

An assessment of sex work in Swaziland: barriers to and opportunities for HIV prevention among sex workers

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Abstract

The HIV situation in virtually all southern African countries is a generalised epidemic. Despite the fact that almost all adult age and social groups have high HIV prevalence estimates, sex workers are disproportionately affected, with prevalence estimates higher than the general population. In a qualitative study of 61 male and female sex workers in Swaziland, we found that while poverty drove many into sex work, others reported motivations of pleasure or “sensation seeking”, and freedoms from the burden of marriage as perceived benefits of sex work. We also found that penile-vaginal sex was not universal in male-female sexual encounters; and motivation by sex workers for non-condom use included intention to earn more money from unprotected sex, desire for sexual pleasure, and not having time to use condoms. Many sex workers expressed doubts over an alternative lifestyle, even if that change afforded them money to meet their daily necessities. The findings from this study suggest that treating sex workers as a homogenous group that is driven into, or maintain sex work only because of poverty may be problematic, and could hamper HIV-relevant interventions aimed at reducing their vulnerability to sexually transmitted infections.

Keywords: Sex work, Swaziland, condoms, sexual pleasure, poverty, human immune-deficiency virus (HIV).

Résumé

Dans pratiquement tous les pays d'Afrique australe, on assiste à une épidémie généralisée du VIH. Presque tous les adultes et les groupes sociaux sont concernés par des estimations de prévalence élevées, mais les travailleurs du sexe sont touchés de manière disproportionnée avec une prévalence plus forte que dans le reste de la population. Dans une étude qualitative concernant 61 travailleurs et travailleuses du sexe au Swaziland, nous avons constaté que la pauvreté a conduit nombre d'entre eux à se prostituer, mais d'autres ont aussi évoqué des motivations liées au plaisir ou à la « recherche de sensations », et à une liberté salutaire au regard du fardeau que représente pour eux le mariage. Nous avons également constaté que les rapports sexuels vaginaux n'étaient pas toujours la règle entre les hommes et les femmes. Aussi, le choix des travailleurs sexuels de ne pas utiliser de préservatifs s'expliquait selon cette étude par la volonté de gagner plus d'argent en moyennant une relation sexuelle non-protégée, par l'envie d'avoir du plaisir sexuel et par la perte de temps que constituait l'utilisation d'un préservatif. Beaucoup de travailleurs du sexe ont exprimé des doutes à l'idée de changer de mode de vie, même si ce changement leur garantissait assez d'argent pour subvenir à leurs besoins quotidiens. Les résultats de cette étude suggèrent qu'il peut être problématique de considérer les travailleurs du sexe comme un groupe homogène qui serait poussé à la prostitution et poursuivrait cette activité uniquement en raison de la pauvreté. La croyance dans cette idée pourrait entraver la mise en place d'interventions pertinentes contre le VIH visant à réduire la vulnérabilité des travailleurs du sexe aux infections sexuellement transmissibles (IST).

Mots clés: Prostitution, Swaziland, préservatif, plaisir sexuel, pauvreté, virus de l'immunodéficience humaine (VIH).

Background

According to UNAIDS, 26.1% (25.1% - 27.1%) people 15 - 49 years of age in Swaziland are infected with HIV (UNAIDS, 2008). As in the majority of southern African countries, heterosexual intercourse is the main mode of HIV transmission. Multiple partners in general and sex work within an environment of low condom use have been identified as drivers of the HIV epidemic in the country (Swaziland National AIDS Strategic Plan, 2000).

However, there is limited understanding of the social and decision-making environment in which sex work occurs. It was because of this limited understanding of the sex work environment that the Ministry of Health (MOH), the National Emergency Response Council on HIV/AIDS (NERCHA), UNAIDS and UNFPA in Swaziland commissioned and funded an assessment of commercial sex work.

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Swaziland, a small southern African country sharing borders with South Africa and Mozambique, is one of the lowest-income countries in the world; it is also among the hardest hit by HIV and AIDS. Since 1992, HIV prevalence has risen steadily, until in 2004 Swaziland had the highest prevalence ever recorded anywhere in the world. Like other countries in the region, Swaziland is experiencing a generalised epidemic, with national sero-sentinel surveillance prevalence increasing from 3.9% in 1992 to 42.6% in 2004 (Pisani, Weir, Zaba & Hay, 2003). The 2006-07 Swaziland Demographic and Health Survey found 19% HIV prevalence in the population aged two years and older; while 26% of the population aged 15-49 was infected. HIV prevalence was also higher among women than men (22% and 15%, respectively); and HIV prevalence is estimated at 19% among the entire population and 26% among the reproductive age group (Central Statistical Office & ORC Macro International, 2008).

Estimating the size of a specific population, particularly at risk of HIV infection, can be difficult. Several reasons to support the importance of estimating the size of populations have been advanced. Some of the reasons are as follows: lobbying for appropriate interventions; raising money and allocating it efficiently; estimating how many people are living with HIV nationwide; and measuring and projecting trends over time (Pisani *et al.*, 2003). Populations at high risk for HIV are often referred to as “hidden populations” or “hard-to-reach” populations with mixed justification (Pisani *et al.*, 2003). However, brothel-based sex workers, for example, are neither hidden nor hard to reach, but are generally stigmatised by society. Where sex work is carried out as an underground activity, the population becomes hidden and hard to reach. In this case, methods that require contact with the population (such as enumeration, nomination and multiplication methods using multipliers derived from surveys) will benefit from including members of the population itself in the contact team.

Sex work in Swaziland

Our definition of a sex worker is a person who provides sex, sexual stimulation or erotic services in exchange for cash or goods. (Weitzer, 1991; 2000;2009). Sex workers may be employed as prostitutes, strippers, brothel workers, or porn stars, among other things. Some sex workers are paid to engage in sex acts which involve varying degrees of physical contact with clients. In most countries, even those where sex work is legal, sex workers are stigmatised and marginalised, which can prevent them from seeking legal help e.g. for non-payment by a client, assault or rape (Flowers, 1998). As in most other southern African countries, sex work in Swaziland is illegal and largely not recognised. This makes sex workers a population that is hard to reach, as discussed above, and sex work an “underground” activity. There is generally a scarcity of literature on sex work and types of sex work in this region.

Jha *et al.* (2001) have suggested that effective interventions that prevent HIV transmission to and from sex workers have a large impact in curbing the spread of HIV in developing nations. There is continued interest in ‘scaling-up’ HIV prevention among persons most at risk of HIV transmission or MART (West, Corneli, Best, Kurkjian & Cates, 2007). However much of this interest focuses on biological parameters, such as high viral load, which is associated with advanced disease, or acute infection

(Pilcher *et al.*, 2007). However, the role of sex workers in the continued spread of HIV infection in southern Africa cannot be over-emphasised. Talbott (2007, p. 543) has argued that it is not the prevalence of male circumcision but rather that ‘the number of infected prostitutes in a country is highly significant and robust in explaining HIV prevalence levels across countries’. In order to provide context-responsive HIV prevention interventions among sex workers, there is a need for more than a casual understanding of sex workers’ lives.

In this study, the approach was to use qualitative research methods to obtain information, albeit guided by previous research. We did not assume: that sexual practices were heterosexual or homosexual; that clients of female sex workers were males only; that sex workers would use condoms always and are only prevented from doing so by their male clients; that contact between sex worker and client was on a one-on-one basis; and that all sex workers were motivated by poverty. This study aims to report the social decision making environment of sex work in Swaziland, and explores barriers and opportunities for the prevention of HIV transmission in a country with one of the highest adult HIV prevalence in the world.

Methods

Study design and participant recruitment

This was a cross sectional study, commissioned by UNFPA-Swaziland, in collaboration with the Ministry of Health (MOH), the National Emergency Response Council on HIV/AIDS (NERCHA), and UNAIDS. Data collection was conducted in 2007, using interviews to collect both qualitative and quantitative data among sex workers. UNFPA-Swaziland approved the data collection procedures. We recruited the first few sex workers from bars, night clubs and hotels, and these participants were then asked to recruit their peers (snowball sampling approach). As sex work is illegal in Swaziland, this method was perceived to be the most appropriate, since sex workers were likely to have been comfortable to identify themselves as such among their own peers. Study participants were recruited from all the four regions of the country (Manzini, Shiselweni, Lubombo and Hhohho). A total of 61 study participants, 53 female and 8 male sex workers, were recruited.

Data collection procedures

Both quantitative and qualitative data were collected by eight trained research assistants (three of whom were women and five were men). Data collection was done over two weeks. For the qualitative data, each data collection team comprised a moderator and a note taker. In some instances, permission to recruit and interview sex workers was obtained from bar and hotel managers.

Quantitative data mainly involved socio-demographic characteristics and sexual behaviour using a questionnaire. A pre-coded questionnaire was carefully developed and briefly pre-tested among the research team. The questionnaire, which was administered by the interviewers to all the 61 sex workers, had the following sections: background characteristics, marriage, family and work questions, sexual history – numbers and types of clients, male and female condom use, sexually transmitted infections - treatment-seeking behaviour, knowledge, opinions, and attitudes

towards HIV and AIDS, stigma and discrimination, exposure to interventions and preference for services.

Qualitative data were collected via five focus group discussions and in-depth interviews. A focus group discussion (FGD) guide was developed and pre-tested briefly with the research team. Conducted by a minimum of two research team members, one who acted as the moderator and the other as the recorder per group of 10 respondents, the FGD was used to elicit perceptions of sex work, risks and vulnerability to sexually transmitted infections (STIs), HIV and unplanned pregnancies. The tool also gathered information on suggestions for reducing risks, and vulnerability associated with sex work and health-related interventions.

In-depth interviews were conducted with ten sex workers. The same tool that was used to guide FGD was used to elicit and explore more in-depth personal perceptions on a one-on-one basis. Interviews occurred either at the place of operation (for street sex workers) or at the venue (a hotel) where FGDs were conducted. Participants who came to FGD venues received food and accommodation over night. No additional incentives to participate in the study were provided. Qualitative data collection was the main mode of data collection because the study aimed to answer questions associated with “what, how or why” of sex workers (Green & Thorogood, 2008, p. 25) in a way that quantitative methods could not achieve. Comprehensive notes were taken of interviews and FGDs, rather than audio tapes, as this was perceived to be less threatening to study participants. Research assistants were programme officers with experience in reproductive health and family planning. For the specific purpose of this study, they received training in qualitative data collection through didactic teaching, group work and role playing.

Data analysis

Quantitative data were analysed, using SPSS, to obtain frequencies and proportions of relevant socio-demographic characteristics. Qualitative data were analysed manually by thematic content analysis (Green & Thorogood, 2008). Initially categories were generated from the transcripts based on pre-determined study

motivations. These themes were: general operational environment of sex work, knowledge of HIV relevant behaviour, self-perception as a sex worker, perceived community perceptions, high risk sexual behaviour and risk reduction practices, and motivations for sex work. Specifically, we aimed to have a general understanding of the sex work environment in Swaziland, the motivation for being a sex worker, self-perception or attitudes toward sex work, condom and modern family planning use, and barriers to safer sex. Data analysis was led by the first author, and some research participants participated in the analysis. Qualitative data was analysed manually. Disagreements in data analysis were resolved by consensus.

Results

Socio-demographic characteristics of the study participants

Sixty-one sex workers participated in the study; 8 were males and 53 females. Fifty-seven (93.4%) reported to have ever attended school, with 15 (26.3%) having attained no more than primary school. Fifty-one (83.6%) reported to have taken alcohol at least once in the past week while, 39 (63.9%) had ever used illicit drugs (e.g. marijuana, heroin, cocaine). The minimum age at sexual debut was 12 years (median 16 years), while the minimum age at the initiation of sex work was 14 years (median 19 years), and about half (47.5%) had initiated sex work at age 18 years or less. Thirty (49.2%) reported having other sources of income than sex work: factory work (4); domestic help (7); hotel/restaurant/bar (6); street vending (5); and other sources (2). Forty one (67.2%) reported having dependents they supported financially.

General perceptions about HIV

Eight of the study participants reported the belief that an HIV-infected man could be cured by sex with a virgin. A further description of the knowledge of study participants is shown in Table 1.

Consistent condom use

As consistent and correct condom use (both male and female, but much more so, male condom use) is considered a critical tool in

Table 1. Knowledge and attitude of study participants of sex workers in Swaziland 2007

Statement	Yes	No	Don't know	No response	Total
Ever heard of HIV or the disease called AIDS	60 (98.4%)	1 (1.6%)	0	0	61 (100%)
Do you know anyone who is infected with HIV or who has died of AIDS	52 (86.7%)	8 (13.3%)	0	0	60 (100%)
Can people protect themselves by abstaining from sex	48 (78.7%)	13 (21.3%)	0	0	61 (100%)
Can a person get infected by getting injections with a needle that has been already used by someone else	58 (95.1%)	3 (4.9%)	0	0	61 (100%)
Can a person bewitch someone else so that they have the AIDS symptoms	10 (16.9%)	48 (81.4%)	1 (1.7%)	0	59 (100%)
Can having sex with a virgin cure AIDS	8 (13.3%)	52 (86.7%)	0	0	60 (100%)
Do you think that a person with HIV should engage in unprotected sex	15 (24.6%)	44 (72.1%)	2 (3.3%)	0	61 (100%)
Do you think people living with AIDS should be quarantined	9 (15%)	10 (16.7%)	27 (45%)	14 (23.3%)	60 (100%)
Would you be willing to share a meal with a person you knew had HIV	43 (70.5%)	16 (26.2%)	2 (3.3%)	0	61 (100%)
If you knew a shopkeeper or food seller had the HI virus, would you buy food from them	50 (82%)	10 (16.4%)	0	1 (1.6%)	61 (100%)
If a member of your family became ill with HIV, would you want it to remain secret	26 (42.6%)	33 (54.1%)	1 (1.6%)	1 (1.6%)	61 (100%)
Can a pregnant woman infected with HIV transmit the virus to her unborn child	40 (65.6%)	21 (34.4%)	0	0	61 (100%)

the prevention of HIV acquisition and transmission among sex workers, study participants were asked about condom use. The findings highlighted that condom use was erratic among most of them. Situational factors, including female condom availability, the type of client, desire for sexual pleasure and financial considerations all affected whether condoms were used or not. Several study participants indicated that condoms were less likely to be used with wealthy people and prominent individuals in society. The sex workers reported that these clients would also pay more for sexual services, either because they could afford to or as “hush money” to protect their reputation in society. Sex workers also reported that they would not use condoms with wealthy and famous clients (e.g. prominent business or community leaders), so as to be able to ask them for financial assistance in the future when pregnancy occurred or under the pretext that the sex worker was now pregnant with the client’s baby. A female study participant said: *“When with rich prominent clients, you tell them that you are pregnant so that they can give you a lot of money for abortion”*.

Study participants also reported that they were unlikely to use condoms when drunk; when they liked or admired the client; when they just wished to have sex without condoms, or when sex was with a steady sexual partner such as a boyfriend. Study participants also suggested that when they did not have money for daily necessities, it became difficult to insist on condom use if a client would be discouraged by the suggestion. A female participant said: *“When you don’t have money and a client comes with money you don’t use a condom”*.

We also aimed to assess how familiar sex workers were with the female condom, and for those familiar with the condom, what their experiences were with its use. It appeared that just about half knew what the female condom was and another half had never heard about it. Although situations were reported when sex workers were overwhelmed into accepting sex without condoms due to financial considerations, it was also reported that this was not the main motivation. A female study participant said: *“I had a guy who wanted us to use both the female and the male condom and I did not enjoy the experience”*.

Some participants reported that they were motivated to demanding condom use by telling their clients that they (the sex worker) were HIV infected. This strategy was reported to be used by both those who knew they were HIV infected and those who did not know their status. While the possibility of acquiring HIV by a client had potential to encourage condom use, in some cases this resulted in losing a client. Some participants however, reported that they would not be dissuaded from unprotected sex by these threats. A female sex worker said: *“When a client doesn’t want to use a condom I tell him I am HIV positive and he will say that he is also HIV positive so he doesn’t care.”* It was not possible to determine whether these clients were indeed HIV infected or just said they were infected in order to get what they wanted i.e. unprotected sex.

From the quantitative data on sexual behaviour, 56 study participants reported to have used a condom at last sex, in 41 cases participant initiated; by sexual partner (2); jointly (12); don’t know (1). Reasons for not using condoms included: partner objected;

did not think it was necessary; didn’t like condoms; perception that hormonal contraceptives were enough; did not think about condoms at the time; trusting the partner; not comfortable initiating use and; not trusting condoms would protect against STI transmission; and having been in a hurry. Being in a hurry was perceived to be particularly important in situations where sex occurred in car parks, bushes and other ‘public places’ where participants reported they risked being caught by police.

Sex workers also reported that they sometimes boasted of the number of clients they had “*lobelared*” i.e. infected with HIV. A sex worker reporting on clients who refused condom use said: *“We do not argue with them, we just increase our numbers and we call it “Lobela campaign”, indicating the number of clients they may have had unprotected sex with.”*

Modern contraceptives use

A recurring theme in many southern African countries is the preference for “dry sex”. In the context of sex work, having multiple sex partners in a single day without use of condoms may lead to “over-lubrication” of the vagina. Hormonal contraceptives were not always preferred as they were believed to increase vaginal “wetness”. When asked about hormonal contraceptive use, a participant said: *“No, we don’t want to be wet because that chases away clients.”* Another female sex worker noted: *“We don’t do family planning. It makes us wet and men beat us up saying we have had too much sex”*. Some clients indicated that they could not choose to use hormonal contraceptives because, if they did, they would not be motivated enough to use condoms all the time. For these people, knowing that they were not protected from pregnancy when they were not on hormonal contraceptives motivated them enough to insist on condom use.

Perceptions of sex work

We explored the study participants’ own and the community’s perceptions of being a sex worker in Swaziland. Sex workers noted that they were not totally invisible, as some reported being well known as sex workers within their communities. In general, study participants reported that society in general had negative attitudes toward sex work. A participant in an FGD said: *“In our communities they call us prostitutes, bats, chappies, cabbages”*.

Some sex workers reported they felt society did not like sex workers because *“we make money better than them”*. However, sex workers also described themselves in more favourable terms. *“We call ourselves phajera”*: said a study participant. *Phajera* is a derogatory term in Swazi given to sex workers. Study participants in general reported that initially they did not like being sex workers, but with time, they got accustomed to what they did and in some cases, did not regard life outside sex work as a viable option. A male sex worker said: *“I like this job for the money and for the sex as I have sex with other men. It may be difficult to stop sex work even if I get another job that pays well”*.

Female study participants also compared being a sex worker to being married: *“Sex work is better than being a married woman”*. Moreover, female sex workers perceived themselves as serving a useful societal function. A female sex worker said: *“Clients come to us because they probably do not get what they want from their*

wives or husbands. Wives refuse sex and they refuse to perform certain sexual styles". Another respondent said: "Women will tell their husbands that they are tired yet with us we do not complain".

Clients and type of sex work

Research on sex work in Africa has probably assumed that all sexual activity is penile-vaginal. Studies aimed at documenting frequency and duration since initiation of sex work and HIV may therefore fail to identify the actual risk behaviour that is performed. Questions like how many sex partners did you have on the last day of work; or asking sex workers to estimate the average number of sexual encounters in a time period (week, day or month) is less meaningful if the type of sex work involved is not explored. We found that both male and female sex workers in Swaziland were involved in behaviour such as: cunnilingus, fellatio, mutual masturbation, and "sibashaya sikhova" (same sex relations).

Clients from a wide variety of social backgrounds were reported to have sex with the study participants. While probably married individuals sought the services as a marker of infidelity, study participants also reported that some married couples together would seek the services of sex workers. Contrary to popular opinion that men in Africa are responsible for infecting their 'innocent wives', we also found that married women were clients of sex workers. A male study participant said: "Women are also our clients because they are starved of sex in their homes. We enjoy it especially when the woman is beautiful and sexy".

Our exploration of the type of clients based on socio-demographic variables also highlighted the importance of unmarried adolescents, not just married men or adults, as clients. A female study participant reported: "In one particular instance a father booked me for his 13 year old son who was not experienced so I had to teach him a few things". While we could not confirm if the older male was indeed a parent of the adolescent client, this report highlights the importance of high-risk intergenerational sex between adolescent males and more sexually experienced sex workers. Furthermore, it also highlights the role of some adults in facilitating under-age individuals' access sexual services.

Motivation for sex work

The majority of study participants reported financial need as the reason for initiating and maintaining sex work. The trigger factors however were not always poverty. Some respondents, especially male sex workers, reported pleasure seeking as a reason they engaged in sex work. They also reported that wealthy female clients would allow them to drive "their fast cars." The pursuit of "fast cars" may not necessarily be a solution to poverty.

A female sex worker highlighted the fact that compared to many other occupations available to less educated women; sex work was much more high paying. A participant reported: "Last month I made E7500.00 with which I was able to buy a dining suite and other household items". (7.7 Swazi Elangeni was equivalent to US\$1.00 at the time of the study.) Another female sex worker reported: "I was provoked by my husband beyond imagination, I worked hard to build my home but he would bring his lovers home and arguments led to fights and I had to call it quits". The cultural environment

where men are expected to have multiple sex partners even when married and women cannot reprimand their husbands for their infidelity may drive women to make such desperate decisions.

Discussion

In this exploratory study conducted among sex workers in Swaziland, using both qualitative and quantitative methods, several findings deserve mention. We found that sex workers reported that poverty, lack of viable economic alternatives, sensation seeking and liberation from the bonds of marriage motivated them into sex work. This study highlights a number of critical areas that HIV prevention programmes and researchers in southern Africa should consider seriously. As shown in Table 1 above, less than complete knowledge and prejudice against HIV infected persons continue to exist in a country with one in three persons being HIV infected.

There are hundreds of knowledge, attitude and practice (KAP) articles on various aspects of HIV prevention and control. The basic concept of the KAP model is that knowledge is a prerequisite for the intentional performance of health-related behaviour. As knowledge accumulates, this leads to change in attitudes, and action will eventually follow. This theory assumes that humans are rational and make decisions based on the available knowledge and/or evidence. The KAP model however, has not specified the process by which change occurs i.e. how does knowledge translate into attitudes and then into behaviour? Furthermore, although knowledge is critical in our efforts to prevent HIV transmission, without an enabling environment, knowledge alone may not be enough to facilitate behavioural change (Ghosh & Kalipeni, 2005). In the present study, we found that sex workers appreciated the fact that condoms could curb the spread of HIV and other sexually transmitted infections. However, client and individual factors, environmental factors (e.g. having sex at a place where people needed to rush) prevented condom use.

The belief in cure after sex with a virgin has persisted in southern Africa. There are many reports of men who rape very young girls, in the belief that they can be cured of HIV infection if they have sex with virgins (Jewkes, Martin & Penn-Kekana, 2002; Mathunjwa & Gary, 2007; Meel, 2003). We found that female sex workers also had this belief, which has persisted for close to a decade. It is interesting why the myth continues when there is evidence that perpetrators of child rape have died of the disease (Mathunjwa & Gary, 2007).

Previous research in Zimbabwe, South Africa and East Africa has demonstrated a positive association between knowing someone with HIV and AIDS or who has died of AIDS and protective sexual behaviour, such as condom use, delayed sexual debut, and decreased number of sexual partners (Gregson, Zhuwaiui, Anderson & Chandiwana, 1997; Ijumba, Garmieldien, Myer & Morroni, 2004; Macintyre, Brown & Sosler, 2001). In one study in South Africa, however, there was no association found between knowing someone with HIV or who died of AIDS and condom use at last sexual encounter (Camlin & Chimbwete 2003). Mitchell, Severtson and Latimer (2007) have reported that knowing someone who died from AIDS was not associated with reduced risk taking among injecting drug using young men with low

cognitive capacity. The majority of our study participants reported knowing someone with AIDS or HIV. Whether they thought this influenced individual decision making was not assessed. Much of the literature on sex work in southern Africa seems to suggest that poverty is universal among sex workers, and only males are clients of sex work (Oyefara, 2007; Udoh, Mantell, Sandfort & Eighmy, 2009; Weiser *et al.*, 2007). Penile-vaginal penetrative sex is also assumed, with married male clients patronising sex workers, and thereby being “vectors” of infection to their wives. Our study has confirmed that poverty is an important factor among sex workers and has the potential to influence decision on condom use. However, we have also reported that young unmarried adolescents and females are clients of both male and female sex workers. Sex workers are not always engaged in situations where the male partner is ‘cheating’ on his wife. Both male and female clients may engage sex workers as a consequence of marital difficulties.

Although the pursuit of financial independence was echoed in virtually all FGDs and in-depth sex worker and key informant interviews, a few study participants indicated that they engaged in sex work in part because of the pleasure they obtained from having sexual intercourse with multiple partners. It would appear that among these women, they had rationalised that being married was incompatible with sex work; although we found that some women were married sex workers. Study participants also reported that many times they were prevented from using condoms when clients demanded no condom use and offered to pay more than when condoms were used. Previous research in diverse settings has confirmed this finding (Campbell, 2000).

In a number of health behaviour models, but more so within Social Cognitive Theory and the Health Belief Model, self-efficacy, defined as having confidence in one's ability to perform a particular behaviour, is strongly associated with consistent condom use (Bandura, 1969a; 1969b; 1986; Baele, Dusseldorp & Maes, 2001; Fischer & Fisher, 1992; Giles, Liddell & Bydell, 2005; Mashegoane *et al.*, 2004; Meekers, Silva & Klein, 2006). Norms and expectations within societies also influence behaviour. Overall, many sex workers interviewed reported the desire to use condoms, at least with non-regular sexual partners, but were limited by the environment in which they operated. For instance, clients of sex workers expected them (the sex workers) not to be concerned with HIV infection; and the illicit nature of sex work with the threat of being arrested by police, made it particularly challenging to use condoms when sex occurred in public places such as on the road, or in cars and car parks.

Varga (1997) has reported that condom use may be associated with negative symbolism; suggesting condoms were associated with infection, mistrust and fear. Study participants in our research reported that they were unlikely to use condoms when confronted with the question as to whether they were infected or when intercourse was with a regular sex partner.

Study participants also reported that they were less likely to use condoms if and when they had taken alcohol. Alcohol use before sex has been associated with less likelihood of condom use (Kongnyuy & Wiysonge, 2007; Mmbaga *et al.*, 2007; Weiser *et al.*, 2006). McCready and Halkitis (2008) have also reported

use of methamphetamine among MSM in order to escape the responsibility of using condoms. Research however is not universally consistent on the association between mind-altering drugs and non-condoms use. Leigh and colleagues (2008) have reported that people tend to follow their usual pattern of condom use. We believe though, that sex workers who use alcohol may be limited in their cognitive will power to insist on condom use when drunk. The inconsistency in the findings in the previous studies assessing the link between alcohol use and unprotected sex may also have been due to failure to quantify alcohol intake. Minimal alcohol intake may not be enough to overcome cognition, while moderate to heavy intake may be required to influence mental capacities.

Limitations of the study

This study had several limitations. First all the data were collected through self reports or FGDs, without specific verification. Furthermore, study participants were recruited through self identification and snow-balling. It is therefore possible that initial recruits were more likely to recruit other sex workers who were similar to themselves, thereby minimising variability in the responses. There may have been problems in individual definition of what being a sex worker was. It is also possible that these methods of participant recruitment favoured individuals who were comfortable to identify themselves as sex workers. These individuals may not be representative of the sex worker population in Swaziland. We also did not appropriately disaggregate the data according to sex. This is a major flaw on our part because the knowledge, attitudes and practices of the males and females need to be distinctly separated in order to address issues pertaining to each gender. The fact that note-taking was used as the method of data collection may have compromised the integrity of the data. However, we believe in the Swaziland environment, where sex work is illegal, having audio-recorded the interviews would have been problematic.

Conclusions

Sex work like much other human behaviour is a complicated experience, and ‘reductionist’ approaches, in which researchers and public health intervention implementers assume that sexual intercourse is always heterosexual, penile-vaginal, that all clients seek services of sex workers without the knowledge of their spouses, and that sex work is motivated by poverty, may not be as meaningful as when the actual practices are understood. We urge public health intervention planners and implementers to understand in more detail the experiences of the people whose behaviours they want to have changed.

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References

- Baele, J., Dusseldorp, E., & Maes, S. (2001). Condom use self-efficacy: effect on Intended and actual condom use in adolescents. *Journal of Adolescent Health, 28*, 421-431.
- Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1969a). Social learning of moral judgments. *Journal of Personality and Social Psychology, 11*, 275-279.
- Bandura, A. (1969b). Social-learning theory of identificatory processes. In D.A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-262). Chicago: Rand McNally.
- Camlin, C., & Chimbwete, C. (2003). Does knowing someone with AIDS affect condom use? An analysis from South Africa. *AIDS Education and Prevention, 15*(3), 231-244.
- Campbell, C. (2000). Selling sex in the time of AIDS: the psycho-social context of condom use by sex workers on a southern African mine. *Social Science & Medicine, 50*(4), 479-94.
- Central Statistical Office [Swaziland] and ORC Macro International (2008). *Swaziland Demographic and Health Survey 2006-2007*. Central Statistical Office, Mbabane, Swaziland.
- Fischer, J.D., & Fisher, A.W. (1992). Changing AIDS risk behaviour. *Psychological Bulletin, 111*, 455-474.
- Flowers, R.B. (1998). *The prostitution of women and girls*. North Carolina, USA: Mc Farland & Company, Inc.
- Ghosh, J., & Kalipeni, E. (2005). Women in Chinsapo, Malawi: vulnerability and risk to HIV/AIDS. *SAHARA Journal, 2*(3), 320-32.
- Giles, M., Liddell, C., & Bydell, M. (2005). Condom use in African adolescents: the role of individual and group factors. *AIDS Care, 17*, 729-739.
- Green, J., & Thorogood, N. (2008). *Qualitative methods for health research*. Thousand Oakes, California, USA: Sage.
- Gregson, S., Zhuwailu, T., Anderson, R. M., & Chandiwana, S. K. (1997). Is there evidence for behavior change in response to AIDS in rural Zimbabwe? *Social Science and Medicine, 46*(3), 321-330.
- Harcourt, C., & Donovan, B. (2005). The many faces of sex work. *Sexually Transmitted Infections, 81*, 201-6.
- Jumba, K., Gamielidien, R., Myer, L., & Morroni, C. (2004). Sexual risk behaviors are influenced by knowing someone with HIV/AIDS. *South African Medical Journal, 94*(7), 522-523.
- Jewkes, R., Martin, L., & Penn-Kekana, L. (2002). The virgin cleansing myth: cases of child rape are not exotic. *Lancet, 359*(9307), 711.
- Jha, P., Nagelkerke, N.J.D., Ngugi, E.N., Prasada Rao, J.V., Willbond, B., Moses, S., & Plummer, F.A. (2001). Reducing HIV transmission in developing countries. *Science, 292*, 224-5.
- Kongnyuy, E.J., & Wiysonge, C.S. (2007). Alcohol use and extramarital sex among men in Cameroon. *BMC International Health and Human Rights, 7*, 6.
- Leigh, B.C., Vanslyke, J.G., Hoppe, M.J., Rainey, D.T., Morrison, D.M., & Gillmore, M.R. (2008). Drinking and condom use: Results from an event-based daily diary. *AIDS and Behaviour, 12*(1), 104-12.
- McCready KC, Halkitis PN. (2008). HIV Serostatus Disclosure to Sexual Partners among HIV-Positive Methamphetamine-Using Gay, Bisexual, and Other Men Who Have Sex With Men. *AIDS Education and Prevention, 20*(1): 15-29.
- Mashegoane, S., Moalusi, K.P., Peltzer, K., & Ngoepe, M.A. (2004). The prediction of condom use intention among South African university students. *Psychological Reports, 95*, 407-417.
- Mathunjwa TR, Gary FA. (2006). Women and HIV/AIDS in the Kingdom of Swaziland: culture and risks. *Journal of the National Black Nurses Association, 17*(2): 39-46.
- Meel, B.L. (2003) The myth of child rape as a cure for HIV/AIDS in Transkei: a case report. *Medicine, Science, and the Law, 43*(1), 85-8.
- Meekers, D., Silva, M., & Klein, M. (2006). Determinants of condom use among youth in Madagascar. *Journal of Biosocial Science, 38*(3), 365-80.
- Macintyre, K., Brown, L., & Sosler, S. (2001). It's not what you know, but who you know: Examining the relationship between behaviour change and AIDS related mortality in Africa. *AIDS Education and Prevention, 13*(2), 160-174.
- Mitchell, M.M., Severtson, S.G., & Latimer, W.W. (2007). Interaction of cognitive performance and knowing someone who has died from AIDS on HIV risk behaviors. *AIDS Education and Prevention, 19*(4), 289-97.
- Mmbaga, E.J., Hussain, A., Leyna, G.H., Mnyika, K.S., Sam, N.E. & Klepp, K.I. (2007). Prevalence and risk factors for HIV-1 infection in rural Kilimanjaro region of Tanzania: implications for prevention and treatment. *BMC Public Health, 7*(147), 58.
- Oyefara, J.L. (2007). Food insecurity, HIV/AIDS pandemic and sexual behaviour of female commercial sex workers in Lagos metropolis, Nigeria. *SAHARA J, 4*(2), 626-35.
- Pilcher CD, Joaki G, Hoffman IF, et al. (2007). Amplified transmission of HIV-1: comparison of HIV-1 concentrations in semen and blood during acute and chronic infection. *AIDS, 21*(13):1723-30.
- Pisani, E., Weir, S., Zaba, B., & Hay, G. (2003). Estimating the size of populations at risk for HIV: issues and methods. A joint UNAIDS / IMPACT / FHI workshop: report and conclusions. Updated. Arlington, Virginia, Family Health International [FHI], Institute for HIV/AIDS, [3], 61 p. (UNAIDS/03.36E|USAID Cooperative Agreement No. HRN-A-00-97-00017-00)
- Swaziland National HIV/AIDS Strategic Plan for HIV/AIDS 2000-2005 (2000). HIV Crisis Management and Technical Committee. Deputy Prime Minister's Office, Swaziland Government.
- Shahmanesh, M., Wayal, S., Andrew, G., Patel, V., Cowan, F.M., & Hart, G. (2009). HIV prevention while the bulldozers roll: exploring the effect of the demolition of Goa's red-light area. *Social Science and Medicine, 69*, 604-12.
- Talbot, J.R. (2007). Size matters: the number of prostitutes and the global HIV/AIDS pandemic. *PLoS ONE, 2*(6), e543.
- Udoh, I.A., Mantell, J.E., Sandfort, T., & Eighmy, M.A. (2009). Potential pathways to HIV/AIDS transmission in the Niger Delta of Nigeria: poverty, migration and commercial sex. *AIDS Care, 21*, 567-74.
- UNAIDS. (2008). *Epidemiological Fact Sheet on HIV and AIDS, 2008*. Core data on epidemiology and response, Swaziland. Accessed 25 September 2010 from http://apps.who.int/globalatlas/predefinedReports/EFS2008/full/EFS2008_SZ.pdf
- Varga, C.A. (1997). The condom conundrum: barriers to condom use among commercial sex workers in Durban, South Africa. *African Journal of Reproductive Health, 1*(1), 74-88.
- West, G.R., Corneli, A.L., Best, K., Kurkjian, K.M., & Cates, W. Jr. (2007). Focusing HIV prevention on those most likely to transmit the virus. *AIDS Education and Prevention, 19*(4), 275-88.
- Weiser, S.D., Leiter, K., Heisler, M., McFarland, W., Percy-de Korte, F., DeMonner, S.M. et al. (2006). A population-based study on alcohol and high-risk sexual behaviors in Botswana. *PLoS Medicine, 3*(10), e392.
- Weiser, S.D., Leiter, K., Bangsberg, D.R., Butler, L.M., Percy-de Korte, F., Hlanze, Z, et al. (2007). Food insufficiency is associated with high-risk sexual behavior among women in Botswana and Swaziland. *PLoS Medicine, 4*, 1589-97.
- Weitzer, R. (1991). Prostitutes' rights in the United States, *Sociological Quarterly, 32*(1), 23-41.
- Weitzer, R. (2000). *Sex for sale: Prostitution, pornography, and the sex industry*. New York: Routledge Press.
- Weitzer, R. (2009). Sociology of sex work, *Annual Review of Sociology, 35*, 213-34.