

The need to know: HIV status disclosure expectations and practices among non-HIV-positive gay and bisexual men in Australia

Dean A. Murphy^{a,b*} , John B.F. de Wit^{a,c} , Simon Donohoe^d and Philippe C.G Adam^a

^aCentre for Social Research in Health, UNSW, Sydney, Australia; ^bNational Drug Research Institute, Curtin University, Melbourne, Australia; ^cDepartment of Social and Organizational Psychology, Utrecht University, Utrecht, The Netherlands; ^dAustralian Federation of AIDS Organisations, Sydney, Australia

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Although there is evidence of increasing overall rates of HIV status disclosure among gay and bisexual men, little is known about men's disclosure expectations and practices. In this study, we investigate the importance non-HIVpositive men in Australia vest in knowing the HIV status of their sexual partners, and the extent to which they restrict sex to partners of the same HIV status, and their HIV disclosure expectations. Data were collected through a national, online self-report survey. Of the 1044 men included in the study, 914 were HIV negative and 130 were untested. Participants completed the assessment of socio-demographic characteristics, HIV status preferences, and disclosure expectations and practices. Participants also completed reliable multi-item measures of perceived risk of HIV transmission, expressed HIV-related stigma, and engagement with the gay community and the community of people living with HIV. A quarter (25.9%) of participants wanted to know the HIV status of all sexual partners, and one-third (37.2%) restricted sex to partners of similar HIV status. Three quarters (76.3%) expected HIV-positive partners to disclosure their HIV status before sex, compared to 41.6% who expected HIV-negative men to disclose their HIV status. Less than half (41.7%) of participants reported that they consistently disclosed their HIV status to sexual partners. Multivariate linear regression analysis identified various covariates of disclosure expectations and practices, in particular of disclosure expectations regarding HIV-positive men. Men who expected HIV-positive partners to disclose their HIV status before sex more often lived outside capital cities, were less educated, were less likely to identify as gay, perceived more risk of HIV transmission from a range of sexual practices, were less engaged with the community of people living with HIV, and expressed more stigma towards HIV-positive people. These findings suggest that an HIV-status divide is emerging or already exists among gay men in Australia. HIV-negative and untested men who are most likely to sexually exclude HIV-positive men are less connected to the HIV epidemic and less educated about HIV risk and prevention.

Keywords: HIV status disclosure; expectations; gay men; risk perception; stigma

Background

Disclosure of HIV status between casual partners has become increasingly common among both HIV-positive and HIV-negative gay men in Australia (Holt et al., 2013; de Wit, Mao, Adam, & Treloar, 2014). This overall increase appears to reflect the importance of HIV status disclosure for gay men in managing transmission risk in casual sex contexts, in particular through the use of non-condom risk-reduction strategies. Non-condom risk-reduction strategies. Non-condom risk-reduction strategies are most commonly reported by HIV-positive gay men (Elford, 2006; Holt et al., 2013; van Kesteren, Hospers, & Kok, 2007; Mao et al., 2011; Zablotska, Crawford et al., 2009), but are also increasingly being adopted by HIV-negative gay men (Holt et al., 2011; Zablotska, Crawford et al., 2009). However,

trends in disclosure of HIV status may not be driven simply by the increasing popularity of sero-adaptive strategies such as serosorting, but may also be related to the disclosure expectations and serostatus preferences of gay men.

Recent findings from repeat cross-sectional surveys of gay men in Australia show that around one-fifth of HIV-positive men who have condomless sex with casual partners *always* disclose their serostatus, and this indicates a dramatic increase over the past 10 years (Holt et al., 2013; de Wit et al., 2014). A review of studies from the USA noted that the proportion of HIV-positive men who *always* disclosed to sex partners ranged from 25% to 58% in different studies (Sullivan, 2005). Several studies have reported that among HIV-positive men the likelihood of disclosing serostatus to all sex partners was associated with

^{*}Corresponding author. Email: d.murphy@unsw.edu.au

the number of partners overall, and that men who had more sex partners were less likely to disclose their serostatus to all partners (Rosser et al., 2008; Sullivan, 2005). Among HIV-negative men, only 7.5% who had condomless sex disclose their HIV status to all sexual partners, although notably this proportion has also increased significantly over the past 10 years (de Wit at al., 2014). Even though the proportion of HIV-negative men who disclose their status to all partners is relatively low, in an earlier national survey of gay and bisexual men in Australia, disclosure to the most recent casual sex partner was reported by half (54%) of HIV-negative men (Holt, Rawstorne et al., 2011). Disclosing to this most recent casual partner was associated with previously having had sex with the partner, having sex in a private home (rather than a sex venue), having a lower number of sex partners overall, living in a capital city and having a higher expectation that HIV-negative men should disclose their status before sex.

The focus of most studies has been disclosure practices, which have provided findings on the proportion of men who know the serostatus of their sex partners. However, to date, there has been little research examining expectations of HIV status disclosure among gay men. One survey of HIV-negative gay and bisexual men in Australia in 2000 found that 79.3% of participants expected HIV-positive men to disclose their HIV status prior to having sex (van de Ven, Rawstorne, Crawford, & Kippax, 2001). In a similar study conducted 10 years later, Holt et al. (2011) found that HIV-negative men strongly agreed that HIV-positive men should disclose their HIV status before sex. These same men had much lower expectations that HIV-negative men should disclose their status.

Other research has investigated factors associated with HIV-positive men's disclosure to sexual partners. Historically, HIV-positive men have viewed the gay community as a supportive environment in which to disclose their status (Dodds, 2006; Dodds et al., 2004). There is however increasing evidence that sexual encounters in particular are hazardous contexts for HIV-positive men to disclose (Rutledge, 2009; Sheon & Crosby, 2004). Barriers to disclosure reported by HIV-positive men include anticipated rejection, confidentiality, missed sexual opportunities, partner's HIV status, partner type, the environment in which sex took place, and issues of responsibility regarding disclosure and transmission (Driskell, Salomon, Mayer, Capistrant, & Safren, 2008; Flowers, Duncan, & Frankis, 2000). HIV-positive men may also be acutely aware that many HIV-negative gay men prefer sex with HIV-negative partners. The study conducted in Australia in 2000 that we already referred to, found that 83.3% of HIV-negative men sometimes or always avoided having sex with HIV-positive partners (Van de Ven, et al., 2001). A more recent study of gay and bisexual men in Germany found that a similar proportion (three quarters) of HIV-negative and untested men placed importance on all their sexual partners being HIV negative (Drewes, Kraschl, Langer, & Kleiber, 2010). These findings indicate an environment that is not conducive to disclosure of an HIV-positive status, and also suggest a remarkable stability in these attitudes over time.

The HIV status disclosure expectations and practices of HIV-negative gay and bisexual men may be intended to reduce their risk of HIV infection and likely reflects their perceptions of HIV risk from sexual contact. However, little research has been conducted in recent times on perceived risk of HIV transmission among gay and bisexual men and how this may influence HIV status disclosure. Earlier work found differences between gay and bisexual men in the degree to which they attributed HIV risk to contested behaviors such as oral sex (Kalichman, Roffman, Picciano, & Bolan, 1998; Wolitski & Branson, 2002). Other research on HIV risk perceptions has focused on reduced concerns about HIV among gay and bisexual men in the context of effective antiretroviral treatment (International Collaboration on HIV Optimism, 2003). Among HIV-negative men, lower concerns about becoming infected with HIV were found to be associated with an increased likelihood of reporting condomless sex (Ostrow et al., 2002).

Rather than only being part of specific strategies to reduce the risk of HIV through limiting condomless sex to partners they believe share the same HIV status (i.e., serosorting), some disclosure expectations and practices may be part of a strategy to avoid HIV-positive men as sex partners altogether. Previous research has described how HIV testing, through a process of "othering", contributes to the social exclusion of known or assumed HIV-positive men (Flowers et al., 2000; Flowers, 2001). Studies from the USA and UK have found that HIV-positive gay men experience substantial HIVrelated stigma and perceive an increasing sexual division within the gay community along the lines of HIV status (Courtenay-Quirk, Wolitski, Parsons, & Gomez, 2006; Dodds, 2006). Bird and Voisin (2011) propose that HIV-related stigma exerts a primary influence on HIV status disclosure by HIV-positive gay men. Our own research among gay men in Australia found moderate levels of HIV-related exclusion of HIV-positive men as sexual and romantic partners (de Wit, Murphy, Adam, & Donohoe, 2013).

This study examines HIV status preferences and disclosure expectations and practices among gay and bisexual men in Australia who are HIV-negative, untested or HIV status unknown. The study in particular investigates how important it is to these non-HIV-positive men to know the HIV status of their sex partners, the extent to which they restrict having sex to partners who have the same HIV status as themselves, the extent to which they expect HIV-positive and HIV-negative partners to disclose their HIV status before sex, and the extent to which they self-disclose their HIV status. We also examine associations of HIV status disclosure expectations and self-disclosure with participants' socio-demographic characteristics, their perceived risk of HIV transmission from having sex with an HIV-positive partner and the extent to which they express stigma towards HIV-positive men. In addition, we assess associations of HIV status disclosure expectations and practices with the extent to which men engage with the gay community and the community of people living with HIV (PLHIV). Such engagement may shape and reflect the extent to which these men are educated about HIV and are comfortable around HIV-positive people.

Methods

Procedures

Data for this study were collected through an anonymous, cross-sectional online survey. The self-report study questionnaire was hosted on the website of the Australian Federation of AIDS Organisations (www. afao.org.au). Participants were recruited through a gay chat site, a gay social networking site, *Facebook* and gay community, and HIV organizations. Eligibility criteria included being 18 years of age, living in Australia at the time of being surveyed and being either a person living with HIV, or a gay man (or a man who has sex with men) who was HIV negative or untested for HIV. The study protocol was approved by the UNSW Human Research Ethics Committee.

Participants

Participants were recruited between 1 December 2009 and 31 January 2010. During this period, the dedicated survey website was accessed 1855 times and 1694 people proceeded to the study questionnaire, of whom 1680 (99.2%) provided informed consent. A total of 1258 men met the eligibility criteria and completed the self-report questionnaire. The presented analysis includes only the 1044 men who self-reported as HIV negative, untested or of unknown HIV status. Of these men, 914 were HIV negative and 130 indicated that they were either untested for HIV or did not know their HIV status. Socio-demographic characteristics of participants are presented in Table 1.

The mean age of participants was 36.7 years (range 18-70 years). The majority of participants (78.8%) had been born in Australia and a small proportion (3.2%) reported that they had an Aboriginal or Torres Strait Islander background. Participants lived across all Australian states and territories, with over 80% reporting that they lived in one of the three most populous states: New South Wales (40%), Victoria (21.5%), or Queensland (20.5%). Two-thirds of participants (67%) lived in the capital city of their state. Half of the men (52.1%) had completed a university degree. Most men (87.5%) described themselves as gay, and 9.8% described themselves as bisexual. Almost all participants (95%) reported having had at least one male sex partner in the previous year. Among men who had any male sex partners, the mean number of partners in the previous year was 18.4 (range 1–500).

Measures

The importance of knowing the serostatus of all sexual partners was measured using the item: "I only have sex with someone whose HIV status I know". The extent to which men restrict sex to partners who share the same (or similar) serostatus was also measured with one item: "I only have sex with someone whose HIV status is similar to mine". Expectations of HIV status disclosure prior to sex were assessed separately for HIV-positive and HIV-negative partners, each with one item: "I'd expect an HIV-positive man to tell me he was HIV positive before we had sex", and "I'd expect an HIV-negative man to tell me he was HIV negative before we had sex". Self-disclosure of men's own serostatus to sexual partners was measured with one item: "I always tell my sex partner what my HIV status is before we have sex".

Perceived risk of HIV transmission risk from having sex with an HIV-positive partner was assessed for 21 sexual practices, ranging from deep kissing to condomless receptive anal intercourse with ejaculation (de Wit et al., 2013). The viral load of the HIV-positive partner was assumed to be unknown and responses were given on a 5-point scale (1 = no risk; 5 = very risky). Internal consistency of the items was very good (Cronbach's alpha = .93). A mean score was calculated across items, with a higher score indicating greater perceived transmission risk from sex with an HIV-positive partner of unknown viral load.

Expressed HIV-related stigma was assessed with a 22-item scale developed by de Wit at al. (2013) assessing stigma-related thoughts (e.g., blaming), feelings (e.g., disgust), and actions (e.g., keeping a physical distance). Items were mostly derived from existing research and scales (Berger, Estwing Ferrans, &

Table 1. Socio-demographic characteristics of participants.

		Mean (SD)	N	%
Age		36.7 (11.48)		
Country of birth	Australia		823	78.8
•	Other		221	21.2
Aboriginal background	Yes		33	3.2
	No		1011	96.8
State	Australian Capital Territory		35	3.4
	New South Wales		418	40.0
	Northern Territory		17	1.6
	Queensland		214	20.5
	South Australia		58	5.6
	Tasmania		32	3.1
	Victoria		221	21.2
	Western Australia		49	4.7
Place of residence	Capital city		700	67.0
	Regional city		189	18.1
	Other city/town		111	10.6
	Rural/remote		44	4.2
Education	Not completed high school		74	7.1
	High school		157	15.0
	Diploma/trade certificate		246	23.6
	University degree		544	52.1
	Other		23	2.2
Sexual identity	Gay		914	87.5
·	Bisexual		102	9.8
	Queer		16	1.5
	Other		12	1.1
Any male sex partners in the past year	Yes		992	95.0
	No		52	5.0
Number of male sex partners in the past year		18.4 (32.54)		

Lashley, 2001; Genberg et al., 2008; Herek, Capitanio, & Widaman, 2002; Holzemer et al., 2007; Kalichman et al., 2005, 2009; Stutterheim et al., 2011; Visser, Kershaw, Makin, & Forsyth, 2008). Responses were given on a 5-point scale (1 = not at all; 5 = always). Internal consistency of the 22-item scale was very good (Cronbach's alpha = .91), and a mean score was calculated across all items to reflect HIV-related stigma, with higher scores indicating more stigma.

Engagement with the gay community and engagement with the community of PLHIV were each assessed with three mirrored items derived from previous research (e.g., Rawstorne et al., 2005; Zablotska, Holt, & Prestage, 2012): "How many of your friends are [gay men/HIV positive]?", "How much of your free time do you spend with [gay men/HIV-positive people]?", and "How much do you feel part of a [gay/HIV-positive] community?". Responses were provided on a 5-point scale (1 = none/not at all; 5 = all/very much). Internal consistency of the measures was satisfactory (Engagement with the gay community: Cronbach's alpha = .76; Engagement with the community of PLHIV: Cronbach's alpha = .76). Item scores were averaged for both measures with higher scores indicating more community engagement.

Analyses

Descriptive statistics were calculated for each of the items assessing the importance of knowing the HIV status of all sex partners, the extent to which men restricted sex to partners with the same HIV status as themselves, HIV status, disclosure expectations regarding HIV-positive and HIV-negative sex partners, and self-disclosure of HIV status. For ease of interpretation, descriptive statistics are also presented for item responses recoded into a binary "agree/disagree" variable; neutral responses were classified as disagreement. For HIV status disclosure expectations and self-disclosure of HIV status, bivariate associations with age, place of residence, education, sexual identity, number of male sex partners in the past year, perceived risk of HIV transmission, expressed HIV-related stigma, and engagement with the gay community and the community of

Table 2. Expectations of disclosure, consistent self-disclosure, and of serostatus preferences.

	Mean (SD)	Agree (%)
I only have sex with someone whose HIV status I know	2.54 (1.42)	25.9
I only have sex with someone whose HIV status is similar to mine	2.88 (1.51)	37.2
I'd expect an HIV-positive man to tell me he was HIV positive before we had sex	4.13 (1.29)	76.3
I'd expect an HIV-negative man to tell me he was HIV negative before we had sex	3.14 (1.48)	41.6
I always tell my sex partner what my HIV status is before we have sex	3.11 (1.54)	41.7

PLHIV were assessed using analyses of variance (for categorical variables) and Pearson correlation test (for continuous variables). Multivariate linear regression analyses were conducted to assess independent associations of covariates that we found to be (marginally) significantly (p < .10) associated in bivariate analyses.

Results

The mean score on the measure of perceived risk of HIV transmission was 2.67 (SD = .66), indicating overall moderate perceptions of risk from having sex with an HIV-positive partner. There was also a moderate level of engagement with gay community with a mean score of 2.72 (SD = .92) on this measure. The mean score for engagement with the community of PLHIV was 1.48 (SD = .63) indicating little engagement with HIV-positive people among this sample of non-HIV-positive men.

Responses to the items assessing the importance of knowing the HIV status of all sex partners, restricting sex to partners with the same HIV status, expectations of HIV status disclosure, and self-disclosure of HIV status are presented in Table 2. A quarter (25.9%) of these non-HIV-positive men agreed that they only have sex with a partner whose HIV status they know. One-third (37.2%) of men agreed that they only have sex with a partner who has the same HIV status as they do. The majority (76.3%) of participants expected an HIV-positive man to disclose his HIV status before having sex. Only 41.6% expected an HIV-negative man to disclose his HIV status before having sex, and a similar proportion (41.7%) reported that they always tell sex partners their HIV status before having sex.

In bivariate analyses, all variables were found to be significantly associated with expecting HIV-positive men to disclose their HIV status before sex (Table 3). Men who expected HIV-positive men to disclose their HIV status before sex on average were younger, more often lived outside a capital city, less likely to be university educated, were less likely to identify as gay, had fewer sex partners in the past year, perceived greater risk of HIV transmission from a range of sexual practices, were more likely to stigmatize HIV-positive men, and were less engaged with the gay community and with the community of PLHIV. Men who expected HIV-negative men to disclose their HIV status before sex more often lived outside a capital city, were less likely to be university educated, were less likely to identify as gay, perceived greater risk of HIV transmission from a range of sexual practices, were more likely to stigmatize HIV-positive men, and were less engaged with the community of PLHIV (Table 4). Men who consistently self-disclosed their HIV status more often lived outside a capital city, were less likely to be university educated, were less likely to identify as gay, and were more likely to stigmatize of HIV-positive men (Table 5).

Subsequent multivariate linear regression analyses confirmed that having higher HIV status disclosure expectations of HIV-positive sexual partners was independently associated with living outside capital cities,

Table 3. Bivariate and multivariate analyses examining correlates of HIV status disclosure expectation for HIV-positive men.

			Multivariate association	
	Bivariate association	<i>p</i> -value	Beta	<i>p</i> -value
Age (in years)	r =12	< .001	05	ns
Place of residence	F(1, 1042) = 29.00	< .001	.09	< .01
Education	F(1, 1042) = 16.44	< .001	10	< .001
Sexual identity	F(1, 1014) = 12.28	< .001	05	ns
Number of male sex partners in the past year	r =07	< .05	.01	ns
Perceived risk of HIV transmission	r = .28	< .001	.17	< .001
Expressed HIV-related stigma	r = .22	< .001	.07	< .05
Gay community engagement	r =16	< .001	.00	ns
HIV-positive community engagement	r =27	< .001	17	< .001

Table 4. Bivariate and multivariate analyses examining correlates of HIV status disclosure expectation for HIV-negative men.

	Bivariate association	<i>p</i> -value	Multivariate association Beta	<i>p</i> -value
Age (in years)	r = .01	ns		
Place of residence	F(1, 1042) = 27.25	< .001	.10	< .01
Education	F(1, 1042) = 11.21	< .01	07	< .05
Sexual identity	F(1, 1014) = 4.30	< .05	03	ns
Number of male sex partners in the past year	r =05	ns		
Perceived risk of HIV transmission	r = .25	< .001	.22	< .001
Expressed HIV-related stigma	r = .11	< .001	.02	ns
Gay community engagement	r =04	ns		
PLHIV community engagement	r =06	< .05	.01	ns

Note: ns = non-significant.

not having a university education, perceiving greater risk of HIV transmission from a range of sexual practices, expressing greater HIV-related stigma, and being less engaged with the community of PLHIV. Having higher HIV status disclosure expectations of HIVnegative sexual partners was independently associated with living outside capital cities, not having a university education, and perceiving greater risk of HIV transmission from a range of sexual practices. Reporting more consistent self-disclosure of HIV status was independently associated with living outside capital cities, having fewer sexual partners in the past year, and perceiving greater risk of HIV transmission from a range of sexual practices.

Discussion

Among gay men in Australia, consistent HIV status disclosure has increased significantly over the past 10 years (de Wit, et al., 2014). This increase has been driven in part by gay men's adoption of noncondom-based risk-reduction strategies (Mao et al., 2011). Most of these strategies rely on partners accurately disclosing their HIV status. Increases in

disclosure for the purpose of negotiating sex without condoms may also reinforce expectations to disclose HIV status in general. The results of this study confirm that HIV status disclosure is important for many HIV-negative and untested gay and bisexual men in Australia. HIV-negative and untested men in particular have high disclosure expectations of HIVpositive men, with three quarters expecting HIV-positive men to disclose their HIV status to them before having sex. This finding is consistent with results from previous research in samples of gay and bisexual men in Australia (van de Ven et al., 2001; Holt et al., 2011). We also found that over a third of HIV-negative and untested men only wanted to have sex with a partner who was not HIV-positive, confirming previous reports of an HIV status divide in the gay community (Courtenay-Quirk et al. 2006; Dodds, 2006; de Wit et al., 2013).

Disclosure expectations of HIV-negative men were comparatively low, with less than half of men expecting an HIV-negative man to disclose his HIV status before having sex. Rates of self-disclosure were similar to expected disclosure of HIV-negative men, with less than half of the HIV-negative and untested participants reporting that they consistently self-

Table 5. Bivariate and multivariate analyses examining correlates of self-disclosure of HIV status.

	Bivariate association	<i>p</i> -value	Multivariate association Beta	<i>p</i> -value
Age (in years)	r = .00	ns		
Place of residence	F(1, 1042) = 17.51	< .001	.08	< .05
Education	F(1, 1042) = 5.54	< .05	05	ns
Sexual identity	F(1, 1014) = 5.37	< .05	04	ns
Number of male sex partners in the past year	r =09	< .01	07	< .05
Perceived risk of HIV transmission	r = .21	< .001	.17	< .001
Expressed HIV-related stigma	r = .08	< .01	.00	ns
Gay community engagement	r =04	ns		
HIV-positive community engagement	r = .00	ns		

Note: ns = non-significant.

disclose their HIV status to their partners prior to having sex. Together these findings suggest a "disclosure double standard" among HIV-negative and untested men, whereby they have high expectations that HIV-positive men disclose their HIV status and much lower expectations that HIV-negative men (i.e., men similar to themselves) disclose their HIV status. This discrepancy suggests that the default expectation of these HIV-negative and untested men is that a partner is HIV negative unless he says otherwise.

In this study, we found a number of factors to be associated with expecting disclosure from HIV-positive men. Multivariate analyses showed that HIV-negative and untested men who expected HIV-positive men to disclose their HIV status were more likely to live outside capital cities, were less likely to have a university education, perceived greater risk of HIV transmission from a range of sexual practices, expressed more HIVrelated stigma, and were less engaged with the community of PLHIV. We found that HIV-negative and untested men who expected their HIV-negative sex partners to disclose their HIV status were more likely to live outside capital cities, less likely to have a university education, and perceived greater risk of HIV transmission from a range of sexual practices. Consistent self-disclosure of their HIV status among these HIV-negative and untested men was also associated with living outside capital cities and perceiving greater risk of HIV transmission from a range of sexual practices, as well as with a lower number of sexual partners in the past year.

Perceiving greater risk of HIV transmission from engaging in a range of sexual practices with an HIV-positive partner whose viral load is unknown was independently associated with disclosure expectations for HIV-positive and HIV-negative men, as well as with consistent self-disclosure. This association between HIV status disclosure expectations and practices and perceived risk suggests a strong association between concern about HIV and identifying and avoiding potential sexual partners who are HIV positive. The association between expectations of HIV-positive status disclosure and both greater HIV-related stigma and less engagement with the community of PLHIV, suggests broad social exclusion and provides further evidence of a serostatus divide among gay men.

These findings of high expectations of HIV-positive men to disclose, and strong preferences among some men to exclude HIV-positive men as sex partners indicate the paradox of disclosure for HIV-positive men. They are expected to disclose their HIV status, and yet doing so may result in being rejected as a potential partner. Also, although the dramatic increases in disclosure of HIV status to sex partners documented over the past decade may have been influenced by the increasing adoption of risk-reduction strategies such

as serosorting, our findings provide evidence of high expectations to disclose HIV-positive status in general. These findings also suggest, as we have argued elsewhere, that HIV-related stigma is a continuing issue among gay men, especially in the area of sex and relationships (de Wit et al., 2013). Such stigmatizing practices may also have a negative effect on current strategies that encourage men to undertake more frequent HIV testing.

There are some potential limitations to this study that need to be noted. These data were collected in 2009–2010, which may raise questions about the currency of the findings. However, given that there was little change in expectations of HIV-positive men to disclose over the 10 years previous to this survey, we would argue that they are still highly relevant. As the study had a cross-sectional design, we are not able to establish causal links regarding the variables that were associated with expectations and practices around HIV status disclosure. Also, as participants were recruited through convenience sampling and self-selected into the study, the extent to which findings can be generalized to other samples of gay and bisexual men in Australia is unknown, although the characteristics of this sample were similar to other Australian community-based samples that are not recruited online, particularly in terms of the age, education and sexual identity profile of participants (de Wit et al., 2014). Similarly, caution should be exercised in extrapolating these conclusions to men outside Australia. Furthermore, we did not assess men's use of condoms or other HIV risk-reduction strategies, so as we have noted throughout the article, our findings relate to issues that exceed seroadaptation. The findings of this study are instead indicative of the importance of HIV status preferences, and disclosure expectations and practices in sexual

In conclusion, our study makes a unique contribution because we explore expectations as well as practices related to disclosure of HIV status. Very few other studies have undertaken similar analyses. The findings of this study indicate that a serostatus divide persists among gay men in Australia in the domain of sex and relationships. In particular, higher expectations of HIV-positive men to disclose enables the exclusion of HIV-positive men as sex partners, which seems to be not only driven by (inflated) concerns about risk of HIV transmission but also by HIV-related stigma and lack of contact with people living with HIV. Future HIV education should continue to address this "sero-divide", and emphasize that transmission can be effectively prevented in others ways than by avoiding partners with HIV.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Dean A. Murphy http://orcid.org/0000-0003-2752-7091 John B.F. de Wit http://orcid.org/0000-0002-5895-7935

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