ◆

School-based sex education gave some students reasonable information about the mechanics of sexual relationships, but many students missed this education altogether because of "shame" (embarrassment from talking about sensitive issues or being singled out), timetabling issues or absenteeism. Many students' main sources of information were friends and magazines, and their knowledge about STIs was incomplete. Some families were good sources of information, but in others, issues to do with sex were not discussed.

> Interviewer: So it sounds like it [sex education] might have been a bit hit and miss, some got it and some didn't … [Participants: yeah] … What about talking with family about things like that?
>
> Participants: Ah, shame … my mum talks with us about it … gross, nah … I didn't even talk to mum when I went to get the pill, I took my auntie and told her to never tell mum … (School 3, focus group 9 with 8 girls)

Almost all students thought that school sex education should be yearly from Year 8, ideally in small single-sex groups, as they felt comfortable talking in small groups of their Indigenous peers.

DISCUSSION

We present a "snapshot" of the attitudes and behaviours of young Indigenous people in Townsville concerning relationships, sex and contraceptive use, providing a contextual understanding of the transition to sexual adulthood for this population.

The 46% of our sample reporting sexual intercourse and inconsistent condom use is comparable to studies involving other groups of Australian young people.[26-28] For example, a national survey of 2388 students found that 25% reported having had sexual intercourse by Year 10, and just over half by Year 12.[26] Less information is available about the sexual behaviour of Indigenous young people. The large Western Australian Aboriginal Child Health Survey found that 74.5% of Aboriginal 17-year-olds reported having had sexual intercourse, and for 48.6% this occurred before the age of 16 years. Independent associations with having had sex were age, having left school, drinking alcohol and using marijuana.[12] The slightly lower rates of sexual activity we found probably reflect our largely school-based, urban sample.

Young women were mostly concerned by unwanted pregnancy and damage to their reputations as consequences of sexual activity. The low salience of the risk of STIs for participants may represent underdiagnosis, or may be an accurate representation of prevalence in this population,[29] but both this and the relatively large proportion of Indigenous adolescents reporting a gay or lesbian orientation warrant further exploration.

Young people's knowledge about safe sex and birth control was variable, and 60% of sexually active participants reported always using condoms. The limiting factor in condom use seemed to be shame, in terms of bringing up the issue and negotiating condom use at the onset of a sexual relationship. That young womens' reputations were at risk if they carried a condom or suggested its use encouraged sexual risk behaviour. This finding has been previously reported[30,31] and poses challenges for sex education.

A strength of our project was that it was designed by a group of young Indigenous people within an Aboriginal medical service, ensuring that it was relevant to young peoples' needs and well accepted by the community. Information was gathered through innovative, youth-friendly methods with peer interviewers. A disadvantage was that, like all cross-sectional descriptive studies, we report self-reported rather than actual behaviours of young people. We were also not able to measure changes in their self-reported behaviour over time. High student absenteeism meant that our response rates may be underestimates. This sample is not representative, and our findings are not generalisable, but our study does offer a unique insight into the attitudes and behaviours of a group of understudied regional Indigenous teenagers, and is likely to be relevant in work with similar groups elsewhere.

Indigenous teenagers, like other teenagers, are experimenting with sex, but not practising safe sex reliably. They need access to comprehensive information about sex, relationships, contraception and infections in a safe, shame-free environment.[11,15]

6 Barriers to contraceptive use from focus group discussions

Getting "carried away"

- Not thinking about contraception (usually in the context of alcohol use at parties)

. . . but sometimes you just get going and just don't think about it . . . (School 3, focus group 9 with 8 girls)

The "shame" factor

- Limited skills for negotiating condom use, and embarrassed by discussions about sexual relationships (including standard school sex education)

. . . cos if you started talking before, and then you started doing anything it's, like, just be embarrassing . . . it's better just to go on . . . cos then you don't have to, like, talk about it . . . (School 3, focus group 9 with 8 girls)

- Embarrassed about seeing a health care professional or buying condoms

Damage to reputation for girls if they carry condoms, implying premeditation of sex

Interviewer: What do you think if a girl has a condom?
Participants: Ooh, she's dirty, she's hungry . . . ooh, she slut . . . (School 3, focus group 11 with 8 boys)

Limited knowledge about hormonal contraceptives and sexually transmitted infections

Limited access to hormonal contraceptives

- Includes issues of access to doctors, cost and perceived side effects

Boys' dislike of condoms (prefer to "go bareback")

Guys think it's the girl's choice . . . but within truth, we sometimes sleep without a franger, cos you find more girls want guys to use them, but then you find girls that are too scared to confront guys to use it . . . then you find the guys that don't want to use it because they feel comfortable without using it . . . (School 2, focus group 7 with 4 girls)

Desiring a pregnancy ◆

Poverty, family dysfunction and educational disadvantage for young Indigenous people may combine to make the consequences of early sexual initiation or pregnancy less cogent, especially for those disengaged from schooling. We cannot assume that early parenthood is "natural" for Indigenous young people, and they must have access to the same opportunities and reproductive rights as other young Australians.[15]

Targeted school-based programs in small, single-sex groups might be a good way to reach Indigenous students, but alternative approaches must be found to reach those who have disengaged from the education system. Programs must focus broadly on communication, relations between males and females, and healthy sexual relationships, in addition to diseases and pregnancy, to help young Indigenous people create more egalitarian and thus safer sexual relationships.

ACKNOWLEDGEMENTS

We thank all the young Indigenous people who participated so openly in the project, and in particular, the Young Mums who gave so generously of their time and experience in making this project a success. Thanks to staff and the Board of Directors of Townsville Aboriginal and Islander Health Services and staff of participating schools. The project was supported by a National Health and Medical Research Council Public Health Postgraduate Scholarship (Grant ID: 233516), and funding from the General Practice Education and Training Registrar Scholarship and Research Fund, and the Primary Health Care Research, Education and Development Program Queensland.

COMPETING INTERESTS

None identified.

AUTHOR DETAILS

Sarah L Larkins, MB BS, MPH, FRACGP, General Practitioner and NHMRC Doctoral Fellow[1,2]
R Priscilla Page, CertIII, Aboriginal Health Worker and Development Officer, Indigenous Health[3]
Kathryn S Panaretto, MB BS, MPH, Senior Medical Officer[1]
Robert Scott, CertSexualHealthCounselling, Sexual Health Worker[1]
Melvina R Mitchell, EN, Aboriginal Health Worker[1]
Valerie Alberts, MSocPol, GradCertTeaching, Associate Lecturer and Cultural Educator, School of Medicine[2]
P Craig Veitch, DipAppSci(RT), BA, PhD, Professor of Rural Health, School of Medicine[2]
Suzanne McGinty, DipEd, MA, PhD, Associate Professor, School of Indigenous Australian Studies[2]

1 Townsville Aboriginal and Islander Health Services, Townsville, QLD.
2 James Cook University, Townsville, QLD.
3 Tropical Medical Training, Townsville, QLD.

Correspondence: sarah.larkins@jcu.edu.au

REFERENCES

1 Ramrakha S, Caspi A, Dickson N, et al. Psychiatric disorders and risky sexual behaviour in young adulthood: cross sectional study in birth cohort. *BMJ* 2000; 321: 263-266.
2 DiClemente RJ, Wingood GM, Crosby RA, et al. A prospective study of psychological distress and sexual risk behavior among black adolescent females. *Pediatrics* 2001; 108: e85.
3 Lear D. Sexual communication in the age of AIDS: the construction of risk and trust among young adults. *Soc Sci Med* 1995; 41: 1311-1323.
4 Lagana L. Psychosocial correlates of contraceptive practices during late adolescence. *Adolescence* 1999; 34: 463-482.
5 Billy JOG, Brewster KL, Grady WR. Contextual effects on the sexual behavior of adolescent women. *J Marriage Fam* 1994; 56: 387-404.
6 Turner KM. Young women's views on teenage motherhood: a possible explanation for the relationship between socio-economic background and teenage pregnancy outcome? *J Youth Studies* 2004; 7: 221-238.
7 Shoveller JA, Johnson JL, Langille DB, et al. Socio-cultural influences on young people's sexual development. *Soc Sci Med* 2004; 59: 473-487.
8 Australian Bureau of Statistics. Births, Australia, 2005. Canberra: ABS, 2005. (ABS Cat. No. 3301.0.) http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3301.02005?OpenDocument (accessed Apr 2007).
9 Panaretto KS, Lee H, Mitchell M, et al. Impact of a collaborative shared antenatal care program for urban Indigenous women: a prospective cohort study. *Med J Aust* 2005; 182: 514-519.
10 Mindel A, Kippax S. A national sexually transmissible infections strategy: the need for an all-embracing approach. *Med J Aust* 2005; 183: 502-503.
11 Skinner SR, Hickey M. Current priorities for adolescent sexual and reproductive health in Australia. *Med J Aust* 2003; 179: 158-161.
12 Zubrick S, Silburn S, Lawrence D, et al. The Western Australian Aboriginal Child Health Survey: the social and emotional wellbeing of Aboriginal children and young people. Perth: Curtin University of Technology and Telethon Institute for Child Health Research, 2005. http://www.ichr.uwa.edu.au/waachs/publications/volume_two.lasso (accessed Oct 2006).
13 Mellor D. Contemporary racism in Australia: the experiences of Aborigines. *Pers Soc Psychol Bull* 2003; 29: 474-486.
14 Groome H. Towards improved understandings of Aboriginal young people. *Youth Studies Australia* 1995; 14(4): 17-21.
15 Arabena K. Preachers, policies and power: the reproductive health of adolescent Aboriginal and Torres Strait Islander peoples in Australia. *Health Promot J Austr* 2006; 17: 85-90.
16 Australian Bureau of Statistics. Population distribution, Indigenous Australians, 2001. Canberra: ABS, 2002. (ABS Cat. No. 4705.0.) http://www.abs.gov.au/Ausstats/abs@.nsf/lookupMF/14E7A4A075D53A6CCA2569450007E46C (accessed Apr 2007).
17 Tsey K, Patterson D, Whiteside M, et al. Indigenous men taking their rightful place in society? A preliminary analysis of a participatory action research process with Yarrabah Men's Health Group. *Aust J Rural Health* 2002; 10: 278-284.

18 Cass A, Lowell A, Christie M, et al. Sharing the true stories: improving communication between Aboriginal patients and healthcare workers. *Med J Aust* 2002; 176: 466-470.
19 Adolescent Health Research Group. New Zealand youth: a profile of their health and wellbeing. Auckland: University of Auckland, 2003.
20 Holmes W, Stewart P, Garrow A, et al. Researching Aboriginal health: experience from a study of urban young people's health and well-being. *Soc Sci Med* 2002; 54: 1267-1279.
21 Condon JT, Donovan J, Corkindale CJ. Australian adolescents' attitudes and beliefs concerning pregnancy, childbirth and parenthood: the development, psychometric testing and results of a new scale. *J Adolesc* 2001; 24: 729-742.
22 Mays N, Pope C. Qualitative research in health care: assessing quality in qualitative research. *BMJ* 2000; 320: 50-52.
23 Strauss AL, Corbin J. Basics of qualitative research: techniques and procedures for developing grounded theory. 2nd ed. Thousand Oaks, Calif: Sage Publications, 1998.
24 Australian Bureau of Statistics. Schools, Australia, 2005. Canberra: ABS, 2005. (ABS Cat. No. 4221.0.) http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4221.02005?OpenDocument (accessed Apr 2007).
25 Hill A, Dawes G, Boon H, et al. Investigating the factors that lead to disengagement of students in the Upper Ross. Townsville: James Cook University, Feb 2005.
26 Smith A, Agius P, Dyson S, et al. Secondary students and sexual health 2002. Summary of findings from the 3rd National Survey of Australian Secondary Students, HIV/AIDS and Sexual Health. 2002. http://www.latrobe.edu.au/arcshs/scdry_stdnts_sxl_hlth.html (accessed Apr 2007).
27 Australian Institute of Health and Welfare. Australia's young people 2003: their health and wellbeing. Canberra: AIHW, 2003. (AIHW Report No. PHE-50.) http://www.aihw.gov.au/publications/index.cfm/title/9569 (accessed Apr 2007).
28 Bond L, Thomas L, Toumourou J, et al. Improving the lives of young Victorians in our community: a survey of risk and protective factors. Melbourne: Centre for Adolescent Health, 2000.
29 Panaretto KS, Dallachy D, Manessis V, et al. Cervical smear participation and prevalence of sexually transmitted infections in women attending a community-controlled Indigenous health service in North Queensland. *Aust N Z J Public Health* 2006; 30: 171-176.
30 Hillier L, Harrison L, Warr D. "When you carry condoms all the boys think you want it": negotiating competing discourses about safe sex. *J Adolesc* 1998; 21: 15-29.
31 Wyn J. Young women and sexually transmitted diseases: the issues for public health. *Aust J Public Health* 1994; 18: 32-39.

(Received 6 Feb 2007, accepted 9 Apr 2007) ❑