

## Do Australian female commercial sex workers still harbour sexually transmissible infections?

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For at least the past few centuries, female commercial sex workers (CSWs) have been viewed by governments, churches, and much of the public as spreaders of sexually transmissible infections (STIs), and all manner of sanctions – including criminal ones – have been aimed at this workforce, often with no evidence that such measures were effective from a public health perspective. The HIV era has more recently sharpened the focus on sex workers around the globe, with good evidence that sex work can indeed be one of the many drivers of increasing rates of HIV incidence in a population.

With this in mind, programs that aim to reduce high STI – including HIV – rates in CSWs in resource-poor settings have been studied and shown to be effective.<sup>1,2</sup> Australia used to see high rates of bacterial STIs in CSWs, but the days of 10% of brothel workers contracting gonorrhoea each week in the course of their employment, so eloquently described by Donovan in 1984,<sup>3</sup> seem but a distant part of a colourful history. Licensing – or in the case of the state of New South Wales – decriminalisation of sex work, coupled with high levels of condom usage by CSWs, and community-based health promotion, have been shown to be highly effective in reducing the STI burden among this vulnerable population. This decriminalised environment has many other advantages for the workers, quite apart from helping to reduce the burden of STIs.

The disadvantages of working in an *illegal* setting in Australia still remain, however. A recently-published study<sup>4</sup> looking at 247 female CSWs in the state of Queensland (where there is a mixture of legal licenced brothels, legal private sole operators, and illegal street-based sex work) showed few differences in the physical health of the women from the different industry sectors, but the illegal workers were four times more likely to report poor mental health. It is not inconceivable that many of these women would find it difficult, if not impossible, to find regular work in the legal industry.

These same authors (plus two more of their colleagues) found little variation in self-reported lifetime prevalence of STIs among these 247 CSWs, although licenced brothel workers were less likely to have reported ever having gonorrhoea or pubic lice.<sup>5</sup> A group of 185 of their clients found that clients accessing illegal services were more likely to report having had an STI in their lifetime than were those recruited through licenced brothels and licenced private operators – this finding by itself, however, may say more about the clients than the workers! Studies of street-based sex workers in New South

Wales<sup>6</sup> and Victoria<sup>7</sup> did show a greater risk for sexual health problems in this vulnerable, and – thanks to decriminalisation – increasingly less-representative population of CSWs.

In contradistinction, Lee *et al.*<sup>8</sup> showed a low incidence of STIs in CSWs in a decriminalised and regulated environment and found that most infections were in fact related to sexual partners outside of work. A review of *Chlamydia trachomatis* prevalence in Australia<sup>9</sup> found an overall mean estimate of 3.3% for female attendees of sexual health and related clinics, and the same mean estimate for sex workers. Interestingly, adolescents and young adults had a higher mean estimate at 5.6%. Thus, it would appear that the majority of Australia's female CSWs, who by and large work in a decriminalised environment, no longer have the problems with regards to STIs that were present in the past.

At first glance, then, the study by Kakar and colleagues<sup>10</sup> in this edition of *Sexual Health* is worrying. They found a disturbingly high level of STIs in female CSWs in the western suburbs of Sydney. Their retrospective case note review of self-identified female CSWs identified 185 attendees over a 12-month period. Only one attendee self-described as a street-based sex worker. Over half were born overseas (with 32.7% born in China), and 32% were from non-English speaking backgrounds. Kakar *et al.* also found that 38.9% were symptomatic on attendance (with the main symptom being vaginal discharge). Infection with *C. trachomatis* in the previous 12 months was reported by 15.1% of the attendees, a rate several times higher than recent reported data would indicate. In keeping with other data from studies of Australian CSWs,<sup>4</sup> no women reported a diagnosis of gonorrhoea or HIV infection in the previous 12 months.

What then is going on? Could it be that there are pockets of high rates of *C. trachomatis* – and possibly other STIs – in CSWs, with implications for the health of the women themselves, as well as their sex partners in their private lives, and possibly even some of their clients? Could it be that the deregulation of sex work in New South Wales, coupled with the lack of compulsory screening for sex workers in legal industries, have led to increased rates of *C. trachomatis* in these CSWs?

It would be foolhardy to draw such conclusions at this stage. The authors themselves are at pains to point out some of the limitations of their data, namely the possibility that their sample is unrepresentative of CSWs in Sydney, a possible screening

artefact due to the fact that CSWs are more likely to be screened than are the general population, and the fact that it is data derived from a secondary analysis of case notes – furthermore, their data is compiled from a combination of self-report and laboratory diagnosis.

National STI testing guidelines for Australian sex workers recommend testing asymptomatic female CSWs every 3–6 months for gonorrhoea, chlamydia, syphilis, hepatitis B, and HIV, and to consider testing for hepatitis A.<sup>11</sup> Screening is mandatory every 3 months for those working in the legal brothel industry in Queensland, and screening is mandatory *every month* for those working legally in Victoria! Women working in the *illegal* industry are under no obligation at all, of course, to have any STI testing performed. There are considerable downsides to such mandatory screening, with concerns it may push some women into the illegal system,<sup>8</sup> that it restricts access to services for those individuals at higher risk of STIs,<sup>12</sup> and that it is excessive and not cost-effective.<sup>13</sup>

The findings of Kakar *et al.* really call for more studies of female CSWs in particular geographic locations that may have women at higher risk of STIs, and call for ongoing studies of women from non-English speaking backgrounds who work in the sex industry. Clinicians should continue the recommended practice of offering STI screening to CSWs every 3–6 months unless there are reasons for testing more frequently (such as symptoms, or condoms slips or breaks). More frequent screening is mandated in some jurisdictions, and clinicians need to comply with this law; however, in such jurisdictions there is a strong case for legal reform so that a middle path is trod, between high-cost, low-yield, coercive mandated screening, and no screening at all.

### Conflicts of interest

None declared.

### References

- Laga M, Alary M, Nzila N, Manoka AT, Tuliza M, Behets F, *et al.* Condom promotion, sexually transmitted disease treatment, and declining HIV infection in female Zairian sex workers. *Lancet* 1994; 344: 246–8. doi:10.1016/S0140-6736(94)93005-8
- Ford K, Wirawan DN, Reed BD, Muliawan P, Wolfe R. The Bali STD/AIDS study: evaluation of an intervention for sex workers. *Sex Transm Dis* 2002; 29: 50–8. doi:10.1097/00007435-200201000-00009
- Donovan B. Gonorrhoea in a Sydney house of prostitution. *Med J Aust* 1984; 140: 268–71.
- Seib C, Fischer J, Najman JM. The health of female sex workers from three industry sectors in Queensland, Australia. *Soc Sci Med* 2009; 68: 473–8. doi:10.1016/j.socscimed.2008.10.024
- Seib C, Debattista J, Fischer J, Dunne M, Najman JM. Sexually transmissible infections among sex workers and their clients: variation in prevalence between sectors of the industry. *Sex Health* 2009; 6: 45–50. doi:10.1071/SH08038
- Harcourt C, van Beek I, Heslop J, McMahon M, Donovan B. The health and welfare needs of female and transgendered street sex workers in New South Wales. *Aust N Z J Public Health* 2001; 25: 84–9. doi:10.1111/j.1467-842X.2001.tb00556.x
- Morton AN, Wakefield T, Tabrizi SN, Garland SM, Fairley CK. An outreach programme for sexually transmitted infection screening in street workers using self-administered samples. *Int J STD AIDS* 1999; 10: 741–3. doi:10.1258/0956462991913286
- Lee DM, Binger A, Hocking J, Fairley CK. The incidence of sexually transmitted infections among frequently screened sex workers in a decriminalised and regulated system in Melbourne. *Sex Transm Infect* 2005; 81: 434–6. doi:10.1136/sti.2004.014431
- Vajdic CM, Middleton M, Bowden FJ, Fairley CK, Kaldor JM. The prevalence of genital *Chlamydia trachomatis* in Australia 1997–2004: a systematic review. *Sex Health* 2005; 2: 169–83. doi:10.1071/SH05018
- Kakar SR, Biggs K, Chung C, Sawleshwarkar S, Mindel A, Lagios K. A retrospective case note review of sex worker attendees at sexual health clinics in the western suburbs of Sydney. *Sex Health* 2010; 7: 3–7. doi:10.1071/SH09031
- The Royal Australasian College of Physicians, Australasian Chapter of Sexual Health Medicine. Clinical guidelines for the management of sexually transmissible infections among priority populations. Available online at: [http://www.stipu.nsw.gov.au/pdf/STI\\_Rx\\_Priority\\_Populations.pdf](http://www.stipu.nsw.gov.au/pdf/STI_Rx_Priority_Populations.pdf) [Accessed 20 November 2009].
- Samaranayake A, Chen M, Hocking JS, Bradshaw C, Cummings R, Fairley CK. Legislation requiring monthly testing of sex workers with low rates of sexually transmitted infections restricts access to services for higher-risk individuals. *Sex Transm Infect* 2009; 85: 540–2. doi:10.1136/sti.2009.037069
- Wilson DP, Heymer KJ, Anderson J, O'Connor J, Harcourt C, Donovan B. Sex workers can be screened too often: a cost-effectiveness analysis in Victoria, Australia. *Sex Transm Infect* 2010; in press. doi:10.1136/sti.2009.036673

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