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This is a pre-copyedited, author-produced PDF of an article accepted for publication in *Sexual Health* following peer review. The definitive publisher-authenticated version [Scott, R, Foster, R, Oliver, L, Olsen, A, Mooney-Somers, J, Mathers, B, Micallef, J, Kaldor, J and Maher, L (accepted 22/10/2014). Sexual risk and health care seeking behaviour in young Aboriginal and Torres Strait Islander people in north Queensland. *Sexual Health*] will be available online soon. A link to the published version will be added here as soon as it becomes available.

Sexual risk and health care seeking behaviour in young Aboriginal and Torres Strait Islander people in north Queensland

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Abridged title: Sexual health of Indigenous Australian youth

ABSTRACT

Background: Compared to non-Indigenous Australians, Aboriginal and Torres Strait Islander people have higher rates of sexually transmitted infections (STI). We sought to identify the sexual risk and health care seeking behaviours service utilisation of young Aboriginal and Torres Strait Islander people in a regional Australian setting.

Methods: Cross-sectional survey of 155 young Aboriginal and Torres Strait Islander people (16 to 24 years) in Townsville.

Results: Most participants (83%) reported ever having had sex with a median age of 15 years at first sex, ranging from 9 to 22 years. While young men reported more sexual partners in the last 12 months than young women, they were also more likely to report condom use at last casual sex (92% vs. 68%, $p=0.006$). Young women were significantly more likely than young men to report never carrying condoms (35% vs. 16%) however more likely to have had STI testing (53% vs. 28%, $p=0.004$). Of those reporting previous STI testing 29% reported ever being diagnosed with an STI.

Conclusions: Our sample of young Aboriginal and Torres Strait Islander people reported an early age at first sex, variable condom use, and low uptake of STI testing. The high prevalence of self-reported STI diagnoses indicate a need for opportunistic sexual health education and efforts designed to promote the uptake of STI screening in this group.

Keywords: Aboriginal and Torres Strait Islander, young people, risk behaviour, sexually transmitted infections, regional

INTRODUCTION

Aboriginal and Torres Strait Islander people have poorer health outcomes than non-Indigenous Australians. (1,2) Among a number of areas of health disparity, sexually transmitted infections (STIs) stand out, based on notified diagnoses of chlamydia, gonorrhoea and syphilis. (3) Barriers to sexual health among young Aboriginal and Torres Strait Islander people include cultural factors such as shame and difficulty with open discussion of sex (4), negative attitudes to condoms (5,6) and alcohol use (6). More general determinants of poor health include low socioeconomic status (7), remoteness and the adequacy of services (8). The delivery and uptake of sexual health services by young Aboriginal and Torres Strait Islander people could be enhanced by a greater understanding of their sexual behaviours, attitudes to safe sex and current use of health services. This paper aims to explore these specific factors in a regional community with the intention of directing future health promotion and intervention strategies.

Townsville is one of the largest regional cities in Australia with 6% of residents identifying as Aboriginal or Torres Strait Islander or both (9), compared to 2.5% nationally (10). The Townsville Aboriginal Islander and Health Service (TAIHS) is a community-controlled health service, established in 1974 that provides comprehensive primary health care and community services.

Previous research addressing the sexual and reproductive health of young Aboriginal and Torres Strait Islanders in Townsville has found self-reported rates of consistent condom use around 60%, generally consistent with other populations of young people in Australia (5), but a prevalence of chlamydia that is considerably higher. (11)

This paper presents findings from work funded via a research grant awarded by National Health and Medical Research Council, through the International Collaborative Indigenous Health Research Partnership (ICIHRP), which had the overall goal of examining the role of resilience in protecting Indigenous populations against sexually transmitted and blood-borne infections. (12,13)

METHODS

A cross-sectional survey was developed by TAIHS staff in collaboration with researchers based at the Kirby Institute at the University of New South Wales.

Five young (<24 years), local Aboriginal and Torres Strait Islander people were employed and trained in research ethics and methodology. They assisted in the development of the survey questionnaire and data collection.

The survey used a pre-coded, scannable, interviewer-administered questionnaire with items including socio-demographic characteristics including location of usual residence, recent and past sexual activity, alcohol and other drug use, history of selected health outcomes and health service utilization. Items were derived from the Toronto Teen Survey (14), the Australian Study of Health and Relationships (15), the Australian Secondary Students Survey HIV/AIDS and Sexual Health (16) and the Child and Youth Resilience Measure (CYRM) (17).

Inclusion criteria were being Aboriginal and/or Torres Strait Islander and aged 16 to 24 years. Data collection took place during a two week period in July 2010 at the Townsville Show, sporting events, shopping centres, a TAIHS open day and a National Aborigines and Islanders Day Observance Committee (NAIDOC) parade and community event.

Potential participants were approached by research team members and provided with information on the study. Those interested and eligible could choose an interviewer who was male or female, and Indigenous or non-Indigenous. Signed, informed consent was obtained from all participants. Questionnaires took 20 to 30 minutes. Participants received \$AUD20 and were offered sexual and reproductive health information and clinical referral if needed.

The study was approved by the University of New South Wales Human Research Ethics Committee (HREC 09370) and the TAIHS Board of Directors.

Descriptive statistics were calculated using Microsoft Excel. IBM SPSS (version 21) was used to test for differences between male and female participants with Chi square tests, student t tests and Whitney-Mann u tests where appropriate. A p-value of less than 0.05 was considered statistically significant.

RESULTS

A total of 155 people completed the questionnaire, nearly half (49%) were female and 98% were heterosexual. Mean age was 18 years, ranging from 16 to 24 years. Sixty five percent were single at the time of interview. Nearly a fifth (19%) had children. The majority of participants (89%) resided in Townsville.

More than half (55%) were currently enrolled in secondary or further education. Men were significantly more likely than women to have been in prison (16% vs. 5%, $p=0.037$).

Half the sample smoked, and just over a third (36%) reported heavy drinking at least weekly (six or more standard drinks on one occasion). Almost a third (32%) reported using cannabis and 5% reported the use of other illicit drugs in the past year.

Most participants (83%) had had sex (Table 1). Median age at first sex was 15 years ranging from 9 to 22 years. Men reported earlier first sex and more partners in the past year than women. Three-quarters of sexually active participants reported carrying condoms at least 'sometimes'. Of those who had ever engaged in casual sex ($n=92$), 82% used a condom at last encounter. Young men were more likely than women to report condom use with their last casual partner (92% vs. 68%, $p=0.006$). The main reasons for not using a condom included partner-related reasons (32%) such as trust in partner and partner not liking condoms, as well as condom not being available (23%) and unplanned sexual intercourse (18%) (Figure 1).

Table 1. Sexual risk and protective behaviours among those who have ever had sex

<i>N</i> ^A	Total 129 <i>n</i> (%, 95% CI)	Male 69 <i>n</i> (%, 95% CI)	Female 60 <i>n</i> (%, 95% CI)	P-value

Median age at first sex (years)	15	15	16	0.007*
Range (years)	9-22	9-18	12-22	
Number of sexual partners in the last 12 months				0.027*
No partners	4 (3, 0-6)	1 (2, -1-5)	3 (5, -1-11)	
1 partner	51 (41, 32-50)	20 (31, 20-42)	31 (53, 40-65)	
2 partners	15 (12, 6-18)	7 (11, 3-18)	8 (14, 5-22)	
3 to 4 partners	19 (15, 9-22)	12 (19, 9-28)	7 (12, 4-20)	
5 or more partners	35 (28, 20-36)	25 (39, 27-50)	10 (17, 7-27)	
Number of current regular sexual partners				0.689
No regular partners	59 (46, 37-55)	33 (48, 36-60)	26 (44, 31-57)	
1 regular partner	56 (44, 35-52)	28 (41, 29-52)	28 (47, 35-60)	
2 or more regular partners	13 (10, 5-15)	8 (12, 4-19)	5 (8, 1-16)	
Ever had sex with a casual partner	92/122 (75, 68-83)	51/63 (81, 71-91)	41/59 (69, 58-81)	0.206
Number of casual sexual partners in the last 12 months				0.079
No casual partners	47 (37, 28-45)	23 (34, 23-45)	24 (40, 28-52)	
1 casual partner	28 (22, 15-29)	11 (17, 7-25)	17 (28, 17-40)	
2 or more casual partners	53 (41, 33-50)	34 (50, 38-62)	19 (32, 20-43)	
Condom used last time sex was with a casual partner^B	75/92 (82, 74-90)	47/51 (92, 85-100)	28/41 (68, 54-83)	0.006*
Frequency of carrying condoms				0.012*
Never	32 (25, 17-32)	11 (16, 7-25)	21 (35, 23-47)	
Often or sometimes	50 (39, 30-47)	26 (38, 26-49)	24 (40, 28-52)	
Always	47 (36, 28-45)	32 (46, 35-58)	15 (25, 14-36)	
Ever tested for STIs	51 (40, 31-48)	19 (28, 17-38)	32 (53, 41-66)	0.004*
Tested in past 12 months	43 (33, 25-42)	15 (22, 12-32)	28 (47, 34-59)	0.005*
Location of the last STI test^C				0.474
Aboriginal medical service	17/48 (35, 22-49)	9/18 (50, 27-73)	8/30 (27, 11-42)	
Sexual health service	3/48 (6, -1-13)	1/18 (6, -5-16)	2/30 (7, -2-16)	
General practice	19/48 (40, 26-53)	5/18 (28, 7-48)	14/30 (47, 29-65)	
Other ^D	9/48 19, 8-30)	3/18 (17, -1-34)	6/30 (20, 6-34)	

Diagnosed with a STI^C	15/51 (29, 17-42)	2/19 (11, -3-24)	13/32 (41, 24-58)	0.028*
Additional sexual health services ever received from a doctor or other health provider				
Information on safe sex	86 (67, 59-75)	44 (64, 52-75)	42 (70, 52-76)	0.454
Information on condoms	59 (46, 37-54)	28 (41, 29-52)	31 (52, 39-64)	0.207
Free condoms	74 (57, 49-66)	44 (64, 52-75)	30 (50, 37-63)	0.115
Contraception advice or prescription	-	-	30 (50, 37-63)	-
Papanicolaou (Pap) smear ^E	-	-	1/36 (3, -3-8)	-
Attended TAIHS for any health care	66 (51, 43-60)	38 (55, 43-67)	28 (47, 34-59)	0.926

*Significant at 0.05 level

^A Denominators vary slightly due to small numbers (≤ 5) of 'declined', 'not sure' or 'don't know' responses.

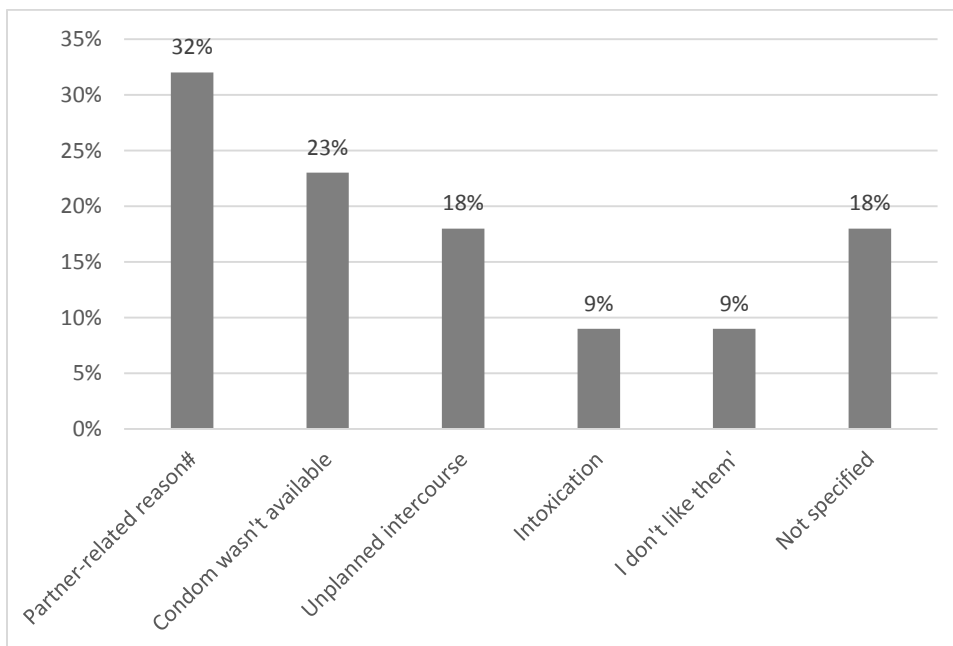
^B Participants who had never engaged in casual sex were excluded.

^C Participants who had never been tested for STIs were excluded.

^D Other locations included specialist doctor, hospital or emergency department, prison or juvenile detention centre, and alcohol or drug treatment facility.

^E Participants who were less than 18 years were excluded.

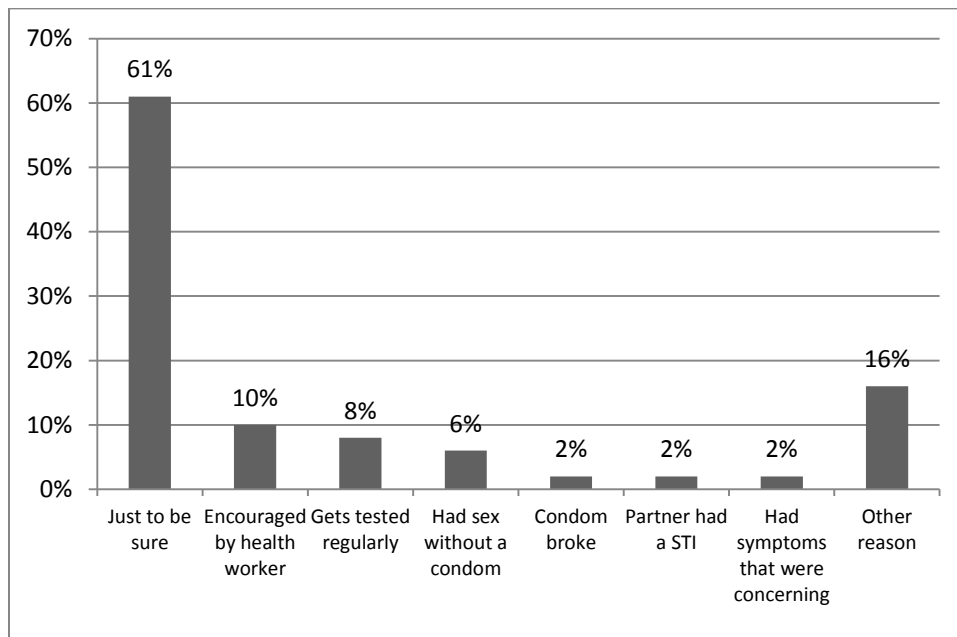
Figure 1. Reported reasons condoms were not used during last sexual encounter with casual partner (n=22)*



*Multiple responses were permitted. #Partner related reasons included partner not liking condoms, participant trusting partner, participant and partner tested for STIs/HIV, participant knew partner's history, trying to fall pregnant and lesbian partner.

Two-fifths of sexually active participants (40%) had ever been tested for an STI, with women more likely than men (53% vs. 28%, $p=0.004$), (Table 1). The main reasons for an STI test were 'just to be sure' (61%) and 'a health worker encouraged me to get tested' (10%), with very small numbers reporting being tested due to symptoms (2%), or a partner with a STI (2%) (Figure 2). Of participants tested, most reported the last occasion was at a general practice (39%) or Aboriginal medical service (35%). Few (6%) had last attended a sexual health service for testing. Among participants who had been tested, women were far more likely to report a STI diagnosis than men (41% vs. 11%, $p=0.028$).

Figure 2. Reported reasons why last sexually transmitted infection (STI) test was performed (n=51)*



*Multiple responses were permitted

Of those participants who had ever had sex, most (67%) participants had received information on safe sex. Half (50%) of the women had received contraception information or prescription from a health professional. A small proportion (3%) of the 36 eligible women (sexually active and over 18 years) had been screened for cervical cancer. Fifty-one percent of participants had attended TAIHS.

Virtually all respondents (97%) identified Aboriginal medical services as a trusted source of sexual health information. School sex education programs and pamphlets were also trusted (84% and 72% respectively), while the internet was less so (29%).

DISCUSSION

Our study has shown variability in patterns of condom use and carriage by young Indigenous people. There are also low rates of information regarding safe sex, in particular condom use, delivered by health services to this cohort. Study participants demonstrated low rates of testing for STIs.

Our study has several methodological limitations. The non-random selection of the sample means that results may not be generalisable to the broader population of young Indigenous people. While we attempted to minimise social desirability bias through the use of peer interviewers (18-20), the relatively close-knit Indigenous community meant that peer interviewers were known to some participants which may have impacted on both social desirability bias and willingness to participate. The use of self-reported data may also be subject to recall bias. (21)

Studies reporting age at first sex specifically in Indigenous youth across Australia are limited. Studies of the general Australian population (22-26) have reported median ages at first sex as 16 to 18 years compared to our study which reported 15 years as the median age at first sex. The GOANNA study, a large multicentre survey of young Indigenous people's sexual knowledge and behaviours, reported a similar median age at first sex to our study. (27) This is concerning as age at first sex of less than 16 years has been associated with risky sexual behaviours such as multiple lifetime sexual partners, and inconsistent condom use. (26)

The men in our study were more likely than the women to carry and to use condoms. This gender difference in condom use has previously been demonstrated for young Indigenous people. (5, 27) Young Indigenous women have reported greater stigma associated with carrying condoms than men (5,6) yet both genders experience embarrassment and shame with publicly accessing condoms (6, 28). There is inconsistent use of condoms among young people in the general population. (16) Similar reasons for not using condoms have been reported by Australian men, such as the use of hormonal contraception and trusting their partner's sexual health status. (28) Misconceptions about partners' expectations regarding condoms can also influence the acceptability of their use. (29) There remains a need to improve the sexual health knowledge of young Indigenous people (30) so that they are more inclined to engage in protective behaviours such as condom use. Community education initiatives would assist in de-stigmatising sexual health (31) allowing for an open dialogue between young people and service providers regarding preventative practices. A number of factors have previously been identified that impact on the effectiveness of sexual health promotion programs in Australia, such as lack of community engagement and cultural sensitivity. (32) These issues need to be considered for future initiatives.

Our study participants engaged in substance use at higher rates compared to Australian youth in general. The 2013 National Drugs Strategy Household Survey reported 19% of young Australians smoked cigarettes compared to half of our study sample. (33) Similarly about a fifth (21%) of young Australians engage in risky alcohol consumption compared to 36% in our study. (33) A significant proportion (32%) of our cohort had used at least one illicit substance in the past year. The same national survey found that 27% of 20-29 year old Australians and 18% of 14-19 year olds had used at least one illicit substance over the same period. (33) Intoxication has been linked to risky sexual behaviours. (27, 28) There is evidence that smoking in particular is linked to unprotected casual intercourse in young people. (34)

The proportion (60%) of sexually active participants never tested for STIs was higher than the proportion (39%) reported in a recent survey of 16 to 30 year old Indigenous people. (27) For young people attending general practices in Australia less than 10% are tested for the most prevalent STI, chlamydia. (35) Higher rates of STI testing in women have been demonstrated

(27,36) and may reflect greater health service utilisation by young women (37,38), specifically for family planning advice and antenatal care, which incorporate sexual health assessments. The lower uptake of STI testing among young men is of concern, although they have demonstrated a preference to attend AMSs for testing over general practices. This finding supports AMS-based initiatives to engage young Indigenous men in regular testing. Age-based screening programs for STIs are acceptable to young women, particularly if a sexual history is not explored (31), and could also be considered for young men. Intensive population-based screening programs, such as mass annual screening events, have also proven effective for engaging young Indigenous people in STI testing. (39) Community engagement and material incentives were identified as enablers for recruitment to these programs. (39) Opportunistic testing is a more feasible option (36) and can be implemented into routine care with appropriate support. Health promotional activities in schools, community service venues and sports clubs is another strategy to increase the uptake of STI testing. (40). Testing for STIs outside of health services has been shown to result in high participation rates due to the more comfortable settings as well as access to peer support, although start-up costs and ongoing sustainability need to be considered. (40)

The high reported level of trust in Aboriginal medical services (AMSs) reported by our participants echoes recent research with young Indigenous people (41) and suggests a change in attitudes, and possibly health service cultures since the 1990s when Aboriginal and Torres Strait Islander respondents described avoiding AMSs for health care because of shame or embarrassment (42-44). Given the comparatively lower level of trust in internet-based sexual health information reported by our sample and in other surveys (45), the role of AMSs in providing sexual health education is endorsed (46). It is vital that safe sex messages and the value of regular testing are promoted by health services to increase the level of engagement by young Aboriginal and Torres Strait Islander people with sexual health. Embedding opportunistic testing into routine clinical care, establishing non-clinical locations for testing and offering incentives are possible strategies to improve the uptake of STI testing for this population.

ACKNOWLEDGEMENTS

We thank the study participants. We would also like to thank TAIHS for assistance in recruitment and training of the young researchers and management of the project. Special thanks to James Sambo, Anjelica Santo and Jamahl Ross, for their assistance with recruitment and data collection, and Libby Topp, Michael Wood and Ciaran Fawley for their assistance with data analysis, research and presentation.

This study was funded by the National Health and Medical Research Council (NHMRC 361621). The Indigenous Resiliency Project was funded by the International Collaborative Indigenous Health Research Partnership (ID: 361621), a trilateral partnership between the National Health and Medical Research Council of Australia, the Canadian Institutes of Health Research, and the Health Research Council of New Zealand. The Kirby Institute is core-funded by the Australian Government Department of Health and Ageing. Lisa Maher, Bradley Mathers and John Kaldor are supported by NHMRC Fellowships.

This paper is written on behalf of the Indigenous Resiliency Project Australian Steering Committee: Robert Scott, Regina Foster and Dr Lisa Oliver (Townsville Aboriginal and Islander Health Service), Barbara Henry and Robyn Williams (Derbarl Yerrigan Health Service), Edward

Wilkes, Maurice Shipp, and Dennis Gray (National Drug Research Institute, Curtin University), John Kaldor, Lisa Maher and Bradley Mathers (The Kirby Institute) and independent investigators Chris Lawrence and Sandra Eades.

CONFLICTS OF INTEREST

No conflicts of interest exist.

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