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SOUTH AFRICAN HEALTH CARE PROVIDERS' RECOGNITION OF THE LINKS BETWEEN ALCOHOL AND HIV IN THEIR DAILY PRACTICE: A PILOT STUDY

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ABSTRACT

This pilot study assessed the extent to which health care providers in HIV care and treatment, substance abuse intervention and employee assistance programmes (EAPs) consider and inform their clients about the role of alcohol use/abuse in HIV transmission, HIV disease progression and adherence to antiretroviral therapy (ART). A web- and telephone-based survey was conducted among 84 of the aforementioned programmes. Albeit not routinely, respondents from most organisations reported addressing the issues of alcohol in HIV transmission, disease progression and ART adherence among their clients. Contrary to expectations, many programmes do consider the links between alcohol and HIV and AIDS in their operations, but seem to lack adequate resources, information and skills to intervene in a comprehensive way.

Key Words: Alcohol, HIV/AIDS, South Africa, health care providers, antiretroviral therapy, adherence

INTRODUCTION

South Africa has the greatest number of people living with HIV infection in the world (UNAIDS, 2007) and is among countries with the highest levels of hazardous alcohol use (Parry, 2005); that is,"a pattern of substance use that increases the risk of harmful consequences for the user" (Babor et al., 1994, p. 41). Within sub-Saharan Africa, the burden of the HIV epidemic is not evenly distributed, and Southern Africa is the sub-region which is most affected. It is estimated that in 2007 Southern Africa accounted for 35% of all people living with HIV and 32% of all new infections and AIDS-related deaths globally (UNAIDS, 2007).

Alcohol use (including hazardous use, harmful use and alcohol dependence) is increasingly known to impact on at least three main aspects of HIV disease, namely, HIV transmission, HIV disease progression and adherence to HIV medication. Harmful use refers to "a pattern of"(... alcohol use...) "that

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is causing damage to health" (Babor et al., 1994; p.41), and alcohol dependence refers to "a cluster of behavioural, cognitive, and physiological phenomena that may develop after repeated alcohol use"...inclusive of..."a strong desire to consume alcohol, impaired control over its use, persistent drinking despite harmful consequences, a higher priority given to drinking than to other activities and obligations, increased alcohol tolerance, and a physical withdrawal reaction when alcohol use is discontinued (Babor et al., 2001, p. 5). Encouragingly, the South African Department of Health's HIV and AIDS and STI Strategic Plan for South Africa, 2007-2011 (Department of Health, 2007) recognises the role played by alcohol and other substances of abuse (i.e. substances that can "change an individual's consciousness, mood or thinking processes"; World Health Organization [WHO], 2004, pp. 1-2) in the transmission of HIV, and highlights the need for programmes to address this challenge. However, it makes little mention of alcohol's effects on antiretroviral (ART) medication adherence and HIV disease progression.

Much research that has been carried out in sub-Saharan Africa has highlighted alcohol's role in HIV transmission. A recent systematic review of studies conducted in Southern Africa has shown that alcohol use is associated with increased involvement in sexual risk behaviours which lead to infection with HIV (Kalichman, Simbayi, Kaufman, Cain & Jooste, 2007). Alcohol use also increases the likelihood of HIV infected individuals engaging in sexual risk behaviour, thereby re-infecting themselves and/or infecting others. A number of studies have found a high prevalence of alcohol use in HIV positive individuals (e.g. Shaffer et al., 2004; Simbayi et al., 2007). Indeed, a systematic review and meta-analysis of studies conducted in Africa (Fisher et al., 2007) has indicated that those who drink alcohol tend to be more likely than non-drinkers to be HIV-positive, with the association becoming even stronger for persons who are problem drinkers (which, in the reviewed studies, was variously defined, based on scores on the AUDIT and CAGE; alcohol consumption patterns, including ≥ 3 drinks per occasions; frequency of alcohol consumption; and daily consumption).

There is also growing evidence that heavy alcohol use (i.e. the consumption of alcohol in levels that exceed "some standard of moderate drinking or – more equivocally – social drinking"; WHO, 2004, p.26) is negatively associated with adherence to ART. The same holds true for the heavy use of other drugs. The association between the two behaviours is complex (Parsons, Rosof, Punzalan, & di Maria, 2005), and proposed to be mediated by a number of cognitive and behavioural factors. First, heavy substance use has been hypothesised to impact adherence negatively as it leads to impaired cognition, judgment and short-term memory (Murphy, Marelich, Hoffman & Steers, 2004; Parsons et al., 2005), all of which are cognitive functions vital for navigating some of the complex antiretroviral regimens (Hinkin et al., 2002; Hinkin et al., 2004). Second, beliefs that substances of abuse interact negatively with ART drugs are purported to account for the relationship between substance use and ART non-adherence. For example, individuals may *consciously* decide to forgo taking their ART when drinking alcohol in order to avoid the negative alcohol-ART interactions that they believe result from the ingestion of both substances concurrently (Sankar et al., 2007). Third, since heavy alcohol or other drug use may hinder patients' health-protective behaviours such as keeping a doctor's appointment (Turner et al., 2001), it is proposed that substance use could lead to missed opportunities for receiving adherence counselling or other advice from health care providers regarding various aspects of their treatment regimen.

Alcohol use has also been shown to hasten HIV disease progression (Conigliaro et al., 2003; Fabris et al., 2000, Hao rah et al., 2004; Samet, Horton, Traphagen, Lyon, & Freedberg, 2003; Miguez, Shor-Posner, Morales, Rodriguez & Burbano, 2003; Wang et al., 2002). With a few exceptions (e.g. Fabris et al., 2000), the evidence for this effect is particularly compelling for patients on ART (Samet et al., 2003; Miguez, Shor-Posner, Morales, Rodriguez & Burbano, 2003). A number

of mechanisms have been proposed to explain this relationship. First, alcohol (ethanol) has an impact on proteasomes and immunoproteasomes; critical immune processes that are attenuated during progressive HIV-1 infection (Hao rah et al., 2004). Second, it is hypothesized that alcohol-exacerbated hepatotoxicity may reduce the efficiency of the liver, hence leading to less bioavailable ART to curtail the replication of HIV. For example, in a prospective cohort study of 881 HIV-positive veterans in the USA, hazardous drinking/alcohol abuse was associated with HIV disease progression and/or hepatic comorbidity and anaemia (Conigliaro et al., 2003). Third, drug-drug interactions between alcohol and ART are posited to accelerate the progression of the disease. Studies with human monocyte-derived macrophages support the notion that HIV-1 infection and ethanol may act synergistically to affect immune function including antigen presentation, hence speeding up disease progression (Hao rah et al., 2004). Finally, the link between alcohol use and HIV disease progression is thought to be mediated by ART non-adherence (Samet et al., 2003). In other words, as a result of their use of alcohol individuals may be less likely to take their antiretroviral (ARV) medications as regularly as prescribed.

Given the evidence from the above studies, interventions to address heavy alcohol consumption may (a) reduce individuals' chances of engaging in HIV-related sexual risk behaviours; (b) slow down the rate of HIV disease progression, particularly among those who are receiving ART; and (c) reduce levels of non-adherence to ART. However, it is not clear whether health care and service providers in South Africa actually acknowledge and apply this information in their daily practice.

With some exceptions (e.g. Myers & Fakier, 2007), very few studies have examined whether knowledge about the role of alcohol abuse in HIV disease is utilised by health care providers in South Africa. Myers and Fakier found that 52% and 49% of substance abuse services in the provinces of Gauteng and KwaZulu-Natal, respectively, provide HIV risk reduction interventions/HIV testing and counselling. However, few studies conducted in South Africa have assessed whether HIV prevention and treatment programmes or employee assistance programmes (EAPs) recognise and inform their clients about the role of heavy alcohol (and other drug) use in HIV transmission, disease progression and adherence to HIV medication in their daily practice. Such knowledge can be useful for informing the implementation of many aspects of the National HIV and AIDS and STI Strategic Plan (Department of Health, 2007) as well as other national planning tools such as the National Drug Master Plan which broadly highlights the need to address the links between substance use and sexually transmitted infections, such as HIV and AIDS (Department of Social Development, 2007). The primary aim of this pilot study was to assess the extent to which HIV care and treatment, substance abuse, and employee assistance programmes in South Africa consider and inform their clients about the role of alcohol use/abuse in HIV transmission, HIV disease progression and adherence to ART. The study considered other drugs as a secondary concern, hence information was also sought from the various programmes regarding the extent to which they consider and inform their clients about the role of other drugs in HIV transmission, HIV disease progression and adherence to ART.

METHOD

Design

The pilot study involved a cross-sectional survey that was carried out between November 2005 and May 2006.

Participants/Organisations

Participants comprised service providers (and not clients/users) within three sectors: the HIV prevention, care and treatment sector, the substance abuse prevention and treatment sector, and the private industry sector. The first two sectors were selected in order to include programmes that provide services specifically for people who are risk of developing problems

related to HIV and/or substance use, and/or are already experiencing substance use or HIV-related problems. The private industry sector was selected in order to focus on Employee Assistance Programmes (EAPs) dealing specifically with HIV and AIDS and/or alcohol and other drug use problems. For the sampling of organisations, we sought to include all HIV care and treatment organisations that were listed in the Centre for HIV/AIDS Networking's database of HIV-related organisations as having substance abusers among their clients. We also targeted all substance abuse programmes that were included in the substance abuse directory of services of the Central Drug Authority (Central Drug Authority, 2003), and excluded research and academic institutions, as the pilot study was concerned with the practices of health care and health service providers. The EAPs were those that ran substance abuse and HIV programmes for their employees.

Questionnaire

The questionnaire consisted of ten sets of items: eight close-ended and two open-ended (please see the Appendix for a copy of the questionnaire). The questions asked about the following aspects of service delivery:

1. The extent to which the programme considers the role of alcohol use in HIV transmission, disease progression, and adherence to HIV treatment.
2. Whether the programme informs its clients about the role of alcohol use in HIV transmission, disease progression and adherence to HIV treatment via written communication and/or verbal communication and/or referral.
3. Whether the programme considers the role of the use of substances other than alcohol in HIV transmission and/or disease progression and/or HIV treatment adherence.
4. Whether the organisation has resources to address these issues.

On average the questionnaire would take about 5 minutes to complete.

Procedures

Web-based survey

The *web-based survey* was implemented by the webmaster of the Medical Research Council (MRC) in Cape Town and hosted on the MRC's website. Data collection was initiated by sending a brief introductory letter by email to all of the eligible service providers inviting them to participate in the audit. The introductory electronic mail was embedded with a hyperlink that directed prospective participants to a webpage displaying an information leaflet and informed consent form. Separate information leaflets about the study were available for participants from each of the sectors, i.e. the HIV services sector, the substance abuse treatment and prevention programmes, and the EAP sector. Those prospective participants who were willing to complete the questionnaire indicated their willingness to do so by entering their name and electronic mail address onto the consent form and then clicking on a box displaying the words "I agree". Those who did not consent to participate in the study clicked a box displaying the words "I do not agree". They were then directed to a webpage displaying the words "Thank you for taking the time to read the information", and did not have access to the questionnaire. In those instances where the electronic mails were undelivered, the organisations were contacted telephonically in order to verify their correct email address, and the introductory letter was then resent to the updated email address.

Telephone survey

Telephone interviews were conducted among service providers of those organisations that did not have access to e-mail and those that did not respond to the web-based survey. Data collection was initiated by introducing the study to the recipient of the telephone call who was then asked to direct the call to the appropriate person/department. After introducing the study to the prospective participant, the consent form was read aloud and time was given to answer any possible questions the participant might have had. Verbal consent was then provided and the interview commenced.

The entire procedure took about 20 minutes to complete.

Ethical approval for conducting the study was granted by the University of Pretoria's Faculty of Health Sciences Research Ethics Committee.

RESULTS

Table 1 shows the number of questionnaires that were completed, refusals received and organisations that were not contactable. Many organisations could not be contacted due to disconnected telephones and wrong numbers listed. In some instances service providers did not have time to complete the survey due to staff shortages. A total of 84 questionnaires were completed; a response rate of 43%. The refusal rate was just over 5% for organisations contacted telephonically.

The types of services that were provided by the HIV prevention, care and treatment and substance abuse programmes that participated in the study can be seen in Table 2. The majority of HIV care and treatment programmes included in the study were based in clinical settings, whereas community-based settings and rehabilitation centres were predominant for substance abuse programmes. The substance abuse programmes were based mainly in Gauteng (30%), KwaZulu-Natal (25%) and the Western Cape (21%) provinces, while a few organisations were located in each of the other provinces barring the Northern Cape. The vast majority (80%) of the HIV programmes were based in Kwa-Zulu Natal, while there were two in the Eastern Cape, and one each in the Free State, Gauteng and Western Cape provinces. The EAPs included in the study deliver services to employees within as many as a few hundred companies around South Africa. The types of companies to which they delivered their programmes were mainly within the insurance, telecommunications, hotel, banking and retail sectors.

Screening for Alcohol and Other Drug Abuse/Dependence

Table 3 shows the frequency with which the organisations reportedly screened their clients for alcohol abuse/dependence and other drug abuse/dependence. As expected, the participants from the substance abuse programmes were significantly more likely than those from the HIV programmes to report screening their clients. Two of the three EAP participants reported that their organisations did sometimes screen their clients for alcohol abuse/dependence, but none of the EAPs reportedly screened their clients for other drug abuse/dependence.

Alcohol and HIV

Participants from all of the HIV prevention, care and treatment programmes (100%) and most of the substance abuse programmes (96%) confirmed that they did spend at least some time informing their clients about the links between alcohol and HIV in general. Respondents from most of the HIV prevention

Table 1: Response Rate for HIV, Substance Abuse and Employee Assistance Programmes

Responses	HIV Care and Treatment Programmes	Substance Abuse Programmes	Employee Assistance Programmes	Totals
	N (%)	N (%)	N (%)	N (%)
Questionnaires completed	25 (28)	56 (53)	3 (100)	84 (43)
Telephonic refusals*	6 (7)	4 (4)	0 (0)	10 (5)
Organisations not contactable	57 (65)	45 (43)	0 (0)	120 (52)
Total targeted	88 (100)	105 (100)	3 (100)	196 (100)

*The web-survey method was unfortunately not set up to keep a record of refusals.

Table 2: Types of HIV and Substance Abuse Programmes in the Sample

Type of Service	HIV Care and Treatment Programmes (N = 25)	Substance Abuse Programmes (N = 56)
	N (%)	N (%)
Interventions in Clinical Settings	18 (72)	0 (0)
Interventions in Community Settings	7 (28)	31 (55)
Interventions in Rehabilitation Centres	0 (0)	30 (54)
Policy and Advocacy Programmes	3 (12)	17 (30)
Telephone Help-Lines	0 (0)	12 (21)
Screening and Brief interventions	0 (0)	12 (21)
Faith-Based programmes	0 (0)	6 (11)

Note: Percentages do not add up to 100 as some programmes could be classified as providing more than one type of service

and care (88%) and substance abuse (86%) organisations, and all three of the EAPs indicated that their programme considered the role of drugs other than alcohol in HIV transmission and/or disease progression and/or treatment.

Alcohol use and HIV transmission (Table 4). Table 4 shows the frequency, amount of time spent per month, and modes used by each of the different types of organisation to address the links between alcohol use and HIV transmission, disease progression, and treatment among their clients. Respondents from all of the HIV care and treatment programmes, most (95%) of the substance abuse programmes, and two of the three EAPs indicated that their programmes informed their clients about the role of alcohol use in HIV transmission. Table 4 shows that the HIV and substance abuse organisations were most likely to inform their clients about alcohol and HIV transmission via the verbal and referral routes, and least likely to do so via the use of written materials. Participants from two of the three EAPS reported using verbal means, one reported using written material and none used referrals to other organisations to address alcohol and HIV transmission. All organisations were not inclined to spend much time on these issues.

Alcohol use and HIV disease progression (Table 4). All the HIV care and treatment programmes and 93% of the substance abuse organisations reported that they informed their

Table 3: Screening for alcohol and other drug abuse/dependence

Drug of Abuse/ Dependence			HIV Care and Treatment Programmes (N = 25)	Substance Abuse Programmes (N = 56)		EAPs (N = 3)*
			N (%)	N (%)	Chi-square	N (--)
Alcohol	Frequency	Always	7 (28)	35 (63)	**13.05***	1 (---)
		Sometimes	8 (32)	16 (29)		2 (---)
		Never	10 (40)	5 (9)		1 (---)
Other Drugs	Frequency	Always	6 (24)	32 (56)	**12.31***	0 (---)
		Sometimes	6 (24)	15 (27)		0 (---)
		Never	13 (52)	9 (16)		3 (---)

*p < .01; (---) Percentages were not calculated due to the small number of EAP respondents.

Table 4: Extent to which organisations address links between alcohol use and HIV transmission, disease progression and HIV treatment

Area of Intervention			HIV Care and Treatment Programmes (N = 25)	Substance Abuse Programmes (N = 56)	EAPs (N = 3)*
			N (%)	N (%)	N (%)
Alcohol and HIV Transmission	Frequency	Always	10 (40)	25 (45)	1 (---)
		Sometimes	15 (60)	28 (50)	1 (---)
		Never	0 (0)	3 (5)	1 (---)
	Time spent (hours per month)	>10	9 (36)	18 (32)	2 (---)
		1-10	15 (60)	31 (55)	0 (---)
		0	1 (4)	7 (13)	1 (---)
	Mode used to inform clients	Verbal	23 (92)	48 (86)	2 (---)
		Written	12 (48)	11 (20)	1 (---)
		Referral	16 (64)	22 (39)	0 (---)
Alcohol and HIV Disease Progression	Frequency	Always	10 (40)	22 (39)	1 (---)
		Sometimes	15 (60)	30 (54)	1 (---)
		Never	0 (0)	4 (7)	1 (---)
	Time spent (hours per month)	>10	8 (32)	16 (29)	2 (---)
		1-10	15 (60)	32 (57)	0 (---)
		0	2 (8)	8 (14)	1 (---)
	Mode used to inform clients	Verbal	24 (96)	47 (84)	2 (---)
		Written	11 (44)	10 (18)	1 (---)
		Referral	15 (60)	23 (41)	2 (---)
Alcohol and HIV Treatment	Frequency	Always	7 (28)	23 (41)	1 (---)
		Sometimes	17 (68)	29 (52)	2 (---)
		Never	1 (4)	4 (7)	0 (---)
	Time spent (hours per month)	> 10	10 (40)	16 (29)	2 (---)
		1-10	13 (52)	32 (57)	0 (---)
		0	2 (8)	8 (14)	1 (---)
	Mode used to inform clients	Verbal	22 (88)	37 (66)	3 (---)
		Written	11 (44)	10 (18)	1 (---)
		Referral	15 (60)	24 (43)	2 (---)

*Percentages were not calculated due to the small number of EAP respondents.

clients about links between alcohol use and HIV disease progression. Most reportedly addressed these links verbally, followed by using referrals, with a minority doing so in writing. The respondents from two out of the three EAPs reported informing their clients about alcohol and HIV disease progression; such information was given to their clients verbally, in writing or via referrals by two, one and two organisations, respectively.

Alcohol and HIV treatment (Table 4). Most of the respondents from the HIV programmes (96%), and the substance abuse organisations (93%) confirmed that they did inform their clients about alcohol use and its effects on HIV treatment. Again, most organisations reportedly informed their clients verbally or via the use of referrals, while fewer did so by using written materials. The participants from the three EAP organisations reported

that they did inform their clients about alcohol and its role in HIV treatment; three via the verbal route, one in writing and two by using referrals.

Resources and Information

Table 5 shows that just over two thirds of the respondents from both the HIV (68%) and substance abuse (70%) organisations reported having resources to address the role of alcohol use within the context of HIV. Based on counts of the responses to open-ended questions, for the HIV prevention, care and treatment programmes, the most commonly reported resources were pamphlets (36%) and counsellors (32%); while the resources that were most commonly available to the substance abuse programmes were counsellors (39%) and different medical personnel (29%). Other resources mentioned included videos, flip charts, posters, pamphlets, booklets, internet sites, rapid tests, university academics, medical personnel, community workers and volunteers. However, 24% of the respondents from the HIV organisations and 30% of the respondents from the substance abuse organisations indicated that they lacked their own resources. Respondents from the three EAP organisations indicated that they did not have resources concerning alcohol use and HIV, but that they used referrals instead. Most of the respondents in the study indicated that they would be able to help their clients better if they had more information on alcohol use and (a) risky sexual behaviour; (b) immune status and HIV transmission; (c) immune status and HIV progression; and (d) coping with HIV.

General Comments: Findings from open-ended question

The final question of the survey was open-ended and asked the participants for further comments. Since the comments were generally brief (due to the web-based and telephonic formats), and the telephonic comments were not recorded verbatim, in this section we merely summarise the apparent thrust of the participants' main comments.

One common concern that was expressed was of the severity of alcohol and other drug use problems in South Africa. Alcohol and other drug abuse in South Africa were described as "a pandemic", and considered to be the "root cause" of many of the country's health, social and economic problems. A need was expressed for more substance abuse prevention and treatment programmes which could be accessible to youth, as well as to people living with HIV and AIDS.

Concern was also expressed about the severity of the HIV and AIDS epidemics and the public's lack of awareness of their true impact. Participants felt that the government and civil society should exert greater effort in combating the spread of the disease (e.g. through better prevention and confidential counselling services, such as via the internet) and in addressing the high mortality rate among people living with HIV by speeding up the roll-out of antiretroviral therapy services. Efficient service delivery was reportedly hindered by budgetary shortages, among other factors.

Participants noted that levels of stigma were high and hampered treatment-seeking for HIV and substance abuse problems. Another

Table 5: Extent to which organisations have resources to address links between alcohol use and HIV transmission, disease progression and treatment

Availability of Resources	HIV Care and Treatment Programmes (N = 25)	Substance Abuse Programmes (N = 56)	EAPs (N = 3)*
	N (%)	N (%)	N (--)
Yes	17 (68)	39 (70)	0 (---)
No, but use referrals	6 (24)	17 (30)	3 (---)
No	2 (8)	0 (0)	0 (---)

*Percentages were not calculated due to the small number of EAP respondents.

concern was that some service providers in substance abuse programmes were "antagonistic" towards people with HIV and AIDS, and refrained from discussing HIV and AIDS with their clients unless these issues were brought up by clients themselves. It was also felt that substance abuse programmes need to give more prominence to the role of alcohol and other drug use in all aspects of HIV and AIDS.

Recognition of alcohol's contribution to HIV transmission was acknowledged as important. Service providers indicated a need to raise awareness among young people in particular, that alcohol use rather than injection drug use (IDU) and needle sharing, is the primary drug of abuse that is associated with HIV transmission.

The participants indicated that they were inadequately trained to address problems of alcohol and its effect on HIV and AIDS and wanted to be able to help their clients themselves rather than relying on referrals. They also pointed to a need for more personnel in the clinics, to facilitate clinical service delivery on more days of the week. Furthermore, they identified the need for training of service providers, and more resources on substance abuse and HIV in the form of pamphlets, booklets, and posters in different South African languages.

DISCUSSION

This pilot study sought to obtain a quick impression of the extent to which health care providers in HIV and substance abuse programmes as well as EAPs consider the role of alcohol in HIV transmission, disease progression and treatment. The findings suggest that, in general, health care providers in HIV care and treatment programmes, EAPs and substance abuse programmes are aware of and apply knowledge on the role of alcohol in HIV in their daily practice. This result is in line with the findings of Myers and Fakier (2007), who found that about half of the surveyed substance abuse services provide HIV risk reduction interventions/HIV testing and counselling.

Similar types of responses emerged from the participants from the substance abuse and HIV prevention, care and treatment programmes. Verbal communication was most commonly used to inform clients about alcohol and HIV. This was followed by the use of referrals, followed by the use of written materials. However, less than one half of the health care providers from the substance abuse and HIV care and treatment programmes reportedly informed their clients about the links between alcohol and HIV on a routine basis

A few differences between the substance abuse and HIV programmes were noted. As expected, participants from the substance abuse programmes were more likely than those from the HIV programmes to report that they screened their clients for alcohol and other drug problems. However, it is advisable that HIV health care providers also routinely screen their patients for problems related to the use of alcohol or other drugs to enable them to identify and then appropriately advise and manage their clients regarding aspects of HIV disease that may be affected by their use of the substances. The finding that almost half of the service providers reported never screening their patients for alcohol and/or other drug use is of concern. Only about one fifth of the substance abuse programmes as compared with just under half of the HIV programmes had written materials that informed their clients about alcohol and its role in various aspects of HIV. Finally, the HIV programmes were more likely to use referrals (just under 2/3) than were the substance abuse programmes (about 2/5).

The service providers highlighted numerous general concerns. For example, as found in previous research (Myers & Fakier, 2007), they considered the existing services for alcohol and other drug abuse problems to be inadequate. Similarly, participants felt that the severity of the HIV and AIDS epidemics were underplayed by society and that ART services needed to be scaled-up urgently. Stigma was seen to be prevalent with respect to HIV and AIDS and substance use problems and to be a deterrent to treatment-seeking behaviours; as it is a barrier to ART adherence (Dlamini et al., 2009).

Indeed, some participants pointed to the reluctance of some substance abuse service providers to discuss HIV and AIDS with their clients.

Participants indicated a need for more knowledge, specialist personnel and resources to deal with HIV and AIDS and substance abuse problems among clients within their organisations. The types of concerns about under-resourced facilities and under-skilled staff that were expressed by health care workers in this study mirror those that have been documented elsewhere (Hall, 2004).

The study has numerous implications. First, it is suggested that there is a need in South Africa for more accessible treatment services for people with substance use disorders in general, as well as for people living with HIV and AIDS in particular. Second, the study highlights a need for population-focused HIV awareness programmes, as well as community-based stigma reduction initiatives with accurate information about alcohol's role in HIV. This is particularly important, given that alcohol use has been associated with HIV transmission (Fisher et al., 2007), the progression of HIV disease, particularly among individuals on ART (Samet et al., 2003; Miguel et al., 2003), and ART non-adherence (Parsons et al., 2005). Third, there is a need for better integration of substance abuse and HIV programmes. Specifically, HIV care and treatment programmes should more often screen their clients for alcohol and other drug-related problems, and substance abuse programmes should more actively address possible HIV infection among their clients. Fourth, improved cross-training and support for health care providers are required to assist them to better serve and manage their clients with dual diagnoses. Training curricula should include more information on alcohol and HIV interactions and sensitise service providers to substance abuse and HIV and AIDS-related issues to reduce the stigmatisation of clients. This includes an increase in written resource material on these issues. Health care providers should also be provided with support, such as debriefing counselling, to reduce work-related stress and burn-out which results from working in challenging and under-resourced facilities. Finally, there is a need to support the further establishment and regular updating of comprehensive lists of HIV and substance abuse intervention services to guide organisations in making appropriate referrals.

Further research is required to ascertain service providers' understanding of how alcohol impacts on those at risk or already infected with HIV, and to obtain a clearer sense of how they manage these challenges. For example, do these programmes only provide information or do they engage in interventions which facilitate behaviour change? Research is also needed to assess whether there is congruence between what health care providers report that they say and do, and what recipients of health care services report being told about the hazards of alcohol and other drug use on their behaviour and on the various aspects of HIV disease.

Conclusion

Contrary to expectations at the outset of the study, many programmes in South Africa do consider the role of alcohol use in HIV in their operations, but seem to lack adequate resources, information and skills to manage their clients effectively.

Limitations

This study has a number of limitations. The data for the study were collected in 2005/2006 and with the rapid changes in the state of HIV services in South Africa since then (Matjila, Hoosen, Stoltz, & Cameron, 2008), the extent to which the results would still apply at the time of writing (early 2009) is unclear. The organisations that participated in this study are not representative of all such programmes in South Africa and thus the findings may not be widely generalisable. The failure to access many of the organisations was mainly due to their contact details being out of date on the lists that were used. Although highly viable for certain organisations, the web-based survey method proved to not be useful for the organisations that lacked internet and electronic

mail access, but telephonic interviews were still possible. Finally, the study was not designed to ascertain the reasons underlying the participants' responses although such knowledge would certainly be valuable for guiding efforts to address many organisations' existing shortcomings.

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Appendix: Brief Questionnaire Administered

ALCOHOL AND HIV AUDIT

Your organisation's name:

_____

Please answer the following questions.

1. Does your programme ever screen clients for:

	Yes, always	Yes, sometimes	No, never	Not applicable
A. Alcohol abuse and/dependence				
B. Other drug use and/or dependence				

2. Does your programme inform your clients about alcohol abuse and its role in **HIV transmission** in the following ways?

	Yes, to each client	Yes, to some clients	No	Not applicable
A. Verbally (e.g. lectures, counselling)				
B. In writing (e.g. pamphlets, booklets)				
C. By referral				

3. Does your programme inform your clients about alcohol use and **HIV disease progression** in the following ways?

	Yes, to each client	Yes, to some clients	No	Not applicable
A. Verbally (e.g. lectures, counselling)				
B. In writing (e.g. pamphlets, booklets)				
C. By referral				

4. Does your programme inform your clients about alcohol use and **HIV treatment (e.g. ARVs)** in the following ways?

	Yes, to each client	Yes, to some clients	No	Not applicable
A. Verbally (e.g. lectures, counselling)				
B. In writing (e.g. pamphlets, booklets)				
C. By referral				

5. Would you be able to **help your clients better** if you had more information about:

	Yes	No	Not applicable
A. Alcohol use and risky sexual behaviour			
B. Alcohol use, immune status and HIV transmission			
C. Alcohol use, immune status and HIV progression			
D. Alcohol use and coping with HIV			

6. Does your programme consider the role of drugs other than alcohol in **HIV transmission and/or disease progression and/or treatment**?

Not at all		A little		A lot		Not applicable	

7. How many **hours per month** does your organisation consider the role of alcohol abuse in:

	0 hours	1 – 5 hours	6 – 10 hours	More than 10 hours	Not applicable
A. HIV transmission					
B. HIV disease progression					
C. HIV treatment (e.g. ARVs)					

8. Does your organisation have any resources that address these issues?

Yes		No, we use referrals		No, we do not use referrals		Not applicable	

9. If yes, please list your organisation's resources that are valuable in addressing these issues?

10. Do you have any further comments?

Thank you very much for your assistance.