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Transgender HIV prevention: a qualitative needs assessment

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Abstract *Although clinical experience and preliminary research suggest that some transgender people are at significant risk for HIV, this stigmatized group has so far been largely ignored in HIV prevention. As part of the development of HIV prevention education targeting the transgender population, focus groups of selected transgender individuals assessed their HIV risks and prevention needs. Data were gathered in the following four areas: (1) the impact of HIV/AIDS on transgender persons; (2) risk factors; (3) information and services needed; and (4) recruitment strategies. Findings indicated that HIV/AIDS compounds stigmatization related to transgender identity, interferes with sexual experimentation during the transgender 'coming out' process, and may interfere with obtaining sex reassignment. Identified transgender-specific risk factors include: sexual identity conflict, shame and isolation, secrecy, search for affirmation, compulsive sexual behaviour, prostitution, and sharing needles while injecting hormones. Community involvement, peer education and affirmation of transgender identity were stressed as integral components of a successful intervention. Education of health professionals about transgender identity and sexuality and support groups for transgender people with HIV/AIDS are urgently needed.*

Introduction

Fifteen years into the HIV/AIDS epidemic, many HIV prevention education programmes have targeted high-risk groups such as men who have sex with men and injecting drug users (e.g. Rosser, 1991). One group largely ignored in these efforts is the transgender population. Since 1990, we have seen increasing numbers of transgender persons with HIV/AIDS at our clinic. We observed the usual high-risk behaviours, including unprotected anal intercourse, needle sharing, substance abuse, compulsive sexual behaviour and prostitution. This study assessed transgender people's HIV risk and prevention needs to aid in the development of one of the first HIV prevention education programmes to specifically target this population.

'Transgender' is an umbrella term used to refer to a diverse group of individuals who cross or transcend culturally defined categories of gender. They include crossdressers or transvestites (those who desire to wear clothing associated with another sex), male-to-female and female-to-male transexuals (those who desire or have undergone hormone therapy or sex reassignment surgery), transgenderists (those who live in the gender role associated with another sex without desiring sex reassignment surgery), bigender persons (those who identify

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as both man and woman), drag queens and kings (usually gay men and lesbian women who 'do drag' and dress up in, respectively, women's and men's clothes), and female and male impersonators (males who impersonate women and females who impersonate men). Definitive data on the prevalence of transgender identities are lacking. While the DSM-IV suggests that 1 per 30,000 adult males is male-to-female transexual and 1 per 100,000 adult females is female-to-male transexual (American Psychiatric Association, 1994), the prevalence of transexualism in the Netherlands was estimated at 1 per 11,900 for male-to-female transexuals and 1 per 30,400 for female-to-male transexuals (Bakker *et al.*, 1993). Transexuals are outnumbered by people with other identities that fall under the transgender umbrella.

A number of studies report on the prevalence of HIV/AIDS among transgender sex workers (Boles & Elifson, 1994; Castello-Branco *et al.*, 1988; De-Vincenzi, 1989; Elifson *et al.*, 1993; Galli *et al.*, 1991; Gattari *et al.*, 1991; 1992; Modan *et al.*, 1992; Morlet *et al.*, 1990; Piccirillo, 1996; Suleiman *et al.* 1989; Tabet *et al.*, 1992; Tirelli *et al.*, 1988; 1991). Prevalence rates of HIV infection in these reports are high; significantly higher than among non-transgender male and female sex workers. For example, Elifson *et al.* (1993) found that 68% of a sample of 53 transvestite sex workers in Atlanta, Georgia, was HIV-positive. This was much higher than an earlier sample of 152 non-transvestite male sex workers in Atlanta in which 27% tested positive (Elifson *et al.*, 1989). And Gattari *et al.* (1991) found that 86% of a sample of 22 drug-using transgender sex workers in Rome, Italy, was HIV-positive compared to 32% of a sample of 396 non-transgender IV drug users.

Few studies assessed the prevalence of HIV/AIDS among other sub-groups of the transgender population: eight transexual cases at the HIV Clinic of the University of Texas (Avery *et al.*, 1995); two out of 91 transexual patients of the Rosenberg Clinic, Galveston, Texas; one female-to-male transexual with AIDS in the USA (Coleman & Bockting, 1988); three out of 816 male-to-female transexuals died of AIDS at the Vrije University Hospital in Amsterdam, the Netherlands (Kesteren *et al.*, 1996); five transexual HIV cases in Queensland, Australia (Neilsen & Hill, 1993); four, and in a year's follow-up, 26 transvestite cases in Brazil (Veronesi *et al.*, 1987; 1988), three out of 76 inmates in a California prison who tested HIV-positive (Valenta *et al.*, 1992); and one case in Taiwan (Wang, 1988).

Several studies assessed HIV knowledge, attitudes and risk behaviour among the transgender population, primarily among transgender sex workers. Ratnam (1986) found that AIDS awareness was significantly lower among transexual sex workers in Singapore than among the general population. Compared to controls matched for race, age and sex, transexual sex workers in Singapore were more hopeless, more anxious in general, more anxious about getting AIDS and engaged in significantly more frequent sexual risk behaviour (Kok *et al.*, 1990). Common risk factors found among transgender sex workers include multiple sexual partners, frequent anal receptive sex, irregular condom use, drug and injecting drug use, needle sharing and the interaction between sexual and drug using/injecting practices (Boles & Elifson, 1994; Elifson *et al.*, 1993; Galli *et al.*, 1991; Gattari *et al.*, 1991; 1992; Inciardi & Surratt, 1997; Modan *et al.*, 1992; Ratnam, 1986; Tirelli *et al.*, 1988; 1991). Condom use was more frequent with paying partners than with non-paying partners (Boles & Elifson, 1994; Elifson *et al.*, 1993; Tirelli *et al.*, 1991) and some paying partners offered more money for sex without a condom (Gattari *et al.*, 1991). Boles and Elifson (1994) found that strong commitment to transvestism (defined as using female names, always dressing in drag and identifying as female) was associated with social and/or physical isolation, adverse life experiences, feelings of vulnerability and hopelessness, participation in particularly risky sexual behaviour and higher rates of HIV infection. Modan *et al.* (1992) theorized that more frequent anal sex and the possible increased efficiency of HIV transmission by the neovagina

may explain higher HIV infection rates among transgender versus nontransgender female sex workers. Just one study (Avery *et al.*, 1995) examined HIV knowledge and risk behaviour in a transexual sample not limited to sex workers. Knowledge about HIV was high and number of sexual partners was low. Twenty-four percent of sexually active respondents engaged in receptive anal sex and 19% of those reported condom use; 4% reported IV drug use.

Only a handful of prevention efforts has specifically targeted the transgender population. In Rio de Janeiro, transgender sex workers were recruited as health agents to act as a bridge between groups of sex workers and the prevention project (Peterson & Szterenfeld, 1992). In Singapore, Ratnam (1990) evaluated the effects of a health education programme on a sample of 77 transexual sex workers. Ratnam found that although HIV knowledge increased, safer sexual behaviour did not. Transgender outreach has taken place in Boston, Philadelphia, New York City and San Francisco (personal communications with R. Durkee, 1995, M. Little, 1995, S. Webb, 1993 and K. Whitlock, 1995; Warren *et al.*, 1996).

The high prevalence of HIV among transgender sex workers, the scarcity of studies assessing the risk factors and needs of transgender people not involved in sex work and the lack of targeted HIV prevention, led us to develop a prevention education programme targeting the Minneapolis/St Paul transgender community. The first phase of this project used transgender focus groups to obtain information about HIV risks and targets for prevention.

Method

Subjects

Nineteen of 26 invited transgender individuals participated in one of four planned focus groups: (1) crossdressers with a history of compulsive sexual behaviour ($n = 7$); (2) transgender sex workers ($n = 1$); as only one of the four invited sex workers showed, an individual interview was conducted; (3) transgender persons with HIV/AIDS, three of whom reported having been paid for sex in the past ($n = 4$); and (4) individuals representing a spectrum of transgender and transexual identities ($n = 7$). The demographics, sexual identity and HIV status of these 19 participants are presented in Table 1. A substantial number of participants reported sexual risk behaviour and alcohol/drug use (Table 2).

The majority of participants were recruited from transgender community organizations. In addition, we placed several advertisements in local newspapers likely to be read by the target community and invited former and current transgender clients of our clinic to participate. Participants were paid $40 for their participation.

Focus group procedures

Focus groups are a qualitative research method that are 'particularly effective in providing information about *why* people think or feel the way they do' rather than focusing on gathering uniform information on representative or random samples (Krueger, 1988, p. 14). We followed Krueger with regard to method and technique for these groups; that is, we developed our questions beforehand by identifying all potential questions, highlighting key questions, arranging the questions in a logical sequence and avoiding 'why' questions. In addition, we did not ask about personal characteristics that might bring out status differences between participants, seated shy and quiet participants directly across from the moderator, experts and loud participants next to the moderator and controlled moderator self-disclosure and body language.

Table 1. *Demographics, sexual identity and HIV status of participants by focus group*

	Group 1 ($n = 7$)	Group 2 ($n = 1$)	Group 3 ($n = 4$)	Group 4 ($n = 7$)	Total ($n = 19$)
Age					
Mean	46.3	20	32.8	41.3	40.2
SD	6.0	–	5.9	11.6	10.6
Range	39–56	–	28–41	27–61	20–61
Ethnic identification					*n* (%)
Caucasian	6	–	4	5	15 (79%)
African-American	0	1	0	1	2 (11%)
Latino	1	–	0	0	1 (5%)
West Indian	0	–	0	1	1 (5%)
Sex at birth					
Male	7	1	4	5	17 (89%)
Female	0	–	0	2	2 (11%)
Transgender identity					
Transexual	0	1	4	5	10 (53%)
Crossdresser	5	–	0	1	6 (32%)
Transgenderist	2	–	0	0	2 (11%)
Drag queen/female impersonator	0	–	0	1	1 (5%)
Sex reassignment surgery					
No interest	4	–	0	0	4 (21%)
Some interest	1	–	0	2	4 (21%)
Desires SRS	2	1	4	3	9 (47%)
Undergone SRS	0	–	0	2	2 (11%)
Sexual orientation					
Attracted to women	4	–	0	4	9 (47%)
Attracted to both women and men	2	–	1	0	4 (21%)
Attracted to men	1	1	3	3	6 (32%)
Relationship status					
Single, no sexual partners	2	–	2	0	4 (21%)
Single, one sexual partner	1	–	0	5	6 (32%)
Single, multiple sexual partners			1	0	1 (5%)
Coupled, monogamous	2	1	1	2	6 (32%)
Coupled, not monogamous	1	–	0	0	1 (5%)
HIV status					
Tested	6	1	4	3	14 (74%)
Not tested	1	–	0	4	5 (26%)
Knowingly living with HIV/AIDS	0	–	4	0	4 (21%)

Upon arrival, participants were asked to sign a consent form for their participation and completed a brief survey which gathered demographic, HIV, sexual identity and behaviour data (Bockting *et al.*, 1993). A two-hour focus group discussion followed, facilitated by the second author and an assistant. The facilitator followed a structured guide which contained an introduction and 12 specific questions grouped in four areas: (1) impact of HIV/AIDS on transgender persons (e.g. What kinds of concerns about HIV/AIDS do you, your transgender friends and your partners have?); (2) risk factors (e.g. What do you think would make you,

Table 2. *HIV risk behaviour of participants (N = 19)*

	Lifetime		Past two months	
	n	%	*n*	%
Sexual risk behaviour				
Vagina–penis intercourse without a condom	6	32	4	21
Anal–penis intercourse without a condom	7	37	2	11
Oral–vagina intercourse without a dental dam	1	5	1	5
Oral–penis intercourse without a condom	8	42	3	16
Had sex while drunk or high	10	53	3	16
Been paid for sex	5	26	1	5
Paid for sex	3	16	1	5
Needle use risk				
Used IV drugs since knowing about AIDS	1	5	0	0
Shared needles	0	0	0	0

your transgender friends and your partners decide to engage in unsafe sex); (3) information and services needed (e.g. Going back to the 'typical (risk) situation' you described earlier, what information, things, tools or services would help you, your transgender friends and your partners be safer?); and (4) recruitment strategies (e.g. How can we interest you, your transgender friends and your partners to attend a transgender HIV prevention workshop or programme?). The interview discussions were audiotaped, transcribed verbatim and analyzed qualitatively. Content analysis involved review of transcripts to extract quotations in each of the four areas covered in the focus groups. Themes were identified and quotations were grouped according to these themes.

Results

Impact of HIV/AIDS

Friends with HIV/AIDS. Most participants reported having known people with HIV/AIDS, which appeared to enhance awareness of their own vulnerability to this disease. Two typical examples: 'I had a friend dying of AIDS. She was having sex and using the needles so it had a lot of impact on me. My best friend. We used to run together.'; 'A lot of my friends have been exposed to the virus that used to do the same things that I did. I was neck and neck with these people, just hanging out and having fun. Being carefree. I still have that sense of wanting to be carefree and wild, but I've tamed it down to where it's either me or the virus. This is fairly new, and it is very tempting. It still haunts me, I still want to do it, to have a sense of being free.'

Stigmatization. HIV/AIDS seemed to compound stigmatization. As members of a sexual minority, with even less acceptance than the gay, lesbian and bisexual communities, transgender participants reported feeling vulnerable to HIV and social stigma: 'A lot of people don't

like crossdressers, they think they caused this disease that's killing people. So we could either be killed two ways: by AIDS or by someone that has a grudge against transexuals.'; 'When I used to go out dressed up female, go home with a straight man and he would find out, it's like well, you're breaking the rule, bringing me a gay disease while being a female [under] that illusion. That's what they think the crossover comes from: you get it from crossdressers.'

The public perception is one that associates transexuality with homosexuality: 'I was trying to tell my stepmother that I was going to change my gender. Well, she immediately started talking about HIV and confusing HIV infection with gay and lesbian sexuality and transexualism.'; 'When my wife found out that I was crossdressing, her immediate reaction was that I was homosexual and that I had contracted AIDS.'

Those participants living with HIV/AIDS elaborated on the double stigmatization they had experienced: 'You're considered dirty. You're considered a lower minority than most minorities. It's enough being transgender, but then when you have AIDS, you're even lower yet.'; 'Wearing makeup, wearing my hair the way I do, jewelry, that's my normalcy every day and often people don't accept it. And so when you go out in the street, you get these stares like you're a freak from outer space somewhere. And you go to a restaurant or something and everybody is over there giggling. But to me this is normal. To whatever normal I can get ... It's hard enough to find somebody who is interested in a transgender person. There are very few men out there that like transexuals. And then to tell them on top of everything else that you are HIV, I mean, it's like dropping the H bomb.'

Several participants perceived HIV/AIDS as a punishment for being different: 'My contention is that the AIDS crisis was allowed to happen by the US Government, the result being that sexual minorities are especially vulnerable to contracting this disease and dying. Hence, AIDS is society's punishment for being queer.'

Fear of HIV/AIDS. Fear of HIV/AIDS was prevalent among participants, contributing to anxiety about sex and restriction of sexual activity: 'HIV/AIDS has scared me to death. I don't feel as safe as I used to.'; 'AIDS made me much less likely to engage in sex.'; 'I have had a lot of curiosity what it would be like to have sex with a man, but I am much more intimidated or hesitant to explore that direction. If AIDS were not part of our society, I would be apt to do so.'

Developmental tasks otherwise addressed during adolescence are often delayed for transgender persons. Participants discussed how fear of HIV/AIDS particularly interferes with sexual experimentation during their transgender 'coming out' process. Transexual participants described feeling cheated out of sexual experimentation, first by intense discomfort with their sex and genitals, then by the risk for HIV: 'I had the chance to be promiscuous, [however] I was the wrong sex. Then once I had the reassignment surgery, I've had this real desire to go through what most adolescent males go through and now I don't dare.'; '... fantasizing all my life how it would be great to have sex as a woman and now to be faced with the situation that you've got to be very safe.'

Others described how for them periods of restricted sexual activity were followed by periods of sexual acting out: 'That was the point that I didn't have any sex because a boyfriend of mine caught the HIV virus. We were not having safe sex. I was already feeling that I had this virus, but it was just from me being depressed and not understanding my sexuality. Those were periods that I wouldn't eat. Then I thought that I had the HIV virus so I became more promiscuous. I still sometimes wake up and feel that I'm exposed to the virus from being promiscuous way back then.'

HIV testing. The majority of the participants had been tested: 'I've taken the test four times. Each time I have taken it I've dreaded it and I keep saying this will be the last time. There is always the terror: what if I test positive?'

Interference with obtaining sex reassignment. Transexual participants expressed concern about HIV/AIDS preventing them from obtaining sex reassignment. Many surgeons won't operate on HIV-positive transexual individuals: '[In order to] have the surgery, I had to be sure I did not get AIDS. I wanted to live, to enjoy it. So, I stopped going out.'

Participants with HIV/AIDS reported that the health risks and medical expenses of having HIV/AIDS threatened achievement of their goals: 'I think the challenging thing for me right now with HIV/AIDS is to get on hormones since I've been diagnosed. I feel like I'm going to be discriminated against. I mean, I've already been through it with my AIDS doctor. That, well, if you go on hormones, I'm going to stop treating you. So, I'll quit everything anyway because I'd rather go on hormones and take the challenge of my own life, [to be] in charge of my life.'; 'It's finding the money and means to go through the therapy of reassignment. You're busy paying doctor's bills rather than your therapy bills.'; 'I guess one of the big things right now is finding a surgeon to do the reassignment surgery. That's hard. Because it's a high-risk surgery. There's a lot of blood. My big fear is [not] being healthy enough to heal from it.'

Those with HIV/AIDS had the sense that time was running out which accelerated their desire to actualize their transgender identity: 'I've lived with this disease long enough. It's time for me to go on to live the way I want to live.'; 'They [my friends] are challenged because they don't understand why I would give up treatment for AIDS to go and push myself to become a woman.'

General risk factors

Multiple partners. Participants indicated that while their primary partner may not know about or not accept their transgender identity, additional sexual partners are often found who are accepting of the transgender role: 'I have had extramarital sex about seven times.'; 'I have sex outside my marriage. My wife knows about that and is real concerned. She will not come near me anymore partly because of the concern for HIV.' Sexual partners include many heterosexual and bisexual men: 'There were like 40 guys at a time. These men were mostly bisexual, never gay. Gay men, I thought, never liked transgenders. They were mostly bisexual or straight men.'

Alcohol and drugs. Participants described how alcohol and drugs lowered their inhibitions and facilitated sexual risk behaviour: 'I think most of us have had a problem with alcohol or drug use because of the fear [related to coming out as a crossdresser]'; 'I would drink and reach a certain point of intoxication. I would go home, crossdress, and then go out and cruise either for a female prostitute or go to Loring Park [a meeting place for sex with men] depending on my mood, or do both. [Alcohol] cuts down my inhibitions, and there is a sense of urgency'; 'Alcohol and drugs lessen your reasoning ability, and you're going to be more apt to participate in dangerous sexual practices.' In the case of injecting drug use, sharing needles forms an additional risk factor: 'If you're an IV drug user, which I used to be, if you're getting high, and you're so high, then you're not paying attention if someone's using a needle or if you're using someone else's needle, because you don't care at this point.'

Discomfort with condoms. Participants reported difficulties associated with condom use, including decreased sensitivity and erectile problems. These difficulties were exacerbated by the use of hormones, which makes erections more difficult to get and maintain: 'I was with a man and he wanted me to do active anal sex on him. I put a condom on and then I got soft and it fell off. Then I got hard again and he said: "Oh, just go ahead. Just don't come inside me". ' 'I can't get used to these condoms'; 'I can't get [the same] feeling.'; 'To me a penis is very attractive, very beautiful. It's like a piece of art. To put a condom on it kills it, totally kills it. You want it all!'

Sexual negotiation difficulties. Participants mentioned that insisting on safer sex remains challenging; for example: 'I tell them that I'm a safety girl, and they say: "Why? Are you positive or have any diseases?" '

Infatuation. Participants reported that infatuation can interfere with practising safer sex: 'I get mushy eyed over somebody and I don't think about condoms ... I have had a guy that I was really in love with. We had unsafe sex all the time.'

Promises of monogamy. After practising unsafe sex with their partner, several participants discovered that their assumption of their partner's monogamy was false: 'I thought we were monogamous, but found out that we weren't. My partner was not being monogamous. I found out he had been cheating on me.'

Relapses to unsafe sex. Participants stated that they felt tempted to have unsafe sex, because they missed the sense of freedom it gave them: 'It [unsafe sex and multiple partners] still haunts me. I still want to do it, because I was free.'; 'I want to have anal or oral sex without condoms, and coming in the mouth.' In addition, situational factors led participants to violate their commitment to practising safer sex: 'I was in a heterosexual relationship and made a contract to wear a condom if I ever had sex with anybody. I chose not to [wear a condom]. I'm not sure exactly why, but part of it was the fear of asking whether I could get one, or that by the time I would come back they would be out of the mood [to have sex]. So I went ahead.'; 'I met a gal at a health spa and we went back to her room instead of going to my room to get a condom, and just had unsafe sex.'; 'I met a man and just kind of overcame and had unsafe sex, but of course I didn't tell him [that I have HIV/AIDS].'

Hopelessness. Participants discussed how feelings of hopelessness and depression could lead to self-destructive behaviour by putting oneself at risk for HIV: '... being really depressed and feeling hopeless. This one person was telling me about having engaged in a lot of real risky sexual practices, basically almost hoping to get AIDS. It's sort of a way of committing suicide without it being your fault.'

Inadequate and confusing information. Participants reported having received contradictory information about HIV transmission and safer sex, especially with regard to the risk of oral sex: 'I was dating a woman and she wanted to have a test. So we went and had a test. [They] told me at the time that oral sex was almost totally harmless. You never had to worry about oral sex; it was anal sex that was the problem. Well, then a couple of years later I had another test. At that time I was told that oral sex was to be thought of as very dangerous, because of

[bleeding] gums, etc. So even within a year-and-a-half I got two very different messages.'; 'I think a lot of people are genuinely concerned about being safe, but a lot of people are genuinely confused as to what that means. A lot of men think it is okay to do oral sex before you climax. Then I read somewhere that if you have cuts inside your mouth it increases the danger because of precum, then I hear later that HIV can go right through the skin without having lacerations. There is a lot of confusion. I think this causes people to be careless by saying: Well, what do they know anyway?' One participant with HIV/AIDS stated: 'I will let a guy ejaculate in my mouth as long as I don't have open sores, but is that safe or unsafe? Doctors don't even know.'

Non-disclosure of HIV status. Participants with HIV/AIDS debated whether or not to tell their sexual partners about their HIV status: 'We're not out to save the world. I mean if they are a consenting adult, if they don't have the knowledge to protect themselves, who am I to put the badge on and say, "Hey, wait, stop", you know. No way. I don't feel I should have to.'; 'I usually always tell women, but I never tell men.'; 'It would depend on the person I'm with, first of all, then the situation and the mutual agreement to have sexual intercourse. It'd be whatever he would be comfortable with. I would tell him that I was HIV. It's just that if he felt comfortable having unsafe sex, fine.'

Transgender-specific risk factors

Sexual identity conflict. Participants discussed how conflict and confusion about their sexual identity may delay or prolong adolescent sexual experimentation, which is often accompanied by sexual risk behaviour: 'In trying to find out who I was, who I am, I experimented more.'; 'My promiscuity was, I believe, the result of not dealing with either my gender dysphoria or my childhood sexual abuse.'; 'I went to college and was still unsure what my sexual identity was. I just sort of had an idea of what I was not: I was not a heterosexual male. It didn't take very long to realize that now I was away from mom and dad and could do what I wanted. So I became very promiscuous with other males. It was not every weekend, but more like every day, like every evening and with different partners. And I kept hearing about what was not yet being called AIDS. It took me a while to realize that not only did I not somehow identify myself as a gay man but that nevertheless I might have contracted this virus. I eventually came to understand myself as transgender/transexual and changed my sexual behaviour quite radically. I became celibate.'; 'If I had become more open with myself when I was younger about really wanting to be female, I might not have contracted AIDS. I wouldn't have been so promiscuous.'

Shame, isolation and fear. Participants discussed the shame, isolation and fear associated with having a stigmatized identity: 'The sense of being isolated from and rejected by society. The shame and pain involved oftentimes leads to the use of drugs and alcohol, which then gives the permission to go out and get involved [sexually] with other people.'

Secrecy. Participants reported that many transgender individuals, especially crossdressers, are afraid of being found out and spend time in the transgender role in secret. This may include sexual encounters that are kept a secret from their primary partners: 'There are a lot of married men who have sex with other men and their wives don't know about it. They never tell anybody about it. There is a lot of underground [sexual] activity.'

Search for affirmation. Participants discussed how searching for affirmation and acceptance of their crossgender identity may lead to unsafe sex. To be considered sexually attractive in the crossgender role by a sexual partner makes one feel desirable and successful. This may interfere with setting limits during sexual encounters: 'I think, too, [that] finally getting to a place of having someone being with you sexually as a woman and wanting to do that might undermine someone's judgement if someone doesn't want to use a condom. It would be like, well, maybe it isn't that important ... You look so good, you know. And they think you look good and it's just great. I think that happens a lot.'; 'I just wanted to see how many straight men I really could pick up and how many I could actually get in bed with. Once I told them [about my transexualism] they didn't really care because they said: "You look so good." '

One of the participants with experience in sex work reported peer pressure as amplifying this risk: 'I was just a crossdresser back then, and had no idea about a hormonal transformation. It was amazing how all these beautiful women had all these beautiful men around them. And it was cool to go out and turn a trick. You're considered one of the best girls if you turn a trick or a couple of tricks for money. It's like a game. If you can attract a man who will pay you to have sex, you're beautiful. I was told I was the prettiest new Black girl on the block. And they're saying: "O girl. He likes you, girl. Make him pay you some money". '

Compulsive sexual behaviour. Participants elaborated on how shame, isolation, low self-esteem and loneliness may contribute to compulsive sexual behaviour: 'When I was acting out I was doing a lot of different things. I was picking up prostitutes. I was going to gay parks and gay bookstores. I was also having multiple relationships with other women while in a marriage. So I was exposing myself compulsively to a lot of different people. I was using alcohol and drugs, poppers. That all put me at risk, especially when I was mixing drugs and cruising.'; 'If there is a feeling of shame and self-destructive behaviour, there is no way you're going to solve this problem. They're past that point, and logic and reason isn't working anymore. On one day I may say no to unsafe sex, but 15 minutes later, or on another day, I might have gone ahead. I've been there.'; 'Every day there was a different guy. I was very promiscuous. I would have like 30 sexual partners a month.'; 'Right after high school I was very promiscuous because I lost my family. I had a major war with them about coming out and doing drag. After leaving home I became very promiscuous both in and out of drag.'

Prostitution. As customers, prostitution provides easy access to sex in the transgender role, ensures anonymity, prevents rejection and fulfills a fantasy. As sex workers, prostitution provides a means to supplement income and help pay for the considerable cost of sex reassignment, or compensate for lack of employment due to discrimination: 'One concern is that so many male-to-female preoperative transexuals have trouble getting employment and have trouble raising money for sex reassignment. Some of them have raised money through prostitution and it puts them at risk.'; 'I wouldn't do it [accept money for sex]. Then this rent thing came up. Me not having money to support myself because of the way I was living, as a transgender. I had to pay the rent and I couldn't get a job because of the way I was. And I wanted to start my hormonal treatment. I couldn't get a job because it [being transgender] wasn't accepted. So I would sleep all day, wake up at night, go out and turn $200 a night. The bills were paid and I was getting hormones. Not thinking of the HIV virus at all. [I was practising] very unsafe sex at this time. This was half a year ago. It was like: Wow, here I am, this really pretty queen having wealthy men flocking after me. All I have to do is just sleep with them to have as much money as I need. Then my head started filling up with all this nightlife glamour and money being thrown at my feet. Not having to worry about anything

else because everything was okay. Then I found out my best friend was exposed to the virus from having the nightlife and glamour scene. Doing the same thing I was doing.'

Participants reported that customers may insist on sex without a condom: 'What when a customer doesn't like it when I make him wear a condom?'; 'The fact that I was with somebody I didn't know. This person could have had the HIV virus and probably wouldn't even care, because they see me as dirt anyway.' One participant stated that clients even deliberately break condoms: 'I've known guys who actually poke it, break it [the condom]. So they can get the feel, they say.'

Those with experience as sex workers reported that they were less likely to use condoms with their lovers compared to with their customers. Not using condoms with their lovers served as an affirmation of trust, and helped distinguish these relationships from sex with customers: 'With a customer [as opposed to a lover] you would definitely use protection. But I didn't before'; 'It's more intimate that way, instead of it being an ordeal.'

Participants attested to the association between sex work and injecting drug use, and the risk of needle sharing: 'When I was a street hooker I would do anything to buy that drug. Your mind just is not coping with reality and you're not gonna sit there and say: 'Is that [needle] washed out?' You just don't do that. It's not reality. All you care about is getting high.'

Difficulty talking about sex. Participants discussed how sexual negotiation is complicated by their unique physical identity (e.g. women with breasts and penises, men with vaginas). Transexuals may not want to acknowledge their genitals if these conflict with their gender identity. Shame and fear of discovery or rejection may prevent openness about one's transgender status and preclude clear communication: 'I think another big area in the transgender community is that talking about sexuality is kind of problematic. All of the things [e.g. sexual orientation] get confused because sexuality is so different when you're frustrated. It's a whole different set of rules for us compared to other people.'

Sexual assault. Male-to-female transgender participants were not prepared to feel so vulnerable in the role of a woman. In the female role, they feared more for their physical safety. Not 'passing' in the crossgender role and being 'read' as transgender further increased the fear of assault:'We're not out to harm anybody else and yet everybody else seems to be out to harm us in some way or another or to get their kicks or whatever.'; 'In my neighbourhood either they want to beat you up or they want a free blow job.'; 'I've got maced and called a fag just half a block from home. Four boys trying to get my purse. I just kept screaming: "Leave me alone". They sprayed me like three other times. They ripped off the hair, that kind of stuff.'

Sharing needles while injecting hormones. Both male-to-female and female-to-male transexuals may experiment with or acquire hormones 'on the street'. Hormones obtained from other transexuals or through underground sources are often administered intramuscularly, since it is believed that intramuscular injection (as opposed to oral administration) results in more powerful effects. Silicone also is sometimes injected to feminize the body. Needle sharing herewith does occur: 'I just found out there was somebody giving people hormone shots for a certain amount of money and I thought: My God, she's giving all these people shots. Is she taking care of her needles?'

Myths

It's a gay disease and heterosexuals don't get AIDS. The frequency of this comment illustrated that this remains a pervasive myth:'I wonder if [AIDS is not more relevant] for people who are actively involved with people of the same sex.' 'I think a lot of people in heterosexual communities still feel it's not really their problem. They hear that it [HIV/AIDS] is crossing over, but still connect it with the gay community or drug users.'

The danger of this myth is particularly great for transgender people because of the fluidity and diversity in sexual identities and sexual partners. For example, a transgender individual might start out trying to conform as a heterosexual male and date women, subsequently think he might be gay and experiment with same-sex relationships, then discover and accept his female gender identity, and transition to living as a heterosexual woman. Transgender persons tend to 'migrate' across different categories of sexual orientation and gender identity, and interact with sexual partners of various orientations: 'Most of the [transgender people] I knew, who were living as heterosexual men and are now living as heterosexual women, think they are immune. They are preoperative and they're having anal intercourse just like the riskiest thing in the world.'; 'If they haven't been involved in the gay community and they are going from male to female and then going to the straight community, they really believe that it isn't a problem for them.'; 'A lot of the straight men I think don't believe in condoms. They think it can't happen to them.'; 'I just had no care in the world. Because I thought I was heterosexual, and heterosexuals can't catch the virus. And then it dawned: You're with me and yet, you say you're heterosexual. Obviously you're not one hundred percent heterosexual.'; 'I figured I was heterosexual then. I was only having sex with heterosexual men, so I needed not use condoms.'; 'I have been told you can only get it from gay men. You're not a man and you're not gay.'

You can tell just by looking. Some participants thought they could recognize infected persons: 'If you see this really gorgeous guy you're going to say: No, I don't think he has it. Just by looking at somebody. You can't tell a book by its cover and that's how most of it [unsafe sex] occurs.'

It won't happen to me. A sense of being invincible was mentioned: 'I think the most common myth is: It won't happen to me. That is human and elemental, whether it is a car accident or AIDS.'; 'The tricks say: "This is my first time [so they can't catch it]". '

A cure is imminent. Some are overly optimistic about finding a cure for HIV: 'Another general perception is that they are going to find a cure any day now. So we'll all have a vaccine and get a shot, just like we did for measles and mumps, and everything will be okay. Then we won't have anything to worry about.'

Services needed

Free condoms and lubricant. Participants asked for increased condom availability and free lubricant for anal and neovaginal penetration, neither of which self-lubricates: 'To have free condoms in the bars or in gas stations. Also: lubrication. That's one thing they need to stop putting on the market and just donate. Like if you're too embarrassed to go in the store and buy them anyway. Especially lubricant. Because lubricant usually when you buy that is mostly for anal sex. Easy access. I think every bar, not just homosexual bars, should have it. There are a lot of heterosexual bars that don't.'

HIV testing accessibility. Participants called for easy and confidential access to HIV testing: 'One of the things that would help is to make AIDS testing more accessible. So that you don't have to go into a little room in the corner of a building, where as soon as you walk into the door you feel nothing but embarrassment because [it's obvious] you're there for a sexually transmitted disease. Regular clinics have to be open about it, and receptive to HIV testing. They have to make that part of the annual checkup, normalize it.'

Clear instructions for safer sex. Participants asked for clear, consistent and concrete instructions: 'Real dos and don'ts. Guidelines.'

Encouragement of safer sex over abstinence. 'You hear about abstinence and what to prevent, but you're not really given a feel for the other safe ways [of having sex].'; 'Everything that I've heard so far is don't do this, don't do this, don't do that. I don't want to hear any more about that. I've heard all the don'ts, let's see what the dos are.'

Stronger condoms. Participants asked for stronger condoms because they had experienced condoms breaking: 'And a stronger prophylactic. They break too easily.'

Transgender-specific needs

Targeted education. Participants discussed the scarcity of resources relevant to transgender people and reported feeling out of place at interventions for the gay and lesbian community. Participants volunteered to be involved in educational outreach: 'To have transgenders talk about this. And counselling and information. They have this thing called LGYT, Lesbian and Gay Youth Together. But I would be uncomfortable going in there because of the way I am. I don't fit. I had to go to hell to find out about this one. This is the first thing I've ever heard of for transgenders, and I love it. It's like: Wow!'; 'I'd love to go into schools and talk not just with the kids but with the parents also. I'd give my right arm to go to school and talk to people like that.'

Recognition of diversity and uniqueness. Participants emphasized the need to be sensitive to differences between various sub-groups of the transgender community, as well as to individual lifestyle differences: 'I think you have to separate crossdressers from transgenders or transexuals and transvestites. I think you have to look at what the objective or the persona of the individual is. My own experience was that the crossdressing was not an expression of a desire to be female all the time. It was an expression of a desire to experience something I still don't fully appreciate or understand. It was only for a given period of time I chose to do it, and I'm not sure whether I was seeking the experience itself or the pain, self criticism and guilt that followed.'; 'We have what I consider classic transvestites who are heterosexual and don't go out of their house, and then you have people like me who had drug and alcohol problems and actually went out and got involved in unsafe sex.' Participants called for information and services that account for the unique physical and sexual identities of transgender persons: 'The general community says you're either male or you're female, and we're technically a little bit of both. That gives us a whole different perspective of life.'; 'There are crossgenders who feel themselves to be heterosexual women. I have talked to two or three of them. They like to be with men and some of them are preoperative, which means they have breasts but still have a penis and testicles.'

Affirmation of transgender identity. Participants explained how assisting transgender persons in discovering and affirming their identity would increase their own self-esteem and self care: 'I figure for a lot of people the reason they end up drinking, end up having sex and end up not caring if they get HIV, is because they can't be what they want to be.' Participants with HIV/AIDS reported that progress with resolution of their gender identity conflict gave them hope and a reason to live: 'Since I made this decision about transexualism I've had a very real self-preservation, because there is more reason to live [now that I] can be who [I] want to be. [This in contrast with] the time I was real repressed [when] everything was on automatic pilot.'

Combating isolation. Participants recognized the need to create safe opportunities to meet others like them and to support one another: 'They should have a group'; 'A drop-in centre.'

Empowerment. Participants emphasized the need for personal and community empowerment as an integral part of HIV prevention: 'I think one thing that I would love to see is an organization for the specific reason of empowering transgender people. I think that makes a whole community really care more about informing ourselves about the spread of HIV.'; 'We need to empower ourselves. AIDS has been around since '81 and this is the first research project done on HIV in the transgender community. What is that saying about where we stand?'; 'I think empowering people in any direction is gonna make them receptive to the HIV thing because they'll feel life is a warm thing that's worth living and I can make choices about how to do it.'

Peer education. Participants asked for community involvement in prevention education and support: 'A place where you can come and talk to transgender professionals.'; '[Where] someone who wants to know how to prevent it [HIV] can sit down with a doctor, a transgender doctor, and say, I'm pre-op. After I have surgery am I at risk for vaginal sex, because my vagina is different from a genetic woman's? Does that make it more of a risk or less of a risk and all those kinds of questions.'; 'Someplace that is staffed by crossgender people.'

Meeting people with HIV/AIDS. Participants explained how meeting someone with HIV/AIDS had changed awareness of their own vulnerability to the disease. Participants with HIV/AIDS volunteered to be on a panel to educate others: 'Those are the three [persons I knew with HIV/AIDS] that really affected me. In that way I know not to screw around.' ; 'Have some of us on a panel. They can ask questions of us [such as]: How did we contract it? How do we deal with it? What are our experiences?'

Treating compulsive sexual behaviour. Participants acknowledged that compulsive sexual behaviour can add to HIV risk, and wanted to see this addressed: 'You have to take into account that some people are going to do things compulsively. You have to deal with the compulsion first, and then you can get into a frame of mind where you would be safe. If you don't get past the compulsive stage, you might not.'; 'Education like what has been done with non-smoking. How smoking has affected people and the considerations for other people's health. I think attitudes towards smoking and unsafe sex are similar: Even though people

know they shouldn't, they do. There is a lot working against safe sex, such as losing spontaneity, losing erections or not feeling comfortable about even bringing the subject up.'

Education of health professionals. Participants noted that health professionals lack the necessary knowledge about transgender identity and sexuality to respond to their concerns adequately. Those with HIV/AIDS stated: 'We're so much in the medical community now [because of AIDS] that every doctor, you have to educate them about transgender. And it gets real old.'; 'The young interns and residents come in and won't touch you unless they have a pair of gloves on. They are scared to death.'; 'When I was in the hospital every single doctor wants to look at my genitals. And after the third one, I said: "What are you doing? I have pneumonia. You cannot look at my genitals anymore!" [This] because they knew I was preoperative. I felt really violated like somehow I was a freak that they had to come in and see.'; 'My doctor is very homophobic or transgender phobic.'; 'Maybe a seminar teaching staff about what it is like to be transgender so that we don't have to educate everybody [while] trying to get treated for AIDS.'

One participant expressed gratitude for a rare positive experience with a sensitive physician: 'I was so honoured. I had a doctor that I fell in love with because he came in and said: "Should I call you Ms or Mr?" I almost kissed him. I said: "Thank you very much. Miss would be just fine". ' He treated me as such and that was the first and only time in 41 years that I have ever been treated as a lady. I felt honoured.'

Transgender HIV/AIDS support group. Participants with HIV/AIDS expressed the need for peer support around living with HIV/AIDS: '... finding a support system within the AIDS community where my gender isn't the main focus. Because I don't want to go somewhere and talk to people who have AIDS where everyone is going to be real concerned about what my gender is. I know they'd have a support group for women with AIDS. Is that an option for me as far as them being okay with that? If you go to a different group, everyone is kind of looking at you. It's hard to just go somewhere and say: "Okay, I'm here because I have AIDS and want support", without that being such a huge issue.'

Recruitment strategies for HIV prevention workshops

Confidential, secure location. In response to the fear of being discovered, participants stressed the need for assurances of confidentiality: 'The biggest thing is prevention of being found out. It would have to be presented in a way that somehow I could maintain my secret of crossdressing. So that I could protect myself somewhat and still partake in the information'

Opportunity to meet others. Participants felt that the opportunity to meet other transgender people at the intervention would be an important incentive to attend: 'Most of us transvestites who have spent most of our lives alone and isolated, we do want to connect with somebody'; 'I would use it probably more to meet other transgender people.'

Fun. Participants discussed the lack of appeal of AIDS education. They emphasized the need for programming that is fun, exciting and puts sex and sexuality in a positive light: 'Take people that are working 40 hours a week and want to play and go out. They are not going to sit down in a two-hour programme and listen to somebody talk about AIDS. That is going to be a big turn off for a lot of people. They would rather go out and party.'; 'There's a

certain dread of being told that there's another community meeting being held about AIDS. The scare tactic isn't working, you know.'; 'Figure out fun ways of promoting it. Make safe sex not only okay and desirable, but enjoyable and fun. Lightness as opposed to all this heavy darkness that we've used.'; 'I think it's a mistake to sell it as safe sex. I think it should be sold as great, kinky or fun sex. Fun sex would work, safe sex doesn't work.'

Transgender role models. Participants felt that the use of transgender role models and peer educators would enhance interest and recruitment: 'A possible [role] model, somebody who is a crossdresser, someone I can identify with.'; 'Make it in a way that it is being presented by transgender people and not by somebody outside of the community. If you make it about transgender people educating transgender people, I think it would be more successful.'

Transgender celebrity. Participants also suggested inviting a transgender celebrity that would have a draw on people to attend the intervention: 'Or have something like a big name transexual there. Kate Bornstein would be good.'; 'Famous people, like the mayor, dressed as transvestites.'

Targeted advertisements eroticizing safer sex. Participants called for transgender-specific advertising to be placed in general community newspapers to reach transgender people everywhere: 'More advertisements. You look at the papers and you never hear anything about transgenders.'; 'An ad of a crossdresser saying: I use my condom.'; 'Like in the ad [for the focus groups]: I could call, I saw my identity there!'

Personal contacts. Several participants explained how their decision to participate in the focus group was influenced by their relationship with the person who invited them. Invitation by a trusted provider or a friend was a very effective recruitment strategy: 'I probably would have never done it if it was just some stranger [that invited me].'

Street outreach. Participants discussed the needs of transgender persons who frequent parks and streets looking for sex: 'There are crossdressers out there who cruise Loring Park and that's all they do. They don't go to gay bars, they don't seek any other information. These people we need to reach.'

Incentives. Lastly, participants suggested using incentives such as cookies or money. Money was requested specifically by one of the participants with experience in sex work: 'Cookies and stuff. And the money thing is good, but I think 40 bucks is too much. Twenty bucks is just as good'

Discussion

The findings of this study reflect the impact on transgender persons of living with a stigmatized identity. Stigmatization contributes to shame, low self-esteem, isolation, loneliness, anxiety and depression. These are all known correlates of HIV risk behaviour (Prieur, 1990; Rosser & Bockting, 1998; Valdiserri *et al.*, 1992). Thus, stigmatization compounds transgender persons' overall risk for HIV.

Similar to gay and lesbian persons, transgender persons' conflict and confusion about

their sexual identity and a lack of positive role models may delay or prolong adolescence (Coleman, 1981/1982). This may impede the development of a sense of personal attractiveness and competence through adolescent experimentation. Focus group participants discussed how their fear of HIV/AIDS forms a barrier to completion of this developmental task. Targeted prevention education should provide positive role models and give permission to experiment safely.

Shame, isolation and fear of rejection contribute to transgender persons' risk for HIV via alcohol and drug abuse, compulsive sexual behaviour and secrecy. By 'coming out', transgender persons risk harassment, discrimination and crises in relationships with friends and family. Prevention education should provide peer support to combat isolation, assure confidentiality and safety, and educate health professionals about transgender identity and sexuality.

The need for affirmation of one's transgender identity is strong. Being recognized and affirmed in the crossgender role as sexually desirable is extremely important. The hunger for such affirmation may override any fear of HIV/AIDS and lead to unsafe sexual activity, compulsive sexual behaviour and prostitution. Prevention education should respond to this by providing alternative ways to affirm transgender identity and expression.

Transgender persons are vulnerable to economic marginalization. 'Coming out' as transgender has economic risks and consequences. Participants reported job discrimination. Lack of employment is devastating when expenses of treatment for gender identity conflict are substantial. Participants explained how sex work can serve as a way to supplement income and survive. Sex with multiple partners, reinforcement of alcohol and drug abuse and the perpetuation of shame and low self-esteem make sex work risky (Vanwesenbeeck, 1994). Furthermore, within the hierarchy of sex workers, transgender persons are at the very bottom (Boles & Elifson, 1994). Prevention education should provide outreach and monetary incentives to sex workers, improve sex workers' access to condoms and lubricants and teach assertiveness.

Participants reported that sexual identity conflict, shame and fear of discovery or rejection may prevent openness about one's transgender identity. This reluctance to discuss one's transgender identity may prevent direct communication about sex, thus interfering with the negotiation of safer sexual behaviours. Moreover, not discussing one's transgender status precludes discussion of unique physical characteristics that may warrant special precautions. For example, the neovagina does not lubricate or may be constructed with colon tissue, making vaginal penetration of transexual women more risky than penetration of non-transexual women (Hage & Laub, 1995; Modan *et al.*, 1992). Prevention education should respond to this by encouraging communication about sex and by building sexual negotiation skills that include discussion of transgender-specific needs.

Participants confirmed that existing prevention education is not inclusive of transgender people and oftentimes makes assumptions about sex and gender that are not applicable to their situation (e.g. men with breasts and penises, men with vaginas, women penetrating men as well as women). In addition, differences between transgender people need to be taken into account. Whereas male-to-female transexuals attracted to men may prefer the receptive role in intercourse, female impersonators and drag queens may assume the insertive role in anal and vaginal intercourse. In particular, paying partners of female impersonators and drag queens involved in sex work tend to prefer to be penetrated anally (Inciardi & Surratt, 1997; Whitam, 1988). Male crossdressers often have penis–vagina intercourse in sexual relations with their female partners, while engaging in receptive anal sex with male sexual partners. Participants called for information and services that account for these unique physical and sexual realities.

Several risk factors are related to the use of hormones. Feminizing hormones negatively affect the ability to get and maintain erections and reach orgasm and, as participants explained, condoms exacerbate this effect. This may be welcome for those preoperative male-to-female transexuals who dislike erections and prefer the anal receptive role in intercourse. However, for those who take the insertive role in intercourse, decreased sensitivity as a result of condom use would aggravate the inhibiting effect of hormones on their erectile and orgasmic functioning. Participants suggested that lubricant be made available, free of charge, along with education about its use (e.g. that lubricant is needed for both anal and neovaginal penetration, and that adding lubricant to the inside tip of the condom improves sexual sensitivity). Use of the female condom instead of the male condom and use of a cockring are other options to consider in improving erectile functioning.

Another HIV risk associated with the use of hormones is sharing needles while injecting hormones. Hormones may be obtained from friends or through underground sources and administered without medical supervision. Even those who are under the care of a medical specialist might supplement hormone therapy with additional hormones to speed up or intensify the desired effects (Hope-Mason *et al.*, 1995). These hormones are often administered intramuscularly, since it is believed that injection results in more powerful effects than oral administration. Besides hormones, silicone and other substances may be injected to help feminize the body (Goihman *et al.*, 1994; Hope-Mason *et al.*, 1995; Inciardi & Surratt, 1997; Minnesota Department of Health, 1994). Transgender persons involved in the injection of black market hormones and silicone may not identify as drug users nor perceive their behaviour as injecting drug use, and hence may not identify themselves as at risk despite frequent needle sharing. Prevention education needs to target this specific risk and improve access to specialized medical care that promotes responsible use of hormones.

The effects of hormones are especially desirable because of the emphasis on 'passing' in the crossgender role. As Sandy Stone (1991) articulated, the act of passing has been the essence of transexualism. Passing means blending in with non-transgender women and men, hiding one's transgender identity and history, and may involve denial of the reality of one's self. Stone recognized that transexuals' silence through passing can be a high price to pay for acceptance. The pressure and fear of failure to pass can form a source of insecurity, shame and despair. It motivates experimentation with dangerously high dosages of hormones and irresponsible use of silicone. The fear of being 'read' (i.e. discovered) as transexual can result in extreme self-consciousness and even social phobia. Fortunately, norms are changing. Transgender persons are 'coming out' as transgender, differentiating themselves from non-transgender men and women, and affirming their unique identities (Bockting, 1995; 1997a; 1997b; Bolin, 1994; Warren, 1993). Affirmation of a spectrum of transgender identities as part of prevention education might alleviate the pressure to physically conform to a binary conceptualization of gender that plays an important role in risk behaviour. This would improve the potential for authentic relationships, decrease loneliness and isolation, reduce sexual acting out and facilitate negotiation of safer sex.

One factor that complicates prevention education is that the transgender community is not as cohesive as some other minority communities, such as gay men. Transgender identities are diverse; situations and needs vary considerably. Transgender persons often identify at different points in time with different sexual minority and majority sub-populations, and sexually interact with them. Parts of their identity and sexual activity might be compartmentalized, as for example in the case of the 'double life' of a married male who secretly crossdresses and engages in casual sex with men without his wife's knowledge. Male partners of female impersonators and drag queens are often heterosexually identified, even though they might enjoy the transgender person's penis (Minnesota Department of Health, 1994;

Whitam, 1988). Male-to-female transexuals attracted to men tend to identify as heterosexual women regardless of the status of their genitals. As participants explained, denial of risk for HIV in such cases is common, based on the myth that it is a gay disease and that heterosexuals don't get AIDS. Prevention should stress that HIV risk is behaviour based and does not discriminate on the basis of sex, gender or sexual orientation.

Participants frequently noted that a successful programme is one that involves and empowers the community. Prevention education should involve transgender community representatives in all aspects of the programme, including planning, recruitment, intervention and evaluation. This would provide a sense of ownership, enhance its impact and facilitate community building.

The limitations of the current study rest primarily in the area of sampling. Krueger (1988) recommends conducting two-to-four focus groups of similar participants. In this study, we attempted to sample a range of transgender individuals and conducted focus groups with different sub-groups of the transgender community. Even so, people of colour, active sex workers, drag queens and kings, and (fe)male impersonators were under-represented. Future studies should address these limitations and consider combining qualitative and quantitative methodologies.

Future research should include sexual partners of transgender persons, and assess the interpersonal dynamics involved in HIV transmission. An excellent example of such a dynamic was found in a needs assessment conducted in Boston (Hope-Mason *et al.*, 1995), where negotiating condom use would mean that both the male-to-female transgender person and her non-transgender partner would have to acknowledge her penis. This threatens the protective denial of both partners; that is, the transgender person's denial of having a penis and her partner's denial of desiring one. There are few studies of partners (Blanchard & Collins, 1993; Bullough & Weinberg, 1989; Docter, 1988; Weinberg & Bullough, 1988; Wise *et al.*, 1981), and none specifically assessed their HIV risk.

Another area in need of research is the effect of erratic hormone use on transgender persons' mood, sexual risk behaviour, impulse control and alcohol and drug use (Cohen-Kettenis & Gooren, 1992). Studies on the effects of hormones on the progression of HIV/AIDS are needed, and the risks and potential benefits of sex reassignment surgery need to be clarified. A special task force of the Harry Benjamin International Gender Dysphoria Association has been formed for this purpose.

In conclusion, this study demonstrated the need for targeted transgender HIV prevention. Community involvement, peer education and affirmation of transgender identity and sexuality emerged as key elements of a successful intervention. Health professionals and HIV/AIDS workers need to be better trained to respond to the needs of this population.

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