

# INTERNALISED STIGMA, DISCRIMINATION, DEPRESSION, SOCIAL SUPPORT AND DISCLOSURE EXPERIENCES OF HIV+ WORKERS IN THE SOUTH AFRICAN CONSTRUCTION INDUSTRY

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HIV/AIDS-related stigmas can be internalised by HIV+ persons, leading them to avoid treatment or care, engage in unsafe sex practices, feel emotional distress, isolation and self-loathing and perceive diminished social support. Using a self-administered questionnaire, internalised stigma was investigated in 34 HIV+ respondents from a sample of 512 construction workers in the Western Cape of South Africa, with statistical analysis of the quantitative data. Particular emphasis was placed on lifestyle-related risk factors such as the condom use (lack of), numbers of sex partners, and failure to take anti-retroviral medication. The HIV+ workers were found to have lower AIDS-related knowledge than non-infected co-workers, and their internalised stigma was significantly associated with level of education. Improving knowledge, eradicating discrimination in the workplace and society, and recasting HIV/AIDS as a chronic but manageable disease could potentially help to address the problems presented by such stigma, but construction organisations will have to apply nuanced and sensitive approaches in their intervention management.

Keywords: construction workers, HIV/AIDS, internalised stigma, discrimination, South Africa

## INTRODUCTION

HIV/AIDS is perhaps the most stigmatized medical condition in history (Parker and Aggleton, 2003). Stigma should more precisely be regarded as ‘stigmatising behaviour’ since stigma may be defined as the outward mark of disgrace and it is the stigmatising action that is at issue. It is *‘the phenomenon whereby an individual with an attribute is deeply discredited by his/her society and is rejected as a result of the attribute’*; as *‘a process by which the reaction of others spoils normal identity’* (Goffman, 1963: 3); and as a *‘powerful discrediting and tainting social label that radically changes the way individuals view themselves and are viewed as persons’* (Alonzo and Reynolds, 1995: 304). HIV/AIDS stigmatisation is thus a social process

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rooted in social power relations (Deacon, 2006). Prejudice towards, and discrimination against, HIV+ persons is a serious impediment to addressing the HIV/AIDS pandemic (Klein *et al.* 2002; Deacon *et al.*, 2009).

Few studies exist of AIDS stigmas experienced by HIV+ persons and none have focussed on construction workers. Simbayi *et al.* (2007) assert that socially-constructed views of AIDS can be assimilated and internalised by HIV infected persons, leading them to avoid seeking treatment or care; to engage in unsafe sex practices; and to experience feelings of emotional distress, isolation, and self-loathing. Internalised stigma is also associated with the development of depressive symptoms (Tucker *et al.*, 2013). Lee *et al.* (2002) report that HIV+ persons are embarrassed by their positive status; that it is difficult for them to disclose it to others; and that a link can be established between internalised stigma and depression. Smith *et al.* (2008) report a positive correlation between disclosure and social support, a negative correlation between stigma and social support, and a negative correlation between stigma and disclosure. These findings suggest that internalised AIDS-related stigmas potentially play a pivotal role in the distress and emotional reactions of many people living with HIV/AIDS (Restall, 2014).

Stigma issues are important for the South African construction industry in two respects. First, the industry has been identified as one of the economic sectors most adversely affected by HIV/AIDS, and also as one of the least responsive to the pandemic (Bowen *et al.*, 2013). Bowen *et al.* (2008) report that HIV prevalence amongst construction workers exceeds that of the national statistic. Second, the sheer scale of the disease in South Africa has overwhelmed the capacity of the government to respond through public resources alone; the private sector is thus called upon to share the burden through corporate intervention management among the workforce. The aim of the study, therefore, was to better understand the internalised stigma, experienced discrimination, depression, social support and aversion to disclosure experienced by HIV+ construction workers in South Africa; as these factors are an impediment to testing behaviour, which has considerable implications for rates of prevalence and incidence as a result of new infections and re-infections of existing HIV+ workers. The objective was not to compare this sector to other sectors, but rather to understand the dynamics of these characteristics and their impact on testing behaviour specifically for this sector. This would better inform construction organisations in their approaches to intervention management and thus contribute to the wider long-term aims of the research: to first assist the formal industry in its responsibility towards worker health and well-being; and then to use this knowledge to reach out to and help the informal construction industry.

## **RESEARCH METHOD**

### **Participants and setting**

A survey questionnaire, self-administered in a supervised field setting on construction sites, was used to collect data. The questionnaire was based on instruments previously employed in South Africa (Simbayi *et al.*, 2007; Kalichman *et al.*, 2009). Convenience sampling was used for the selection of construction firms and sites, as well as the workers interviewed. The sample frame consisted of all employees present when researchers visited the sites by prior arrangement. Ethical clearance was obtained from the University of Cape Town.

Participants ( $n=512$ ) comprised site-based unskilled and skilled workers and site office-based staff drawn from 6 firms on 18 construction sites in the Western Cape. Questionnaires were available in English, Afrikaans and *isiXhosa* (an indigenous African language), the most commonly spoken languages in the Western Cape. Participants were told about the nature of the study, assured that their participation was entirely voluntary and anonymous, and informed that they could withdraw from participation at any time. Participants who provided informed consent then completed the questionnaires. Between them, the supervisors were proficient in all three languages. Time to complete the questionnaires ranged from 30 minutes to 1-hour, depending on participant literacy.

## Measures

*Demographic characteristics:* Age was measured in five discrete categories: 20 or under; 21-30; 31-40; 41-50; and over 50 years. Ethnicity data used four response options: 'Black' African; 'Coloured' (mixed race); 'Indian'; and 'White', but the data for the latter three classes were later combined as 'Others' for the statistical analysis. Level of education was categorised as 'primary or less', 'secondary', or 'tertiary or higher'. Nature of employment was classified as 'permanent', 'temporary / contract', or 'casual'. Marital status was categorised as either 'married or in a long-term relationship', or 'single'. Participants were asked if they had children ('Yes'; 'No'). Participants also reported their lifestyle risk behaviours, with catalogue items for alcohol consumption and cannabis ('dagga') use, sexual intercourse with multiple partners in the preceding three months, and use of and attitudes towards condoms. HIV+ participants were also asked to self-identify (anonymously) and describe their current health status ('excellent' to 'very poor'); whether or not they were currently taking ARV medication ('Yes'; 'No'); and the number of AIDS-related overnight hospitalizations ('never' to 'four or more times').

*AIDS-related factors:* Table 1 provides details of the seven AIDS-related factor *scales* used in this study. A 6-item test was used to assess HIV/AIDS-related internalised stigma (see Table 1) with 'Agree' or 'Disagree' response options. Example items include: 'It is difficult to tell people about my HIV infection'; 'Being HIV+ makes me feel dirty'; 'I am ashamed that I am HIV+'; and 'I sometimes feel worthless because I am HIV+'. Internal consistency was excellent,  $\alpha=0.90$ . Responses to each of the 6 items were first examined as individual indicators of internalised stigma. Thereafter, an *AIDS-related internalised stigma scale* was developed and scored for the number of 'Agree' responses (score range 0 to 6; higher score = higher levels of internalised stigma). Similarly composite scales were also computed for the other six AIDS-related variables, namely: AIDS-related medical conditions (health); AIDS-related knowledge; personal experiences of discrimination; anxiety and depression; social support and connectedness; and aversion to disclosure ('openness').

*Statistical analysis:* The data were analysed using IBM SPSS Ver. 23.0 for Macintosh (IBM Corporation, 2013). Descriptive statistics and non-parametric tests (see Pett, 1997) were used to examine bivariate relationships between the demographic characteristics of the HIV+ ( $n=34$ ) sub-sample and the remaining HIV- ( $n=478$ ) participants (total sample:  $n=512$ ). The Kruskal-Wallis Test and Mann-Whitney Test were used to explore bivariate relationships between composite variables and demographic characteristics of HIV+ workers (see Table 2). Finally, Spearman's rank correlation coefficients were computed to examine the bivariate relationships between

the various composite variables (see Table 3). Additionally, the mean, standard deviation and standard error for each scale are given.

*Table 1. Scale items and Cronbach's alpha reliability coefficients for HIV/AIDS factors (HIV+ n=34)*

Scale	Items	( $\alpha$ )
<b>Health</b> Yes=1; No=0 Scale Range: 0-14	H3. Symptoms (fourteen): Incidence of any of the listed medical conditions over the past 3 months: persistent shortness of breath; persistent cough; oral sores; recurring fever; persistent or severe diarrhoea; difficult or painful swallowing; nausea, stomach cramps or vomiting; persistent or severe headaches; seizures and lack of coordination; mental symptoms such as confusion and forgetfulness; loss of vision; excessive or sudden weight loss; extreme fatigue; coma	0.930
<b>AIDS knowledge</b> Correct response=1 Incorrect response=0 Don't know=0 Scale Range: 0-9	K1. Is AIDS spread by kissing? (No) K2. Can a person get AIDS by sharing kitchens and bathrooms with someone who has AIDS? (No) K3. Can you get AIDS by touching someone with AIDS? (No) K4. Can men give AIDS to women? (Yes) K5. Does washing after sex help protect you against getting AIDS? (No) K6. Can a pregnant woman give AIDS to her baby? (Yes) K7. Can a person get rid of AIDS by having sex with a virgin? (No) K8. Is HIV the virus that causes AIDS? (Yes) K9. Is there a cure for AIDS? (No)	0.789
<b>Internalised stigma</b> Agree=1 Disagree=0 Scale Range: 0-6	IS1. It is difficult to tell people about my HIV infection IS2. Being HIV+ makes me feel dirty IS3. I feel guilty that I am HIV+ IS4. I am ashamed that I am HIV+ IS5. I sometimes feel worthless because I am HIV+ IS6. I hide my HIV+ status from other people	0.898
<b>Personal experiences of discrimination</b> Yes=1 No=0 Scale Range: 0-6	PD1. I have been treated differently since I disclosed my HIV+ status to friends / family PD2. Friends and family stopped visiting after learning that I am HIV+ PD3. My HIV+ status has caused me to lose a job or housing PD4. I believe my family has experienced discrimination since my HIV+ status became known PD5. I believe my friends have experienced discrimination since my HIV+ status became known PD6. There are people I have not told I am HIV+ for fear of negative consequences	0.836
<b>Anxiety and depression</b> No Days=0 1-2 Days=1 3-4 Days=2 5-7 Days=3 Scale Range: 0-21	Number of days in the past week (including today) which best describe your feelings. AD1. I thought my life had been a failure AD2. I felt fearful AD3. I talked less than usual AD4. I felt lonely AD5. I had crying spells AD6. I felt sad AD7. I felt that people disliked me	0.805
<b>Social support and connectedness</b> Completely true=1 Mostly true=2 Mostly false=3 Completely false=4 Scale Range: 0-24	SS1. There are several people that I trust to help me solve problems SS2. If I needed a place to stay for a week because of an emergency I could easily find someone who would put me up SS3. If I were sick, I could easily find someone to help me with my daily chores SS4. I feel a strong emotional bond with at least one other person SS5. When I need help to deal with a personal problem, I know someone I can turn to SS6. If I needed an emergency loan of R100, there is someone I could get it from	0.622
<b>Aversion to disclosure ('Openness')</b> Completely true=1 Mostly true=2 Mostly false=3 Completely false=4 Scale Range: 0-16	AD1. If I did not know a person's HIV status I am certain I could decide about telling them my HIV+ status before having sex AD2. I'm certain that I could discuss being HIV+ with a new sex partner AD3. I feel confident that I could tell someone I am dating that I am HIV+ AD4. I would rather not have sex than deal with decisions to disclose my HIV+ status	0.853

*Note: Correct responses indicated in parentheses against each knowledge question.*

Percentages reported refer to the percentage of the number of participants answering that particular question.

## ANALYSIS OF THE DATA

*Participant characteristics:* Most participants in the full dataset ( $n=512$ ) were male (91%;  $n=461$ ) and 7% ( $n=34$ ) reported themselves to be HIV+. Participant ages ranged from 18 to 69 years (mean = 36, SD = 10.86), with most in the 21-30 year age group (34%;  $n=168$ ). Almost two-thirds (62%;  $n=313$ ) of participants were 'Black' African. Over a quarter (29%;  $n=144$ ) had at most primary level education, whilst 52% ( $n=260$ ) had secondary level education. Sixty-two per cent ( $n=304$ ) were permanent employees, as distinct from contract (employed on a project basis: 34%;  $n=167$ ) and occasional (casually hired: 4%;  $n=22$ ) workers. Sixty-five per cent ( $n=320$ ) were either married or in long-term relationships, and 76% ( $n=380$ ) reported having children. In comparing the characteristics of the sub-samples of HIV+ and HIV- participants, the only significant demographic difference between the two groups was in respect to age ( $p=0.004$ ) with proportionately-more older workers in the HIV+ group than in the HIV- group. For AIDS knowledge, the HIV- group demonstrates a significantly higher level of AIDS knowledge than does the HIV+ group (HIV+: mean score=5.72; HIV-: mean score=6.83;  $p=0.011$ ). Depression scale scores between the two groups are not significantly different.

*Health:* Of the HIV+ group, 79% ( $n=27$ ) reported 'very good' or 'excellent' health, 42% ( $n=10$ ) stated that they were not currently compliant with an anti-retroviral (ARV) medication regime (CD4 count unknown), and 81% ( $n=22$ ) claimed to have never been hospitalised overnight for an AIDS-related medical condition. Considering current lifestyle risk behaviour, 24% ( $n=8$ ) of HIV+ workers reported having had two or more sex partners in the preceding 3 months; 44% ( $n=15$ ) had not used a condom at their last coital act; and 35% ( $n=12$ ) stated that they did not like using a condom. Regarding substance usage, 62% ( $n=21$ ) of HIV+ workers had consumed alcohol at least once in the past 3 months (50% indicated twice or more), and 15% ( $n=5$ ) had smoked cannabis at least once in the same period. Alcohol and drug use is contra-indicated for ARV medication.

*AIDS-related medical conditions:* Half ( $n=17$ ) of the HIV+ participants did not suffer from any of the symptoms listed in the questionnaire. Of those who did, the most frequently reported symptoms included persistent shortness of breath (24%;  $n=8$ ), a persistent cough (21%;  $n=7$ ), persistent headaches (21%;  $n=7$ ), excessive or sudden weight loss (21%;  $n=7$ ), and mental confusion (21%;  $n=7$ ). The medical symptom scale scores are not significantly related to any of the demographic factors (see Table 2), nor are they related to depression scale scores (see Table 3).

*Internalised stigma of HIV+ workers:* A majority (54%;  $n=15$ ) of this group believed that it was their own fault that they are HIV+. Nearly half stated that it was difficult to tell people about their infection (48%;  $n=14$ ), and that they tried to hide it from other people (48%;  $n=13$ ). They reported that being HIV+ made them feel dirty (30%;  $n=9$ ), guilty (47%;  $n=14$ ), ashamed (41%;  $n=11$ ), and sometimes worthless (28%;  $n=8$ ). Only level of education is significantly related to internalised stigma ( $p=0.017$ ), with the more highly-educated participants feeling *more* stigmatisation compared to less educated respondents (see Table 2). Two of the variables within the stigma scale were found to be significantly related to demographic characteristics. Firstly, ethnicity was significantly associated with knowing whether or not HIV is the virus that causes AIDS (Table 1, Item K8;  $p=0.002$ ). Proportionately more 'Black' African participants did not

answer this question correctly compared to those from the 'Other' ethnic groups. Secondly, being a parent or not was significantly associated with whether or not washing after sex is believed to help protect someone from getting AIDS (Table 1, Item K5;  $p=0.029$ ). Proportionately more participants who were parents did not answer this question correctly compared to the childless respondents.

*Discrimination experienced by HIV+ workers:* Whilst many HIV+ participants reported having spoken about AIDS with a family member (77%;  $n=20$ ) or friend (82%;  $n=23$ ), 54% ( $n=15$ ) stated that they had not disclosed their status to some people for fear of negative consequences and those that had disclosed reported that they had been treated differently since disclosing their status to family and friends (36%;  $n=10$ ); they had lost a job or housing (14%;  $n=4$ ); they had experienced discrimination (35%;  $n=9$ ); they had experienced cessation of visits from family and friends (21%;  $n=6$ ); and that their *family* members (36%;  $n=10$ ) and *friends* (30%;  $n=8$ ) had experienced discrimination. The discrimination *scale* scores are not significantly related to any of the demographic factors (see Table 2). Responses to individual questions within this discrimination scale reveal a significant relationship between education level and having lost a job or housing (Table 1, Item PD3;  $p=0.022$ ). Specifically, the less educated respondents had experienced the loss of a job or housing more than better-educated respondents.

*Anxiety and depression:* The scale results for anxiety and depression were not significantly related to any of the demographic variables (Table 2). Within the depression scale results (not shown here), a significant difference was found in the relationship between marital status and feelings of sadness (Table 1, Item AD6;  $p=0.019$ ); with single persons reporting significantly more frequent occasions of feeling sad. A significant relationship also exists between being a parent and feeling disliked by people (Table 1, Item AD7;  $p=0.012$ ); where parent respondents less frequently experienced feelings of being disliked, compared to non-parents. It is also noteworthy that 64% ( $n=21$ ) of HIV+ participants had experienced feelings of inadequacy at some point during the preceding week. Similarly, 27% ( $n=9$ ) claimed to have felt sad during that week.

*Social support and connectedness:* None of the demographic variables were significantly related to the social support *scale* (see Table 2). For individual questions within the scale, significant relationships were found between gender and having access to assistance with problem-solving (Table 1, Item SS1;  $p=0.001$ ), and between employment type and having easy access to a place to stay in case of emergencies (Table 1, Item SS2;  $p=0.024$ ). Male respondents, more than females, reported greater levels of support in respect of help with problem solving. Contract/temporary employees reported having easier access to emergency accommodation than did colleagues in permanent employment.

*Disclosure of HIV+ status to new sexual partners ('openness'):* The 'openness' *scale* result was not significantly related to any of the demographic variables (see Table 2). Within the scale (not shown here), only disclosure of a HIV+ status to a dating partner was significantly associated with gender (Table 1, Item AD3;  $p=0.008$ ), whereby male respondents expressed significantly greater willingness to disclose their positive status to their dating partners than did female workers.

*Bivariate correlation analysis of factor scales:* The Spearman's rank correlation coefficients for all composite scales are shown in Table 3. A significant relationship was found between the internalised stigma scale and the experienced discrimination scale ( $\rho=0.525$ ;  $p=0.018$ ).

This positive relationship indicates that higher levels of internalised stigma are associated with higher levels of experienced discrimination. No other significant relationships between composite scales were evident. Education level and AIDS knowledge were *not* significantly correlated (not depicted in Table 3). In contrast, for the HIV- group, the relationship (also not depicted here) between education level and AIDS knowledge was highly significant ( $r=0.371$ ;  $p<0.001$ ).

Table 2. Degrees of significance between factor scales and demographic variables ( $n=34$ )

Factor scale	Age (p-value)	Gender (p-value)	Ethnicity (p-value)	Education level (p-value)	Employment type (p-value)	Marital status (p-value)	Children (p-value)
AIDS-related medical symptoms	0.285 <sup>3</sup>	0.659 <sup>4</sup>	0.051 <sup>4</sup>	0.200 <sup>3</sup>	0.210 <sup>3</sup>	0.737 <sup>4</sup>	0.439 <sup>4</sup>
AIDS-related knowledge	0.387 <sup>3</sup>	0.753 <sup>4</sup>	0.305 <sup>4</sup>	0.464 <sup>3</sup>	0.969 <sup>3</sup>	1.000 <sup>4</sup>	0.101 <sup>4</sup>
Internalised stigma	0.537 <sup>3</sup>	0.270 <sup>4</sup>	0.683 <sup>4</sup>	0.017 <sup>3</sup>	0.610 <sup>3</sup>	0.533 <sup>4</sup>	0.783 <sup>4</sup>
Experienced discrimination	0.843 <sup>3</sup>	0.909 <sup>4</sup>	0.877 <sup>4</sup>	0.149 <sup>3</sup>	0.331 <sup>3</sup>	0.686 <sup>4</sup>	0.688 <sup>4</sup>
Anxiety and depression	0.554 <sup>3</sup>	0.774 <sup>4</sup>	0.580 <sup>4</sup>	0.438 <sup>3</sup>	0.485 <sup>3</sup>	0.564 <sup>4</sup>	0.178 <sup>4</sup>
Social support and connectedness	0.135 <sup>3</sup>	0.240 <sup>4</sup>	0.134 <sup>4</sup>	0.388 <sup>3</sup>	0.054 <sup>3</sup>	0.301 <sup>4</sup>	0.158 <sup>4</sup>
Aversion to disclosure (Openness)	0.317 <sup>3</sup>	0.958 <sup>4</sup>	0.260 <sup>4</sup>	0.267 <sup>3</sup>	0.651 <sup>3</sup>	0.101 <sup>4</sup>	0.623 <sup>4</sup>

Notes: See Table 1 for an explanation of the scales. <sup>3</sup>Kruskal-Wallis Test; <sup>4</sup>Mann-Whitney Test

Table 3. Spearman's rank correlation coefficients between factor scales for HIV+ persons ( $n=34$ )

Scale	AIDS-related knowledge (r)	Internalised stigma (r)	Experienced discrimination (r)	Depression (r)	Social support and connectedness (r)	Aversion to disclosure (Openness) (r)	Symptoms (r)
AIDS-related knowledge	1.000	0.023	0.188	-0.175	0.056	0.148	-0.008
Internalised stigma	0.023	1.000	0.525*	0.245	-0.159	-0.390	0.135
Experienced discrimination	0.188	0.525*	1.000	-0.085	-0.109	-0.389	0.205
Anxiety and depression	-0.175	0.245	-0.085	1.000	-0.142	-0.221	0.201
Social support and connectedness	0.056	-0.159	-0.109	-0.142	1.000	0.101	0.223
Aversion to disclosure (Openness)	0.148	-0.390	0.389	-0.221	0.101	1.000	0.021
Symptoms	-0.008	0.135	0.205	0.201	0.223	0.021	1.000
Scale range	0-9	0-6	0-6	0-21	0-24	0-16	0-14
Scale mean	5.72	2.57	1.83	3.11	10.19	7.52	2.18
Scale SD	2.65	2.44	1.99	4.27	3.60	3.75	3.69
Standard error	0.47	0.53	0.41	0.81	0.64	0.75	0.63
Scale $\alpha$	0.79	0.90	0.84	0.81	0.62	0.85	0.93

Notes: See Table 1 for an explanation of the scales. \* $p<0.050$ .

## DISCUSSION

The AIDS-related knowledge scores of HIV+ respondents are significantly lower than those of HIV- participants. This supports the findings of Kalichman and Rompa (2000) concerning functional health literacy of persons with HIV/AIDS, and could be partly explained by the significantly higher proportion of older workers in the HIV+ sub-sample, a factor which is problematic as media and communication knowledge is generally directed more at younger age groups. The reported lifestyles of many respondents in the HIV+ group present an obstacle to prevention and mitigation of the disease, as almost one in four of the sub-sample claimed to have had two or more sex partners in the preceding 3 months; 44% reported not using a condom at last coital act; and 52% indicated that they would be inclined to abstain from sex rather than deal with

decisions regarding disclosure. Nearly half of the HIV+ sub-sample (42%) reported not taking (or not remaining compliant with) ARV medication. Possible reasons for this include poor family support, depression, and internalised stigma (see Nsimba *et al.*, 2010).

Internalised stigmas are evident in the HIV+ group. Many report feeling guilty, ashamed, worthless and dirty. Nearly half try to hide their condition from others. These results align with Simbayi *et al.* (2007), who found that HIV+ persons have internalised stigmas to a greater extent than the broader community. Internalised stigmas may account for at least some of the psychological distress reported by persons living with HIV/AIDS (WHO, 2008), which reported higher rates of depression in HIV+ people compared with HIV- control groups. The level of distress also seems to be related to the severity of symptoms of HIV infection. The current study has identified feelings of inadequacy in nearly two out of three HIV+ participants, and feelings of unhappiness in just over a quarter of them. On the other hand, in contrast to the WHO (2008) findings, AIDS-related medical symptoms and depression were not found to be significantly related. Whilst elevated, the depression scale scores of the HIV+ workers reported here were not significantly higher than those of the HIV- workers. Unlike Lee *et al.*'s (2002) finding, the relationship between depression scores and internalised stigma was not found to be significant.

Many HIV+ workers reported incidents of discrimination. Over a third had been treated differently by family and friends since disclosing their status and had experienced other acts of discrimination. Twenty per cent of this group were no longer visited by family and friends, and four respondents had lost a job or housing due to their condition. These findings align with those of Maughan-Brown (2010). At the same time, levels of perceived social support were found to be generally quite high, potentially providing a counter to stigma and depression (Li *et al.*, 2009).

## CONCLUSIONS

The internalised stigma, experienced discrimination, depression, social support and aversion to disclosure among HIV+ construction workers in the Western Cape are reported. The sub-sample was found to have significantly lower levels of AIDS-related knowledge than their HIV- counterparts. This also reflected in their lifestyles, where practices such as multiple sex partners, not using condoms and preference for maintaining their unsafe sexual practices rather than dealing with disclosure-related decisions, were reported. About half of the HIV+ respondents reported not taking ARV medication, with this potential lack of treatment compliance appearing to be associated with internalised stigma. Frequent feelings of inadequacy, unhappiness, guilt, shame, worthlessness and dirtiness were reported, and half of the respondents in this group tried to conceal their condition. Many felt discriminated against by family, friends or employers. On the other hand, levels of perceived social support among HIV+ workers were found to be generally good, with most reporting a high likelihood of obtaining help in an emergency, such as being able to getting a small loan or finding someone to help with daily chores; although fewer believed they could find someone to accommodate them for a week in an emergency.

The findings provide some guidance about work-based HIV/AIDS intervention management by construction firms. They suggest that if the problems resulting from internalised stigma are to be effectively addressed, they need to be dealt with through carefully structured nuanced and culturally-sensitive intervention. The conventional notion of HIV/AIDS as being a (rapidly) terminal medical condition needs to be

countered by the understanding that, although still chronic, it is a manageable disease that, with carefully monitored treatment, can yield a substantially extended lifespan.

The construction sector is a significant employer of labour in the South African economy in both the formal ( $\pm 7.5\%$ ) and informal ( $\pm 13\%$ ) sectors, and this underscores the importance of such understanding and intervention for economic as well as public health reasons. The construction industry, throughout sub-Saharan Africa, is largely unique compared to other industries in terms of its formal and informal sectors; its labour employment structures; its high utilisation of migrant workers; its fragmentation of firms; its diversity of project clients, project types and locations; and the long term nature of its products which often form the capital infrastructure assets of other industries and public services. The contribution of the research should be seen against this context. Employer organisations now have specific areas to target in the policy and programme development and implementation they undertake in terms of HIV/AIDS intervention management. Planned future research will explore exactly how these can be achieved.

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