

# Do women use dental dams? Safer sex practices of lesbians and other women who have sex with women

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**Abstract.** Dental dams are distributed and promoted in some safer sex campaigns for use in oral sex. However, whether and how often dams are used for sex between Australian women remains unknown. We investigated the use of dental dams for sex by lesbians and other women who have sex with women, and the relationship between dam use and sexual risk for this group. In 2004, a self-completion questionnaire was distributed to women attending the Sydney Gay and Lesbian Mardi Gras Fair Day and lesbian community venues and health services in Sydney ( $n = 543$ ). Among the 330 women who had had oral sex with a woman in the previous 6 months, 9.7% had used a dental dam and 2.1% had used one 'often'. There was little evidence of dam use for prevention of sexually transmissible infections. Although women who practised rimming (oral–anal contact) or had fetish sex involving blood were more likely to have used a dam, dam use was not significantly more common among women who had more partners, or had casual or group sex. Some women avoided oral sex during menstruation or had oral sex with a tampon in place. Latex gloves and condoms were used by more women and more often than dams.

**Additional keywords:** cunnilingus, HIV prevention, lesbians, rubber dams, STI prevention.

## Introduction

Dental dams are 'sheets of latex rubber punched and placed over the teeth during dental procedures to isolate the field of operation from the rest of the oral cavity'.<sup>1</sup> Without holes punched in them, they can also act as a barrier between the vulva and the mouth for cunnilingus or between the anus and the mouth for rimming (oral–anal contact). Since the 1980s, dental dams have been made available in some developed countries as part of efforts for the prevention of sexually transmissible infections (STIs) including HIV in sex between women. They are included in the advice on safer sex equipment given by the AIDS Council of New South Wales (ACON).<sup>2</sup>

Very few studies have reported use of barrier methods by women who have sex with women. A UK survey of 1218 lesbians and bisexual women (803 from clinic samples) reported that 97% had had oral sex with a woman.<sup>3</sup> A subset of 328 women were asked about safer sex in the previous 10 years; 14% had ever used dental dams, and only 1% always used them. In a US study interviewing 563 women in 1994 in lesbian/bisexual social settings, 14% reported consistent use of latex barriers during sex with women; this may have included gloves and condoms as well as dental dams.<sup>4</sup>

In order to address the question whether women use dams to have safer sex, we added an item on dental dam use to a survey of women in contact with Sydney's gay and lesbian community in

2004.<sup>5</sup> We investigated whether there was evidence of women using dams for sex and, if so, which women – were they those with higher numbers of partners or involvement in group or fetish sex, or HIV-positive women? We also looked at whether women appeared to be avoiding blood in oral sex with other women, whether by avoiding cunnilingus during menstruation, or by practising it only with a tampon or a dental dam in place to have safer sex.

## Method and sample

The ACON survey of women in contact with the gay and lesbian community has been conducted every 2 years since 1996.<sup>6</sup> The two-page self-completion questionnaire includes questions on lesbian, gay, bisexual and transgender (LGBT) community attachment, demographics, HIV risks, sexual practice with men and women, other health risks such as smoking and illicit drug use, and protective behaviours such as Pap smears. See the Appendix for the questions used in this analysis.

In early 2004, the questionnaire was distributed to women attending the Sydney Gay and Lesbian Mardi Gras Fair Day (486 respondents) and at several other lesbian community venues and health services (57 respondents). Questionnaires were offered to anyone identifying herself as a woman who was willing to respond. For practical reasons, refusal rates could not be calculated. Fair Day is an open-air event and women who

wished to avoid being surveyed could avoid the women carrying clipboards.

Results were entered from the coded questionnaires and analysed using SPSS Version 16.0 (SPSS, Chicago, IL, USA). No imputations for item non-response were made, i.e. percentages reported are proportions of all women responding to the survey. The relative risk of dental dam usage in different behavioural groups was calculated with associated 95% confidence intervals and therefore estimates a ratio of prevalences. Use of dental dams by respondents who had not had sex with a woman in the previous 6 months was not examined.

Ethics approval was given by the University of New South Wales Human Research Ethics Committee for 2003–2008, approval number HREC 03301.

## Results

A total of 543 women responded to the survey. A majority (65%) identified themselves as lesbian, dyke, homosexual or gay; 11% as bisexual and 19% as heterosexual. They were aged from 16 to 64, with a median of 33 years. Most (68%) were Anglo-Australian, with 23% having other ethnic or cultural background (European, Asian, etc.) and 2% indigenous Australian. A majority (62%) were employed full-time, 69% had post-school qualifications (certificate, diploma or university degree) and 69% lived in Sydney. As in earlier years, almost all had a high degree of involvement in the LGBT community (see report<sup>5</sup> for details of measures used).

### *Dam use and sexual practices with women*

Of the total sample, 346 had had sex with a woman in the 6 months before completing the survey. None of these women identified as heterosexual. Table 1 shows the number who had used a dental dam, using all 346 women as the denominator,

**Table 1. Dental dam use in sex with women in the previous 6 months by sexual practice**

Used dental dam	Any sex		Oral sex		Rimming	
	No.	%	No.	%	No.	%
Never	301	87.0	286	86.7	54	77.1
Once	25	7.2	25	7.6	8	11.4
Often	8	2.3	7	2.1	4	5.7
No answer	12	3.5	12	3.6	4	5.7
Total	346	100.0	330	100.0	70	100.0

those who had had oral sex and those who had had oral–anal contact with a woman in that period. Women who practised rimming (either given or received) were more likely to have used a dam than those who did not (relative risk (RR)=2.6, 95% confidence interval (CI)=1.3–5.0,  $P=0.005$ ).

### *Number of partners and involvement in casual sex*

Dental dam use was not significantly more common among those who had two or more female partners than among those who had only one partner (RR=1.5, CI=0.7–3.0,  $P=0.3$ ). After questions about a ‘sexual relationship with a regular partner’, respondents were asked about casual sex. Women who reported having casual sex were not more likely to have used dams (RR=1.5, CI=0.8–2.9,  $P=0.3$ ) (Table 2).

### *Group sex*

Thirty-eight women (7.0% of the total sample) had been involved in group sex, of whom 26 were among those who had had sex with a woman (Table 2); four of them had used a dam. Women who had engaged in any group sex were not significantly more likely to use dental dams (RR=1.64, CI=0.6–4.5,  $P=0.33$ ).

**Table 2. Dental dam use, number of women partners, casual sex and group sex among women who had had sex with a woman in the previous 6 months**

	Dental dam use	No dental dam use	No response	Total
<b>Number of women partners</b>				
One partner	23	234	9	266
Two or more partners	10	66	2	78
No response	0	1	1	2
Total	33	301	12	346
<b>Casual sex</b>				
No casual sex partners	21	219	7	247
Casual sex with women	8	59	4	71
Casual sex with men	0	3	0	3
Casual sex with both men and women	4	19	0	23
No response	0	1	1	2
Total	33	301	12	346
<b>Group sex</b>				
Had any group sex	4	22	0	26
with gay/homosexual/bisexual man	2	4	0	6
with straight/heterosexual man	2	10	0	12
with a woman	2	20	0	22
Had no group sex	27	258	8	293
No response/incomplete answer	2	21	4	27
Total	33	301	12	346

**Table 3. Women's practice of oral sex during menstruation among those who had had sex with a woman in the previous 6 months**

	Gave oral sex to menstruating woman		Received oral sex while menstruating	
	No.	%	No.	%
Yes	133	38.4	130	37.6
Yes, but always with a dam	0	0.0	0	0.0
Yes, but always with a tampon	50	14.5	51	14.7
No	162	46.8	164	47.4
Not answered	1	0.3	1	0.3
Total	346	100.0	346	100.0

### *Blood avoidance during oral sex*

We asked whether respondents had given oral sex to a woman while she was menstruating or received oral sex while menstruating themselves (Table 3).

Of the 11 women in the survey who had hepatitis C, six did not receive oral sex when menstruating and three did; none of the three used a tampon or dam when they were receiving oral sex during menstruation. One woman did not answer the question and one did not have oral sex.

### *Other sex involving blood*

Respondents were also asked whether they had had any other form of sex involving blood: 48 (8.8% of the total sample) had done so. Of the 346 women who had recently had sex with a woman, 40 had had sex involving blood and nine of them were among the group who had used a dam. Women who had had sex involving blood were significantly more likely to have used a dental dam than women who had not (CI = 1.5–5.9,  $P = 0.002$ ).

### *HIV-positive women*

A question of relevance for HIV prevention programs is whether any of the women deliberately used dental dams for HIV prevention in situations of known risk, i.e. women who knew that they or their partners were HIV-positive. However, we had no data on the serostatus of female partners. Only two of the 543 respondents were HIV-positive and neither of them had had sex with a woman in the previous 6 months.

### *Use of other protective equipment*

Of the 346 women who had had sex with another woman in the previous 6 months, 287 (82.9%) women had never used a glove during sex with a woman, while 17 (4.9%) had done so once and 29 (8.4%) had done so often. Similarly, the majority (275; 79.5%) had never used a condom during sex with a woman, while 13 (3.8%) had done so once and 48 (13.9%) often.

## **Discussion**

This survey of women in contact with the gay and lesbian community is based on a convenience sample, but the great majority of the respondents – people attending Fair Day – are more typical of the LGBT community in general than are patients of clinics or members of special groups and programs. Respondents tended to be from an English-

speaking background and to have higher levels of education than women in general, but in this respect, they resemble women with same-sex experience in the representative sample survey of Australian households done in 2001–2002.<sup>7</sup> As the survey was held at an event where ACON was prominent, it is likely that awareness of STI risks and availability of barriers for use in sex between women was as high in this group as would be found anywhere in Australia. Issues around risk of HIV and other STIs for women who have sex with women, and whether dental dams would be protective in oral sex if they were used, are discussed elsewhere.<sup>8</sup>

## **Conclusions**

Although oral sex is a majority practice among women who have sex with other women in Sydney (as in other studies in Australia<sup>7,9</sup> and, for example, in the UK<sup>10</sup> and the USA<sup>11</sup>), it appears that dental dams are hardly ever used. Most of the minority of women who had used dams had done so only once. Gloves and condoms were used by more women than dams, although again only by a minority. Further, women who used gloves and/or condoms were much more likely to use them often rather than to just try them once. Although the questionnaire did not request details, gloves were presumably used for insertion of the hand or fist into the vagina or rectum ('fisting'), and condoms for sex toys such as dildos or vibrators, and possibly also for fisting.

Although about 15% of women appeared to avoid blood when having oral sex during menstruation, they did so by means of tampons, not dental dams. This may sometimes be because the tampon is already in place when sex starts rather than a deliberate policy of blood avoidance for disease prevention.

There is no evidence for women using dams out of a rational perception of their STI risk because they had multiple partners, or casual or group sex. Other motivations for the use of barriers such as dams, apart from concern for risk of HIV, other STIs or hepatitis C, are beyond the purview of this study.

Women who had practised rimming (oral–anal contact) and women who had had sex involving blood (e.g. cutting, piercing, whipping or fisting) were more likely to have used a dental dam. We cannot tell whether the dams were used during these practices, or whether women involved in more adventurous sex and/or the bondage, discipline and sadomasochism scene were more aware of infection risk and thus more inclined to use or at least try out a dental dam for oral sex.

## Conflict of interests

None declared.

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## Appendix

### Questionnaire items ascertaining sexual and protective practices

*When was the last occasion that you had sex with a woman?*

- Never   
 Over 6 months ago   
 In the past 6 months

*During the past 6 months, how many women have you had sex with?*

- None  6–10 women   
 One  More than 10 women   
 2–5 women

*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"/> |

*In the past 6 months, while having sex with a woman, have you used —*

- |               |                                |                               |                                |
|---------------|--------------------------------|-------------------------------|--------------------------------|
| A dental dam? | Never <input type="checkbox"/> | Once <input type="checkbox"/> | Often <input type="checkbox"/> |
| A glove?      | Never <input type="checkbox"/> | Once <input type="checkbox"/> | Often <input type="checkbox"/> |
| A condom?     | Never <input type="checkbox"/> | Once <input type="checkbox"/> | Often <input type="checkbox"/> |

*In the past 6 months, have you had sex with a woman who was menstruating at the time?*

- Yes  Yes, but always with a dam   
 Yes, but always with a tampon  No

*In the past 6 months, have you had sex with a woman when you were menstruating at the time?*

- Yes  Yes, but always with a dam   
 Yes, but always with a tampon  No

*In the past 6 months, have you had any other form of sex in which blood was involved (such as cutting, piercing, whipping, fisting)?*

- Yes  No

*Have you had casual sex in the past 6 months?*

- Yes – with women  Yes – with both   
 Yes – with men  No casual partners

*On any occasion in the past 6 months did you have group sex which included:*

- A gay, homosexual or bisexual man? No  Yes   
 A straight or heterosexual man? No  Yes   
 A woman? No  Yes