



Curtin University

*Women in contact with the
Perth gay and lesbian community:
Report of the Women's Western Australian Sexual Health
(WWASH) Survey 2010*



*Women in contact with the Perth
gay and lesbian community:*

*Report of the Women's Western
Australian Sexual Health (WWASH)
Survey 2010*

Julie Mooney-Somers
Rachel M. Deacon
Jude Comfort



© WA Centre for Health Promotion Research at Curtin University, 2012

WA Centre for Health Promotion Research at Curtin University
Faculty of Health Sciences
Curtin University
PO Box U 1987
Bentley
Western Australia 6845

Telephone: 61 8 9266 7819
Email: j.comfort@curtin.edu.au
Website: <http://wachpr.curtin.edu.au>

For copies of this report please contact Jude Comfort, WA Centre for Health Promotion Research at Curtin University.

This report is based on the Women's Western Australian Sexual Health (WWASH) Survey run in 2010 with comparison data provided by the 2010 Sydney Women and Sexual Health (SWASH) survey. The WWASH questionnaire was based on the SWASH survey developed and run by ACON (formerly the AIDS Council of NSW) with Juliet Richters (School of Public Health and Community Medicine, University of New South Wales), until 2009, and then with Julie Mooney-Somers (Centre for Values, Ethics and the Law in Medicine, University of Sydney) and Rachel Deacon (Discipline of Addiction Medicine, University of Sydney). WWASH 2010 was run by Jude Comfort at the Western Australia Centre for Health Promotion Research at Curtin University. Analysis and the draft report were produced by Julie Mooney-Somers and Rachel Deacon.

Please address queries about the research to:

Jude Comfort
WACHPR
Curtin University
PO Box U 1987
Bentley
Western Australia 6845
j.comfort@curtin.edu.au
+ 61 8 9266 2365

Acknowledgments

In 2010 the Women's Western Australian Sexual Health (WWASH) survey was conducted by the WA Centre for Health Promotion Research at Curtin University. The survey was funded by the WA Department of Health. We thank all the women who completed the questionnaire.

Contents

Executive Summary	1
1. Introduction	5
2. Methods	6
2.1. Recruitment	6
3. Results	7
3.1. Sample Characteristics	7
3.1.1. Age	7
3.1.2. Sexual identity and attraction	8
3.1.3. Transgender respondents	10
3.1.4. Children	10
3.1.5. Social attachment to the gay and lesbian community	12
3.1.6. Education, employment and income	13
3.1.7. Ethnicity.....	15
3.1.8. Geographical location	16
3.2. Sexual partners and practices	16
3.2.1. Sex with women.....	16
3.2.2. Sex with men	17
3.2.3. Sexual practices	18
3.2.4. Sexual relationships	20
3.2.5. Sex work	22
3.3. Tobacco, alcohol and other drug use.....	22
3.3.1. Tobacco use	22
3.3.2. Alcohol use	24
3.3.3. Illicit drug use.....	25
3.4. Health behaviour and knowledge.....	26
3.4.1. Relationships with doctors	26
3.4.2. Self-reported general health	27
3.4.3. Self-reported mental health.....	29
3.4.4. Screening tests.....	31
3.4.5. Knowledge of STIs	33
3.5. Experiences of violence and abuse	34
3.5.1. Sexual coercion.....	34
3.5.2. Domestic Violence	35
3.5.3. Anti-gay and anti-lesbian behaviour.....	35
4. Discussion and conclusions	36
4.1. Tobacco use	36
4.2. Alcohol use	36
4.3. Illicit drug use.....	37
4.4. Sexual health	38
4.5. Prevention-related screening	38
4.6. Health indicators.....	39
4.7. Mental Health	40
4.8. Experiences of abuse and violence	41
4.9. Engaging with LBQ women around health.....	41
4.10. WWASH limitations	42
4.11. Conclusion.....	43
Appendix 1: Survey	46

Executive Summary

A lack of systematic research on the health and wellbeing of Australian lesbian, bisexual and queer (LBQ) women has been a significant barrier to understanding, recognising and addressing their health needs. While research on same-sex attracted women's health and wellbeing has increased, the inclusion of sexuality questions in large epidemiological surveys remains patchy (or data is reported only by sexuality and not by sexuality and gender).

First conducted in Sydney in 1996 and run every two years since, the Sydney Women and Sexual Health (SWASH) is the longest running and only regular survey of LBQ women's health and wellbeing in Australia (and probably the world). SWASH provides a unique and important source of health-related information in Australian LBQ women. In October 2010, the Women's Western Australian Sexual Health (WWASH) survey was run in parallel with SWASH. This report presents results from surveys collected at Perth Pride Fair Day 2010 and other community events and venues during the Perth Pride month, and comparison findings from the SWASH survey run during the Sydney Mardi Gras season 2010.

2010 Key Findings:

Demographics: Ages ranged from 16 to 75 (median age 26 years) and 50% had post-school education. 59% were employed full-time and 22% were students. 15% had dependent children and 16% were planning children in the coming two years. 91% lived in metropolitan Perth.

Sexual identity: 67% thought of themselves as lesbian/dyke/homosexual/gay, 21% as bisexual, and 4% as queer; 7% chose the 'other' category. Most women (63%) had a regular female partner.

Community engagement: 47% felt very or mostly connected to the lesbian, gay, bisexual, trans and queer (LGBTQ) community in their everyday life.

Sexual relations with women: 92% had ever had sex with a woman; 71% had done so in the preceding six months. Most women who had had sex in the preceding six months with a woman (73%) had one sexual partner.

Sexual relations with men: 60% had ever had sex with a man; 18% had done so in the preceding six months. 19% had ever had sex with a man they knew to be gay or bisexual; 48 women had done so in the preceding six months, 10 of whom often had unprotected sex.

Sex work: 5% had ever done sex work.

Pap smears: 27% had never had a Pap smear screen, and a further 8% had their last screening more than three years ago.

HIV/STI/Hepatitis C screening: Less than a third (30%) had been tested for HIV; one woman was HIV-positive. 36% reported ever having had a test for hepatitis C; of those tested, 3% were positive.

STI knowledge: 17% were unaware that a person with a cold sore could give a partner genital herpes through oral sex, and 5% were unaware that you can have an STI but not have any symptoms.

Tobacco: 33% were tobacco smokers, a substantially higher proportion than women in the general community; smoking was most common in 16-24 year olds (43%).

Alcohol: 86% reported drinking alcohol; 55% consumed more than the NHMRC guidelines recommend to reduce the lifetime risk of alcohol related disease or injury, while 28% drank at levels likely to put them at risk of alcohol-related injury on a single drinking occasion. Risky drinking was higher than in the general community.

Illicit drugs: In the preceding six months, 49% had used one or more illicit drugs including cannabis (36%), ecstasy (18%) and speed (16%). Rates of drug use were much higher than in the general community.

Self-reported health status: While most rated their physical health as good/very good/excellent, 12% said their health was poor or fair.

Weight: 47% had a Body Mass Index (BMI) in the healthy range; nearly as many (38%) were overweight or obese, while 12% were underweight.

Psychological health: 10% reported high psychological distress (17% of 16-24 year olds); 50% had accessed psychological services in the preceding 5 years and 35% had received a mental health diagnosis.

Experiences of abuse and violence: 24% had ever experienced sexual coercion by a man, and 8% had ever experienced sexual coercion by a woman; 21% had ever experienced domestic violence with a female partner and 47% of these women had sought help; 35% of women had experienced some kind of anti-LGBTQ behaviour in the preceding year.

Recommendations:

Tobacco use

- The rate of smoking among LBQ women is twice the rate of women in the general population; this demands urgent public health attention.
- Detailed exploration is required to understand why progressively successful anti-smoking campaigns and programs are not proving successful within this group of women. Targeted interventions to prevent young LBQ taking up smoking may be needed.
- Examination of the role and efficacy of smoking cessation programs for LBQ women is necessary.

Alcohol use

- LBQ women are at a higher risk of lifetime risk of alcohol related disease or injury than women in the general community, and are more often drinking at levels that put them at risk of alcohol-related injury on a single drinking occasion.
- Further research is needed to understand the social and cultural context of alcohol use among LBQ women; this knowledge can inform targeted interventions.
- Levels of risky drinking among younger LBQ women demonstrate an urgent need for early interventions. Messages about responsible drinking should be integrated into existing programs delivered by LGBTQ community organisations, while LGBTQ community organisations need to consider the role of alcohol sponsorship of community events.

- There is an urgent need for research on alcohol-related harms and the utilisation of treatment programs among this group.

Illicit drug use

- LBQ women are using illicit drugs at rates several times higher than women in the general community, demonstrating an urgent need for interventions targeted to LBQ women.
- Without a sophisticated understanding of the drivers of illicit drug use in LBQ women, and the conditions under which these practices become problematic, interventions are unlikely to succeed.
- Research is needed to understand LBQ women's utilisation of and satisfaction with drug treatment programs, as well as treatment outcomes.

Sexual Health

- Those designing STI prevention programs need to be aware that a significant proportion of women who do not identify as heterosexual are having sex with men and consider the reach of their programs; LBQ women may not respond to health promotion campaigns directed at assumed heterosexual audiences.
- STI prevention programs need to address skill development among LBQ women to support successful negotiation of safe and satisfying sexual relationships with all sexual partners.

Prevention-related screening

- Efforts to raise awareness of cervical cancer and the need for ALL women to have Pap screening regularly must continue. The message that a history of sex with men is not a prerequisite for a Pap screen is particularly important.
- STI testing campaigns and resources targeting LBQ women about their sexual health, risks and the need for testing are required.
- The need continues for the development of education and capacity building strategies targeting primary healthcare providers that focus on building their understanding of the screenings needs of LBQ women. This must also include information on creating culturally sensitive environments that encourage open dialogue around sexual health and behaviour, including same-sex attracted women's sexual activities with men.

Health indicators

- Public health programs on weight, exercise and diet need to target and be accessible to LBQ women, and sensitively engage with LGBTQ communities around the health impacts of these issues.

Mental Health

- There is a clear need to assist young women who are disproportionately represented in the high rates of drinking, smoking, illicit drug use and mental health distress within this sample. Programs aimed at improving the social and emotional wellbeing of this group, including strategies around 'coming out' and self-acceptance, may well prove important to an eventual decline in rates of behaviours that present a health risk.
- Further investigation is required to understand the utilisation of mental health services in this group of women: Who is providing these services? Are women

receiving the services they desire? What are the outcomes of treatment for LBQ women?

Experiences of abuse and violence

- Increased capacity is required in the provision of support services around domestic violence (DV) to respond to LBQ women and to understand their crisis and longer term needs. This includes support to report to law enforcement agencies.
- Campaigns that raise awareness of domestic violence in lesbian relationships are still needed.
- Further research is required to better understand the dynamics of lesbian relationships and the contexts of DV in order to inform culturally appropriate and sensitive responses.

Engaging with LBQ women around health

- We need to know more about the patterns of engagement among LBQ women and with the wider LGBTQ communities. In particular, how is community connection generated and how important is it for health and wellbeing?
- As 'E-health' gains more prominence, it is important to know more about how LBQ women access information online, particularly in regions that do have the population to sustain dedicated physical spaces for LBQ women. This information will improve the future effectiveness of health promotion, prevention messages or early interventions to this group.

Conclusion:

WWASH highlights several areas of physical and mental health concern for LBQ women engaged with the LGBTQ community in Perth. The lack of health promotion, prevention and intervention programs that specifically address these health issues for LBQ women is disappointing. The consistent messages from national and community-based research is that the health outcome gains being made in the general population are not being replicated for this group of Australian women; it is time for action.

1. Introduction

A lack of systematic research on the health and wellbeing of Australian lesbian, bisexual and queer (LBQ) women has been a significant barrier to understanding, recognising and addressing their health needs. At worst, LBQ women's health needs have been largely ignored. At best, they have been considered to be synonymous with women's health.⁽¹⁾ While sex between women is rarely a health risk in itself, a range of social, psychological and economic factors mean that this minority group has worse health outcomes than their heterosexual peers. Stigma, family and community rejection and discrimination can impact on health and wellbeing, the delivery of health services, and women's access to services. The inclusion of lesbian and bisexual women in the 2010 National Women's Health Policy⁽²⁾ was a timely recognition of persuasive international and local evidence that some health problems may be more prevalent, risk factors may be different, and interventions may need to be tailored to the needs of this group.

First conducted in Sydney in 1996 and run every two years since, the Sydney Women and Sexual Health (SWASH) is the longest running and only regular survey of LBQ women's health and wellbeing in Australia (and probably the world). SWASH was initiated by workers from two ACON (formerly the AIDS Council of NSW) projects, Women Partners of Gay and Bisexual Men and the Gay and Lesbian Injecting Drug Use Project, who were faced with a lack of empirical evidence on which to base their intervention work. The survey covers sexual health (sexual practices, STI testing and diagnosis, Pap smears); tobacco, alcohol and illicit drug use; experiences of domestic violence, sexual coercion, and anti-LGBTQ behaviour; and self-report measures of physical and mental health. With a focus on LBQ women's health, the long-running project SWASH provides a much needed local evidence base to inform best practice in healthcare and prevention for chronic diseases, mental health and wellbeing, sexual and reproductive health and ageing.

In October 2010, the Women's Western Australian Sexual Health (WWASH) survey was run in parallel with SWASH, which was conducted in February of the same year.⁽³⁾ The same survey questions were used for both cohorts. This allows us to provide a comprehensive picture of the health and wellbeing of women engaged with the lesbian, gay, bisexual, transgender and queer (LGBTQ) communities in Perth, and a comparison with a similar sample of community-engaged women in Sydney.

2. Methods

In October 2010, a two-page self-complete questionnaire was distributed to women attending the Perth Pride Fair Day and several other community events, venues and groups during Pride month. In February of the same year, the same survey was distributed to women at Sydney Mardi Gras Fair Day and other community events and venues during the Mardi Gras season.⁽³⁾ The questionnaire included items on demographics; sexual and gender identity; community connection; tobacco, alcohol and drug use; sexual health; height and weight; psychological wellbeing; experiences of anti-gay, sexual and domestic violence; parenthood intentions; preventive health behaviour; healthcare access; and knowledge questions on reproductive health. See Appendix 1.0 for a copy of the 2010 survey.

Results were entered from the coded questionnaires and loaded into Stata IC 11.0 software for analysis. The data were cleaned and checked for internal consistency and, where inconsistencies were found, checked against the questionnaires. All additional comments and answers to open-ended questions were transferred from the questionnaires. The analysis presented here is primarily descriptive, with cross-tabs and *t*-tests to confirm significant differences between subgroups; *p* values were calculated using Pearson's chi-square statistic or Fisher's exact test where appropriate (i.e. where the 'expected' number was very small).

The non-answer rate for some questions was high, especially those requiring writing a word or phrase rather than simply ticking a box. We assume that many respondents simply left a question blank when it did not apply to them, rather than ticking the 'no' response. For this reason, percentages have generally been calculated in this report on the total sample, not on the question-specific response rate, which would have inflated the 'yes' percentages. Readers can take the 'yes' percentages given as lower-bound estimates and judge for themselves whether to interpret the missing people as likely to be similar to the respondents or likely to mean 'no' or 'not applicable'. Exceptions to this are tables reporting summaries of questions where women could select more than one item, and tables reporting sub-samples.

2.1. Recruitment

The primary recruitment site was the Perth Pride Fair Day. Additional recruitment took place at other lesbian, gay, bisexual trans and queer (LGBTQ) venues, social events during the course of Perth's Lesbian and Gay Pride month. Questionnaires were offered to everyone identifying as a woman who was willing to respond. Because of practical difficulties, refusal rates were not calculated. Fair Day is an open-air function, so women who wish to avoid questionnaires can take a route to avoid recruiters carrying clipboards or directing respondents to the booths; women can also easily accept a survey form and disappear with it. Few women explicitly refused a verbal offer to participate.

3. Results

It is impossible to calculate a response rate for WWASH. Very few women declined the invitation to participate but it was easy for women in recruitment sites to avoid the survey recruiters. Reflecting the decision taken for earlier SWASH reports,⁽⁴⁾ responses of women who identified as heterosexual have not been included in this report. While women who identify as straight may still have sex with women, many of them did so rarely (of the 120 heterosexual women who responded in WA, 33 had ever had sex with a woman, only 6 in the last 6 months). Thus, this report focuses on LBQ women. SWASH data is included for comparison.⁽³⁾ Table 1 summarises the valid responses by recruitment venue.

Table 1: Recruitment venues

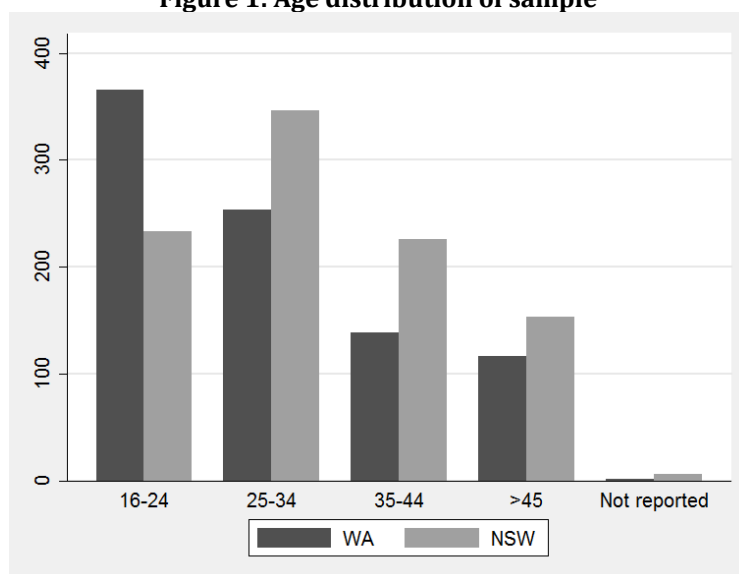
	WWASH 2010 n (%)	SWASH 2010 n (%)
Fair Day	763 (86.9)	689 (71.5)
Social venues/events	115 (13.1)	216 (22.4)
Groups	-	59 (6.1)
Total	878 (100)	964 (100)

3.1. Sample Characteristics

3.1.1. Age

The age range was 16 to 75 years. With a mean age of 26 years, this is a significantly younger sample than that collected in Sydney (mean age 30 years; $p < 0.001$). Figure 1 compares the proportion of respondents in 10-year age categories over the two cohorts, and demonstrates the greater proportion of younger women in the Perth cohort compared to Sydney.

Figure 1: Age distribution of sample



3.1.2. Sexual identity and attraction

We asked women if they identified as ‘Lesbian/dyke/homosexual/gay’, ‘Bisexual’, ‘Heterosexual/straight’, ‘Queer’ or ‘Other’. We have collapsed ‘queer’ and ‘other’ in the analyses. Some women resisted sexual categorisation, making comments such as ‘label free’ or ‘no specific label’ or ‘homoflexible’ or ‘just me’. The most common written comment for ‘other’ was ‘pansexual’. Tension between identity labels and practice was evident in a few replies, such as the women who wrote ‘bisexual but leaning gay!’ or ‘between bi and lesbian’. Throughout this report, when women are referred to as lesbian, bisexual etc., it is this self-description that is being used, whatever their reported sexual behaviour. The two cohorts differed significantly ($p < 0.001$) with regards to sexual identity (Table 2). Twice as many women in the Perth cohort identified as bisexual compared to the Sydney cohort (21% vs 11%), and twice as many women identified as ‘other’ (7% vs 3%). At the same time, three times as many women in the Sydney cohort identified as ‘queer’ (9% vs 4%). It appears that for women rejecting labels like ‘lesbian’ or ‘bisexual’, ‘queer’ is preferred by women in Sydney, while Perth women used a variety of self-descriptors.

Table 2: Stated sexual identity

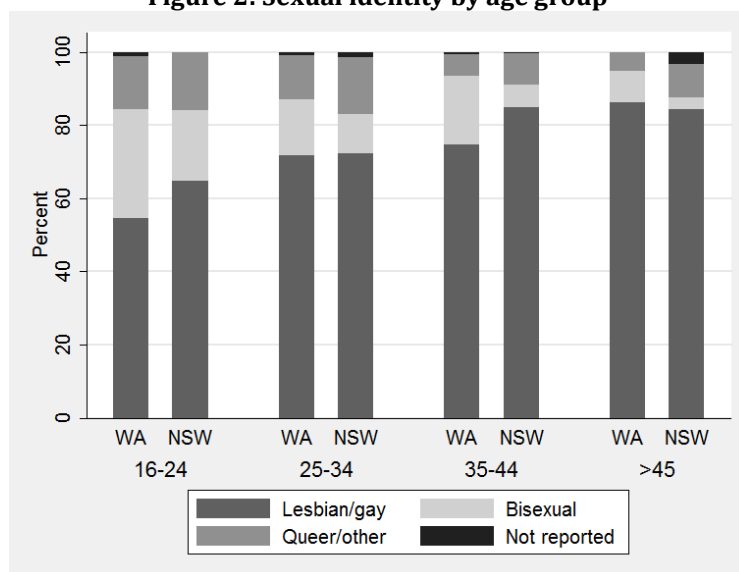
	WWASH 2010	SWASH 2010
	n (%)	n (%)
Lesbian/homosexual	588 (67.0)	726 (75.3)
Bisexual	184 (21.0)	101 (10.5)
Queer	33 (3.8)	91 (9.4)
Other	65 (7.4)	33 (3.4)
Not reported	8 (0.9)	13 (1.4)
Total	878 (100)	964 (100)

Age and sexual identity are correlated, with younger women more likely to identify as bisexual and less likely to identify as lesbian (Table 3). There are several possible reasons for this. Some older bisexual women in long-term relationships with men may be less likely to take part in LGBTQ social events where they can be recruited for the survey. Or, it may be that women’s identities become more fixed and more polarised as they age, partly as a result of the relationships they have. The high proportion of bisexual and queer or other younger women may also reflect a greater acceptance of queer and fluid identities in younger age groups. Figure 2 compares the proportion of respondents in each sexual identity category by 10-year age categories over the two cohorts.

Table 3: Mean and median age, by sexual identity

	Lesbian	Bisexual	Queer/ Other	Not reported
	Mean (median)	Mean (median)	Mean (median)	Mean (median)
WWASH 2010	32 (29)	26 (22)	26 (23.5)	26 (24)
SWASH 2010	34 (33)	28 (25)	31 (28)	33 (38)

Figure 2: Sexual identity by age group



We also asked about sexual attraction to males and females. After all the heterosexual identifying women were excluded from the sample, all but 2% of respondents indicated at least some attraction to females, though only 31% indicated exclusively same-sex attraction. As Table 4 shows, not everyone felt sexual attraction exclusively or even mostly to women, even in this sample of women who were in contact with and recruited through LGBTQ community venues and functions, and 71% of whom had been sexually active with a woman in the preceding six months (and 92% in their lives). Sexual attraction, like sexual identity (with which it is highly correlated), is also age-related, with younger women more likely to report attraction to both men and women. However, this may be an artefact of the survey method, as bisexual women may be less likely to attend Fair Day or other LGBTQ functions when they are older if they are in a regular relationship with a man. As would be expected, lesbian identified women were most likely to say they were attracted only or mostly to females (95%) when compared to bisexual women (31%) and queer or other women (54%). Sydney and Perth respondents were very similar in their reported sexual attractions.

**Table 4: Sexual attraction to males and females
("I have felt sexually attracted to:")**

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Only to females	276 (31.4)	343 (35.6)
More often to females	397 (45.2)	475 (49.3)
Equally often to both	131 (14.9)	102 (10.6)
More often to males	51 (5.8)	25 (2.6)
Only to males	4 (0.5)	4 (0.4)
To no one at all	5 (0.6)	3 (0.3)
No answer	14 (1.6)	12 (1.2)
Total	878 (100)	964 (100)

3.1.3. Transgender respondents

Forty nine respondents (6%) indicated that they were transgender, this compares to 3% in Sydney (Table 15). Most respondents in Perth and Sydney identified as female transgender or 'other' transgender. The very small number of people identifying as male may reflect the recruitment strategy and the branding of the survey as for women. Sexual attraction varied similarly among the transgender respondents, with 65% reporting attraction mostly or always to women.

**Table 5: Transgender and transsexual identity
("Are you transgender or transsexual?")**

	WWASH 2010	SWASH 2010
	n (%)	n (%)
No	814 (92.7)	925 (96.0)
Yes, identify as female	28 (3.2)	16 (1.7)
Yes, identify as male	6 (0.7)	4 (0.4)
Yes, identify other	15 (1.7)	11 (1.1)
Not reported	15 (1.7)	8 (0.8)
Total	878 (100)	964 (100)

3.1.4. Children

In the Perth cohort, 15% of women said they had dependent children (Table 6). Some women who are biological mothers or co-parents may no longer have dependent children if the children have left home and are self-supporting.

Table 6: Dependent children (birth or co-parent)

	WWASH 2010	SWASH 2010
	n (%)	n (%)
No	730 (83.1)	816 (84.7)
Yes	135 (15.4)	139 (14.4)
Not reported	13 (1.5)	9 (0.9)
Total	878 (100)	964 (100)

One hundred and thirty seven women (16%) said they were planning to have children in the next two years (Table 7). The vast majority (72%) of women considering children in the coming two years did not already have children.

Table 7: Planning children in next 2 years

	WWASH 2010	SWASH 2010
	n (%)	n (%)
No	606 (69.0)	677 (70.2)
Yes	137 (15.6)	129 (13.4)
Not sure	120 (13.7)	145 (15.0)
Not reported	15 (1.7)	13 (1.4)
Total	878 (100)	964 (100)

For women considering having children in the coming two years, two different conception options were common: anonymous IVF (19%) and self-insemination with a known donor (17%) (Table 8). Intended conception methods varied between sexual identities. For lesbian women, the most common intended method of conception was anonymous IVF (25%), for bisexual women it was sex with a male partner (40%) and for queer and other women it was known self insemination (19%). The most striking difference between Perth and Sydney cohorts was that four times as many Sydney-women were considering a known donor through IVF.

Table 8: How plan to conceive, by sexual identity

	Lesbian	Bisexual	Queer/ Other	Not reported	Total
	n (%)	n (%)	n (%)	n (%)	n (%)
WWASH 2010					
Sex with male partner	1 (0.6)	20 (40.0)	9 (25.0)	0 (0.0)	30 (11.7)
Anonymous IVF	43 (25.3)	4 (8.0)	1 (2.8)	0 (0.0)	48 (18.7)
Known IVF	24 (4.1)	4 (8.0)	5 (13.9)	0 (0.0)	33 (12.8)
Anonymous self-inseminate	15 (8.8)	1 (2.0)	1 (2.8)	1 (100.00)	18 (7.0)
Known self-inseminate	31 (18.2)	5 (10.0)	7 (19.4)	0 (0.0)	43 (16.7)
Considering more than one option	7 (4.1)	5 (10.0)	4 (11.1)	0 (0.0)	16 (6.2)
Not reported	49 (28.8)	11 (22.0)	9 (25.0)	0 (0.0)	69 (26.9)
Total	170 (100)	50 (100)	36 (100)	1 (100)	257 (100)
SWASH 2010					
Sex with male partner	8 (3.7)	9 (33.3)	2 (7.4)	0 (0.00)	19 (6.9)
Anonymous IVF	62 (28.6)	3 (11.1)	1 (3.7)	0 (0.00)	66 (24.1)
Known IVF	35 (16.1)	1 (3.7)	4 (14.8)	1 (33.3)	41 (15.0)
Anonymous self-inseminate	11 (5.1)	0 (0.0)	2 (7.4)	0 (0.00)	13 (4.7)
Known self-inseminate	40 (18.4)	5 (18.5)	8 (29.6)	1 (33.3)	54 (19.7)
Considering more than one option	17 (7.8)	2 (7.4)	0 (0.0)	1 (33.3)	20 (7.3)
Not reported	44 (20.3)	7 (26.0)	10 (37.0)	0 (0.0)	61 (22.3)
Total	217 (100)	27 (100)	27 (100)	3 (100)	274 (100)

NOTE: Table only includes women who indicated they planned to conceive or were unsure, in the next 2 years

3.1.5. Social attachment to the gay and lesbian community

The sample of women was highly attached to the LGBTQ community. Of the 878 respondents, 96% said that at least a few of their friends were lesbian, gay men, bisexual, transgender or queer (Table 9).

Table 9: Number of friends who are LGBTQ

	WWASH 2010 n (%)	SWASH 2010 n (%)
None	20 (2.3)	23 (2.4)
A few	149 (17.0)	127 (13.2)
Some	285 (32.5)	285 (29.6)
Most	373 (42.5)	471 (48.9)
All	26 (3.0)	38 (3.9)
Not reported	25 (2.9)	20 (2.1)
Total	878 (100)	964 (100)

We asked women how connected they felt to a LGBTQ community in their everyday life. Unsurprisingly for a sample that is generated through attendance at LGBTQ community events levels of connection were high; close to half (47%) reported they felt mostly or very connected in their everyday lives (Table 10). Compared to the Sydney cohort, women in Perth were nearly twice as likely to say they felt rarely or never connected (31% vs. 17%).

Table 10: Connection to LGBTQ community, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Very	101 (17.2)	23 (12.5)	30 (30.6)	1 (12.5)	155 (17.7)
Mostly	179 (30.44)	44 (23.9)	32 (32.7)	1 (12.5)	256 (29.2)
Somewhat	170 (28.9)	73 (39.7)	23 (23.5)	2 (25.0)	268 (30.5)
Rarely	79 (13.4)	27 (14.7)	9 (9.2)	1 (12.5)	116 (13.2)
Not at all	48 (8.16)	14 (7.6)	3 (3.1)	1 (12.5)	66 (7.5)
Not reported	11 (1.9)	3 (1.6)	1 (1.0)	2 (25.0)	17 (1.9)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Very	147 (20.3)	9 (8.9)	34 (27.4)	3 (23.1)	193 (20.0)
Mostly	230 (31.7)	22 (21.8)	41 (33.1)	1 (7.7)	294 (30.5)
Somewhat	221 (30.4)	43 (42.6)	35 (28.2)	3 (23.1)	302 (31.3)
Rarely	79 (10.9)	16 (15.8)	4 (3.2)	1 (7.7)	100 (10.4)
Not at all	44 (6.1)	8 (7.9)	9 (7.3)	2 (15.4)	63 (6.5)
Not reported	5 (0.7)	3 (3.0)	1 (0.8)	3 (23.1)	12 (1.2)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

In the preceding six months, 75% had attended at least one LGBTQ social group or venue (Table 11). The lower attendance at women’s or queer nights, and LGBTQ dance parties relative to the Sydney cohort, may reflect a smaller commercial scene with fewer events and venues.

Table 11: Attendance at LGBTQ social venues or groups in the past 6 months

	WWASH 2010 n (%)	SWASH 2010 n (%)
Lesbian/queer women’s night/bar	402 (45.8)	614 (63.7)
Gay night/bar	467 (53.2)	496 (51.5)
LGBTQ dance party	146 (16.6)	295 (30.6)
LGBTQ group meeting	160 (18.2)	205 (21.3)
LGBTQ community event	318 (36.2)	403 (41.8)
LGBTQ sports group	79 (9.0)	133 (13.8)
Any of the above	662 (75.4)	781 (81.0)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category

Readership of street press targeted at women – Cherrie and LOTL – was low but readership of the LGBTQ community street press was high (64%). This contrasts with Sydney, where the opposite pattern was evident (Table 12). This probably reflects the limited distribution of east coast-based publications Cherrie and LOTL in Perth, compared to locally-produced Out in Perth.

Table 12: Number of respondents reading gay and lesbian street press

	WWASH 2010 n (%)	SWASH 2010 n (%)
LOTL	132 (15.0)	705 (73.1)
Cherrie	40 (4.6)	378 (39.2)
Out in Perth	563 (64.1)	-
SSO (Sydney Star Observer)	-	276 (28.6)
SX (Sydney-based paper)	-	227 (23.6)
Any of the above	582 (66.3)	733 (76.0)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category.

3.1.6. Education, employment and income

The Perth cohort was well educated; around 50% had post-school qualifications (Table 13). For comparison, in the 2006 Census only 35% of Western Australian women aged over 15 had post-school qualifications in 2006.⁽⁵⁾ A higher proportion of women had stopped their

formal education at high school than their Sydney counterparts (46% vs 34%), but this may be in part a reflection of their younger age.

Table 13: Education

	WWASH 2010 n (%)	SWASH 2010 n (%)
Up to Year 10/School Certificate	159 (18.1)	133 (13.8)
Year 12/Higher School Certificate	244 (27.8)	197 (20.4)
Tertiary diploma/trade certificate	124 (14.1)	159 (16.5)
University or college degree	234 (26.7)	305 (31.6)
Postgraduate degree	80 (9.1)	160 (16.6)
Not reported	37 (4.21)	10 (1.0)
Total	878 (100)	964 (100)

Of those who answered the question on employment, 59% were employed full-time (Table 14). Women in the Perth cohort were significantly more likely to be students than women in the Sydney cohort (22% vs. 18%; $p < 0.01$), reflecting the younger age of the sample. It is difficult to compare the employment status of the WWASH sample with Census data, as our sample is skewed towards younger and childless women.

Table 14: Employment status

	WWASH 2010 n (%)	SWASH 2010 n (%)
Employed full-time	515 (58.7)	615 (63.8)
Employed part-time	142 (16.2)	168 (17.4)
Unemployed	31 (3.5)	40 (4.2)
Student	195 (22.2)	168 (17.7)
Pensioner/social security benefits	36 (4.1)	22 (2.3)
Doing domestic duties	28 (3.2)	15 (1.6)
Not in the work force	18 (2.1)	22 (2.3)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category

The younger age of the Perth cohort, and the higher proportion of students may partly explain the significantly lower overall income ($p < 0.001$) compared to the Sydney cohort: 39% of the Sydney cohort had an income under \$40,000 compared to 47% of the Perth cohort (Table 15). For comparison, the average before-tax annual wage for women in February 2010 was \$40,158.⁽⁶⁾

Table 15: Annual income before tax

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Nil–\$19,999	222 (25.3)	181 (18.8)
\$20,000–\$39,999	190 (21.6)	197 (20.4)
\$40,000–\$59,999	194 (22.1)	234 (24.3)
\$60,000–\$99,999	188 (21.4)	248 (25.7)
\$100,000+	56 (6.4)	90 (9.3)
Not reported	28 (3.2)	14 (1.5)
Total	878 (100)	964 (100)

3.1.7. Ethnicity

Table 16 shows the responses to the questions on ethnic or cultural background grouped into broad categories. This cannot be compared directly with Census data, which report several variables including place of birth, language spoken and ancestry rather than our less specific category of ethnic affiliation. However, according to the 2006 Census, 62% of the female population of Western Australia aged 15–64 was born in Australia, 17% in Europe or the Middle East and 8% in Asia.⁽⁵⁾ This suggests that this sample of lesbian, bisexual and queer women contains fewer European and Middle-Eastern women than would be expected if it were similar to the total WA population. The sample contains more self-identified Aboriginal or Torres Strait Islander women (6%) than would be expected if it were similar to the total WA population (2%).⁽⁵⁾

Table 16: Ethnicity

	WWASH 2006	SWASH 2010
	n (%)	n (%)
Anglo-Australian ¹	599 (68.2)	627 (65.0)
Aboriginal or Torres Strait Islander ²	49 (5.6)	37 (3.8)
European and Middle Eastern	84 (9.6)	137 (12.0)
Asian	47 (5.4)	58 (6.0)
Other	65 (7.4)	91 (9.4)
Not reported	34 (3.9)	14 (1.5)
Total	878 (100)	964 (100)

(1) Including UK and Irish/Scottish/Celtic.

(2) 41 WWASH respondents and 29 SWASH respondents also indicated Anglo-Australia, European, Asian or other ethnic or cultural background.

3.1.8. Geographical location

The vast majority (91%) of women lived in metropolitan Perth, with only 7% living in regional or rural WA (Table 17).

Table 17: Where respondents lived

	WWASH 2010 n (%)
Metropolitan Perth	800 (91.1)
Regional/rural WA ¹	61 (7.0)
Outside WA	7 (0.8)
Not reported	10 (1.1)
Total	878 (100)

(1) Areas more than 75 kilometres from the Perth GPO were classed as regional or rural. Postcodes between 6208 and 6770 (inclusive) and postcodes 6041, 6043 and 6044 define such areas.

3.2. Sexual partners and practices

3.2.1. Sex with women

The great majority of Perth respondents (92%) reported that they had ever had sex with a woman; 71% of women had done so in the preceding six months, lower than reported by the Sydney cohort (82%) (Table 18).

Table 18: When respondents last had sex with a woman, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Never	11 (1.9)	14 (7.6)	9 (9.2)	3 (37.5)	37 (4.2)
Over 6 months ago	93 (15.8)	52 (28.3)	35 (35.7)	1 (12.5)	181 (20.6)
In the past 6 months	457 (77.7)	112 (60.9)	52 (53.1)	2 (25.0)	623 (71.0)
Not reported	27 (4.6)	6 (3.3)	2 (2.0)	2 (25.0)	37 (4.2)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Never	9 (1.2)	8 (7.9)	6 (4.8)	1 (7.7)	24 (2.5)
Over 6 months ago	87 (12.0)	19 (18.1)	15 (12.1)	0 (0.0)	121 (12.6)
In the past 6 months	61 (84.0)	70 (69.3)	100 (80.7)	8 (61.5)	788 (81.7)
Not reported	20 (2.8)	4 (4.0)	3 (2.4)	4 (30.8)	31 (3.2)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

Women who reported sex with a female partner in the preceding six months were most likely to report only one sexual partner (73%), with 19% reporting between two and five partners (Table 19).

Table 19: Number of female sexual partners in the past 6 months, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
One	350 (74.5)	77 (65.8)	41 (75.9)	2 (50.0)	470 (72.9)
2–5	88 (18.7)	29 (24.8)	7 (13.0)	0 (0.0)	124 (19.2)
>5	20 (4.3)	6 (5.1)	3 (5.6)	0 (0.0)	29 (4.5)
Not reported	12 (2.6)	5 (4.3)	3 (5.6)	2 (50.0)	22 (3.4)
Total	470 (100)	117 (100)	54 (100)	4 (100)	645 (100)
SWASH 2010					
One	462 (75.0)	41 (57.8)	61 (59.8)	6 (50.0)	570 (71.2)
2–5	126 (20.5)	16 (22.5)	31 (30.4)	3 (25.0)	176 (22.0)
>5	16 (2.6)	8 (11.3)	5 (4.9)	0 (0.0)	29 (3.6)
Not reported	12 (2.0)	6 (8.5)	5 (4.9)	3 (25.0)	26 (3.3)
Total	616 (100)	71 (100)	102 (100)	12(100)	801 (100)

Note: Table only includes women that reported sex with a woman in the preceding six months.

3.2.2. Sex with men

In the Perth cohort, 522 women (60%) reported they had ever had sex with a man. Bisexual (82%) and queer or other (70%) women were more likely to have ever had sex with a man compared to lesbian women (51%). This is very similar to the Sydney cohort but lower than international research suggesting 80–85% of LBQ women have a sexual history with men.⁽⁷⁻⁹⁾ Where the two cohorts differed was in recent sex; Perth women were more likely to have had recent sex with a man (18%) compared to Sydney women (11%).

Sex with men was overwhelmingly with men the respondents believed to be heterosexual: 495 women reported sex with heterosexual man (Table 20) compared to 163 reporting sex with a gay or bisexual man (Table 21). Of the forty eight women reporting sex with a gay or bisexual man in the preceding 6 months, 10 (21%) often had unprotected sex (similar to the Sydney cohort). Of the 139 women reporting sex with a heterosexual man in the preceding 6 months, 43 (31%) had unprotected sex often. These findings reflect previous research showing condom use by LBQ women during sex with men is low.^(7, 10, 11) However, twice as many Perth women (31%) reported often having unsafe heterosexual sex when compared to their Sydney counterparts (n=14; 15%).

Table 20: When respondents last had sex with a heterosexual man, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Never	276 (46.9)	31 (16.9)	33 (33.7)	1 (12.5)	341 (38.8)
Over 6 months ago	260 (44.2)	59 (32.1)	34 (34.7)	3 (37.5)	356 (40.6)
In the past 6 months	25 (4.3)	83 (45.1)	29 (29.6)	2 (25.0)	139 (15.8)
Not reported	27 (4.6)	11 (6.0)	2 (2.0)	2 (25.0)	42 (7.8)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Never	293 (40.4)	16 (15.8)	29 (23.4)	3 (23.1)	341 (35.4)
Over 6 months ago	339 (46.7)	34 (33.7)	68 (54.8)	6 (46.2)	447 (46.4)
In the past 6 months	25 (3.4)	46 (45.5)	21 (16.9)	0 (0.0)	92 (9.5)
Not reported	69 (9.5)	5 (5.0)	6(4.8)	2 (6.1)	84 (8.7)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

Table 21: When respondents last had sex with a gay or bisexual man, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Never	507 (86.2)	117 (63.6)	55 (56.1)	5 (62.5)	684 (77.9)
Over 6 months ago	53 (9.0)	40 (21.7)	21 (21.4)	1 (12.5)	115 (13.1)
In the past 6 months	11 (1.9)	20 (10.9)	17 (17.4)	0 (0.00)	48 (5.5)
Not reported	17 (2.9)	7 (3.8)	5 (5.1)	2 (25.0)	31 (3.5)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Never	606 (83.5)	66 (65.4)	79 (63.7)	9 (69.2)	760 (78.8)
Over 6 months ago	81 (11.2)	19 (18.8)	37 (29.8)	1 (7.7)	138 (14.3)
In the past 6 months	19 (2.6)	12 (11.9)	8 (6.5)	0 (0.0)	39 (4.1)
Not reported	20 (2.8)	4 (4.0)	0 (0.0)	3 (23.1)	27 (2.8)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

3.2.3. Sexual practices

Among the 71% of women who had had sex with a woman in the preceding six months, the most common sexual practice was manual sex (Table 22). Stimulation of the external genitals was practised by only a few more women than sex with the fingers or hand inside the vagina. Most women also practised oral sex (cunnilingus), both given and received, although a few (7%) had experienced only giving or receiving. Over half reported having used a sex toy. Most women (84%) who had used a toy used it both on the external genitals and inside the vagina. Anal practices were less common in the Perth cohort than in the

Sydney cohort; 19% (vs. 28%) had given or received manual stimulation of the anus and 11% (vs. 21%) had practised rimming, that is oral–anal contact. Again, these practices were generally reciprocal.

Table 22: Sexual practices with a woman in the past 6 months

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Fingers/hand on external genitals	594 (95.4)	753 (95.6)
Fingers/hand inside vagina	588 (94.4)	741 (94.0)
Fingers/hand inside anus	115 (18.5)	223 (28.3)
Oral sex (mouth on partner’s genitals)	520 (83.5)	693 (87.9)
Oral sex (mouth on respondent’s genitals)	503 (80.7)	663 (84.1)
Rimming (mouth on partner’s anus)	67 (10.8)	128 (16.2)
Rimming (mouth on respondent’s anus)	62 (10.0)	119 (15.1)
Sex toy used on external genitals	330 (53.0)	470 (59.6)
Sex toy used inside vagina	334 (53.6)	482 (61.2)
Sex toy used inside anus	60 (9.6)	110 (14.0)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category; only includes women that reported sex with a woman in the past 6 months.

Respondents were also asked how many times they had had sex with a woman in the preceding four weeks (Table 23). Perth and Sydney cohorts were very similar, with a median of two to five times. A small proportion of women wrote an estimate in words rather than numbers.

Table 23: Number of times women had had sex with a woman in the past 4 weeks

	WWASH 2010	SWASH 2010
	n (%)	n (%)
0	113 (18.1)	129 (16.4)
1	73 (11.7)	82 (10.4)
2–5	194 (31.1)	244 (31.0)
6–10	82 (13.1)	139 (17.6)
11+	112 (18.0)	107 (13.6)
“A few”	1 (0.2)	9 (1.3)
“Many”, “Lots”	29 (4.7)	31 (3.9)
“Too many to count”	8 (1.3)	2 (0.3)
“Not enough”	0 (0.0)	3 (0.4)
“Don’t know”, “Forget”	11 (1.8)	4 (0.5)
Not reported	0 (0.0)	38 (4.8)
Total	623 (100)	788 (100)

Note: Table only includes women that reported sex with a woman in the past 6 months.

In the Perth cohort, 126 (14%) women reported having been involved in ‘S/M dominance/bondage’ (i.e. sadomasochism or slave–master encounters) without or with blood (i.e. from practices such as cutting, piercing, whipping or fisting) (Table 24).

Table 24: Experience of S/M dominance/bondage in the past 6 months

	WWASH 2010 n (%)	SWASH 2010 n (%)
Yes, but no blood	112 (12.8)	145 (15.0)
Yes, with blood	27 (3.1)	35 (3.6)
No	770 (80.0)	772 (76.2)
Not reported	15 (1.6)	34 (3.4)
Total	751 (100)	792 (100)

One in ten women reported that they had group sex in the preceding six months; most respondents reported that this group sex involved a woman (Table 25).

Table 25: Group sex in the past 6 months

	WWASH 2010 n (%)	SWASH 2010 n (%)
Group sex which included—		
a gay or bisexual man	22 (2.5)	14 (1.5)
a straight or heterosexual man	50 (5.7)	31 (3.2)
a woman	73 (8.3)	77 (8.0)
BDSM ¹ no blood	27 (3.1)	35 (3.6)
BDSM ² with blood	12 (1.4)	9 (0.9)
Any group sex	92 (10.5)	93 (9.6)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category.

(1) BDSM is bondage, dominance or sadomasochism or slave–master encounters

(2) For example, involving practices such as cutting, piercing, whipping or fisting

3.2.4. Sexual relationships

Five hundred and two women (57%) were in a regular sexual relationship with a woman (Table 26). Of the remaining, 29% were not in a regular sexual relationship, 7% were in a regular sexual relationship with a man and 3% reported that they were in a polyamorous relationship or had multiple regular partners (gender not specified). Perth respondents were 2.8 times more likely to be in a relationship with a man compared to Sydney, although the numbers are small.

Table 26: Regular partners

	WWASH 2010 n (%)	SWASH 2010 n (%)
No	258 (29.4)	273 (28.3)
With a woman	502 (57.2)	607 (63.0)
With a man	61 (7.0)	24 (2.5)
Polyamorous/Multiple partners	23 (2.6)	35 (3.6)
Not reported	34 (3.9)	25 (2.6)
Total	878 (100)	964 (100)

Of those in regular relationships, the most common length was one to two years (27%), where as in Sydney it was over five years (27%) (Table 27): this may reflect the age difference between the two cohorts.

Table 27: Length of regular relationship

	WWASH 2010 n (%)	SWASH 2010 n (%)
Less than 6 months	138 (22.3)	122 (17.7)
6-11 months	85 (13.7)	84 (12.2)
1-2 years	164 (26.5)	161 (23.3)
3-5 years	75 (12.1)	101 (14.6)
Over 5 years	119 (19.2)	189 (27.4)
Not reported	39 (6.3)	34 (4.9)
Total	620 (100)	691 (100)

Note: Table only includes women in regular relationships.

Casual partners in the preceding six months were reported by 31% of women (Table 28). Almost half (51%) of these women were also in a regular relationship. That is, 28% of women in a regular relationship with a woman had had a casual sexual partner in the preceding six months.

Table 28: Casual partners in past 6 months

	WWASH 2010 n (%)	SWASH 2010 n (%)
No	561 (63.9)	620 (64.3)
Yes, with women	164 (18.7)	210 (21.8)
Yes, with men	40 (4.6)	24 (2.5)
Yes, with both	67 (7.6)	53 (5.5)
Not reported	46 (5.2)	57 (5.9)
Total	878 (100)	964 (100)

3.2.5. Sex work

Forty two women (5%) reported they had ever done sex work, most over six months ago (Table 29).

Table 29: Sex work

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Never	809 (92.14)	887 (92.0)
Over 6 months ago	32 (3.6)	34 (3.5)
In last 6 months	10 (1.1)	14 (1.5)
Not reported	27 (3.1)	29 (3.0)
Total	878 (100)	964 (100)

3.3. Tobacco, alcohol and other drug use

3.3.1. Tobacco use

A third of women (33%) in the Perth cohort said they were current tobacco smokers (Table 30), 25% of women (or 75% of current smokers) were daily smokers and the median number of cigarettes smoked per day was 10. These are high rates of smoking compared with the general population, especially considering that this is a highly educated urban sample. For comparison, in the 2010 National Drug Strategy Household Survey (NDSHS) of the general population,⁽¹²⁾ 16% of women 18 or older were current smokers (vs 33% WWASH and 35% SWASH), with 14% of women daily smokers (vs 25% WWASH/SWASH). In the NDSHS sample, gay women and men (not reported by gender) were twice as likely to smoke and among smokers were twice as likely to report smoking daily, compared to the heterosexual women and men.⁽¹²⁾ In our sample, tobacco use was twice as likely in the youngest age group compared to the oldest age group (43% of 16-24 year olds vs. 15% of women over 45 years) (Table 31). The closest comparison in the NDSHS is 20-29 year old women, of whom 22% are smokers.⁽¹²⁾

Table 30: Smoking status by age group

	16-24 years n (%)	25-34 years n (%)	35-44 years n (%)	45+ n (%)	Not reported n (%)	Total n (%)
WWASH 2010						
Current smoker	157 (42.9)	82 (32.2)	35 (25.2)	18 (15.4)	1 (50.0)	293 (33.4)
Ex-smoker	36 (9.8)	49 (19.3)	37 (26.6)	48 (41.0)	0 (0.0)	170 (19.4)
Never smoked	143 (39.1)	114 (44.9)	64 (46.0)	42 (35.9)	0 (0.0)	363 (41.3)
Not reported	30 (8.2)	9 (3.5)	3 (2.2)	9 (7.7)	1 (50.0)	52 (5.9)
Total	366 (100)	254 (100)	139 (100)	117 (100)	2 (100)	878 (100)
SWASH 2010						
Current smoker	98 (42.1)	127 (36.7)	75 (33.2)	33 (21.6)	1 (16.7)	334 (34.7)
Ex-smoker	32 (13.7)	77 (22.3)	66 (29.2)	68 (44.4)	2 (33.3)	245 (25.4)
Never smoked	86 (36.9)	120 (34.7)	78 (34.5)	42 (27.5)	2 (33.3)	328 (34.0)
Not reported	17 (7.3)	22 (6.4)	7 (3.1)	10 (6.5)	1 (16.7)	57 (5.9)
Total	233 (100)	346 (100)	226 (100)	153 (100)	6 (100)	964 (100)

While smoking was highest among bisexual women (37%) in the Perth cohort, there was much less variation by sexual identity than in the Sydney cohort (Table 31); this may reflect the association between sexual identity and age and the younger age of the Perth cohort.

Table 31: Smoking status by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Current smoker	190 (32.3)	68 (37.0)	32 (32.7)	3 (37.5)	293 (33.4)
Ex-smoker	131 (22.3)	23 (12.5)	14 (14.3)	2 (25.0)	170 (19.4)
Never smoked	232 (39.5)	81 (44.0)	48 (49.0)	2 (25.0)	363 (41.3)
Not reported	35 (6.0)	12 (6.5)	4 (4.1)	1 (12.5)	52 (5.9)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Current smoker	251 (34.6)	47 (46.5)	32 (25.8)	4 (30.8)	334 (34.7)
Ex-smoker	192 (26.5)	21 (20.8)	27 (21.8)	5 (38.5)	245 (25.4)
Never smoked	244 (33.6)	26 (25.7)	56 (45.2)	2 (15.4)	328 (34.0)
Not reported	39 (5.4)	7 (6.9)	9 (7.3)	2 (15.4)	57 (5.9)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

3.3.2. Alcohol use

The majority of women (86%) reported drinking alcohol. Table 32 illustrates the distribution of drinking frequency.

Table 32: Frequency of drinking alcohol

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Never	69 (7.9)	100 (10.4)
Less often than weekly	269 (30.6)	251 (26.0)
1 or 2 days a week	248 (28.3)	270 (28.0)
3 or 4 days a week	135 (15.4)	177 (18.4)
5 or 6 days a week	43 (4.9)	53 (5.5)
Every day	64 (7.3)	49 (5.1)
Not reported	50 (5.7)	64 (6.6)
Total	878 (100)	964 (100)

The National Health and Medical Research Council (NHMRC)⁽¹³⁾ recommends that adults drink no more than two standard drinks on any single day to reduce the *lifetime* risk of alcohol related disease or injury. Half of all women (55%) in our sample – 60% of drinkers – exceeded this recommendation (Table 33). This compares to 11% of women in the general population (in the preceding 12 months).⁽¹²⁾

Table 33: Drinks consumed on a typical day

	WWASH 2010	SWASH 2010
	n (%)	n (%)
1 or 2 drinks	262 (29.8)	302 (31.3)
3 or 4 drinks	241 (27.4)	275 (28.5)
5 to 8 drinks	152 (17.3)	160 (16.6)
9 or more drinks	90 (10.3)	51 (5.3)
Not reported	64 (7.3)	76 (7.9)
Non-drinker	69 (7.9)	100 (10.4)
Total	878 (100)	964 (100)

The NHMRC recommends that adults drink no more than four standard drinks on a single occasion to reduce the risk of alcohol-related injury *on that occasion*. Twenty eight percent of women – 31% of drinkers – exceeded this advice, having five or more drinks on a day when they usually drink (Table 33). This is a similar proportion to the general population (30% in the preceding 12 months).⁽¹²⁾ However, three times as many LBQ women in the Perth cohort were placed at this risk daily or weekly (26% of the whole sample), compared to women in the general population (9%) (Table 34).⁽¹²⁾

Table 34: Frequency of drinking 5 or more on a single occasion in past 6 months

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Never	129 (14.7)	139 (14.4)
Once or twice	213 (24.3)	234 (24.3)
About once a month	187 (21.3)	202 (21.0)
About once a week	141 (16.1)	153 (15.9)
More than once a week	61 (6.9)	63 (6.5)
Every day	22 (2.6)	8 (0.8)
Not reported	56 (6.4)	65 (6.7)
Non-drinker	69 (7.9)	100 (10.4)
Total	878 (100)	964 (100)

The Perth and Sydney cohorts were similar in the frequency of drinking, and in the high proportion of women drinking more than two standard drinks on any single day. The younger Perth cohort was slightly more likely to binge drink (28% vs. 22% drinking five or more drinks on a single occasion) and to do it more often (26% vs. 23% doing so daily or weekly).

3.3.3. *Illicit drug use*

In the preceding six months, 49% of respondents had used any illicit drug including cannabis (36%), ecstasy (18%), and speed (16%) (Table 35). The Perth cohort was significantly less likely than the Sydney cohort to have used amyl/poppers ($p < 0.005$), ecstasy ($p < 0.001$), or cocaine ($p < 0.001$), but more likely to have reported crystal meth use ($p < 0.05$) (Table 35). In response to the question 'Have you ever injected drugs?' 9% of women in our sample indicated that they had ever done so. This was similar to the injecting drug use reported by the Sydney cohort.

Table 35: Drug use in the past 6 months

	WWASH 2010 n (%)	SWASH 2010 n (%)
Cannabis	316 (36.0)	319 (33.1)
Ecstasy	155 (17.7)	241 (25.0)
Speed	136 (15.5)	150 (15.6)
Benzos / Valium	127 (14.5)	130 (13.5)
Cocaine	85 (9.7)	164 (17.0)
LSD / trips	67 (7.6)	53 (5.5)
Crystal meth	64 (7.3)	40 (4.2)
Amyl / poppers	48 (5.5)	93 (9.7)
Special K / Ketamine	24 (2.7)	48 (5.0)
GHB	15 (1.7)	22 (2.3)
Steroids	15 (1.7)	13 (1.4)
Heroin	14 (1.6)	13 (1.4)
Viagra, Cialis etc.	12 (1.4)	12 (1.2)
Any other drug	76 (8.7)	60 (6.2)

Rates of illicit drug use in both cohorts were several times higher than among women in the general community (Table 36).⁽¹²⁾ Indeed, the NDSHS found that gay people (not reported by gender) had the highest rate of recent drug use (36%) among all subpopulation groups.⁽¹²⁾

Table 36: Use of various illicit drugs compared with the general community

	WWASH 2010 aged 16–64 past 6 months %	SWASH 2010 aged 16–64 past 6 months %	NDSHS 2010 aged over 14 past 12 months %
Cannabis	36.0	33.1	7.0
Ecstasy/designer drugs	17.6	25.1	2.3
Cocaine	9.6	17.1	1.5
Speed/crystal meth	16.9	17.0	1.7
Ever injected drug	8.2	8.2	1.2

3.4. Health behaviour and knowledge

3.4.1. Relationships with doctors

More than two thirds of women (71%) said they had a regular doctor (50%) or attend the same health centre (21%) (Table 37). Similar to Sydney (67%), the majority of women (61%) were 'out' to their doctor; that is, they were open about their sexuality. Women who had a regular doctor or attended the same health centre were significantly more likely to be out (72%) than women who did not (36%; $p < 0.001$). Women who did not have a regular doctor

were much more likely to be open about their sexuality to a doctor in the Sydney cohort (50%) than the Perth cohort (36%; $p=0.012$).

Table 37: Regular doctor

	WWASH 2010 n (%)	SWASH 2010 n (%)
No regular doctor	197 (22.4)	226 (23.4)
Yes, regular GP	436 (49.7)	474 (49.2)
Yes, regular health centre	180 (20.5)	211 (21.9)
Not reported	65 (7.4)	53 (5.5)
Total	878 (878)	964 (100)

3.4.2. Self-reported general health

The majority of respondents rated their general health as excellent/very good/good (83%); 12% of respondents reported their health as fair/poor (Table 38). Lesbian women were most likely to rate their general health as excellent (23%), while bisexual women were most likely to rate their general health as poor or fair (15%); the opposite pattern was found in Sydney.

Table 38: Self reported physical health, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Poor/Fair	60 (10.2)	28 (15.2)	12 (12.2)	1 (12.5)	101 (11.5)
Good/Very good	364 (61.9)	118 (64.1)	65 (66.3)	5 (62.5)	552 (62.9)
Excellent	135 (23.0)	27 (14.7)	15 (15.3)	0 (0.0)	177 (20.2)
Not answer	29 (4.9)	11 (6.0)	6 (6.1)	2 (25.0)	48 (5.5)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Poor/Fair	106 (14.6)	8 (7.9)	15 (12.1)	1 (7.7)	130 (13.5)
Good/Very good	443 (61.0)	65 (64.4)	79 (63.7)	8 (61.5)	595 (61.7)
Excellent	140 (19.3)	22 (21.8)	21 (16.9)	2 (15.4)	185 (19.2)
Not answer	37 (5.1)	6 (5.9)	9 (7.3)	2 (15.4)	54 (5.6)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

We asked respondents to provide their height and weight. We have used these to calculate a body mass index (BMI) for each respondent. The BMI is an internationally recognised standard for classifying overweight and obesity in adults, although it is an imperfect measure as people tend to overestimate height and underestimate weight when self-reporting and it does not recognise differences in height and weight proportions related to cultural heritage. Women were as likely to self report height and weight that placed them in the overweight or obese category (38%) than in the healthy category (37%) (Table 39). A small variation in sexual identity among the younger Perth cohort (e.g. 19% of lesbians, 16% of bisexual, 18% of queer or other women were in the obese category) was more pronounced in the older Sydney cohort (e.g. lesbian women 20%, bisexual women 12%, queer and other women 12% were in the obese category).

Table 39: Body mass index

	WWASH 2010 n (%)	SWASH 2010 n (%)
Underweight (<20)	108 (12.3)	105 (10.9)
Healthy (20-<25)	320 (36.5)	386 (40.0)
Overweight (25-<30)	178 (20.3)	207 (21.5)
Obese (>30)	159 (18.1)	169 (17.5)
Not reported	113 (12.9)	97 (10.1)
Total	878 (100)	964 (100)

We have provided comparative self-report data from women in the 2008 National Health Survey (NHS) (Table 40).⁽¹⁴⁾ The younger age of our cohorts may explain the striking difference in the proportion of LBQ underweight women compared to women in the general population.

Table 40: Body mass index compared with the general community (18-54 year olds)

	WWASH 2010 %	SWASH 2010 %	NHS 2007-2008 %
Underweight (<20)	14	13	4
Healthy (20-<25)	43	46	52
Overweight (25-<30)	23	24	26
Obese (>30)	21	19	17

We asked respondents whether they had ever been diagnosed with cancer; 7% said that they had. Table 41 presents a breakdown of the type of cancer reported by respondents. We provide these figures as a means of tracking cancer diagnosis in this sample. There are no comparable statistics on lesbians and cancer in Australia and it is difficult to compare these statistics with national data as ours is a relatively young sample.

Table 41: Cancer diagnoses

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Cervical	15 (1.7)	24 (2.5)
Skin	16 (1.8)	21 (2.2)
Breast	12 (1.4)	13 (1.4)
Lung	1 (0.1)	1 (0.1)
Other ⁽¹⁾	21 (2.4)	16 (1.6)

NOTE: Summary table; adds up to more than 100% because respondents could be in more than one category.

(1) Other cancers included ovarian and bowel/colon cancers.

3.4.3. Self-reported mental health

We used the Kessler 6, a short screening tool to measure non-specific psychological distress in the preceding month.⁽¹⁵⁾ High distress was more common in younger women, with 17% of 16-24 year olds exhibiting high distress compared to 6% of women aged over 45 years ($p < 0.001$; Table 42).

Table 42: Kessler 6 measure of psychological health, by age group

	16-24 years	25-34 years	35-44 years	45+	Not reported	Total
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
WWASH 2010						
Low distress	167 (45.6)	175 (68.9)	101 (72.7)	69 (59.0)	1 (50.0)	513 (58.4)
Medium distress	78 (21.3)	45 (17.7)	22 (15.8)	17 (14.5)	0 (0.0)	162 (18.5)
High distress	61 (16.7)	16 (6.3)	5 (3.6)	7 (6.0)	0 (0.0)	89 (10.1)
Not reported	60 (16.4)	18 (7.1)	11 (7.9)	24 (20.5)	1 (50.0)	114 (13.0)
Total	366 (100)	254 (100)	139 (100)	117 (100)	2 (100)	878 (100)
SWASH 2010						
Low distress	124 (53.2)	215 (62.1)	165 (73.0)	114 (74.5)	2 (33.3)	620 (64.3)
Medium distress	55 (23.6)	61 (17.6)	27 (11.9)	14 (9.2)	0 (0.00)	157 (16.3)
High distress	28 (12.0)	29 (8.4)	12 (5.3)	4 (2.6)	0 (0.00)	73 (7.6)
Not reported	26 (11.1)	41 (11.8)	22 (9.7)	21 (13.7)	4 (66.7)	114 (11.8)
Total	233 (100)	346 (100)	226 (100)	153 (100)	6 (100)	964 (100)

Note: Kessler 6 cut off scores were Low = 0-7, Medium = 8-12, High = 13-24.⁽¹⁶⁾

Differences across sexual identity in the reporting of high distress – lowest among lesbian women and highest among bisexual and queer and other women – are partly due to age (Table 43).

Table 43: Kessler 6 measure of psychological health, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Low distress	373 (63.4)	87 (47.3)	49 (50.0)	4 (50.0)	513 (58.4)
Medium distress	96 (16.3)	46 (25.0)	20 (20.4)	0 (0.0)	162 (18.5)
High distress	51 (8.7)	20 (10.9)	18 (18.4)	0 (0.0)	89 (10.1)
Not reported	68 (11.6)	31 (16.9)	11 (11.2)	4 (50.0)	114 (13.0)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Low distress	481 (66.6)	67 (66.4)	67 (54.0)	5 (38.5)	620 (64.3)
Medium distress	103 (14.2)	17 (16.8)	33 (26.6)	4 (30.8)	157 (16.3)
High distress	53 (7.3)	5 (5.0)	15 (12.1)	0 (0)	73 (7.6)
Not reported	89 (12.3)	12 (11.9)	9 (7.3)	4 (30.8)	114 (11.8)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

Note: Kessler 6 cut off scores were Low = 0-7, Medium = 8-12, High = 13-24.⁽¹⁶⁾

We asked women if they had ever accessed counselling or psychological services (Table 44). Half had accessed services in the preceding five years; nearly two thirds had ever accessed services. The increased age of the lesbian women may explain why this group was most likely to have accessed services more than five years ago.

Table 44: Accessing counselling or psychological services

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
No	184 (31.3)	60 (32.6)	26 (26.5)	3 (37.5)	273 (31.1)
Yes, in the past 5 years	281 (47.8)	98 (53.3)	58 (59.2)	3 (37.5)	440 (50.1)
Yes, over 5 years ago	85 (14.5)	13 (7.1)	9 (9.2)	0 (0.0)	107 (12.2)
Not reported	38 (6.5)	13 (7.1)	5 (5.1)	2 (25.0)	58 (6.6)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
No	213 (29.34)	37 (36.6)	29 (23.4)	3 (23.1)	282 (29.3)
Yes, in the past 5 years	359 (49.5)	45 (44.6)	80 (64.5)	3 (23.1)	487 (50.5)
Yes, over 5 years ago	105 (14.5)	10 (9.9)	8 (6.5)	4 (30.8)	127 (13.2)
Not reported	49 (6.8)	9 (8.9)	7 (5.7)	3 (23.1)	68 (7.1)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

We asked women if they had ever been diagnosed with depression, an anxiety disorder or another mental health disorder. A third reported they had received a mental health diagnosis in the preceding five years (Table 45).

Table 45: Diagnosed with anxiety, depression or other mental health disorder

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
No diagnosis	295 (50.2)	78 (42.4)	40 (40.8)	3 (37.5)	416 (47.4)
Yes, in past 5 years	186 (31.6)	77 (41.9)	43 (43.9)	3 (37.5)	309 (35.2)
Yes, over 5 years ago	69 (11.7)	15 (8.2)	9 (9.20)	0 (0.0)	93 (10.6)
Not reported	38 (6.5)	14 (7.6)	6 (6.1)	2 (25.0)	60 (6.8)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
No diagnosis	367 (50.6)	53 (52.5)	56 (45.2)	5 (38.5)	481 (50.0)
Yes, in past 5 years	237 (32.6)	28 (27.7)	48 (38.7)	3 (23.1)	316 (32.8)
Yes, over 5 years ago	67 (9.2)	11 (10.9)	13 (10.5)	2 (15.4)	93 (9.6)
Not reported	55 (7.6)	0 (0.0)	7 (5.6)	3 (23.1)	74 (7.7)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

3.4.4. Screening tests

The WA Department of Health recommends that all women should be screened for precursors of cervical cancer by having Pap smears every two years, including lesbians.⁽¹⁷⁾ Table 46 shows that 39% of the Perth cohorts were overdue for screening: last screened more than three years ago, never had or not sure when last had a Pap smear. This compares with 26% of the Sydney cohort. Over a quarter of women (27%) had never been screened; nearly twice the rate of the Sydney cohort (16%). The relative youth of the Perth sample may explain some of these differences.

Table 46: Timing of last Pap smear test, by experience of sex with men

	Never sex with a man n (%)	Ever sex with a man n (%)	Not reported n (%)	Total n (%)
WWASH 2010				
Less than 3 years ago	159 (46.6)	327 (62.6)	5 (33.3)	491 (55.9)
More than 3 years ago	16 (4.7)	54 (10.3)	0 (0.0)	70 (8.0)
Never	131 (38.4)	105 (20.1)	4 (26.7)	240 (27.3)
Not sure	14 (4.1)	17 (3.3)	1 (6.7)	32 (3.6)
Not reported	21 (6.2)	19 (3.6)	5 (33.3)	45 (5.1)
Total	341 (100)	522 (100)	15 (100)	878 (100)
SWASH 2010				
Less than 3 years ago	226 (60.1)	430 (75.3)	7 (41.2)	663 (68.8)
More than 3 years ago	29 (7.7)	46 (8.1)	0 (0.0)	75 (7.8)
Never	91 (24.2)	61 (10.7)	0 (0.0)	152 (15.8)
Not sure	10 (2.7)	8 (1.4)	0 (0.0)	18 (1.9)
Not reported	20 (5.3)	26 (4.6)	10 (58.8)	56 (5.8)
Total	327 (100)	571 (100)	66 (100)	964 (100)

A total of 380 respondents (43%) had ever had a diagnostic or screening test for a sexually transmitted infection (STI) other than HIV; this is lower than the Sydney cohort (54%; $p < 0.001$) (Table 47). Women who had ever had sex with a man were more likely to have ever had a diagnostic or screening test for an STI (53%) compared to women who had never had sex with a man (29%; $p < 0.001$).

Table 47: Timing of last STI test and diagnosis, by sexual identity

	Lesbian n (%)	Bisexual n (%)	Queer/ Other n (%)	Not reported n (%)	Total n (%)
WWASH 2010					
Never	326 (55.4)	88 (47.8)	32 (32.7)	5 (62.5)	451 (51.4)
Yes, over 6 months ago	149 (25.3)	42 (22.8)	28 (28.6)	2 (25.0)	221 (25.2)
Yes, in the past 6 months	81 (13.8)	44 (23.9)	34 (34.7)	0 (0.0)	159 (18.1)
Not reported	32 (5.4)	10 (5.4)	4 (4.1)	1 (12.5)	47 (5.4)
Total	588 (100)	184 (100)	98 (100)	8 (100)	878 (100)
SWASH 2010					
Never	305 (42.0)	39 (38.6)	34 (27.4)	6 (46.2)	384 (39.8)
Yes, over 6 months ago	277 (38.2)	32 (31.7)	54 (43.6)	5 (38.5)	368 (38.2)
Yes, in the past 6 months	103 (14.2)	23 (22.8)	28 (22.6)	0 (0.0)	154 (16.0)
Not reported	41 (5.7)	7 (6.9)	8 (6.5)	2 (15.4)	58 (6.0)
Total	726 (100)	101 (100)	124 (100)	13 (100)	964 (100)

Eighty women (9%) had ever received an STI diagnosis, this compared to 14% in the Sydney cohort. The most commonly reported STI diagnosis was chlamydia (4%) followed by genital herpes (3%) and genital warts (2%). Table 48 provides further details on the diagnosed STIs.

Table 48: STI diagnosis

	WWASH 2010 n (%)	SWASH 2010 n (%)
Chlamydia	31 (3.5)	30 (3.1)
Genital herpes	23 (2.6)	25 (2.6)
Genital warts	17 (1.9)	35 (3.6)
Bacterial vaginosis	10 (1.4)	27 (2.8)
Gonorrhoea	10 (1.1)	15 (1.6)
Lice/crabs	10 (1.1)	10 (1.0)
HPV	9 (1.0)	22 (2.3)
Hepatitis B	7 (0.8)	6 (0.6)
Syphilis	2 (0.2)	0 (0.00)

Note: Summary table; adds up to more than 100% because respondents could be in more than one category.

Only 30% of women reported ever being tested for HIV, this compares to 43% in Sydney (a drop from 59% in 2006). Of the 266 women who had ever been tested for HIV, 1 reported that they were HIV-positive. More women had been tested for hepatitis C (36%); this was also lower than in the Sydney cohort (45%). It is possible that some women answered 'yes' to this question but did not actually know which of the hepatitis viruses they had been tested for (A, B or C). Indeed it is worth noting that 7% said they were not sure if they had been screened for hepatitis C. Of those who said they had been tested for hepatitis C, 10 women (3%) reported they were positive (compared to 4% in Sydney). Of the 10 women who had hepatitis C, 7 had injected drugs.

3.4.5. Knowledge of STIs

Three knowledge questions about sexually transmissible infections and Pap smears were asked in true/false format (Table 49). While most women knew the correct answers to knowledge questions on Pap smears and the presence of STI symptoms, 17% were unaware that a person experiencing a cold sore outbreak can give their partner genital herpes during oral sex.

Table 49: Answers to STI knowledge questions

		WWASH 2010	SWASH 2010
		n (%)	n (%)
“If a person experiencing a cold sore outbreak has oral sex they can give their partner genital herpes” (F)	Correct	665 (75.7)	736 (76.4)
	Incorrect	146 (16.6)	152 (15.7)
	Not reported	67 (7.7)	76 (7.9)
	Total	878 (100)	964 (100)
“Lesbians do not need Pap smears” (F)	Correct	776 (88.4)	854 (88.6)
	Incorrect	44 (5.0)	40 (4.1)
	Not reported	58 (6.6)	70 (7.3)
	Total	878 (100)	964 (100)
“You can have an STI and not have any symptoms” (T)	Correct	770 (87.7)	841 (87.2)
	Incorrect	45 (5.1)	53 (5.5)
	Not reported	63 (7.2)	70 (7.3)
	Total	878 (100)	964 (100)

3.5. Experiences of violence and abuse

3.5.1. Sexual coercion

We asked women: ‘Since the age of 16, have you ever been forced or frightened into doing something sexually that you did not want to do?’ Two thirds indicated that they had never experienced sexual coercion. Among the women ever coerced since age 16, the majority were coerced by a male (Table 50).

Table 50: Number of respondents who had experienced sexual coercion

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Never	570 (64.9)	640 (66.4)
Yes, by a male only	182 (20.7)	182 (19.0)
Yes, by a female only	54 (6.2)	38 (3.9)
Yes, by both	15 (1.7)	33 (3.4)
Not reported	57 (6.5)	70 (7.3)
Total	878 (100)	964 (100)

3.5.2. Domestic Violence

Over a third of women reported ever experiencing domestic violence (DV), 10 with both male and female partners (Table 51). One hundred and seventy seven women (21%) reported experiencing domestic violence in a relationship with a woman, compared to 29% of women in the Sydney cohort. Over half of women (53%) that reported experiencing domestic violence had sought help. Women experiencing same-sex DV were less likely to have sought help (47%) compared to women experiencing other-sex DV (56%).

Table 51: Number of respondents who experienced domestic violence in a relationship

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Never	522 (59.5)	538 (55.8)
Yes, with a female	177 (20.2)	266 (27.6)
Yes, with a male	119 (13.6)	74 (7.7)
Yes, with both	10 (1.1)	15 (1.6)
Not answer	50 (5.7)	71 (7.4)
Total	878 (100)	964 (100)

3.5.3. Anti-gay and anti-lesbian behaviour

Respondents were asked whether they had experienced any of six specified anti-gay or anti-lesbian acts against them in the preceding 12 months (Table 52). A third of women (35%) had experienced some form of abuse or harassment, the most was verbal abuse or harassment (32%) followed by physical threat or intimidation (11%).

Table 52: Anti-gay or anti-lesbian behaviour experienced in the past 12 months

	WWASH 2010	SWASH 2010
	n (%)	n (%)
Verbal abuse or harassment	279 (31.8)	295 (30.6)
Being pushed or shoved	94 (10.7)	91 (9.4)
Being bashed	35 (4.0)	23 (2.4)
Physical threat or intimidation	99 (11.3)	92 (9.5)
Refusal of service	54 (6.2)	70 (7.3)
Refused employment or promotion	42 (4.8)	41 (4.3)
Any of the above	35.2%	33.8%

Note: Summary table; adds up to more than 100% because respondents could be in more than one category

4. Discussion and conclusions

In 2010 we surveyed 1,842 lesbian, bisexual and queer women engaged with the Perth and Sydney LGBTQ communities. This report provides an unparalleled insight into the health and wellbeing of LBQ women and provides the first comparison of women engaged in two urban LGBTQ communities in Australia. We will consider our findings in light of available national data and consider the implications for those interested in improving the health and wellbeing of this population.

4.1. Tobacco use

Over a third (33%) of LBQ women reported smoking. This is twice the rate (16%) among women in the general population.⁽¹²⁾ A quarter of all LBQ women were daily smokers (the vast majority of smokers in the sample), compared to 14% of women in the general population.⁽¹²⁾ Of particular concern is the rate of smoking among younger women; 43% of 16-24 years old WWASH respondents smoked. The closest comparison provided by the 2010 National Drug Strategy Household Survey is among 20-29 year olds, 22% of whom are smokers.⁽¹²⁾ The Australian Longitudinal Study of Women's Health found a similar level of disparity: 46% of LBQ women aged 22–27 years were smokers, compared to 25% of heterosexual women.⁽¹⁸⁾ These findings that LBQ women are twice as likely to be smoking as women in the general population appear to be a consistent and robust. Despite population-level efforts including wide ranging government initiatives and several hard-hitting campaigns, consistently high rates among this population group call for urgent public health intervention.

- The rate of smoking among LBQ women is twice the rate of women in the general population; this demands urgent public health attention.
- Detailed exploration is required to understand why progressively successful anti-smoking campaigns and programs are not proving successful within this group of women. Targeted interventions to prevent young LBQ taking up smoking may be needed.
- Examination of the role and efficacy of smoking cessation programs for LBQ women is necessary.

4.2. Alcohol use

The vast majority of LBQ women drank alcohol, most doing so frequently. Five times as many LBQ women drank at levels that put them at a *lifetime* risk of alcohol related disease or injury, compared to women in the general population.⁽¹²⁾ This disparity is considerably higher than that reported by the 2010 National Drug Strategy Household Survey (NDSHS).⁽¹²⁾ However, the NDSHS reports its findings by sexuality without a breakdown for gender; we think it more meaningful to compare LBQ women with other women. Compared to the general population of women, a similar proportion of LBQ women drank at levels that put them at risk of alcohol-related injury *on a single drinking occasion*.⁽¹²⁾ However, 2.9 times as

many LBQ women reported drinking at these risky levels daily or weekly, compared to women in the general population.⁽¹²⁾

- LBQ women are at a higher risk of lifetime risk of alcohol related disease or injury than women in the general community, and are more often drinking at levels that put them at risk of alcohol-related injury on a single drinking occasion.
- Further research is needed to understand the social and cultural context of alcohol use among LBQ women; this knowledge can inform targeted interventions.
- Levels of risky drinking among younger LBQ women demonstrate an urgent need for early interventions. Messages about responsible drinking should be integrated into existing programs delivered by LGBTQ community organisations, while LGBTQ community organisations need to consider the role of alcohol sponsorship of community events.
- WWASH only reports on alcohol use; there is an urgent need for research on alcohol-related harms and the utilisation of treatment programs among this group.

4.3. Illicit drug use

Use of illicit drugs was several times higher – use of speed/crystal meth was 10 times higher – among LBQ women than in the general community, and some of this drug use may be problematic.⁽¹²⁾ In the 2010 National Drug Strategy Household Survey, gay people had the highest rate of recent illicit drug use (36%) among all subpopulation groups.⁽¹²⁾ The Australian Longitudinal Survey of Women’s Health found that compared to heterosexual women, LBQ women were more likely to have used marijuana (58% vs. 22%), other illicit drugs (41% vs. 10%) and to have ever injected drugs (11% vs. 1%).⁽¹⁸⁾ A recent international meta-analysis of 18 studies of sexual orientation and adolescent substance use found the odds of substance use by young LBQ women was four times higher than that of heterosexual young women.⁽¹⁹⁾ To contextualise this, the authors note that LBQ women report illicit drugs use at a similar level to that of young heterosexual men. Despite stark evidence that a lesbian, bisexual or queer identity appears predictive of drug use, harm reduction efforts have largely focused on gay men.

- LBQ women are using illicit drugs at rates several times higher than women in the general community, demonstrating an urgent need for interventions targeted to LBQ women.
- Without a sophisticated understanding of the drivers of illicit drug use in LBQ women, and the conditions under which these practices become problematic, interventions are unlikely to succeed.
- Research is needed to understand LBQ women’s utilisation of and satisfaction with drug treatment programs, as well as treatment outcomes.

4.4. Sexual health

Of the 878 women in this report, 67% identified as lesbian. Women aged less than 25 were more likely to regard themselves as bisexual than the older age groups. Sexual attraction roughly corresponded to identity for most women. Exclusive attraction to women was not the majority experience (31%), even among these highly community attached women, the majority of whom (71%) had been sexually active with a woman in the preceding six months. Indeed, over half (60%) of the sample, had had sex with a man at some time in their lives, and 18% had had sex with a man in the preceding six months. This fact is perhaps familiar and unremarkable to LGBTQ community members, but needs to be better understood by health service providers and policy makers, who often assume that all women who have sex with women are lesbians and that all lesbians are attracted only to women and never have sex with men. Sexual attraction, like sexual identity (with which it is highly correlated), is also age-related, with younger women more likely to report attraction to both men and women.

Our findings on unprotected sex echo international research that condom use by LBQ women during sex with men is low.^(7, 10, 11) Close to one in five women had ever had sex with a man they believed to be gay or bisexual, raising the issue of possible exposure to STIs, including HIV, that are more common among gay and bisexual men. A third of women reporting sex with a heterosexual man had often had unprotected sex. We did not ask about unintended pregnancy but Australian research suggests that unplanned pregnancy among younger same-sex attracted women is much higher than among their heterosexual peers,^(20, 21) a disparity echoed by international research.^(22, 23) The nature of LBQ women's sexual relationships with men is not well understood, and high rates of unprotected sex may suggest sex is unplanned and that LBQ women may not have the necessary negotiation skills to protect themselves against STIs in these situations.

- Those designing STI prevention programs need to be aware that a significant proportion of women who do not identify as heterosexual are having sex with men and consider the reach of their programs; LBQ women may not respond to health promotion campaigns directed at assumed heterosexual audiences.
- STI prevention programs need to address skill development among LBQ women to support successful negotiation of safe and satisfying sexual relationships with all sexual partners.

4.5. Prevention-related screening

The proportion of LBQ women in Perth overdue for cervical cancer screening was much higher than the Sydney cohort: 39% vs 26%. Further, 1.7 times as many women in Perth were had *never* been screened compared to Sydney. While the relative youth of the Perth sample may explain some of these differences, these high rates, particularly among a sample where recent sex with a man was more common, are concerning.

Low screening in LBQ women may be due to a belief that lesbian women are at lower risk of cervical cancer,⁽²⁴⁾ a perception that has been reported among Australian healthcare providers.⁽²⁵⁾ This is despite HPV transmission only requiring skin-to-skin contact⁽²⁶⁾ and

Australian research demonstrating that the prevalence of genital warts in women with a sexual history with women is similar to that of exclusively heterosexual women.⁽¹⁰⁾ Health promotion campaigns designed to raise awareness among the LGBTQ community and the professionals caring for their health have been run in other jurisdictions, such as the Cancer Council of Victoria's *Lesbians need Pap smears too*, and our findings suggest an urgent need for something similar in WA.

Under half of the women (43%) in our sample had been tested for an STI other than HIV; this is lower than in Sydney (54%). Given the younger age and higher proportion of bisexual women in the Perth cohort we would have expected more recent screening (< 6 months) than in the Sydney cohort; this was not the case (18% in Perth and 16% in Sydney). Testing for HIV was also lower (30% vs. 43%); this is less surprising as testing for HIV among the Sydney cohort has dropped considerably in recent years (down from 59% in 2006).⁽³⁾ Knowledge about STIs was generally high; however 17% of women did not know that someone with a cold sore can transmit herpes to the genitals through oral sex. Given herpes was the second most commonly reported STI among this sample, education around this issue is called for.

- Efforts to raise awareness of cervical cancer and the need for ALL women to have Pap screening regularly must continue. The message that a history of sex with men is not a prerequisite for a Pap screen is particularly important.
- STI testing campaigns and resources targeting LBQ women about their sexual health, risks and the need for testing are required.
- The need continues for the development of education and capacity building strategies targeting primary healthcare providers that focus on building their understanding of the screenings needs of LBQ women. This must also include information on creating culturally sensitive environments that encourage open dialogue around sexual health and behaviour, including same-sex attracted women's sexual activities with men.

4.6. Health indicators

Levels of overweight and obesity were similar in LBQ women compared to women in the general population,⁽¹⁴⁾ yet no public health campaigns have targeted this population group. There is understandable concern among members of the LGBTQ community about a focus on body weight, and in particular on using normative ideals of body shape. This issue does pose a challenge for our communities: levels of overweight and obesity put women at increased risk of heart and lung disease, joint problems, and diabetes.⁽²⁷⁻³⁰⁾ More broadly, international research suggests that lesbian and bisexual women have an above-average prevalence of known risk factors for breast and gynaecological cancers including having no children or being older at first childbirth, tobacco use, alcohol consumption, and obesity.^(29, 31, 32) Our findings suggest a confluence of a number of risk factors present for LBQ women at rates much higher than for the general community.

- Public health programs on weight, exercise and diet need to target and be accessible to LBQ women, and sensitively engage with LGBTQ communities around the health impacts of these issues.

4.7. Mental Health

There are reasons to be concerned about the mental health of some within this group of women. One in ten women reported high non-specific psychological distress, 50% had accessed mental health services in the preceding five years and 35% had received a mental health diagnosis in the preceding five years. There is consistent and persuasive international evidence that LGBTQ populations experience higher rates of mental health problems and suicidal behaviour than heterosexual people.⁽³³⁻³⁸⁾ A recent review of the international literature concluded that higher rates of depressive symptoms and mental health outcomes are consistently found in LBQ women than in their heterosexual peers.⁽³⁹⁾ This is borne out by the Australian Longitudinal Study of Women's Health: younger LBQ women were significantly more likely to exhibit poorer mental health and exhibited significantly higher levels of self-harm than exclusively heterosexual women (17% vs. 3%).⁽⁴⁰⁾ The Australian *Private Lives* survey found 15% of LBQ women reported that in the preceding two weeks they had felt they would be better off dead, with 80% reporting a history of feeling depressed. In that study, one in three had seen a counsellor or psychiatrist in the previous 5 years, mostly for anxiety or depression.⁽⁴¹⁾

The higher rate of recent access to services and diagnoses may reflect may be due in part to the Australian government's *Better Access* program, which since 2006 has provided intensive, short-term Medicare subsidised mental health services. Although a 2005 national survey of gay and lesbian wellbeing⁽⁴¹⁾ found that 62% of women had accessed counselling or psychological between 2000-2005, suggesting use of these services may always have been high in this population. Regardless of whether access has increased or was always high, these findings demonstrate very clearly a considerable demand for services. We do not know how this demand is being met, or by which professionals. Nor do we know whether women are satisfied with the services they are receiving.

It is both striking and concerning that 42% of bisexual women and 44% of queer and other women reported a recent mental health diagnosis; these are most likely to be the youngest respondents in our sample (almost one in five younger women (17%) reported high levels of non-specific psychological distress). Given the similarity in age, it is not clear why nearly twice as many queer and other identifying women reported high distress compared to bisexual women. They were also more likely to report receiving a recent diagnosis (44%) and accessing services (60%). Taken together with a similar pattern in the Sydney cohort, these findings suggest that there is something important going here apart from age.

- There is a clear need to assist young women who are disproportionately represented in the high rates of drinking, smoking, illicit drug use and mental health distress within this sample. Programs aimed at improving the social and emotional wellbeing of this group, including strategies around 'coming out' and self-acceptance, may well prove important to an eventual decline in rates of behaviours that present a health risk.

- Further investigation is required to understand the utilisation of mental health services in this group of women: Who is providing these services? Are women receiving the services they desire? What are the outcomes of treatment for LBQ women?

4.8. Experiences of abuse and violence

A number of campaigns over recent years have addressed violence and abuse of LGBTQ people; this includes raising awareness of the impact of homophobic harassment. Campaigns such as ACON's *This Is Oz*, are clearly valuable and must continue; it is unacceptable that a third of LBQ women in our sample experienced some type of homophobic abuse – one in ten being physically intimidated – in the preceding year.

The report of SWASH 2006, 2008 and 2010 noted an increasing trend in the proportion of LBQ women reporting domestic violence (DV) in same-sex relationships and cautiously suggested that this may be evidence of the effectiveness of the campaigns on LGBTQ domestic violence.⁽³⁾ That is, campaigns targeting messages to the LGBTQ community on the nature of DV or where to get support may be having a positive effect by providing a language for talking about DV and encourage reporting. The proportion of LBQ women in the Perth cohort reporting DV is similar to the 2006 levels reported in Sydney. Without trend data it is impossible to know if a similar increase in reporting is taking place here. Regardless, that one in five women reported experiencing same-sex DV is a finding that demands a response. There are very few programs for LBQ women on developing and sustaining healthy and respectful relationships.

- Increased capacity is required in the provision of support services around domestic violence (DV) to respond to LBQ women and to understand their crisis and longer term needs. This includes support to report to law enforcement agencies.
- Campaigns that raise awareness of domestic violence in lesbian relationships are still needed.
- Further research is required to better understand the dynamics of lesbian relationships and the contexts of DV in order to inform culturally appropriate and sensitive responses.

4.9. Engaging with LBQ women around health

This study of women in contact with the LGBTQ community showed them to be a fairly well-educated group on average, though not universally—18% had education only to Year 10 (School Certificate) equivalent or less. The majority were in their 20s and 30s and lived in metropolitan Perth. The relative population density of this sample presents an opportunity for targeted engagement strategies in the delivery of health and wellbeing programs.

This was a highly community connected sample – 96% of women had LGBTQ friends and 47% reported feeling mostly or very connected to an LGBTQ community in their everyday lives. While the Perth cohort was as likely to have a lot of LGBTQ friends and to report high community connection, nearly twice as many women (31%) said they rarely or never felt

connected LGBTQ community in their everyday life. LBQ women in Perth were more likely to read the LGBTQ community press than Sydney-based women (who were more likely to read the LBQ women's press), and more likely to attend a gay venue than a lesbian or women's venue; this may be about opportunity (few women's venues, events or street press) or about preference. In this respect then, it appears that the women in the Perth cohort have more integrated connections – in terms of gender. The Sydney cohort is connecting with a more fractured – or diverse, depending on your perspective – community. This presents challenges for health services wishing to engage with this group and underscores the need for tailored solutions. Health promotion relying on women physically congregating at events or venues or reading community street press will look different in Sydney and Perth. Strategies in Perth need to consider that LBQ women's health promotion is most likely to take place in mixed gay spaces. We know little about online engagement among this population and how this contributes to women's sense of community connection or how it may be productive for health promotion.

- We need to know more about the patterns of engagement among LBQ women and with the wider LGBTQ communities. In particular, how is community connection generated and how important is it for health and wellbeing?
- As 'E-health' gains more prominence, it is important to know more about how LBQ women access information online, particularly in regions that do have the population to sustain dedicated physical spaces for LBQ women. This information will improve the future effectiveness of health promotion, prevention messages or early interventions to this group.

4.10. WWASH limitations

WWASH covers a broad range of general health questions and issues of concern to the LGBTQ community. Despite this, we are not collecting information on health issues that affect all women, such as exercise, diet or health service utilisation. Our findings suggest concerning levels of psychological distress among young LBQ women and high numbers of LBQ women accessing psychological services. We do not know about the use of prescribed medication or about markers of psychological distress such as self harm or suicidality. Nor do we collect adequate information on which mental health or physical health services women access or their experiences of these services.

WWASH is a convenience survey rather than a random sample, but recruitment is done in settings not specifically related to the health outcomes under study. People come to Fair Day, where 87% of our respondents were recruited, for social reasons, not because they have health or other problems. This means that the sample is not skewed towards people with high rates of health difficulties or risk factors. On the other hand, a survey of this sort is not likely to include people with same-sex desires about which they are very uneasy or who do not wish to associate with the LGBTQ community or are not drawn to the activities or events on offer during Pride season. The results reflect the features of a generally younger metropolitan community-attached group of LBQ women, rather than a sample of women who have had sexual experiences with women.

4.11. Conclusion

WWASH has highlighted several areas of physical and mental health concern for LBQ women engaged with the LGBTQ community in Perth. The lack of health promotion, prevention and intervention programs that specifically address these health issues for LBQ women is disappointing. The consistent messages from national and community-based research is that the health outcome gains being made in the general population are not being replicated for this group of Australian women; it is time for action.

References

1. McNair R. Lesbian Health inequalities: A cultural minority issue for health professionals. *MJA*. 2003;178:643-5.
2. Department of Health and Ageing. National Women's Health Policy 2010. Canberra: Commonwealth Government of Australia, 2010.
3. Mooney-Somers J, Deacon RM, Price K, Richters J, León de la Barra S, Schneider K, et al. Women in contact with the Sydney gay and lesbian community: Report of the Sydney Women and Sexual Health (SWASH) Survey 2006, 2008, 2010. Sydney: ACON, 2012.
4. Richters J, Song A, Prestage G, Clayton S, Turner R. Health of lesbian, bisexual and queer women in Sydney: The 2004 Sydney women and sexual health survey. Sydney: NCHSR, UNSW, 2005.
5. Australian Bureau of Statistics. 2006 Census Community Profile Series : Western Australia Canberra: Australian Bureau of Statistics, 2008.
6. Australian Bureau of Statistics [ABS]. 6302.0 - Average Weekly Earnings, Australia, Feb 2010. Canberra: Australian Bureau of Statistics, 2010.
7. Mercer CH, Bailey JV, Johnson AM, Erens B, Wellings K, Fenton KA, et al. Women who report having sex with women: British national probability data on prevalence, sexual behaviors, and health outcomes. *Am J Public Health*. 2007;97(6):126-1133.
8. Bailey JV, Farquhar C, Owen C, Whittaker D. Sexual behaviour of lesbians and bisexual women. *Sex Transm Infect*. 2003;79(2):147-50.
9. Marrazzo JM, Koutsky LA, Kiviat N, Kuypers J, Stine K. Papanicolaou test screening and prevalence of genital human papillomavirus among women who have sex with women. *Am J Public Health*. 2001;91(6):947-52.
10. Fethers K, Marks C, Mindel A, Estcourt CS. Sexually transmitted infections and risk behaviours in women who have sex with women. *Sex Transm Infect*. 2000;76(5):345-9.
11. McNair R, Power J, Carr S. Comparing knowledge and perceived risk related to the human papilloma virus among Australian women of diverse sexual orientations. *Aust NZ J Publ Heal*. 2009;33(1):87-93.
12. Australian Institute of Health and Welfare [AIHW]. 2010 National Drug Strategy Household Survey Report. Canberra: Australian Institute of Health and Welfare,, 2011.
13. National Health and Medical Research Council. Australian Guidelines to Reduce Health Risks from Drinking Alcohol. Canberra: National Health and Medical Research Council; 2009 [cited 2011 18 November]; Available from: <http://www.nhmrc.gov.au/guidelines/publications/ds10>.
14. Australian Bureau of Statistics [ABS]. National Health Survey: Summary of Results, 2007-2008 (Reissue) 4364.0. Canberra: Australian Bureau of Statistics, 2009.
15. Furukawa T, Kessler R, Slade T, Andrews G. The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine*. 2003;33(02):357-62.
16. Kessler R, Barker P, Colpe L, Epstein J, Gfroerer J, Hiripi E, et al. Screening for serious mental illness in the general population. *Archives of General Psychiatry*. 2003;60(2):184-9.
17. WA Cervical Cancer Prevention Program. Do I need a Pap smear? n.d. [4 January 2012]; Available from: http://www.health.wa.gov.au/cervical/papsmears/ps_doineed.cfm.
18. Hillier L, De Visser R, Kavanagh AM, McNair R. Letter: The association between licit and illicit drug use and sexuality in young Australian women. *MJA*. 2003;179(6):326-7.
19. Marshal MP, Friedman MS, Stall R, King KM, Miles J, Gold MA, et al. Sexual orientation and adolescent substance use: a meta-analysis and methodological review. *Addiction*. 2008;103(4):546-56.
20. Hillier L, Jones T, Monagle M, Overton N, Gahan L, Blackman J, et al. Writing Themselves In 3: The third national study on the sexual health and wellbeing of same sex attracted and gender questioning young people. Melbourne: ARCSHS, 2010.

21. Hillier L, Turner A, Mitchell A. Writing themselves in again: 6 years on, the 2nd national report on the sexuality, health and well-being of same sex attracted young people in Australia. Melbourne: ARCSHS, 2005.
22. Goodenow C, Szalacha LA, Robin LE, Westheimer K. Dimensions of sexual orientation and HIV-related risk among adolescent females: Evidence from a statewide survey. *Am J Public Health.* 2008;98(6):1004-6.
23. Saewyc E, Pettingell S, Skay C. Teen pregnancy among sexual minority youth during the 1990s: countertrends in a population at risk. *J Adolescent Health.* 2004;34(2):125-6.
24. Hyde Z, Comfort J, McManus A, Brown G, Howat P. Alcohol, tobacco and illicit drug use amongst same-sex attracted women: results from the Western Australian Lesbian and Bisexual Women's Health and Well-Being Survey. *BMC Public Health.* 2009;9(1):317.
25. Brown R. More than just lip service - the report of the lesbian health information project. Melbourne: Royal Women's Hospital, 2000.
26. Marrazzo JM, Koutsky LA, Stine K, Kuypers J, Grubert T, Galloway D, et al. Genital human papillomavirus infection in women who have sex with women. *J Infect Dis.* 1998;178(6):1604-9.
27. Yancey AK, Cochran SD, Corliss HL, Mays VM. Correlates of overweight and obesity among lesbian and bisexual women. *Prev Med.* 2003;36(6):676-83.
28. Saphira M, Glover M. New Zealand National Lesbian Health Survey. *J Gay Lesbian Med Assoc.* 2000;4(2):49-56.
29. Cochran SD, Mays V, Bowen D, Gage S, Bybee D, Roberts S, et al. Cancer-related risk indicators and preventive screening behaviours among lesbian and bisexual women. *Am J Public Health.* 2001;91(4):591-7.
30. Roberts SA, Dibble SL, Nussey B, Casey K. Cardiovascular disease risk in lesbian women. *Women's Health Issues.* 2003;13(4):167-74.
31. Dibble SL, Roberts SA, Nussey B. Comparing breast cancer risk between lesbians and their heterosexual sisters. *Women's Health Issues.* 2004;14(2):60-8.
32. Dibble SL, Roberts S, Robertso P, Paul S. Risk factors for ovarian cancer: lesbian and heterosexual women. *Oncol Nurs Forum.* 2002;29(1):E1-7.
33. Fergusson DM, Horwood J, Rider EM, Beautrais AL. Sexual orientation and mental health in a birth cohort of young adults. *Psychol Med.* 2005;35(7):971-81.
34. Garofalo R, Wolf R, Kessel S, Palfrey J, DeRant R. The associations between health risk behaviors and sexual orientation among a school-based sample of adolescents. *Pediatrics* 1998;101(895-902).
35. Cochran SD, Sullivan J, Mays V. Prevalence of mental disorders, psychological distress, and mental services use among lesbian, gay, and bisexual adults in the United States. *J Consul Clin Psych.* 2003;71:53-61.
36. Skegg K, Nada-Raja S, Dickson N, Paul C, Williams S. Sexual orientation and self-harm in men and women. *Am J Psychiat.* 2003;160:541-6.
37. D'Augelli A, Grossman A. Disclosure of sexual orientation, victimisation, and mental health among lesbian, gay and bisexual older adults. *J Interpers Violence.* 2001;16(10):1094-8.
38. Jorm AF, Korten AE, Rodgers B, Jacomb PA, Christensen H. Sexual orientation and mental health: Results from a community survey of young and middle-aged adults. *Brit J Psychiat.* 2002;180(5):423-7.
39. Corboz J, Dowsett G, Mitchell A, Couch M, Agius P, Pitts M. Feeling queer and blue: A review of the literature on depression and related issues among gay, lesbian, bisexual and other homosexually active people. Melbourne ARCSHS, 2008.
40. McNair R, Kavanagh A, Agius P, Tong B. The mental health statuses of young adult and mid-life non-heterosexual Australian women. *Aust NZ J Publ Heal.* 2005;29(3):265-71.
41. Pitts M, Smith A, Mitchell A, Patel S. Private Lives: A report on the health and wellbeing of GLBTI Australians. Melbourne: ARCSHS, 2006.

Appendix 1: Survey



Women's WA Sexual Health (WWASH) Survey

With thanks to ACON for the survey design

About You

1. What is your age? years
2. Where do you live? Postcode or Suburb/town _____
3. Are you of Aboriginal or Torres Strait Islander origin?
No Yes
4. What is your ethnic or cultural background? e.g. Greek, Vietnamese, Lebanese, Chinese
Anglo-Australian only
Other (please specify) _____
5. Do you think of yourself primarily as:
Lesbian / dyke / homosexual / gay
Bisexual Heterosexual / straight
Queer Other (please specify) _____
6. Which of these six statements best describes you?
I have felt sexually attracted to:
Only to females, never to males
More often to females, and at least once to a male
About equally often to females and to males
More often to males, and at least once to a female
Only to males, never to females
To no one at all
7. Are you transgender or transsexual? No
Yes, identify as female Yes, identify as male
Yes, other (please specify) _____
8. Are you: (Tick all that apply to you) Employed full-time
Employed part-time Unemployed A student
Doing domestic duties Not in the work force
A pensioner or on social security benefits

9. What is your annual income before tax? Nil-\$19,999
\$20,000-\$39,999 \$40,000-\$59,999
\$60,000-\$99,999 \$100,000+

10. What is the highest level of education you have completed? Up to Year 10 / School Certificate
Year 12 / TEE / HSC / Leaving Cert / IB
Tertiary diploma or trade certificate
University or college degree
Postgraduate degree (master's, PhD)

11. Do you have any dependent children?
No Yes If yes, how many? _____

12. Are you planning to have a child in the next 2 years?
No Yes Not sure

If yes, how do you plan to conceive?

- Sexual intercourse with a male partner
IVF, anonymous donor IVF, known donor
Self inseminate, anonymous donor
Self inseminate, known donor

Community

Here, LGBTQ means Lesbian, Gay, Bisexual, Transgender, Queer

13. Do you feel connected to a LGBTQ community in your everyday life?
Very Mostly Somewhat Rarely Not at all
14. How many of your friends are LGBTQ?
None A few Some Most All
15. In the past 6 months have you attended:

	No	Monthly	Weekly	More
Lesbian/queer women's night/bar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gay night/bar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LGBTQ dance party?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LGBTQ group meeting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LGBTQ community event?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LGBTQ sports group?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Do you read: *Cherie* No Yes
LOTL No Yes
Out in Perth No Yes

17. Which GLBTQ websites do you visit most often?

Sex and relationships

18. When was the last time you had sex with a woman?
Never Over 6 months ago Go to question 22
In the past 6 months

19. During the past 6 months, how many women have you had sex with? None One 2-5 women
6-10 women More than 10 women

20. In the past 6 months, which of the following have you done while having sex with a woman?

Fingers / hand on external genitals	No <input type="checkbox"/> Yes <input type="checkbox"/>
Fingers / hand inside vagina	No <input type="checkbox"/> Yes <input type="checkbox"/>
Fingers / hand inside anus	No <input type="checkbox"/> Yes <input type="checkbox"/>
Oral sex (your mouth, her genitals)	No <input type="checkbox"/> Yes <input type="checkbox"/>
Oral sex (her mouth, your genitals)	No <input type="checkbox"/> Yes <input type="checkbox"/>
Rimming (her mouth, your anus)	No <input type="checkbox"/> Yes <input type="checkbox"/>
Rimming (your mouth, her anus)	No <input type="checkbox"/> Yes <input type="checkbox"/>
Sex toy used on external genitals	No <input type="checkbox"/> Yes <input type="checkbox"/>
Sex toy used inside vagina	No <input type="checkbox"/> Yes <input type="checkbox"/>
Sex toy used inside anus	No <input type="checkbox"/> Yes <input type="checkbox"/>

21. In the last 4 weeks, how many times have you had sex with a woman? _____ times

22. In the past 6 months, have you done:
S/M dominance/bondage (no blood) No Yes
S/M dominance/bondage (with blood) No Yes

23. Have you done any sex work? Never
In the past 6 months Over 6 months ago

24. When was the last occasion that you had sex with a gay, homosexual or bisexual man?
Never Over 6 months ago Go to question 26
In the past 6 months

25. In the past 6 months have you had vaginal or anal intercourse with a gay or bisexual man (either regular or casual partner) without a condom?
Never Once Occasionally Often

26. When was the last occasion that you had sex with a straight or heterosexual man?
Never Over 6 months ago Go to question 28
In the past 6 months

27. In the past 6 months have you had vaginal or anal intercourse with a straight or heterosexual man (either regular or casual partner) without a condom?
Never Once Occasionally Often

28. Are you currently in a sexual relationship with a regular partner? No regular relationship
Yes, a woman Yes, a man
Yes, multiple regular partners/polyamorous

If yes, how long has this relationship been?

- Less than 6 months 6-11 months
1-2 years 3-5 years >5 years

29. Have you had casual sex in the past 6 months?
 Yes, with women ₁ Yes, with both ₃
 Yes, with men ₂ No casual partners ₄

30. On any occasion in the past 6 months have you had group sex which included (tick all that apply to you)
 a gay, homosexual or bisexual man? No ₁ Yes ₂
 a straight or heterosexual man? No ₁ Yes ₂
 a woman? No ₁ Yes ₂
 S/M dominance/bondage (no blood) No ₁ Yes ₂
 S/M dominance/bondage (with blood) No ₁ Yes ₂

Your health

31. Do you have a regular GP? No ₁ I see the same GP ₂
 I attend the same health centre/practice ₃
32. Are you out to your GP about your sexuality/gender identity? No ₁ Yes ₂
33. In general, would you say your health is
 Poor ₁ Fair ₂ Good ₃ Very good ₄ Excellent ₅
34. How tall are you without shoes?
 (If you are not sure, estimate) _____ cms
35. How much do you weigh without clothes or shoes?
 (If you are not sure, estimate) _____ kgs
36. Have you ever been diagnosed with cancer? No
 Yes – Breast Skin Lung Cervical
 Other cancer (please specify) _____
37. When did you have your last Pap smear test?
 Less than 2 years ago ₁ More than 5 years ago ₄
 2-3 years ago ₂ Never ₃
 3-5 years ago ₃ Not sure ₅
38. Have you ever had a test for a sexually transmitted infection (not HIV)?
 No ₁ Over 6 months ago ₂ In the past 6 months ₃
39. Have you ever been diagnosed with an STI?
 No ₁ Yes ₂
 If yes, tick all that apply to you
 Gonorrhoea ₁ Chlamydia ₂ Lice/crabs ₃
 Hepatitis B ₄ Syphilis ₅ Genital herpes ₆
 Genital warts ₇ Bacterial vaginosis ₈ HPV ₉
 Other ₁₀ (please specify) _____

40. Have you ever had an HIV antibody test?
 No ₁ Yes ₂ Don't know ₃
 If yes, what was the result of your last HIV test?
 Positive (you have HIV) ₁ Negative ₂ Not sure ₃

41. Have you ever been tested for hepatitis C?
 No ₁ Yes ₂ Don't know ₃
 If yes, are you?
 Positive (you have hep C) ₁ Negative ₂ Not sure ₃

Smoking, drinking and drug use

42. Do you currently smoke cigarettes or other tobacco?
 Yes, daily ₁ Yes, more than weekly (not daily) ₂
 Yes, less than weekly ₃ No, ex-smoker ₄
 Never smoked/less than 100 in lifetime ₅
43. On a day when you smoke, how many cigarettes do you usually have? (please specify number) _____
44. How often do you normally drink alcohol?
 Never, I don't drink ₁ Less often than weekly ₂
 1 or 2 days a week ₃ 3 or 4 days a week ₄
 5 or 6 days a week ₅ Every day ₆
45. On a day when you drink alcohol, how many standard drinks do you usually have? (1 drink = a small glass of wine, a middy of beer or a nip of spirits)
 1-2 drinks ₁ 3-4 drinks ₂ 5-8 drinks ₃
 9-12 drinks ₄ 13-20 drinks ₅ 20+ drinks ₆
46. In the past 6 months, how often have you drunk 5 or more drinks on one occasion?
 Never ₁ Once or twice ₂
 About once a month ₃ About once a week ₄
 More than once a week ₅ Every day ₆
47. How often have you used these drugs in the last 6 mths?

	Never	1-5 times	6-10 times	11-20 times	More than 20 times
Benzos / Valium	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Amyl / poppers	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Marijuana	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Viagra, Cialis etc.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Ecstasy	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Speed	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Cocaine	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Crystal meth	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
LSD / trips	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
GHB	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Ketamine	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Heroin	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Steroids	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
Any other drug	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

48. Have you ever injected drugs? Never ₁
 Over 6 months ago ₂ In the past 6 months ₃
49. How often have you injected drugs in the past 6 months?
 Weekly+ ₁ 6-10 times ₂ 1-5 times ₃ Never ₄

Psychological health and wellbeing

50. During the past 4 weeks, how much of the time did you feel:
- | | All of the time | Most of the time | Some of the time | A little of the time | None of the time |
|------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| So sad nothing could cheer you up? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| Nervous? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| Restless or fidgety? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| Hopeless? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| That everything was an effort? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| Worthless? | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

51. Have you ever accessed a counsellor or psychiatrist?
 No ₁ Yes, in past 5 yrs ₂ Yes, over 5 yrs ago ₃
52. Have you ever been diagnosed with depression, anxiety disorder or other mental health disorder?
 No ₁ Yes, in past 5 yrs ₂ Yes, over 5 yrs ago ₃

Violence

53. In the last 12 months, have you experienced any of the following anti-lesbian, gay, bi or trans behaviour?
 Verbal abuse or harassment No ₁ Yes ₂
 Being pushed or shoved No ₁ Yes ₂
 Being bashed No ₁ Yes ₂
 Physical threat or intimidation No ₁ Yes ₂
 Refusal of service No ₁ Yes ₂
 Refused employment or promotion No ₁ Yes ₂
54. Have you ever been in a relationship where your partner abused you (physically or emotionally)?
 Never ₁ Yes, with a man ₂ Yes, with a woman ₃
 If yes, did you talk to someone else about it or seek help?
 No ₁ Yes ₂
55. Since the age of 16, have you been forced or frightened into doing something sexually that you didn't want to do?
 No ₁ Yes, by a female ₂ Yes, by a male ₃

Finally, please indicate whether you consider the following statements to be true or false.

56. If a person experiencing a cold sore outbreak has oral sex they can give their partner genital herpes.
 True ₁ False ₂
57. You can have an STI and not have any symptoms.
 True ₁ False ₂
58. Lesbians do not need Pap smears. True ₁ False ₂

Thank you for taking the time to complete this survey.



Western Australian Centre for Health Promotion Research
School of Public Health | Faculty of Health Sciences
PO Box U 1987 | Bentley | Western Australia | 6845
www.wachpr.curtin.edu.au
Curtin University

An international leader shaping the future through our graduates and research, and positioned among the top 20 universities in Asia by

2020