NSW GOVERNMENT | Health

INQ15/40

Ms Elspeth Dyer
Committee Manager
Select Committee on the Regulation of Brothels
Parliament of New South Wales
Macquarie Street
SYDNEY NSW 2000

Dear Ms Dyer

Please find enclosed the response from NSW Health to the questions taken on notice during the 11 September 2015 hearing before the Select Committee on the Regulation of Brothels.

Should you have any queries in relation to this matter please do not hesitate to contact Dr Jo Mitchell, Director, Centre for Population Health in the NSW Ministry of Health on [redacted].

Yours sincerely

[redacted]

Dr Kerry Chant PSM
Chief Health Officer
Deputy Secretary, Population and Public Health

25 September 2015

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PARLIAMENT OF NEW SOUTH WALES

Select Committee on the Regulation of Brothels

Inquiry into the Regulation of Brothels

11 September 2015 Hearing

NSW Health response to questions taken on notice

1. Question from Mr Alister Henskens MP, Transcript of Evidence, p2:

CHAIR: Yes, I think it is every three months. I think it operates in an environment where all the sex workers are registered. I am not advocating that our sex workers be registered, but I am wondering whether you think it would be helpful or unhelpful to have perhaps an environment where the owners or managers of brothels were responsible for ensuring, as are employers in other industries, the health, wealth and safety of their workers. They could be required to have some evidence of regular checking of sex workers for sexual diseases.

Dr CHANT: I think the use of condoms is probably the single level of significant protection for practising safe sex. It is important to know that in the current framework employers within brothels have those responsibilities for occupational health and safety. That is the framework we currently operate in. As the Committee would know, there is that guidance document, which is currently being updated, around health and safety guidelines for brothels. Clearly the managers of brothels, as employers, would have responsibilities to comply with those requirements.

I can provide the Committee with evidence about the frequency of testing.

Answer:

There is good evidence that sex workers test frequently for Sexually Transmitted Infections (STIs). In 2012, 83.1% of Sydney sex workers surveyed reported regular sexual health checks, of which 63.6% reported that they underwent sexual health checks at least 6-monthly, with only 6% undergoing testing less than once per year.[1] The majority underwent checks through public sexual health clinics (53%) or their local doctor (29%)[1].

In 2014-15, 13% (5,041) of the 37,546 HIV tests performed in NSW public sexual health services were in people who reported they were or had previously been a sex worker[2]. This represents a 20% increase in the number of HIV tests in sex workers in NSW public sexual health services compared to 2013-14 (4,191). In addition, 9.5% (15,457/162,766) occasions of service for STI testing and/or management in NSW public sexual health services were delivered to sex workers in 2014-15.[3]

[1] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012
[2] NSW Health HIV Strategy Monitoring Database
[3] HIV-STI-Hep Minimum Data Set (MDS)

Given the near universal use of condoms in commercial sexual encounters (99%) and that the prevalence of STIs in sex workers is at least as low as the general population in NSW[4], there is a low risk of transmission for STIs associated with the sex industry.

2. Question from Mrs Melinda Pavey MP, Transcript of Evidence, p4:

Mrs MELINDA PAVEY: In evidence last week from Deputy Commissioner Kaldas, he said he had phoned his local area commanders who had estimated there are about 360 premises offering sex services across the State and yet, from memory, only 130 are licensed and have the appropriate planning approvals to operate as brothels. Are we reaching as wide a community of sex workers as we should be reaching? This relates to the Chair's questions: Are we getting to the population we need to care for? I ask you to consider how Victoria handles this through its different legal framework. Do you have any evidence from your contact with Victorian colleagues about how that system reaches out to sex worker populations?

Dr CHANT: My apologies, I have not had a chance to talk to my Victorian colleagues. I am happy to take that question on notice, undertake a discussion with them and provide an answer. We are watching to see whether sexual health clinics are meeting those needs. You have probably heard evidence from sexual health clinic directors, who are passionate about meeting the needs of vulnerable communities. On that level, publicly funded sexual health clinics are focusing on the higher risk groups. The Sex Workers Outreach Project [SWOP] provides an excellent service. We provide it with funding of $1.193 million. I can provide the Committee with the key performance indicators we have in the contract with SWOP.

Answer:

NSW Health provides a comprehensive range of services to sex workers across a variety of settings in NSW:

- NSW has a network of publically funded sexual health services offering free and confidential services including STI and HIV testing and health promotion at 51 sites across the State.
- The delivery of STI and HIV testing and management services by publically funded sexual health services is measured and monitored through the service agreements between the local health districts and the NSW Ministry of Health. Local health districts are required to report the activity and proportion of HIV and STI testing and management delivered overall and to priority populations including sex workers.
- The data shows that publically funded sexual health services are highly accessed by sex workers with 53% of sex workers surveyed in Sydney receiving their sexual health checks from public sexual health services.[5]
- Sexual health services deliver services to sex workers across all settings in NSW.
- Sydney Sexual Health Centre and Liverpool Sexual Health Clinic provide clinics to support the health needs of sex workers including migrant sex workers, for example:
    - Liverpool Sexual Health Clinic provides one clinic per week where interpreters are available.
    - Sydney Sexual Health Centre has provided interpreter assisted language clinics for Thai (2 per week) and Chinese (1 per week) speaking sex workers since 1991 and 1994 respectively.

[4] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012
[5] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

- Publically funded sexual health services also provide outreach sexual health and health promotion services to sex workers across a range of settings, for example:
  - Kirketon Road Clinic provides clinical outreach services, until midnight every day, to brothel and street-based sex workers in the local area.
  - South Western Sydney Local Health District, HIV and Related Programs Health Promotion has a long standing project employing a designated health education officer to deliver outreach to brothels in partnership with the Sexual Health Clinic and Sex Workers Outreach Program (SWOP), who provide bilingual peer workers.
  - South Western Sydney Local Health District also contracts SWOP to provide an additional 1 shift per month outreach to street-based sex workers on Canterbury Rd (Bankstown).
  - Bilingual Health Promotion Officers (Thai and Chinese speaking) are employed as part of the Multicultural Health Promotion Project to provide initiatives such as outreach and health education without the need for an interpreter.
- SWOP provides HIV, hepatitis C and sexually transmissible infections peer-based health education, prevention, outreach and support to sex industry workers across a range of settings in NSW, including brothels, massage parlours and street-based sex work locations.
  - SWOP's work involves a strong emphasis on vulnerable sub-populations including specific programs for Aboriginal, street-based and culturally and linguistically diverse (migrant) and male sex workers.
  - SWOP outreach delivers targeted, peer based HIV and STI prevention education and support and is successful in reaching its communities due to its ability to gain and sustain the ongoing trust and respect of sex industry workers.
  - SWOP also provides free and confidential sexual health counselling services with referrals to other counseling and support services.
  - The key performance indicators for SWOP are attached (**Attachment 1**).

The Victorian Department of Health have advised that in order to ensure good sexual health of sex workers and their clients that they conduct:

- Community based drop in and outreach services by peer educators managed through a community health centre (the Resourcing Health Education [RhED] program at Inner South Community Health)
- An outreach sexual health nurse at the RhED program once a week for free STI screenings and advice
- A confidential, free sexual health service provided by Melbourne Sexual Health Centre.
- Clauses in both health and consumer affairs legislation which require condoms or other barrier measures to be provided and used to prevent the spread of STI.
- Clauses which prevent managers/owners from forcing workers to provide services to symptomatic clients or to coerce workers to engage in unsafe sexual practices.
- Contact tracers in the Health Department are authorised under the *Public Health and Wellbeing Act 2008* to inspect brothels at least annually and to investigate any complaints.
- Regulations under the *Sex Work Act 1994* making it an offence for workers to have an STI and for owners/managers to allow a worker to work if they have an STI.
- A clause in the regulations includes a built-in defence to the above offence allowing for plausible deniability of infection provided the worker had been having regular testing where 'regular' is defined as three monthly for HIV and other STI requiring blood tests and a frequency at the discretion of the Minister for Health for all other prescribed STI (prescribed STI are listed in the Sex Work Regulations).

Additionally, it should be noted that sex work is only permitted in brothels in Victoria; street-based sex work is illegal. It is unknown whether street-based sex workers declare that they are doing sex work if/when they present to a sexual health service for STI testing. As

outlined above, sex workers in NSW, including street-based sex workers, access public sexual health clinics and targeted outreach programs.

3. Question from Mr Alister Henskens MP, Transcript of Evidence, p4:

CHAIR: I would like to follow up on Mrs Pavey's earlier question that you undertook to discuss with your Victorian colleagues. The Committee has been told that the public health outcomes for sex workers in Victoria and New South Wales are similar. It would be interesting to know whether you can verify that that is the case. If you would look at their data and our data and confirm that statement or identify the differences, that would be helpful.

Dr CHANT: We would be happy to do that.

Answer:

The evidence currently suggests that the prevalence of STIs is similarly low between sex workers in Victoria [6,7] and sex workers in New South Wales[8]. However, under Victoria's legislative framework it is estimated that up to 50% of sex workers operate illegally[9]; in NSW sex work in unlicensed premised is estimated to be <2%[10]. The figures available for STI prevalence among sex workers in Victoria only include those female sex workers attending Melbourne Sexual Health Centre to work in legal brothels in Melbourne.[11] It is unknown whether these female sex workers are representative of all female sex workers in Victoria. [12]

4. Question from Mr Alex Greenwich MP, Transcript of Evidence, pp4-5:

Mr ALEX GREENWICH: Dr Chant, would you like to see the population who do not engage in sex work tested at the same level as people who do engage in sex work?

Dr CHANT: ..... What has been really pleasing is the work we have done with the Royal Australian College of General Practitioners and General Practice NSW. That has been interesting because we have raised the level of testing for HIV in general practice. It has shown that doctors who are not s100 prescribers, which are our GPs who specialise in HIV, have identified the majority of new HIV diagnosis in the last quarter. I can make the report of that quarter available to the Committee.

Answer:

The NSW HIV Strategy 2012-2015 Quarter 2 2015 Data Report is attached (**Attachment 2**) and publically available at http://www.health.nsw.gov.au/endinghiv/Documents/q2-2015-hiv-data-report.pdf.

[6] Tang et al. (2013) The prevalence of sexually transmissible infections among female sex workers from countries with low and high prevalences in Melbourne. *Sexual Health; 10:142-145.*

[7] Chow et al. (2014) Testing Commercial Sex Workers for Sexually transmitted infections in Victoria, Australia: an evaluation of the impact of reducing frequency of testing. *PLoS One*; 9:e103081.

[8] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

[9] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

[10] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

[11] Tang et al. (2013) The prevalence of sexually transmissible infections among female sex workers from countries with low and high prevalences in Melbourne. *Sexual Health; 10:142-145.*

[12] Chow et al. (2014) Testing Commercial Sex Workers for Sexually transmitted infections in Victoria, Australia: an evaluation of the impact of reducing frequency of testing. *PLoS One*; 9:e103081.

5. Question from Mr Alex Greenwich MP, Transcript of Evidence, p7:

'WorkCover Health and Safety Guidelines for Brothels 2001' provided to Committee

Mr ALEX GREENWICH: Is that document produced in multiple languages?

Dr CHANT: I would have to take that on notice.

Answer:

When the Guidelines were released in 2001, they were available in English, Thai, Chinese and Korean. SafeWork NSW intends to review, update and re-issue the Guidelines to reflect the changes in legislation and the industry since 2001. In the interim, SafeWork NSW is developing an interim guide.

SafeWork NSW has advised NSW Health that when the English review is approved, then arrangements will be made to translate the document into other languages.

6. Question from Mr Alister Henskens MP, Transcript of Evidence, p7:

CHAIR: Mental health is an issue that is sort of catching up to more science-based medicine and is getting a lot of prominence at the moment. We have had some submissions referring to the mental health of sex workers and studies around that. Are you familiar with any New South Wales study that has been conducted in relation to the mental health of sex workers??

Dr CHANT: Off the top of my head no, but I would be happy to follow that up.

Answer:

Donovan et al.[13] and Roxburgh et al.[14] examined the mental health of sex workers in New South Wales. Donovan et al. concluded that in general Sydney brothels workers enjoyed levels of mental health that were comparable to the general population. However, 10% of the sex workers surveyed were severely distressed on psychological testing. Psychological distress was strongly associated with injecting drug use.

Roxburgh et al. interviewed 72 female street-based sex workers and found that just under half of the sample met the criteria for post-traumatic stress disorder. All but one of the street-based sex workers interviewed reported experiencing trauma, with the majority reporting multiple traumas that typically began in early childhood. Injecting drug use was highly prevalent in this sample.

Both studies are attached (**Attachments 3 - 5**).

[13] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

[14] Roxburgh et al. (2006) Posttraumatic stress disorder among female street-based sex workers in the greater Sydney Area, Australia. *Substance abuse and misuse*; 43:1202-1217 and 1288.

7. Question from Mr Alister Henskens MP, Transcript of Evidence, p7:

CHAIR: There are obviously journals and articles of different veracity and so on. We have received a submission from the Coalition Against Trafficking in Women, Australia, which refers to a study of 854 people currently or recently in prostitution in nine countries, which found that 68 per cent met the criteria for PTSD, which was a similar rate to combat veterans. It is footnote No. 7 in their submission. Would you be able to have a look at that article and give us some idea of its veracity?

Dr CHANT: Yes, and it would also be interesting to look at what was the setting for the sex work in each of the countries from which those individuals were drawn. Because I have certainly got some evidence that STIs and HIV in sex workers is certainly higher in some parts of the world.

CHAIR: Indeed, and their conditions may not be comparable. However, we have heard evidence that there are a range of environments that sex workers operate in in New South Wales as well, from street workers to large establishments, well-run, organised establishments.

Dr CHANT: I would be very happy to look at that and get some advice.

Answer:

In summary, Farley *et al.*'s report titled *Prostitution and Trafficking in Nine Countries: An Update on Violence and Post-Traumatic Stress Disorder (PTSD)*, reported that:

- 68% of sex workers met the criteria for PTSD.
- 71% of sex workers had encountered physical violence in sex work
- 63% had been raped.
- 89% wanted to escape sex work but had no other options for survival.

The nine countries included were Canada, Germany, Mexico, Colombia, South Africa, Thailand, Turkey, United States and Zambia. The fundamental differences in the legislative, regulatory and public health frameworks between these settings mean that the findings are not generalisable to the sex industry in New South Wales.

The population of sex workers surveyed by Farley et al. was strongly biased towards highly marginalised and primarily street-based sex workers, and does not represent the range of sex work settings in New South Wales. For example, participants in Germany were recruited from a drop-in shelter for drug-addicted women and from a program that offered vocational rehabilitation. In Canada the participants were sampled from "one of the most economically destitute regions in North America"; and in Turkey participants were brought to a hospital by the police for the purpose of STI control. The rationale for this recruitment strategy is not provided nor whether alternative locations were considered. People recruited from these settings are likely to be distressed. Furthermore, it is known that street based sex workers experience higher rates of violence and distress than other sex workers[15] and that sex workers are a heterogeneous population[16]. Because the report interviewed only sex workers from settings where there is likely to be a very high level of underlying distress and did not include sex workers from other settings, the findings of the report cannot be generalised to draw conclusions about all sex workers.

[15] The Sex Industry in New South Wales: a Report to the NSW Ministry of Health, 2012

[16] Harcourt, C. & Donovan, B. (2005) "The Many Faces of Sex Work", *Sexually Transmitted Infections*. 81: 201–206

SWOP Key Performance Indicators 2015/2016 - Draft

Service/ Project Objective 1	Maintain low rates of HIV and STI transmissions in the NSW sex industry.
Service/ Project Activities	- Deliver targeted peer based outreach to street-based and sex service locations - Support the NSW sex industry's high rates of voluntary HIV, Hepatitis C and STI testing - Work to maintain the current high rates of condom use in the NSW sex industry, & maintain distribution of other safe sex and injecting equipment through direct distribution and partnerships

Service/ Project Objective 2	Continue to meet the needs of Aboriginal people who engage in sex work and sex for favours by providing peer-based, culturally appropriate outreach services focussed on HIV, BBV and STI prevention
Service/ Project Activities	- Develop effective partnerships with key Aboriginal services for the delivery of outreach programs to Aboriginal people who engage in sex work and sex for favours - Deliver outreach and health interventions to Aboriginal community members who engage in sex work and sex for favours

Service/ Project Objective 3	Continue to meet the needs of sex workers from culturally and linguistically diverse (CALD) backgrounds favours by providing peer-based, culturally appropriate outreach services focussed on HIV, BBV and STI prevention
Service/ Project Activities	- Deliver in-language, culturally appropriate HIV Prevention and health promotion outreach - Develop and distribute resource in language - Develop effective partnerships with Local Health Districts

Service/ Project Objective 4	**Contribute to an enabling environment for HIV & STI prevention and health promotion by ensuring that policy and research efforts incorporate the needs and perspectives of NSW sex workers**
Service/ Project Activities	- Work to remove barriers to access to health and safety for sex workers - Work to increase the evidence base for effective responses - Work to address structural determinants of vulnerability to HIV & STI infection among NSW Sex Workers - Participate in interagency and associated committees, as required

Service/ Project Objective 5	Increase awareness and knowledge of safe sex and risk reduction strategies amongst sex workers
Service/ Project Activities	- Implement a range of peer education workshop programs and counselling to engage a broad range of sex workers and build personal skills to prevent HIV transmission. - Implement and adapt education campaigns (utilising a range of approaches including social media, community engagement activities, online initiatives, advertising and media), including specific adaptations for sub-populations based on, for example, gender, ethnicity, place of work, HIV status, and location

NSW HIV Strategy 2012 – 2015

Quarter 2 2015
Data Report

NSW GOVERNMENT Health

Executive Summary

The *NSW HIV strategy 2012–2015: A New Era* was launched in December 2012 and includes major changes in the way that HIV is detected, treated and prevented in NSW, as well as improved support for people at the time of their HIV diagnosis and throughout their life.

Evidence suggests that antiretroviral therapy (ART) offers improved health benefits for people living with HIV and the potential to dramatically reduce the risk of passing on HIV. This makes treatment a critical part of HIV prevention. Gaining the optimal benefit in NSW relies on early detection of HIV through increased HIV testing, early provision of ART treatment for people diagnosed with HIV, and support for treatment adherence to achieve undetectable viral load.

In brief, the 2015 targets of the NSW HIV Strategy are to:

- Reduce HIV transmission by 60% among men who have sex with men.
- Reduce heterosexual transmission of HIV and transmission of HIV among Aboriginal populations by 50%
- Sustain the virtual elimination of mother to child transmission of HIV
- Sustain the virtual elimination of HIV transmission in the sex industry
- Sustain the virtual elimination of HIV among people who inject drugs
- Reduce the average time between HIV infection and diagnosis
- Increase to 90% the proportion of people living with HIV on ART
- Sustain the virtual elimination of HIV related deaths

The range of activities NSW Health is engaged in to meet these targets is summarised in the NSW HIV Snapshot. To monitor progress against the Strategy targets, a range of data sources have been identified, analysed and reported via this quarterly data report. More detailed information on NSW residents newly diagnosed with HIV up to 31 December 2013 is available in the NSW HIV 2013 Epidemiological Report.

In quarter 2 2015:

- 74 people were newly diagnosed with HIV in NSW, the lowest quarter 2 new diagnosis count since 2006 and 12 per cent (%) less than the same period in 2012. Among the newly diagnosed in this quarter, a greater proportion had evidence of late diagnosis compared with previous years.
- HIV testing continued to increase both overall in NSW, and among high risk populations. However, there remains more scope for increasing HIV testing rates.
- 117,627 serology tests were performed in NSW. This is a four % increase compared with both quarter 2 2014 (113,560) and quarter 2 2013 (113,174) and a 13% increase compared with quarter 2 2012 (103,737).
- 11,263 HIV tests were performed across public sexual health clinics in NSW. This represents a 36% increase compared with quarter 2 2014 (8,305). Of the tests done in public sexual health clinics, 87% were among men who have sex with men.
- Data from public sexual health and HIV clinics indicate 91% of people living with HIV who attended these services were on antiretroviral therapy (ART).
- Progress is being made in reducing the gap between HIV diagnosis and commencement of ART, but continuing efforts are required to support early ART for individual and public health benefits.
- Of the cohort of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014, 64% were reported to have commenced ART within six months of diagnosis.

Table of Contents

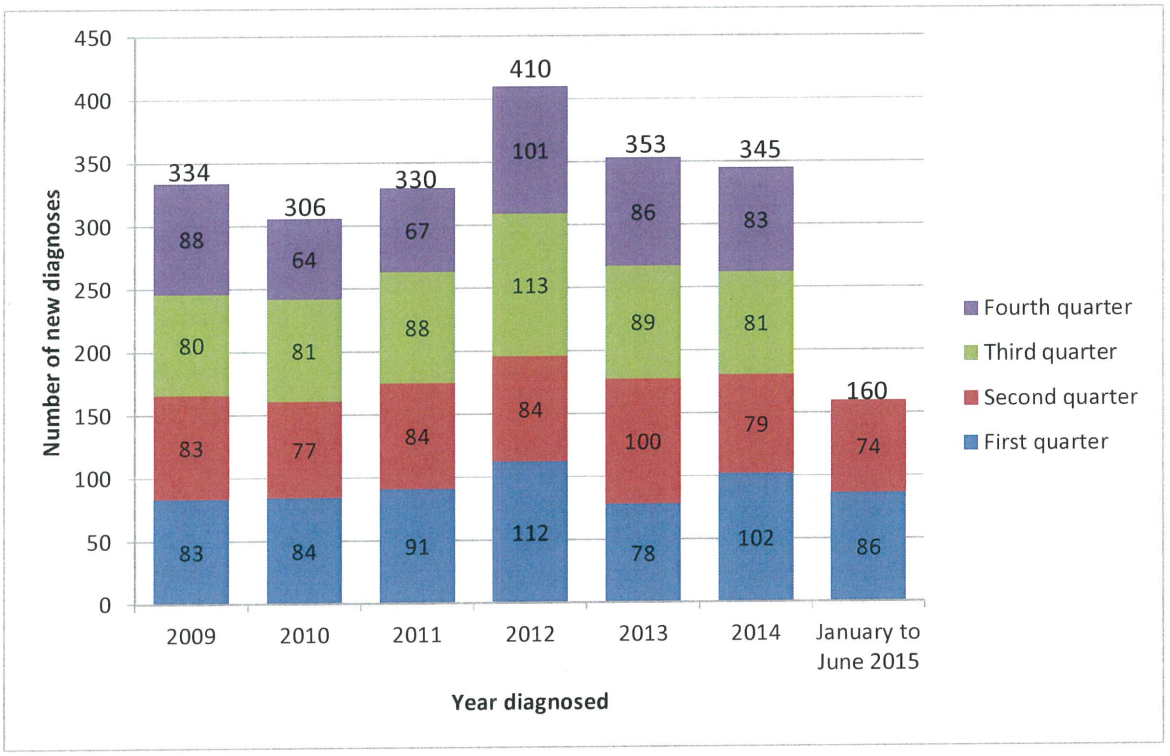
Glossary of Terms

ART	Antiretroviral therapy
HIV	Human Immunodeficiency Virus
LHD	Local Health District
MSM	Men who have sex with men
NSP	Needle and syringe program
NSW	New South Wales
NSWPHS	New South Wales Population Health Survey
PWID	People who inject drugs
PFSHC	Publicly Funded Sexual Health Clinic
SGCPS	Sydney Gay Community Periodic Survey

1. Reduce HIV transmission

1.1 How many cases are notified?

Figure 1: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

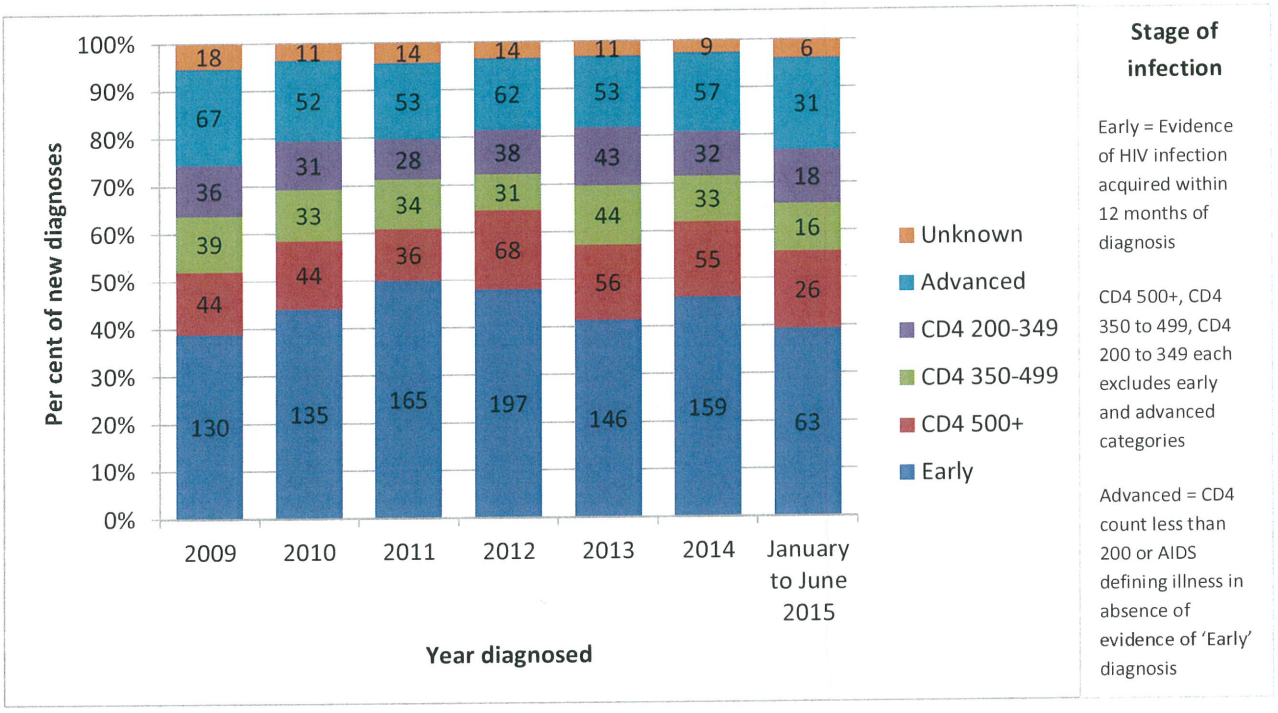
In the period 1 April to 30 June (quarter 2) 2015, 74 NSW residents were notified with newly diagnosed HIV infection, the lowest second quarter new diagnosis count since 2006 and 12 per cent (%) less than the same period in 2012, despite a 13% increase in HIV testing in NSW in the same period (Figures 1 and 16). From 1 January to 30 June 2015, 160 NSW residents were notified with newly diagnosed HIV infection (Figure 1); this is 10% less than the average January to June 2009 to 2014 new diagnoses count and 18% less than the same period in 2012.

From 1 January to 30 June 2015, the number of NSW residents notified with newly diagnosed HIV infection reporting to be men who have sex with men (MSM) was 126, which is 20% less compared with MSM notifications for the same period in 2012 (n=158) and 11% less than the average for the same period in 2009 to 2014 (n=142). It is also the lowest number of MSM notifications in January to June since 2010 (n=126).

1.2 What proportion of HIV notifications are newly acquired infections?

Trends in the stage of infection at which people present when newly diagnosed with HIV provide an indication as to the timeliness of diagnosis over time.

Figure 2: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by stage of infection at diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Evidence of early stage infection was defined as notification of a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis.

Comment

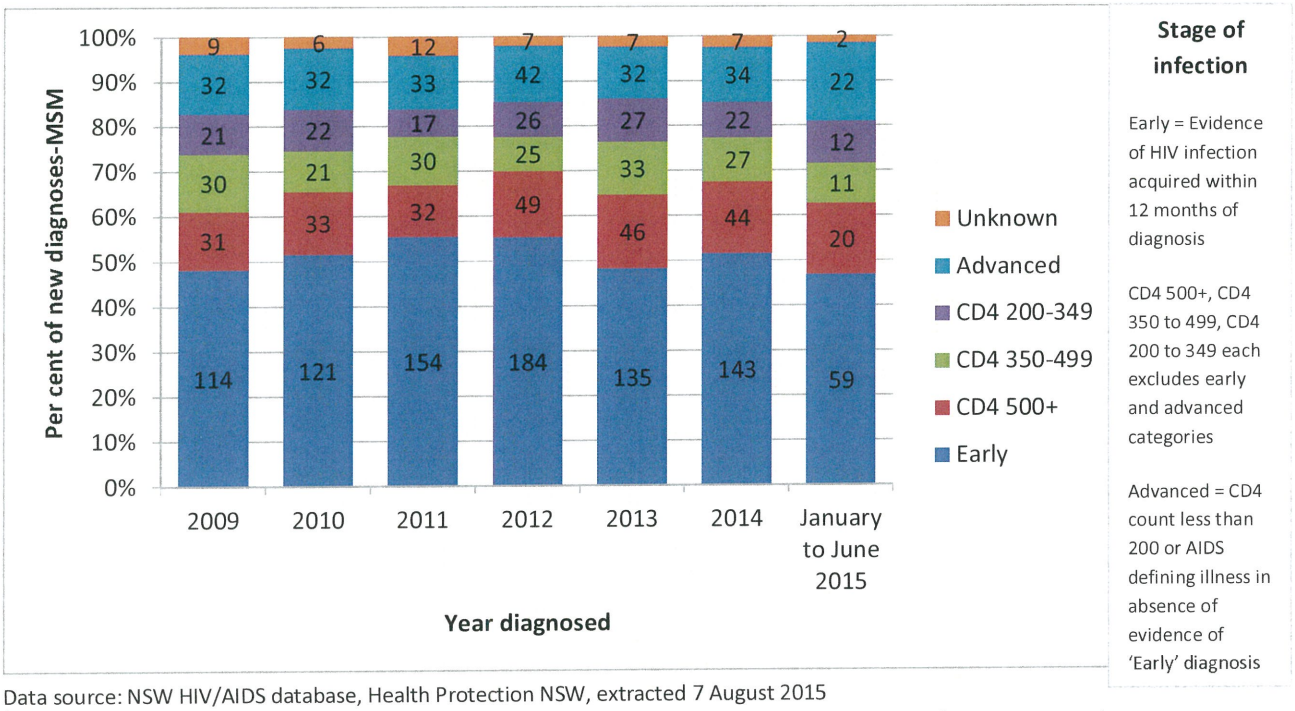
In quarter 2 2015, 29 of 74 (39%) NSW residents notified with newly diagnosed HIV infection had evidence of early stage infection and 12 (16%) had evidence of advanced infection at diagnosis.

Of 160 NSW residents notified with newly diagnosed HIV infection between January and June 2015, 63 (39%) had evidence of early stage infection; this is less compared with 47% of new diagnoses both for the period January to June 2012 and the average for January to June 2009 to 2014.

Of 160 NSW residents notified with newly diagnosed HIV infection between January and June 2015, 31 (19%) had evidence of advanced stage infection, compared with 14% of new diagnoses for both the period January to June 2012 and the average for January to June 2009 to 2014.

While HIV testing has continued to increase, the number of NSW residents notified with newly diagnosed HIV infection appears to be declining and, among those notified in the first half of 2015, a lesser proportion had evidence of early stage infection at diagnosis compared with previous years; this pattern suggests that there may be less transmission of HIV occurring.

Figure 3: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 reporting to be men who have sex with men (MSM) by stage of infection at diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Evidence of early stage infection was defined as notification of a sero-conversion illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis

Comment

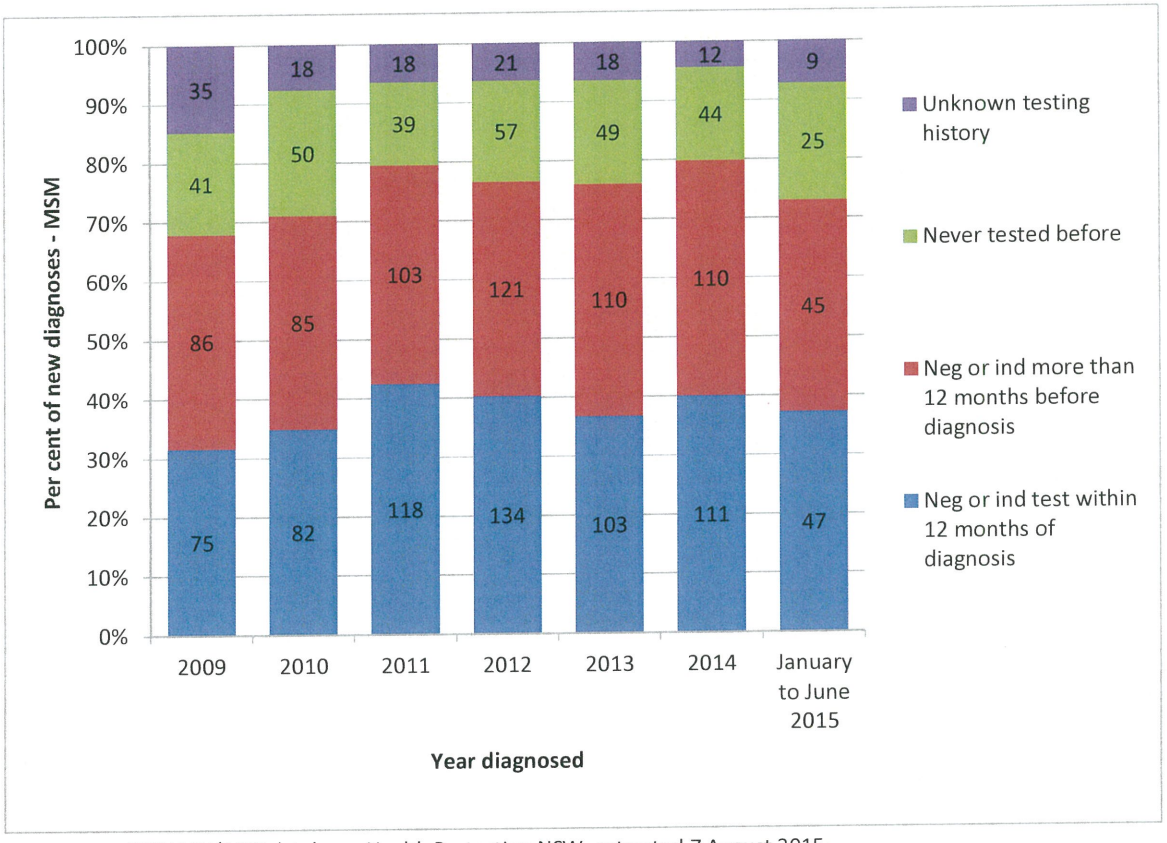
In quarter 2 2015, 26 of 62 (42%) NSW residents notified with newly diagnosed HIV infection reporting to be men who have sex with men (MSM) had evidence of early stage infection and 10 (16%) had evidence of advanced infection at diagnosis.

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 59 (47%) had evidence of early stage infection; this is less compared with 54% of new diagnoses for the period January to June 2012 and 53% for the average for January to June 2009 to 2014.

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 22 (17%) had evidence of advanced stage infection, compared with 11% of new diagnoses for the period January to June 2012 and 12% for the average for January to June 2009 to 2014.

While HIV testing among MSM has continued to increase, the number of MSM notified with newly diagnosed HIV infection appears to be declining (page 5) and, among MSM notified in the first half of 2015, a lesser proportion had evidence of early stage infection at diagnosis compared with previous years; this pattern suggests that there may be less transmission of HIV occurring among MSM.

Figure 4: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 reporting to be MSM by HIV testing history



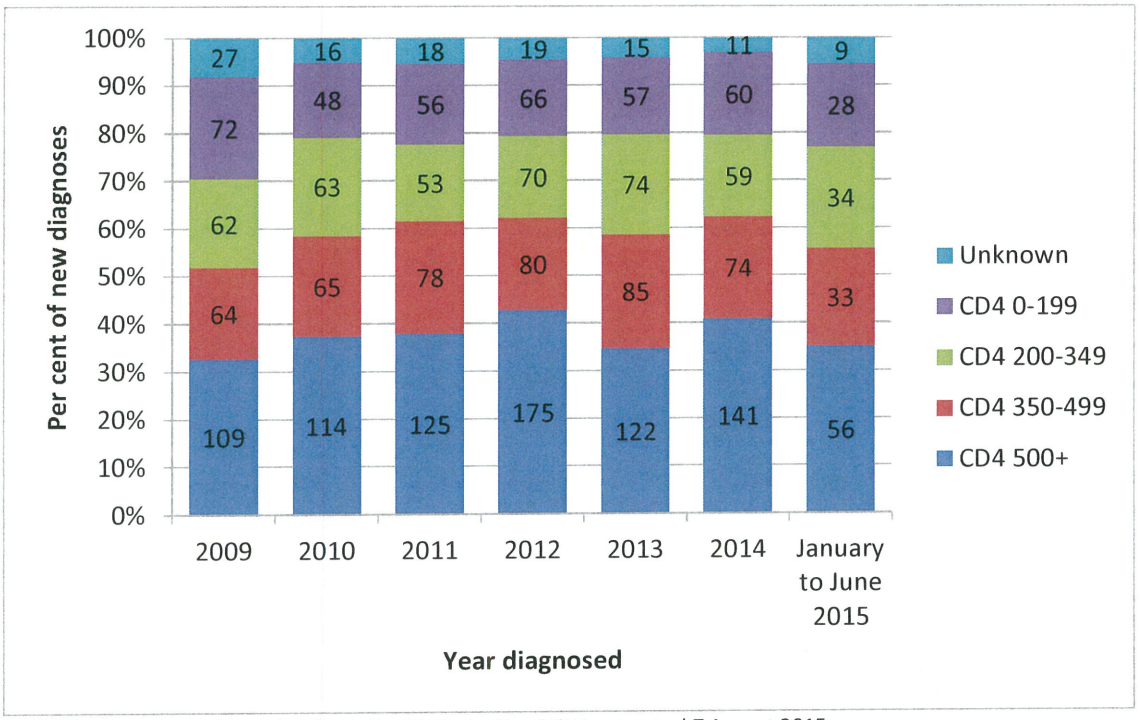
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 47 (37%) were reported as having had a negative or indeterminate HIV test within 12 months of their diagnosis, compared with 39%, the average for the period January to June 2009 to 2014 (Figure 4).

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM 25 (20%) were reported as not ever having had an HIV test before diagnosis, compared with 18%, the average for the period January to June 2009 to 2014.

Figure 5: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by CD4 count at diagnosis

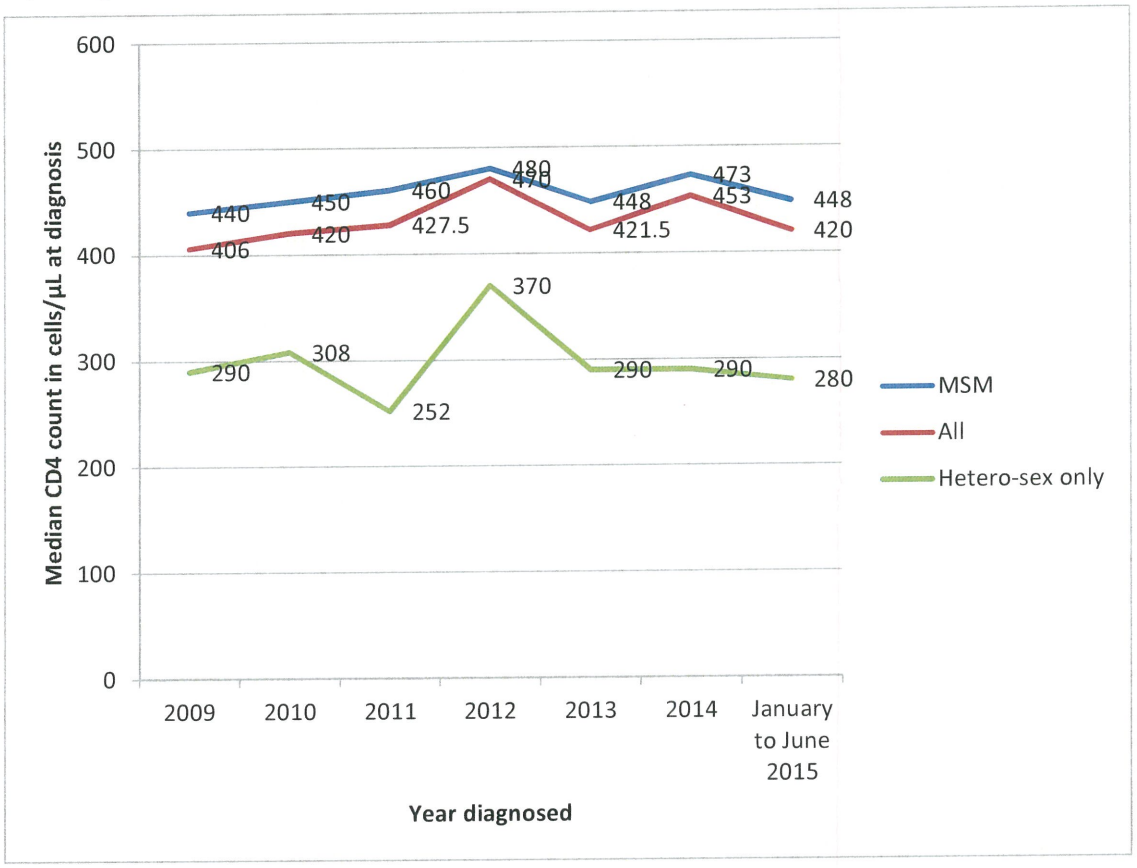


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection from 1 January to 30 June 2015, 56 (35%) had a CD4 count (in cells/µL) within three months of diagnosis 500 or over, 33 (21%) had a CD4 count 350 to 499, 34 (21%) a CD4 count 200 to 349, 28 (18%) a CD4 of 0 to 199 and 9 (6%) were unknown (Figure 5). Overall 62 (39%) had a CD4 count at diagnosis less than 350, slightly greater than compared with 33% of new diagnoses in the period January to June 2012 and 36% for the average of January to June 2009 to 2014.

Figure 6: Median CD4 count at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 for all, for those reporting to be MSM and for those reporting heterosexual acquisition of HIV[1]

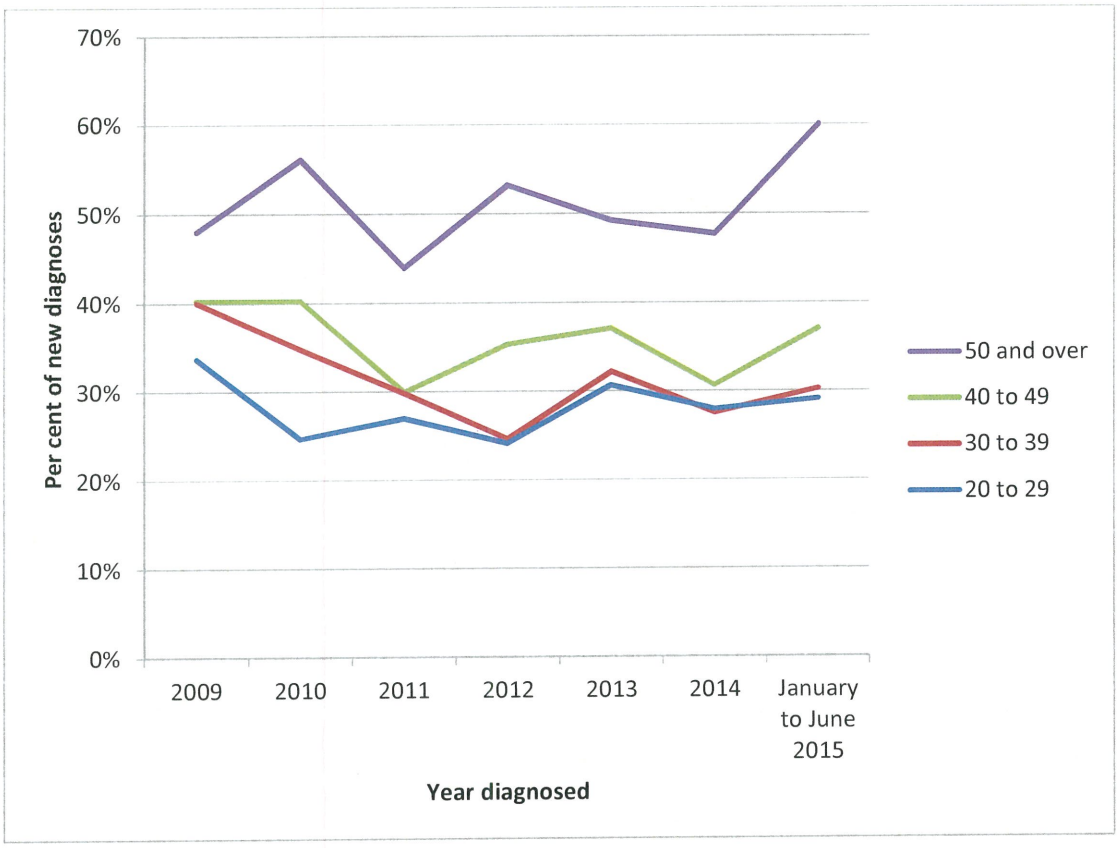


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
[1]The median CD4 count at diagnosis for other HIV risk exposure groups such as being a person who injected drugs (PWID) are not reported separately due to very low number of cases.

Comment

The median CD4 count at diagnosis for NSW residents notified with newly diagnosed HIV infection January to June 2015 was 420. For those reporting to be MSM it was 448 and for those reporting heterosexual exposure only to HIV it was 280 (Figure 6), a slight drop for all three groups compared with previous years. The median CD4 count at diagnosis among those reporting heterosexual exposure to HIV remains low (Figure 6).

Figure 7: Within each age group at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 the per cent with evidence of late diagnosis[1]



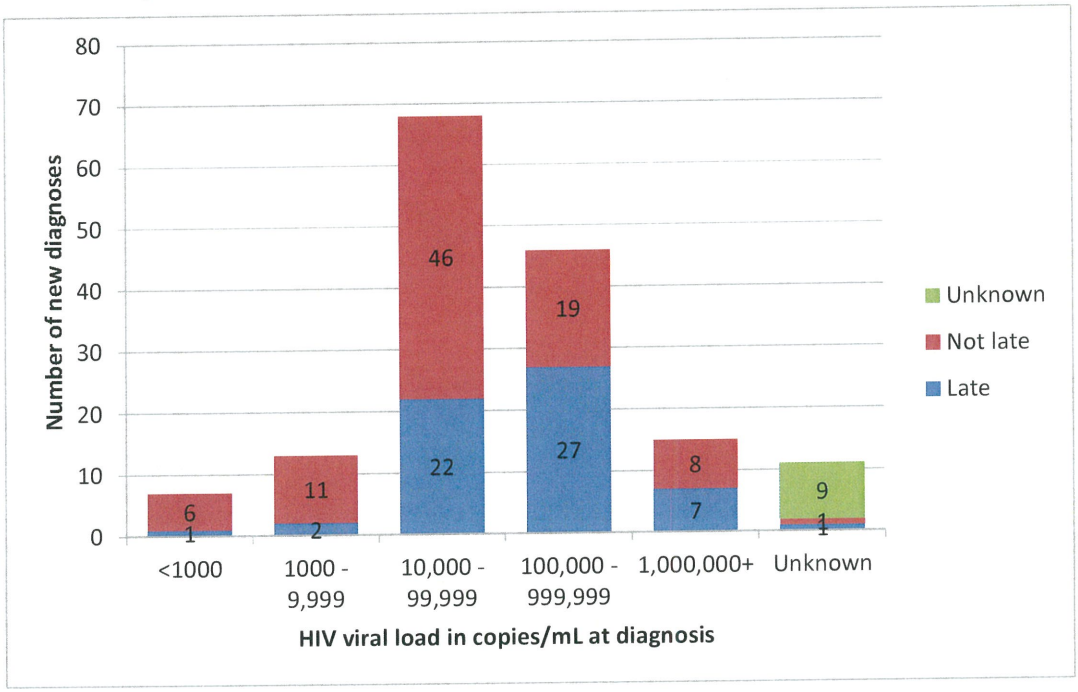
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
[1]Clinical or immunological evidence of a late diagnosis included a CD4 count less than 350 or an AIDS defining illness within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis. Please note: this definition of "late" has changed and tightened since the 2013 fourth quarter and annual report.

Comment

The "50 years and over" age group has a distinctly higher proportion of people with evidence of late diagnosis compared with younger age groups. The age category "less than 20 years" was excluded from Figure 7 due to very low numbers; from January to June 2015 there was zero new diagnoses less than 20 years of age.

Among NSW residents notified with newly diagnosed HIV infection in January to June 2015, the proportion within each age group with evidence of late diagnosis compared with earlier periods was similar, though increased in those 50 and over at diagnosis (Figure 7).

Figure 8: Number of NSW residents notified with newly diagnosed HIV infection from January to June 2015 by HIV viral load at diagnosis and evidence of late diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Clinical or immunological evidence of a late diagnosis included a CD4 count less than 350 or an AIDS defining illness within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis. Please note: this definition of "late" has changed and tightened since the 2013 fourth quarter and annual report.

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 20 (13%) had HIV viral load (HIV VL) less than 10,000 copies/mL at diagnosis, 68 (43%) had a HIV VL between 10,000 and 99,999, 46 (29%) had a HIV VL between 100,000 and 999,999, 15 (9%) had a HIV VL of 1,000,000 or more and 11 (7%) were missing an HIV VL (Figure 8).

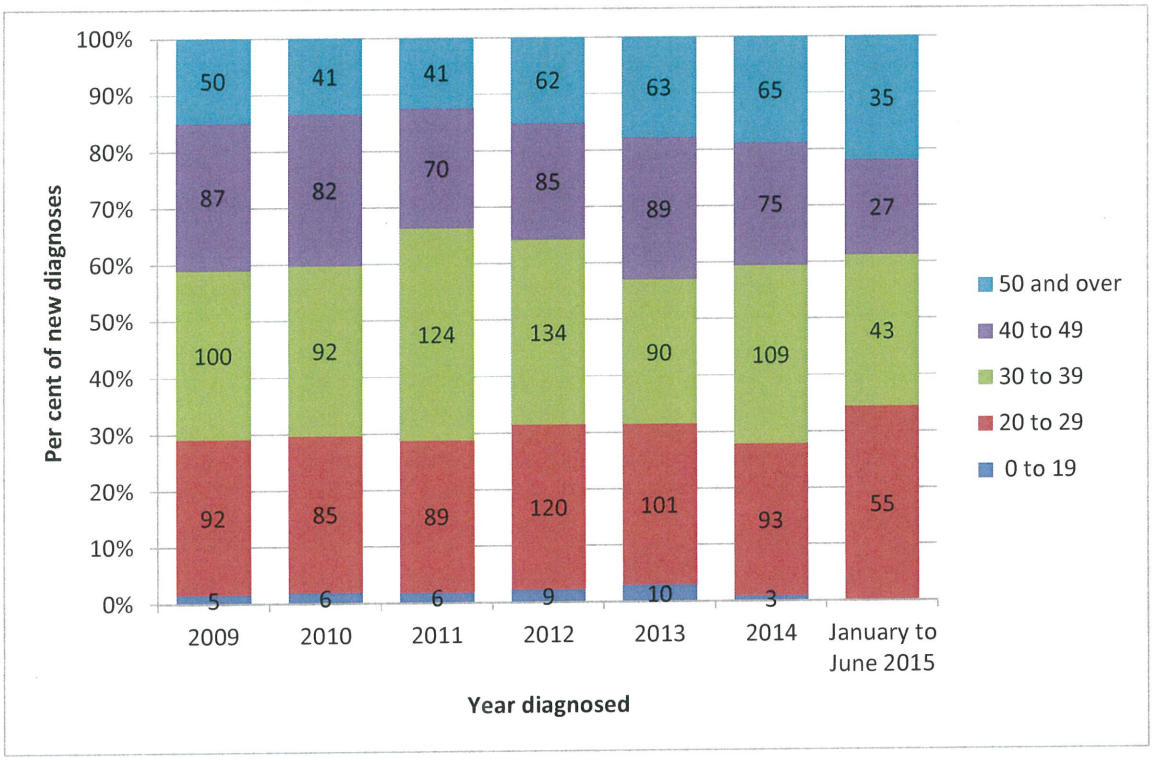
Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 60 (38%) had evidence of late diagnosis and of these 34 (57%) had an HIV VL 100,000 copies/mL or more at diagnosis.

For the HIV-infected individual, unchecked viral replication is associated with negative clinical outcomes and is a factor in disease progression and death, independent of CD4 count. Higher viral loads are associated with a higher risk of transmission of HIV and lower viral loads are associated with a lower risk of transmission of HIV.

1.3 Which groups are being notified?

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 147 (92%) were male, 12 (8%) were female and 1 (1%) was transgender; a very similar gender distribution to that of new diagnoses January to June 2009 to 2014.

Figure 9: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by age in years at diagnosis

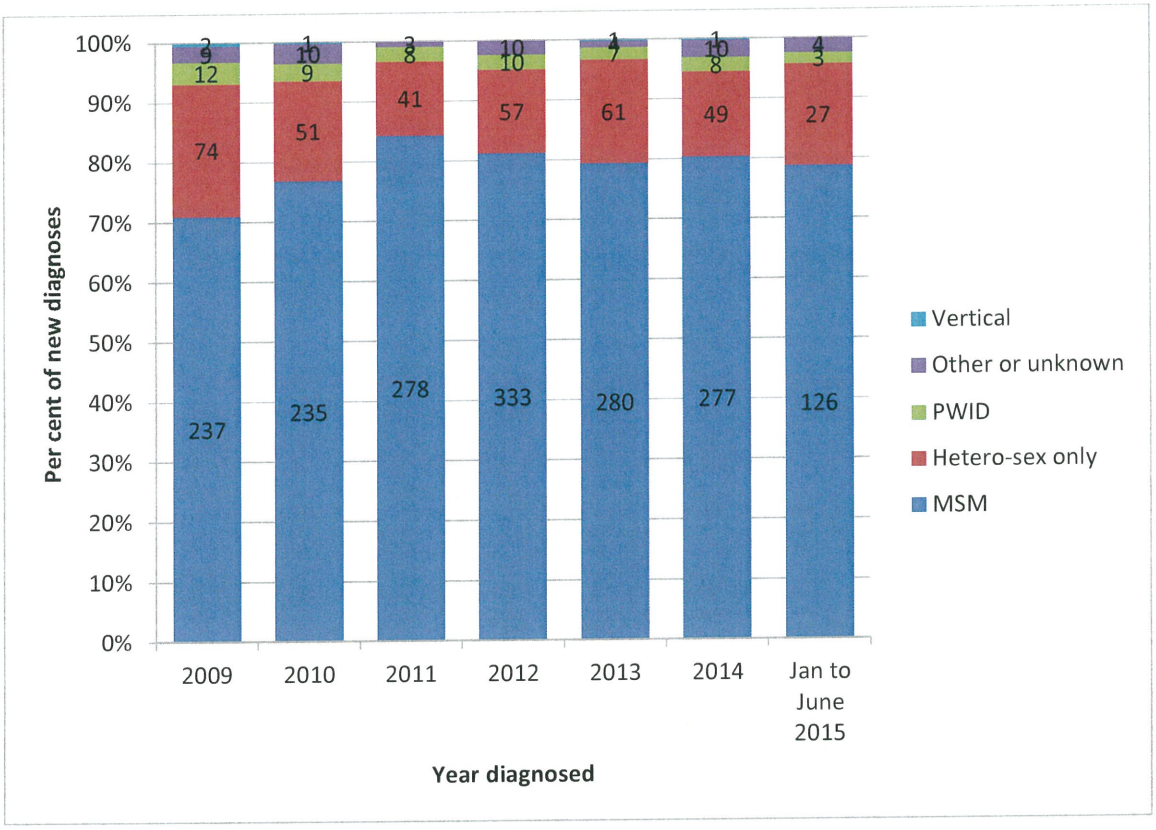


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, none were less than 20 years of age, 55 (34%) were 20 to 29 years, 43 (27%) were 30 to 39 years, 27 (17%) were 40 to 49 years and 35 (22%) were 50 years or over (Figure 9). This is a slightly different age at diagnosis distribution compared with the average for the period January to June 2009 to 2014, where 2% were 0 to 19 years, 28% were 20 to 29 years, 32% were 30 to 39 years, 24% were 40 to 49 years and 15% were 50 years and over.

Figure 10: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by reported HIV risk exposure



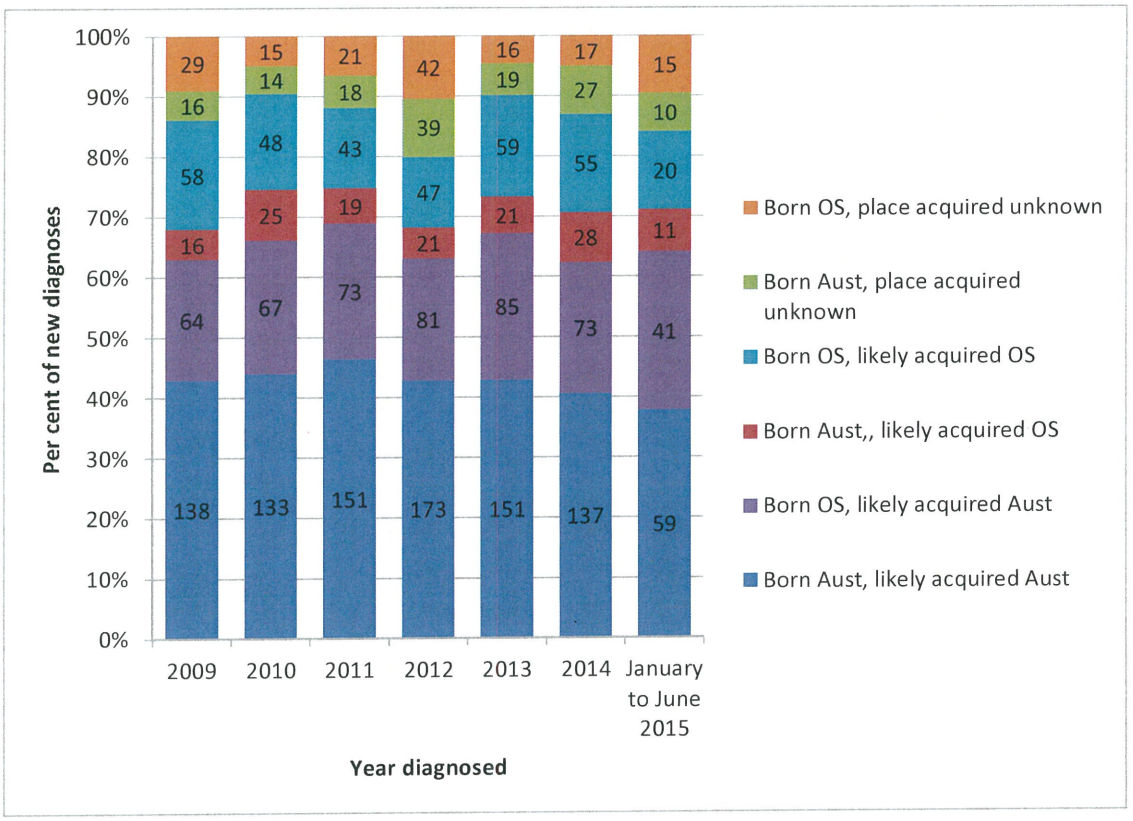
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 126 (79%) reported being MSM, 27 (17%) people newly diagnosed self-reported acquiring HIV through heterosexual sex, 3 (2%) reported being a person who injected drugs (PWID) and 4 (3%) were of unknown risk factor for HIV acquisition (Figure 10). This is similar breakdown of HIV risk exposures as for the average of the period January to June 2009 to 2014; 81% MSM, 15% heterosexual sex only, 2% were PWID and 2% were of unknown risk factor for HIV acquisition.

As mentioned earlier, from 1 January to 30 June 2015, the number of NSW residents notified with newly diagnosed HIV infection reporting to be MSM was 126, which was 20% less compared with MSM notifications for same period in 2012 (n=158) and 11% less than the MSM average for the same period in 2009 to 2014 (n=142). It is also the lowest number of MSM notifications in January to June since 2010 (n=126).

Figure 11: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by place of birth and place most likely acquired HIV*



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
* Excluded were 43 new diagnoses January 2009 to June 2015 with unknown country of birth.
OS=overseas, Aust=Australia

Comment

Australian born NSW residents newly diagnosed

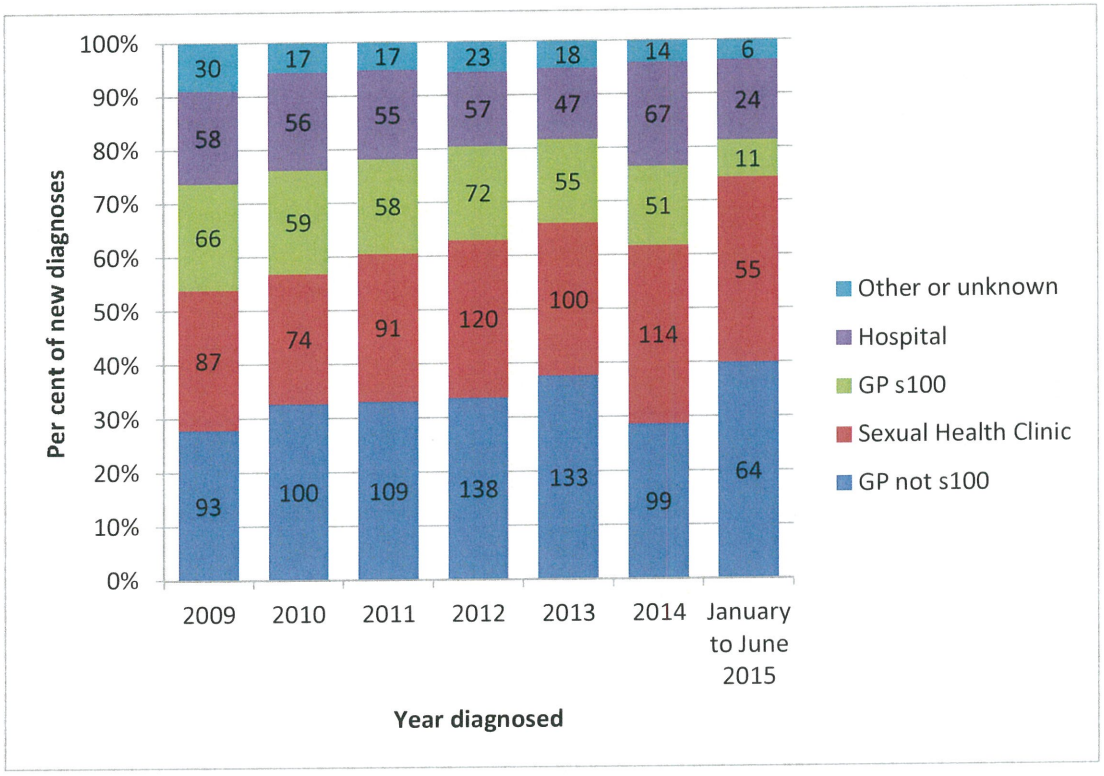
Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 80 (50%) were born in Australia. Of these, 59 (37%) likely acquired their infection in Australia, compared with 42% for the average of the period January to June 2009 to 2014. A further 11 (7%) likely acquired their infection overseas and 10 (6%) place of acquisition was unknown, both similar to previous comparable periods (Figure 11).

Overseas born NSW residents newly diagnosed

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 76 (48%) were born overseas. Of these, 41 (26%) likely acquired their infection in Australia, compared with 23% for the average of the period January to June 2009 to 2014. A further 20 (13%) likely acquired their infection overseas and 15 (9%) place of acquisition was unknown, both similar to previous comparable periods.

At the time of reporting place of birth was unknown for 4 (2%) of 160 new diagnoses January to June 2015.

Figure 12: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by type of diagnosing doctor



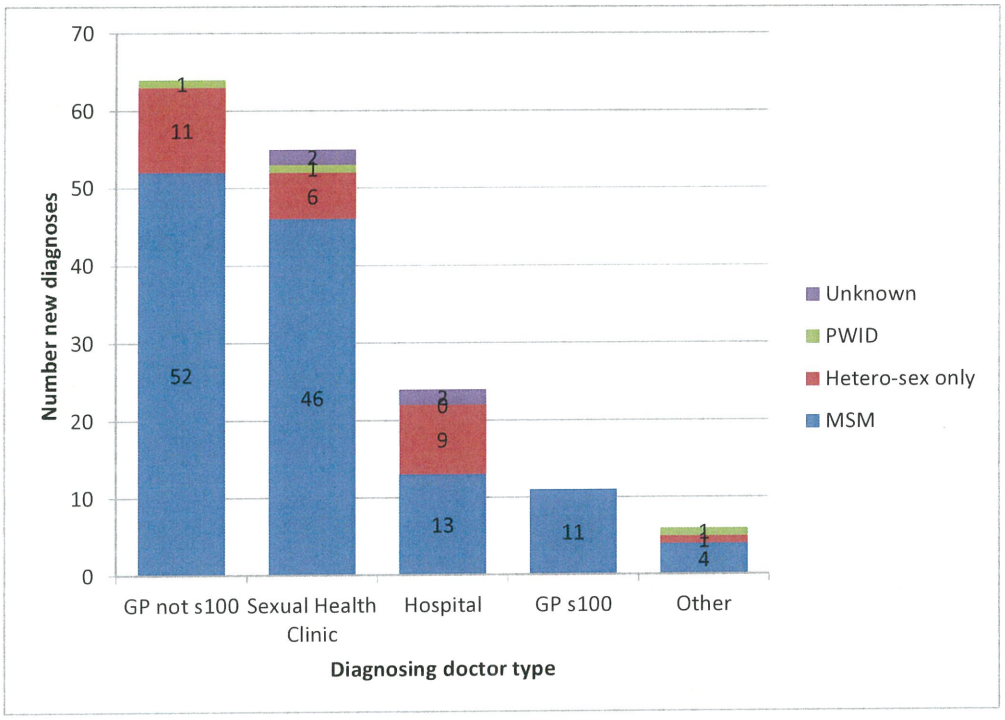
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection in January to June 2015, 64 (40%) were diagnosed by general medical practitioners not accredited to prescribe antiretroviral therapy (ART) nor specialised in HIV (GP non-s100), 55 (34%) were diagnosed by sexual health clinics (SHC) (which also includes linked community testing sites), 24 (15%) by hospital located doctors, 11 (7%) by GP s100 doctors (GP HIV specialist-accredited to prescribe ART) and 6 (4%) by other doctor types such as immigration services (Figure 12). Of note, GP non-s100s made a greater proportion of the new diagnoses in January to June 2015 compared with 31% for the average of the period January to June 2009 to 2014 and GP s100 doctors (GP HIV specialist-accredited to prescribe ART) made a lesser proportion of diagnoses (7%) compared with 18% for the average of the period January to June 2009 to 2014.

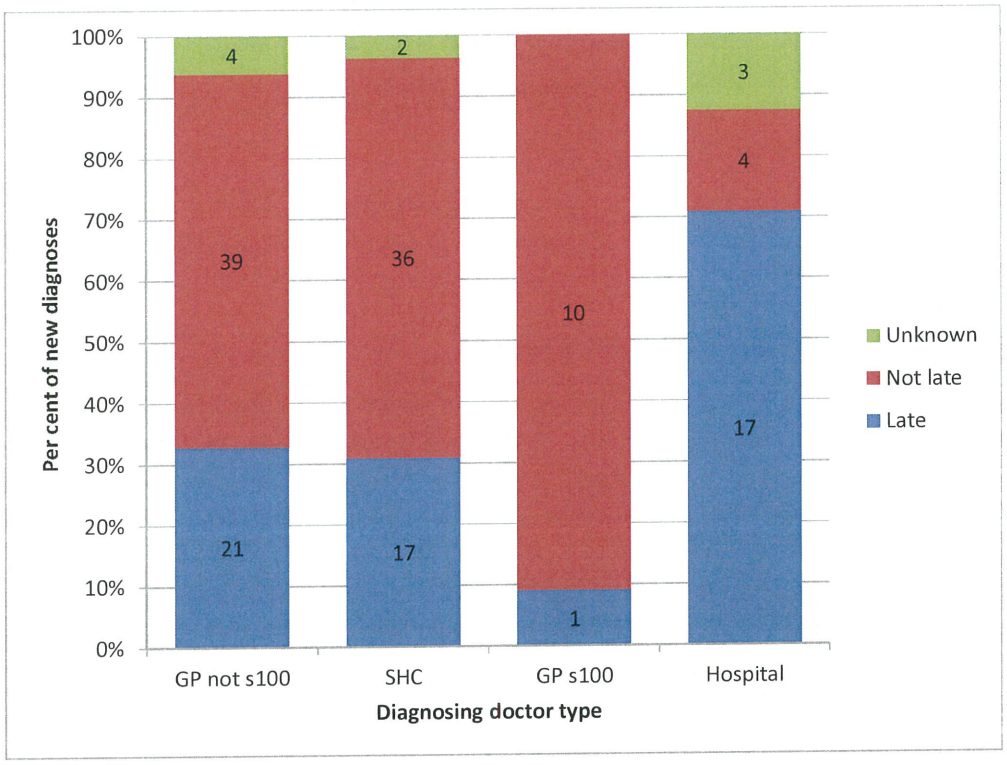
GP non-s100, SHC and hospital based doctors diagnose HIV in a mix of at risk groups whereas GP s100s almost exclusively diagnose MSM (Figure 13). Evidence of late diagnosis in people newly diagnosed by hospital located doctors is double that among those diagnosed by GP non-s100 and SHC (Figure 14).

Figure 13: Number of NSW residents notified with newly diagnosed HIV infection from January to June 2015 (n=160) by type of diagnosing doctor and self-reported HIV risk exposure



Data source both figures: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Figure 14: NSW residents notified with newly diagnosed HIV infection from January to June 2015 by type of diagnosing doctor (6 'other' excluded) and evidence of late diagnosis

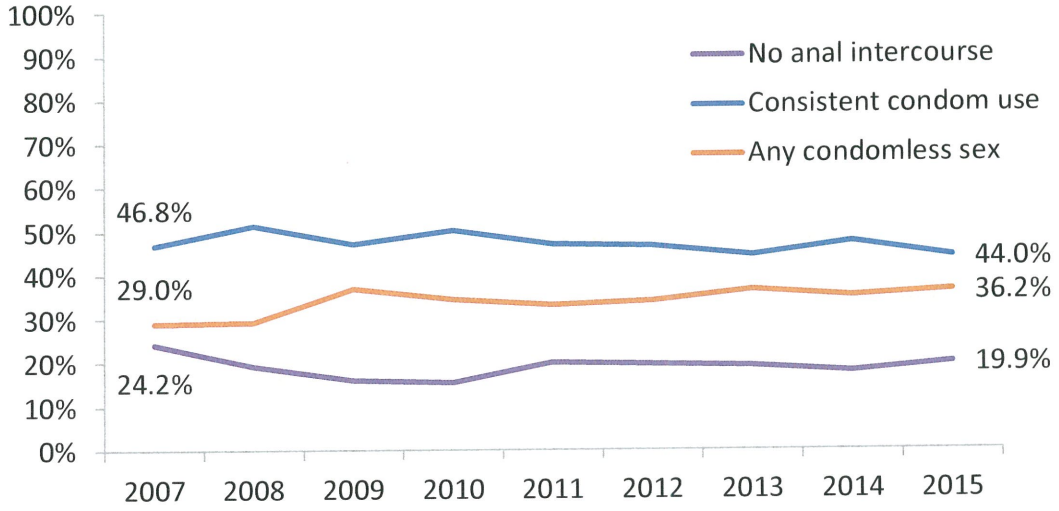


2. Maintain safe behaviour

2.1 How many men who have sex with men use condoms with casual sexual partners?

Condom use among men who have sex with men with casual sexual partners is measured through the Sydney Gay Community Periodic Survey (SGCPS). This represents behaviour in the 6 months prior to February 2015 and is therefore reflective of behaviours in the latter part of 2014.

Figure 15: Condom use reported by MSM with casual sexual partners in NSW, 2007-2015



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

Among gay men with casual sexual partners surveyed, 64% reported "always using a condom for anal sex" or "avoided anal sex". This has remained stable since 2009. Updated data from the February 2016 SGCPS will be presented in the Quarter 1 2016 report.

2.2 Community mobilisation "Ending HIV"

Since 2013, ACON has monitored the knowledge and attitudes of gay men in regards to key messages relating to the NSW 'Ending HIV' campaign. Key findings and a description of the evaluation is provided in Appendix B.

2.3 How accessible are NSP services in NSW?

In the year ending 30 June 2015, a total of 12,668,704 units of injecting equipment were distributed in NSW. This figure includes injecting equipment distributed by pharmacies participating in the Pharmacy NSP Fitpack® scheme and by the Public NSP. This represents an increase of 391,807 additional units (3.2%) compared with the previous 12 months (NSW Health NSP Minimum Data Set).

As of 30 June 2015, there were 1,076 NSP outlets located across NSW. This represents an increase of 27 additional outlets (2.6%) compared with same period in 2014 (NSW NSP Data Collection).

2.4 How many people are using new injecting equipment in NSW?

Among respondents to the NSW NSP Enhanced Data Collection survey 2013[1] who reported injection, 22% reported receptive sharing (RSS) of needles and syringes in the previous month. In 2014, the proportion who reported receptive sharing of needles and syringes declined to 14%.[2]
These results are broadly comparable to the Australian NSP survey. In the Australian NSP survey, which surveys only primary NSW sites, the proportion of NSW respondents who reported receptive sharing of needles and syringes in the previous month was 13% in 2013 and 16% in 2014.[3]

Findings from the upcoming 2015 NSW NSP Enhanced Data Collection will indicate whether the reduction between 2013 and 2014 identified in that survey is a continuing trend or an expected fluctuation.

[1] In 2013, the first annual NSW NSP Enhanced Data Collection survey was conducted. The purpose of the survey is to collect NSP client demographic, behavioural and drug use data on an annual basis to strengthen the state-wide prevention approach, and also inform LHDs in planning for NSP service delivery at the local level.
[2] Currie B, Iversen J, Maher L NSW Needle and Syringe Program Enhanced Data Collection 2013 A report for the Ministry of Health by the Kirby Institute, UNSW Australia, 2014.
[3] Iversen J, Chow S and Maher L. Australian Needle and Syringe Program Survey National Data Report 2009-2013. The Kirby Institute, UNSW Australia, 2014. In 2013, 686 people in NSW were surveyed in 20 primary NSPs. Refer to Appendix 1, Table 2

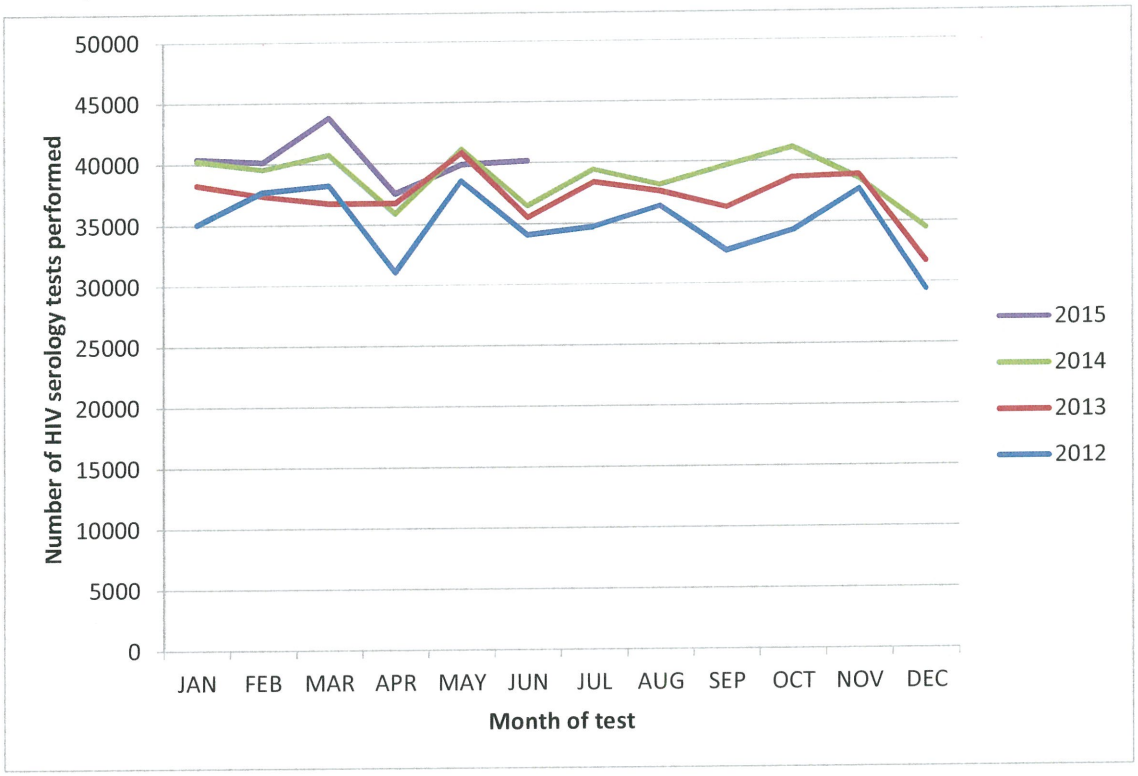
3. Increase HIV testing

3.1 Is HIV testing increasing in NSW?

3.1.1 NSW overall

In 2012, NSW Health commenced collection of testing data for selected notifiable conditions, including HIV, from 15 NSW laboratories. These laboratories represent about 95% of the laboratory testing for HIV in NSW residents. Information from laboratories does not provide any indication on the purpose of testing (screening of high risk individuals, routine antenatal, post-exposure testing), nor whether there are repeat tests on the same individual.

Figure 16: Number of HIV serology tests performed at 15 NSW laboratories per month from 1 January 2012 to 30 June 2015



Data source: NSW Health denominator data project

Comment

In quarter 2 2015, there were 117,627 HIV serology tests performed in 15 laboratories in NSW (Figure 16). This is a 4% increase compared with quarter 2 2014 (113,560), a 4% increase compared with quarter 2 2013 (113,174) and a 13% increase compared with quarter 2 2012 (103,737).

In January to June 2015, there were 242,074 HIV serology tests performed in 15 laboratories in NSW (Figure 16). This is a 3% increase compared with January to June 2014 (234,218), a 7% increase compared with January to June 2013 (225,615) and a 13% increase compared with January to June 2012 (214,731). These data do not include data on point of care (rapid) HIV testing offered at a range of community sites.

3.1.2 Local Health Districts

Data on HIV testing is available from Publicly Funded Sexual Health Clinics (PFSHCs) in all LHDs however the time periods and the type of data is not uniform due to different data management systems. Key differences in the availability of data are summarised in Table 1.

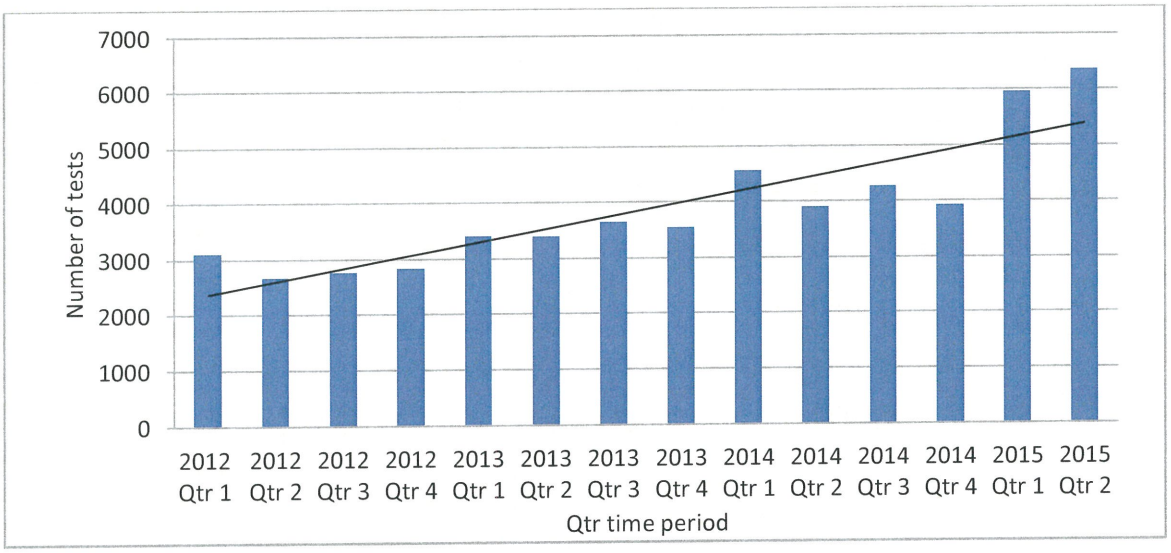
Table 1: Summary of testing data availability from Publicly Funded Sexual Health Clinics in NSW

	Total number of HIV tests and positivity per quarter *Available from*	Number of HIV tests and positivity per quarter by priority population *Available from*
South Eastern Sydney LHD	January 2011	July 2013
Western Sydney LHD Nepean Blue Mountains LHD Northern Sydney LHD Northern NSW LHD Illawarra Shoalhaven LHD	January 2011	January 2011
All other LHDs	July 2013	July 2013

As trend data for PFSHCs have become available, the proportional increase/decrease for HIV testing has varied considerable, in particular for high risk groups that have low numbers.

Figure 17 displays the number of HIV tests done in PFSHC between 1 January 2012 and 30 June 2015 in South Eastern Sydney LHD. Both rapid HIV testing and HIV serology are included.

Figure 17: Number of HIV serology tests performed in South Eastern Sydney Local Health District Publicly Funded Sexual Health Clinics from 1 January 2012 to 30 June 2015



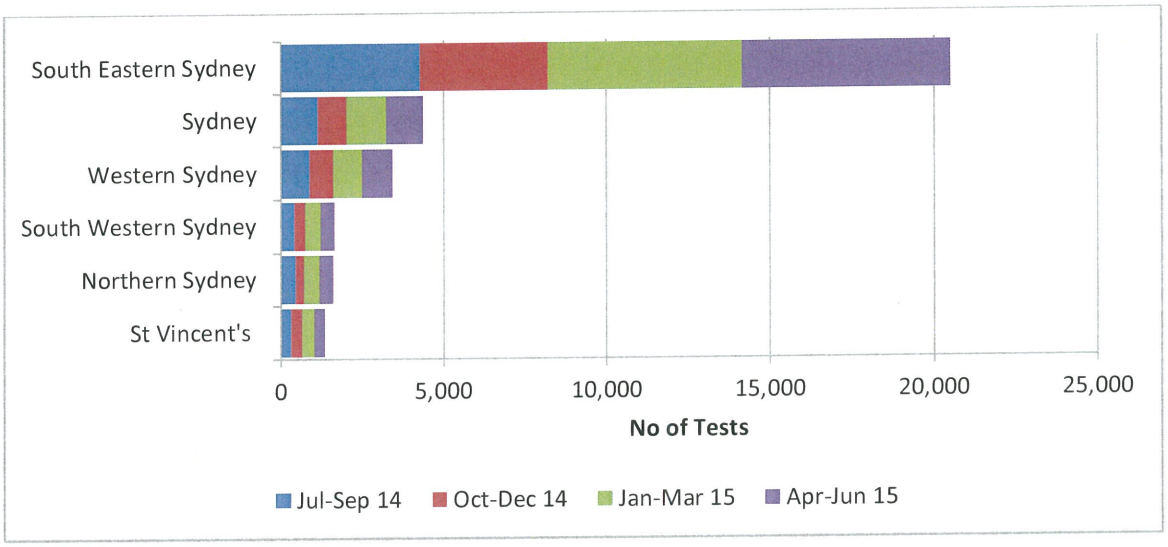
Data source: South Eastern Sydney Local Health District

Comment

In quarter 2 2015, testing in South Eastern Sydney LHD (Figures 17) increased by 63% (6,364) compared with the same period in 2014 (3,897), and by 87% compared to same period in 2012 (3,403).

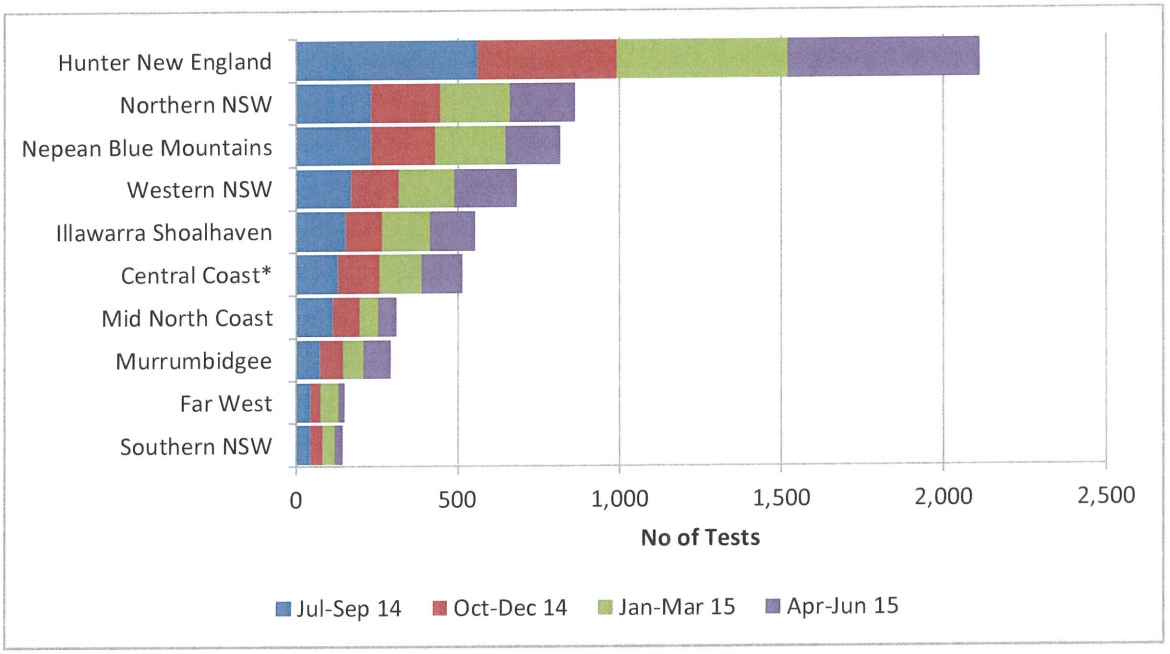
A comparison in the number of HIV tests done between 1 July 2014 and 30 June 2015 for metropolitan PFSHCs is displayed in Figure 18 and for regional and rural PFSHCs in Figure 19. Both rapid HIV testing and HIV serology are included.

Figure 18: Number of HIV tests performed in Sydney metropolitan Local Health District Publicly Funded Sexual Health Clinics from 1 July 2014 and 30 June 2015



Data source: NSW Health HIV Strategy Monitoring Database

Figure 19: Number of HIV tests performed in regional and rural Local Health District Publicly Funded Sexual Health Clinics from 1 July 2014 and 30 June 2015



*Central Coast figures are an underestimate as actual activity data is not available from Dec 2013

Data source: NSW Health HIV Strategy Monitoring Database

Comment

In quarter 2 2015, 11,263 HIV tests were done in all PFSHCs in NSW. This represents a 36% increase on the number of tests performed in the same quarter in 2014 (8,305).

In quarter 2 2015, testing increased particularly in key Sydney metropolitan areas; overall HIV testing in Sydney LHD increased by 26% (1,138) compared with the same period in 2014, and testing in Western Sydney LHD increased by 15% (933) compared to the same period in 2014.

HIV testing increased both overall in NSW and among high risk populations. To reduce the number of undiagnosed HIV infections in the community, populations with ongoing risk of HIV infection need to continue to test frequently.

3.2 Where is HIV testing being done?

Apart from PFSHCs, HIV testing takes place in a range of other clinical and community settings. A large proportion of testing occurs in the private sector, especially in general practice. Efforts to better understand HIV testing practices in different clinical settings including drug and alcohol services and emergency departments are ongoing.

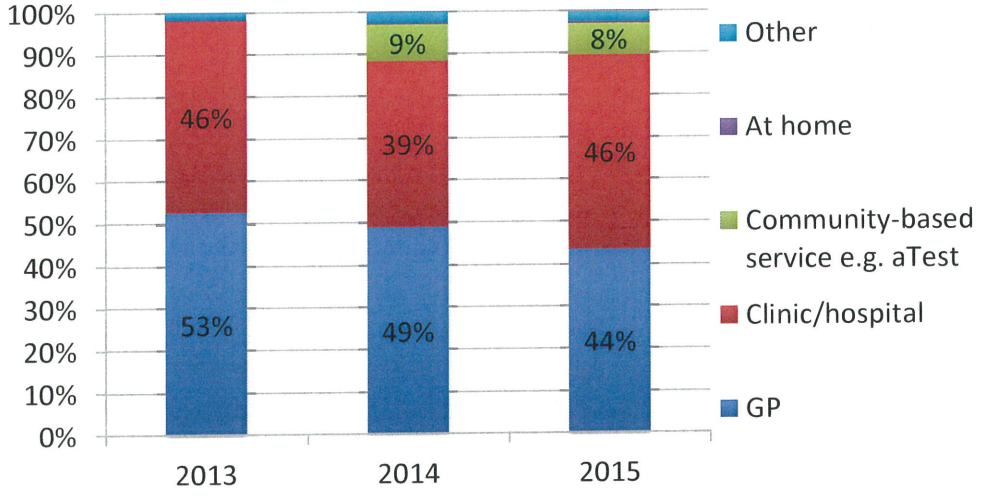
3.2.1 General practice

Number of HIV tests done and positivity for 3 General Practice clinics with high caseloads of MSM clients located in South Eastern Sydney LHD was presented in the Quarter 2 2014 report and are included here in Appendix C. Obtaining a further understand of HIV testing practices in General Practice is a high priority for NSW.

3.2.2 Survey data

HIV testing in MSM – including location and testing history - is measured regularly through the SGCPS, with most recent data presented in the Quarter 1 2015 report and included in (Figures 20, 21 and 22). Updated data from the 2016 SGCPS will be presented in the Quarter 1 2016 report.

Figure 20: Location of last HIV test reported by non-HIV-positive men.



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

The majority of gay men reported that their last HIV test took place in general practice or a public hospital service, 44% and 46% respectively.[4]

3.3 Who is being tested for HIV?

3.3.1 LHD data

To reduce the pool of undiagnosed HIV infection, testing should be targeted to high risk populations. Table 2 summarises the available data from PFSHCs on HIV testing in priority population groups. The number of HIV tests among priority populations in quarter 2, 2015 was higher compared to the same period in 2014.

Table 2: HIV testing in priority populations, Publicly Funded Sexual Health Clinics, NSW

Priority Population	% of HIV tests in all PFSHCs, Q2 2015*	Number of HIV tests in all PFSHCs, Q2 2015**	*% increase in HIV tests compared with Q2 2014 in all PFSHCs#*
Men who have sex with men (MSM)	59%	6,621	*87%*
Sex workers^	12%	1,337	*44%*
People who inject drugs (PWID)^	6%	720	*73%*
Aboriginal people	3%	291	*15%*

*Excludes Central Coast LHD who was unable to provide testing data by priority population. Also excludes Sydney Children's Hospital Network.

#Excludes LHDs without testing data by priority population in Q2 2014 (St Vincent's Hospital Network, select Southern Eastern Sydney LHD services and Central Coast LHD.

^Includes people who *ever* were sex workers or who *ever* injected drugs.

Data source: NSW Health HIV Strategy Monitoring Database[5]

Sydney Sexual Health Centre in South Eastern Sydney LHD performed the highest number of HIV tests in MSM amongst PFSHCs in NSW. Of the 5,208 tests done by this clinic in quarter 2 2015, 3,809 (73%) were for MSM. 14 were positive, yielding a 0.4% positivity rate among MSM clients.

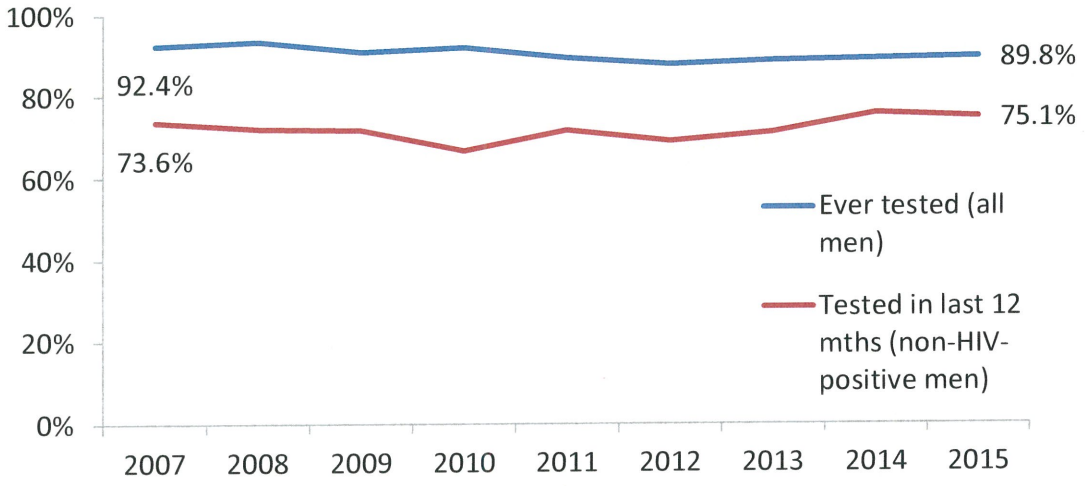
In summary, data from PFSHCs indicates that priority populations are being reached by public services. Achieving further increases in testing and retesting, particularly in high risk MSM, are important to identify and link HIV infected individuals to care; and to reduce the number of people living with HIV in NSW who are undiagnosed.

[4] excludes HIV-positive men and men who said they hadn't been tested for HIV

[5] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

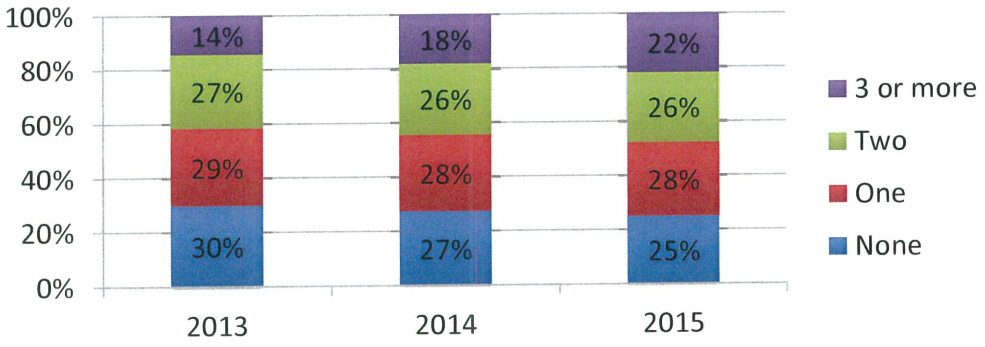
4.3.2 Survey data

Figure 21: HIV test in the previous 12 months reported by non-HIV-positive men



Data source: Sydney Gay Community Periodic Survey (February 2015)

Figure 22: Number of HIV tests in the previous 12 months reported by non-HIV-positive men



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

The high proportion of gay men reporting to have had an HIV test in the last 12 months recorded in 2014 (76%) has been sustained in 2015 (75%); these figures are the highest since the survey began in 1996 and represent a modest but statistically significant increase compared with 2013 (71%).

Among non-HIV-positive men, there has been a gradual decline in the proportion reporting no HIV tests in the previous year and an increase in the proportion who had "three or more" HIV tests in the previous 12 months (Figure 22). This suggests that while annual HIV testing appears stable overall, the proportion of men having multiple HIV tests within a year is gradually increasing.

In the context of increased testing and retesting among high risk groups, declines in positive rates are to be expected. Saturation of testing is likely to have occurred when testing numbers are high, high risk populations are well targeted and positivity is low. Aiming for and maintaining this triad is important for ensuring a negligible pool of undiagnosed HIV infection.

3.4 How is testing being made more accessible?

3.4.1 Rapid testing

Rapid HIV testing is part of a mix of high quality, safe and innovative HIV testing services being offered across NSW, to encourage gay men and other men who have sex with men to have a test annually, with more frequent testing up to 4 times a year for men who report higher risk behaviours including sex without a condom and multiple sexual partners. Rapid testing offers choice and convenience to people who do not routinely access conventional testing.

Rapid HIV testing has been made available to high risk groups in a range of settings across NSW, with a focus on community based testing services. Since June 2013, five 'fixed' community sites and six 'pop up' sites have been operational.

Table 3 displays the number of rapid HIV tests done and the percentage of clients with high risk behaviours and infrequent testing history in Community-based and other non-traditional clinical testing sites in NSW.

Table 3: Number of rapid HIV tests in non-traditional testing sites and percentage of clients with high risk behaviour and infrequent testing history from 1 April to 30 June 2015

Non-traditional Settings	Number of RHT, Q2 2015	% Positive	% never previously tested	% tested more than 12 months ago	*% with > 5 sexual partners in last 3 months*
Community-based					
aTEST Surry Hills (7 hours/week)	*220*	*0.0%*	*13.2%*	*16%*	*24%*
aTEST Oxford St (40 hours/week)	*968*	*1%*	*11%*	*19%*	*30.5%*
aTEST Kings Cross (3 hours/week)	*49*	*4.1%*	*18%*	*34%*	*16%*
aTEST Newtown (6 hours/week)	*191*	*1.6%*	-	*34%*	*26%*
Other					
Ankali House (14 hours/week)	33	*0.0%*	*9%*	*12%*	*24%*

-data is unavailable
Data sources: NSW Health HIV Strategy Monitoring Database[6]

Comment

In quarter 2 2015, 1,531 HIV rapid tests were performed in NSW, approximately 1,461 of which were at community sites. 15 of 1,531 rapid tests (1%) were confirmed as positive.

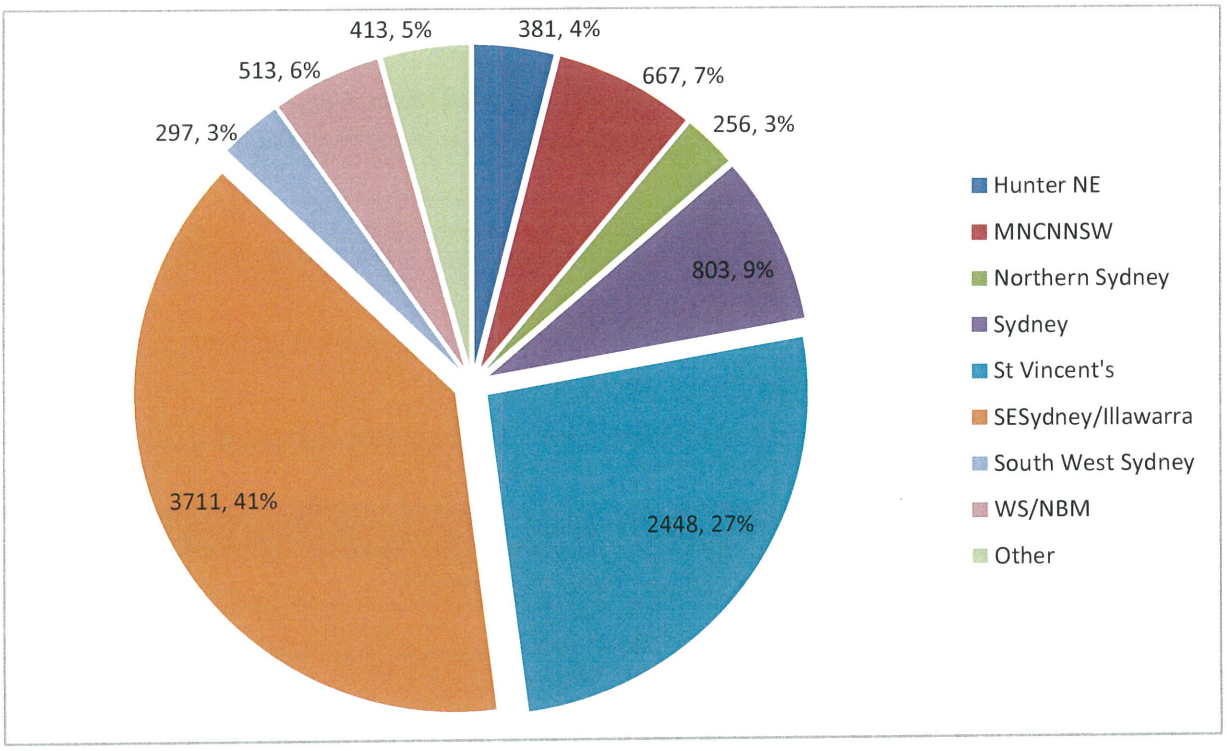
Though the number of clients tested in community sites is relatively small, NSW data suggests it is an effective testing model for engaging MSM, a high proportion of whom reported high risk behaviours, or infrequent testing for HIV.

[6] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4 Increase HIV treatment

4.1 How many people in NSW are on antiretroviral treatment?

Figure 23: Number of patients dispensed ART in NSW by LHD of dispensing pharmacy from 1 July 2014 to 30 June 2015[7][8][9][10]



Data source: Health Share NSW ipharmacy data and data submitted by Western Sydney, Nepean Blue Mountains and Hunter New England LHDs

Comment

Pharmacy dispensing data indicates that in the 12 months between 1 July 2014 to 30 June 2015, 9,152 people diagnosed with HIV in NSW and in care were dispensed antiretroviral therapy (ART) at least once. This includes all people accessing subsidised HIV treatment through the Pharmaceutical Benefits Scheme, as part of the Highly Specialised Drugs Programme. It does not include people who may be accessing treatment through other sources, including those who purchase HIV treatment

[7] In December 2013, Heath Share NSW completed the NSW rollout of a standardised ipharmacy system, which enables the collection of data from LHDs about pharmacy dispensing activities including dispensing of ART for HIV. 2013 was the first year for which actual treatment numbers can be ascertained. Past estimates were based on modelled data and therefore comparisons should be made with caution.

[8] Northern NSW, Mid North Coast, South Western Sydney, Justice Health, Murrumbidgee and Southern NSW LHDs came online with the ipharmacy system late in 2013. The 2014 calendar year ART dispensing data was the first complete data available of the public pharmacies from which ipharmacy data is extracted.

[9] The numbers displayed in the graph add up to a figure greater than the overall total of 9,152 for 1/7/14 -30/6/15. This is because a small number of cross-LHD patient flows are not eliminated

[10] 'Other' includes Central Coast 155 (1.7%); Far West/Western NSW 89 (1.0%); Murrumbidgee/Southern NSW 96 (1%); Childrens Hospital Network 16 (0.2%); Justice Health 57 (0.6%).

from overseas, receive ART through clinical trials or are dispensed ART for post-exposure prophylaxis.

Over three-quarters (77%) of all ART dispensing in NSW in the year ending 30 June 2015 occurred through inner metropolitan pharmacies, with over half of all patients receiving ART from pharmacies at the Albion Centre (29.3%) or the St Vincent's Hospital (26.7%). A further 7.5% received ART from the Royal Prince Alfred Hospital and 7.2% from Sydney Hospital and Sydney Eye Hospital.

The NSW Ministry of Health is working with Health Share NSW towards making more comprehensive ART dispensing data available, including data on ART initiations, the LHD of patient's residence, prescriber location and drug combinations.

4.2 What are the current antiretroviral treatment prescribing patterns?

4.2.1 LHDs

Data on the treatment status of clients who received HIV care in NSW public sexual health and HIV services in the year ending 30 June 2015 is summarised at Table 4[11].

Table 4: Clients who received HIV care in NSW public sexual health and HIV services from 1 July 2014 and 30 June 2015

Total number of patients who received care between July 2014 and June 2015	**5192**
Number (%) of patients for whom treatment information was available	4823 (93%)
Number (%) on ART	4378 (91%)
Number not on ART^	445
Number (%) not on ART with CD4 count < 350	*112 (25%)*
Number (%) not on ART with CD4 count between 350 - 499	*82 (18%)*
Number (%) not on ART with CD4 count > 500	*250 (56%)*
Number who initiated ART	378
Number (%) initiated at a CD4 count <350	*133 (35%)*
Number (%) initiated at a CD4 count between 350 - 500	*66 (17%)*
Number (%) initiated at a CD4 count >500	*179 (47%)*

^Includes ART naïve clients and clients who have stopped ART
Data source: NSW Health HIV Strategy Monitoring Database[12]

In the year ending 30 June 2015, at least 5,192 clients with HIV received care in public HIV and sexual health clinics in NSW. The available data indicates that treatment coverage in public clinics is high at 91%.

In the year ending 30 June 2015, 378 people living with HIV initiated ART at public HIV and sexual health clinics in NSW; this number is greater than the total number of new diagnoses in NSW (324) and does not include any persons initiating ART in the private sector.

[11] Data is representative of all clients who has received HIV care in NSW public HIV and sexual health services in the last 12 months where treatment information is available.
[12] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4.2.2 Care outcome, ART initiation and post ART HIV viral load six months post diagnosis of NSW residents notified with newly diagnosed HIV infection 1 January 2013 to 31 December 2014

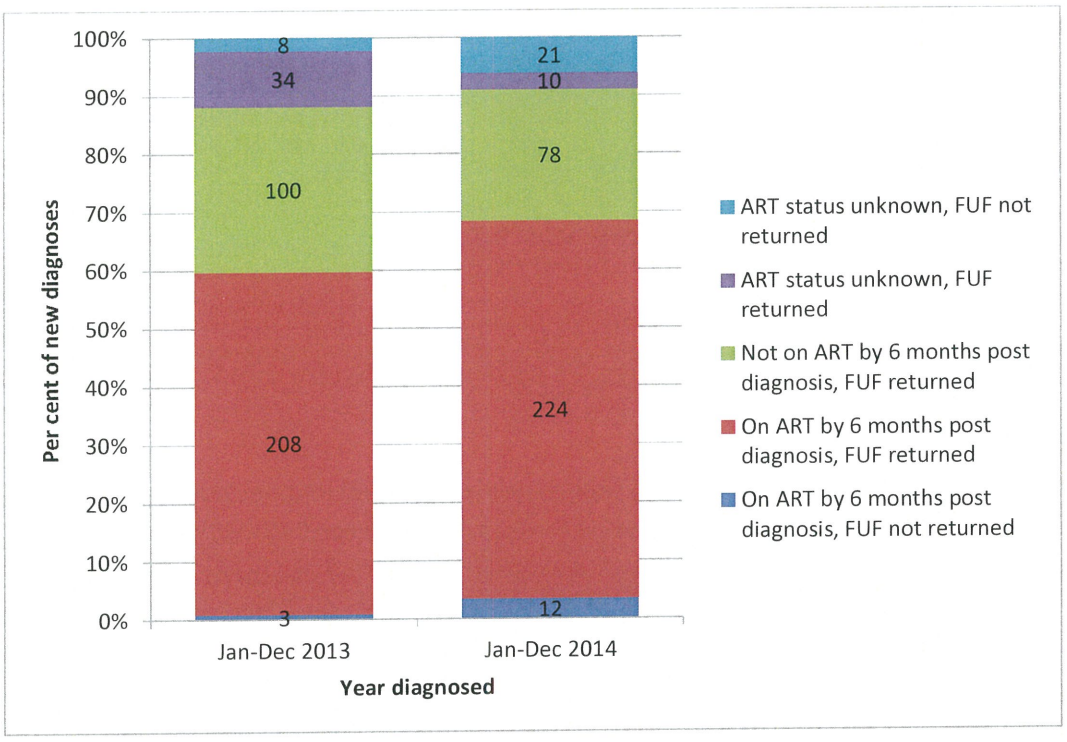
Since 2013, HIV surveillance in NSW was enhanced to:

a) at the time of diagnosis, collect from doctors additional information on the patient's HIV viral load, antiretroviral therapy (ART) commencement or deferral, and;
b) at six months post diagnosis, follow up on the patient via their doctor to collect information on retention in care, ART commencement, pre-ART and latest HIV viral load and CD4 count.

In each quarterly report, the cases reported on with respect to follow up indicators, will have been diagnosed at least six months prior. So in this Quarter 2 2015 report, we report on six month post diagnosis indicators on 698 NSW residents newly diagnosed with HIV infection between 1 January 2013 and up to and including 31 December 2014.

Return rate of six month post diagnosis follow up forms by treating clinicians was very high with 342 of 353 (97%) forms returned for the 2013 new diagnoses cohort and 312 of 345 (90%) forms returned for the 2014 new diagnoses cohort (Figure 24).

Figure 24: Per cent of NSW residents newly diagnosed with HIV infection in 2013 (n=353) and 2014 (n=345) by follow up form (FUF) return and ART status six months post diagnosis

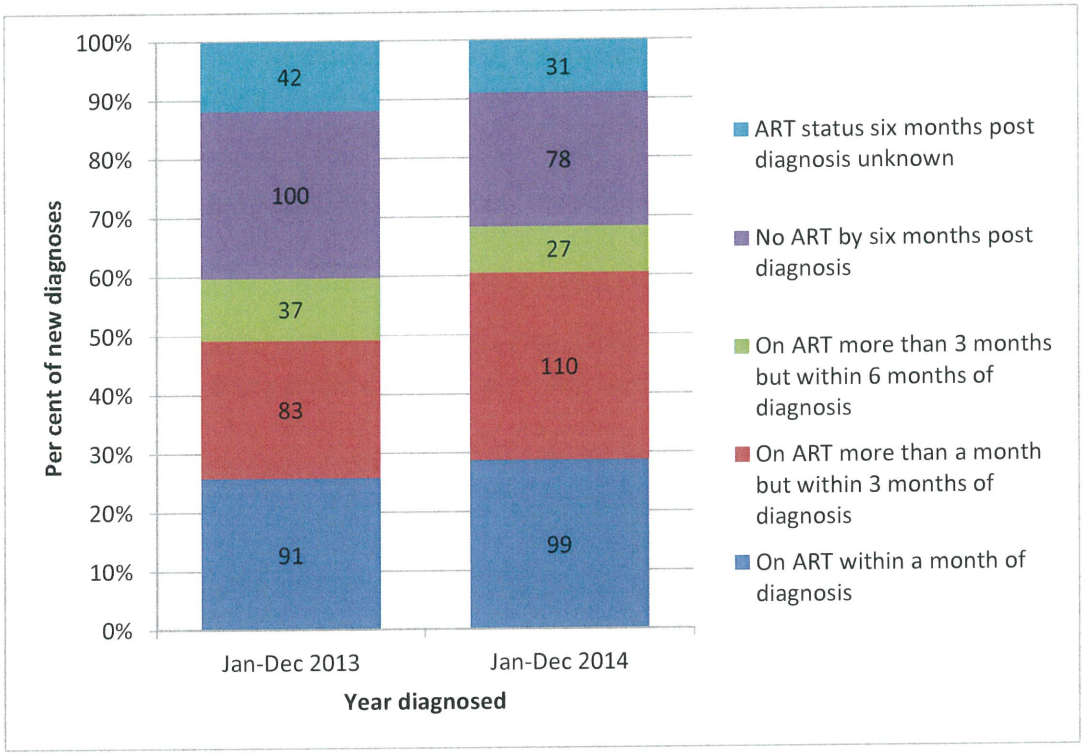


Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

Commencement of ART by six months post diagnosis

Data on commencement of ART by six months post diagnosis was drawn from follow up forms (FUF) and notifications forms and combined for analysis. All new diagnoses were included independent of care outcome by six months post diagnosis.

Figure 25: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 (n=353) and 2014 (n=345) by ART commencement status at six months post diagnosis, based on notification form and six month post diagnosis data.



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

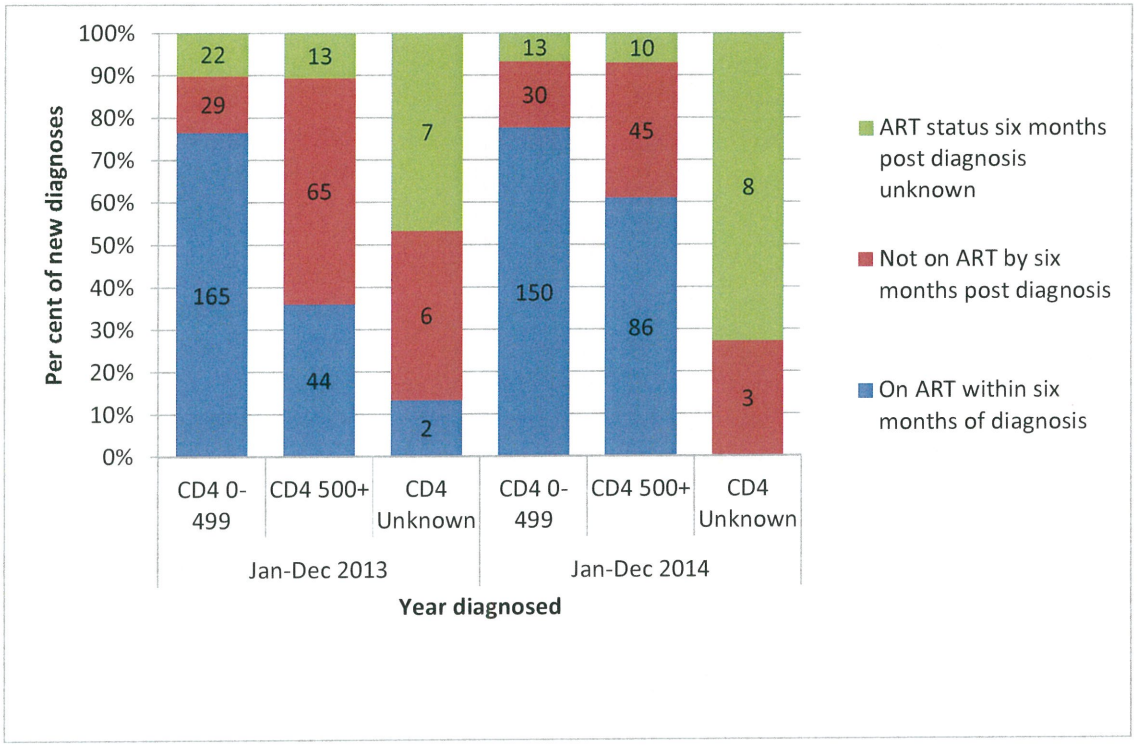
Comment

Among the cohort of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014, 447 (64%) were reported to have commenced ART within six months of diagnosis. This comprises 211 (60%) of 353 newly diagnosed in 2013 and 236 (68%) of 345 newly diagnosed in 2014 (Figure 25). In addition, 49% of the 2013 new diagnoses cohort was on ART within three months of diagnosis, compared with 61% of 2014 new diagnoses cohort. It would appear that early commencement of ART is increasing.

Those with ART status unknown at six months post diagnosis were either not retained in care of the reporting doctor (i.e., the patient was reported as lost to follow up, dead or transferred out of NSW) or had non-return of the follow up form.

Among 83 NSW residents notified with newly diagnosed HIV infection in quarter 4 2014 (the most recent quarter of diagnoses with six months post diagnosis data available), 66 (80%) were on ART within six months of diagnosis.

Figure 26: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 and 2014 by CD4 count at diagnosis and ART commencement status six months post diagnosis.

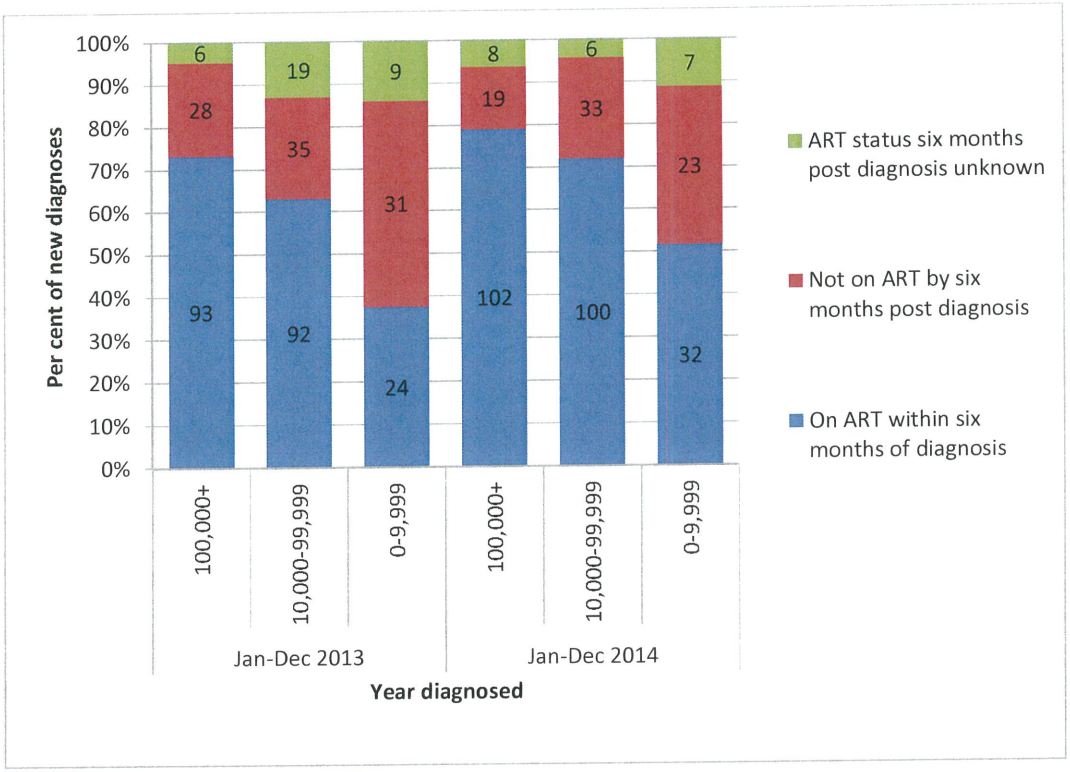


Date source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

Comment

When comparing follow data on the new diagnoses of 2013 with those of 2014, the proportion commencing ART within six months post diagnosis among those with a CD4 count equal to or greater than 500 cells/μL rose from 36% in the 2013 new diagnoses cohort to 61% in the 2014 new diagnoses cohort (Figure 26). This temporal change may reflect potential impacts of a) lifting of the CD4 count restriction to access subsidised ART, b) the reported changing attitudes and practices among treating clinicians towards earlier ART initiation and c) targeted campaigns to promote early treatment uptake. When comparing new diagnoses in 2013 with 2014, among those with a CD4 count less than 500, there was no change in the proportion commencing ART within six months post diagnosis.

Figure 27: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 and 2014 by HIV viral load at diagnosis[1] and ART status at six months post diagnosis.



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.
[1]16 in 2013 and 15 in 2013 excluded from figure as HIV VL at diagnosis unknown

Comment

When comparing follow up data on NSW residents notified with newly diagnosed HIV infection in 2013 versus 2014, in 2014 the proportion commencing ART within six months of diagnosis rose across all HIV VL categories; among those with a HIV VL at diagnosis of 100,000 copies/mL or over the proportion commencing ART within six months of diagnosis rose from 73% of 2013 new diagnoses to 79% of 2014 new diagnoses; among those with a HIV VL 10,000 to 99,999 it rose from 63% of 2013 new diagnoses to 72% of 2014 new diagnoses; and among those with a HIV VL at diagnosis of less than 10,000 copies/mL it rose from 38% of 2013 new diagnoses to 52% of 2014 new diagnoses (Figure 27).

HIV viral load after ART initiation within six months of diagnosis

The goal of ART is to reduce the HIV viral load to both minimise the effects of the virus and reduce the risk of HIV transmission. Of the 447 of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014 who were reported to have commenced ART within six months of diagnosis, 414 (93%) had a post ART HIV viral load available and reported at the time of follow up. Of these 345 (83%) had a post ART undetectable viral load at six months follow up and 400 (97%) had a viral load less than 1000 copies/mL post ART at six months follow up.

5. Sustain the virtual elimination of HIV related deaths

5.1 What is the number of deaths for which HIV/AIDS was reported as underlying cause?

Ascertaining the number of deaths due to HIV is complex in an era when people with HIV have access to effective treatment giving them a long life expectancy. People with HIV are subject to the same causes of morbidity and mortality as are people without HIV. Methods to better estimate deaths attributable to HIV are being investigated.

Appendix A: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 30/6/2015

Case characteristics	2008		2009		2010		2011		2012		2013		2014		2015		1981-30/6/15	
Gender	**325**	**%**	**334**	**%**	**306**	**%**	**330**	**%**	**410**	**%**	**353**	**%**	**345**	**%**	**160**	**%**	**17432**	**%**
Male	293	90.2%	293	87.7%	281	91.8%	309	93.6%	373	91.0%	323	91.5%	320	92.8%	147	91.9%	16031	92.0%
Female	32	9.8%	39	11.7%	23	7.5%	21	6.4%	36	8.8%	27	7.6%	24	7.0%	12	7.5%	1114	6.4%
Transgender	0	0.0%	2	0.6%	2	0.7%	0	0.0%	1	0.2%	3	0.8%	1	0.3%	1	0.6%	40	0.2%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	247	1.4%
Aboriginal person status																		
Aboriginal person	8	2.5%	9	2.7%	7	2.3%	5	1.5%	12	2.9%	8	2.3%	7	2.0%	3	1.9%	166	1.0%
Non-Aboriginal person	301	92.6%	314	94.0%	294	96.1%	323	97.9%	392	95.6%	343	97.2%	329	95.4%	150	93.8%	10329	59.3%
Not stated	16	4.9%	11	3.3%	5	1.6%	2	0.6%	6	1.5%	2	0.6%	9	2.6%	7	4.4%	6937	39.8%
Years of age at diagnosis																		
0 to 4	0	0.0%	1	0.3%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	39	0.2%
5 to 9	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	23	0.1%
10 to 14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	36	0.2%
15 to 19	3	0.9%	3	0.9%	5	1.6%	6	1.8%	9	2.2%	9	2.5%	2	0.6%	0	0.0%	304	1.7%
20 to 24	39	12.0%	34	10.2%	29	9.5%	34	10.3%	44	10.7%	37	10.5%	41	11.9%	20	12.5%	2116	12.1%
25 to 29	58	17.8%	58	17.4%	56	18.3%	55	16.7%	76	18.5%	64	18.1%	52	15.1%	35	21.9%	3445	19.8%
30 to 34	44	13.5%	42	12.6%	49	16.0%	65	19.7%	70	17.1%	48	13.6%	64	18.6%	22	13.8%	3473	19.9%
35 to 39	63	19.4%	58	17.4%	43	14.1%	59	17.9%	64	15.6%	42	11.9%	45	13.0%	21	13.1%	2901	16.6%
40 to 44	52	16.0%	57	17.1%	52	17.0%	44	13.3%	47	11.5%	44	12.5%	45	13.0%	13	8.1%	2128	12.2%
45 to 49	32	9.8%	30	9.0%	30	9.8%	26	7.9%	38	9.3%	45	12.7%	30	8.7%	14	8.8%	1253	7.2%
50 to 54	14	4.3%	28	8.4%	7	2.3%	25	7.6%	28	6.8%	24	6.8%	26	7.5%	16	10.0%	764	4.4%
55 to 59	10	3.1%	12	3.6%	22	7.2%	10	3.0%	14	3.4%	22	6.2%	15	4.3%	6	3.8%	430	2.5%
60 to 64	6	1.8%	1	0.3%	5	1.6%	2	0.6%	13	3.2%	6	1.7%	14	4.1%	7	4.4%	230	1.3%
65 to 69	0	0.0%	4	1.2%	6	2.0%	2	0.6%	4	1.0%	9	2.5%	7	2.0%	3	1.9%	127	0.7%
70 or over	4	1.2%	5	1.5%	1	0.3%	2	0.6%	3	0.7%	2	0.6%	3	0.9%	3	1.9%	77	0.4%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	86	0.5%

Stated HIV risk exposure	2008		2009		2010		2011		2012		2013		2014		2015		1981-30/6/15	
Men who have sex with men (MSM)	236	72.6%	220	65.9%	227	74.2%	267	80.9%	319	77.8%	264	74.8%	258	74.8%	118	73.8%	10947	62.8%
MSM who inject drugs	11	3.4%	17	5.1%	8	2.6%	11	3.3%	14	3.4%	16	4.5%	19	5.5%	8	5.0%	506	2.9%
Hetero-sex - other	47	14.5%	54	16.2%	39	12.7%	29	8.8%	46	11.2%	55	15.6%	34	9.9%	23	14.4%	1193	6.8%
Hetero-sex – high prev.	17	5.2%	20	6.0%	12	3.9%	12	3.6%	11	2.7%	6	1.7%	15	4.3%	4	2.5%	412	2.4%
Person who injects drugs	12	3.7%	12	3.6%	9	2.9%	8	2.4%	10	2.4%	7	2.0%	8	2.3%	3	1.9%	560	3.2%
Blood disorder, blood or tissue recipient	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	276	1.6%
Vertical transmission	0	0.0%	2	0.6%	1	0.3%	0	0.0%	0	0.0%	1	0.3%	1	0.3%	0	0.0%	46	0.3%
Other	0	0.0%	2	0.6%	1	0.3%	1	0.3%	2	0.5%	1	0.3%	4	1.2%	0	0.0%	45	0.3%
Unknown	2	0.6%	6	1.8%	9	2.9%	2	0.6%	8	2.0%	3	0.8%	6	1.7%	4	2.5%	3447	19.8%
LHD of residence																		
South Eastern Sydney	117	36.0%	108	32.3%	110	35.9%	128	38.8%	150	36.6%	124	35.1%	118	34.2%	56	35.0%	5458	31.3%
Sydney	78	24.0%	90	26.9%	77	25.2%	83	25.2%	112	27.3%	91	25.8%	79	22.9%	42	26.3%	2874	16.5%
Northern Sydney	25	7.7%	39	11.7%	19	6.2%	24	7.3%	23	5.6%	26	7.4%	19	5.5%	7	4.4%	962	5.5%
Western Sydney	26	8.0%	21	6.3%	20	6.5%	31	9.4%	25	6.1%	26	7.4%	26	7.5%	7	4.4%	700	4.0%
South Western Sydney	16	4.9%	21	6.3%	23	7.5%	18	5.5%	31	7.6%	29	8.2%	27	7.8%	16	10.0%	637	3.7%
Hunter New England	14	4.3%	16	4.8%	16	5.2%	10	3.0%	14	3.4%	17	4.8%	27	7.8%	8	5.0%	470	2.7%
Nepean Blue Mountains	7	2.2%	3	0.9%	3	1.0%	4	1.2%	5	1.2%	3	0.8%	6	1.7%	2	1.3%	256	1.5%
Illawarra Shoalhaven	3	0.9%	5	1.5%	8	2.6%	5	1.5%	9	2.2%	7	2.0%	6	1.7%	5	3.1%	222	1.3%
Central Coast	6	1.8%	5	1.5%	5	1.6%	4	1.2%	10	2.4%	5	1.4%	8	2.3%	3	1.9%	194	1.1%
Mid North Coast	8	2.5%	6	1.8%	3	1.0%	4	1.2%	3	0.7%	6	1.7%	7	2.0%	3	1.9%	142	0.8%
Northern NSW	4	1.2%	4	1.2%	9	2.9%	11	3.3%	5	1.2%	5	1.4%	7	2.0%	4	2.5%	191	1.1%
Western NSW	3	0.9%	3	0.9%	4	1.3%	3	0.9%	7	1.7%	5	1.4%	2	0.6%	2	1.3%	120	0.7%
Murrumbidgee-Albury	3	0.9%	2	0.6%	7	2.3%	2	0.6%	5	1.2%	3	0.8%	3	0.9%	0	0.0%	85	0.5%
Southern NSW	3	0.9%	6	1.8%	1	0.3%	2	0.6%	7	1.7%	4	1.1%	4	1.2%	1	0.6%	55	0.3%
Far West	0	0.0%	2	0.6%	0	0.0%	0	0.0%	2	0.5%	0	0.0%	0	0.0%	0	0.0%	8	0.0%
Unknown or other	12	3.7%	3	0.9%	1	0.3%	1	0.3%	2	0.5%	2	0.6%	6	1.7%	4	2.5%	5058	29.0%
Total	**325**	**100%**	**334**	**100%**	**306**	**100%**	**330**	**100%**	**410**	**100%**	**353**	**100%**	**345**	**100%**	**160**	100%	**17432**	100%

Appendix B: Ending HIV Seven Statements Evaluation, ACON 2015

The table below shows the figures over the five separate surveys.

Percentage of respondents who strongly agree or agree with the statements below.

Answer Options	FEB 2013 (n=233)	MAY 2013 (n=517)	NOV 2013 (n=553)	APRIL 2014 (n=530)	DEC 2014 (n=549)	APR 2015 (n=602)	+/-
Everything has changed, we can now dramatically reduce HIV transmission	48%	59%	59%	67%	61%	71%	**+23**
Now more than ever, gay men need to know their HIV status	81%	85%	86%	90%	89%	91%	+10
Sexually active gay men should take an HIV test at least twice a year	88%	87%	92%	93%	89%	92%	+4
HIV treatments now offer increased health benefits and fewer side effects	65%	66%	67%	73%	69%	75%	+10
HIV treatments significantly reduce the risk of passing on HIV	33%	42%	50%	64%	59%	69%	**+36**
Early HIV treatment is better for your health and can help protect your sex partners	74%	80%	89%	91%	92%	93%	**+19**
Condoms continue to be the most effective way of preventing HIV transmission	95%	92%	92%	91%	91%	85%	-10

Survey methodology:
Each of the five online evaluation surveys was developed and analysed by an independent consultant using the Survey Monkey online tool. Each survey was run over a one to three week period. In addition to 30 to 40 mainly multiple choice questions, with a few opportunities for respondents to provide comments, respondents were provided with a set of seven statements and asked to indicate whether they agree or disagree with the statements (using a five point scale)

Recruitment methodology:
Respondents were mainly recruited through the placement of survey advertisements on Facebook undertaken by ACON.

Survey objectives:
The online evaluation survey focussed on measuring a) advertisement awareness, b) engagement with campaign components, and c) self-reported impact and getting answers to seven statements.

Appendix C: eTEST study, 2014

3.2.1 General practice

Table 2 displays the number of HIV tests done and positivity for 3 clinics with high caseloads of MSM clients located in South Eastern Sydney LHD between 1 January 2012 and 30 June 2014.

Table 5: HIV testing and positivity among general practice clinics with high caseloads of MSM

Year	Q	Total tests	Positives*	Positivity
2012	Total	6611	122	1.8%
2013	1	1732	32	1.8%
	2	1656	26	1.6%
	3	1847	26	1.4%
	4	1775	16	0.9%
	Total	7010 (+6%)	100 (-18%)	1.4% (-0.4%)
2014	1	1943	18	0.9%
	2	1798	17	1.2%

*not all new diagnoses

Data source: eTEST study (2014)

Comment

In three general practice clinics with high caseloads of MSM located in South East Sydney LHD, HIV testing increased by 10% in the first half of 2014 compared with the first half of 2013.

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Posttraumatic stress disorder among female street-based sex workers in the greater Sydney area, Australia

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Abstract

Background: This paper examines rates of exposure to work-related violence and other trauma, and the prevalence of lifetime and current posttraumatic stress disorder (PTSD) among female street-based sex workers. It also investigates associations between current PTSD symptoms and: demographic characteristics, psychiatric comorbidity, injecting and sex risk behaviours, and trauma history.

Methods: Cross sectional data collected from 72 women via face to face structured interviews. The interview included structured diagnostic assessment of DSM-IV PTSD; drug dependence; depression; experience of childhood trauma; and an assessment of sex working history.

Results: All but one of the women interviewed reported experiencing trauma, with the majority reporting multiple traumas that typically began in early childhood. Child sexual abuse, adult sexual assault and work related violence were commonly reported. Just under half of the women met DSM-IV criteria for PTSD and approximately one-third reported current PTSD symptoms. Adult sexual assault was associated with current PTSD symptoms. Depression and drug dependence were also highly prevalent; cocaine dependence in particular was associated with elevated rates of injecting risk and sexual risk behaviours.

Conclusion: These women reported complex trauma histories and despite ongoing opportunities for clinical intervention, they continued to experience problems, suggesting that current models of treatment may not be appropriate. More targeted interventions, and integrated mental health and drug treatment services are needed to address the problems these women are experiencing. Outreach services to these women remain a priority. Education strategies to reduce risky injecting and sexual behaviours among sex workers should also remain a priority.

Background

There is a long history of women engaging in the sex industry, both in developed and developing countries, and a large body of literature exists on the risks these women face in the course of their work [1]. Previous research has documented the risks of blood borne virus (BBV) transmission and sexually transmitted infections among sex workers due to unprotected sex with clients [2], the relatively high rates of HIV among sex workers in some countries, and the potential risks posed to the

broader community via BBV transmission through clients to the general population [3].

There is good evidence to suggest that sex workers are also highly likely to encounter violence during the course of their work [4-6]. In a study of females who conducted sex work indoors compared with women working outdoors, the outdoor sex workers were significantly more likely to report ever having experienced work-related violence (81% compared to the indoor sex workers (48%) [7]. In addition, street-based sex workers in particular may face risks of work-related violence due to the locations where they provide services, and the nature of the interaction with their clients [6]. Kurtz et al [6] examined the characteristics of female sex workers who had recently (in the past month) been victimised compared to those who had not and found that women who were homeless, had used crack, and injected any drug in the past month were more likely to report recent victimisation than women who were not homeless, and had not used crack or injected any drug recently. Having sex, or even getting in the car with a client was also significantly associated with recent victimisation. Controlling the location and destination of services provided was a key factor in these women's safety.

Exposure to traumatic events during the course of occupational duties is associated with psychological problems, one of which is posttraumatic stress disorder (PTSD) [8]. Previous research investigating the prevalence of PTSD in certain occupational groups has suggested that rates among those exposed to traumatic events are typically greater than those reported in the general population. These groups include police officers (current PTSD prevalence up to 9%) [9] combat veterans of the Vietnam and Gulf Wars (current PTSD prevalence up to 15%) [10-12], and journalists in war zones (lifetime rates of 29%) [13]. In comparison, the 12 month prevalence of PTSD in the Australian population has been estimated at 3.3% [14].

Given the risk of exposure to traumatic events during the course of their work, this study focuses on violence and trauma as an occupational risk among street-based sex workers, and the psychological problems that may be associated with such experiences. Despite the stigma surrounding street-based sex work, it is a legal occupation in New South Wales (NSW). The legislation states that sex workers may operate along public thoroughfares as long as they are not within view of a dwelling, church, school or hospital. NSW is unique in this respect as no other state or jurisdiction in Australia permits street-based sex work [15].

Posttraumatic stress disorder

The diagnosis of PTSD describes symptoms that develop in response to exposure to "extreme traumatic stressors involving direct personal experience of an event...or witnessing an event" [16]. These events include natural disasters, witnessing serious injury or death, serious accidents, exposure to combat, child sexual abuse, child neglect, physical assault, child physical abuse, being threatened with a weapon, tortured or held captive, and rape. Symptoms range from re-experiencing the trauma, persistent avoidance of reminders of the event, numbing of responsiveness, and persistent anxiety or hyper-arousal. For a diagnosis of PTSD, these symptoms must be present for more than one month, and must cause clinically significant distress or impairment in functioning [16].

Not all exposure to trauma results in a diagnosis of PTSD [17], but several factors have been associated with an increased risk of developing PTSD following trauma exposure. These include background variables such as childhood trauma, comorbid mental health problems, family instability and substance abuse [18-21]. There is also good evidence to suggest that females are at greater risk than males of developing PTSD following trauma [22,23].

Characteristics of the trauma also affect the likelihood of development of the disorder: PTSD is more likely to develop in response to rape [24], and associated symptoms are more likely to be severe and persistent following an event of human design (e.g. rape and torture) [16]. Continued exposure to trauma is another risk factor for development of PTSD, with previous research suggesting that the longer the exposure, the more persistent and/or severe PTSD symptoms will be. These findings relate to war veterans [10,25], as well as individuals who have experienced child sexual abuse [8]. If this relationship holds for street-based sex workers, one would assume that the longer they are exposed to traumatic experiences in their workplace, the more persistent their PTSD is likely to be.

Previous literature suggests that sex workers may have many of these risk factors. Experiences of childhood trauma are commonly reported among sex workers [26], and experiences of adult sexual assault [27] and violence while working [5,28-30] are prevalent. Adult sexual assault has also been associated with psychiatric morbidity among street-based sex workers [31].

A comparative study conducted in New Zealand [32] found that sex workers were significantly more likely to report adult sexual assault (55%) than non-sex workers (13%). Likewise, Surratt et al [33] found that half of the female street-based sex workers they interviewed reported child sexual abuse and 40% had experienced work-related violence in the previous twelve months.

The literature also makes reference to the connection between childhood violence and later re-victimisation. Surratt et al [33] purported that consistent relationships between historical and current victimisation among female street-based sex workers suggested a continuing cycle of violence in these women's lives, and that they operate within a 'subculture of violence'. Tyler at al [26] found that among a group of homeless females, those with a history of sexual abuse were more likely to be re-victimised on the street. Re-victimisation among this group was also associated with trading sex for money, while substance abuse was associated with sexual victimisation.

Research indicates that mental health problems are also prevalent among sex workers [34]. One comparative study in Scotland examining differences in psychiatric morbidity between female drug users who engaged in sex work versus those who did not [35] found that sex workers were significantly more likely to report adult physical and child sexual abuse, to have attempted suicide and to meet criteria for current depressive ideas than non sex workers. Similarly, research in the United States found that sex workers exhibited significantly higher levels of psychological distress, independently of having experienced traumatic events [31].

High rates of family instability have also been reported. In a comparative study of female sex workers and females who had experienced child sexual abuse, sex workers reported experiencing higher rates of parental separation and less parental care [36]. Child sexual abuse has also been linked with family dysfunction, leaving home at an earlier age, living on the streets for longer periods of time and engaging in sex work [26].

The literature on PTSD also suggests that the diagnosis is associated with other psychological problems [37]. Research on occupational groups at high risk of PTSD (e.g. war veterans, journalists in war zones, and police) has found that PTSD symptomatology is significantly associated with alcohol [13,38] and other substance use [39]. Research among police officers in the U.S. suggests that comorbid PTSD and problematic alcohol use is associated with increased risk of suicidal ideation [38]. Comorbid substance use is also likely to complicate treatment for PTSD [40].

There is good evidence to suggest that rates of drug use among street-based sex workers may be higher than in the general community. Studies have found high rates of illicit drug use [41], injecting drug use [2,5,42,43], and drug dependence [2,35,44] in a number of countries. Studies report that between 57% and 90% of street-based sex workers report injecting drug use, and between 46% and 96% report drug dependence [34,35,44]. Problematic substance use is also likely to complicate PTSD and response to treatment among street-based sex workers.

Given the high rates of childhood trauma, family instability, mental health problems and problematic substance use among street-based sex workers, they may be at high risk of developing PTSD if they are exposed to traumatic events. In support of this, one study reported that 68% of female sex workers interviewed met criteria for lifetime diagnosis of PTSD [4]. This was associated with exposure to trauma in childhood and adulthood, as well as high levels of work-related violence. In addition, the more types of violence reported (childhood physical and sexual abuse, rape and physical assault while working), the greater the severity of PTSD symptoms [4]. In another study of sex workers in Israel [45] 17% of the women reported having experienced PTSD symptoms in the past month. Child sexual abuse (33%), parental neglect as children (30%), rape (30%) and physical assault (30%) while working were prevalent among these women. Consistent with Farley and Barkan's [4] findings, symptoms of PTSD among these women were positively associated with past and work-related traumas.

Aims of the current study

There has been no Australian research on PTSD or its association with mental health, drug use and risk behaviours among street-based sex workers. Investigation of these issues may provide important information for the development of targeted interventions for this group. The rationale for examining street sex workers in the current study is empirically based, with previous studies suggesting that they are a more marginalised group than non street sex workers, being more vulnerable to adverse contact with law enforcement, subject to physical assault, rape, kidnap, and being threatened with a weapon [5,28-30].

The aims of the current study were therefore:

1. To examine demographics, sex work history, working conditions and work-related risk behaviours;

2. To examine rates of exposure to work-related violence and other traumatic events;

3. To examine the prevalence of posttraumatic stress disorder (PTSD) and current PTSD symptoms;

4. To investigate associations between current PTSD symptoms and a range of other issues such as psychiatric comorbidity and risk behaviours; and

5. To examine other characteristics (such as mental health and drug use) that may impact on current PTSD symptoms.

Methods

This study collected cross-sectional data between April and August 2005 via a structured interview administered face-to-face. Seventy two participants were recruited through various agencies that have ongoing contact with female street-based sex workers through the provision of on-site and outreach services. Recruitment cards with a contact number were distributed by these agencies to potential participants, who then called to organise an interview time. Participants were 17 years and over and currently engaged in street-based sex work. In order to maintain participant confidentiality, no identifying details were recorded on the questionnaire, only a study number. Written consent was obtained from all participants. This project was approved by the University of New South Wales (HREC 04277), Sydney South West Area Health Service (05/018) and South Eastern Sydney Area Health Service (04/334) Research Ethics committees.

The questionnaire collected information on demographics, working conditions in the sex industry, drug use and dependence, injection-related risk behaviour, suicidal ideation, depression, trauma history (including child sexual abuse, adult sexual assault, and violence at work) and PTSD. Trauma histories and diagnoses of PTSD were obtained using the National Mental Health and Well-Being (NHMWB) version of the Composite International Diagnostic Interview (CIDI). The CIDI is a fully structured diagnostic interview for the assessment of mental disorders. It provides diagnoses in accordance with two major psychiatric classification systems, the International Classification of Diseases, 10th Edition (ICD10) and the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) [14,46,47]. Criteria for a lifetime diagnosis of PTSD were determined in accordance with DSM-IV criteria [47]. Previous research has established that the CIDI has good psychometric properties [48]. The Beck Depression Inventory-II (BDI-II) [49] was administered to determine the presence and severity of current depressive symptoms. The BDI-II is a 21 item self-reported measure, designed to represent the criteria for a major depressive episode as presented in the DSM-IV [16]. Scores on the BDI-II range from 0 to 63, with scores between 0 and 13 representing minimal depression, 14 to 19 representing mild depression, 20 to 28 representing moderate, and 29 to 63, severe depression. Dependence on various drugs (cocaine, heroin and cannabis) was assessed using the Severity of Dependence Scale (SDS), a five-item 15-point scale that measures psychological dependence on various illicit drugs [50]. The injecting sub-scale of the HIV Risk Taking Behaviour Scale, a component of the Opiate Treatment Index (OTI), was used to measure current injection-related risk behaviour [51]. Data on child sexual abuse and adult sexual assault was collected utilising a structured instrument from a child development study conducted in Christchurch, New Zealand [52].

Three researchers, experienced in interviewing individuals engaging in illegal activities, were trained to administer the interview (including structured scales such as the CIDI and the SDS). With the exception of the BDI-II (which is self-report) the questionnaire was administered by the interviewers. If participants were having difficulty reading the BDI-II this was administered by the interviewers. More detail on the questionnaire is available elsewhere [53].

Statistical analyses

Descriptive statistics were used to record the prevalence of PTSD, depressive symptoms and drug dependence. Odds ratios and chi square analyses were conducted to determine the relationship between PTSD and other variables. Independent samples T tests were used to look at differences in the mean age of those women with current PTSD and those without, while the Mann-Whitney U statistic was used to examine differences in the median number of traumas between these groups. Post-hoc tests were conducted looking at the differences between women who identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) origin and those who did not on; homelessness in the past 12 months (Chi square); level of depression; and age of entry into sex work (t-tests). Multiple logistic regression, with the backwards elimination method using log likelihood ratios, was employed to model associations between current PTSD and other variables at a multivariate level. All analyses were conducted using SPSS for windows, version 12.0 (SPSS Inc, 2003).

Results

Demographic characteristics

Demographic characteristics of the sample are presented in Table 1. The mean age of the sample was 34 (SD 8.8, range 18 to 58). Approximately one quarter (23%) of the sample identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) origin. The mean years of school education was 9, with only 18% of the sample attaining a high school education. Almost two-thirds (61%) of the sample reported moving out of home before age 16. The mean age of living independently was 15, and this was also the most common age of living independently (range 11 to 21 years). A substantial minority (14%) reported having no fixed address, or current homelessness and nearly half (45%) of the sample reported being homeless within the past 12 months. A larger proportion (68%) of women who identified as being of A&TSI origin reported being homeless in the past 12 months compared to

Table 1: Demographic characteristics of the sample

Characteristic	% (N = 72)**
Mean age in years	34
Mean years of school education	9
Completed secondary education	18 (13)
Aboriginal and/or Torres Strait Islander (A&TSI)	23 (16)
Prison history	56 (40)
Currently homeless	14 (10)
Homeless in past 12 months	45 (32)
Currently in drug treatment	61 (44)
Source of income in past month (apart from sex work)*	
wage or salary	6 (4)
government pension	89 (64)
criminal activity	17 (12)
child support	6 (4)
Sex work as main source of income in past month	93 (67)
Left home before 16 years of age	61 (44)

*Percentages do not add to 100 as more than one response was possible.
**The figure in brackets represents the N that the percentage refers to.

Table 2: Sex work history and working conditions.

Variable	% (N = 72)*
Mean age (years) started sex work	21
Commenced sex work before age 18	31 (22)
Mean number of years involved in sex work	12
Location where services provided	
street	75 (54)
cars	67 (48)
safe house	57 (51)
Always use condoms when have sex with clients	82 (59)
Always use condoms during oral sex with clients	57 (41)
Find sex work very stressful	66 (48)
Aspect that is stressful	
clients	50 (36)
violence	11 (8)
lack of work	11 (8)
self esteem issues	11 (8)
long hours	10 (7)
Ever experienced violence while working	85 (61)
Types of work-related violence	
physical assault	65
rape at gun/knife point	40
rape without a weapon	33
robbery	29
attempted rape	21
threatened/attacked with a weapon	17
abduction	13
Ever reported these incidents to police	35 (25)

*The figure in brackets represents the N that the percentage refers to

women of non A&TSI origin (38%). This finding was close to statistical significance (p = .05).

Very few of the participants (6%) reported receiving income from a wage or salary from other paid work and most (89%) cited the government pension as an alternative source of income. Likewise, most of the sample (93%) reported sex work as their main source of income in the past month (Table 1).

Working environment

The mean age at which participants reported starting sex work was 21 (range 12 to 55 years), with nearly one-third of the sample (31%) starting before the age of 18 years (Table 2). There were no differences in the mean age of commencing sex work among the A&TSI women (21 years of age) and the non-A&TSI women (22 years of age). The mean length of involvement in the sex industry was 12 years (SD 7.3, range four months to 39 years). Three quarters of the women (75%) reported providing services on the street and 67% reported providing them in cars. Two-thirds (66%) of the sample reported that they found sex work very stressful. The majority of women (85%) reported having experienced violence while working, however only 35% had reported these incidents to police. The most common work-related incidents reported were physical assault (65%), rape with a weapon (40%), and rape without a weapon (33%) (Table 2).

Drug use history

The vast majority (94%) of the sample had ever injected any drug (Table 3). The majority (83%) had injected heroin in the past month on a median of 30 days, just under half (42%) reported injecting cocaine in the past month on a median of 17.5 days, and nearly two thirds (63%) reported cannabis use in the past month on a median of 20 days. The majority (82%) of the sample was heroin dependent according to the Severity of Dependence Scale (SDS), and approximately one-third were cocaine (36%) and cannabis (32%) dependent (Table 3).

Approximately one-third (32%) of the sample reported sharing injecting equipment such as spoons, water, filters and tourniquets in the past month (Table 3). Those women who were cocaine dependent were 4.6 times more likely to have shared injecting equipment in the past month (χ^2 = 6.85, CI 95% 1.6 to 13.7) than those who were not. They were also less likely than those who were not cocaine dependent to use condoms when having penetrative sex with clients (χ^2 = 4.19, OR .20, CI 95% .04 to .81).

When asked about the relationship between drug use and their involvement in the sex industry, just over half of the women (53%) reported that they used drugs to facilitate their sex work. The mechanism of drug use to facilitate sex work was generally described as 'numbing' so that the

Table 3: Drug use history, dependence and relationship to sex work.

Variable	% (N = 72)
Ever injected any drug	94 (68)
Mean age in years first injecting drug use	19
Injected before age 16	23 (16)
Heroin dependent	82 (59)
Cocaine dependent	36 (26)
Cannabis dependent	32 (23)
Borrowed used needles in past month	7 (5)
Lent used needles in past month	22 (16)
Shared other injecting equipment in past month	32 (23)
Commenced injecting drug use prior to sex work	53 (38)
Commenced sex work prior to injecting drug use	26 (18)
Reporting drug use had increased since starting sex work	71 (51)

*The figure in brackets represents the N that the percentage refers to

women 'did not have to think' about what they were doing, and they didn't 'have to feel' while working. Just over half of the women (52%) reported engaging in sex work to pay for drugs, with 7% reporting that drugs are the reason they work. Eighteen percent of the sample reported the relationship as being reciprocal (i.e. they used drugs to facilitate sex work and worked to facilitate drug use).

Depression and suicidal ideation

The majority of the sample (87%) reported the presence of some depressive symptoms ranging between mild and severe, while more than half (54%) reported severe current depressive symptoms in accordance with the Beck Depression Inventory (BDI-II). Approximately three quarters (74%) of the sample reported having ever thought about suicide, and just under half (42%) reported having tried to kill themselves. Just under half (40%) of the sample reported speaking with a health professional about a mental health problem other than their drug use in the past six months. Among those who had consulted a mental health professional recently, depression (79%) was the most common reason for this consultation. A&TSI women reported significantly higher levels of depression (BDI mean of 36.5) compared to non-A&TSI women (27.6) ($t = 2.8$, $df = 68$, $p = .007$). Very few of the A&TSI women (25%) had spoken to a mental health professional in the past six months compared with the non-A&TSI women (45%).

Trauma

All but one of the participants (99% of the sample) reported having experienced at least one traumatic event in their lifetime, with a large proportion (93%) reporting multiple traumas. More than half (53%) of the sample reported experiencing 6 or more traumatic events. Three quarters (75%) of the sample reported experiencing some form of sexual abuse before the age of 16 years, and the mean age of first occurrence was 7 years (range 1 to 15 years). Approximately one quarter (26%) of the sample reported that the first incident occurred before the age of 6 years. Approximately half (51%) of the sample reported that someone had vaginal sex with them before they were 16 years. The majority of the sample (81%) reported having been raped while working or in their personal lives (44% of the sample reported being raped outside of work) and physically assaulted (81%), while 71% had witnessed someone being badly injured or killed. Among those exposed to trauma, the largest proportions reported rape (19%) and being threatened with a weapon or being held captive (19%) as the most stressful of the traumatic events they had experienced (Table 4).

Posttraumatic stress disorder

Almost half (47%) of the sample met DSM-IV criteria for a lifetime diagnosis of PTSD. For 91% of those with PTSD, their symptoms were chronic in duration (i.e. they lasted for 3 months or longer), and 82% reported that their symptoms lasted for one year or more.

Among those with PTSD, a median of 17 years (range 1 to 52) had passed since the most stressful traumatic event occurred. Despite this, 62% of those who met criteria for PTSD (31% of the sample) met DSM-IV criteria for current PTSD (i.e. within the preceding 12 months). Approximately three quarters (74%) of those participants who developed PTSD said they had spoken to a health professional about the associated symptoms.

Table 5 sets out a comparison of those women who reported current PTSD symptoms with those who did not on a range of variables. There were no differences between the groups in demographic characteristics. Similarly, there were no differences in age of initiation of injecting drug use, drug dependence, or injecting risk behaviours. Age of entry into sex work, and sex risk behaviours were also similar for both groups.

There were differences in trauma histories between the two groups. Women reporting current PTSD were nearly 4 times more likely to have ever experienced adult sexual assault than women who did not report current PTSD (82% vs. 53% respectively; $\chi^2 = 4.18$, OR 3.98, 95% CI 1.2 to 13.5), and they had also experienced a significantly greater number of traumas (median of 7 traumas) than those without current PTSD (median of 5 traumas) (Mann Whitney $U = 329$, $df = 70$, $p < 0.01$). In addition, women reporting current PTSD were nearly 4 times more likely to report being seriously neglected as a child (59%) than women without current PTSD (28%) ($\chi^2 = 5.04$, OR 3.7, 95% CI 1.2–10.6). There were no differences in proportions reporting child sexual abuse (82% among those

Table 4: Prevalence of exposure to traumatic events and events perceived as most stressful.

Trauma***	% (N = 72)**	% most stressful event*
Child sexual abuse (CSA)		
ever experienced CSA	75 (54)	13 (9)
mean age of first CSA	7	
reporting first CSA before age 6 years	26 (19)	
reporting someone having vaginal sex with them before age 16 years	51 (37)	
Rape	81 (58)	19 (13)
Physical assault	81 (58)	12 (8)
Witness serious injury or death	71 (51)	15 (10)
Threatened with a weapon/held captive	68 (49)	19 (13)
Child physical abuse	54 (39)	12 (8)
Life threatening accident	51 (37)	4 (3)
Child neglect	38 (27)	4 (3)
Natural disaster	26 (19)	1 (1)

* Among those who had experienced a stressful event.
**The figure in brackets represents the N that the percentage refers to.
***With the exception of some of the child sexual abuse items all trauma data presented in this table derives from the PTSD scale in the CIDI

with current PTSD and 72% among those without current PTSD), or physical assault at work (77% each). Likewise, there was no difference between the groups in median age of first sexual assault (13 for those with current PTSD, and 14 those without current PTSD). The association between current PTSD and severe depressive symptoms was close to significance, with women reporting current PTSD more likely to report being depressed at the time of interview ($p = .05$). Variables that were significant at the bivariate level (number of traumas experienced, severe depression, child neglect and adult sexual assault) were then entered into a multiple logistic regression model. The only variable that

Table 5: Correlates of current PTSD symptoms.

Variable	Current PTSD % (N = 22)**	No current PTSD (N = 50)
Demographics		
Mean age in years	34	33
Homeless in the past 12 months	50 (11)	42 (21)
Median years of school education	9	9
A&TSI status	27 (6)	20 (10)
Drug use		
Median age in years first injecting drug use	17	18
Drug dependent		
heroin dependent	73 (16)	86 (43)
cocaine dependent	32 (7)	38 (19)
cannabis dependent	36 (8)	30 (15)
Shared injecting equipment in the past month	20 (4)	40 (19)
Sex work & sex risk behaviours		
Median age started sex work	20	18
Always use condoms when have sex with clients	91 (20)	83 (39)
Always use condoms during oral sex with clients	62 (13)	60 (28)
Mental health & trauma		
Median number of traumas experienced	7**	5
Severe depressive symptoms	73+(16)	48 (23)
Attempted suicide	50 (11)	40 (19)
Experienced physical assault while working	77 (17)	77 (39)
Ever experienced child sexual abuse	82 (18)	72 (36)
Ever experienced child neglect	59* (13)	28 (14)
Ever experienced adult sexual assault	82* (18)	53 (26)
Median age of first sexual assault	13	14

* $p < .05$ ** $p < .01$ +close to significance $p = .05$.
**The figure in brackets represents the N that the percentage refers to

remained significant was the number of traumas experienced (Wald statistic = 6.87, p = .009, OR 1.49, CI 95% 1.11 to 2.00). Women reporting current PTSD were more likely to have experienced a greater number of traumas than those without current PTSD

Discussion

This study examined rates of exposure to work-related violence and other traumatic events, and the prevalence of lifetime and current PTSD among female street-based sex workers. It also investigated associations between current PTSD and demographic characteristics, psychiatric comorbidity, injecting and sex risk behaviours and trauma history.

The overwhelming majority of women interviewed for this study reported multiple traumas in their lifetime, with over half experiencing 6 or more events. These women had many of the markers reported in the literature (childhood trauma, family instability, mental health problems, rape and substance use) as being associated with the risk of developing PTSD following exposure to traumatic events. The majority had experienced child sexual abuse before the age of 16 years, a substantial proportion reported being seriously neglected as a child, and over half of the women reported leaving home before age 16 years. The majority of women had experienced adult sexual assault, and drug dependence, severe depressive symptoms and suicidal ideation were prevalent. These findings are entirely consistent with previous research among sex workers [4,5,27,31,54]. Just under half of the sample reported being homeless in the previous twelve months, and homelessness was particularly prevalent among the A&TSI women. In addition, A&TSI women reported significantly higher levels of depression compared to non-A&TSI women, with very few of these women having spoken to a mental health professional in the past six months.

Just under half of the women met criteria for lifetime PTSD, and approximately one-third reported current PTSD symptoms (31%), a rate that is almost ten times higher than that in the general population (3.3%) in Australia [14], and higher than the upper levels of prevalence rates among other occupational groups (war veterans 15%; police officers 9%) [10,38].

Those women meeting criteria for current PTSD were more likely to report a greater number of traumas, serious neglect during childhood, and adult sexual assault. This last point is particularly important, as these women continue to be exposed to the risk of sexual assault through their work, the very factor that is associated with their current PTSD symptoms. These women are at ongoing risk of further work-related trauma, so whilst they remain in the street-based sex industry, their PTSD symptoms are unlikely to recede.

Clinical implications

Although the majority of women who met criteria for a lifetime diagnosis for PTSD reported having consulted a professional about issues associated with their trauma, a substantial proportion continued to experience PTSD symptoms. Likewise, despite almost half the women reporting consulting a mental health professional in the past 6 months, high proportions reported severe current depression. It is important to consider then, whether traditional mental health care services are appropriate for this group, who have complex histories and high levels of psychiatric morbidity. Mental health professionals need to be aware of the issues that are central for this group, particularly with respect to child sexual abuse and ongoing sexual assault, which often engenders a lack of trust and difficulty with disclosure. There are also issues of stigma surrounding sex work that may prevent these women from engaging in therapy, and these may need to be addressed. Very few indigenous women in this study reported *any* engagement with mental health services, and strategies to encourage this group to access such services are clearly required. Employing A&TSI mental health professionals in key areas may assist with these objectives.

There are several factors that complicate treatment of PTSD among these women, one of which is the high prevalence of drug dependence. Central to conventional cognitive behavioural approaches to PTSD intervention is the ability to cognitively confront traumas experienced, and assault victims who develop PTSD are characterised by extreme cognitive and behavioural avoidance [24]. There was some evidence to suggest that drug use among the women in this study was serving the purpose of reducing psychological distress through cognitive avoidance. This avoidance will undoubtedly affect treatment, and any psychological intervention for PTSD among these women should ensure that drug use is addressed. Treatment is further complicated by the interplay between PTSD and substance use, with previous research showing that unremitted PTSD is associated with poorer outcomes for substance use disorders [55].

Drug use is also important to target in order to reduce some of the associated risks. Research among police officers suggests that comorbid PTSD and substance use is associated with higher risk of suicide [38], and the high prevalence of suicide attempts among this group (42%) suggests this risk may be elevated among street-based sex workers. Previous research confirms that sex workers with a history of child sexual abuse and adult sexual assault are at elevated risk of attempting suicide compared to non-sex workers with a similar history [35], and these histories are

prevalent among the women in the current study. In addition to the risk of suicide, cocaine dependence was associated with increasingly risky injecting and sexual behaviours. Education strategies for safe sex and drug use then clearly need to target these higher-risk injectors. More practically, targeting drug use may reduce the financial pressures for high-risk sex workers.

Another factor complicating treatment is the ongoing exposure to work-related trauma for these women. Much of the research on successful PTSD intervention recommends removing clients from the potential of exposure to further trauma [24] and establishing a safe environment before commencing therapy [20]. Given that current PTSD among these women is related to adult sexual assault (which was reported as the most prevalent and most stressful trauma), establishing a safe environment and minimising their ongoing exposure to trauma would entail leaving the sex industry, where occupationally they are at risk of sexual assault on a daily basis. This may be difficult for these women as many of them reported low levels of education. Sex work was the main source of income for the vast majority of women, suggesting that they have limited employment alternatives. Indeed, some of the women cited limited alternatives and lack of other job skills as reasons for remaining in the sex industry.

The nature of PTSD interventions may also be difficult to employ with these women. Imaginal exposure (in which the client relives the trauma in their imagination with the assistance of the therapist) is a central component of therapy [56], and has received strong support as an effective treatment for PTSD among sexual assault survivors [24]. It is difficult to implement when there is ongoing trauma, as it is a psychologically demanding strategy [40]. In addition, social support is an important protective factor in minimising these demands, but very few of these women reported supportive relationships. Imaginal exposure would not be an appropriate strategy to employ with these women until such time as their physical safety could be guaranteed.

Conventional PTSD interventions may not be effective for these women, and alternative strategies may need to be employed. Given the issues of cognitive avoidance and drug use among this group, more behaviourally focused strategies may be useful. These might include harm reduction strategies such as teaching the women how to recognise the signs of distress, and how to minimise them. There is some evidence to suggest that simple relaxation techniques may be successful in minimising trauma-related distress among sexual assault victims [57] and they require relatively few cognitive demands [58].

Increased awareness of and access to crisis telephone lines and mental health services may also be useful. Agencies providing outreach services to this group could promote and provide mental health and referral contacts to those women wishing to seek assistance. Provision of mental health services via outreach would also be a useful adjunct to existing services. Research in the U.S. suggests that the provision of brief psychological interventions for female street-based sex workers via existing outreach services is effective in reducing the frequency of drug use [59], and increasing drug treatment uptake and retention [60]. Motivational interviewing (a method designed to evoke intrinsic motivation for change in health risk behaviours by resolving ambivalence [61] has been shown to be particularly useful for targeting drug use among street-based sex workers [59]. While there is evidence against the efficacy of brief interventions targeting PTSD symptoms [62], these techniques may be useful for targeting other mental health problems among this group, thereby reducing the associated risks.

Psychological interventions for street-based sex workers should be specifically tailored to their needs, and they should be flexible, as many of these women have little stability in their lives. High levels of homelessness make it difficult for these women to access community resources, as well as complicating agency service provision. Accordingly, assistance with welfare and access to housing should remain a priority for agencies that serve as a first point of contact for this group, as without such stability drug treatment programs and psychological interventions are unlikely to be effective.

At a more basic level, the ongoing risk of exposure to trauma among these women needs to be targeted, as it is associated with current PTSD in this group. There needs to be continued liaison between the police and outreach workers about the negotiation of legal and safe places for these women to work. A high proportion of women in the current sample reported providing their services in cars, which may increase the risk of work-related violence. The overwhelming majority reported experiencing work-related violence however, very low proportions had reported these incidents to police. In order to encourage more women to report work-related violence, there should be an ongoing police commitment to the provision of sex work liaison officers in the local areas where street sex work is conducted. Many of the women reported positive experiences with liaison officers when reporting assaults, and any encouragement for these women to engage with police is important as it may reduce the risks they face on a regular basis. Conflict between police and street-based sex workers most often occurs due to the women soliciting in an area that is prohibited under the Summary Offences Act 1988, 19(1). Police are under con-

stant pressure from local businesses and residents to move the women out of these areas, which can result in the police pressuring the women. Ongoing dialogue between police, outreach workers and sex workers would not only help to relieve some of this tension, but it would also minimise the disruption to the broader community [5]. Finally, safety measures such as the provision of personal distress alarms through outreach services may minimise the risk of repeated exposure to trauma for these women.

Future research

These findings have several implications for further research. Firstly, the issue of safe houses needs to be addressed, as a proportion of women in the current sample continued to provide services in cars, despite safe houses being available in the Kings Cross area. Research is needed to investigate the reasons safe houses are not being utilised, as well as what changes might be required to encourage greater use of existing safe houses. This research may provide vital information for the establishment of additional safe houses outside the inner city area.

Given the prevalence of cocaine dependence among this group and the increased potential for injection-related and sexual risk behaviours, further research is required on if, and how, sex workers use drugs to facilitate their work, and what impact, if any, this has on the nature of the encounter (e.g. Does it limit their ability to negotiate safe sex? Does it increase their vulnerability to violence?).

Future research among street-based sex workers should also consider the impact that A&TSI status may have for these women, as our findings suggested that women identifying as being of A&TSI origin were more likely to report depressive symptoms and less likely to access mental health services.

Finally, more research is required on the nature of psychological treatment that would be most effective for street-based sex workers, and trialling brief psychological interventions via existing outreach services would be a useful start.

Limitations

The findings of this study refer to street-based sex workers, who differ from sex workers employed in other sectors of the industry on several domains [5,28,34]. Street-based sex workers in other Australian jurisdictions are also likely to differ from the current sample due to different legislation.

Inherent to any study of marginalised populations engaging in stigmatised activities is the issue of sample representativeness, which is difficult to achieve among these groups. Findings from the current study may be more indicative of those women who were willing to participate. One recruitment strategy utilised in an attempt to overcome this limitation was personal introductions to the women, facilitated by outreach workers who knew the women and the areas well.

Conclusion

The female street-based sex workers interviewed for this study reported complex histories of trauma, and the majority reported experiencing work-related violence. Current PTSD was more prevalent among these women than in the general population, and may be complicated by ongoing exposure to trauma, due to risks they face every day at work. These findings raise several issues. Firstly, outreach services to street-based sex workers remain crucial, in order to provide links with health and welfare services, and strategies to increase these women's personal safety. Second, that so many of the women continue to experience mental health problems, despite access to health services suggests that current models of service provision are not sufficient to address the problems among this group. More targeted intervention programs and more integrated models of care need to be developed given the high comorbidity of mental health and substance use problems, and the interplay between the two. Despite the legality of street-based sex work in NSW, it is an occupation that continues to be surrounded by stigma, which impacts on these women reporting work-related violence. The legality of street-based sex work in NSW does not provide sufficient protection against this violence and again, ongoing outreach efforts of harm minimisation, including police liaison, are crucial. Every effort should be made to encourage these women to report incidents to the police in an effort to minimise the ongoing risks they face at work. Finally, while education that targets safe sex and injecting practices among sex workers should remain a priority (given the high rate of problems encountered among this group, and the risks they face due to contact with multiple sex partners), it is recognised that these strategies will remain compromised within the context of the high prevalence of rape reported among this group.

Competing interests

The author(s) declare that they have no competing interests.

Authors' contributions

AR was involved in obtaining ethics approval from the appropriate bodies, design of the study, data collection, performing statistical analysis, conducting a detailed literature review and drafting the manuscript. LD conceived of the study, participated in its design, and provided detailed structural comment on, and assistance with drafting the manuscript. JC assisted with the study design and pro-

vided comment on the content of the manuscript. All authors read and approved the final manuscript.

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The Kirketon Road Centre (KRC), K2, the Medically Supervised Injecting Centre (MSIC) and the Women and Girls Emergency Centre (WAGEC) also provided invaluable assistance with recruitment of women in the inner city areas.

Finally, and most importantly, we are indebted to the 72 women interviewed for this project who generously gave their time and spoke openly about their involvement in the sex industry.

ABBREVIATIONS

A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	Blood-borne viral infection
BDI	Beck Depression Inventory
BPD	Borderline Personality Disorder
CIDI	Composite International Diagnostic Interview
DOCS	Department of Community Services
HCV	hepatitis C virus
IDRS	Illicit Drug Reporting System
IDU	injecting drug users
KRC	Kirketon Road Centre
MSIC	Medically Supervised Injecting Centre
NSP	Needle and Syringe Programme
NSW	New South Wales
PTSD	Posttraumatic stress disorder
STI	sexually transmitted infections
SWOP	Sex Worker Outreach Project
WAGEC	Women and Girls Emergency Centre

EXECUTIVE SUMMARY

Demographic characteristics

The mean age of the sample was 34 years and approximately one-quarter of the sample identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) origin. The median years of school education completed was 9. Fourteen percent reported having no fixed address, or current homelessness and nearly half the sample reported being homeless within the past 12 months. Income apart from sex work in the past month came from several sources, and the vast majority reported sex work as their main source of income in the past month. More than half of the sample reported moving out of home before age 16.

Sex work history and working conditions

The median age that participants reported starting sex work was 19, with almost one-third starting before 18. Length of involvement in the sex industry ranged from four months to 39 years, and participants had worked in various other sectors of the sex industry. The majority of participants reported starting sex work because they needed the money for drugs, and this was also the main reason for remaining in the sex industry. Just under half the sample reported the money as being the most enjoyable aspect of their work, and the biggest concern for approximately one-third of the sample was the provision of a safe work environment (such as safe houses). Three-quarters of the women reported providing services on the street, two-thirds reported providing them in cars and just over half the sample reported using a safe house (in areas where safe houses were available). Two-thirds of the sample reported that they found sex work very stressful, and half stated that clients were the reason for this stress. The overwhelming majority of women reported ever having experienced violence while working, most commonly physical assault and rape.

Drug use and drug treatment

Ninety four percent of the sample had ever injected any drug, and the median age of first injecting was 18, with approximately one-quarter of the sample reporting first injecting before the age of 16. There were relatively heavy patterns of heroin, cocaine and cannabis use reported among some of the women, while patterns of methamphetamine and alcohol use remained sporadic. The vast majority of the sample was heroin dependent according to the Severity of Dependence Scale (SDS) while approximately one-third was cocaine and cannabis dependent. Participants who were cocaine dependent were more likely to report sharing injecting equipment in the past month and less likely to use condoms when having penetrative sex with clients. Approximately two-thirds of the sample was in drug treatment at the time of interview.

Sex work and drug use

Approximately half the sample reported injecting drugs prior to commencing sex work, and one-quarter reported commencing sex work within 3 years of injecting drug use initiation. Just over one-quarter of the sample reported starting sex work prior to injecting drug use, and approximately three-quarters reported that their drug use had increased since they started sex work.

Injection-related risk behaviours

There were very few reports of borrowing used needles among the injecting drug users, while one-fifth reported lending a used needle to someone in the preceding month. Almost two-thirds of the sample reported sharing other injecting equipment in the past month. Approximately two-thirds of the sample reported testing positive for HCV. There were no reports of HIV positive results.

Unwanted sexual activity

Three-quarters of the sample reported experiencing some form of child sexual abuse before the age of 16. Almost two-thirds of the sample reported that someone had sexual intercourse with them after the age of 16 when they had made it clear they did not consent.

Mental health problems

Depression

Approximately half of the sample reported severe current depressive symptoms in accordance with the Beck Depression Inventory II. Depression was associated with homelessness in the past 12 months, A&TSI status, and cannabis dependence. Approximately half the sample reported ever having tried to kill themself, and approximately one-quarter had first attempted suicide by the age of 18.

Borderline Personality Disorder

Approximately half the sample screened positively for a diagnosis of Borderline Personality Disorder (BPD), which was associated with a range of adverse outcomes: earlier age of injecting drug use initiation, benzodiazepine dependence, cannabis dependence, sharing injecting equipment, current severe depressive symptoms, and adult sexual assault.

Posttraumatic stress disorder

All but one of the participants reported having experienced at least one traumatic event in their lifetime, with a large proportion reporting multiple traumas. Rape, physical assault, child sexual abuse and witnessing someone being badly injured or killed were the most commonly reported traumas. Approximately half of the sample met Diagnostic and Statistical Manual of Mental Disorders (DSM-IV (TR)) criteria for a lifetime diagnosis of posttraumatic stress disorder (PTSD), and one-third reported current PTSD symptoms.

Approximately three-quarters of those participants who developed PTSD said they had spoken to a health professional about the associated symptoms. Those reporting current PTSD were more likely to have experienced a greater number of traumas than those who did not report current symptoms.

Access to mental health services

Approximately one-quarter of the sample had ever been admitted to a psychiatric hospital, and the most common reasons for admission were depression and anxiety. Just under half of the sample reported speaking with a health professional about a mental health problem other than their drug use in the past 6 months, most commonly for depression.

Crime and police contact

Just under half of the sample reported engaging in criminal activity in the month prior to the interview, and just over half of the sample had been arrested in the preceding 12 months. Over half the sample reported ever having been in prison, and a small proportion had been in prison in the preceding 12 months. There were mixed reports regarding experiences with the police. Equal proportions of participants reported experiences of police harassment, poor treatment, and assault reports not being taken seriously, as well as police assistance, respectful treatment, and police assistance after assaults. Despite the large majority of women reporting experiences of violence at work, very low proportions had reported these incidents to police.

Access to information and emotional support

Participants generally had good access to information on safe sex and drug use, blood-borne virus information and legal support. Access was particularly good to information on the sex industry in general. A substantial minority of the group reported having no emotional support.

1 INTRODUCTION

There is a long history of women engaging in the sex industry, both in developed and developing countries, and a large body of literature exists on the risks these women face in the course of their work (Vanwesenbeeck, 2001). Previous research has documented the risks of blood-borne viral infection (BBVI) transmission and sexually transmitted infections among certain sectors of sex workers due to unprotected sex with clients (Gossop et al., 1995b), the relatively high rates of HIV among sex workers in some countries, and the potential risks posed to the broader community via BBVI transmission through clients to the general population (Tuan et al., 2004). Sex workers are a diverse group. Different groups have very different profiles and needs, and the focus of this report is predominantly on street-based sex workers, as the literature suggests that they are disadvantaged across a number of domains (Harcourt et al., 2001, Minichiello et al., 2001, Travis, 1986, Perkins and Bennet, 1985, Perkins, 1991), which will be reviewed below.

1.1 Demographic characteristics

Research has been conducted with male sex workers (Minichiello et al., 2001, Scott et al., 2005, Aggleton, 1999), but studies looking at both male and female street-based sex workers in the U.S. and Australia have documented that the majority of this group tend to be female (Roxburgh et al., 2005, Valera et al., 2000, Farley and Barkan, 1998). Consequently, there is a substantial body of literature on female street-based sex workers. Age ranges of female street-based sex workers in Western countries have generally been reported to be teenage years up to mid-50s, and the mean age is typically late 20s to early 30s (Roxburgh et al., 2005, Harcourt et al., 2001, Valera et al., 2000, Farley and Barkan, 1998, Inciardi and Surratt, 2001). The older age of street-based sex workers may indicate

a progression through different modes of sex work (such as escort, brothel and private work), with street-based work commencing once these women are well into their career. Research in the U.K. provides support for the progression from private to street-based work among female sex workers (Hunter et al., 2004).

Disadvantaged ethnic or racial minority groups also tend to be over represented among female street-based sex workers. Results of U.S. studies have found that disproportionately high numbers of street-based sex workers identify as being African American (ranging from 50 to 85%) (Inciardi and Surratt, 2001, Logan et al., 1998, Jones et al., 1998). Aboriginal and/or Torres Strait Islanders (A&TSI) are also over represented among this group in Australia. In one study of street-based sex workers in Sydney, the authors reported that 20% of the sample identified as being of A&TSI descent (Harcourt et al., 2001), while another study found that over half (59%) of the street-based sex workers identified as A&TSI (Roxburgh et al., 2005).

Low levels of education are also common among this group, with previous research documenting that the majority of women sampled have not completed secondary education (Inciardi and Surratt, 2001, Logan et al., 1998, Jones et al., 1998, Harcourt et al., 2001, Roxburgh et al., 2005).

Finally, research shows that high proportions of these women (with estimates ranging from 18 and 45%) are likely to be homeless (Inciardi and Surratt, 2001, Logan et al., 1998, Jones et al., 1998, Harcourt et al., 2001).

Low levels of education and high levels of homelessness further compound the marginalisation of these women, many of whom are from disadvantaged backgrounds.

Without solid links to the community (as afforded those with stable housing and good employment prospects), negotiating access to community resources for assistance becomes extremely difficult (Surratt et al., 2004).

1.2 Drug use

There is good evidence to suggest that, among street-based sex workers in particular, rates of drug use may be higher than in the general community. Studies have found high rates of illicit drug use (Hunter et al., 2004), injecting drug use (Gossop et al., 1995b, Logan et al., 1998, Harcourt et al., 2001, Jeal and Salisbury, 2004), and drug dependence (Gossop et al., 1995b, Gilchrist et al., 2005, Kuyper et al., 2005) in a number of countries. Studies report that between 57% and 90% of street-based sex workers report injecting drug use, and between 46% and 96% report drug dependence (Alegria et al., 1994, Gilchrist et al., 2005, Kuyper et al., 2005).

In addition to the known risks of heavy or dependent drug use, some studies have suggested higher rates of other risk behaviours such as injecting drug use and risky sex work practices (Gossop et al., 1994, Degenhardt et al., in press).

Of particular concern is the risk of BBVI transmission due to injecting drug use and needle sharing. Research investigating self-reported injecting risk behaviour has found that female street-based sex workers who are injecting drug users (IDU) are significantly more likely to share needles than female IDU who are not sex workers (Kail et al., 1995, Philpott et al., 1989, Gossop et al., 1995b, Inciardi and Surratt, 2001, Jeal and Salisbury, 2004), despite knowing the associated risks (Jeal and Salisbury, 2004). High rates of hepatitis C have also been reported among street-based sex workers (Harcourt et al., 2001).

Another issue is the association between drug use and unsafe sex (Minichiello et al., 2003, Maher, 1997, Gossop et al., 1995b). Findings in this area have been somewhat mixed. Some studies have found that drug use plays a substantial role in the way women conduct their sex work. For some, drug use may facilitate their engagement in sex work (Maher, 1997, Logan et al., 1998), and may reduce the likelihood of condom use (Gossop et al., 1994). Cocaine use in particular has been associated with significant blood borne-virus risk and sex risk behaviours among injecting drug users (Hudgins et al., 1995, Tyndall et al., 2003). Crack cocaine use has led to the lowering of the price of sex work exchanges among street-based sex workers in the U.S., engendering a more hostile environment among sex workers and more violent exchanges with clients, as well as the increased potential for high risk sexual encounters (Maher, 1997, Cohen et al., 1994), while increases in cocaine use among street-based sex workers in Sydney have been associated with reduced condom use (Degenhardt et al., in press). Other studies examining drug use and sexual risk behaviours have found no differences in condom use with clients between sex workers who are drug users or drug dependent and those who are not (Gossop et al., 1995b, Minichiello et al., 2003), indicative that condom use may be influenced by a myriad of factors, and the relationship may be more complex.

1.3 Mental health problems

There is also some evidence to suggest that rates of mental health problems are elevated among street-based sex workers. High proportions report depression (with studies showing percentages as high as 72%) (Alegria et al., 1994, Gilchrist et al., 2005) as well as high levels of psychological distress (El-Bassel et al., 1997). Posttraumatic stress disorder is also prevalent, with rates reported at around 70% (Farley and Barkan, 1998).

1.4 Comorbidity

Less work has been conducted on possible associations between drug use and mental health among sex workers. Both epidemiological and clinical studies have found that drug use problems and mental health problems are likely to co-occur.

1.4.1 Co-occurring drug use problems

There is good evidence to suggest that, in the general community, persons who meet criteria for drug or alcohol use problems are more likely to report problems with a range of drugs (Degenhardt et al., 2001, Robins and Regier, 1991, Farrell et al., 2001, Kessler, Tsuang, M. T., Tohen, M. and Zahner, G. E. P., 1995, Kessler et al., 1997).

These associations are more marked among persons who receive treatment for drug use problems. In clinical samples of persons seeking treatment for problematic substance use, a substantial proportion will report the problematic use of more than one substance (Henningfield et al., 1990, Hays et al., 1998, Compton et al., 2000, Darke and Ross, 1997). A study of comorbidity among heroin injectors (half of whom were in treatment for heroin dependence) found that 49% met criteria for DSM-III-R dependence on alcohol in the past year, 40% met criteria for cannabis dependence, and 24% and 16% met criteria for amphetamine and benzodiazepine dependence respectively (Darke and Ross, 1997).

1.4.2 Co-occurring drug use and mental health problems

General population studies have also found associations between drug use and mental health problems (Degenhardt et al., 2001). Again, the rates of co-occurring mental health problems are higher among problematic drug users recruited from health services. These findings have been consistent across anxiety disorders, mood disorders and personality disorders. In particular, studies have suggested that PTSD, borderline personality

disorder and depression may be particularly high among these populations. This is of concern given the known negative associations between these disorders and clinical outcome.

In a study examining the interplay between PTSD and substance abuse, Read and colleagues (Read et al., 2004) examined inpatients being treated for substance use disorders. The authors found that unremitted PTSD (rather than lifetime PTSD) was associated with poorer outcomes for substance use disorders. In addition, they found that comorbidity of PTSD and substance use disorders was associated with a risk for psychiatric comorbidity.

Research has also shown that BPD is prevalent among substance using populations, and that the diagnosis can have poorer treatment outcomes for substance use disorders (Bowden-James et al., 2004). In an Australian sample of heroin dependent persons, it was reported that nearly half met criteria for BPD (Darke et al., 2004). The authors also found that participants who met criteria for BPD were more likely to engage in risk behaviours such as attempted suicide and needle sharing than those who did not.

Little research has been conducted among sex workers on the comorbidity of mental health problems and drug use; however, one study looking at depression among sex workers found that those who were street-based were more likely to report high depressive symptomatology, and a significantly higher proportion of sex workers who were IDU reported high levels of depression compared to those who were not. In addition, depression was associated with unprotected sex (Alegria et al., 1994).

1.5 Violence and unwanted sexual activity

In a study of male and female inpatients at a detoxification unit, Liebshcutz and colleagues (Liebschutz et al., 2002) found that trauma - particularly when experienced as a child - was significantly related to greater substance use consequences for both males and females. The authors also found that interpersonal violence and childhood abuse was associated with poorer outcomes with regards to substance dependence, as were depressive symptoms.

Much of the literature on street-based sex workers shows that experiences of child sexual abuse, adult sexual assault (Valera et al., 2000, Tyler et al., 2000), and of violence while working (Harcourt et al., 2001, Minichiello et al., 2001, Travis, 1986, Perkins and Bennet, 1985) are prevalent, and that adult sexual assault is associated with psychiatric morbidity among this group (El-Bassel et al., 1997). In a comparative study in Scotland examining differences in psychiatric morbidity between female drug users who engaged in sex work versus those who did not, Gilchrist et el (Gilchrist et al., 2005) found that sex workers were significantly more likely to report adult physical assault and child sexual abuse, to have attempted suicide and to meet criteria for current depressive ideas than non sex workers. These studies are indicative that workers are at greater risk of meeting criteria for PTSD, and one study examining the prevalence of PTSD among street-based sex workers (Farley and Barkan, 1998) reported that 68% of the sample met criteria for the diagnosis of PTSD. This was attributable to exposure to trauma in childhood and adulthood, as well as high levels of violence related to sex work. In addition to these findings, research has found that sex workers exhibit psychological distress independently of traumatic events experienced. A comparative study of female sex workers and non sex workers, recruited from the streets of Harlem (El-Bassel et al.,

1997), found that when factors such as rape, drug use, perceived AIDS risk, ethnicity and age were controlled for, sex workers exhibited significantly higher levels of psychological distress than non sex workers, indicative that the intrinsic nature of street-based sex work is such that it triggers psychological distress.

Research suggests, then, that among female street-based sex workers, drug use may be further complicated by the presence of one or more psychological disorders. Gaining an understanding of these psychological disorders is an important clinical issue for the design and implementation of intervention strategies for street-based sex workers (Valera et al., 2000). However, it is more than just a clinical issue, as psychopathology among this group may impact on the ability to negotiate safe sex practices (El-Bassel et al., 2001) in the same way that drug use has been shown in some studies to have a detrimental effect on safe sex practices (Maher, 1997, Cohen et al., 1994).

While much of the previous research on sex workers has focused on drug use patterns, drug dependence, and the transmission of BBVI through dual vectors of sharing injecting equipment and unsafe sex practices, there has been little done in Australia on the psychological health of sex workers, and what impact it may have on subsequent drug dependence. Investigating these issues may provide new insight into whether psychopathology is likely to increase the risks (such as drug dependence, risky injecting, and unsafe sex practices) among street-based sex workers, as well as inform intervention strategies tailored for this group. The rationale for examining street sex workers in the current study is empirically based, with previous studies suggesting that they are a more marginalised group than non street sex workers, being more vulnerable to adverse contact with law enforcement, subject to physical assault, rape, kidnap, and being

threatened with a weapon (Harcourt et al., 2001, Minichiello et al., 2001, Travis, 1986, Perkins and Bennet, 1985).

1.6 Street-based sex work legislation in New South Wales (NSW)

New South Wales (NSW), Australia, has a good tradition of measures designed to reduce harms related to the public health risks posed by sex work. Street-based sex work has been legally permitted in NSW since 1979, with restrictions outlined in the Summary Offences Act 1988, 19 (1) (Wotton in Dittmore, M., 2005). Sex workers may solicit along public thoroughfares as long as they are not within view of a dwelling, church, hospital or school. NSW is unique in this respect as no other state or jurisdiction in Australia permits street-based sex work (Perkins, 1991). Relatively good outreach efforts have targeted sex workers in NSW, with a strong focus on the reduction of sexual and other risk behaviours among this group.

1.7 Aims

The current report aims to examine the following:

1. To document the demographics, childhood background, drug use patterns and working conditions of female street-based sex workers;
2. To document the prevalence of disorders such as depression, drug dependence, BPD and PTSD among this group;
3. To investigate the relationship between mental health problems and drug dependence; and
4. To consider the association, if any, of these mental health problems on self-reported risk behaviours such as needle sharing and unsafe sex.

2 METHODS

2.1 Recruitment procedures

The data presented in this report were collected between April and August 2005. Participants were recruited through various agencies including the Sex Workers Outreach Project (SWOP), the Women and Girls Emergency Centre (WAGEC), the Kirketon Road Centre (KRC) and the Medically Supervised Injecting Centre (MSIC). These agencies were chosen to assist with recruitment due to ongoing contact with, and provision of outreach services to, the participant population. Recruitment cards with a contact number were distributed by these agencies to potential participants, who then called to organise an interview time. Interviews were conducted at locations convenient to the participant (such as local cafes).

2.2 Sample

Eligibility criteria were i) involvement in the sex industry within the last 3 months, ii) involvement in street-based sex work and iii) aged 17 years and over. The sample consists of 72 female street-based sex workers located in the Sydney metropolitan area, Western Sydney, and Port Kembla.

2.3 Questionnaire

Data were collected via a structured interview administered face-to-face, which took approximately one hour to complete. Participants were reimbursed $50 for their time and costs associated with taking part in the survey.

Due to the potentially distressing nature of some of the questions such as those on child sexual abuse, cards were given to the participant with a list of incidents so they simply answered yes or no to whether an event had occurred. Similar cards were provided with a list of possible perpetrators of these incidents.

A protocol for adverse events was also established to ensure that, where needed, participants were linked in with mental health professionals immediately. This is attached at Appendix A. At the end of the interview, those participants who were interested in mental health referral information were provided with cards containing services and contact details to follow up with should they wish to do so. Finally, it was specified at the beginning of the interview that some sections may be distressing, and that the participant could choose to discontinue with those sections if they felt too distressed.

Areas covered in the interview are summarised below.

2.3.1 Demographic characteristics

Age, gender, Aboriginal and/or Torres Strait Islander (A&TSI) status, level of school and tertiary education attained, sources of income, current type of accommodation, marital status, current occupation, number of pregnancies, number of children, and details of the participant's primary carer/s until the age of 16 were collected in the demographics section.

2.3.2 Drug use and drug treatment

Participants were asked about age of initiation of drug use and which drug they first used, whether they had ever injected any drug and which drugs injected, age of initiation of

injecting drug use and which drug they first injected, drugs used in the last 12 months, and injecting drug use patterns in the last month across different drug types.

The Severity of Dependence Scale (SDS) was used to assess substance dependence for heroin, methamphetamines, cocaine, benzodiazepines, alcohol and cannabis. The SDS is a five-item 15-point scale that measures psychological dependence on various illicit drugs (Gossop et al., 1995a). Research has established that the SDS is a valid and reliable measure of cocaine, heroin, amphetamine, cannabis, benzodiazepine and cannabis use (Kaye and Darke, 2002, Copeland et al., in preparation, Topp and Mattick, 1997, Swift et al., 1998), and work has recently been completed to validate the cut off for dependence on alcohol using the SDS (Lawrinson et al., in press).

Data on age first sought treatment for drug use, current treatment, completion of treatment and reasons for non-completion, as well as how treatment services could change to encourage completion was collected.

2.3.3 Injection-related risk behaviour

The injecting sub-scale of the HIV Risk Taking Behaviour Scale, a component of the Opiate Treatment Index (OTI), was used to measure current injection-related risk behaviour (Darke et al., 1992).

2.3.4 Mental health and access to treatment services

A number of different measures were used to assess various domains of psychopathology.

Depression

The Beck Depression Inventory–II (BDI-II) (Beck et al., 1996) was administered to determine the presence and severity of current depressive symptoms. The BDI-II is a 21 item self-reported measure, designed to represent the criteria for a major depressive episode as presented in the Diagnostic and Statistical Manual of Mental Disorders Text Revision (DSM-IV TR) (American Psychiatric Association, 2000). Previous research has established that the BDI-II has good psychometric properties and that these hold across a variety of different samples (Beck et al., 1996, Whisman et al., 2000, Grothe et al., 2005).

Suicidal Ideation

Participants were asked about suicidal ideation, whether they had ever attempted suicide, and age at first and last suicide attempt. Data was also collected on methods of attempted suicide.

Borderline Personality Disorder

Participants were screened for potential ICD-10 emotionally unstable personality disorder (borderline type) (herein referred to as Borderline Personality Disorder – BPD) using the National Survey of Mental Health and Wellbeing (NSMHWB) version of the Composite International Diagnostic Interview (CIDI) (Andrews et al., 1999).

Posttraumatic stress disorder (PTSD)

DSM-IV diagnoses of Posttraumatic stress disorder (PTSD) were obtained using the NSMHWB version of the CIDI (Andrews et al., 1999).

Access to mental health services

Data were collected on psychiatric histories including treatment sought in the preceding 6 months, and for what problems, as well as whether participants were currently taking any psychiatric medication.

2.3.5 Sex work history & working environment

Data on age of initiation into sex work, reasons for entry and reasons for continued involvement in the sex industry, history of non street-based sex work, services provided, locations of service provision, and violence experienced while working were collected.

2.3.6 Blood-borne viral and sexually transmitted infections

Information regarding HCV, HIV and sexually transmitted infections (STIs) testing, HCV and HIV status, and STIs contracted in the past 12 months was collected.

The sexual behaviour sub-scale (assessing condom use in the working and personal environment) of the HIV Risk-Taking Behaviour Scale, taken from the OTI, was administered. An additional component assessing condom use in oral sex was also administered.

2.3.7 Sexual abuse

Data on child sexual abuse and adult sexual assault was collected, utilising a structured instrument from a child development study conducted in Christchurch, New Zealand (Fergusson et al., 1989).

2.3.8 Crime and contact with the police

The criminality scale of the OTI (Darke et al., 1992) was used to determine how often participants had committed property crime, drug offences, fraud and violent crimes in the preceding month. Prison and juvenile detention histories were also collected, and participants were asked about arrests within the preceding 12 months. Participants were also asked what their best and worst experiences have been with the police.

2.3.9 Accessing information

Participants were asked how they learnt about various issues such as safe sex and drug use, blood-borne viral infections, where they went to obtain information on legal advice and the sex industry in general, and who they used for emotional support.

2.4 Statistical analyses

Descriptive statistics were used to record the prevalence of PTSD, BPD, depressive symptoms and drug dependence. Medians were reported rather than means for variables where the data were not evenly distributed. Odds ratios and chi square analyses were conducted to determine the relationship between depressive symptoms and other variables, BPD and other variables, PTSD and other variables, and the relationship between depression and drug dependence, BPD and drug dependence, and PTSD and drug dependence. Independent sample T tests were used to look at differences in median age of first sexual assault and median number of traumas experienced. Multiple logistic regression, with the backwards elimination method using log likelihood ratios, was employed to model associations between current PTSD and other variables at a multivariate level. All analyses were conducted using SPSS for Windows, version 12.0 (SPSS Inc, 2003).

3 RESULTS

3.1 Demographic characteristics

Demographic characteristics of the sample are presented in Table 1. The mean age of the sample was 34 (SD 8.8, range 18 to 58). Approximately one-quarter (23%) of the sample identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) origin. The median years of school education was 9 (SD 3, range 3 to 12), with 18% of the sample completing a high school education. More than half of the sample (57%) reported that they had not completed any further courses after school. Fourteen percent reported having no fixed address, or current homelessness and nearly half (45%) the sample reported being homeless within the past 12 months.

Income apart from sex work in the past month came from several sources (Table 1); however, very few (6%) reported receiving income from a wage or salary from other paid work and the vast majority (89%) cited the government pension as a source of income. Likewise, the vast majority (93%) reported sex work as their main source of income in the past month.

Only 21% of the sample reported that they were raised by both parents until age 16. More than half of the sample (61%) reported moving out of home before age 16. The mean age of living independently was 15.

Table 1: Demographic characteristics of the sample

Characteristic	N=72
Mean age in years	34
% Current Accommodation	
Own house/flat	53
Parent's/family house	4
Boarding house/hostel	12
Shelter/refuge	4
No fixed address/homeless	14
Other (including hotel/club/friend's house)	13
% Homeless in past 12 months	45
% Aboriginal and/or Torres Strait Islander	23
Median years of school education	9
% Completed secondary education	18
% Tertiary education	
None	57
Trade/technical	38
University	5
% Marital status	
Married/de facto	14
Widowed	6
Separated/divorced	9
Single	71
% Current main occupation	
Sex work	78
Home duties	5
Unemployed	17
% Source of income in past month (apart from sex work)*	
Wage or salary	6
Government pension	89
Criminal activity	17
Child support	6
% Sex work as main source of income in past month	93

*Percentages do not add to 100 as more than one response was possible.

Eighty five percent of the sample said they had ever been pregnant, and 65% said they had children. Eight percent of the sample (13% of women who reported having children) reported that all of their children lived with them. The most common reason for the children not living with their mother was that they were living with other family members (36% of the sample; 56% of women who had children). Other reasons for the child not being with their mother included being removed by the Department of Community Services (DOCS) (11% of the sample; 17% of women who had children), children had passed away (7% of the sample; 10% of women who had children), children living elsewhere due to mother's drug use, mental health issues or involvement in sex work (7% of the sample; 10% of women who had children) and children being adopted out (4% of the sample; 6% of women who had children).

Table 2: Family background & parental status

Variable	N=72
% Ever pregnant	85
% Who had children	65
% All children living with them	8
% Children not living with them	56
% Reasons children not living with them	
Living with other family	36
DOCS mentioned	11
Passed away	7
Living elsewhere due to drugs use/mental health issues	7
Adopted out	4
% Raised by biological parents until age 16	21
% Reasons for separation from parents	
Parents divorced	21
Left home early to live on own	18
Placed in foster care	8
Lived with relatives	7
Separated from mother	7
Separated from father	6
Other reason	12

3.2 Working environment

3.2.1 Sex work history

The median age that participants reported starting sex work was 19 (SD 8, range 12 to 55 years) (Table 3), with nearly one-third of the sample (31%) starting before the age of 18. Length of involvement in the sex industry ranged from four months to 39 years (SD 7.32). Participants had worked in various other sectors of the sex industry (Table 3).

Table 3: Sex work history

Variable	N=72
Median age (years) started sex work	19
% Commenced before age 18	31
Mean number of years involved in sex work	12
Other sex industry sectors ever worked in*	
% Brothels	63
% Private	42
% Massage parlour	38
% Escort	24
% House	17
% Street-based only	14

*Percentages add to more than 100 as more than one response was possible.

The majority of participants reported starting sex work because they needed the money for drugs (61%), while just over a third (36%) reported needing money to live (Table 4). Reasons for remaining involved in the sex industry were similar to those for commencing sex work (Table 4). Again, money for drugs was nominated by the largest proportion of participants (64%), and almost half the sample (43%) said they needed the money to live.

Table 4: Reasons for commencing and continuing sex work

Reason	% commencing (N=72)*	% continuing (N=72)*
Needed money for drugs	61	64
Needed money to live	36	43
Acquaintances involved	8	
Had a particular goal in mind	4	3
Partner put me to work	4	
Preferable to committing crime	4	
Good money/flexible hours	4	13
Purely for survival	3	4
Drifted into it	3	
Can't get another job		7

* Percentages do not add to 100 as more than one response was possible.

3.2.2 Work practices

Half of the sample reported having penetrative sex with more than 30 people in the past month (Table 5).

Three-quarters of the women (75%) reported providing services on the street, 67% reported providing them in cars and just over half the sample (57%) reported using a safe house (it should be noted that not all participants were working in areas where safe houses were available) (Table 5).

The majority of participants provided oral sex (96%), vaginal sex (94%) and hand relief (92%) (Table 5). Forty six percent of participants reported that they had stopped providing services they once provided. The largest proportion (13%) reported no longer providing B&D and S& M services, followed by anal sex (11%).

Table 5: Current work practices

Variable	N=72
% Number of clients had sex with in past month	
None	3
10 people or less	25
11-20 people	18
21-30 people	4
More than 30 people	50
Location where services provided	
% Street	75
% Cars	67
% Safe house	56
% Own home	16
% Motel room	11
% Client's home	7
Services provided	
% Oral	96
% Vaginal sex	94
% Hand relief	92
% Erotic massage	31
% Role-play fantasies	31
% Anal sex	19
% Kissing	18
% B&D/S&M	18
% Fisting	7
Services no longer provided	
% B&D/S&M	13
% Anal sex	11
% Kissing	8
% Erotic massage	8
% Role-play fantasies	8
% Vaginal sex	4
% Oral	3
% Fisting	1

Half of the participants who had stopped B&D/S&M cited safety reasons and fear of losing control, and the other half cited the degrading and demeaning nature of this service. Reasons provided for discontinuing anal sex were divided between physical discomfort, and not needing the money as much as previously. Among those who had stopped kissing clients, they reported doing so because they felt it was too intimate. Massage services were stopped for a variety of reasons including no longer having the

enthusiasm for it, not getting many requests for massage, and a change of work environment from parlour to street-based work. The main reasons for role play fantasy services no longer being provided were that it made participants uneasy, and they felt it was demeaning.

3.2.3 Enjoyable aspects of sex work

When participants were asked what they enjoyed about their work, the most common response was the money (46%), followed by meeting people (35%). Approximately one-fifth (21%) reported that there was nothing enjoyable about their work (Table 6).

Table 6: Enjoyable aspects of sex work

Variable	N=72
% Money	46
% Meeting people	35
% Nothing	21
% Drugs associated with working	7
% Flexibility	6
% Dominant role/being in control	6
% Sex	4
% Providing pleasure for clients	3

3.2.4 Work-related stress and violence

Two-thirds of the sample reported that they found sex work very stressful, and half of the sample stated that clients were the reason for this stress (Table 7).

The overwhelming majority of women (85%) reported ever having experienced violence while working (Table 7). The most common incidents reported were physical assault (65%), and rape with a weapon (40%) and without a weapon (33%). Weapons included

knives, iron bars and guns, and a few of the participants also reported being tortured. Nearly two-thirds (65%) of the sample reported that the perpetrators of these incidents were clients.

Table 7: Work-related stress and violence

Variable	N=72
% Find sex work stressful	
Very stressful	66
Not at all	17
A little stressful	17
% Aspect that is stressful	
Clients	50
Violence	11
Lack of work	11
Self esteem issues	11
Long hours	10
Lack of police assistance	3
Fear of arrest	3
Issues with other sex workers	3
% Ever experienced violence while working	85
% Ever reported these incidents to police	35
% Types of violence	
Physical assault	65
Rape at gun/knife point	40
Rape without a weapon	33
Robbery	29
Attempted rape	21
Threatened/attacked with a weapon	17
Abduction	13
Stalking	6
Objects thrown from cars	6
% Perpetrators of violence	
Client	65
Potential client	18
Another worker	6
Police	6

Despite 85% of women reporting that they had experienced violence at work, only 35% had reported any of these incidents to the police. One-quarter of the sample had not reported these incidents due to a perception that the police were not concerned or would not take the women seriously, 7% had not reported for fear of retribution for their

involvement in sex work, 6% feared retribution from the offender and 4% had not reported incidents due to a lack of evidence.

3.2.5 Condom use and penetrative sex

The majority (83%) of participants reported using condoms every time they have penetrative sex with their clients (Table 8). Just over half (60%) of the participants reported either not having sex with their regular partner or not having a regular partner, while one-third reported never using condoms with their regular partner.

Table 8: Condom use for penetrative sex in past month

Variable	N=72
% Frequency of condom use with clients	
Don't have penetrative sex	3
Every time	83
Often	13
Never	1
% Frequency of condom use with regular partner	
N/a or don't have a regular partner	60
Every time	6
Never	33
% Frequency of condom use with casual partner	
N/a or don't have a casual partner	89
Every time	6
Never	3

The vast majority (82%) of participants reported that clients offered them extra money for sex without a condom, and over half (58%) of the sample reported refusing to see clients when they were offered more money for sex without a condom. Just under one-fifth (14%) reported accepting the money and providing sex without a condom, and reasons provided included "depends on whether I am hanging out", "depends on how

desperate I am for the money", "depends if they're a regular" and "sometimes after looking at them" (meaning inspecting the client's penis).

3.2.6 Condom use and oral sex

Five percent of the sample had not engaged in oral sex in the month preceding interview, while 57% reported using a condom every time they engaged in oral sex with clients (Table 9). Over half (60%) of participants reported not having a regular partner or not engaging in oral sex with their regular partner, while 32% reported never using condoms when engaging in oral sex with their partner.

Table 9: Condom use for oral sex in past month

Variable	N=72
% Frequency of condom use with clients	
Don't have oral sex	5
Every time	57
Often	23
Sometimes	6
Rarely	3
Never	6
% Frequency of condom use with regular partner	
Haven't engaged in oral sex	6
N/a or don't have a regular partner	60
Every time	0
Often	0
Sometimes	0
Rarely	1
Never	32
% Frequency of condom use with casual partner	
Haven't engaged in oral sex	6
N/a or don't have a casual partner	86
Every time	4
Often	0
Sometimes	0
Rarely	0
Never	4

Approximately three-quarters (73%) of participants reported that clients offered them extra money for oral sex without a condom, and just under half (43%) of the sample reported refusing to see clients under these circumstances. Approximately one-third

(31%) accepted the money and did the job, and reasons provided generally revolved around whether the client was a 'regular', or visual checks to see if their penis was free from visible signs of infection.

3.2.7 Sexually transmitted infections

Over half of the sample (63%) reported being screened for STIs every two to six months, and 13% reported having had an STI in the preceding 12 months. Chlamydia was the most commonly reported STI (6%) (Table 10).

Table 10: Sexually transmitted infections

Variable	N=72
% frequency of screening for STIs	
Never	3
Monthly	7
Every six months or less (but less frequent than monthly)	63
Annually or less (but less frequent than six monthly)	21
Less frequent than annually	4
% Had a sexually transmitted infection in past 12 months	13
% Chlamydia	6

3.2.8 General issues of concern for street-based sex workers

When asked what improvements could be made to benefit sex workers, almost one-third of the sample (30%) reported the provision of a safe working environment, such as safe houses, as an important initiative. Some participants also thought improving the operation of existing safe houses was important, with suggestions of cleaner rooms, reduced prices and increased operating hours. Fifteen percent of the sample reported the need for increased welfare support in the form of housing assistance and basic needs such as clothing and food for sex workers, while smaller proportions mentioned greater understanding among health professionals and the broader community about sex

workers and their needs (11%), and improved relationships with the police (10%) as important areas of concern. Some of the women also wanted to see the nature of outreach services extended to include counselling support and referral information.

3.3 Drug use

3.3.1 Drug use history and injecting drug use

All participants reported having ever used drugs (including alcohol), and 15 was the mean age of first drug use (SD 5.5, range 6 to 38) (Table 11). Cannabis was reported as the first drug used by the largest proportion of the sample (33%), followed by alcohol (29%), and heroin (21%).

The majority (94%) of the sample had ever injected any drug, and the median age of first injecting was 18 (SD 6.6, range 10 to 40). Approximately one-quarter (23%) of the sample reported first injecting before the age of 16.

Table 11: Drug use history

Variable	N=72
% First drug used	
Cannabis	33
Alcohol	29
Heroin	21
Methamphetamine powder (speed)	12
Benzodiazepines	3
Cocaine	2
Mean age in years of first drug use	15
% Ever injected any drug	94
Median age in years first injecting drug use	18
% Ever injected*	
Heroin	94
Methamphetamine powder (speed)	83
Cocaine	75
Methadone	47
Base methamphetamine	46
Crystal methamphetamine (ice)	44
Morphine	28
Benzodiazepines	21
Ecstasy	8
Other opiates (including pethidine/codeine)	6
LSD	3

*More than one response possible.

3.3.2 Current drug use and injecting patterns

Ninety two percent of the sample reported using heroin in the preceding 12 months, and 83% had injected heroin in the past month on a median of 30 days (Table 12). Just under half of the sample (43%) reported daily heroin injection in the preceding month.

Three-quarters (75%) of the sample reported using methadone in the preceding 12 months. Just over half (58%) of the sample reported using benzodiazepines in the preceding 12 months. There were no reports of recent benzodiazepine injection.

Approximately half (53%) of the sample reported using cocaine in the preceding 12 months, and 42% had injected cocaine in the past month on a median of 17.5 days. Thirteen percent of the sample reported daily cocaine injection in the past month.

Half (50%) of the sample reported methamphetamine powder (speed) use in the preceding 12 months, and 39% had injected speed in the past month on a median of 6.5 days. Three percent of the sample reported daily speed injection in the past month.

Just under half (40%) of the sample reported using ice in the preceding 12 months, and 22% had injected ice in the past month on a median of 3.5 days. One participant reported daily ice injection in the past month.

Approximately one-third (32%) of the sample reported using base in the preceding 12 months, and one-quarter (25%) reported injecting base in the past month on a median of 4 days. One participant reported daily base injection in the past month.

Approximately one-fifth (21%) of the sample reported morphine use in the past 12 months, and 14% reported morphine injection in the past month on a median of 3 days. There were no reports of daily morphine injection in the past month.

Fourteen percent of the sample reported other opiate use (including pethidine and codeine) in the preceding 12 months.

Nearly two-thirds (64%) of the sample reported alcohol use in the preceding 12 months, and 56% reported alcohol use in the past month on a median of 4 days. Six percent of the sample reported daily alcohol use in the past month.

Just over two-thirds (69%) of the sample reported cannabis use in the preceding 12 months, and 63% reported cannabis use in the past month on a median of 20 days. Approximately one-quarter (26%) of the sample reported daily cannabis use in the past month.

Heroin was the most popular drug of choice (57%) followed by cocaine (21%), cannabis (8%), methamphetamine powder (speed) (6%), and base methamphetamine (3%). Crystal methamphetamine (ice), alcohol, methadone and morphine were each nominated by 1% of the sample as their drug of choice (data not shown).

Table 12: Recent drug use patterns

Drug type	% Used in past 12 months (N=72)	% Injected in last month (N=72)	Median days injected last month	% Injected in last week (N=72)	Median days injected last week	% Daily injection in last month (N=72)
Heroin	92	83	30	74	7	43
Methadone	75	DNC*	DNC	DNC	DNC	DNC
Benzodiazepines	58	0	0	0	0	0
Cocaine	53	42	17.5	36	6	13
Speed	50	39	6.5	33	2	3
Ice	40	22	3.5	17	1	1
Base	32	25	4	18	1	1
Morphine	21	14	3	8	2.5	0
Other opiates	14	DNC	DNC	DNC	DNC	DNC
		% Used in last month	Median days use in last month	% Used in last week	Median days use in last week	% Daily use in last month
Alcohol	64	56	4	42	2	6
Cannabis	69	63	20	53	7	26

*Data not collected

3.3.3 Substance dependence

The vast majority of the sample was heroin dependent according to the Severity of Dependence Scale (SDS) (Table 13), and approximately one-third were cocaine (36%) and cannabis (32%) dependent. Smaller proportions reported dependence on other drugs (Table 13).

Table 13: Substance dependence according to the Severity of Dependence Scale

Drug type	% of sample dependent	% Conditional prevalence of dependence *
Heroin	82	89
Cocaine	36	68
Cannabis	32	46
Benzodiazepines	26	45
Methamphetamine	21	39
Alcohol	13	20

*Conditional prevalence refers to the percentage of those who reported using the drug in the preceding 12 months who meet criteria for dependence.

Cocaine dependence has been shown to influence injecting risk behaviours and sexual behaviours (Tyndall et al., 2003, Hudgins et al., 1995), and Table 14 compares those who are cocaine dependent and those who are not on a range of related variables. Those who were cocaine dependent were 4.6 times more likely to have shared injecting equipment in the past month (CI 95% 1.6 to 13.7) than those who were not. They were also less likely to use condoms when having penetrative sex with clients (OR .20, CI 95% .04 to .81). There were no differences between those who were cocaine dependent and those who weren't in age of initiation of injecting drug use or proportions reporting condom use when engaging in oral sex with clients.

Table 14: Correlates of cocaine dependence

Variable	Cocaine dependent (N=26)	Not cocaine dependent (N=46)
Injecting drug use & risk behaviours		
Median age in years first injecting drug use	16	19
Shared injecting equipment in the past month	56**	21
Sex risk behaviours		
% Always use condoms when have sex with clients	72*	93
% Always use condoms during oral sex with clients	58	62

* p < .05 **p < .01

3.3.4 Drug treatment

The majority (87%) of the sample had ever sought treatment for drug use, 76% had been in some form of treatment in the past six months, and 61% were in drug treatment at the time of interview (Table 15). Methadone was the main type of current treatment (50%). The median age at first treatment was 23 years (range 12 to 57 years), with 59% of this group reporting they were under 25 when they first sought drug treatment. Just under half (40%) of the sample (44% of those who had ever sought treatment for drug use) reported completing a course of drug treatment.

When asked how drug treatment services could change to encourage attendance or treatment completion, 12% thought they - rather than the services - needed to change, while smaller proportions wanted more support through counselling and caseworkers (8%), detoxification programs that are medicated (8%), increased flexibility regarding the rules of treatment (6%), and easier access to treatment places rather than having to wait (5%).

Table 15: Drug treatment history and current treatment status

	N=72
% Ever sought drug treatment	87
% Treatment in last 6 months	76
% Currently in drug treatment	61
Main treatment type	
% Methadone	50
% Buprenorphine	10
Treatment types in last 6 months*	
% Methadone	63
% Drug counselling	19
% Detoxification	14
% No treatment	11
Median age (years) first sought treatment	23
% Completed treatment	40
% Reasons for non-completion of treatment	
Too difficult to maintain	19
Started using again	14
Not ready to stop	4
Barred from treatment centre	4
Kicked off	3

*Percentages add to more than 100 as more than one response is possible.

3.4 Sex work and drug use

Just over one-quarter (26%) of the sample reported starting sex work prior to injecting drug use (with reports ranging from 1 to 20 years of sex work preceding injecting drug use), 17% commenced both injecting drug use and sex work within the same year and 53% reported first injecting drugs before commencing sex work (ranging from 1 to 33 years of injecting drug use preceding sex work). One-quarter (25%) of the sample reported commencing sex work within 3 years of injecting drug use initiation. The

majority (71%) of the sample reported that their drug use had increased since they started sex work.

When asked about the relationship between drug use and their involvement in the sex industry, just over half (53%) of the women reported that they used drugs to facilitate their sex work. The mechanism of facilitation was generally described as 'numbing' so that the women 'did not have to think' about what they were doing, and they didn't 'have to feel' while working. Just over half (52%) of the women reported engaging in sex work to pay for drugs, with 7% reporting that drugs were the reason they work. Eighteen percent of the sample reported the relationship as being reciprocal (i.e. they used drugs to facilitate sex work and worked to facilitate drug use). As one participant explained:

> *"It's a partnership. First you work to use, then you end up using to work. One feeds the other. It's the ever devouring beast".*

3.5 Injection-related risk behaviour

3.5.1 Needle risk behaviour

Among those participants who were injecting drug users (n=66), 7% reported having used a needle after someone else had used it in the past month (Table 16). Approximately one-fifth (22%) of those who were injecting drug users reported lending their needle to others after they had used it. Approximately two-thirds (65%) of the injecting drug users in the sample reported sharing other injecting equipment in the past month.

Table 16: Self reported needle risk behaviour in the past month among sex workers who were injecting drug users

Variable	N=66 (IDU)
% Borrowed needles in past month	7
% Reporting one person had used the needle before them	7
% Lent needles to others in past month	22
% Shared other injecting equipment*	65
Spoons	29
Water	24
Filters	19
Tourniquet	9

*Percentages add to more than 100 as more than one response was possible.

3.5.2 Blood-borne viral infections

The majority (97%) of the sample reported ever having been tested for HCV, and almost two thirds (61%) said they had tested positive for HCV (Table 17). Ninety seven percent also reported ever being tested for HIV; there were no reports of HIV positive results.

Table 17: Prevalence of Hep C and HIV

Variable	N=72
% Tested for hepatitis C	97
Within the last year	78
More than a year ago	19
% Result of Hepatitis C test	
Tested positive for Hep C	61
Tested negative for Hep C	35
Never tested	3
Don't know	1
% Tested for HIV	97
Within the last year	85
More than a year ago	12
% Result of HIV test	
Tested positive for HIV	0
Tested negative for HIV	96
Never tested	3
Don't know	1

3.6 Unwanted sexual activity

3.6.1 Child sexual abuse

Three-quarters (75%) of the sample reported experiencing some form of sexual abuse before the age of 16, and the median age of first occurrence was 7 years (range 1 to 15 years) (Table 18). Approximately one-quarter (26%) of the sample reported that the first incident occurred before the age of 6.

Table 18: Child sexual abuse before the age of 16

Variable	N=72
% Ever experienced child sexual abuse	75
Median age in years of first experience	7
% Reporting first incident occurring before age 6	26
Mean age in years when most stressful event occurred	10
% Reporting most stressful incident occurring by age 10	35

Nearly two-thirds (63%) reported that someone had attempted to have vaginal sex with them, and 51% reported that someone *did* have vaginal sex with them before age 16 (Table 19). Twenty two percent reported someone attempting to have anal sex with them, and 13% reported that someone did have anal sex with them before the age of 16.

Participants were asked which event they found most stressful, with the largest proportion (17%) reporting someone having vaginal sex with them before age 16 as the most stressful event (Table 19). Among this group (N=12), the median age of first occurrence of someone having vaginal sex with them was 8.5 years (range 4 to 15 years) (data not shown). Some participants found it difficult to ascribe "the most stressful" status to these events. The mean age of the most stressful event was 10 years (SD 3.4, range 3 to 16), and just over one-third (35%) of the sample reported that the most stressful event occurred by the age of 10 years (Table 18).

Table 19: Incidents of child sexual abuse reported and incidents reported as most stressful

Unwanted sexual activity	% Reporting the incident N=72	% Reporting the incident as most stressful N=72
Touch or fondle your body or make you do that to them	72	15
Try to have vaginal sex with you	63	10
Rub their genitals against your body	61	1
Sexually arouse you	56	1
Masturbate in front of you	51	4
Had vaginal sex with you	51	17
Touch your genitals with their mouth or make you do that to them	40	7
Try to have anal sex with you	22	3
Had anal sex with you	13	0

Approximately one-third (31%) of the sample reported that a relative other than a sibling or a parent (such as grandfather and uncle) had been the perpetrator of unwanted sexual experiences, while one-quarter reported the perpetrator was a family friend (Table 20).

Table 20: Perpetrators of unwanted sexual activity before the age of 16

Perpetrator of unwanted sexual activity	% (N=72)*
Relative other than sibling or parent	31
Family friend	25
Stranger	19
Personal acquaintance	18
Boyfriend	14
Step parent	11
Natural sibling	11
Natural parent	10
Step sibling	6
Teacher	6
Priest/minister/rabbi or other clergy person	4

*Percentages do not add to 100 as more than one response was possible.

3.6.2 Unwanted sexual activity after age 16 outside of work

More than half the sample reported that someone had attempted to have sexual intercourse with them after the age of 16 by threatening physical violence (58%) and by using physical violence (58%) (Table 21). Almost two-thirds of the sample (61%) reported that someone had sexual intercourse with them after the age of 16 when they had made it clear they did not consent.

Table 21: Unwanted sexual activity after age 16 outside of work

Unwanted sexual activity	(N=72)
% Attempted sexual intercourse by the use of physical violence	58
% Attempted sexual intercourse by threatening physical violence	58
% Attempted sexual intercourse by threatening blackmail	22
% Attempted sexual intercourse by threatening to break up with you	25
Median age of first occurrence of attempted sexual intercourse	18
% Someone had sexual intercourse with you when you did not want to	61

The largest proportion (29%) of participants reported that a partner had been the perpetrator of unwanted sexual attempts/activity, followed by a stranger (28%) (Table 22).

Table 22: Perpetrators of unwanted sexual activity after age 16

Perpetrator of unwanted sexual activity	% (N=72)
Partner/spouse	29
Stranger	28
Someone you went out with	17
Someone you met at a party, club etc.	17
Friend or acquaintance	14
Family member	10
Other	7
Teacher	3
Priest/minister/rabbi or other clergy person	1

3.7 Mental health

3.7.1 Depression and suicidal ideation

Fifty four percent of the sample reported severe current depressive symptoms in accordance with the Beck Depression Inventory II. Table 23 compares those who reported current severe depressive symptoms with those who did not on a range of variables.

Those with current severe depression were 3.72 times (95% CI 1.3 to 10.3) more likely to have been homeless in the past 12 months and 4 times (95% CI 1.1 to 16.3) more likely to identify as being of A&TSI descent.

No differences were found between the groups for injecting risk behaviours or injecting drug use initiation. Those who reported current severe depression were 5.7 times (95% CI 1.7 to 19.7) more likely to be dependent on cannabis than those who did not.

Sex work history and work practices were similar among both groups.

There were no differences in proportions reporting ever having experienced violence at work; however there were three associations that were close to significance: severe depression and i) experience of child sexual abuse ii) experience of adult sexual abuse and iii) ever attempted suicide.

Table 23: Correlates of current severe depressive symptoms

Variable	Severe depressive symptoms (N=39)	No severe depressive symptoms (N=31)
Demographics		
Mean age in years	34	34
% Homeless in the past 12 months	56*	26
Median years of school education	9	10
% A&TSI	31*	10
Drug use dependence & injecting risk behaviours		
Median age in years first injecting drug use	18	18
% Drug dependent		
Heroin dependent	84	82
Cocaine dependent	43	29
Methamphetamine dependent	28	10
Benzodiazepine dependent	31	23
Alcohol dependent	15	10
Cannabis dependent	46**	13
Shared injecting equipment in the past month	38	29
Sex work & sex risk behaviours		
Median age started sex work	19	19
% Always use condoms when have sex with clients	87	86
% Always use condoms during oral sex with clients	66	53
Mental health & trauma		
% Attempted suicide	54	29
% Ever experienced violence while working	93	77
% Ever experienced child sexual abuse	85	64
% Ever experienced adult sexual abuse	72	48

*Sig at p< .05 **sig at p< .01

Ten percent of the sample scored highly on the suicidal thoughts item (item number 9) of the BDI-II and 14% endorsed high levels of hopelessness (item number 2), both of which are strong indicators of current suicidal ideation (Beck et al 1996).

Approximately three-quarters (74%) of the sample reported having ever thought about suicide, and just over one-quarter (28%) had these thoughts within the last 2 months (Table 24). Of this group (n=20), 40% (n=8) reported that these thoughts persisted for 7 days in a row, 30% (n=6) had thought of a plan on how to kill themselves, and 20% (n=4) reported having access to the means to carry out this plan, all of which are indicative of current suicidal risk (data not shown). Interviewers sought further information from these participants about current suicidal ideation at the end of the interview, and they were either directly put in touch with a mental health professional, or were already seeing one.

Just under half (42%) of the sample reported ever having tried to kill themself, and the median number of attempts was 3 (range 1 to 12). The median age at which participants reported first trying to commit suicide was 16 (range 6 to 28), and almost one-quarter (24%) of the sample (70% of those who had ever attempted suicide) had attempted suicide by the age of 18. Just under half (46%) of the sample reported overdosing on heroin, benzodiazepines, other opiates, alcohol or other drugs (Table 24).

Table 24: Suicide attempts, methods used and circumstances surrounding these attempts

Variable	N=72
% Had thoughts about suicide	74
% Had thoughts within the past 2 months	28
% Ever attempted suicide	42
Median age in years of first attempt	16
Median number of suicide attempts	3
% Attempted suicide by age 18	24
% Methods used	
Overdose on benzodiazepines/heroin/alcohol/other opiates	46
Slashed wrists	22
Hanging	11
Running in front of a car	6
Jumping	3
Gassing	1
"When you were trying to kill yourself did you . . . . ."	
% Want to die	28
% Want to stop pain frustration and anger	14
% Want to stop pain, & didn't care if I died	4
% Didn't know what else to do	4
Likelihood of death due to most serious attempt	
% Not at all	4
% Somewhat likely	1
% Likely	10
% Very likely	26
Suicide attempt while:	
% Feeling depressed	40
% After alcohol	14
% After drug use	21

3.7.2 Borderline Personality Disorder

Nearly half the sample screened positively for a diagnosis of Borderline Personality Disorder (BPD), and 50% screened positively for Impulsive Personality Disorder. Table 25 compares those who screened positively for BPD with those who did not on a range of variables. There were no demographic differences between those who screened positively for BPD and those who did not.

Those who screened positively for BPD were more likely to have initiated injecting drug use at an earlier age, 3.5 times (95% CI 1.2 to 10.9) more likely to be dependent on benzodiazepines and 4.3 times (95% CI 1.5 to 12.5) more likely to be dependent on cannabis. They were also 2.9 times (95% CI 1.1 to 8.5) more likely to have shared injecting equipment in the past month than those who did not screen positively for BPD.

There were no differences between those who screened positively for BPD and those who did not in age of sex work initiation, or proportions reporting condom use at all times during penetrative sex with their clients. Differences in proportions reporting condom use at all times during oral sex with clients were close to significance, with a smaller proportion of those screening positively for BPD reporting condom use at all times.

Those who screened positively for BPD were 8 times (95% CI 2.7 to 25.3) more likely to report severe depressive symptoms than those who did not, and 3 times (95% CI 1.1 to 8.6) more likely to have experienced adult sexual assault. Close to significance was the proportion of those screening positively for BPD who had ever attempted suicide (55%) compared with those who did not (33%) ($p = .07$).

Table 25: Correlates of screening positively for Borderline Personality Disorder

Variable	Borderline (N=33)	Not borderline (N=39)
Demographics		
Mean age in years	32	35
% Homeless in the past 12 months	54	36
Median years of school education	9	9
A&TSI status	18	26
Drug use dependence & injecting risk behaviours		
Median age in years first injecting drug use	17*	20
% Drug dependent		
Heroin dependent	88	77
Cocaine dependent	42	31
Methamphetamine dependent	21	21
Benzodiazepine dependent	39*	15
Alcohol dependent	18	7
Cannabis dependent	49*	18
Shared injecting equipment in the past month	47*	23
Sex work & sex risk behaviours		
Median age started sex work	18	21
% Always use condoms when have sex with clients	85	86
% Always use condoms during oral sex with clients	48	70
Mental health & trauma		
% Severe depressive symptoms	81**	34
% Attempted suicide	55	33
% Ever experienced violence while working	88	82
% Ever experienced child sexual abuse	85	67
% Ever experienced adult sexual assault	76*	50

*p< .05 **P < .01

3.7.3 Posttraumatic stress disorder

All but one of the participants (99% of the sample) reported having experienced at least one traumatic event in their lifetime, with a large proportion (93%) reporting multiple traumas. Participants reported experiencing a median of 6 traumatic events (range 1 to 9) in their lifetime, with more than half (53%) the sample reporting that they had experienced 6 or more traumatic events. The youngest reported median age of first occurrence of any traumatic life event was reported for child neglect (5 years of age), followed by child physical abuse (6 years of age) and child sexual abuse (7 years of age) (Table 26).

The majority of the sample reported ever having been raped (81%) and physically assaulted (81%), while three-quarters (75%) of the sample reported ever experiencing child sexual abuse, or had witnessed someone being badly injured or killed (71%). Just over two-thirds (68%) reported being threatened with a weapon or held captive, and approximately half reported child physical abuse (54%) and being involved in a life threatening accident (51%). The largest proportions reported rape (19%) and being threatened with a weapon or being held captive (19%) as the most stressful of the traumatic events they had ever experienced (Table 26).

Table 26: Prevalence of exposure to traumatic events and age of onset

Trauma	% (N=72)	Median age (yrs) at 1st occurrence	% Most stressful event*
Rape	81	14	19
Physical assault	81	16.5	12
Child sexual abuse	75	7	13
Witness serious injury or death	71	17	15
Threatened with a weapon/held captive	68	19	19
Child physical abuse	54	6	12
Life threatening accident	51	16	4
Child neglect	38	5	4
Natural disaster	26	14	1

* Among those who had experienced a stressful event

Just under half (47%) of the sample met DSM-IV (TR) criteria for a lifetime diagnosis of posttraumatic stress disorder (PTSD).

For the majority of those participants who developed PTSD (79%), their symptoms began immediately after the traumatic event or within days of the event occurring. Only 6% of those with PTSD had delayed onset (i.e. symptoms developed 6 months post-trauma). The median age of onset of the most stressful traumatic event was 14 years (range 3 to 56) (Table 27).

For 91% of those with PTSD, their symptoms were chronic in duration (i.e. they lasted for 3 months or longer), while 82% reported that their symptoms lasted for one year or more. The median duration of PTSD symptomatology was 2 years (range 1.5 months to 33 years). Among those with PTSD, a median of 17 years (range 1 to 52) had passed since the most stressful traumatic event occurred. Despite this, 62% had experienced symptoms related to that event within the past 12 months (Table 27).

Approximately three-quarters (74%) of those participants who developed PTSD said they had spoken to a health professional about the associated symptoms (Table 27).

Table 27: Onset, duration and recency of symptomatology among those with PTSD

Variable	N=34
% Onset of symptoms	
Immediately after traumatic event	23
Within days of traumatic event	56
Weeks after traumatic event	9
Months after traumatic event	6
Years after traumatic event	6
Median age in years at time of most stressful event	14
% Duration of symptoms	
Less than 3 months	6
3 months or more but less than 1 year	9
1 year or more	82
Median duration of symptoms (in years)	2
Median years passed since most stressful event	17
% Experienced symptoms in past 12 months	62
% Spoken to a health professional	74

Approximately one-third (31%) of the sample reported experiencing current PTSD symptoms (i.e. within the preceding 12 months). Table 28 sets out a comparison of those women who reported current PTSD symptoms with those who did not on a range of variables. Those reporting current PTSD were nearly 4 times (OR 3.98, 95% CI 1.2 to 13.5) more likely to have ever experienced adult sexual assault than those who did not report current symptoms (82% vs. 53% respectively), and they had also experienced a significantly greater number of traumas (median of 7 traumas) than those without current PTSD (median of 5 traumas) ($t=2.859$, $df=70$, $p < 0.01$). In addition, women reporting current PTSD were nearly 4 times more likely to report being seriously neglected as a

child (59%) than women without current PTSD (28%) (OR 3.7, 95% CI 1.2-10.6). (Table 28). There were no differences in proportions reporting child sexual abuse (82% among those with current PTSD and 72% among those without current PTSD), or physical assault at work (77% each). Likewise, there was no difference between the groups in median age of first sexual assault (13 for those with current PTSD, and 14 for those without current PTSD). The association between current PTSD and severe depressive symptoms was close to significance, with women reporting current PTSD more likely to report being depressed at the time of interview (p=.05). Variables that were significant at the bivariate level were then entered into a multiple logistic regression model. The only variable that remained significant was the number of traumas experienced (OR 1.49, CI 95% 1.11 to 2.00). Women reporting current PTSD were more likely to have experienced a greater number of traumas than those without current PTSD.

Table 28: Correlates of current PTSD symptoms

Variable	Current PTSD (N=22)	No current PTSD (N=50)
Demographics		
Mean age in years	34	33
% Homeless in the past 12 months	50	42
Median years of school education	9	9
A&TSI status	27	20
Drug use dependence & injecting risk behaviours		
Median age in years first injecting drug use	17	18
% Drug dependent		
Heroin dependent	73	86
Cocaine dependent	32	38
Cannabis dependent	36	30
Shared injecting equipment in the past month	20	40
Sex work & sex risk behaviours		
Median age started sex work	20	18
% Always use condoms when have sex with clients	91	83
% Always use condoms during oral sex with clients	62	60
Mental health & trauma		
Median number of traumas experienced	7**	5
% Severe depressive symptoms	73+	48
% Attempted suicide	50	40
% Experienced physical assault while working	77	77
% Ever experienced child sexual abuse	82	72
% Ever experienced child neglect	59*	28
% Ever experienced adult sexual assault	82*	53
Median age of first sexual assault	13	14

** $p < .01$ * $p < .05$ +close to significance $p=.05$

3.8 Access to mental health services

Approximately one-quarter (26%) of the sample had ever been admitted to a psychiatric hospital. Among those who had been admitted, the most common reason for admission was depression (57%) followed by anxiety (21%). Approximately one-fifth (19%) of the sample reported currently taking psychiatric medication, and just under half (40%) of the sample reported speaking with a health professional about a mental health problem other than their drug use in the past 6 months. Among those who had consulted a mental health professional, depression (79%) was the most common reason for this consultation (Table 29).

Table 29: Mental health treatment access

Variable	N=72
% Ever admitted to psychiatric hospital	26
% Reason admitted for mental health problem*	
Depression	57
Anxiety	21
Schizophrenia	16
Drug-induced psychosis	16
Suicide attempt	10
Personality disorder (not antisocial)	10
PTSD	10
% Currently on psychiatric medication	19
% Spoken to health professional about mental health problem in past 6 months	40
% Health professionals consulted*	
Counsellor	41
General practitioner	31
Psychologist	31
Psychiatrist	21
% Mental health problem consulted health professional about*	
Depression	79
Anxiety	31

* Among those who had been admitted or had consulted a mental health professional

When asked how mental health services could change to encourage attendance, 16% felt that they didn't know enough about the services available to comment, and 14% felt they didn't need to change anything. Smaller proportions reported issues with trust and disclosing personal details to a therapist (11%), the need for increased accessibility to services (7%), that therapists did not understand them (5%) and the stigma attached with attending mental health services (4%).

3.9 Crime and contact with the police

3.9.1 Criminal activity, prison and juvenile detention history

Just under half (49%) of the sample reported engaging in criminal activity in the month prior to the interview. The most commonly reported offence types were dealing (31%) and property crime (31%). Just over half (53%) of the sample had been arrested in the preceding 12 months, and the most common grounds for arrest were property crime (18%), possession and/or use of drugs (17%), and soliciting in a residential area (11%) (Table 30).

Over half the sample (56%) reported ever having been in prison, and 14% had been in prison in the preceding 12 months. Just over one-quarter (28%) of the women reported being placed in a juvenile detention centre for the first time at a median age of 14 years of age (range 11 to 17) (Table 30).

Table 30: Self-reported criminal activity, prison and juvenile detention history

Variable	N=72
% Criminal activity in past month:	
Dealing	31
Property crime	31
Fraud	4
Violent crime	1
Any crime	49
% Arrested in past 12 months	53
% Offence arrested for in past 12 months	
Property crime	18
Possession and/or use of drugs	17
Soliciting in a residential area	11
Driving offence	8
Violent crime	4
Dealing	3
Driving under the influence of alcohol	1
% Ever in prison	56
% In prison in past 12 months	14
% Ever placed in juvenile detention	28
Median age first placed in juvenile detention	14

3.9.2 Experiences with the police

When asked what their worst experience had been with the police, 17% responded that they had not had a bad experience, with one participant stating, *"They have been really good to us."* Thirteen percent reported that they had been harassed by police (including excessive numbers of searches in one night) and 13% reported that the police had treated them poorly. Incidents included verbal abuse, and being asked to remove clothing for a strip search in the middle of the street:

> *"When I had drugs on me, they asked me to strip on the street. I was embarrassed & scared."*

"They were harassing me, they pulled me over, went through all my stuff, and the questions they asked me made me feel unworthy."

Thirteen percent reported being made to feel as if they deserved the sexual assaults they were reporting and that the police did not take them seriously:

"Their attitude is that we put ourselves at risk so we deserve what happens & they won't listen to us."

"They think because you're a sex worker it's OK that you get raped."

"They're not interested. Because I'm a sex worker they don't take me seriously."

Thirteen percent reported being physically assaulted by police in the process of being arrested, and smaller proportions reported being sexually assaulted by police (10%) and that the police do not assist them when they are in need (8%):

"Someone came at me with a knife. The police just came down & told me I'd handled it well. They do nothing."

"They don't come when you need them. By the time they get there it's all over & done with."

When asked about their *best* experience with police, 42% of participants said they had not had one, and this included police 'leaving us alone'. Fifteen percent of the women reported that the police had assisted them on occasion:

"They've helped me out when I've needed them."

"One time when I was sick they drove me to the hospital."

Fifteen reported that the police had treated them decently and respectfully. Thirteen percent reported that the police had been helpful after the women had been assaulted, and smaller proportions reported that the police had dropped charges against them when they could have gone to jail (4%), that police provided them with safety warnings (4%), and that police were genuinely concerned for their welfare (3%):

"They've come and told me 'this car is driving around, be careful'."

"They seem to be more concerned about our welfare. They do the best that they can and always take time to say hello and see if we're alright."

" (suburb name) police are fantastic. They go out of their way for us and they'll respond quickly if needed."

Table 31: Reports of best and worst experiences with the police

Variable	N=72
% Worst experience with the police:	
None	17
Police harassment	13
Poor treatment	13
Assault reports not taken seriously	13
Physically assaulted during arrest	13
Sexual assault	10
Lack of police assistance	8
% Best experience with the police:	
None	42
Police assistance	15
Respectful treatment	15
Helpful after assault	13
Charges dropped	4
Concerned for welfare	4
Safety warnings	3

3.10 Access to information

Participants most commonly learnt about safe sex and drug use from friends (21%), followed by the Kirketon Road Centre (KRC) (17%) and the Sex Workers Outreach Project (SWOP) (17%). Blood-borne virus (e.g. HCV and HIV) information was most often sourced from KRC and their outreach services (19%), followed by SWOP (15%), general medical practice (15%), and friends (15%). Just under half (46%) of the sample sourced information on legal advice or support from legal aid or other free legal services,

17% sourced this information from SWOP, and 15% from KRC. Information about the sex industry was most commonly sourced from SWOP (46%) followed by KRC (28%), and other NSP's (11%) (Table 32).

Table 32: Sources of information

Variable	N=72
% Access information on safe sex & drug use from:	
Outreach/NSP	45
Friends	21
School	14
Family	8
Reading material	8
Media	6
% Access information on blood-borne viral infections from:	
Outreach/NSP	41
Medical practice/doctor	15
Friends	15
Media	7
Reading material	7
Jail	4
% Access information on legal advice and support from:	
Legal aid or other free legal service	46
Outreach/NSP	32
Don't access information	8
Own solicitor	3
Friends	3
% Access information on the sex industry from:	
Outreach/NSP	85
Don't access information	4
Friends	4
Sexual health clinic	4
Other workers/on the street	4
Doctor	3

When participants were asked who they used for emotional support, the largest proportion (29%) reported that they did not have anyone to provide emotional support (Table 33).

Table 33: Source of emotional support

% Source	N=72
Nobody	29
Friends	26
Family	24
Partner	17
Counselling service	14
Outreach/NSP	14

4 DISCUSSION

This study examined the demographic characteristics, childhood experiences, drug use patterns and working conditions among a group of female street-based sex workers. It also documented the prevalence of a range of mental health problems and considered the comorbidity between these problems. Finally, it examined whether there was an association between depression, BPD, and PTSD and self-reported risk behaviours, and drug dependence and these risk behaviours.

4.1 Demographic characteristics

There was a high proportion of women identifying as being of A&TSI descent, and this is consistent with previous research showing that women from socially and economically disadvantaged minorities are over represented among sex workers (Roxburgh et al., 2005, Harcourt et al., 2001, Inciardi and Surratt, 2001, Jones et al., 1998). This has important implications. Agencies providing health services for sex workers may need to consider tailoring programs to the needs of individuals who identify as A&TSI, which could involve A&TSI liaison personnel as part of outreach teams and services provided on site.

Also consistent with previous research is the finding that only a small minority of women reported completing a high school education, and a high proportion reported being homeless in the past 12 months. Low levels of education may limit the potential for alternative employment opportunities among this group, and providing skills-based training for women who wish to exit the sex industry should remain a priority for agencies working with street-based sex workers. High levels of homelessness make it difficult for this group to access community resources, as well as complicating agency service provision. Therefore, the continuation of outreach services to street-based sex workers remains critical.

Only a minority of the women lived with both parents until age 16 years, with almost two-thirds leaving home before this age. Research has shown that lack of parental supervision, lack of parental interest and single parent status are potential risk factors for early drug use initiation (Gottfredson and Hirschi, 1990, Baker, 1998).

4.2 Unwanted sexual activity

The majority of the women had experienced child sexual abuse before the age of 16, and in most cases the perpetrator was someone they knew. The vast majority had also experienced sexual assault outside of work after the age of 16; however, a larger proportion of these perpetrators were strangers. These findings are consistent with previous research, with many of the studies indicating that unwanted sexual activity is associated with greater psychiatric morbidity for sex workers (El-Bassel et al., 1997) (Farley and Barkan, 1998). Previous literature has also documented an association between child sexual abuse and earlier age of injecting drug use initiation (Ompad et al., 2005).

4.3 Sex work history and working practices

Approximately one-third of the women reported initiating sex work before they were 18, and the majority reported commencing sex work to pay for drugs. The majority also reported remaining in the sex industry to pay for drugs. Just over half the women reported commencing injecting drug use before sex work, and length of involvement in the sex industry ranged from four months to 39 years. Other studies have also found that drug use precedes commencement in the sex industry for many street-based sex workers (Harcourt et al., 2001).

The majority of women had worked in various other sectors of the sex industry, and the mean age of the sample (34 years) may indicate that they have progressed from private to street-based sex work. This progression has received empirical support in the literature (Hunter et al., 2004).

Three-quarters of the women reported providing their services on the street, and approximately half reported using safe houses, which only operate in the Kings Cross area. A high proportion of women in the current sample reported providing their services in cars, which may increase the risk of work-related violence. The overwhelming majority of women reported experiencing work-related violence, most notably physical assault and rape.

These findings have implications for service provision as well as further research. There needs to be continued liaison between the police and outreach workers in the negotiation of legal and safe places for these women to work. The Kings Cross area has seen a reduction in these spaces, as the local police have targeted curb-crawling on William St. This has resulted in the women being pushed into back streets and unsafe situations as well as into residential areas to provide their services.

The issue of safe houses also needs to be addressed. Women in the current sample continued to provide services in cars, despite safe houses being available in the Kings Cross area. Further research is needed to investigate the reasons safe houses are not being utilised, as well as what changes might be required to encourage greater use of existing safe houses. This research may provide vital information for the establishment of additional safe houses outside the inner city area, as many of the women operating in these areas stated they would utilise these services if they were available.

4.4 Mental health

4.4.1 Depression and suicidal ideation

Over half of the women reported severe levels of current depressive symptoms, and this group was significantly more likely to have been homeless in the past 12 months, to identify as being of A&TSI descent, and to be cannabis dependent than those who did not report current severe depressive symptoms. This last finding is consistent with previous research that shows comorbidity of substance use and mental health disorders is common (Degenhardt and Hall, 2001, Read et al., 2004). Given the high proportion of A&TSI sex workers reporting severe depression, mental health workers who are dealing with street-based sex workers may need to design culturally appropriate programs that specifically target the mental health needs of this group. Strategies to encourage this group to access treatment are also required, as 75% of those A&TSI participants reporting severe depression in the current study had *not* spoken to a mental health professional in the past 6 months. Employing A&TSI mental health professionals in key areas would assist with these objectives.

The vast majority of the women reported having had thoughts about suicide, with just over one-quarter reporting current (within the past 2 months) suicidal ideation. Just under half had ever attempted suicide, and approximately one-quarter had attempted suicide by the age of 18. Some of the women reported attempting suicide as young as 6 years of age. This has clear implications for health professionals who have contact with "at-risk" youth, and early intervention is crucial. A thorough suicide assessment should be conducted with all young clients who present to mental health professionals with depression, and welfare and refuge workers should remain vigilant for any signs of depression and social withdrawal among these clients. Any communication of suicidal

thoughts should be treated seriously and referred to the appropriate services. Likewise, health professionals who work with street-based sex workers should also be vigilant for these risks as they are clearly an issue for this population.

4.4.2 Borderline Personality Disorder

Just under half of the sample screened positively for BPD. Those women screening positively for a diagnosis of BPD initiated injecting drug use at an earlier age, were more likely to share injecting equipment and were more likely to be benzodiazepine dependent, and cannabis dependent. They were also more likely to report severe depressive symptoms, and more likely to have ever experienced adult sexual assault than those who did not. These findings are consistent with previous research showing that the BPD diagnosis has poorer outcomes for drug dependence and risk behaviours such as sharing injecting equipment and attempted suicide. Early initiation of injecting drug use has also been associated with these outcomes.

4.4.3 Posttraumatic stress disorder

The overwhelming majority of the women had experienced multiple traumas in their lifetime, and almost one-third reported current PTSD symptoms. Those women meeting criteria for current PTSD were more likely to report a greater number of traumas, serious neglect during childhood, and adult sexual assault. This last point is particularly important, as these women continue to be exposed to the risk of sexual assault through their work, the very factor that is associated with their current PTSD symptoms. Whilst these women remain in the street-based sex industry their PTSD symptoms are unlikely to recede.

More research is required on the nature of psychological interventions for PTSD among this group that would be most effective. Much of the research on successful PTSD

intervention recommends removing clients from the potential of exposure to further trauma (Foa and Rothbaum, 1998) and establishing a safe environment before commencing therapy (Benedek et al., in Sadock, B. J. and Sadock, V. A., 2005). Given that current PTSD among these women is related to adult sexual assault (which was reported as the most prevalent and most stressful trauma), establishing a safe environment and minimising their ongoing exposure to trauma would entail leaving the sex industry, where occupationally they are at risk of sexual assault on a daily basis. This is an option that is not always practical, and may be particularly difficult for this group given that many of them reported low levels of education. Sex work was the main source of income for the vast majority of these women, suggesting that they have limited employment alternatives.

Conventional PTSD interventions may not be effective for these women, and alternative strategies may need to be employed. These might include harm reduction strategies such as teaching the women how to recognise the signs of distress, and how to minimise them. There is some evidence to suggest that simple relaxation techniques may be successful in minimising trauma-related distress among sexual assault victims (Napoli et al., 2001). Increased awareness of and access to crisis telephone lines and mental health services may also be useful. Agencies providing outreach services to this group could promote and provide mental health and referral contacts to those women wishing to seek assistance. At a more basic level, safety measures such as the provision of personal distress alarms may minimise the risk of repeated exposure to trauma.

4.5 Drug use

The median age of first injecting was 18 years, and approximately one-quarter of the women reported initiating injecting drug use before the age of 16. In a comparative study of injecting drug users who engaged in sex work and those who did not (Roxburgh et al., 2005), the authors found that the sex workers initiated drug use at a significantly younger age than the non sex workers (18 and 20 years respectively). Also consistent with previous research e.g. (Gossop et al., 1995b) is the finding of high levels of drug dependence. A large proportion of the current sample reported dependence on heroin, and substantial minorities were cocaine and cannabis dependent. Earlier age of initiation has been associated with a range of adverse outcomes later in life, with evidence suggesting that those initiating drug use at an earlier age are more likely to develop problematic substance use, engage in risky sexual behaviour, become involved in criminal activity, and complete fewer years of education. Earlier initiates to substance use are also more likely to become dependent, use for a longer time and have more drug-related problems (Grant and Dawson, 1997, Brook et al., 1999, Fergusson and Horwood, 1997). All of these associations are clearly evident in the current study.

Early initiation of injecting drug use among this group indicates the need for greater emphasis on early intervention, in order to reduce the likelihood of young people developing problematic drug use. To increase efficacy, interventions should target several groups at different stages. Considerable research and public interest has been focused upon ways in which substance use among young people may be reduced, and to encourage those who have begun at an early age to cease or moderate their use. Interventions have involved primary interventions (for example drug education in schools or general population campaigns); secondary interventions (such as targeted

programs aimed at "at-risk" children); and tertiary interventions (most often involving treatment for young persons who have developed problematic drug use, or interventions designed to reduce the initiation of injecting). Given that many of the women in this study left home before the age of 16, the continued involvement of youth services, refuges and drop-in centres in the provision of programs targeted at preventing the uptake of injecting drug use among young people - as well as education campaigns to minimise injection-related harms, and facilitation of access to drug treatment services among this group - remains a priority. Further research into the circumstances of initiation into injecting drug use among marginalised groups such as street-based sex workers and high-risk youth is also warranted, to ensure these programs remain relevant.

Cocaine use among the street-based sex workers for this study was more frequent than among the regular injecting drug users interviewed for the Illicit Drug Reporting System (IDRS). Sixty percent of IDRS respondents reported using cocaine, on average, on two days per month in the past 6 months (Black et al., in press). Heavier patterns of cocaine use among sex workers have been documented in other studies (Degenhardt et al., in press, Inciardi and Surratt, 2001), with some reporting that sex workers use cocaine (and 'crack' cocaine) to facilitate their sex work (Maher, 1997, Inciardi and Surratt, 2001, Degenhardt et al., in press). Research in Australia has also found that during a sustained shortage in the heroin supply, more IDU engaged in sex work as a consequence of substituting heroin with other, more expensive, drugs such as cocaine (Degenhardt et al., in press).

4.6 Self-reported risk behaviours

4.6.1 Injection-related risk behaviour

Very few women reported borrowing used needles, while approximately one-quarter reported lending a used needle to someone else in the past month, and approximately two-thirds reported sharing other injecting equipment. Consistent with previous research that has shown high levels of drug use as central to the decision to engage in risky injecting practices (Roxburgh et al., 2005, Gossop et al., 1995b, Australian National Council on Drugs, 2003), greater proportions of daily cocaine users (44%) in the current sample reported lending used needles to others in the past month compared to those who were not daily cocaine users (15%) (small numbers precluded significance testing). Also consistent with previous research (Hudgins et al., 1995, Tyndall et al., 2003), the women who were cocaine dependent were more likely to share injecting equipment than those who were not, and education strategies need to be targeted specifically at these higher-risk injectors.

4.6.2 Sexual risk behaviour

Fourteen percent of the women reported not always using condoms with their clients during penetrative sex, while just over one-third reported not always using condoms during oral sex with clients. Consistent with previous research (Degenhardt et al., in press), those who were cocaine dependent were less likely to use condoms during penetrative sex with clients than those who were not, and education on safe sex strategies needs to target these groups who are at increased risk of engaging in unsafe sex.

4.6.3 Summary of risk behaviours

Given the heavy patterns of cocaine use among this group and the increased potential for injection-related and sexual risk behaviours, further research is required on if, and how,

sex workers use drugs to facilitate their work, and what impact, if any, this has on the nature of the encounter (e.g. Does it limit their ability to negotiate safe sex? Does it increase their vulnerability to violence?).

4.7 Service utilisation

4.7.1 Drug Treatment

Almost two-thirds of the women reported being in drug treatment at the time of interview, indicative that drug treatment services are fairly accessible for this group. What remains an issue, however, is the need for more relevant programs for street-based sex workers, as many of the women in the current study continued heavy patterns of illicit drug use despite being engaged in treatment. The stigmatised nature of street-based sex work can serve as a barrier to drug treatment in traditional delivery models (Clements, 1996), with research reporting that sex workers are reluctant to approach treatment services for fear of being judged (Weiner, 1996). These concerns were voiced among the women interviewed in the current study, who worried about health professionals misunderstanding them and their involvement in the sex industry. Further research, identifying potential barriers for this group, is warranted in order to develop relevant programs that would encourage attendance and sustained engagement. Likewise, continued evaluative research needs to be conducted to ensure programs remain relevant for the broader IDU population. The role of outreach workers also remains crucial in promoting and providing referral information on available drug treatment programs. In a study investigating one model of outreach in New York, America, results showed that providing comprehensive drug treatment referrals as well as brief on-site counselling had a marked impact on treatment uptake and sustained retention (Nuttbrock et al., 2004). The authors found that factors affecting motivation for drug treatment among street-based sex workers were complex, and that street-based outreach services were a highly effective modality to engage this group in treatment.

Finally, drug treatment agencies and outreach workers should ensure that clients are connected with a variety of agencies (such as housing and welfare assistance) to enhance treatment retention among this group, given that many of them reported unstable living situations.

4.7.2 Mental health

While the majority of women who met criteria for a lifetime diagnosis for PTSD reported having consulted a professional about issues associated with their trauma, a substantial minority continued to experience PTSD symptoms. Likewise, despite almost half the women reporting consulting a mental health professional in the past 6 months, high proportions reported severe current depression. It is important to consider, then, whether traditional mental health care services are appropriate for this group, who have complex histories and high levels of psychiatric morbidity. Mental health professionals need to be aware of the issues that are central for this group, particularly with respect to child sexual abuse and ongoing sexual assault, which often engenders a lack of trust and difficulty with disclosure. There are also issues of stigma surrounding sex work that may prevent these women from engaging in therapy, and these may need to be addressed.

Psychological interventions for this group need to be specifically tailored and they need to be flexible, as many of these women have little stability in their lives. Public mental health services also need to be expanded, as there are few available for clients without money. Agencies providing outreach services to this group could also promote and provide mental health referral contacts to those women wishing to seek assistance. Provision of mental health services via outreach would also be a useful adjunct to existing services. Research in the U.S. (Yahne et al., 2002), trialling a brief psychological intervention for female street-based sex workers utilising motivational interviewing - a

method designed to evoke intrinsic motivation for change in health risk behaviours by resolving ambivalence (Miller and Rollnick, 2002) - found that after the intervention was conducted via outreach, the women reported large reductions in the frequency of their drug use. These techniques may be useful for targeting other mental health problems among this group, thereby reducing the associated risks.

4.7.3 Physical health

There was a high prevalence of HCV among these women with almost two-thirds reporting they had tested positive for the virus. There is a continuing need to ensure that these women have access to primary health care, and that there are no barriers to such care. Primary care should also be extended to agencies outside the inner city that provide services to street-based sex workers, which could involve the provision of general practitioner services one day per week on site. The high prevalence of HCV indicates that HCV education for this group remains a priority.

4.7.4 Access to information and emotional support

These women generally had good access to information on safe sex and drug use, blood-borne viral infections and legal support. Access was particularly good to information on the sex industry in general, highlighting the ongoing need for agencies to continue providing industry specific services. A substantial minority of the group reported having no emotional support, again highlighting the need for enhanced availability of specific mental health services as well as encouragement to attend.

4.7.5 Summary

Mental health problems are highly prevalent among this group, and the psychiatric comorbidity of depression and current PTSD is of clinical significance, as it may have an adverse impact on drug treatment outcomes. Drug treatment is unlikely to be effective if mental health issues are not addressed, which highlights the need for integrated service

provision among drug treatment and mental health agencies. The high levels of comorbidity of substance dependence and mental health problems in, and of, itself, highlights the need for integrated service provision. Physical health is also at issue for these women and the provision of primary care within services that they currently access is also crucial. Finally, assistance with welfare and access to housing should remain a priority for agencies that serve as a first point of contact for this group, as, without such stability, drug treatment programs and psychological interventions are unlikely to be effective.

4.8 Crime and contact with the police

Approximately half the women reported engaging in criminal activity in the past month, half had been arrested in the past 12 months, and just over half had ever been in prison. Arrests generally related to drug use and soliciting in a residential area. There were mixed reports regarding experiences with the police. Equal proportions reported experiences of police harassment, poor treatment, and assault reports not being taken seriously, as well as police assistance, respectful treatment, and police assistance after assaults. Despite the large majority of women reporting experiences of violence at work, very low proportions had reported these incidents to police. Reasons for not reporting were largely due to the perception that they would not be taken seriously. Continued liaison between outreach agencies and local police is crucial, to ensure that the issues that arise from encounters between police and street-based sex workers are addressed. Likewise, training of police in the relevant geographical areas, to enhance their understanding of the issues for these women, would be useful, and SWOP has already undertaken these initiatives in some areas. Finally, in order to encourage more women to report work-related violence to the police, there should be an ongoing police commitment to the provision of sex work liaison officers in the local areas where street sex work is conducted. Many of the women

reported positive experiences with liaison officers when reporting assaults, and any encouragement for these women to engage with the police is important, as it may reduce the risks they face on a regular basis.

4.9 Limitations

The findings of this study refer to street-based sex workers, who differ from sex workers employed in other sectors of the industry across several domains (Alegria et al., 1994, Minichiello et al., 2001, Harcourt et al., 2001). The work and trauma experiences these women reported are likely to be quite different than for non street-based sex workers, and this should be considered when interpreting results. Street-based sex workers in other Australian jurisdictions are also likely to differ from the current sample due to different legislation. While this limits the generalisability of findings to other sex workers in other jurisdictions, sampling street-based sex workers in the Sydney area highlights the complexities of their needs, and hopefully provides important information on strategies to enhance engagement of these women in basic treatment services.

4.10 Conclusions

Many of the female street-based sex workers interviewed for this study reported complex histories of trauma, and the majority reported experiencing work-related violence. Many of their basic needs, such as housing, were not being met and safe work practices were difficult for many to employ. Mental health problems of depression and PTSD were prevalent, and there were reports of heavy heroin and cocaine use among some of the women. Drug dependence (cocaine in particular) was associated with increasingly risky injecting and sexual behaviours, and HCV was prevalent. These findings raise several issues. Firstly, outreach services to street-based sex workers remain crucial, in order to provide links with health and welfare services. Second, that so many of the women continue to experience mental health problems, despite access to health services, suggests that current models of service provision are not sufficient to address the problems among this group. More targeted intervention programs need to be developed. Despite the legality of street-based sex work in NSW, it is an occupation surrounded by stigma, which impacts on these women reporting work-related violence. Every effort should be made to encourage them to report these incidents to the police in an effort to minimise the ongoing risks they face at work. Finally, education that targets safe sex and injecting practices among sex workers should remain a priority, given the high rate of problems encountered among this group, and the risks they face due to contact with multiple sex partners.

5 SUMMARY OF RECOMMENDATIONS

- Agencies providing health services for sex workers may need to consider tailoring programs to the needs of individuals who identify as A&TSI, which could involve A&TSI liaison personnel as part of outreach teams and mental health and drug treatment services provided on site.
- Agencies should be vigilant to the mental health issues among street-based sex workers, particularly suicide risk. They should also be aware of the potential existence of trauma histories among street-based sex workers, especially child sexual abuse.
- Expansion of available public mental health services, particularly for women who have experienced child sexual abuse.
- Further research is required on the sorts of psychological interventions for depression as well as PTSD that are likely to be effective for street-based sex workers, given their highly complex histories, psychiatric comorbidity and unstable living conditions.
- Further research into the circumstances of initiation into injecting drug use among groups such as street-based sex workers and 'at-risk' youth is needed for education about injecting drug use to remain relevant.
- Further research is required on if, and how, sex workers use drugs to facilitate their work, and what impact, if any, this has on the nature of the encounter – Does it limit their ability to negotiate safe sex? Does it increase their vulnerability to violence?
- Education strategies on minimising the risks of injecting drug use should specifically target higher-risk injectors.

- Greater integration of mental health and drug treatment service provision is required, as targeting one without the other is unlikely to succeed.
- Primary health care provision should also be located within existing services that the women currently access.
- Primary health care should be extended to agencies outside the inner city area, and could involve a general practitioner being on site one day per week.
- Ongoing outreach to street-based sex workers remains crucial in minimising the harms among this group.
- Services that are the first point of contact for street-based sex workers should ensure clients are connected with a variety of agencies (such as welfare and housing assistance). Assistance with basic needs is central for drug treatment and psychological interventions to be effective.
- Outreach agencies could provide sex workers with referral details for relevant mental health, drug treatment, and crisis services in the local area.
- Outreach services could extend current services to include mental health service via outreach, which may encourage service utilisation.
- Provision of personal distress alarms via outreach services may increase personal safety and minimise risk of repeated trauma.
- Further research, investigating reasons existing safe houses are not being utilised, may inform improvements for managing existing safe houses as well as the establishment of additional houses outside the inner city area.
- Continued liaison between agencies who work with street-based sex workers and police to promote increased awareness of issues the women are faced with, and to negotiate safe and legal spaces for the women to work.

- Continued police commitment to the provision of sex worker liaison officers in relevant areas to encourage reporting of violent incidents.
- Continued focus on education strategies targeting safe sex practices among street-based sex workers.

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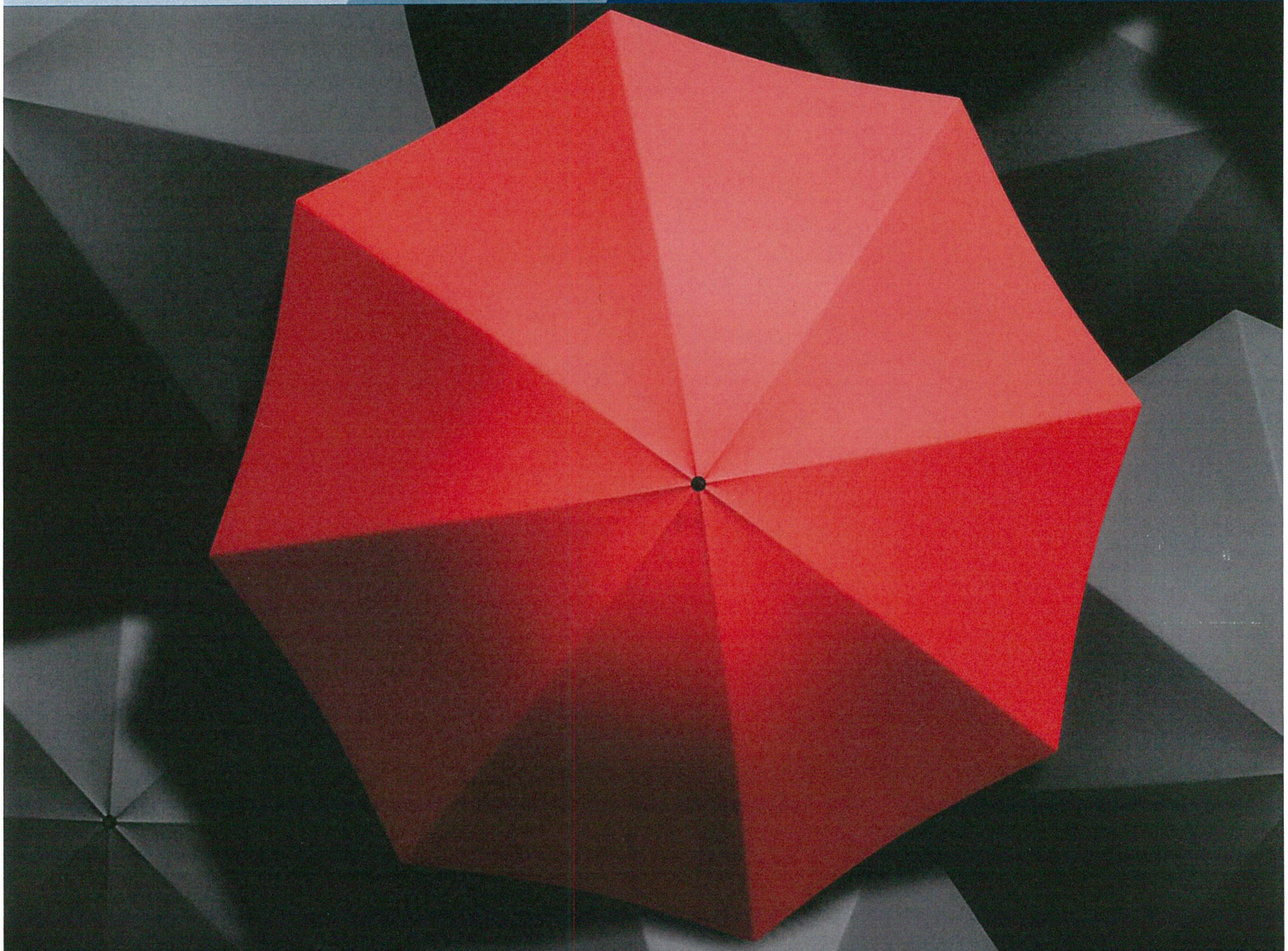

THE SEX INDUSTRY IN NEW SOUTH WALES

A REPORT TO THE NSW MINISTRY OF HEALTH

THE KIRBY INSTITUTE, FACULTY OF MEDICINE
UNIVERSITY OF NEW SOUTH WALES

Dedicated to the late Dr Christine Harcourt – a rare and sensible voice in sex work research and policy for 30 years.

The Sex Industry in New South Wales

A Report to the NSW Ministry of Health

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Executive summary

The Law and Sexworker Health (LASH) team are leading international authorities on the public health and legal aspects of sex work – combining over 100 years of multidisciplinary research experience into sex work in NSW, interstate, and internationally.

Like most Australian Governments, NSW periodically reviews its legislative approach to prostitution. Independent of this process, the LASH team was compiling extensive data on the prostitution laws in NSW; prosecutions (2000–2006) resulting from those laws; the reactions of local government; the structure and function of the sex industry in Sydney; the demographics, behaviour, health, and welfare of a representative sample of brothel-based sex workers in Sydney; and the operation of health promotion and clinical services. The NSW Ministry of Health contracted the LASH team to compile this Report in order to better inform NSW policy considerations.

The LASH team had been funded by the National Health and Medical Research Council to investigate if the various legislative approaches across Australian jurisdictions were associated with different health and welfare outcomes for the sex workers. Three capital cities were selected and the LASH team focused on urban brothel-based female sex workers for comparability reasons, and because such women provide the bulk of commercial sexual services in Australia. Perth was selected because most forms of commercial sex are illegal, Sydney because adult sex work is largely decriminalised, and Melbourne because sex work is 'legalised': that is, either brothels or individual sex workers must be licensed. Unlicensed brothels or sex workers in Melbourne remain criminalised.

In brief, the LASH team determined that:

- Sydney has a diverse and open sex industry. Compared to other Australian cities Sydney's sex industry is commensurate with the size of its population. NSW men are infrequent consumers of commercial sexual services, with only 2.3% purchasing sexual services in any one year, similar to the Australian average. The number of sex workers in Sydney brothels was similar to estimates from 20 years ago. These data confirm that the removal of most criminal sanctions did not increase the incidence of commercial sex in NSW.
- Despite several remaining laws against prostitution-related activities, offenses finalised in the NSW courts were overwhelmingly concentrated on the street-based sex industry. A third of those who were prosecuted were male clients of street workers. Over the seven-year period, 2000 to 2006, there were no prosecutions against several prostitution laws.
- Sydney brothels are widely dispersed in inner urban and suburban areas, and they attract few complaints from neighbours. Because of difficulties in gaining development approval from local councils many Sydney brothels operate without approval, they are often small with poor occupational health and safety standards, and may masquerade as massage parlours. There are periodic reports of local government corruption, but no evidence of widespread police corruption around sex work.
- Compared to sex workers surveyed in Melbourne's licensed brothels and in Perth, brothel-based female sex workers in Sydney were better educated, and were more likely to have been born in an Asian or other non-English speaking country. In contrast to these other cities, the Sex Workers Outreach Project (SWOP) and the Multi-cultural Health Promotion team at the Sydney Sexual Health Centre have been actively working with and have had full access to this sector for 20 years. As a result the migrant sex workers in Sydney have achieved similar excellent levels of sexual health as their local counterparts.
- Condom use at work approaches 100% in Sydney brothels and when the LASH team tested the Sydney sex workers the prevalence of four STIs – chlamydia (2.8%), gonorrhoea (0), *Mycoplasma genitalium* (3.6%), and trichomoniasis (0.7%) – was at least as low as the general population.
- In general Sydney brothels workers enjoyed levels of mental health that were comparable to the general population. However, 10% of the Sydney women were found to be severely distressed on psychological testing (the Kessler-6 scale): twice as often as the general population. Psychological distress was strongly associated with injecting drug use.

Based on these findings and a review of the recent literature on the outcomes of various legislative approaches to prostitution, the LASH team developed the recommendations that appear in the following section.

Recommendations

1. **The NSW Government's legislative reforms of 1979 and 1995 should be endorsed.** These reforms that decriminalised adult sex work have improved human rights; removed police corruption; netted savings for the criminal justice system; and enhanced the surveillance, health promotion, and safety of the NSW sex industry. International authorities regard the NSW regulatory framework as best practice. Contrary to early concerns the NSW sex industry has not increased in size or visibility, and sex work remains stigmatised.

INTERNATIONAL AUTHORITIES REGARD THE NSW REGULATORY FRAMEWORK AS BEST PRACTICE

2. **Licensing of sex work ('legalisation') should not be regarded as a viable legislative response.** For over a century systems that require licensing of sex workers or brothels have consistently failed – most jurisdictions that once had licensing systems have abandoned them. As most sex workers remain unlicensed criminal codes remain in force, leaving the potential for police corruption. Licensing systems are expensive and difficult to administer, and they always generate an unlicensed underclass. That underclass is wary of and avoids surveillance systems and public health services: the current systems in Queensland and Victoria confirm this fact. Thus, licensing is a threat to public health.

LICENSING IS A THREAT TO PUBLIC HEALTH

3. **The Department of Planning, in consultation with local government, community representatives, and the Health Department, should endorse planning guidelines for brothels.** The inadequacies of council responses to brothel development applications can be addressed by the State Planning Department endorsing the *Sex Services Premises Planning Guidelines 2004*, with appropriate updates and amendments.

4. **Decriminalisation of the adult sex industry means that prime responsibility for the industry has moved from the police to local government. Local government should be resourced by the state for this role, and supported by WorkCover.** Decriminalisation in NSW has been associated with many local governments refusing to approve development applications for brothels. This has resulted in substantial legal costs and, in isolated instances, corruption by local government officials. Refusing development applications has also fostered the growth of brothels masquerading as massage parlours. Overseeing brothels to ensure compliance with occupational health and safety standards requires suitably qualified staff, perhaps best managed by WorkCover. WorkCover should implement a system of active staff and performance management in the compliance area, and develop a rigorous review and audit system for the compliance function with a high-level manager overseeing the process.

REFUSING DEVELOPMENT APPLICATIONS HAS FOSTERED THE GROWTH OF BROTHELS MASQUERADING AS MASSAGE PARLOURS

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5. **The NSW Ministry of Health should commission a review of clinical and health promotion services available to sex workers.** Our suggestion is that the process be led by the STI Programs Unit in consultation with the Sex Workers Outreach Project (SWOP) and the Kirby Institute. The current high levels of occupational safety and historically low levels of sexually transmissible infections (STIs) in most sex workers provides an opportunity to rationalise and better target health service provision where it can provide the greatest benefit; for example, new brothel workers and street-based sex workers. Clinical screening and health promotion guidelines should be evidence-based and distinguish between higher and lower risk sex workers. Data on the sexual health of regional and rural, Aboriginal, street-based, male, and gender diverse sex workers should be sought and collated.

6. **The NSW Government, in consultation with local government and street work communities, should investigate more effective and humane approaches to the problems posed by street-based sex work.** Street-based sex work is politically challenging everywhere, and NSW is not exceptional, as traditional working areas become gentrified. Street sex workers are among the most traumatised people in the sex industry. Though they are the smallest component of the industry, street sex workers are the major target for police prosecutions because of their high visibility. The aim of the investigation should be to explore methods of reducing the street presence and vulnerability of sex workers by means such ensuring an adequate supply of indoor alternatives; including approving brothels, and supporting more 'safe house' facilities.

7. **Considerations should be given to supporting research into the health and welfare of NSW sex workers outside Sydney; including the structure and determinates of the industry, and the knowledge, experience and behaviour of the workers.** The LASH and Sydney Sexual Health Centre (SSHC) studies were limited to urban female brothel-workers in Sydney. Parts of regional NSW have significant numbers of sex workers, many of whom are in contact with regional sexual health services. Such research could inform clinical service delivery and health promotion programs (see Recommendation 5).

8. **For health and safety reasons and in order to meet best practice in a decriminalised environment the word 'brothel' as defined in the legislation, should not apply when up to four private sex workers work cooperatively from private premises.** All of the evidence indicates that private sex workers have no effect on public amenity. Exempting this group from planning laws that pertain to brothels will limit the potential for local government corruption. The New Zealand experience provides a successful precedent for the four worker model.

STREET-BASED SEX WORK IS POLITICALLY CHALLENGING EVERYWHERE, AND NSW IS NOT EXCEPTIONAL, AS TRADITIONAL WORKING AREAS BECOME GENTRIFIED

THE WORD 'BROTHEL' SHOULD NOT APPLY WHEN UP TO FOUR PRIVATE SEX WORKERS WORK COOPERATIVELY FROM PRIVATE PREMISES

Background

In 1995 the sex industry in New South Wales (NSW) was effectively decriminalised by the *Disorderly Houses Amendment Act 1995* that allowed for the legal operation of brothels subject to approval under planning laws. This was the culmination of a process begun in 1979 when street soliciting was decriminalised by the repeal of the *Summary Offences Act*. There is growing evidence that better public health outcomes occur when sex work is decriminalised and health promotion and outreach programs are properly resourced (Rekart, 2005; Donovan et al., 2010a), however most jurisdictions continue to criminalise their sex industries.

Decriminalisation has now been in operation in NSW for 16 years. Over that period there have been other major changes with potential impacts on the sex industry in NSW. These include immigration and growing HIV epidemics to our north, and increasing STIs across Australia. As NSW was a pioneer in the decriminalisation of prostitution, it is timely to review the status of its sex industry. This could prove useful to other jurisdictions that are considering decriminalisation, as well as highlighting remaining issues that need to be addressed in NSW.

Legal responses to sex work

The Australian Constitution does not grant general criminal law powers to the Commonwealth Government and thus prostitution laws are matters for the State and Territory Governments. Since the 19th century all Australian jurisdictions and New Zealand (NZ) had criminalised most activities around prostitution but in the later part of the 20th century these laws became increasingly diverse (Harcourt et al., 2005). Most recently, NSW and the Australian Capital Territory (ACT) and NZ largely decriminalised prostitution (see Table 1, overleaf).

Earlier, the Victoria and Queensland governments had introduced licensing systems for brothels and some sex workers in the shadows of the emerging HIV/AIDS epidemic and extensive police corruption, respectively. The remaining states retain a variety of criminal laws against brothel-keeping and other prostitution-related activities (see Table 1), but these seem to be infrequently policed and debates and enquiries about prostitution law reform are ongoing. Notably, a majority of Australians have long favoured a move away from criminal sanctions (Weitzer, 2009), and enforcing prostitution laws is unpopular with police forces (McDonald, 2004).

As governments considering prostitution law reform have a number of options, it is useful to briefly review these options in the Australian context – more data and discussion are available elsewhere (Harcourt et al., 2005). Broadly, these options are:

1. **Criminalisation.** Otherwise known as prohibition or abolitionism, this legal approach has traditionally been seen as the most appropriate societal or moral response to conduct associated with the trade in sexual services. Criminal sanctions focus on related activities such as soliciting, brothel-keeping, and procuring, rather than the act of prostitution itself.

   Though criminalisation is the most common response globally, police discretion is often exercised to permit certain activities notwithstanding the criminal prohibitions. This tension between law and policing has a demonstrated potential to result in police corruption and abuse. Criminalisation may exacerbate opportunities for coercion and exploitation by encouraging sex workers to seek the protection of pimps and criminals (Harcourt et al., 2005). There is no evidence that criminalisation reduces the incidence of prostitution (Abel, 2009; Rissel et al., 2003; Neave, 1988) and the Australian public no longer see it as a preferred option (Weitzer, 2009).

2. **Decriminalisation.** The removal of most of the criminal penalties applying to adult prostitution is based on an essentially pragmatic acceptance that sex work is here to stay, so priority is given to protecting human rights and the public health. Restrictions on sex work remain, but these are normally administered by local government rather than the police (Harcourt et al., 2005).

   In theory, decriminalisation could result in a more 'normalised' sex industry with improved working conditions (including paid leave, superannuation, security, and occupational health and safety programs), taxation obligations, reduced police corruption and a reduction in the involvement of organised crime. However, such advances are often slow and patchy (Harcourt et al., 2005). As they do not acquire criminal records, sex workers find it easier to move out of a decriminalised industry into alternative employment.

   Better health outcomes for sex workers are typically reported from decriminalised systems such as the Netherlands, Germany, and NSW (Rekart, 2005; Donovan et al., 2010) though such jurisdictions usually also have strong public health systems. The NSW decriminalisation model has been commended by international authorities as best practice (Rekart, 2005; Jeffrey & Sullivan, 2009) and was influential in law reform in New Zealand (Ministry of Justice, 2008).

3. **Licensing.** Often called 'legalisation', under this system either brothels or individual sex workers can apply to the state for a license to operate. Seen as a means of excluding undesirable persons from the industry and of enhancing government control over the number, location, and operation of brothels, licensing has never lived up to expectations. Unlicensed premises and sex workers remain criminalised, and the unlicensed sector normally comprises a large proportion of the industry (see Table 1, overleaf).

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Table 1 Australasian legal responses to sex work

	Criminalised	Licensed ('legalised')	Decriminalised
Jurisdiction (year of change)	WA, SA, NT, Tas	Vic (1984) Qld (1992)	ACT (1992) NSW (1995) NZ (2003)
Proportion of sex workers operating illegally	>80% (typically, only private or escort work is not illegal)	Vic ~50% Qld ~90% (inc. unlicensed brothels and street workers)	<2% (street workers in the wrong location)
Corruption potential	Police	Police Local government Medical	Local government

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In Queensland, for example, after 20 years of operation, only 25 brothels (less than 10%) have joined the scheme (Prostitution Licensing Authority, 2009).

Licensing systems are self-serving, expensive and exclusive, often pushing sex workers onto the street (Harcourt et al., 2005), while undermining access by surveillance and health promotion programs (Chen et al., 2010; Harcourt et al., 2010; Rowe, 2011). As well as being questionable from a human rights perspective, mandatory sexual health screening of sex workers in Victoria has been shown to waste millions of dollars (Wilson et al., 2010) and to displace higher risk patients from finite public health services (Samaranake et al., 2010).

4. **The Swedish Model.** In 1998 the Swedish Government introduced a 'new' system that has attracted international attention largely because of its claimed novelty. Positioning sex workers as victims, the Swedes claim to be unique by decriminalising sex work while imposing criminal sanctions on their clients. In other words, purchasing sexual services is a crime while selling such services is not. However, criminal sanctions against clients are common around the world (Brewer et al., 2006), including NSW (p47), so the Swedish model is not as novel as claimed. Curiously, the only evaluation of the legislation by the Swedish Government presented no data on numbers of prosecutions. While they claimed to have reduced the prevalence of street prostitution, this had been offset by substantial increases in indoor prostitution (Swedish Institute, 2010). As most prostitution-related activities remain criminalised in Sweden, even the claim of providing benefit for the women is arguable (Dodillet & Östergren, 2011).

The distinctions between these systems may be largely illusory, with substantial overlap.

Policing practices are usually more important than the law. Even though Thailand's large sex industry is criminalised, it is lightly policed and socially tolerated. By contrast, despite superficially moderate sanctions, 50,000 sex workers are incarcerated in China every year for a period of two years of brutal 're-education', with a high re-offending rate. As the Chinese system expands so do the epidemics of HIV and other STIs in China (Tucker et al., 2010). One can only speculate on the sorts of arrangements the other 99% of Chinese sex workers has reached with the police to avoid detention.

Anti-trafficking measures

Much of the hard line position against the liberalisation of prostitution legislation is driven by concerns about the trafficking women and children for sexual slavery. Most of these claims are anecdotal but there clearly are issues in Europe where women from Eastern Europe and the former Soviet Union have been taken illegally to brothels in more affluent western European and Middle Eastern countries, including Turkey and Israel (Cwikel et al., 2008). There is also a long history of trafficking in India (e.g. from Nepal to Kolkotta and Mumbai) and around the Thai-Burmese border.

Some individuals in Australia contend that hundreds of Asian women are trafficked to brothels in Australia but present little evidence. The Federal Government, in response to international anti-trafficking agreements funded a large-scale investigation into these allegations (*Inquiry into the Trafficking of Women for Sexual Servitude*, June 2004). It was recently reported that, since 2004, 119 women 'discovered' in NSW have been involved in a Commonwealth Government support program for people

trafficked into the sex industry, but there have only been a handful of successful prosecutions. Recent brothel raids in Gladesville and Eastwood resulted in a few men being charged with drug offenses and bail breaches only (*Sydney Morning Herald*, 8/10/2011). Trafficking charges in relation to prostitution are hard to prove (David, 2008).

The LASH team found no evidence of recent trafficking of female sex workers in the Sydney brothel survey (see The size and structure of the sex industry in NSW, page 16) or in a clinic study (Pell et al., 2006). This was in marked contrast to the 1990s when contacted women from Thailand were common in Sydney (Brockett & Murray, 1993; O'Connor et al., 1996; Payne C, 1997).

Public health responses to sex work

Australian sex workers have achieved substantial improvement to their sexual health since the 1980s and this appears to have been sustained (Lee et al., 2005; Donovan et al., 2010a). This has been attributed primarily to the consistent use of condoms by sex workers with commercial partners (Harcourt et al., 2001; Lee et al., 2005). Most Australian jurisdictions have supported health promotion programs targeting sex workers for over 20 years (Donovan & Harcourt, 1996). Highly successful harm reduction programs have also resulted in HIV not entering the sex industry in any substantial way through drug injection (Donovan et al., 2010).

However, there are ongoing changes with potential impacts on the sex industry. These include demographic changes through migration and travel (Pell et al., 2006), prostitution law reform, and an increased incidence of HIV infection and other STIs in Australia and in neighbouring countries (Kirby Institute, 2011).

Demographic changes within the Australian sex industry include an increased number of migrant sex workers from high HIV prevalence countries in Asia. This has been most marked in NSW (O'Connor et al., 1996; Pell et al., 2006) and to an extent in Victoria and WA (Donovan et al., 2010b). However, female sex workers in Australia who are HIV-positive are rare (O'Connor et al., 1996; Kirby Institute, 2011), but with the ongoing potential for this situation to change.

Health promotion

In response to the HIV epidemic, a range of initiatives were implemented in Australia in the 1980s that have contributed greatly to the health of sex workers. Among these initiatives was the formation of community-based organisations representing at-risk groups with the mandate of providing health education, community support and advocacy. They did so with the assistance of health professionals and national and state AIDS funding (Mulhall et al., 1995a; Donovan & Harcourt, 1996).

Specifically, as a national and probably international first, in 1986 the NSW Health Department provided funding to the NSW branch of the Australian Prostitutes' Collective (APC) – a community organisation that had begun peer education and support activities in Sydney as early as 1983 (Donovan & Harcourt, 1996). The APC, with the support of the Health Department, was instrumental in persuading brothel managers and workers to adopt safer sex practices (Bates, 1990). Condom use in brothels rose from under 11% of sexual encounters to over 90% between 1985 and 1989 and the health of sex workers improved commensurately (Donovan & Harcourt, 1996). However, ideological disputes between members of the APC led eventually to a break-up of the organisation in 1988 (Harcourt 2002: 136–143).

The government saw the value of continuing the ground-breaking work of the APC and in 1990 it funded a new organisation – the Sex Workers Outreach Project (SWOP) – administered by the AIDS Council of NSW (ACON), a prominent, community based non-government organisation. The new organisation was funded to deliver HIV/STI information and education to the sex industry. There were initial community concerns that it would lack the strong advocacy and political roles undertaken by the APC but over time the organisation became widely acceptable to sex workers and owners in the sex industry. Through its accumulated knowledge base SWOP has been able to support law reform and to seek improvements in working conditions in the industry (SWOP, 1994). Today, SWOP and its regional branches provide peer education through outreach and shopfront services and delivers resources to sex workers throughout NSW. SWOP has developed strong collaborative partnerships with other public health services (Pell et al., 2006).

Similarly, AIDS education programs for the general public increased awareness among sex workers' clients of the importance of safer sex (Donovan et al 1996). Following the decriminalisation of brothel prostitution, NSW Health gave additional support for work place reform for sex workers (NSW Health & WorkCover, 1997).

Also of note was federal support, initiated in the mid-1980s, for needle and syringe programs (first introduced privately by health professionals in NSW), methadone maintenance programs and other related resources aimed at drug injecting communities throughout Australia. These programs continue to have positive benefits for injecting drug users including those working in the sex industry (Donovan & Harcourt, 1996).

Sexual health services

The 1980s and 1990s also saw an increase in the number and quality of clinical sexual health services in many parts of Australia (Donovan & Harcourt, 1996). In 1988, the Australasian College of Sexual Health Physicians was

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incorporated as a professional training body, and became a Chapter of the Royal Australasian College of Physicians in 2004. Similarly, sexual and reproductive health nursing was recognised as a specialist area and the Australian Sexual Health Nurses Association was established in 1991 (Mulhall et al., 1995b).

These developments fed into career structures and allowed clinical staff to become better consultants and advocates on behalf of their priority populations, including sex workers. Also, in 1985 Medicare began to allow rebates for STI-related consultations for sex workers with private doctors, although there are still restrictions on rebating pathology testing. In all Australian jurisdictions, GPs provide most of the STI screening for sex workers and their clients.

In some NSW public sexual health centres, culturally-specific resources have been developed to address the unique needs of non-resident sex workers. The first and still the largest such initiative was in Sydney where the Multicultural Health Promotion Project was established in 1990 at the Sydney Sexual Health Centre (SSHC). The Project includes Asian language clinics and outreach services employing Asian peer educators and is conducted in collaboration with SWOP (O'Connor et al. 1996; Pell et al., 2006). NSW has the most extensive network of sexual health services in Australia, and all treat sex workers as a priority population. Nevertheless, local gaps in health promotion and health care delivery have been identified in NSW (Berg et al., 2011).

Sexual behaviour

The health promotion programs and HIV prevention services provided by health professionals and community-based groups led to a dramatic increase in condom use by Australian brothel sex workers since the 1980s (Harcourt, 1994; Harcourt & Philpot, 1990). Since the mid-1990s repeated surveys of female sex workers working privately or in brothels in other states show almost universal condom use with clients (Harcourt et al., 2001; Perkins & Lovejoy, 2007; Pyett et al., 1996; Lee et al., 2005; Donovan et al., 2010). Importantly, Asian sex workers are now as likely to use condoms at work as their resident peers (Figure 1).

In other research, sex workers who are young and inexperienced, sex workers who are drug-dependent and male sex workers have been found to use condoms less consistently (Harcourt, 1994; O'Connor et al., 1996; Morton et al., 1999; Minichiello et al., 2001; Minichiello et al., 2000; Pell et al., 2006; Roxburgh et al., 2008; Roxburgh et al., 2006). Street sex workers in Melbourne and Sydney have also reported lower rates of consistent condom use at work than brothel workers (Morton et al., 1999; Harcourt et al., 2001).

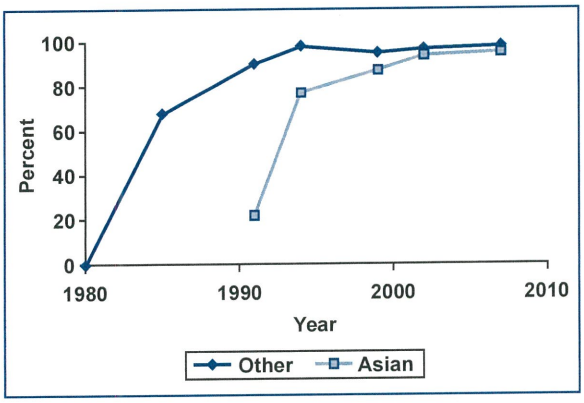

Figure 1 The proportions of Asian and non-Asian brothel-based sex workers in Sydney that reported condom use for vaginal or anal sex with all clients, 1980–2007. (Source: Donovan et al., 2010a.)

Sex workers, regardless of their age, sex, ethnic background or type of sex work are much less likely to use condoms with non-paying partners, similar to the general population (Fox et al., 2006; Harcourt, 1994; Prestage et al., 2007; Pyett et al., 1996). Inconsistent condom use with non-paying partners is associated with a low perception of risk and the use of condoms to differentiate sexual activity with private partners.

STIs and HIV

Due to the consistent use of condoms by sex workers Australia has seen a steady decline in STIs in sex workers and their clients (Harcourt, 1994). These low levels of STIs have been maintained over the last decade (Donovan et al., 2010; Lee et al., 2005). In a Melbourne study, unprotected sex with non-paying partners was the major risk factor for incident STIs (Lee et al., 2005). Nevertheless, because the same sex workers consistently use condoms at work, further transmission to their clients is largely averted (Wilson et al., 2010).

There is still no documented case of a female sex worker in Australia acquiring or transmitting HIV infection at work and HIV in female sex workers remains rare in Australia (Kirby Institute, 2011). The few resident female sex workers identified as HIV-positive have all had IDU as the probable source of infection (Harcourt, 1994).

The prevalence of STIs among certain groups of sex workers tends to be higher. For example, in one review of medical records in Sydney, almost one third of male sex workers had one or more STIs at clinical presentation, which was double the prevalence of STIs among female sex workers (Estcourt et al., 2000).

Female sex workers from Asia, young sex workers, those who engage in high levels of illegal drug use, and street sex workers have previously been found to have higher rates of STIs (O'Connor et al., 1996; Estcourt et al., 2000; Harcourt, 1994; Morton et al., 2002; Morton et al., 1999). However, STI rates in Asian sex workers in Sydney are now as low as in their local peers (Donovan et al., 2010a).

Notably, heterosexual men attending the SSHC who reported contact with a sex worker were five times less likely to be infected with chlamydia than other heterosexual men attending the same clinic (Chen et al., 2007).

Drug injecting

Only 7% to 17% of brothel and escort sex workers in Australia report ever injecting drugs (Harcourt et al., 2001; Perkins & Lovejoy, 2007; Pyett et al., 1996). The proportion is much higher among more marginalised groups such as street-based workers (typically >85%), young sex workers, and occasional sex workers (Morton et al., 1999; Harcourt et al., 2001; Lee et al., 2005; Roxburgh et al., 2008; Roxburgh et al., 2006; Sharp, 1995). Sex workers who inject drugs have the added risk factors of being more likely to have intercourse without a condom and to have partners who are also drug users (Sharp, 1995).

NSW sexual health services provide clean injecting equipment and free hepatitis B vaccination. The Kirketon Road Centre in Sydney – which has a large clientele of injecting drug user (IDU) street workers – also provides opiate substitution therapy and counselling for IDUs.

Mental health

Sex workers face a number of other health and safety concerns in their work. Stress, depression and a sense of isolation have all been reported by sex workers (Perkins, 1994). However, the psychological distress experienced by brothel-based sex workers may not be substantially different than that of women in the general population. In a sample of 171 female sex workers in Queensland, it was found that 28% were above the threshold for mild psychiatric morbidity, a rate similar to that of women from the general population (Boyle et al., 1997).

However, sex workers engaging in street-based work and who inject drugs were much more likely to report poor mental health (Boyle et al., 1997; Perkins, 1994; Roxburgh et al., 2006; Seib et al., 2009). Roxburgh et al (2006) found that just under half of Sydney street workers met the criteria for post-traumatic stress disorder.

Violence at work

Client violence is another issue that sex workers face. While 5% to 10% of brothel and private workers have reported some form of violence in their work (e.g., robbery with violence, rape, bashing, stabbing) (Perkins & Lovejoy, 2007) for street workers violence is a more pervasive issue. Upwards of 50% of Sydney street workers report violence at work (Boyle et al., 1997; Harcourt et al., 2001; Roxburgh et al., 2006; Seib et al., 2009).

The illegal, visible, and stigmatised status of street sex work attracts extreme violence. Between 1990 and 2003, 87 street workers in the UK were murdered (Kinnell, 2004), heralding the five Ipswich murders in 2006 (Goodyear & Cusick, 2007). In 2002, one man was charged with the murder of 26 of the 63 'missing' sex workers in Vancouver (Jeffrey & Sullivan, 2009). No comparable statistics are available for Australia. It has been argued that the state contributes to these murders by promoting stigmatisation and exploitation of sex workers while alienating them from the security that should be provided by the police (Kinnell, 2004; Goodyear & Cusick, 2007).

Other issues

Among sex workers high levels of tobacco consumption is a consistent finding, with up to 82% reporting currently smoking cigarettes (Perkins, 1994). Unless provisions are made for this high rate of smoking, brothels can be very smoky environments that raise occupational health and safety concerns. Other issues faced by more vulnerable sex workers include child care, lack of social support, and unstable accommodation (Harcourt et al., 2001; Pyett et al., 1996).

Methodology

The Law and Sexworker Health (LASH) Study

Between 2007 and 2008 we conducted a comparative study of the health and welfare of sex workers in three Australian cities with different legal climates – the LASH study. The chosen cities were: Perth, with extensive criminal sanctions against most prostitution-related activities; Melbourne, where licensed brothel prostitution was permitted, but most other prostitution-related activities remain criminalised; and Sydney, where adult prostitution is largely decriminalised. While Sydney brothels do not require a license, they are subject to local planning laws.

Australia was arguably the only country where such a study could be conducted because of its diversity of legal approaches to prostitution (Jeffrey & Sullivan, 2009), while other societal and institutional factors are common to all jurisdictions. Specifically, the LASH Study explored the following questions:

- What are the laws relating to prostitution in NSW, Victoria and WA? How are they policed?
- What broadly, are the demographics and the work locations of sex workers in these three states?
- How accessible and targeted are health services for sex workers in each state?
- What are the health and welfare outcomes for sex workers in each state?
- To what extent do sex worker health and welfare outcomes vary with the severity of prostitution laws and policing practices, and with access to health services, in each state?

We employed a number of methods to answer the research questions, including standard legal research techniques, key informant phone interviews, and a self-administered questionnaire and STI testing via a self-collected tampon specimen, of approximately 200 brothel-based sex workers in each city.

The law and policing

We analysed the law and court statistics in each state, the policing and prosecution experiences of sex workers responding to the questionnaire, and local government and police policies, plans and instructions.

Key informant survey

During the first year of the LASH project, we conducted semi-structured phone interviews with key informants. In NSW we interviewed eight key informants, including community and outreach workers, former brothel managers and sex workers, and a public health professional. Information was sought regarding the numbers and locations of sex workers, local policies and policing practices and the informants' understanding of the major issues faced by sex workers.

We analysed information from the key informant questionnaires through cross comparison and thematic grouping of responses to the open-ended questions. The results of this analysis were used to supplement information about the size and location of the sex industry in Sydney to determine local policing practices, to provide a broad picture of health and welfare services targeting sex workers, and to refine the sex worker questionnaire.

Measuring health promotion services

For each state we quantified health promotion programs targeted at the sex industry. We defined health promotion broadly and included issues such as policy framework, work environment, community action, health education, outreach, condom supply, and health service delivery.

We used information from the key informants to determine resource levels, including budgets and staff numbers, and their accessibility and outreach to target populations. The survey of sex workers provided supplementary information and specifically sought the sex workers' personal experiences of delivery of educational services to their work-sites, availability of condoms and other safety equipment, and their access to public sexual health services.

Brothel ratings

While administering the questionnaire, field staff also recorded brothel features such as security measures (external lights, front of house security, and internal alarms), general layout and presentation of premises (cleanliness, lighting, staff rest areas, staff-friendly environment, etc.). Based on their observations, data collectors assessed brothels on their merits as worker-friendly workplaces, awarding them a star rating from 1 star (lowest) to 5 stars (highest) developed for the purposes of the LASH study. The sex worker questionnaire also included questions about work-site security.

Sex worker survey

To achieve a sample of sufficient statistical power we planned to survey and test 200 female sex workers for STIs at their work place in each city. We limited the sample to women in urban brothels as this is the most common type of sex work in Australia (Rissel et al., 2003) and to allow comparison between the three cities. Health issues vary according to the type of sex work (Harcourt & Donovan, 2005; Rowe 2011).

To construct the sampling frame of brothels in Sydney, we cross-referenced advertisements in the telephone book with lists compiled from consultations with SWOP. We ruled out duplicate listings, by cross-referencing brothel addresses and telephone numbers which revealed that some premises had more than one phone line and others advertised under a variety of names. We identified

up to 400 premises that were probably brothels in the greater metropolitan area, but we restricted our final list to approximately 200 premises located within 20 kilometres of the central Sydney GPO. We randomly selected 120 premises from the list and were able to confirm by phone call or visit that 101 of these were currently operating brothels. We were able to access 74 brothels to collect data.

Field staff made a total of 86 visits – some brothels were visited twice. Seventy-two of the visits were made during the daytime and 14 occurred at night. There was a median of 3 (inter quartile range 2–4) workers observed at the brothels at each visit.

We employed outreach workers from the SWOP and SSHC Multicultural Project (Pell et al., 2006) to assist in collecting data from sex workers. As far as possible we included similar numbers of women who worked day and night shifts, a similar spread of both 'high' and 'low class' brothels (as determined by charges for sexual services), and smaller and larger brothels. We translated the questionnaire into Thai, Chinese, and Korean for use with non-English speaking sex workers.

All sex workers present at the time of visit were invited to participate in the study. Those who agreed gave informed verbal consent to complete a 20-minute questionnaire and to provide a self-collected tampon for STI testing. The questionnaire gathered information on demographics, working conditions, sexual behaviour at work, private sexual and drug use behaviours, and contact with a variety of authorities as well as health promotion programs while at work. The women were compensated for their time with a $25 cash payment. Refusals to participate by work-sites or by individual women were recorded.

A total of 264 sex workers were approached and 201 agreed to participate in the survey, resulting in a questionnaire response rate of 76%. A copy of the questionnaire appears as Appendix 1.

Statistical analysis

Frequency tables were used for the descriptive analysis of data. The chi-square test was used to compare categorical data. Statistical analysis was performed using STATA Release 8.2 (Stata Statistical Software: Release 8.0, Stat Corporation, College Station, USA). Statistical significance was set a two-sided 5% level.

Ethical considerations

Approval was obtained from Human Ethics Committees at the University of New South Wales, the AIDS Council of New South Wales, the University of Melbourne and the Alfred Hospital, Melbourne. Confidentiality was maintained throughout. We identified sex workers and key informants by a code only, and no names or addresses were entered on data collection forms. Codes were used for laboratory testing and conveying results to participants. To obtain test results, field staff provided participants with a contact name and number to ring.

Brothel owners/managers provided consent to gain entry to their premises, and sex workers provided verbal consent prior to participating in the survey.

Sydney Sexual Health Centre Longitudinal Study: 1992–2009

We analysed data from the SSHC database to examine the demographics, behaviours and sexual health of sex workers through a period that spanned the decriminalisation of brothels in 1995. To determine STI prevalence we included all female sex workers who attended SSHC for the first time from 1992 through 2009. To determine STI incidence we included all women who attended for further STI testing from 2004 through 2009. This study received approval from the South Eastern Sydney Illawarra Area Health Service Research Ethics Committee.

Sex worker enumeration study

We applied a mathematical modelling technique that exploited the overlap between the LASH community-based sample and the SSHC sample to determine how many female urban brothel-based sex workers worked each week, each month, and each year in Sydney (Read et al., 2012a). This study received approval from the South Eastern Sydney Illawarra Area Health Service Research Ethics Committee.

Survey of local government brothel approvals

We also surveyed by email 27 inner Sydney councils covering those areas where we had collected LASH data, to ascertain how many brothels had received council or Court approval and whether there were provisions for sex workers to work from private premises. Up to three emails were sent if there was no initial response.

The size and structure of the sex industry in NSW

It has been argued that legislation and law enforcement policy does not directly determine the size of the sex industry but rather shapes its form (Neave, 1988).

The following description of the industry draws on published reports plus data from the LASH and SSHC Longitudinal studies.

Demand for sexual services in NSW

Australian men are infrequent consumers of commercial sexual services by world standards. In a representative sample of Australian men aged 15 to 59 years in 2001–2002, 2.3% of NSW men reported paying for sex in the last year (16% had ever paid) which was similar to Australia overall and lower than most countries (Rissel et al., 2003). Australian men who had recently paid for sex had met the women in a brothel (64.6%), via an escort service (32.6%), massage parlour (26.8%), private premises with a single sex worker (25.5%) or private premises with two or more sex workers (11.5%), or on the street (5.9%) (Rissel et al., 2003).

Though its sources are obscure, an industry reporting organisation feels that all of the Australian sex industries are gradually declining in both scale and revenue (IBISWorld, 2010).

Typology and numbers

It is extremely difficult to estimate numbers of sex workers because of the covert and transient nature of employment in the industry. Estimates range from 1,500 female sex workers working at any one time to 10,000 in the whole of NSW (Lovejoy et al., 1991: 5; SWOP estimate, verbal communication 2009). LASH key informants suggested there were about 8,000 sex workers (male, female and gender diverse) in NSW. Our research however suggests that the number is probably lower than this.

LASH data collectors confirmed that there were at least 101 brothels (possibly as many as 200) operating within 20 kilometres of Sydney CBD, and they visited 74 of these. Email enquiries to 23 Local Government Councils in the area (see Perceptions of sex industry conditions, page 28) established that 113 premises had received planning permission since 1996.

Most of the brothels that we visited were relatively small establishments. This was particularly true of those that appeared to be operating without current planning permission. Key informants stated there was an average of seven sex workers per brothel in Sydney. Sex workers reported to LASH that a median of four sex workers worked day shifts and 5.5 worked at night in the 74 brothels surveyed (Table 2).

We also surveyed 34 owners/managers/ receptionists via a small self-administered questionnaire distributed while the LASH questionnaires were being completed. They reported a median number of six sex workers and administration staff per brothel (Table 2). Two claimed they had 40 or more women 'on their books' and eight reported only two or three.

Table 2 Number of sex workers working in individual Sydney brothels accessed by LASH

	Mean number (%)
Sex worker responses (n=201)	
During the day (median)	4.0
No response/don't know	33 (16.4)
During the night	5.5
No response/don't know	75 (37.3)
Owner/Manager responses (n=34)	
Median	6.0
No response/don't know	5 (14.7)

The remaining premises in this group of 34 brothels employed between 5 and 20 sex workers. Overall these numbers suggest there were approximately 1,000 female sex workers working in brothels within 20 kilometres of Sydney CBD in any one week. Given the short time many women spend in the industry there may be two or three times as many who engage in sex work during a 12-month period.

The most systematic estimate of numbers of female sex workers employed in brothels in Sydney used mathematical modelling based on the overlap between the LASH and SSHC samples, and their reported time in the industry, to arrive at figures of:

- 1,578 sex workers each day
- 2,391 sex workers each week, and
- 3,174 (95% confidence interval 2,590–4,762) in a 12 month period (Read et al., 2012a).

In addition to brothel-based sex workers (who are almost all female) SWOP estimates that up to 40% of all sex workers (including most male sex workers) in NSW work privately, approximately 5% are street-based and an unknown number (<10%) work exclusively as escorts. These estimates are broadly consistent with a population-based survey where 32.6% of sex workers clients reported recently using an escort service (Rissel et al., 2003). A realistic estimate of numbers of sex workers working within 20 kilometres of Sydney CBD within any one year might therefore be between 3,000 and 4,500. It is also known that there are a number of brothels operating in Western and South-Western Sydney and some NSW regional centres (Esler et al., 2008; Berg et al, 2011). Street-based sex workers work in some of Sydney's outer suburban areas and in Wollongong and Newcastle (Harcourt et al., 2001).

However it is unlikely that numbers in these locations add more than one or two thousand to the annual total.

Table 3 Age and country of birth of sex workers, LASH and SSHC data from 2006

Characteristics	LASH (n=201)		SSHC (n=628)	
	No.	%	No.	%
Age (years)				
Median	31	—	29	—
Country of birth				
Australia	55	27.4	116	18.5
New Zealand	10	5.0	24	3.8
Other English speaking	2	1.0	14[a]	2.2[a]
China	42	20.9	141	22.5
Thailand	35	17.4	153	24.4
Other Asian	30	14.9	135	21.5
Western Europe	18	9.0	21[b]	3.3[b]
Other non-English speaking	9	4.5	19[c]	3.0[c]
Aboriginal/Torres Strait Islander				
Yes	3	1.5	—	—
No	187	93.0	—	—
Unknown/No response	11	5.5	—	—

a UK and Ireland
b Includes western and eastern Europe
c Includes Central/South America

Notably, these estimates of the current size of the NSW sex industry are similar to estimates prior to decriminalisation (Parliament of NSW, 1986). New Zealand has also found no increase in sex worker numbers with decriminalisation (Abel et al., 2009).

Demographics of female sex workers in NSW

Age

The Sydney LASH respondents were aged between 18 and 60 years, median 31 years (Table 3). The average age of brothel-based sex workers has increased since the mid 1990s in part due to the increased number of Asian sex workers who are generally older than the other women (Pell et al., 2006). Between 1992 and 2009 there was an increase in median age of sex workers at first visit to SSHC from 25 to 29 years (p-trend <0.001). Most of this age increase was among the Asian women.

Country of birth and language skills

Two thirds (66.7%) of the sex workers in the LASH sample were from Asian (53.2%) or other non-English speaking countries (13.5%) (Table 3), and nearly half (46%) rated their English skills as 'Fair' or 'Poor' (Table 4) There has been an increase in the proportions of Asian immigrant sex workers in brothels in NSW since the early 1990s when it was estimated that Asian sex workers represented about 20% of the female sex industry (Donovan et al., 1991; O'Connor et al., 1996; Figure 2, overleaf).

The SSHC database study reflects this trend with the proportion of Australian-born sex workers steadily declining over the past two decades, largely replaced by women from Thailand, Korea, and China (Figure 2). However the clinic sample may be biased toward Asian women because SSHC runs Asian language clinics and many of these women do not have Medicare cards so they have less access to GPs: the LASH sample was not prone to those biases.

Notably, while Thai women comprised the bulk of migrant sex workers in the 1990s (Brockett & Murray, 1993; O'Connor et al, 1996) many more women now come from China, Korea and elsewhere in Asia (Table 3; Figure 2, overleaf; Pell et al., 2006). This is an important change, as the Thai women in the 1990s were typically poorly educated, had false passports and visas, and were usually in debt to the agents that had organised their travel to Australia (Brockett & Murray, 1993; O'Connor et al, 1996). By contrast, educational levels among Asian sex workers in Sydney are now much higher, and most have permanent residency or legitimate student visas. Debt bondage among Asian sex workers in Sydney is now rare (Pell et al., 2006).

Only three women (1.5%) in the LASH sample identified as Aboriginal, consistent with previous studies that found few Aboriginal women work in brothels. However Aboriginal women are disproportionately represented in street-based samples (Roxburgh et al., 2006; Harcourt et al., 2001).

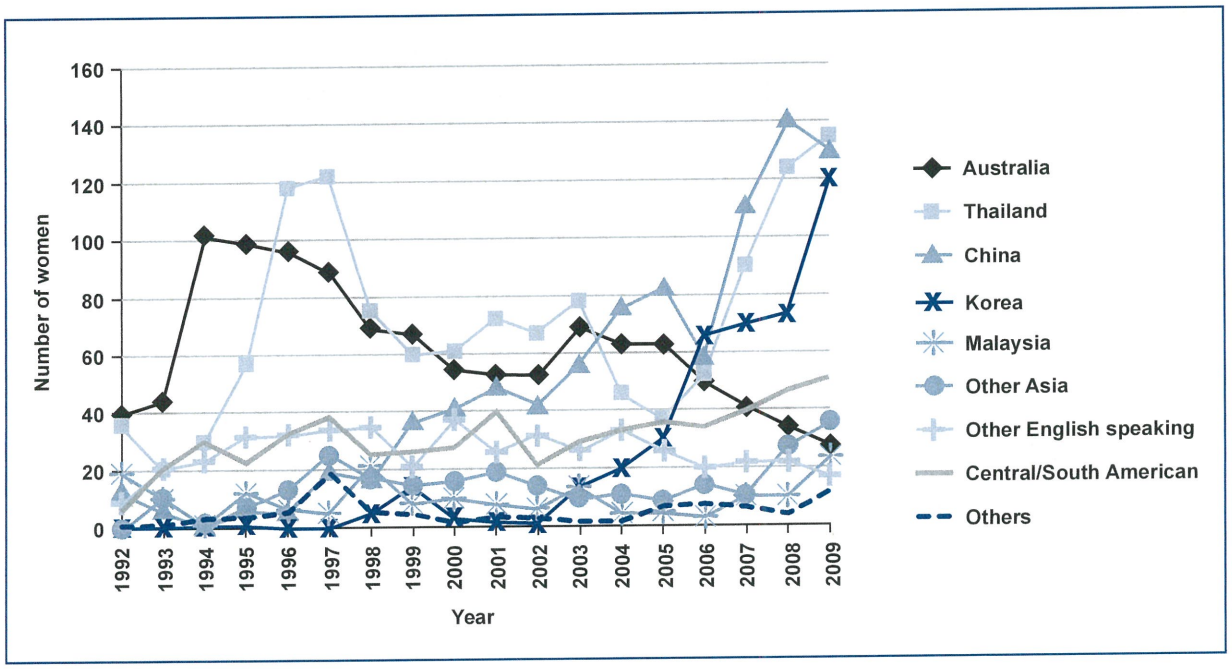

Figure 2 Country of birth of new female sex workers, SSHC 1992–2009

Time in sex work

In the Sydney LASH sample the median total length of time in the sex industry overall was only 2.0 years (interquartile range [IQR] 0.25–4.00) and 1.6 years (IQR 0.25–3.50) in the industry in Australia. This is a transient group of women requiring frequent outreach services to ensure health promotion messages reach newcomers.

Language and education

Their origins in Asian countries meant that a half of the LASH sample struggled with English, but 38% had an educational level beyond high school (Table 4).

Table 4 Language skills and educational levels of sex workers, LASH sample (n=201)

Characteristics	No.	%
English skills (self-rated)		
Good	99	49.3
Fair	49	24.4
Poor	44	21.9
Unknown/No response	9	4.5
Education		
12 years or less	88	43.8
13 years or more	76	37.8
Unknown/No response	37	18.4

Brothel locations and types

Brothels are located throughout Sydney, Wollongong, Newcastle, regional cities, and in many rural towns. Within Sydney there is a heavy concentration of brothels in the inner suburbs. Other clusters of brothels occur around the major commercial nodes such as Parramatta, Liverpool, Bankstown, Kogarah, Bondi Junction and Chatswood. A few brothels are well known to the general public and are easily identifiable, but most brothels operate unobtrusively in suburban houses or above small retail outlets.

Estimates of brothel numbers have varied considerably over the years. In September 1997 SWOP outreach workers (the Female Information and Support Team) estimated there were a minimum of 418 brothels employing female sex workers in the Sydney metropolitan area alone. Of these, 301 were 'Australian' and 118 employed predominantly Asian sex workers. There may have been up to 200 other premises in the rest of NSW. In 2007 the LASH team counted up to 200 brothels within 20kms of the CBD. Disparities in these estimates arise from variations in the way researchers distinguish between brothels, parlours and private workers; and further confusion arises from the common practice of advertising premises under several different names and phone numbers.

Brothels may employ female, male or gender diverse sex workers. However there are currently very few (perhaps two or three) male brothels in Sydney. A few gender diverse sex workers work in female brothels.

Larger brothels employ additional staff, such as receptionists, cleaners and bouncers. Smaller brothels sometimes operate as cooperatives, or are sub-leased from an off-site business owner. The advantages of this type of operation are that the sex workers retain the security of shared premises but they have more autonomy in their work conditions and a greater share of their income than in a managed brothel.

Massage parlours operate in a similar fashion to brothels except that the primary service offered is 'relaxation massage'. For legal reasons they usually present some of the trappings of legitimate massage rooms but sexual services may be available to clients on request. Generally it is left to the sex worker to negotiate with the client in order to distance the management from the activity. Many clients prefer to visit a 'parlour' rather than a 'brothel' and many sex workers state that they prefer to work in premises where they can often avoid vaginal/anal penetrative sex.

Arrangements in massage parlours vary in the mix of massage and sexual services that they provide. This mix can be for both planning permission reasons and for marketing reasons. The ambiguous nature of the presentation of the business can give sex workers more control when negotiating services with the client.

Over 50% of LASH respondents said they worked in a 'massage parlour' (Table 5), though the data collectors only identified one brothel as mainly providing massage services (Table 6). Several respondents gave more than one answer to this question reflecting the fact that some brothels also offer massage and escort services and that some sex workers work in more than one sector of the industry on a regular basis. Many have previously engaged in escort or private sex work (Table 5).

While accessing the 74 participating brothels, the LASH field staff recorded the brothels' physical features and assessed their merits as worker-friendly workplaces, awarding them a semi-objective star rating from 1 star (poor) to 5 stars (good). Their observations are presented in Table 6.

Comparisons between Sydney, Melbourne and Perth found few differences in the 'health and safety' and 'general ambience' categories. However, there was a difference in the scores for availability of health promotion resources aimed at sex workers and clients. Forty percent of Sydney brothels had health promotion resources for sex workers and 5% had them for clients (Table 6). This compares respectively with 61% and 43% of licensed brothels in Melbourne and 25% and 4% in Perth.

Sex workers in the LASH Study were also asked to report on the health promotion and other resources that were made available at their work place (Table 7, overleaf). Thirty six per cent of sex workers in Sydney had condoms supplied free at work, compared with 87% in Melbourne and 11% in Perth ($p<0.001$). The higher proportion in Melbourne was attributable to free condoms being required by the licensing scheme, but what occurs in the unlicensed brothels is unknown (Chen et al., 2010).

Private sex work

Many sex workers prefer to work independently, from home or from privately leased premises. Almost 20% of LASH respondents had worked privately (Table 5), and over a

Table 5 Reported current and previous (Australian) work venues of sex workers in Sydney, LASH sample (n=201)

	Current work		Previous work[a]	
	No.	%	No.	%
Massage	101	50.2	99	49.3
Brothel	92	45.8	82	40.8
Escort	13	6.5	45	22.4
Private	6	3.0	38	18.9
BDSM	4	2.0	10	5.0
Street	0	0.0	3	1.5
Other	3	1.5	6	3.0

Table 6 Sydney brothel characteristics assessed by LASH field staff, LASH sample (n=74)

Brothel characteristics	No.	%
Services provided[a]		
Brothel	47	59
Massage	1	1
Escort	33	45
Bondage and discipline	2	3
Brothel location		
Commercial	38	51
Industrial	10	13
Residential	14	19
Mixed zone areas	12	16
Health and safety[a]		
Security cameras	44	59
Exterior well lit	43	57
Regular sex worker outreach	47	63
Regulatory signs	18	24
Close to public transport/taxis	31	41
Security guard	12	16
Other (intercoms, first aid, etc)	10	13
Health promotion[a]		
Sex worker resources	30	40
Occupational health and safety information	12	16
Client resources	4	5
General ambience[a]		
Staff friendly	69	92
Tidy/clean	56	75
Staff room	65	87
Rules/regulations (punitive) i.e., fines, bonds	16	21
Smokers room/area	20	27
Rating by field staff		
5 star	2	3
3–4 star	45	60
1–2 star	25	33

a May add to more than 100% because responses are not mutually exclusive

Table 7 Workplace resources reported by Sydney brothel-based workers, LASH sample (n=201)

Resource	No.	%
Condoms provided at work		
Yes, they are free	72	35.8
Yes, I pay for them	53	26.4
No	61	30.3
No response	15	7.5
Other resources[a]		
Receptionist	137	68.2
Security cameras	123	61.2
Lubricant	88	43.8
Smokers' room	82	40.8
Room alarm	73	36.3
Dental dams	47	23.4
Security guard	45	22.4
Needles disposal bin	30	14.9
None of these	15	7.5
Frequency of educator/outreach visits		
Never	35	17.4
Less than once a year	16	8.0
1 to 4 times a year	74	36.8
5 or more times a year	22	10.9
Other	36	17.9
No response	18	9.0

a May add to more than 100% because respondents could report more than one

third of Australian men who had recently paid for sex said that this was with a private worker (Rissel et al., 2003). Most male sex workers also work from private premises (Minichiello et al., 1999).

Private sex workers work alone or with one or two others and/or a receptionist. Clients usually attend only by (phone) appointment, so they are sometimes referred to as 'call-girls' (Perkins & Lovejoy, 2007). The decision to work with one or more other people and to restrict clients to appointments is made as much for personal safety considerations as for general business reasons. Private sex workers have been found to be older and more experienced than brothel workers. A survey of 95 private sex workers in NSW found that 20% of them held tertiary qualifications (Lovejoy et al., 1994). Often they have worked in other sectors of the sex industry before setting up business with a core group of regular clients.

However a few LASH key informants expressed concern that younger, less experienced women were now moving into private sex work 'to stay under the radar', thus becoming less accessible to health promotion services. In NSW planning law does not distinguish between a small group of private sex workers and larger 'commercial' brothels.

Escort work

It is very difficult to estimate how many women or men work in this sector because of the casual and discreet nature of the work and because it has never been targeted as an illegal activity. One study found that a majority of male sex workers in Sydney recruit their clients through escort agencies (Minichiello et al., 1999). Some brothels offer an escort service in addition to in-house services. Over 20% of LASH respondents had worked as escorts in Australia and over 6% currently provided escort services (presumably going out from brothels) (Table 5). A third of Australian men who had recently purchased sex had used an escort service (Rissel et al., 2003).

Previously, most escorts worked through an agency that contacted them by phone. Typically, escort agencies advertise under several names with numerous phone lines to maximise their market share (Parliament of NSW 1986: 66). Globally, the internet is increasingly used to advertise escort services. Escorts may be requested to visit clients in a variety of venues including their homes, offices, and hotel rooms. The style and income associated with escort work varies greatly depending on the requirements and status of the clients and the presentation of the sex worker.

Escort work is potentially more hazardous for the sex worker than other forms of indoor prostitution because (s)he works alone in a space that is controlled by the client. The dangers can be minimised by regular phone contact with an agency or minder. In some cases this may include a car escort to and from the client's premises (Parliament of NSW 1986: 18–19). Escorts who work through agencies pay up to 60% of their fee to the agent, plus incur large expenses such as clothes and taxi fares.

Street-based sex work

NSW is unique in Australia in having decriminalised street prostitution. The *Summary Offences Act 1988* permits street soliciting in non-residential areas, not near or within view of churches, schools, dwellings and hospitals. In practice however there are only a very limited number of locales where street soliciting occurs. Traditionally most street soliciting occurred in the inner Sydney suburbs of Darlinghurst and Woolloomooloo, but in recent years numbers have declined in these areas and many sex workers now solicit close to major roads in the western suburbs. There may be up to 120 street-based sex workers on any one night around NSW, and over 300 in the course of the year (Harcourt et al., 2001). Interestingly in Melbourne, where all street-based sex work is illegal, there are many more street workers than in Sydney (Morton et al., 1999).

Male street-based sex workers tend to be younger and to have a more casual and opportunistic involvement in prostitution than do female and transgender sex workers. One study of 96 male sex workers in Sydney showed that 11.3% of soliciting occurred on the street and that 7.6% of sexual encounters took place in a car, or a public place (toilets, park street etc) (Minichiello et al., 2000).

Male street-based sex workers mostly work in East Sydney/Kings Cross but have became less conspicuous in Darlinghurst after the 'Wall' on Darlinghurst Road was made out of bounds.

In 1994 a NSW study of 146 transgender people revealed that 21% were currently working in the sex industry and that 45% had worked in the industry at some time. Of these, 32 individuals had been sex workers for more than five years (Perkins 1994: 31–36). Transgender sex workers work mainly in Darlinghurst on or adjacent to William Street. In addition a small number of transgender sex workers solicit in Newcastle. Nearly 70% of the transgender sex workers surveyed had worked on the street (Perkins 1994: 34).

Street-based sex services are provided in cars, alleyways or lanes, or in nearby safe houses where rooms may be let for short time hire. There are two council approved safe houses in Woolloomooloo, but in other places rooms may be found in hotels or motels, empty properties, private houses or industrial units operated under brothel style management.

One of the most dangerous features of working in the more isolated areas is that the client's vehicle is frequently the only off-street venue available. Sixty-seven percent of the 72 street sex workers interviewed in 2005 reported providing sexual services in cars and 85% reported experiencing violence while working (Roxburgh et al 2006).

Street sex workers are much more likely than other sex workers to have traumatic backgrounds, experience violence at work, be involved in heavy drug use and to have experienced homelessness and incarceration (Roxburgh et al 2006). Notably street-based sex workers may stay in the industry for much longer (mean–12 years compared with the two years of LASH participants) even though 66% reported they found sex work very stressful (Roxburgh et al 2006).

LASH key informants believed street-based sex workers were more affected by the 'move on' powers exercised by police under s 197 of the *Law Enforcement (Powers and Responsibilities) Act 2002* than by the prosecution of offences under the *Summary Offences Act 1988*. 'Move on' orders may prohibit the worker from returning to a 'safe' street and thus put them more at risk. Police could be coercive at times and at other times showed favouritism to individual street workers.

Other venues

A small number of sex workers work in bars, clubs and hotels in NSW. Their work conditions vary with the location but their situation is similar to that of some escorts. Because this kind of prostitution is illegal (breeching the *Liquor Act 1912*) it is very covert. The Royal Commission into the NSW Police Service (*Final Report, Vol.1* 1997:121) partially exposed the most exploitative side of this aspect of the sex industry. Licensed clubs in Kings Cross were found to employ drug dependent and possibly under age sex workers to service their customers under covert 'backstage' conditions.

There is also a number of fantasy, and bondage and discipline/sadomasochism (BDSM) specialists. These workers are less likely to engage in penetrative sexual intercourse with their clients and consequently STIs are not necessarily a major concern, but their work is sometimes described as psychologically demanding. Because of the nature of the work, requiring privacy for clients and safe storage for equipment, these women usually operate from secure premises, which may stand-alone or be linked with a conventional brothel. Only 2% of LASH respondents worked in this sector, with approximately 5% reporting they had ever worked in BDSM (Table 5).

More marginalised sex workers

All sex workers are marginalised from mainstream society, because their work continues to be heavily stigmatised. However some are more marginalised than others.

Street workers fall into this category because of the high level of public antipathy towards them. Aboriginal women are disproportionately represented among street-based sex workers: 21%–23% (Harcourt et al 2001; Roxburgh et al 2006) versus 1.5% in the LASH study of brothel-based sex workers (Table 3). The marginalisation of these women is compounded by the socio-economic disadvantage and cultural norms of their communities. Some rural sex workers are also affected by limited access to health care and community support, and by the difficulties of maintaining confidentiality and privacy within smaller communities (Scott et al., 2006).

Transport services may provide alternative venues for the commercial sex industry. Ports and truck stops are bases from which contact for sexual services are made. These women are hard to reach and rarely studied. Little is known about their sexual health, working conditions or access to services. This is a borderline area where the identity 'sex worker' is less clearly differentiated from other mobile, economically deprived individuals who occasionally exchange sex for travel, hospitality or other gifts in kind.

In the early 1990s many Asian women in Sydney brothels were heavily indebted to migration agents and employed under harsh contracts. While sometimes described as being 'trafficked', these women had voluntarily come to Australia (often repeatedly) seeking economic gain (Brockett & Murray 1994). In addition their employers and clients often resisted the use of condoms in brothels. International sex workers were identified as having poorer sexual health outcomes than resident workers (Donovan 1991b; O'Connor 1996). Fortunately this situation appears to have resolved. More recent studies show Asian migrant sex workers now have far more autonomy, including student visas and residency status, and much better

health outcomes (Pell et al., 2006; Donovan et al., 2010a). That said, 11% of the Asian women in the LASH sample reported that they were unhappy about being involved in sex work (figure that would not be unusual in any industry).

Not all sex workers receive cash payments for their services. Some are drug dependent, under-age youth of both sexes, and young men, who sometimes receive payment in kind. Other people providing sexual services in rural areas, Aboriginal and itinerant communities (such as those formed around shearing, harvesting, major construction projects and truck stops) may not work for cash or identify as sex workers (Harcourt and Donovan 2007).

Pimps

It has been claimed that globally 80–90% of all sex workers are controlled by pimps (Faugier & Sargeant 1997: 121). However, in NSW, and in Australia as a whole, pimping has not been a significant feature of the sex industry for decades. Even in the early part of the 20th century these arrangements appear to have been much looser and more fluid than the tight individual control exerted by pimps in the USA and to some extent in the UK (McLeod 1982; Parliament of NSW 1986:119). Since the legal reforms in 1979 sex workers in NSW have had no use for pimps. Notably, the LASH study found no evidence that any of the women had been coerced into working in a brothel (Table 8).

Clients of sex workers

A representative national study (n=9,337) found that 2.3% of men in NSW had paid for sex in the past year (Rissel et al., 2003). Men were significantly more likely than women to have ever paid for sex (15.6% vs 0.1%). There was no correlation between age, language background, income, education or occupation and having paid for sex. However there were a number of behavioural differences between those who had and had not paid for sex. Men who had paid for sex reported more drug and alcohol use, psycho-social stress, numbers of sexual partners and earlier sexual debut.

Information from female sex workers indicates that clients are very diverse, drawn from all age groups, socio-economic and cultural backgrounds. Reasons for visiting sex workers range from the lack, or temporary absence of, other sexual partners, loneliness and boredom, to curiosity, the quest for variety and the desire for sexual activities unobtainable from regular partners (Parliament of NSW 1986: 74–91; Lovejoy 1991). Male sex workers report the same heterogeneity among their (male) clients, including a significant number who identify as bisexual or straight (Minichiello et al., 1999). In a few instances male sex workers also see female clients.

Table 8 Sex workers' reasons for choosing current workplace, LASH sample (n=201)

Reasons[a]	No.	%
Hours are flexible	88	43.8
I like management	74	36.8
It pays better	70	34.8
I like my workmates	67	33.3
Clients are better	62	30.8
Safer (better security)	47	23.4
More discreet	45	22.4
I live near here	41	20.4
Not as many rules	28	13.9
Sex worker support comes here	16	8.0
Better services	13	6.5
It was all that was available	8	4.0
Avoid hassles with the police	5	2.5
I go where I'm told	—	—
I can get drugs here	—	—
Other	17	8.5

a May add to more than 100% because respondents could report more than one

A few sex workers – often with the support of therapists and carers – provide sexual services to socially isolated people with disability. Possibly unique in the world, NSW has policy and procedure guidelines for accessing such services (Chivers et al. 2010).

Use of clinical and health promotion services

The Sex Workers Outreach Project (SWOP) is funded to provide sexual health education and support to sex workers throughout NSW, including outreach to brothels and street-based sex workers. SWOP has facilities in Sydney and a number of regional centres. SSHC provides several clinics each week targeting non-English speaking sex workers.

SSHC and SWOP jointly employ a number of health promotion/outreach staff with multiple language skills to assist sex workers from Asian countries. Limited services exist in other sexual health centres in Sydney and in NSW regional centres (Berg et al., 2011).

Most LASH respondents (83%) reported they underwent regular sexual health checks: of these, 65.6% reported having sexual health checks at least every six months (Table 9). Fifty-three percent of sex workers in Sydney (compared with 29% in Melbourne and 22% in Perth) reported that they usually attended a public sexual health clinic for checkups.

Of the LASH sample 61% had been vaccinated against hepatitis B, and 65% had ever been tested for HIV. When asked where safer sex and sex work skills were learned, the most common responses were "from other workers while on the job" (52%) and "Sydney Sexual Health Centre" (52%). Other responses included: educational booklets (37%); local GP (22%); educators through face-to-face sessions (21%); friends outside work (18%); via the Internet (12%); and nowhere (6%).

STIs and HIV

Among the 140 LASH participants in Sydney who were tested for four common STIs – chlamydia, gonorrhoea, trichomoniasis, and *Mycoplasma genitalium* infection – the prevalence of these conditions was at least as low as would be found in women in the general population (Table 10, overleaf). Despite their high numbers of sexual partners at work, prevalences are kept low by the consistent use of condoms and regular STI screening.

Importantly these STI prevalences reflect what is observed in the clinic. While the STI prevalences in non-Asian sex workers in Sydney have been very low for decades (Figure 3, overleaf), they are dramatically lower among Asian sex workers than the experience of the early 1990s (Figure 4, overleaf; O'Connor et al., 1996).

These low and declining STI prevalences are particularly remarkable in the context of rising chlamydia notifications in non-sex workers at SSHC and nationally (Guy et al., 2010; Donovan, 2002; Kirby Institute, 2011). The relatively higher reports of past STIs (Table 10, overleaf) reflects high screening rates. The three cases of self-reported HIV infection in the LASH study were in Thai women who were engaged in massage only, while the syphilis cases were imported latent or previously treated infections that were diagnosed at initial screening in Australia.

However some male and female sex workers still report relatively high levels of STIs. These are the people who work on the streets and those who are most marginalised from mainstream health and welfare services (Minichiello et al., 2000; Harcourt et al 2001; Morton et al. 1999).

Table 9 Sydney sex workers use of health services, LASH sample (n=201)

Health Services	No.	%
Have regular sexual health checks	167	83.1
Do not have regular health checks	23	11.4
No response	11	5.5
If yes, frequency of sexual health checks		
Weekly	2	1.0
Monthly	25	12.4
Every 2–6 months	105	52.2
Every 7–12 months	25	12.4
Less than once a year/other	12	6.0
No response	32	15.9
Provider of sexual health checks[a]		
Public (free) sexual health clinic	107	53.2
Local GP/doctor	58	28.9
Women's health clinic/family planning	21	10.4
Private sexual health clinic	17	8.5
GP/doctor in another town	10	5.0
Other	11	5.5
Reasons for seeing this provider[a]		
Confidentiality	99	49.3
Expertise	61	30.3
Easy to get there	55	27.4
Recommended	44	21.9
Cost	25	12.4
Only place I know	17	8.5
Required by employer	11	5.5
Other	14	7.0

a Adds to more than 100% because respondents could report more than one

Condom use with clients

Substantial minorities of the LASH respondents reported no vaginal sex, no oral sex or no anal sex with clients, or they did not answer these questions (Table 11). This may relate to the complexity of the questions (particularly after translation) or it may be because some may only provide massage with hand relief. Nevertheless, when reported, condom use was high.

SSHC data showed that between 1995 (the first full year of collecting this data) and 2009 the proportion of non-Asian sex workers reporting consistent condom use with clients remained at 95% or higher. Over the same period, consistent use of condoms at work by Asian sex workers rose from 77% to 95% (p-trend <0.001). Of the few women that report <100% condom use for vaginal sex at work, all reported 90% or higher. Thus, over 99% of all commercial vaginal sex encounters in Sydney involve the use of a condom.

Of note, consistent condom use was lower for oral sex – a finding among sex workers at SSHC that has been associated with occasional cases of pharyngeal gonorrhoea. A number of these cases have been in women who report no vaginal intercourse at work; that is, they are predominantly working as masseuses (Read et al., 2012b).

Condom use with non-paying partners

Of the women with male partners outside of work in the previous three months, 50% used condoms inconsistently or never used condoms with their partners (Table 12). In the SSHC study there was a decrease from 1995 to 2006 in the use of condoms with partners outside of work. The decrease was from 50% to 24% (p-trend <0.001) in Asian sex workers and from 43% to 25% (p-trend <0.001) for non-Asian sex workers.

Table 10 STIs and HIV in Sydney sex workers, LASH sample (n=201)

Sexually transmitted infections	No.	%
Diagnosis in previous 12 months (self-reported)[a] (n=201)		
Chlamydia	21	10.4
Pelvic infection (PID)	5	2.5
Hepatitis C	4	2
Genital warts	5	2.5
Genital herpes	5	2.5
Gonorrhoea	5	2.5
Hepatitis B	9	4.5
Syphilis	3	1.5
HIV	3	1.5
One or more of the above	40	19.9
Current infection[a] (tampon PCR test) (n=140)		
Mycoplasma genitalium	5	3.6
Chlamydia	4	2.8
Trichomoniasis	1	0.7
Gonorrhoea	—	—

a Respondents may have more than one infection

Table 11 Condom use with clients, LASH sample (n=201)

	No.	%
Median number of clients in a week	15	—
100% condom use with clients		
Vaginal sex (n=143)	135	94
No vaginal sex with clients	26	—
No response	34	—
Oral sex (n=115)	96	84
No oral sex with clients	33	—
No response	54	—
Anal sex (n=33)	28	90
No anal sex with clients	99	—
No response	74	—

Table 12 Non-paying sexual partners and condom use in previous three months, LASH sample (n=201)

Sexual partners and condom use	No.	%
Number of male sexual partners outside of work		
None	25	12.4
One	90	44.8
Two	14	7.0
Three+	29	14.4
No response	43	21.4
Number of female sexual partners outside of work		
None	65	32.3
One	6	3.0
Two	1	0.5
Three or more	3	1.5
No response	126	62.7
Condom use with male partners		
Never	39	19.4
Sometimes (less than half the time)	16	8.0
Usually (more than half the time)	23	11.4
Always	77	38.3
No partners	35	17.4
No response	11	5.5

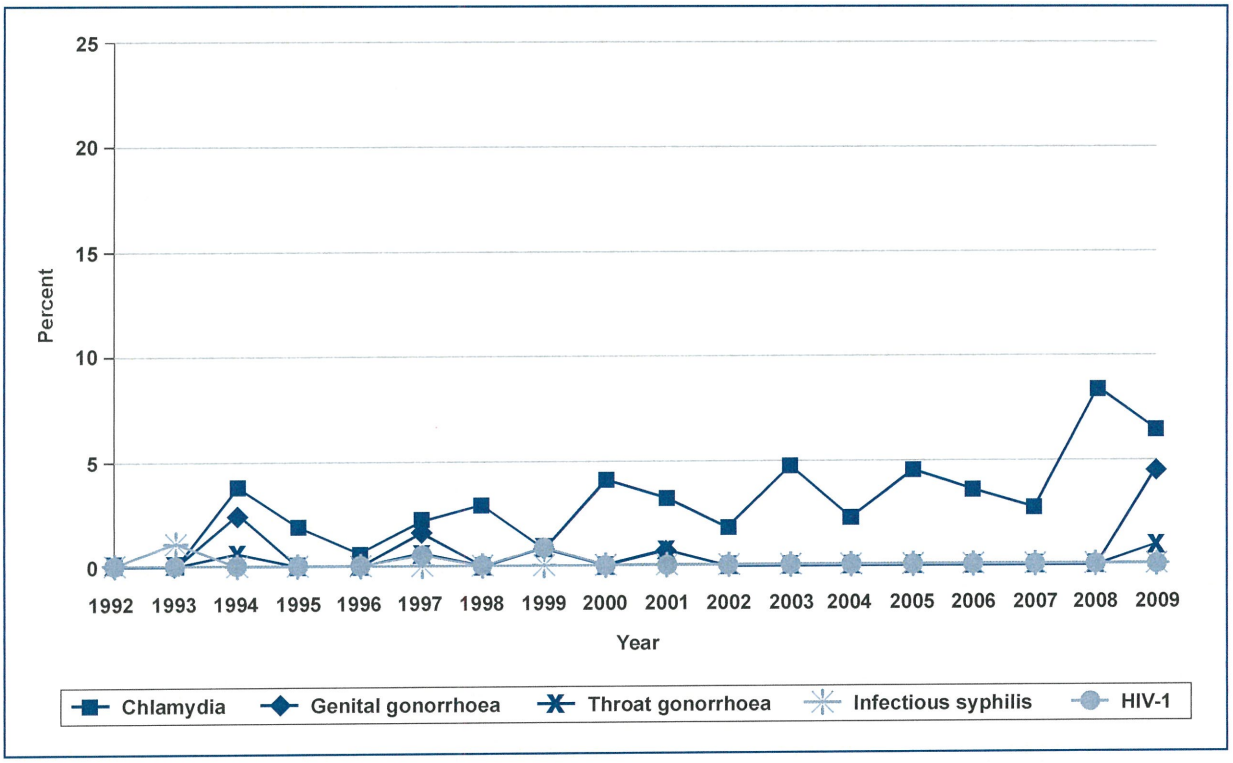

Figure 3 Prevalent STIs at first visit in non-Asian sex workers, SSHC 1992–2009

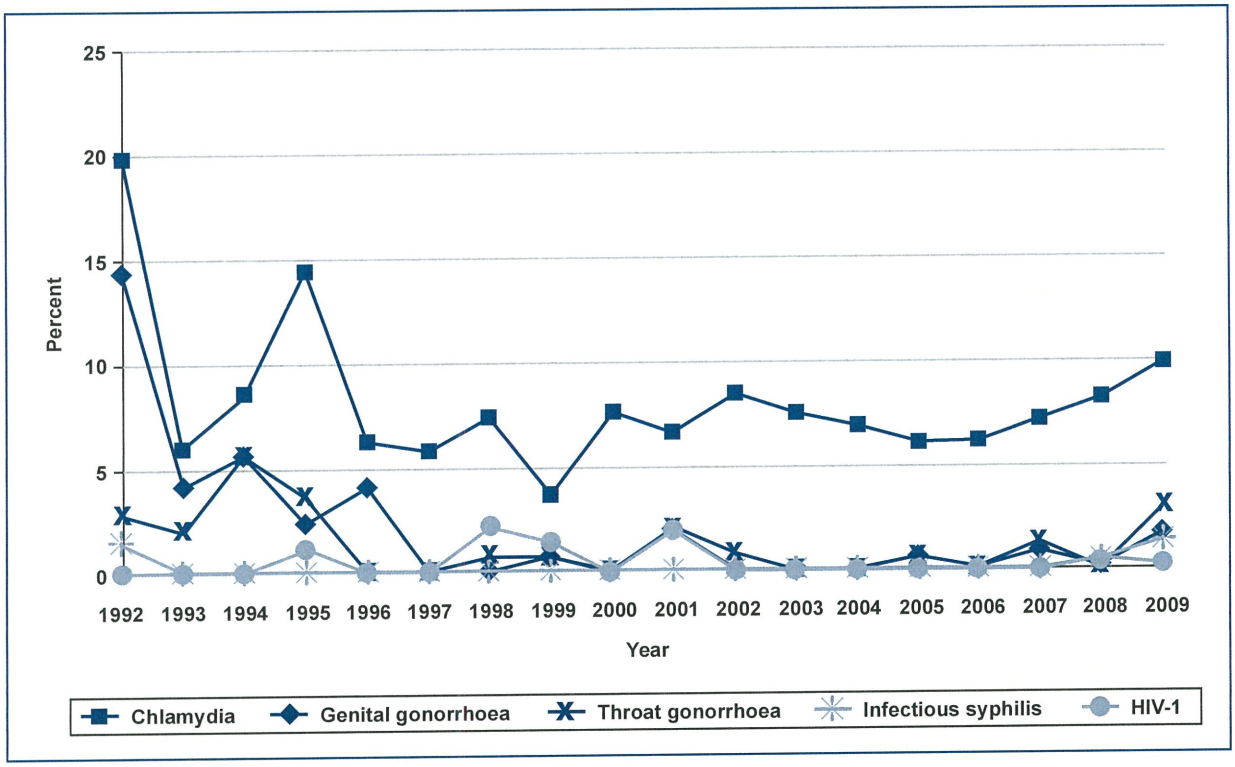

Figure 4 Prevalent STIs at first visit in Asian sex workers, SSHC 1992–2009

Tobacco, alcohol and other substance use

The smoking rate among the LASH sample was high (46%; Table 13), similar to Melbourne (51%) but significantly lower than in Perth (68%; p<0.001). These rates are three times the general population rates. SSHC data showed the overall proportion of women who reported smoking to have fallen from 53% in 1992 to 40% in 2006. Non-Asian women were more likely to smoke cigarettes than were the Asian women (53% vs 37%, p<0.001).

Sydney sex workers were significantly less likely to drink alcohol to excess than were sex workers in Melbourne or Perth: 44% of Sydney workers had never drunk more than four alcoholic drinks in a day, compared with 27% in Melbourne and 23% in Perth; p<0.001. This may reflect the higher proportion of Asian sex workers in Sydney brothels. The SSHC data showed 6% of sex workers reported drinking >140 gms of alcohol per week (non-Asian 10% vs Asian 2%, p<0.001).

Also of note, is that only 2% of Sydney LASH participants had injected a drug in the previous 12 months, significantly lower than in Melbourne (10%) and Perth (14%; p<0.001). Again this finding was supported by the SSHC data where 8% of the women reported ever having injected drugs, with <1% of the Asian women doing so (Table 13).

Table 13 Substance use in previous 12 months, LASH sample (n=201)

	No.	%
Substance use in previous 12 months[a]		
Cigarettes	92	45.8
Marijuana	33	16.4
Cocaine	33	16.4
Ecstasy	31	15.4
Speed	18	9.0
Heroin	2	1.0
Bupenorphine	2	1.0
Methadone	1	0.5
Last time consumed more than four alcoholic drinks in a day		
Never	88	43.8
Today	—	—
Yesterday	11	5.5
Last 7 days	32	15.9
2–4 weeks	28	13.9
2–3 months	8	4.0
More than 3 months	21	10.4
No response	13	6.5
Injected a drug in previous 12 months		
Yes	4	2.0
No	187	93.0
No response	10	5.0

a Adds to more than 100% because respondents could report more than one drug

Social support and wellbeing

Less than two thirds (63%) of LASH respondents reported having a supportive relationship with another person; that is, having someone who would look after them if they were sick at home (Table 14).

On the whole LASH respondents appear to be well adjusted and comfortable with their occupation, however 10% had high scores on the Kessler-6 psychological distress scale that indicates that they were likely to have a serious mental illness (Table 14). This was consistent across all states, and is about twice the rate for similar-aged women in the general population. These women are likely to have other stressors in their lives such as stigma, drug use, homelessness, social and financial constraints. Health and outreach service providers need to be mindful of this minority and be able to make appropriate referrals when they suspect a sex worker is seriously at risk.

In the previous year, 8% of LASH participants reported being assaulted by clients, 10% threatened by clients, and a third (33%) reported being pressured by a client to do something they didn't want to do. These results did not vary significantly across the three cities.

There are clearly still a number of inherent threats to the physical and mental wellbeing of brothel-based sex workers. Social isolation (often associated with the stigma attached to sex work – see Perceptions of sex industry conditions, page 28) is a major factor that is difficult to address. The potential for threats and assaults by clients should be addressed in the management plans of brothels and in the provision of Occupation Health and Safety education and information to owners, managers and workers in the sex industry.

Nevertheless brothel workers appear to be much better off in this respect than street-based sex workers where the majority report serious lifetime traumas, and a large number also report adult sexual assault and work-related violence, as well as drug dependence and depression (Harcourt et al., 2001; Roxburgh et al., 2006). In one recent study nearly half had symptoms that met DSM-IV criteria for post-traumatic stress disorder (PTSD) and one third reported current PTSD (Roxburgh et al., 2006).

Encounters with the police at work

Less than 10% of LASH respondents reported any work related experiences with the police in the past year. Of these, 68% said the police had been supportive and friendly. Two women reported threats of arrest, one reported being threatened with violence, two reported physical assault by police, one reported police had demanded money, and three reported pressure to provide sexual services to police (Table 15).

Table 14 Social support and psychological distress, LASH sample (n=201)

	No.	%
Supportive relationship (n=201)		
Yes	126	62.7
No	52	25.9
No response	23	11.4
If yes, with whom? (n=126)		
Friend	49	38.9
Partner	52	41.3
Parent	33	26.2
Several people	14	11.1
Pet	6	4.8
Flatmate	12	9.5
Another sex worker	7	5.6
Group (religious/community/self-help)	—	—
Psychological distress (Kessler-6) scale (n=201)		
Likely to have a serious mental illness	20	10.0
Unlikely to have a serious mental illness	142	70.6
No response	39	19.4

Twenty-four women (12%) reported that police visited their current workplace one or more times each year. When asked how comfortable they felt about going to police with complaints such as sexual assault, 46% said they would feel 'not comfortable' or 'very uncomfortable', whereas less than 24% said they would feel 'comfortable' or 'very comfortable'.

Knowledge of prostitution laws

When asked about the impact of sex work laws, 2% of sex workers indicated that they had moved state (or country) because of sex work laws, and 3% reported changing workplaces within state because of the laws. Thirteen percent were unsure if it was legal to do sex work in NSW and 4% believed it was illegal. Overall sex workers were much clearer about their status under the law in Sydney and Melbourne than they were in Perth where all sex work is illegal ($p < 0.001$) (Donovan et al., 2010b).

Table 15 Encounters with the police in brothels, LASH sample

Experiences (n=201)	No.	%
Experiences with police while working	19	9.5
No experiences with police while working	170	84.6
No response	12	6.0
Further detail of encounters (n=19)		
Police were supportive/friendly	13	68.4
Police were not supportive/friendly	2	10.5
No response	4	21.1
Threatened with arrest	2	10.5
Not threatened with arrest	5	26.3
No response	12	62.3
Threatened with violence	1	5.3
Not threatened with violence	5	26.3
No response	13	68.4
Physically assaulted	2	10.5
Not physically assaulted	5	26.3
No response	12	63.2
Had money demanded from	1	5.3
No money was demanded of me	5	26.3
No response	13	68.4
Pressured to provide sexual services	3	15.8
Not pressured to provide sexual services	4	21.1
No response	12	63.2
Frequency of police visits to current workplace in the past year (n=201)		
Never	90	44.8
Less than once a year	6	3.0
1 to 4 times a year	20	10.0
5 or more times a year	4	2.0
Other	3	1.5
Unsure	67	33.3
No response	11	5.5
In the past year, (n=201)		
Police arrested/detained someone in the workplace	5	2.5
No one was arrested or detained	127	63.2
Unsure	54	26.9
No response	15	7.5
Police charged someone in the workplace	2	1.0
No one was charged	123	61.2
Unsure	55	27.4
No response	21	10.4
Comfort level in going to police with complaints of sexual assault, assault, etc.(n=201)		
Very comfortable	29	14.4
Comfortable	19	9.5
Somewhat comfortable	18	9.0
Not comfortable	49	24.4
Very uncomfortable	43	21.4
No response	43	21.4

Perceptions of sex industry conditions

At the end of the LASH questionnaire, participants were given the opportunity to provide additional comments about the impact of the law on their work conditions, health and wellbeing. Forty-six (23%) participants provided comments.

Of these, seven (15%) indicated they were happy with their work and had no complaints about the law or work conditions. One of these women commented:

'[It's a] good job, if you are making money'. Another wrote: ' ... we are normal, happy, educated women ... doing and treating this as a professional business'.

Five women (11%) were very unhappy about being involved in sex work. Two expressed this as experiencing discrimination against non-Australians in the search for other kinds of work:

'It is difficult to find a job here in Australia and the wage is really low. If there is a better job here then I wouldn't do this job';

Felt unsafe, not freedom. Australia make difficult [for] ... overseas people'.

A third woman found large brothels 'terrifying and distressing' and another had just started sex work but intended to leave at the end of the week and resume studies. The fifth found [work] conditions sometimes 'very severe'.

Six women (13%) did not express any wish to change jobs but complained about discrimination and the lack of respect shown to sex workers. These included the woman (quoted above) who said she was 'normal, happy and educated'. Two of the six commented that they kept their work secret from friends and family. One explained that ' ... lying all the time is exhausting'; and the other said she would:

' ... not give my ABN number for work in the sex industry. It is a very secretive venture for me ...'

Other issues raised were possible adverse impacts on sexual assault complaints and children's court matters; prohibition from being a blood donor; lack of respect in spite of sex work being 'a job that helps the community'; and the assumption that ' ... all working ladies are doing this to support a drug or other habit.'

A further 29 (63%) women made comments that suggested they were comfortable about being sex workers, although they had a variety of complaints and suggestions about how their working lives could be improved. These comments can be broken down under the following themes.

One sex worker said she admired the Australian (sic) Government's attitude to prostitution law and two commented that the law had no impact on their health or work conditions.

Other comments on the law ranged from saying sex work should be legal everywhere to requests for more regulation to 'keep people honest', and to crack down on 'illegal establishments' and 'illegal workers working on contracts'. One person claimed that 'Immigration accepts bribes'. Another complained of inadequate policing of illegal brothels and a third of ineffective police responses to protect women.

Three respondents thought that the current situation (i.e. decriminalisation) had made some aspects of work less safe. There is more pressure from owners to provide unsafe sex to clients and one woman believed private workers had lost their safety net of being able to work in pairs. Several women commented that sex workers should be given more information about the law and their rights and that NSW laws should be strengthened to give better protection to sex workers.

Several of the respondents indicated by their comments that they were unclear about the intersection of Federal, State and Local Government laws. Others misunderstood the reach of the law. Two women complained that shift fees and room rentals were being administered at their work places contrary to the law. Another woman reported that the police wrongly referred to their 'massage parlour' as a 'brothel'.

One sex worker claimed that legal discrimination against Thais denied them the same access as other non-residents, while another wanted to 'Make sure those that are forced to be in this industry are able to press legal charges even, if they do not have immigration papers'.

Two women complained about establishments that put the need to please clients above the need to protect sex worker health.

One sex worker requested the compulsory provision of free condoms, dams, lube and information at every place of work. There was also a request for a free portable testing kit, and one for free preventive medicine, morning after pill, and better quality (Japanese) condoms.

There were two comments on STI testing – one saying testing should only be done every two to six months,and the other praising the Melbourne system of monthly checks and certificates 'as it ensures the girls are tested and clean.' One woman simply stated that she had learnt a lot about how to use condoms at the sexual health clinic.

Three women were concerned that sex workers were not fully aware of their rights and that more education and information was needed. One woman remarked that workers rights were better protected in legal brothels in Melbourne.

Two responses dealt with the need for industry superannuation, and work cover insurance for all sex workers. One person commented that Receptionists are underpaid and another called for a women's refuge, open 24 hours, for homeless sex workers.

Brothel owners, managers, and receptionists

When LASH data collectors were invited into a brothel to survey the sex workers they also offered a short (one page) questionnaire to the person who appeared to be in charge of brothel management during that shift. These people were sometimes the brothel owners but they were more often shift managers or receptionists. Thirty four responses were collected. Of these, 20 were receptionists, eight were business owners or owner/managers (one business owner also worked as a receptionist), three were general managers and two were shift managers. One general manager and one shift manager also doubled as receptionists. One person did not identify his/her position.

Respondents had been involved with the sex industry (in a variety of capacities) for between three months to 20 years. The median time involved was five years.

Hourly rate for services

Nineteen managers and receptionists quoted amounts for sexual services ranging from $50 to $270. The median hourly rate was $150. Five establishments charged only $50 or $60 per hour. These were all 'Asian' businesses and this may reflect prices charged for 'relaxation massage' as opposed to full sexual services. Seven (20.6%) people did not respond to this question.

NSW Police involvement with brothels

Seven of 34 (20.6%) brothels had been visited by NSW Police in the past three months. Two calls were in relation to property thefts (not directly involving brothel workers) and one was in response to an anonymous tip-off about an underage sex worker. Others were 'routine checks'. There were no known convictions related to these events although one receptionist claimed a young student was charged with harassing sex workers and calling them names. There was no reported evidence of corrupt conduct by police and one owner who had been visited once by the police said he was "Happy with the local police".

Visits by other authorities

Respondents were asked about visits in the past three months by representatives from the Department of Immigration and Citizenship, the Australian Tax Office (ATO), the Local Council, and Federal Police. Five (14.7%) had been visited by the Immigration Department (three of these were 'Asian' brothels). Two (5.9%) had been visited by the ATO, five (14.7%) by Council officers and none by the Federal Police. There was a high no-response rate (29%–44%) to all these questions. Most of these visits were described as 'routine checks' with no action resulting. There was only one report of possible corrupt conduct and that was said to be by a Council officer asking for sexual favours at 'another similar business in this state'. The 'no response' rate was well under 20% for questions about possible corruption. Two people made general unsubstantiated comments about corrupt council officers.

There were few comments about the general impact of NSW law on the brothel industry. Five people indicated they were ambivalent or still slightly confused about the law. Five others lamented that law changes had not removed the stigma from the industry or addressed sex slavery. One of these also commented on neighbourhood prejudice against brothels. One respondent said the current law had a positive impact on the industry.

Conclusions

There is nothing in the comments by sex workers and owner managers in the brothel industry in NSW to indicate any systematic misconduct or corruption by officials, or any serious crime involvement.

Invited unstructured comments show that some people are still rather vague about some aspects of the law and Council regulation. There is still considerable concern about the stigma attached to sex work.

Overall these comments confirm the picture of an industry operating predominantly through small-scale local businesses, offering uniformly moderately priced services to their clientele. It suggests competition is fairly high and profit margins are small for most brothels in Sydney.

Prostitution law and policing in NSW

The criminal laws in NSW contain few offences relating to prostitution. By a series of reforms enacted between 1979 and 1995, prostitution related activities were largely decriminalised. The current law in NSW is contained in the *Summary Offences Act 1988*, the *Restricted Premises Act 1943*, and to a lesser extent, the *Environmental Planning and Assessment Act 1979*. There are no offences relating to the keeping or managing of a brothel *per se*. Current offences include living on the earnings of prostitution, coercive conduct to induce a person to act as a prostitute, holding out premises used for prostitution as a massage parlour, and soliciting by workers or clients near or within view of a school, church, hospital or dwelling. Brothels in NSW do not need a licence to operate, but require planning approval from the local council. A brothel may be closed by a Court upon application under the *Restricted Premises Act*, but not solely on the grounds that it is a brothel. The relevant considerations include complaints, disturbance, operation in an area frequented by children, etc. The criminal offences applying to sex work in NSW as of June 2011 are examined in the following sections.

Policing and prosecution

Information on all finalised court appearances in NSW for prostitution related offences between 2000 and 2006 (inclusive) was requested from the Bureau of Crime Statistics and Research, specified according to Act and section number. In the following sections, the data on all prosecutions are presented where relevant. The data presented in this report relates to all appearances in the courts over 2000–2006 (n=1,579) and includes appearances where the charge was dismissed because no evidence was offered (n=47), appearances where the charges were dismissed after hearing (n=23), and appearances where the charge was dismissed for other reasons or stood out of the list (n=21). The analysis was primarily directed at assessing policing activity, rather than prosecution outcome in the courts, and it was considered that court appearance provides a more direct reflection of policing activity than conviction.

The following sections examine the criminal offences applying to various sex worker activities in NSW in broad offence groupings: street offences, brothel offences, offences applying to using premises in specified circumstances, live on the earnings, sole operators, escort workers, inducing/procuring, advertising and sponsorship, child prostitution and sexual servitude offences.

Street offences

There are three soliciting offences applying to workers in s 19 of the *Summary Offences Act 1988*:

- soliciting in a road or road related area near or within view of a prescribed location,
- soliciting in a prescribed location and,
- soliciting in a manner that distresses or harasses, in, near or within view of a prescribed location.[1]

All three offences contained in s 19 carry a maximum penalty of imprisonment for three months.

An amendment in 1997 changed the location of the first offence from "a public place" to a "road or road-related area" and further specified that soliciting included soliciting from a motor vehicle.[2] A road related area is defined in s 4 to mean a road or road related area "within the meaning of the *Road Transport (General) Act 1999*". The purpose of the amendment was stated in the second reading speech (*NSW Parliamentary Hansard*, Legislative Council, 25 November 1999, at 3710, per Ian MacDonald):

> *By expressly mentioning "motor vehicles" the new offence will operate to target "kerb crawlers". Kerb crawlers are persons who seek the services of street prostitutes by driving slowly along the street. Their behaviour causes significant community concern in certain areas. The mere act of driving slowly in a non-dangerous manner is not criminalised by this proposal.*
>
> *The actions that constitute soliciting are well established in the law and the actions of persons in motor vehicles who are charged with soliciting will reflect the action of propositioning, pestering or similar relevant behaviour as well as being in the motor vehicle.*

The meaning of solicit in s 19(1) was considered in *Coleman v DPP [2000] NSWSC 275*. The defendant was convicted of soliciting in Forbes Street, Darlinghurst within view of SCEGGS boarding school. On appeal, the defendant contended that soliciting involves "persistence, pestering, pressure" and that her conduct was no more than a simple request. O'Keefe J upheld the conviction and concluded that there was no requirement for persistence, pressure or annoyance.[3]

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1 19 (1) A person in a road or road related area shall not, near or within view from a dwelling, school, church or hospital, solicit another person for the purpose of prostitution …
(2) A person shall not, in a school, church or hospital, solicit another person for the purpose of prostitution …
(3) A person shall not, in or near, or within view from, a dwelling, school, church, hospital or public place, solicit another person, for the purpose of prostitution, in a manner that harasses or distresses the other person …
(5) In this section:
(a) a reference to a person who solicits another person for the purpose of prostitution is a reference to a person who does so as a prostitute, and
(b) a reference to soliciting includes a reference to soliciting from a motor vehicle, whether moving or stationary.

2 The *Crimes and Courts Legislation Amendment Act 1999*

Client specific offences were created in s 19A by the *Crimes and Courts Legislation Amendment Act 1999*.[4] Section 19A duplicates the three offences (and penalties) contained in s 19 and states: "a reference to a person who solicits another person for the purpose of prostitution is a reference to a person who does so as a prospective client of a prostitute ..."

An ongoing problem with the enforcement of soliciting laws has been the prosecution of sex workers but rarely clients. The purpose underlying the confining of s 19 to prostitutes and the creation of client offences in s 19A was stated in the second reading speech (NSW Parliament, *Hansard*, Legislative Council, 25 November 1999, at 3710, Ian MacDonald):

> *'Whilst it appears that the offences contained in section 19 apply equally to prostitutes and clients of prostitutes, in practice only prostitutes are charged by police with offences under section 19 ...*
>
> *By clearly criminalising the behaviour of persons seeking the services of prostitutes in the proscribed public places, the creation of the new offences should have a deterrent effect on such persons and thus reduce the incidence of street prostitution.*
>
> *The creation of a separate offence for clients will guide police discretion by providing police with an explicit policy statement and clear direction about the desirability of charging clients of sex workers with prostitution offences ... The offence will be non-gender specific so that it will equally apply to heterosexual, homosexual and transgender street prostitution.'*

Section 20 creates an offence of "public act of prostitution", punishing "each of the persons taking part in an act of prostitution in, or within view from, a school, church, hospital or public place; or within view from a dwelling".[5] Where the act of prostitution takes place in a vehicle which is in or within view from a school, church, hospital or public place or within view from a dwelling, each of the persons is guilty of an offence "whether or not the act of prostitution can be seen from outside the vehicle". The maximum penalty for an offence under s 20 is 10 penalty units or six months imprisonment. An act of prostitution is defined to include sexual intercourse or masturbation.

Street soliciting has thus been legal in NSW for over 30 years except in the few prescribed locations: near or within view of a school, church, hospital or dwelling or in a school, church or hospital. There has been a decline of approximately 95% in the number of prosecutions for street soliciting from the high point of the early 1970s under the *Summary Offences Act 1970* to the present (from 4,288 charges in 1972 to 53 charges in 2006). The most well known street-based market is a stretch of William St near King's Cross. Other street markets are located at Canterbury Road in the suburbs of Campsie, Lakemba and Belmore; the Great Western Highway at Minchinbury and Mt Druitt; and Port Kembla in the Illawarra. From time to time, tensions erupt between local residents, sex workers and other interested parties such as local government. Often police are called upon to conduct a saturation policing exercise to contain the market to the prescribed locations and, as a result, the tensions ease, at least for a while.

As noted elsewhere in this report, street-based sex workers represent only approximately 5% of the sex industry population. Most of the remaining 95% of the sex industry comprises various kinds of 'indoor' work: in brothels (with or without council planning approval), private premises involving one to three women working independently (legally defined as brothels but rarely seeking council planning approval) and phone-based escorts. The charges finalised for the soliciting offences in the courts are presented in Table 16, overleaf.

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3 *Coleman v DPP [2000] NSWSC 275*: "Solicit involves a personal approach, for the purpose of, or which is accompanied by, or which constitutes or conveys, an offer that some form of sexual activity will be engaged in by the person making the approach in return for monetary gain. It is unnecessary ... for there to be any element of aggressive persistence, pestering, pressure, or harassment or annoyance to the person approached. Nor is there a need for distress or embarrassment to be caused by or result from the approach or offer ... The mere approach by a prostitute to a person who is a potential customer, when she is dressed in a suggestive manner, perhaps with appropriate gestures or words, or is presented in a particular way is sufficient to constitute an offer of services as a prostitute."

4 19 (1) A person in a road or road related area must not, near or within view from a dwelling, school, church or hospital, solicit another person for the purpose of prostitution. Maximum penalty: 6 penalty units or imprisonment for 3 months.
(2) A person must not, in a school, church or hospital, solicit another person for the purpose of prostitution. Maximum penalty: 6 penalty units or imprisonment for 3 months.
(3) A person must not, in or near, or within view from, a dwelling, school, church, hospital or public place, solicit another person, for the purpose of prostitution, in a manner that harasses or distresses the other person. Maximum penalty: 8 penalty units or imprisonment for 3 months.

5 20 (1) Each of the persons taking part in an act of prostitution:
(a) in, or within view from, a school, church, hospital or public place, or
(b) within view from a dwelling,
is guilty of an offence. Maximum penalty: 10 penalty units or imprisonment for 6 months.
(2) Each of the persons taking part in an act of prostitution in a vehicle that is:
(a) in, or within view from, a school, church, hospital or public place, or
(b) within view from a dwelling,
is guilty of an offence whether or not the act of prostitution can be seen from outside the vehicle.
Maximum penalty: 10 penalty units or imprisonment for 6 months.

Table 16 Soliciting offences finalised in NSW courts, 2000–2006

Offence	2000	2001	2002	2003	2004	2005	2006	Total
***Summary Offences Act* s 19 (1) Soliciting near or within view of prescribed location by worker**	158	274	198	148	35	32	50	**895**
***Summary Offences Act* s 19 (2) Soliciting in prescribed location by worker**	1	—	1	—	—	—	—	**2**
***Summary Offences Act* s 19 (3) Soliciting in a manner that harasses by worker**	2	—	—	1	—	—	—	**3**
***Summary Offences Act* s 19A (1) Soliciting near or within view of prescribed location by client**	11	164	85	52	80	86	2	**480**
***Summary Offences Act* s 19A (2) Soliciting in prescribed location by client**	—	—	—	—	—	—	1	**1**
***Summary Offences Act* s 19A (3) Soliciting in a manner that harasses by client**	—	—	—	1	—	—	—	**1**

In common with all jurisdictions, the public soliciting offences are the most heavily prosecuted prostitution offences in NSW. Of particular interest, is the fact that a third of the charges were against clients. This represents an important change in the policing of street prostitution and a break from the past practices where almost all law enforcement was directed at workers.

The charges finalised for public act of prostitution offences in the courts are presented in Table 17. The most heavily prosecuted offence is an act of prostitution in a vehicle in, or within view from, a school, church, hospital or public place. However prosecutions were rare in the later years.

Brothel offences

It is not a criminal offence to manage or own a brothel in NSW, or to work in a brothel. The laws underpinning the decriminalisation of brothel keeping were successively enacted over a 16 year period, as follows.

In 1979, reforms were enacted which decriminalised most of the key prostitution offences and which have continued, in substantially the same form, to the present day.[6] The reforms recognised "first, that the present law discriminates unfairly against the prostitute as compared to the customer, and second, that wherever possible the law should be directed at preventing and punishing exploitation" (Frank Walker, *Hansard*, Legislative Assembly, 23 April 1979 at 4923). The key offence of brothel keeping under s 32 of the *Summary Offences Act 1970* was repealed and not replaced.

Throughout the 1980s and the early 1990s, much of the brothel industry operated in a quasi-legal fashion. However, police action in two areas served to undermine the 1979 reforms. First, rarely used wartime legislation, the *Disorderly Houses Act 1943*, was revived and an increasing number of declarations were sought in the Supreme Court. A disorderly house declaration enabled prosecutions to be undertaken for the offences of owning, occupying or being

Table 17 Public act of prostitution offences finalised in NSW courts, 2000–2006

Offence	2000	2001	2002	2003	2004	2005	2006	Total
***Summary Offences Act* s 20 (1) (a) Public act of prostitution in or within view of prescribed location**	3	2	1	1	—	1	1	**9**
***Summary Offences Act* s 20 (1) (b) Public act of prostitution within view of prescribed dwelling**	—	7	—	2	2	—	—	**11**
***Summary Offences Act* s 20 (2) (a) Public act of prostitution in a vehicle in or within view of prescribed location**	28	73	8	9	14	2	7	**141**
***Summary Offences Act* s 20 (2) (b) Public act of prostitution in a vehicle within view of dwelling**	7	1	—	2	4	1	—	**15**

6 The *Summary Offences (Repeal) Act 1979*

found on such declared brothels. The decision in *Sibuse Pty Ltd v Shaw (1988) 13 NSWLR 98*, that a declaration may be made on the mere ground that the premises are a brothel, made it easier to obtain declarations and paved the way for many further applications and prosecutions.

Secondly, the police revived the common law offence of brothel keeping. In 1990, the police charged and successfully prosecuted a person for the common law misdemeanour of keeping a brothel, notwithstanding that there had been no prosecutions for this offence "in living memory" (*McHugh J in Sibuse Pty Ltd v Shaw (1988) 13 NSWLR 98* at 122). Further prosecutions ensued. In *Rahme (1993) 70 A Crim R 357*, the appellant appealed his conviction, arguing that brothel keeping was no longer an offence known to law given the "perceptible changes in the mores of society" (and reliance was placed upon Street CJ's dissenting opinion in *Sibuse*). However, in the Court of Criminal Appeal, Grove J (with whom James and Campbell JJ agreed) noted (at 361) that:

> *' ... the legislature reaffirmed its recognition of the existence of the common law misdemeanour in the passage of s 17(2) of the* Summary Offences Act [1988] *shortly after those views [in* Sibuse*] had been published. ... it is for the legislature to regulate social conduct if this is deemed desirable. It is not the function of the court to assess the merit of competing views about changes in society. The offence of keeping a brothel has been and is part of the law of New South Wales and I reject the submission that the court should discard it.'*

In 1995, the *Disorderly Houses (Amendment) Act 1995* was enacted to reinforce the policy underlying the 1979 reforms by overturning the decisions in *Sibuse* and *Rahme* and to further involve planning laws in the regulation of brothel operation. The common law offence of keeping a common bawdy house or brothel was abolished: see s 580C of the *Crimes Act*. Restrictions were placed on the classification of brothels as disorderly houses.

Premises used for prostitution

Notwithstanding the decriminalisation of brothel keeping, there remain some offences which may apply to brothel-related activities in specified circumstances. Firstly, there are two provisions in the *Summary Offences Act 1988*, which prohibit brothel keeping and use where the premises are held out as a massage parlour. Secondly, if a brothel has been declared by a court to be a disorderly house under the *Restricted Premises Act 1943*, an offence is committed by the owner or occupier if any of the conditions referred to in section 3 (1) apply to the premises while the declaration is in force.

The *Summary Offences Act 1988* provisions

Section 16 creates the following offence (punishable by up to five penalty units or imprisonment for three months):

> *16 A person shall not use, for the purpose of prostitution or of soliciting for prostitution, any premises held out as being available:*
> *a) for the provision of massage, sauna baths, steam baths or facilities for physical exercise, or*
> *b) for the taking of photographs, or*
> *c) as a photographic studio,*
> *or for services of a like nature.*

In *Franklin v Durkin* (unreported, NSWSC, 21 October 1994), Levine J ruled that the section created two offences: using premises for the purpose of prostitution, and using premises for the purpose of soliciting for prostitution. In respect of the first, an act of prostitution is a necessary ingredient. An offer to perform in future a sexual service for payment falls within the second offence. The meaning of prostitution was also considered in *Franklin v Durkin*. Section 3(1) of the *Summary Offences Act* provides:

> ***prostitution** includes acts of prostitution between persons of different sexes or of the same sex, and includes:*
> *a) sexual intercourse as defined in section 61H of the* Crimes Act 1900*, and*
> *b) masturbation committed by one person on another, for payment.*

Levine J held that the definition, although only inclusive, contemplates the performance of a sexual act and that, as a matter of statutory construction, the wider meaning of prostitution at common law referred to in *Samuels v Bosch (1972) 127 CLR 517* does not apply. In *Samuels v Bosch*, Gibbs J stated (at 524) that "The ordinary meaning of 'prostitution' is the offering of the body to indiscriminate lewdness for hire".

Section 17 creates a corresponding offence for owners, occupiers and managers, punishable by a maximum of 50 penalty units or imprisonment for 12 months.[7] Both offences appear to be directed at the deception involved in the labelling of the premises, rather than the prostitution. The justification for including such offences in the criminal law may be questioned, given that their primary purpose appears to be consumer protection. There were only two court appearances for the s 16 offence between 2000 and 2006 (inclusive). There were no appearances for the s 17 offence.

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7 17 (1) A person, being the owner, occupier or manager, or a person assisting in the management, of any premises held out as being available:
(a) for the provision of massage, sauna baths, steam baths or facilities for physical exercise, or
(b) for the taking of photographs, or
(c) as a photographic studio,
or for services of a like nature, shall not knowingly suffer or permit the premises to be used for the purpose of prostitution or of soliciting for prostitution. Maximum penalty: 50 penalty units or imprisonment for 12 months.

Disorderly Houses/Restricted Premises

The *Disorderly Houses Act 1943* was enacted to deal with the "wartime growth of gambling, sly grog and prostitution" (Parliament of NSW 1986, p244). Under s 3, premises could be declared a 'disorderly house' or deemed 'declared premises' on a variety of grounds including that "drunkenness or disorderly or indecent conduct or any entertainment of a demoralising character takes place on the premises". Once declared, the premises could be searched at any time by police, without warrant and offences were created of being the owner (s 8) or occupier (s 9) of declared premises.

In 1968, the Act was amended as part of the Askin Government's attempt to eradicate prostitution, and s 3(1)(e) was added to the grounds: premises that are "habitually used for the purposes of prostitution, or ... have been so used for that purpose and are likely again to be so used for that purpose".[8] As noted above, the Act was increasingly used by police in the 1980s and 1990s to close brothels and prosecute persons found on the premises (Perkins 1991; Egger & Harcourt 1991). The police applications under the Act increased after the decision in *Sibuse* and there were 50 applications in 1990 (Perkins 1991).

The *Disorderly Houses Amendment Act 1995* repealed s 3(1)(e) and provided in s 16 that a s 3 declaration "may not be made in respect of premises solely because ... the premises are a brothel". A new Pt 3 relating to brothels was introduced. Section 17 authorised the NSW Land and Environment Court, on the application of a local council, to make an order that premises not be used for the purpose of a brothel. A local council may not approach the Land and Environment Court to make such an application "unless it is satisfied that it has received sufficient complaints about the brothel [from residents who live in the vicinity of the brothel or whose children use facilities in the vicinity of the brothel] to warrant the making of the application". In making an order, the Land and Environment Court is to consider whether:

- the brothel is operating "near or within view from a church, hospital, school or any place regularly frequented by children for recreational or cultural activities" (s 17(5)(a));
- the brothel "causes a disturbance in the neighbourhood" (including by reason of noise, or vehicular and pedestrian traffic) (s 17(5)(b);
- "sufficient off-street parking" and "suitable access" have been provided (s 17(5)(c), (d)); and
- the operation of the brothel "interferes with the amenity of the neighbourhood" (s 17(5)(f)).

The *Disorderly Houses Act 1943* has been subject to three important subsequent amendments effecting brothels.

1. It was amended by the *Disorderly Houses Amendment (Brothels) Act 2001* in response to a recommendation of the Brothel Task Force (established by the Government in 2000). The objective was to clarify the evidence needed to determine that a premise is operating as a brothel. A new s 17A was inserted into the Act.[9] Section 17A allows the Land and Environment Court to rely on circumstantial evidence in determining whether premises were used as a brothel. Safe sex equipment was said to "not of itself constitute evidence...".

8 By the *Vagrancy, Disorderly Houses and Other Acts (Amendment) Act 1968*

9 17A **Evidence of use of premises as brothel**

(1) This section applies to proceedings before the Land and Environment Court:
  (a) on an application under section 17 for premises not to be used as a brothel, or
  (b) under the Environmental Planning and Assessment Act 1979 to remedy or restrain a breach of that Act in relation to the use of premises as a brothel.

(2) In any proceedings to which this section applies, the Court may rely on circumstantial evidence to find that particular premises are used as a brothel.

(3) However, the presence in any premises of articles or equipment that facilitate or encourage safe sex practices does not of itself constitute evidence of any kind that the premises are used as a brothel.

Note. Examples of circumstantial evidence include (but are not limited to) the following:
  (a) evidence relating to persons entering and leaving the premises (including number, gender and frequency) that is consistent with the use of the premises for prostitution,
  (b) evidence of the premises being advertised expressly or implicitly for the purposes of prostitution (including advertisements on or in the premises, newspapers, directories or the Internet),
  (c) evidence of appointments with persons at the premises for the purposes of prostitution that are made through the use of telephone numbers or other contact details that are publicly advertised,
  (d) evidence of information in books and accounts that is consistent with the use of the premises for prostitution,...

2. The *Disorderly Houses Act 1943* was renamed the *Restricted Premises Act 1943* by the *Disorderly Houses Amendment (Commercial Supply of Prohibited Drugs) Act 2002*. The offence of being found in premises declared to be a disorderly house (s 7) was repealed and the offences relating to owners (s 8) and occupiers (s 9) were repealed and replaced by substantially different offences.[10] The new offences penalize the owner or occupier if, whilst the declaration is in force, any of the conditions referred to in s 3 continue to exist. Since s 3 does not refer to brothel operation[11], it is arguable that the s 8 and 9 offences no longer have any application to brothel owners or managers.

3. The *Restricted Premises Act 1943* was further amended by the *Brothels Legislation Amendment Act 2007*. The ambit of s 17 of the *Restricted Premises Act* (which allows a local council to apply to the Land and Environment Court for an order that the premises are not to be used as a brothel) was substantially broadened to apply to premises offering "related sex uses". Related sex uses are defined in s 2 to include the provision of adult entertainment involving nudity, indecent acts or sexual activity. Section 17 was also amended to provide that only one complaint may be sufficient to warrant the making of an application in the case of a brothel used or likely to be used for the purposes of prostitution by two or more prostitutes. The previous requirement was confined to "sufficient complaints". Section 17 was also amended to allow the Courts to suspend or vary for up to six months any development consent already granted to the brothel or related sex uses premises. S17A was amended to allow the Court to find "without any direct evidence that the particular premises are used as a brothel". Important amendments were also made to the *Environmental Planning and Assessment Act 1979*. The amendments created specific brothel closure orders (defined in s121ZR) which may extend to related sex uses premises. Under s121ZS, if a person fails to comply with a brothel closure order, a Local Court or the Land and Environment Court may make an order directing a provider of water, electricity or gas to those premises to cease provision for up to three months. Because the definition of a brothel in s 4 (1) excludes premises used by no more than one prostitute, the closure and cessation of utilities orders do not apply to sole operators. A person who fails to comply with a brothel closure order may be guilty of an offence under s 126 and subject to a maximum fine of up to 10,000 penalty units (if sentenced by the Land and Environment Court). Section 126 does not provide for the imposition of a term of imprisonment.

The operation of brothels is now regulated by the law in three primary ways and without the direct involvement of the criminal law:

- Firstly, under the *Environmental Planning and Assessment Act 1979*, a development application to establish a brothel may be rejected by a local council or authority. The matters to be considered in determining a development application are laid down in s 79C of the *Environmental Planning and Assessment Act 1979* and include the provisions of "any environmental planning instrument". Previously, the Department of Urban Affairs and Environment informed all local councils that Local Environment Plans would not be approved by the Minister for Urban Affairs and Planning if they contain a blanket prohibition on brothels (Department of Urban Affairs and Planning, *Council Circular – Planning Control of*

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10 8(1) After the service of a notice under section 6 on the owner of premises of the making of a declaration, the owner is guilty of an offence if any of the conditions referred to in section 3 (1) apply to the premises while the declaration is in force. Maximum penalty: 50 penalty units or imprisonment for 6 months, or both.

9(1) After the service of a notice under section 6 on the occupier of premises of the making of a declaration, the occupier is guilty of an offence if any of the conditions referred to in section 3 (1) apply to the premises while the declaration is in force. Maximum penalty: 50 penalty units or imprisonment for 6 months, or both.

11 3(1) On a senior police officer showing reasonable grounds for suspecting that all or any of the following conditions obtain with respect to any premises, that is to say:

(a) that drunkenness or disorderly or indecent conduct or any entertainment of a demoralising character takes place on the premises, or has taken place and is likely to take place again on the premises, or

(b) that liquor or a drug is unlawfully sold or supplied on or from the premises or has been so sold or supplied on or from the premises and is likely to be so sold again on or from the premises, or

(c) that reputed criminals or associates of reputed criminals are to be found on or resort to the premises or have resorted and are likely to resort again to the premises, or

(d) that any of the persons having control of or managing or taking part or assisting in the control or management of the premises:

(i) is a reputed criminal or an associate of reputed criminals, or

(ii) has been concerned in the control or management of other premises which have been the subject of a declaration under this Part, or

(iii) is or has been concerned in the control or management of premises which are or have been frequented by persons of notoriously bad character or of premises on or from which liquor or a drug is or has been unlawfully sold or supplied, ...

the Supreme Court or the District Court may declare such premises to be premises to which this Part applies.

Brothels, *29*, 1995), although they were permitted to restrict them to industrial zones (Department of Urban Affairs and Planning, *Council Circular – Planning Control of Brothels*, *16*, 1996). This edict allowing Councils to restrict brothels to industrial zones has since been repealed. In 2009 the Planning Department revised this advice and issued new directives under the model provisions for the Standard Instrument-Principle LEP that now requires Councils to permit brothels 'somewhere in their local government area.'

- Secondly, a local council may attempt to prevent a brothel from operating by applying under s 17 of the *Restricted Premises Act* to the Land and Environment Court for an order that the premises are not to be used as a brothel if a recent amenity-based complaint has been verified.
- Thirdly, the Land and Environment Court may issue a brothel closure order under the *Environmental Planning and Assessment Act 1979*. If a person fails to comply with a brothel closure order, a Local Court or the Land and Environment Court may issue a utilities order under which gas water and electricity supply is ceased for up to three months. If a person fails to comply with a brothel closure order they may be charged and convicted of an offence of offending against the Court's prohibition under s 125 of the *Environmental Planning and Assessment Act 1979* and fined accordingly.

Several local councils have criticised the planning scheme for brothels, claiming that they do not have adequate resources to investigate and litigate in the Land and Environment Court, where necessary (*Sydney Morning Herald*, 30/8/1999). Some councils have been reluctant to include brothels in their Local Environment Plans and some have criticised the decisions of the court as favouring brothels over councils. Between late 1995 and June 1998, the Land and Environment Court heard 27 appeals from brothel applicants who were refused development consent; 20 were upheld (Smith 1999). Other councils have assumed the new responsibilities with minimal adverse comment. According to Smith (2003) approximately half of the local councils in NSW had prepared Local Environment Plans to identify the location of brothels by 2003. Most councils had prohibited brothels from operating in residential areas. A Sex Services Premises Planning Advisory Panel was established by the Government in 2002 to provide advice and assistance to assist councils in the development and management of brothel planning. The Advisory Panel produced the *Sex Services Premises Planning Guidelines* in 2004 to assist local government and to outline best practice standards. These are yet to be adopted by the Department of Planning.

Live on the earnings

Section 15 of the *Summary Offences Act 1988* prohibits living on the earnings of prostitution:

> *15 (1) A person shall not knowingly live wholly or in part on the earnings of prostitution of another person.*
>
> *Maximum penalty: 10 penalty units or imprisonment for 12 months.*
>
> *(2) For the purposes of subsection (1), a person who is of or above the age of 18 years and who:*
>
> *(a) lives with or is habitually in the company of, a reputed prostitute, and*
>
> *(b) has no visible lawful means of support,*
>
> *shall be taken knowingly to live wholly or in part on the earnings of prostitution of another person unless he or she satisfies the court before which he or she is charged with an offence under that subsection that he or she has sufficient lawful means of support.*
>
> *(3) A person does not contravene subsection (1) by living wholly or in part on earnings derived from a brothel if the person owns, manages or is employed in the brothel.*

The s 15 offence was amended in 1995 by the *Disorderly Houses Amendment Act 1995*, belatedly implementing the recommendation of the 1986 NSW Parliament report *Report of the Select Committee of the Legislative Assembly Upon Prostitution*. Subsection (3) was added to prevent its application to persons owning, managing or employed in a brothel. Although the former version of the offence was generally understood to be aimed at pimps and others who exploit prostitutes, there was nothing in the section to restrict the application to exploitative relationships. It applied to co-workers of the prostitute, such as, for example, the cleaner or the receptionist in a brothel. However, the 1995 amendments did not address the problem of the dependent relationships of the prostitute and, as s 15 presently stands, it could be used against the adult child or other dependant of the prostitute even in the absence of any exploitative relationship. Indeed an adult dependant who lives with the "reputed" prostitute is presumed to be in breach of the section and must affirmatively establish that he or she has independent lawful means of support. Furthermore, s 15(3) only exempts those involved in brothels and thus the support workers of street workers (for example, those who record client car numbers or hold safe sex equipment) may still be prosecuted for living on the earnings.

The *Report of the Select Committee of the Legislative Assembly Upon Prostitution* (Parliament of NSW 1986) recommended that the ambit of live on the earnings be cut

down to restrict its application to circumstances of "violence or coercion or other forms of exploitation ... or to supply an illegal drug of addiction". This recommendation was not adopted; instead, a new offence was created in 1995 by the *Disorderly Houses Amendment Act 1995*:

> *15A (2) A person must not, by coercive conduct or undue influence, cause or induce another person to surrender any proceeds of an act of prostitution.*
>
> *Maximum penalty: 50 penalty units or imprisonment for 12 months, or both.*

The ambit of the live on the earnings offence has been considered by the courts in the past. As observed by the Law Reform Commission of Western Australia, the live on the earnings offence applies to a person who lives with a prostitute and is wholly or partly kept by her, but may also apply in other situations, such as the supply of goods and services:[12]

> *'Prostitutes, like everyone else, need food, clothing, accommodation and so on, and so the courts have attempted to distinguish between the supply of goods and services which in their nature can only relate to prostitution, in which circumstances the supplier would commit the offence;*[13] *and the supply of goods and services which are not exclusively referable to prostitution but which will be used to further it in some way, in which case the supplier will only commit the offence where the charge made for the goods or services is exorbitant because the woman is a prostitute*[14]*.'*

Australian case law supports this distinction and it has been held in NSW that the offence requires some continuous association and habitual receipt of money.[15]

Between 2000 and 2006 (inclusive), no charges were prosecuted in the courts for live on the earnings. Between 2000 and 2006 (inclusive), there were only three court appearances for the s 15A (2) offence of causing another to surrender the proceeds of prostitution: one appearance each year in 2000, 2001 and 2004.

Sole operators

Sole operators, commonly known as private workers in the industry, are ordinarily defined as one sex worker working from a private residence which may be their home or may be a residence which is not their home, but leased or owned for the purpose of providing sexual services. Because owning or managing a brothel is not an offence in NSW, it is not a criminal offence for a sole operator to offer sexual services from home.[16]

Escort workers

There are no criminal prohibitions against the conduct of an escort business or the work of escorts.

Inducing/procuring

Sections 91A–91B of the *Crimes Act* contain serious, but rarely used (Table 18, overleaf), prostitution-related offences of procuring. Section 91A makes it a crime punishable by up to seven years imprisonment "to procure, entice or lead away any person (not being a prostitute)", with or without that person's consent, for purposes of prostitution. Section 91B makes it a crime punishable by up to 10 years imprisonment where procurement for the purpose of prostitution is done "by means of any fraud, violence, threat, or abuse of authority, or by the use of any drug or intoxicating liquor". As noted by Gilmour-Walsh[17], these are older style procuring offences introduced into NSW law in 1924. A new procuring offence was introduced in 1995 by the *Disorderly Houses Amendment Act 1995*:

> *15A (1) A person must not, by coercive conduct or undue influence, cause or induce another person to commit an act of prostitution.*

The rationale underlying the offence is unclear given the existence of the *Crimes Act* offences and no prosecutions have been undertaken for this offence since enactment in 1995. These offences are rarely prosecuted and charges resulted in a guilty outcome in only three appearances.

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12 Law Reform Commission of Western Australia, Project No 85, *Police Act Offences*, Discussion Paper, May 1989, p 89.

13 Footnote supplied by the Law Reform Commission of Western Australia, ibid, p89: "Eg *Calvert v Mayes [1954] 1 QB 342* (the owner-driver of a taxi allowed his taxi to be used by American servicemen and prostitutes on short journeys during which sexual intercourse took place; the defendant was paid the proper fee, but without the presence of the prostitutes and the opportunities for sexual intercourse his income would have been very much reduced)."

14 Footnote supplied by the Law Reform Commission of Western Australia, ibid, p89: "Eg *R v Thomas [1957] 2 All ER 181*, in which a man let a prostitute have the use of a room for prostitution between 9.00pm and 2.00am each night. The court said that the offence of living on the earnings would be committed if the rent was grossly inflated. It has however been suggested that the accommodation was provided for prostitution and nothing else, and whether the rent was inflated or not should have been irrelevant: *Shaw v DPP [1962] AC 220*, 265 per Viscount Simonds."

15 In *Shaluga* (1958) 75 WN (NSW) 120, the appellant was described as "working and receiving substantial remuneration from honest and lucrative employment". On one occasion, he drove a man and two women to and from Holsworthy Military Camp, where the women engaged in prostitution. Shaluga was summarily convicted of living partly on the earnings of prostitution in relation to the fee he earned for driving. The Court of Appeal unanimously quashed the verdict, noting that there was only one isolated incident. The court held that there must be some continuous association and some habitual receipt of money from the earnings of prostitution.

16 It may be an offence under s 16 or 17 of the *Summary Offences Act*, if the sole operator's premises are held out as a massage parlour or photographic studio.

17 Gilmour-Walsh, B. N., *No Bad Sex Workers, Just Bad Laws? The Legal Regulation of Prostitution in Australia*, unpublished PhD thesis, ANU, 2003. The offences were introduced in s 8 of the *Crimes (Amendment) Act 1924*.

Table 18 Procuring charges finalised in NSW courts, 2000–2006

Offence	2000	2001	2002	2003	2004	2005	2006	Total
***Crimes Act* s 91A** **Procure for prostitution**	1	1	—	—	—	1	1	**4**
***Crimes Act Act* s 91B** **Procure for prostitution by fraud, violence, threat, etc.**	—	1	2	1	4	1	—	**9**

Advertising

Section 18 of the *Summary Offences Act 1988* prohibits advertisements for prostitution, with a maximum penalty of six penalty units or three months imprisonment:

> *15 A person shall not, in any manner:*
> *(a) publish or cause to be published an advertisement, or*
> *(b) erect or cause to be erected any sign,*
> *indicating that any premises are used or are available for use, or that a person is available, for the purposes of prostitution.*

However, this has not stopped many newspapers (especially suburban dailies) from running pages of advertisements in the "personal" columns which are obviously for the purpose of prostitution. The Select Committee of the Legislative Assembly (Parliament of NSW 1986) described a survey of the English language press in NSW in the week of 9–15 September 1984, and found 1424 listings for prostitution services. Sixty percent of the advertisements were for establishments (brothels, massage parlours and escort agencies), 31% for individuals, and the remainder for "small groups".

It is also an offence to advertise prostitution employment[18]:

> *18A (1) A person shall not, in any manner, publish or cause to be published an advertisement for a prostitute …*
> *(2) In this section, advertisement for a prostitute means an advertisement that indicates, or that can be reasonably taken to indicate, that:*
> *(a) employment for a prostitute is or may be available, or*
> *(b) a person is required for employment as a prostitute or to act as a prostitute, or*
> *(c) a person is required for employment in a position that involves, or may involve, acting as a prostitute.*

The maximum penalty is 10 penalty units or imprisonment for three months. Thus while s 18 refers to the advertisement of prostitute services, s 18A deals with advertising for the employment of a person to act as a prostitute. No prosecutions were undertaken for either offence between 2000 and 2006 (inclusive).

Child prostitution offences

In common with other Australian jurisdictions, a number of serious criminal offences pertaining to offering a child for prostitution are contained in the *Crimes Act 1900*. The *Crimes (Child Prostitution) Amendment Act 1988* inserted a number of new provisions into the *Crimes Act*. Section 91C defines an "act of child prostitution" very broadly, including "sexual intercourse" (as defined in s 61H), and also "any sexual service, whether or not involving an indecent act … that can reasonably be considered to be aimed at the sexual arousal or sexual gratification of a person".

Section 91D (1) creates offences of causing or inducing a child to participate in an act of child prostitution, or participating as a client in such an act. The penalty is a maximum of imprisonment for 10 years, or 14 years if the child is under 14 years of age.

Section 91E creates an offence, punishable by up to 10 years imprisonment, where any person "receives money or any other material benefit knowing that it is derived directly or indirectly from an act of child prostitution". It is a defence where the accused person satisfies the court that the money or material benefit was received by the person for the lawful provision of goods or services, or was paid or provided in accordance with a judgment or court order or legislative requirement: s 91E(2). Section 91F makes it an offence to be a "person who is capable of exercising lawful control over premises at which a child participates in an act of child prostitution". Section 91G creates offences relating to using, causing or procuring or, having care of a child, consenting to the using of a child for pornographic purposes. Use for pornographic purposes is defined as the child engaging in sexual activity or being placed in a sexual context or is subjected to torture, cruelty or physical abuse for the purpose of the production of pornography.

Sexual servitude and trafficking

Whilst the sexual servitude laws are not part of NSW prostitution laws, they are briefly described here to complete the overview. The *Criminal Code Amendment (Slavery and Sexual Servitude) Act 1999* inserted a number of prostitution offences into the Commonwealth *Criminal Code Act 1995*. Section 270.6(1) creates the offence

18 S 18A was inserted into the *Summary Offences Act* by the *Summary Offences (Prostitution) Amendment Act 1988*.

Table 19 Charges for the most common brothel and soliciting offences, 1972–2006

Year	Soliciting by worker s19(1) & (2)	Soliciting by client s19A(1) & (2)	Live on earnings	Own manage parlour	Use massage parlour	Advertise
1972	4,288	—	46	—	—	—
1974	3,301	—	17	—	—	—
1976	1,930	—	20	—	—	—
1978	1,804	—	13	—	—	—
1980	6	—	35	28	94	4
1982	—	—	39	17	66	—
1984	419	—	33	17	27	166
1986	180	—	11	7	11	—
1988	376	—	32	4	6	68
1990	654	—	1	3	12	2
1992	713	—	6	3	21	2
1994	314	—	14	11	42	2
1996	267	—	4	2	3	10
1998	259	—	—	—	1	—
2000	159	11	—	—	—	—
2002	274	85	—	—	1	—
2004	35	80	—	—	—	—
2006	50	3	—	—	—	—

of intentionally or recklessly causing another person to enter into or remain in sexual servitude, punishable by 15 years imprisonment. Section 270.6(2) creates the offence of conducting a business that involves sexual servitude, punishable by 15 years. Section 270.7 creates the offence of inducing another person into an engagement to provide sexual services by deception about the fact that sexual services are required. The penalty is increased to 19 years for these offences if the other person is under the age of 18 years. Sexual servitude is defined in s 270.4 as "the condition of a person who provides sexual services and who, because of the use of force or threats ... is not free to cease providing sexual services; or ... is not free to leave the place or area where the person provides sexual services". Under s 270.5, either the conduct constituting the offence (or part of it) and/or the sexual services must occur outside Australia.

Summary

Although there remains a poorly justified patchwork of criminal prohibitions against specific activities associated with the adult sex industry, most of the core activities are not prohibited by the criminal law. Street soliciting is legal except in, near or within view of the prescribed locations, brothel keeping is not a criminal offence and no offences apply to escort workers or sole operators *per se*. The court figures show a large decline in the policing of all forms of prostitution in NSW. Table 19 presentsthe number of charges prosecuted in the Local Court for the most frequently prosecuted prostitution offences in the periods before and after the 1979, 1983, 1988 and 1995 amendments.

Prosecutions for all the key prostitution offences have declined. Prosecutions for soliciting declined to zero following the repeal of the soliciting offence in 1979. They increased to 419, when the offence was partially re-criminalised by introduction of defined prohibited locations in 1983. There was a slight increase around the introduction of the *Summary Offences Act 1988* (which increased the ambit from "near" to "near or within view" of the prescribed locations) followed by a steady decline throughout the 1990s. The other offences are less frequently the subject of prosecution. No data are presented for the *Restricted Premises Act 1943* because charges may arise from premises declared disorderly for reasons other than prostitution.

The NSW prostitution prosecution figures generally provide a striking illustration of the decriminalisation of prostitution in NSW and show the declining involvement of police in all aspects of the industry. Notwithstanding the decriminalisation of the industry, there remain significant legal problems associated with the planning law framework under which brothels and sole operators work.

Local government planning responses

In 1995 the *Disorderly Houses Amendment Act 1995* introduced important changes which largely decriminalised the brothel-based sex industry. For some years prior to this reform a number of urban councils had expressed support for changes to the legislation to allow them to consider approving brothels in appropriate locations. At the Local Government Association (LGA) Annual Conference in 1994 delegates strongly supported a motion along these lines. (LGA Annual Conference Business Paper, 1994).

When the *Disorderly Houses Amendment Act 1995* was introduced in 1995 it provided councils with most of the conditions they had sought. Criminal offences applying to brothel keeping were repealed and planning control was left with councils in the first instance, with appeal to the Land and Environment Court (LEC). Councils were also provided with a specific legal procedure to apply to the Land and Environment Court for an order that a brothel be closed if there were amenity complaints under s 17 of the *Disorderly Houses Act 1943*. More than 16 years on, this legislative reform has not fully delivered the anticipated improvements in sex industry regulation.

Initially councils were slow to develop brothel policies, waiting for State Government guidelines on health, location and policing, and unwilling to face community hostility and sustained media campaigns opposed to zoning proposals ('Sex while you shop: council brothel plan', *Sydney Morning Herald*, 21/6/96). Some sought special exemptions in spite of the fact that the NSW Government had indicated that it would not support a 'blanket prohibition' of brothels in a local government area.

The slowness of councils in responding to the Act was matched by brothel owners' reluctance to submit applications. Without policies in place they could not be sure of the conditions they would have to meet. Many businesses also preferred to wait and see the outcomes of other applications and to assess the role to be played by the LEC ('Brothels ignore legitimacy Act', *Daily Telegraph* 6/5/96). People in the sex industry were aware that in the early years of legalisation in Victoria most applications for brothel development had been decided in the Court.

In 1999 newspapers reported the majority of surveyed legal brothels had received approval from the LEC after refusal by Council ('Court gives green light to red lights', *Sydney Morning Herald,* 25/6/99). In its next issue the paper criticised the Court for its approval of a brothel that backed on to a laneway adjacent to a church ('Church, school next door to sleaze', *Sydney Morning Herald,* 28/6/99).

Reflecting councils' unease about approving development applications for brothels, a 'Brothels Task Force' was convened by the President of the LGA in September 1997 and requested the Attorney-General to:

- Establish a Ministerial Advisory Council to assess council brothels policies – providing an opportunity to plead special circumstances.
- Consider the licensing of brothels at State level (a model similar to that used for hotels was suggested); and
- Allow LGA officers to investigate 'more realistic' evidentiary requirements for the closure of illegal brothels.

(Letter from Councillor Peter Woods, President of the LGA, to the Hon Jeff Shaw Attorney General and Minister for Industrial Relations, 12/11/98).

In response, the Premier's Office convened the 'Brothels Task Force' (2000), which in turn recommended the establishment of an advisory service for councils. The Sex Services Premises Planning Advisory Panel, chaired by Vic Smith, former Mayor of South Sydney Council, included representatives from the Departments of Planning, Health, State Chamber of Commerce, local government, sex worker organisations and a legal expert. The Panel produced a set of guidelines, *Sex Services Premises Planning Guidelines (SSPPG) 2004*, to assist councils in planning and policy relating to brothel developments (SSPPG 2006). These guidelines were comprehensive and well informed, but were not formally endorsed by the State Government in spite of the process being initiated by the Premier's Department. Consequently although widely distributed, and endorsed by other agencies (including through judgements in the LEC) the Guidelines' best practice models have been ignored by most councils in favour of an ad hoc approach to brothel planning which gives minimal guidance or assistance to applicants seeking a consistent and commercially equitable development application (DA) process.

Meanwhile the State Government has addressed another concern raised by councils, namely, the difficulties encountered in closing unapproved brothels. Difficulties in substantiating complaints against purported illegal brothels led some councils to employ private investigators to pose as brothel clients, for this purpose (*Sydney Morning Herald,* 24/6/99). Identified brothels usually had the option of submitting a DA, which meant they could continue trading while the DA was considered. Council decisions were frequently appealed to the LEC causing further delays and often an unsatisfactory outcome as far as council was concerned. The *Brothels Legislation Amendment Act 2007* has simplified and speeded up the process of closure of unauthorised brothels by permitting the council to apply to the Court on only one complaint and by providing for the Court to issue an order to cut off power and water to premises that have not ceased trading within one week of receiving a brothel closure order. The utilities orders do not apply to single operator 'private sex workers' although some Councils require a full DA. Anecdotally these provisions seem to have been very effective with the rapid closure – but possible re-location – of many small, unapproved brothels in recent times.

Many councils remain reluctant to draw up appropriate planning guidelines making provision for brothel applications within their area.

Survey of Sydney Councils

The LASH team identified 205 premises within a 20 kilometre radius of Sydney GPO that appeared to be operating as brothels. We contacted – by phone or by visiting – 123 premises and confirmed that 101 were operating as brothels between June 2007 and February 2008. During this period the LASH team also contacted by email the 27 inner-Sydney councils where these brothels were located and asked:

a) how many brothel applications have been approved by your Council or by the Court, since 1996?
b) how many brothel applications have been approved in the past year (1 July 2006–30 June 2007)?
c) do you permit single operator 'home occupation' brothels in your area?

The results are presented in Table 20, overleaf. Four councils did not respond after three emails. Of the 23 responses two councils (City of Sydney and Marrickville: 61 and 15 approvals respectively) accounted for two thirds (67%) of approvals since 1996. Sixteen of these (16/76 – 21%) were Court approved.

The remaining 21 councils hosted 37 approved brothels between them. Of these, two councils (one with five and one with two brothels) did not distinguish between court and council approvals. Eleven councils had not approved any brothels, but of these, six had court-approved brothels within their areas. Five councils had no approved brothels at all and one other (with three court approved brothels) stated it was opposed to any brothel DA. Apart from Marrickville and Sydney City, in 18 councils with approved brothels 50% (15/30) were only approved by the Court.

Only four councils permitted resident private sex workers to conduct 'home occupation' businesses, while Marrickville required a full DA process and Sydney and Canada Bay permitted them only in some localities.

Brothel approvals have been piecemeal and have tended to occur most readily in those suburbs with a long acknowledged history of having a significant sex industry. Through the council approval process brothel distribution has been largely contained within its historic boundaries but this has not taken account of the massive demographic shifts in Metropolitan Sydney (the demographic heartland is now west of Parramatta), and changing socio-economic profiles in the suburbs adjacent to Sydney City. It has, on the whole, been far easier for established brothels in areas adjacent to the old 'red light' suburbs to gain approval than it has for established or new premises meeting additional demand in growing outer suburbs.

Many Councils are still hesitant to deal with brothel applications because of (often justified) fear of hostile community and local media reaction. There are instances of Councillors voting down brothel DAs in spite of favourable reports from their own planning departments (for example: David Harbour, 'Brothel proposal defeated', *The Torch*, 16/4/2008). The lack of clear process through a sound planning policy for brothel approvals makes it more difficult for elected and community members to fairly assess the likely amenity and social effects of a brothel application. Applicants equally have problems when policies are not clearly enunciated and adhered to in council decisions. Many brothel owners/managers are not highly capitalised and are discouraged from making applications if they fear a protracted battle in the LEC will be the outcome even when they have met basic planning requirements.

On the whole NSW brothels are small or very small businesses. Our survey found that on average they employ about four sex workers on day shifts and up to six during evening shifts. Brothel sex workers each work on average about 24 hours per week and see approximately 15 clients in that time. There is a fairly rapid turnover of staff as the mean time for work in the brothel-based sex industry in NSW is 1.6 years.

Interestingly, 67% of the brothels we visited were located in commercial or mixed-use zones (the zones preferred by SSPG, and decriminalisation advocates) (Harcourt 1999). Nineteen per cent were in industrial zones and 13% were in residential areas. We did not try to establish the planning status of the brothels visited for LASH, but it is probable that most of those in residential areas did not have development approval from the local council.

Approximately 83 of the advertised premises we initially tried to contact in Sydney had closed down or moved to another address. It is evident from the low number (three) of approvals in 2006/7 and the fact that the majority of approvals in the City of Sydney date from before the Council amalgamations in 2004 (Table 20), that new or relocating businesses are finding it very difficult to gain approval under existing council policies. A full audit of currently operating brothels would probably reveal that many of the early approvals are no longer active and that recent demand is not being met by the current rate of new approvals. In Newcastle, of an estimated 40 brothels, only 13 appeared to have Council approval (Esler et al., 2008). We believe that councils would find it easier to deal with brothel DAs if the State Government formally adopted the SSPG on behalf of Local Government.

These Guidelines could be incorporated through the changes envisaged in the current government review of the *Environmental Planning and Assessment Act*. Among the stated aims of this review are:

- To consider if aspects of NSW planning policies and legislation need to be adjusted to ensure the right balance in achieving sustainable social and environmental outcomes and in promoting a competitive business environment.
- Zoned land is available for development to reduce barriers to entry.

Table 20 Brothel development approvals by local government area, 1996–2007

Council	No. approved since 1996	No. council approved[a]	No. court approved	Permits home occupation brothel	Comments
Ashfield	3	0	3	No	Opposed to any brothel DA
Auburn	2	1	1	Not clear	
Bankstown	1	1	0	No	
Botany Bay	0	0	0	Not clear	'Recognises' one brothel (established c.1970)
Burwood	2	0	2	No	
Canada Bay	1	1	0	Yes (Concord) No (Drummoyne)	
Canterbury	1	0	1	No	
Hunters Hill	0	0	0	No	
Hurstville					No response
Kogarah	2	0	2	No	
Ku-ring-gai	1	0	1	No	
Lane Cove	0	0	0	No	*Sydney Morning Herald* reports one closure 28/10/07
Leichhardt	3	3	0	No	Currently taking action against two illegal brothels
Manly	0	0	0	Yes, if complies with LEP 'home occupation'	
Marrickville	15	12	3	Yes + full DA	
Mosman	1	1	0	No	
North Sydney	3	1	2	No	
Parramatta					No response
Randwick	2	2	0	No	
Rockdale	5	Not stated	Not stated	No	Three zoned locations for brothels
Ryde	0	0	0	No	
Strathfield	1	0	1	No	
Sydney City	61	48	13	Yes, varies with LEP	New single LEP in process.
Warringah					No response
Waverley					No response
Willoughby	7	5	2	No	
Woollahra	2	Not sure	Not sure	No	Brothel DAs not separately recorded.
TOTALS	**113**[b]	**75**	**31**		

a not requiring Land and Environment Court ruling

b only three approved between July 2006–June 2007

DA = development application, LEP = local environment plan

Corruption by local government officials

Officials of two local governments in Sydney have been found guilty of corrupt behaviour when dealing with brothels, and rumours about others are common. The Independent Commission against Corruption (ICAC) has recommended better and more transparent compliance systems within councils, and for the State Government to examine the potential, and develop policies to counteract, opportunities for corruption in the Local Government regulation of brothels. ICAC also recommended that potential brothel owners be of good character, providing this is not based simplistically on a person's previous history with the law, but takes account of their demonstrated ability to provide and adhere to an appropriate brothel management plan (including health and OH&S measures) and to implement council compliance requirements.

Private sex workers

The situation for private sex workers is also unsatisfactory. None of the surveyed Councils have made adequate provision for this substantial, and possibly growing sector of the industry. Private sex workers are notoriously difficult to research but there is sufficient anecdotal evidence to show that very many female, and probably most male sex workers prefer to work in a private capacity. The reasons for this are many; including having more autonomy and control over work, avoiding the fees imposed in brothels, and possibly avoiding tax. It is evident from their very low profile in the research and policing statistics that private sex workers have no amenity impact on their communities. Private sex workers remain substantially under the radar for planners and politicians alike, but this is an unsatisfactory situation as they remain in a precarious legal position.

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Appendix 1: The LASH questionnaire

All information gathered in this questionnaire is confidential and shall be used only for the purposes of this study. No personal names or identifying information is required. Participation in the questionnaire is entirely voluntary and may be discontinued at any time.

Please mark circles and or write comments as indicated.

1. What is your country of birth? .....

   If you were born overseas, what year did you arrive in Australia? [ ]

2. How old are you? [ ] Years

3. Are you of Aboriginal or Torres Strait Islander descent? ❍ Yes ❍ No

4. What language do you speak at home? ❍ English ❍ Other

5. How would you rate your English language skills? ❍ Good ❍ Fair ❍ Poor

6. How many years of formal education have you had? [ ] Years [ ] Months

7. How long have you been in the sex industry (in total)? [ ] Years [ ] Months

   How long have you worked in the sex industry in Australia? [ ] Years [ ] Months

8. Do you currently work in: (mark all that apply)
   - ❍ Brothel
   - ❍ Escort
   - ❍ BDSM
   - ❍ Private
   - ❍ Massage
   - ❍ Other .....

9. How many sex workers usually work at your work place?

   [ ] Day shift [ ] Night shift

10. What other kinds of sex work have you ever engaged in: (mark all that apply)

    a) In Australia
    - ❍ Brothel
    - ❍ Private
    - ❍ Street
    - ❍ Other .....
    - ❍ escort
    - ❍ massage
    - ❍ BDSM

    b) Overseas?
    - ❍ Brothel
    - ❍ Private
    - ❍ Street
    - ❍ Other .....
    - ❍ escort
    - ❍ massage
    - ❍ BDSM

11. Why did you choose to work at your place of work rather than another location or kind of sex work? (mark all that apply)
    - ❍ I like my work mates
    - ❍ It pays better
    - ❍ I live near here
    - ❍ It is safer (better security)
    - ❍ To avoid hassles with the police
    - ❍ Not as many rules (as the parlours)
    - ❍ I can get drugs here
    - ❍ I like the management
    - ❍ it's more discreet
    - ❍ the hours are flexible
    - ❍ the clients are better here
    - ❍ it was all that was available/ or that I know of
    - ❍ better services (i.e. clothes hire, food provided)
    - ❍ I go where I am told
    - ❍ Sex worker support/ outreach/service providers come here
    - ❍ Other (specify) .....

12. How many hours in an average week do you work? [ ]

13. Do you have regular sexual health checks? ❍ Yes ❍ No

If 'yes' how often?

a) ❍ Weekly ❍ Monthly ❍ Every 2–6 months ❍ Every 7–12 months ❍ Less than once per year
❍ Other .....

b) How long since your last check up?
❍ Less than 30 days ❍ 1–3 months ❍ More than 3 months

c) Where do you usually go for sexual health checks? (mark all that apply)
❍ Local GP/ doctor ❍ GP/doctor in another town/suburb
❍ Private sexual health clinic ❍ Public (free) sexual health centre
❍ Women's health/ family planning clinic
❍ Other? .....

d) Why do you go to this particular health service? (mark all that apply)
❍ Expertise ❍ Cost
❍ Confidentiality ❍ Friendly
❍ Recommended ❍ Required by my employer
❍ Only place I know ❍ Easy to get to
❍ Other (details) .....

e) In the last 12 months have you attended:
❍ Sydney Sexual Health service ❍ Melbourne Sexual Health Centre
❍ Royal Perth Hospital Sexual Health Clinic ❍ None of these

14. Have you ever been diagnosed (by a doctor or nurse) with any of the following conditions: (Mark all that apply)

	No	Yes	In last 12 months
Gonorrhoea	❍	❍	❍
Syphilis	❍	❍	❍
Chlamydia	❍	❍	❍
pelvic infection (PID)	❍	❍	❍
genital herpes	❍	❍	❍
genital warts	❍	❍	❍
Hepatitis B	❍	❍	❍
Hepatitis C	❍	❍	❍
HIV	❍	❍	❍

15. Have you ever been vaccinated against Hepatitis B? ❍ Yes ❍ No ❍ Unsure

16. Have you ever been tested for HIV ❍ Yes ❍ No ❍ Unsure

If yes, when were you last tested for HIV? _____ / _____
Month Year

17. What do you currently use for contraception? (mark all that apply)
❍ Condoms ❍ Injection or implant
❍ The pill ❍ IUD/Coil

❍ Another method (please specify): .....

❍ I don't use any contraception because: .....

18. In the last 3 months how often would you use condoms with male partners outside of work?
❍ Never ❍ Sometimes (less than half the time)
❍ Always ❍ Usually (more than half the time)
❍ No male partners outside work in the last 3 months

19. In the last 3 months how many sexual partners have you had outside of work?

☐ Men ☐ Women ☐ Transgender

20. How many clients do you see in an average week? ☐ Clients

21. In an average week how many of your clients ask for services without condoms?

☐ Men ask for vaginal sex without condoms

☐ Men ask for anal sex without condoms

☐ Men ask for oral sex without condoms

22. In an average week how many of your clients used condoms for:

	All men	*or*	number of men	*or*	I don't have the following
Vaginal sex?	❍		☐		❍ No vaginal sex with clients
Anal sex?	❍		☐		❍ No anal sex with clients
Oral sex?	❍		☐		❍ No oral sex with clients

23. Do you use any of the following? (mark all that apply)

Cigarettes (everyday)	❍ No	❍ in last 12 months	❍ currently (most of the time)
Marijuana	❍ No	❍ in last 12 months	❍ currently (most of the time)
Ecstasy/designer drugs	❍ No	❍ in last 12 months	❍ currently (most of the time)
Speed/ ice/crystal/amphetamines	❍ No	❍ in last 12 months	❍ currently (most of the time)
Heroin	❍ No	❍ in last 12 months	❍ currently (most of the time)
Codeine	❍ No	❍ in last 12 months	❍ currently (most of the time)
Methadone	❍ No	❍ in last 12 months	❍ currently (most of the time)
Bupenorphine (bupe)	❍ No	❍ in last 12 months	❍ currently (most of the time)

Other (specify) .....

24. When was the last time you drank more than four alcoholic drinks in a day?

❍ Never ❍ Today ❍ Yesterday ❍ Last 7 days
❍ 2–4 weeks ❍ 2–3 months ❍ More than 3 months

25. Have you injected a drug in the past 12 months? ❍ No ❍ Yes

26. Are condoms provided at your work? ❍ No ❍ Yes, I pay for them ❍ Yes, they are free

27. Which of the following are provided at your current workplace? (mark all that apply)

❍ Needles disposal bin (sharps container) ❍ Smokers' room ❍ Room alarm ❍ Security guard
❍ Security camera ❍ Receptionist ❍ Dams ❍ Lube ❍ None of these

28. Where did you learn about safer sex and sex work skills? (Mark all that apply)

❍ nowhere ❍ I learnt on the job from other workers ❍ I learnt from my local GP/doctor
❍ I learnt for sexual health centre ❍ I leant from internet ❍ I learnt from clients
❍ I learnt from friends away from work ❍ I learnt from educators that comes to my work (face-to-face)
❍ I learnt from educational booklets left by visiting
❍ Other: .....

29. How often do educators or outreach workers come to your worksite?

❍ Never ❍ less than once a year ❍ 1 to 4 times a year ❍ 5 or more times a year
❍ Other .....

30. Is it legal to do sex work in this state? ❍ Yes ❍ No ❍ Unsure

Any special conditions? .....

31. Have you ever moved state (or country) because of laws about sex sex work?

❍ No ❍ Yes (what state or country did you leave?) .....

32. Have you ever changed your workplace within this state because of the laws?

❍ No ❍ Yes (please give reasons) .....

33. Do the police visit your current workplace? (do not include visits as paying clients)
❍ Never ❍ Unsure ❍ Less than once per year ❍ 1 to 4 times a year ❍ 5 or more times per year
❍ Other .....

34. In the last year have the police ever arrested/detained anyone in your workplace? ❍ Yes ❍ No ❍ Unsure

35. In the last year have the police charged anyone in your workplace with an offence? ❍ Yes ❍ No ❍ Unsure
If 'yes', can you say what the charges were?
.....

If 'yes', someone was charged:
.....

a) Did the premises close down after the charges were laid? ❍ Yes ❍ No ❍ Unsure
b) Did the premises open up elsewhere? ❍ Yes ❍ No ❍ Unsure

36. In the last year have you had any experiences with police whilst working in the sex industry?
a) ❍ Yes ❍ No ❍ Unsure
b) If 'yes' please mark the circles that apply.

	Yes	No
On the whole police are supportive and helpful	❍	❍
I have been threatened with arrest	❍	❍
I have been threatened with violence	❍	❍
I have been physically assaulted	❍	❍
I have had money demanded from me	❍	❍
I been pressured into providing sexual services	❍	❍

Comments:
.....

37. In the past year while at work have any client/s ever?
Threatened you ❍ No ❍ Once or twice ❍ More than twice
Assaulted you ❍ No ❍ Once or twice ❍ More than twice
Pressured you to do something you didn't want to? ❍ No ❍ Once or twice ❍ More than twice
Comments:
.....

38. As a sex worker how comfortable are you about going to the police with complaints such as sexual assault, threats, theft, unpaid services etc?
❍ Very comfortable ❍ Comfortable ❍ Somewhat comfortable ❍ Not comfortable ❍ Very uncomfortable
Comments:
.....

39. Have any of the officials listed visited your workplace? ❍ Yes ❍ No ❍ don't know
If 'yes' please mark all that apply
❍ Immigration (DIMA) ❍ Local council ❍ Tax office ❍ Workcover ❍ Centrelink ❍ Contact tracer/s
Any comments:
.....

40. Do you share your income with anyone? ❍ Yes ❍ No
If 'yes' (please mark all that apply),
❍ Partner ❍ Flatmate ❍ Dependant child[ren] ❍ Parent[s] ❍ Dependants
❍ Other (please describe)
.....

How many altogether? ☐ Adults ☐ Children

41. Is there someone who you have a supportive relationship with? (eg would look after you if you were sick at home)
❍ Yes ❍ No ❍ Unsure
If 'yes' (please mark all that apply),
❍ Partner ❍ Another sex worker ❍ Flatmate ❍ Friend ❍ Parent ❍ Several people
❍ A group (religious/ community/self help) ❍ Pet
❍ Other:
.....

SOCIAL WELLBEING TEST

This is a standard test applied in an Australian national population study. For each question please tick the answer that best fits your circumstances.

In the past four weeks, about how often did you feel:

		All of the time	most of the time	some of the time	little of the time	none of the time
42.	Nervous?	❍	❍	❍	❍	❍
43.	So sad that nothing could cheer you up?	❍	❍	❍	❍	❍
44.	Restless or fidgety?	❍	❍	❍	❍	❍
45.	Hopeless?	❍	❍	❍	❍	❍
46.	That everything was an effort?	❍	❍	❍	❍	❍
47.	Worthless?	❍	❍	❍	❍	❍

Is the anything you would like to add about the impact of the law on your work conditions, health and wellbeing?

❍ No ❍ Yes (Please specify) .....

Thank you for participating in this study.