

# Demographic characteristics and STI diagnoses in female sex workers attending sexual health clinics in Liverpool and Campbelltown 2007–2012

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## BACKGROUND

The sex industry in Sydney is changing, with the proportion of Australian born female sex workers (FSWs) steadily declining over the last two decades, and largely being replaced by women from Thailand in the 1990s and now Korea and China. FSWS in Australia generally have very low rates of STIs largely due to broad based consistent use of condoms across the industry.

We aimed to describe the population of FSWS accessing sexual health clinics in Liverpool and Campbelltown between 2007-2012 to determine demographic changes and STI diagnoses.

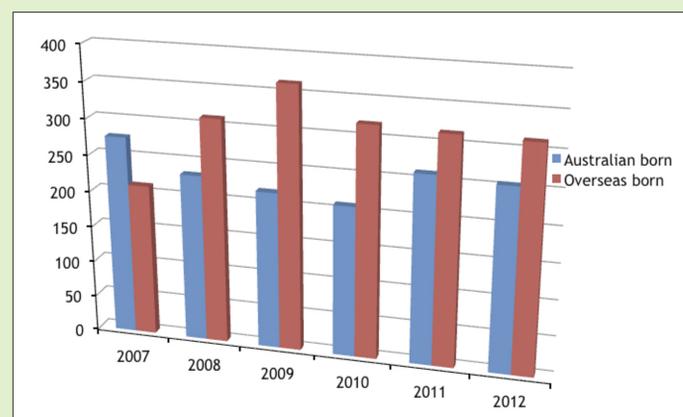
## METHODS

- Data were extracted from the clinic database, manually cleaned and analysed using SPSS.
- Univariate analyses compared Australian born to overseas born FSWS.
- STI positivity rate was calculated by diagnoses per number of clinic visits for screening or anogenital symptoms as a proxy for number of STI tests conducted.

## RESULTS: DEMOGRAPHICS

- 703 FSWS attended 3284 clinic consultations between 2007 and 2012, representing 19% of female clients and 24% of female clinic consultations.
- 317 (45%) Australian born, 386 (55%) from 46 different overseas countries.
- Overall regions of birth did not change over time
- More FSW born in Thailand in 2007 compared to 2012 ( $p < 0.05$ )
- More FSW born in China in 2012 compared to 2007 ( $p < 0.05$ )
- Median 9 consultations per client (range 1-59).

Figure 1: Consultations by Australian born vs overseas born FSWS



## Acknowledgments

Karen Keating, Kushum Lata, Lidya McGowan, Sumi Nair, Christopher Carmody and Sandhya Goundar.

Figure 2: Country of birth of FSWS 2007-2012

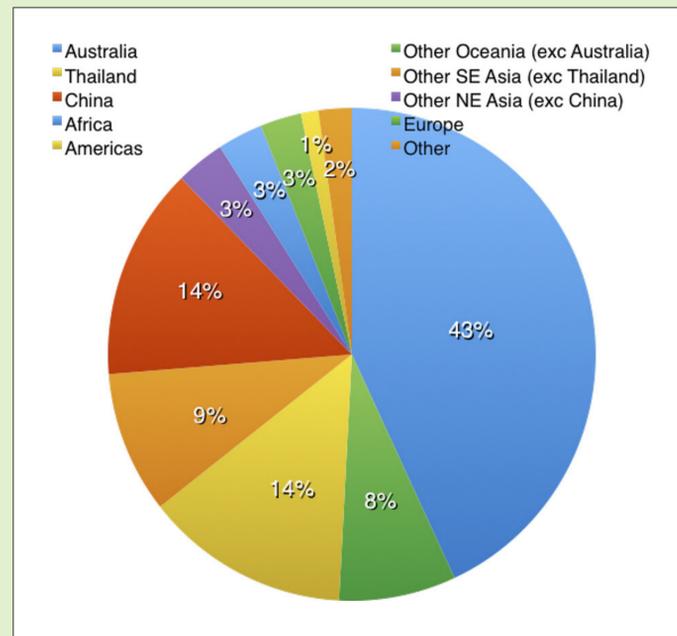


Table 1: Demographic characteristics of 703 FSWS attending clinics 2007-2012

	Australian born	Overseas born	Test of significance
Mean age (range) overall	32 (16-65)	36 (16-67)	$t = -4.7, p < 0.01$
Recent sex work (last 12 months) at first visit	225 (75%)	305 (82%)	$\chi^2 = 6, p = 0.04$
<b>Injecting drug use</b>			
Ever	54 (17%)	10 (3%)	$\chi^2 = 46, p < 0.05$
Last 12 months	26 (8%)	4 (1%)	$\chi^2 = 22, p < 0.05$
<b>Gender of sexual partners in private life</b>			
Male partners only	256 (81%)	351 (91%)	$\chi^2 = 24, p < 0.05$
Female partners only	0	1	
Both male and female partners	48 (15%)	17 (4%)	
Median SEIFA IRSD <sup>1</sup> of postcode of residence	2	1	
Number of women living in postcode with SEIFA IRSD <sup>1</sup> 1/10 or 2/10	109 (50%)	256 (66%)	$\chi^2 = 57, p < 0.05$

1. The SEIFA Index of Relative Socioeconomic Disadvantage (IRSD) is a composite measure of disadvantage by locality based on 2011 census data where 1 is the most disadvantaged locality and 10 is the least disadvantaged locality.

## RESULTS: STI DIAGNOSES

- Most common STI: genital warts
- Genital chlamydia: 84 diagnoses
  - 3 time separated diagnoses in 2 women
  - 2 separate diagnoses in 16 women
  - Single diagnosis among remainder
- Gonorrhoea: 33 diagnoses
  - 23 genital
  - 10 pharyngeal
- Pelvic inflammatory disease
  - 26 diagnoses in 22 women
- HIV
  - No new diagnoses
  - 4 women previously diagnosed – none currently working in sex industry
- Syphilis
  - No primary or secondary
  - 3 early latent
  - 10 late latent
  - 2 past treated
- It was not possible to determine if the STIs diagnosed were transmitted at work or from private sex, but condom use at work was high.

Table 2: Consultations for STIs and other genital infections and positivity rate

	Australian born women		Overseas born women	
	Number of consultations (% of consultations)	Positivity rate (diagnoses/estimated tests)	Number of consultations (% of consultations)	Positivity rate (diagnoses/estimated tests)
Chlamydia <sup>1</sup>	32 (2%)	0.03	52 (3%)	0.04
Gonorrhoea <sup>1</sup>	17 (1%)	0.02	16 (1%)	0.01
Genital warts	75 (5%)	0.07	36 (2%)	0.03
Hepatitis B <sup>2</sup>	1 (<1%)	0.001	14 (1%)	0.01
Infectious syphilis	3 (<1%)	0.003	0	
HIV <sup>3</sup>	0		10 (<1%)	0.008
Genital herpes	18 (1%)	0.02	29 (1%)	0.02
Molluscum	26 (2%)	0.03	25 (1%)	0.02
Bacterial vaginosis	40 (3%)	0.04	27 (1%)	0.02
Candidiasis	20 (1%)	0.02	22 (1%)	0.02

1. Diagnoses of chlamydia and gonorrhoea were each unique but women may have been seen multiple times for the same or recurrent episodes of genital warts, genital herpes, molluscum, bacterial vaginosis or candidiasis.  
2. Diagnoses of hepatitis B are much lower than expected for this population and likely to be due to incomplete data entry.  
3. Only 4 women were diagnosed with HIV.

## CONCLUSIONS

- Female sex workers attending sexual health clinics in Liverpool and Campbelltown have a low positivity rate of STIs.
- Women born overseas vs Australian born women
  - Slightly older
  - More likely to live in very disadvantaged area
  - Less likely to have ever used intravenous drugs
- Given that the majority of brothels in SWS employ Asian born women, we need to increase our reach to this population.
- Provision of excess services to FSW at low risk potentially compromises screening and intervention for groups at higher risk of STIs where there is likely to be greater public health benefit.