

Risky Behaviours, or not? Sex and the Mining Boom

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Introduction

Recent growth in the FIFO/DIDO model of mining in Australia has led to concerns about the adverse health and psychosocial impacts on mining employees and their partners. Although a number of studies have reported on alcohol use in mining populations^{1,2,3} we know little about the sexual practices, risk taking behaviours and transmission of sexually transmitted infections (STIs) in mining populations.

Methods

A cross-sectional survey containing 49 questions was administered to a convenience sample (n=444) of male miners working in Queensland, Australia. Specific items related to sex and relationships included type and frequency of sexual relationships, type and number of partners, condom use, sexual experience overseas, payment for sex, testing for STIs and HIV, reasons for undertaking a test, diagnosis with an STI, self report of symptoms suggestive of an STI, perceived risks and concern of becoming infected.

Results

DIDO/FIFO status was not associated with any differential sexual risk taking behaviours, except for an increased probability of reporting ever being diagnosed with an STI; 10.8% of DIDO/FIFO respondents versus 3.6% of others. Lower levels of sexual risk taking were associated with increasing age, and men reporting relationships, with the effect of marital status being stronger than age for all forms of risk taking. Given that older men were more likely to be in a permanent relationship ($r=.27$), it appears likely that marital status mediates the effect of age on many forms of sexual risk taking. Those with trade qualifications or reporting higher levels of alcohol consumption were more likely to combine sex with alcohol, report multiple partners, and payment for sex; this group also self reported higher levels of previous STIs.

Table 1. Selected demographic and sexual risk taking characteristics of male miners.

Characteristic	Group	
	DIDO/FIFO	Residential
Median Age (Years)	38	39
Educational level (%)		
Up to year 12	35.7	33.3
Trade qualified	43	39.7
Tertiary degree or higher	21.3	27
Marital status (%)		
Defacto/married	72.3	62.1
Single	27.7	37.9
Sexual behaviours (% with 95% CI)		
Condom use last time had sex	20 (16.0, 24.9)	24.9 (18.4, 35.4)
Sex with stranger whilst overseas (last 12 months)	11 (9.3, 16.7)	12 (5.9, 18.4)
Ever paid for sex	5.1 (3.3, 8.5)	5.4 (2.2, 11.8)
Ever been diagnosed with an STI	10.8 (7.7, 14.7)	3.6 (1.2, 9.5)
Worried about contracting HIV	11.4 (8.3, 15.4)	16.2 (11.6, 26.7)
Chance of contracting STI (next 12 months)	7.8 (2.7, 13.0)	6.3 (5.2, 11.4)
Mean number of sexual partners in past 12 months	1.85 (1.56, 2.15)	2.2 (1.54, 2.87)

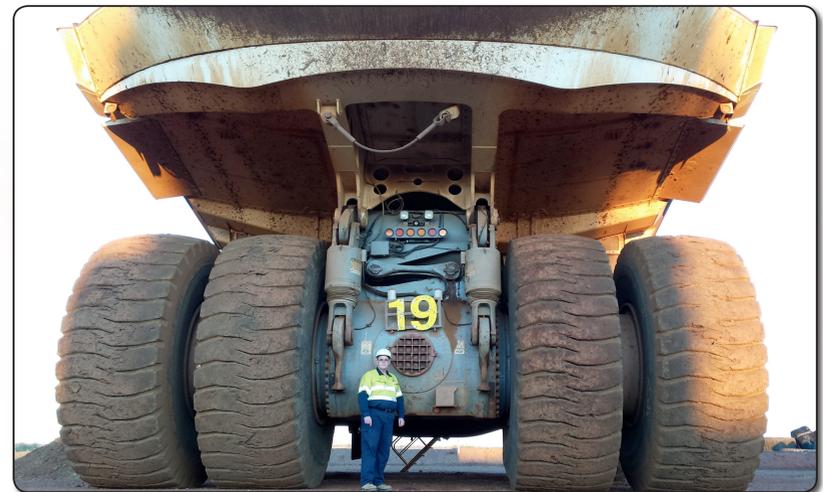


Table 2. Bivariate correlations between demographic/alcohol use variables and sexual behaviours.

FIFO/DIDO	Education			Age	Alcohol	
	yr.12	Trade	Tert.		Short term harm	Long term harm
Freq. sex (reg.part.)						
Freq. sex (cas. part.)	.15		-.27	-.12		
Freq. alcohol/sex (reg. part)		.18		-.34	.27	.18
Freq. alcohol/sex (cas. part)			.16	-.28	.16	.33
Freq. condom/sex (reg. part)				-.42	.15	
Freq. condom/sex (cas. part)				-.76	.20	.20
Multiple partners	-.19	.22		-.77	-.28	.19
Condom use last time				-.41	-.40	
Overseas (OS) last 12m	-.20		.25			
Total sex partners OS**	-.19			-.26	-.21	
Sex with strangers OS**				-.87	-.39	
Sex with sex-workers OS**		.37		-.71		
Sex with reg. partner OS**			.21	.67	.25	
Sex with others OS**	-.48		.25	-.69		
Paid for sex		.24		-.53		.28
Ever diagnosed with STI	.30	-.22	.25	-.41	-.19	
Chance STI next 12m				-.36		
Last general medical test	-.17			-.36	-.27	
Last tested for HIV	-.20		.11	-.23	-.19	
Number STI symptoms				-.36		
Worry about HIV				-.52	-.25	

Correlations with $p>.05$ suppressed.

Polyserial correlations applied to correlations for age, polychoric otherwise

* Denotes married/De facto relationship

**Correlations computed only for those participants overseas during the last 12 months (N=169)

Freq, Frequency of; reg.part., regular partner; cas.part., casual partner; alcohol/sex, consumed alcohol before sex; condom/sex, used a condom during sex; OS, overseas

Conclusion

Our results appear to counter anecdotal evidence that FIFO/DIDO miners engage in higher sexual risk behaviours and suggest that a more nuanced approach may be required in targeting STI/HIV public health programs within the mining industry.

References

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