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Impact of a Workplace-based HIV and AIDS Risk Reduction Training Intervention

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ABSTRACT The aim of the study was to investigate the impact of a workplace-based HIV and AIDS training programme on employees. The study compared the health scores of employees who went through a workplace-based HIV and AIDS training programme and those who did not. The sample was made up of 68 employees drawn from two companies in Johannesburg. The study assessed employees' levels of HIV and AIDS risk with particular reference to attitude to condom use, sexual risk cognition, HIV and AIDS risk-taking behaviour, stigma and disclosure. Data collected from the questionnaires administered were analysed using t tests run on statistical analysis software (SAS). The results showed a significant difference in HIV and AIDS risk between the two groups. The training intervention reduced HIV and AIDS risk among employees. Directions for future research could focus on the relationship between organisational involvement and HIV and AIDS risk reduction among employees.

INTRODUCTION

Studies on effectiveness of training programmes in the workplace are in abundance but not with reference to HIV and AIDS risk reduction training intervention in South Africa (Dickinson 2004). There are few studies that compare the efficacy of workplace-based training programmes. Few studies look at the universal approach in the fight against HIV and AIDS in all sectors of the economy (Girard et al. 2010). Companies in South Africa tend to expend a lot of their energy on meeting production targets which are essential to organisational survival and productivity. The threat of HIV infection and dying from AIDS is normally placed under organisational welfare. Employee welfare was traditionally regarded as not adding shareholder value in some of the South African companies (Connnelly and Rosen 2006). The threat posed by HIV and AIDS to organisational existence has recently gained attention and momentum is gathering in companies to achieve visibility and recognition through HIV and AIDS risk reduction training programmes. Behaviour change among employees is now considered to be a positive development in employee wellness and it is an essential component in meeting world-class standards on employee health (Dickinson 2009). Workplace-based wellness training programmes are now associated with a reduction in workplace deaths, sickness, absenteeism, medical aid claims, insurance claims, pension claims, company health-related loans, funeral expenses, and costs of training new staff (O'Donnel 2010). It is argued that wellness training interventions give hope and motivate employees to stay healthy in the workplace (Charalambous et al. 2007).

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Workplace-based HIV and AIDS Training Programmes in South Africa

There is no law which binds organisations to have HIV and AIDS training programmes for employees in South Africa. Companies could provide wellness programmes to employees for tax exemption, ethical considerations and marketing reasons (Feeley et al. 2009). It is part of corporate social responsibility to provide employee wellness programmes (Smith 2010). Wellness programmes could be used as a social marketing strategy to help companies achieve visibility, credibility and profitability (Lee and Blake 2010; Wymer 2010).

Although there are reports that the prevalence of HIV and AIDS in the South African population is showing a decrease, there is no research yet which indicates that HIV and AIDS prevalence is slowing down in the workforce (Ndirangu et al. 2010). The incidence of HIV

among the 15-49 age group is still reported to be high in South Africa (Ndirangu et al. 2010; Rehle et al. 2010). The prevalence of HIV and AIDS is still reported to be high even among health care practitioners who are expected to be more informed than any other group of employees in various sectors of the economy (Kanzer et al. 2010; Keller et al. 2009).

HIV and AIDS training programmes in South Africa are reported to be done in a haphazard manner as there is no controlling body to oversee the implementation of the interventions in accordance with laid down standards that guide organisations (Peters et al. 2010; Whelan et al. 2008). There is no statutory watchdog, committee, instrument or body corporate that enforces the implementation of HIV and AIDS training interventions in the workplace. There are reports that some of the workplace HIV and AIDS peer education programmes in South Africa are ineffective (Sloan and Myers 2008). The small and medium businesses in South Africa are generally reported to have a negative attitude towards HIV and AIDS risk reduction training interventions (Connelly and Rosen 2006). Companies could use or neglect to use HIV and AIDS educational materials and codes of best practice given by the Health Professions Council or the South African Business Coalition Against HIV/AIDS (Dickinson 2004; Whelan et al. 2008). Some organisations use imported HIV and AIDS training packages while others develop their own programmes. It is argued by some organisations that HIV and AIDS training programmes could be more effective if organisations employed people with a background in health promotion in employee wellness departments (Rispel et al. 2010). In contrast, some companies opt to employ training officers with a bias toward business development rather than HIV and AIDS education to run the programmes (Michinobu 2009). It is also important to note that some organisations in South Africa do not even attempt to offer HIV and AIDS risk reduction training programmes to their employees (Dickinson 2004).

This study sought to assess employees‘ behaviours and beliefs in the context of HIV and AIDS. The study identified HIV and AIDS risk factors that were commonly targeted in many training interventions in South Africa (Bhana et al. 2010; Peltzer et al. 2010). The risk factors examined in this study were attitude to condom use, sexual risk cognition, HIV and AIDS risk-taking behaviour, stigma and disclosure.

Attitude to Condom Use

Attitudes are learnt through human experience (Lopez et al. 2010). People learn to have a positive attitude towards a stimulus and to have a negative attitude towards groups of people, actions and objects (Billings et al. 2010). The degree of reinforcement an individual derives from an action or event is associated with the development of a positive attitude towards the action or event in the individual (Carlson and O‘Cass 2010). It is argued by trainers who use the social learning approach to training that if attitudes are learned, it follows that they can be unlearned through training (Becker 2010; Hernandez et al. 2010). This study posited that HIV and AIDS risk behavior could be learned behaviour that could be modified through training.

Employees could have a negative attitude towards condoms due to what they learnt correctly or incorrectly about condoms (Kang and Moneyham 2010). Some communities and individuals have a negative attitude towards the use of condoms (Reece et al. 2010). The negative attitude could be associated with low affect towards the use condoms during sex, perceived condom effectiveness in preventing HIV infection and how difficult it could be to manage condom failure (Reece et al., 2010; Tafuri et al. 2010). Individuals who engage in unprotected sex usually give reasons such as non-availability of condoms, partners accepting having sex without condoms, use of condoms lead to conflict between couples, faithful partners risk nothing by having sex without condoms, condoms cause irritation, and that it does not feel natural to use a condom (Tafuri et al. 2010). In South Africa, there was a time when government distributed defective condoms that were meant for communities that could not afford expensive brands sold mainly by pharmaceutical companies (Rigillo 2009; Scott 2009). Some people mistrust free condoms that are provided by government and companies. They treat them as less durable since they are given free of charge (Rigillo 2010). There are stories told by some of the people living with HIV and AIDS that they got infected with HIV even though they were using condoms (Chimbindi et al. 2010). Incidences of condom failure are common and health edu-

cators make participants aware of this limitation of the condom as a method preventing HIV infection (Fisher et al. 2010). Negative stories told about condoms and misinformation could make individuals develop a negative attitude towards condoms. In this regard, individuals with a negative attitude towards condom use might not use them during sexual intercourse (Chimbindi et al. 2010). Health educators could help employees use condoms by dispelling myths about condoms and educating employees on how condoms have helped reduce the rate of HIV infection and AIDS-related deaths among employees in South Africa and abroad (Michielsen et al. 2010).

Sexual Risk Cognition

Sexual risk cognition refers to thoughts that come up when an individual is having unsafe penetrative sex. Individuals with self-injurious thoughts usually engage in self-harm behaviours (Nock et al. 2010). Risk behavior in HIV and AIDS prevention is characterised by thoughts of a false sense of security from HIV infection (East et al. 2010). Sexual risk cognition could be associated with psychopathology, fatalism, religion, or culture (Scott 2009).

Psychopathology is associated with distorted thoughts and health risk behavior (Ricks et al. 2010). Psychopathology is associated with depression and suicide ideation (Perroud et al. 2010). Depression and suicide ideation are associated with use of methamphetamine and alcohol as escapade behavior in HIV and AIDS prevention (Ricks et al. 2010). Psychoactive substances are associated with heightened sexual arousal, aggressive sexual activity, and the erasure of sexual inhibitions that could lead to indiscriminate sexual behaviour (Ricks et al. 2010). Sexual risk thoughts could be associated with fatalism. Individuals who believe in fate or predestination could believe that HIV infection is about misfortune (Oluga et al. 2010; Taylor 2010). Religion and culture influence sexual cognition. Some religions discourage or avoid talk about HIV and AIDS among their members and some traditional or cultural practices pose HIV and AIDS risk in Southern Africa (Bogale et al. 2010; Oluga et al. 2010). It was postulated in this study that HIV and AIDS risk in the workplace could be reduced among employees in South Africa by changing sexual risk cognition through workplace-based HIV and AIDS risk reduction training interventions.

HIV Risk-taking Behavior

Risk-taking behaviour in HIV and AIDS prevention refers to behaviours that make the individual vulnerable to HIV infection and the deterioration of HIV into AIDS. Some individuals have a gambling attitude towards HIV infection and the development of HIV into AIDS (Huang et al. 2010). The gambler‘ s fallacy in HIV and AIDS prevention is evident when individuals continue to engage in risk sexual behaviours thinking that they will continue to be lucky in not getting infected with HIV even if they were promiscuous (Chan 2009). The gambler‘ s fallacy in health promotion is characterised by an increase in health risk behaviours by individuals despite available evidence showing the negative effects of the disease. HIV and AIDS risk-takers could have the belief that HIV does not infect them but other people (Neal et al. 2010).

Risk-taking behaviour has some connotations associated with heroism in folk tales and modern literature. The hero or heroine is seen taking risks to save lives and engaging in altruistic activities (Frankenhuis et al. 2010). Risk-taking behaviour in health promotion is associated with sensation-seeking behaviour (Fink et al. 2010). The individual would seek novel, varied, complex, and intense sexual sensations and experiences (Fink et al. 2010). In this context, the individual is prepared to take health risks for the sake of realising the high sexual sensations (Fink et al. 2010). It is argued in sexual health research that individuals seeking high sexual sensations could be at risk of HIV and AIDS. Sexual risk-taking usually involves self-stimulation and use of alcohol and drugs. Sexual risk behaviour could be associated with suicide ideation and depression (Giovannini et al. 2010). Use of drugs and alcohol before sex is common in South Africa and it is associated with HIV and AIDS risk (Peltzer et al. 2010). Such individuals tend to have multiple sexual partners (Peltzer et al. 2009).

Stigma and Disclosure

Individuals with a negative perception about HIV and AIDS stigmatise it (Sullivan et al. 2010). They have a negative attitude towards

the subject and people living with HIV and AIDS (Keikelami et al. 2010). They do not disclose their HIV status and neither would they be comfortable about disclosing the HIV and AIDS statuses of their sick relatives (Iwelunmor et al. 2010). Such individuals are less likely to look for HIV and AIDS prevention information, voluntary counselling, testing and treatment (Sowell and Phillips 2010).

Stigma and disclosure among employees could be a problem in HIV and AIDS prevention programmes in South African organizations (Maughan-Brown 2010). Some of the employees could fear victimisation and discrimination if their employers were made aware of their HIV and AIDS statuses (Pereira 2010; Tee and Huang 2009). HIV and AIDS statuses could be associated with illness and low productivity in some organisations (Gray et al. 2010; Nkomo 2010). Some organisations may not be interested in knowing about employees‘ HIV and AIDS statuses as they regard that as a private matter between the doctor and the patient. Some organisations argue that their interest is on seeing the employee working and meeting production targets as stipulated on the employment contract (Michinobu 2009). Some employers could find it stigmatising to publish HIV and AIDS statistics and wellness reports about their employees (Dickinson and Stevens 2005; Yap and Ineson 2010). It is argued in this paper that low organisational response to HIV and AIDS stigma and disclosure could escalate the prevalence of HIV and AIDS among employees. Workplace-based organisational response to reduce HIV and AIDS risk among employees is now a global health initiative yielding positive results in many countries (Dickinson 2009; Spicer et al. 2010).

Aim of the Study

The study sought to assess the impact of HIV and AIDS training intervention by comparing HIV and AIDS risk scores of employees who attended the workplace-based training intervention and employees who did not. The study specifically tested the following hypotheses:

1. There will be no difference in attitude to condom use between participants who attend the workplace-based HIV and AIDS risk-reduction training intervention and participants who do not attend.
2. There will be no difference in sexual risk cognition between participants who attend the workplace-based HIV and AIDS risk-reduction training intervention and participants who do not attend.
3. There will be no difference in HIV and AIDS risk-taking behaviour between participants who attend the workplace-based HIV and AIDS risk-reduction training intervention and participants who do not attend.
4. There will be no difference in stigma and disclosure between participants who attend the workplace-based HIV and AIDS risk-reduction training intervention and participants who do not attend.

MATERIAL AND METHODS

Research Design

This was a cross-sectional comparison of two groups in terms of psychological functioning in the context of HIV and AIDS risk. The design enabled the study to establish differences in psychological functioning between the two groups.

Participants

The sample was drawn from two organisations in Johannesburg. The organisation that had a HIV and AIDS training intervention was in the automotive industry. Participants for the comparison group were drawn from an organisation in the hospitality industry in Johannesburg. The organisation had no training intervention although it was keen to work with other organisations in developing its own HIV and AIDS training intervention. The study sample was made up of 68 employees drawn from these two organisations.

There were 31 participants from the organisation that had implemented its workplace-based HIV and AIDS training intervention. Of these were 12 male and 19 female participants. The age range was 22-45 years of age. There were 23 Blacks and 8 Whites in the group that implemented the training intervention. Participants from the group that implemented the training intervention had a school-leaving certificate, tertiary level diplomas and a five had degrees. The comparison group consisted of 37 employees. There were 16 male and 21 female participants. The age range was 25-35 years of age. There

were (N =36 Black) and White (N = 1 White) participants. Participants in this group had a school-leaving certificate and tertiary level diplomas.

Measuring Instruments

(a) Demographic Questionnaire: The demographic questionnaire was used to collect participant information such as age, gender, race, highest educational qualification, marital status and home language. The demographic characteristics of the study sample provided an insight into the nature of the study sample in the context of HIV and AIDS risk in the workplace. However, the various demographic variables were not factored into the statistical analysis as the study was only interested in establishing difference in psychological functioning between the two groups of employees.

(b) Attitude to Condom Use Scale: The attitude to condom use scale was used to assess attitudes of employees towards use of condoms. The scale was developed by De Hart and Birkimer (1997). It was found suitable for use in this study (Cronbach alpha, 0.91). This scale is used widely used in South Africa to assess attitudes towards condoms (Maharaj and Cleland 2010).

(c) Sexual Risk Cognition Scale: The instrument was used to assess risk sexual thoughts among employees. Employees were assessed on some of the reasons why they would think using a condom was not important (Imrie et al. 2001). The questionnaire was developed by Shah et al. (1997). The scale had a reliability of .91 (Cronbach alpha). Variations of the scale are used in South Africa to assess cognition in high risk sexual behaviour (Aaro et al. 2006).

(d) HIV Risk-taking Behaviour Scale: This instrument was used to measure HIV risk through substance abuse and risk sexual practices (Darke et al. 1991). The reliability of the instrument was .70 (Cronbach alpha). The scale is used in South Africa (Wang 2009).

(e) HIV Stigma Scale: The scale was used to assess HIV and AIDS stigma and disclosure. It was developed by Berger et al. (2001). Various forms of the original scale are used in South Africa (Kalichman et al. 2005).

Procedure

The study approached organisations that were interested in HIV and AIDS risk reduction interventions. Two organisations agreed to participate in the study. One had an existing training programme which covered a broad range of issues including attitude to condom use, sexual risk cognition, HIV and AIDS risk-taking behaviour, stigma and disclosure. The organisation would train its employees and invite the researchers to assess the impact of the training intervention in reducing HIV and AIDS risk among employees. The comparison organisation did not have a HIV and AIDS training intervention for its employees. The two organisations were told that the purpose of the study was to assess employees‘ perceptions about HIV and AIDS risk.

The assessment began when permission to conduct the study was granted in writing by the two organisations. The organisation that had a training intervention was asked to complete their training sessions before the assessment started. The organisation that had not yet started training employees on HIV and AIDS risk reduction was told not to start the training until the assessment was done. The two organisations were informed that the study involved completion of five questionnaires.

For the organisation that had a workplace-based training intervention, 40 questionnaires were handed out and only 31 were correctly completed and usable. The organisation that did not have a training intervention returned 37 questionnaires that were usable out of the 40 that were distributed to participants.

Ethical Considerations

Before the study commenced, participants were informed that they were free to participate or not to participate in the study. They completed informed consent forms to show that they were not being coerced to participate in the study. Participants were told that there were no consequences for participating in the study and that the study was not initiated by their organisations. They were told that there were no material benefits in participating in the study. Participants were told that no names would appear on any part of the study and that the results would be published as a group report. Information on wellness centres available to employees was made available to participants in case they experienced emotional difficulties as a result of completing the questionnaires.

Data Analysis

Two independent sample *t*-tests were run on statistical analysis software (SAS) to establish differences in HIV and AIDS risk between the two groups. The means of the two groups were compared on measures of attitude to condom use, sexual risk cognition, HIV-risk-taking behaviour, and stigma and disclosure.

RESULTS

Demographic Characteristics of the Study Sample

The completed demographic questionnaire showed that the study sample was made up of young employees who are described as a risk group in terms of HIV and AIDS risk research in South Africa. Participants were mainly female and Black. Most of the participants had a school leaving certificate and a diploma. The majority of the participants reported that they were sexually active and living with a partner or married. English and Afrikaans were used as the official languages of communication at work but most of the participants spoke African languages.

The mean and standard deviation of trained participants on attitude to condom use were (M =42, SD =2.89) and that of untrained employees were (M =36.86, SD =5.38). On sexual risk cognition the mean and standard deviation were (M =24.94, SD =7.55) for the trained group and (M =38.51, SD =12.90) for the untrained group. The mean and standard deviation on stigma and disclosure were (M =49.19, SD =5.59) for the trained group and (M =40.81, SD = 6.57) for the untrained group. The mean and standard deviation for the trained group on HIV risk-taking behavior were (M = 5.16, SD = 1.19) for the trained group and (M = 5.75, SD = 2.00) for the untrained group.

The results obtained after running the independent sample *t*-tests showed a significant difference in psychological functioning between the two groups in this study. The group that implemented its workplace-based training intervention showed responses that differed significantly from the group that did not have a training intervention. The results showed that the difference in HIV and AIDS risk between the two groups was statistically significant with respect to attitude to condom use t (66) = 4.77, $p < .01$, sexual risk cognition, t (66) = -5.40, $p < .01$, and stigma and disclosure, t (66) = 5.68, $p < .01$. The difference between the two groups in terms of HIV risk-taking behaviour was not significant (t (66) = 1.16 NS). This could relate to test items which referred more to intravenous drug use. Most of the participants in both groups reported that the practice was less common.

DISCUSSION

The study results were in tandem with previous findings which indicated an association between training intervention and HIV and AIDS risk reduction (Smith 2010). In this study, participants who took part in a workplace-based HIV and AIDS risk reduction training intervention showed less HIV and AIDS risk behaviours than participants who were not exposed to a workplace-based HIV and AIDS risk reduction training intervention. The findings showed the efficacy of the training intervention in reducing HIV and AIDS risk among employees (Charalambous et al. 2010; O'Donnel 2010).

The results showed that the two groups differed significantly in attitude to condom use. Participants who went through the workplace-based training programme reported less risk condom use behaviours than participants who did not attend the HIV and AIDS risk reduction training intervention. The results indicated that the workplace-based training intervention had a positive impact on attitude change towards condom use among employees (Becker 2010; Rigillo 2010). The workplace-based training intervention helped participants learn safer and correct methods of using condoms. Employees who participated in the training intervention showed a reduction in myths about condom use (Chimbindi et al. 2010; Michielsen et al. 2010). This study showed evidence that organisational involvement in HIV and AIDS risk reduction training intervention contributes positively towards HIV and AIDS risk reduction among employees (Michinobu 2009; Rispel et al. 2010).

Participants who were exposed to the workplace HIV and AIDS risk reduction intervention reported sexual risk cognition which differed significantly from participants who did not attend the workplace-based HIV and AIDS risk reduction intervention. The study confirmed that training reduces sexual risk cognition among participants (East et al. 2010; Nock et al. 2010).

Employees who participated in the workplace training intervention reported that they were aware that negative thoughts before sex and the desire to please sexual partners tempted them not to use condoms (Ricks et al. 2010). Trained participants reported that they realised that cultural beliefs, religion and having many sexual partners could make them vulnerable to HIV and AIDS (Bogale et al. 2010; Oluga et al. 2010). Trained participants reported that engaging in unsafe sex without condoms would not make a partner happy or strengthen the love (Peltzer et al. 2010; Ricks et al. 2010).

The results of this study showed that HIV and AIDS stigma and disclosure differed significantly between trained and untrained participants. The workplace-based training intervention had a significant impact on stigma and disclosure among employees. The results are similar to previous findings (Sullivan et al. 2010; Kekelami et al. 2010).

Employees who participated in the training intervention showed a reduction in stigma associated with HIV and AIDS and people living with HIV and AIDS (Gilbert and Walker 2010; Iwelunmor et al. 2010). After training, most of the participants reported that they would disclose their HIV and AIDS statuses and the statuses of their sick relatives (Pereira 2010; Gilbert and Walker 2010). They reported the importance of supporting employees who were HIV positive and those with full-blown AIDS in the workplace (Dickinson 2006; Sowell et al. 2010). The reduction in stigma and the promotion of disclosure among employees was attributed to the efficacy of the workplace-based training intervention in this study (Dickinson and Stevens 2005). It is argued in this study that the reduction of negative perceptions of HIV and AIDS in the workplace could have been facilitated by the active involvement and interest of management in dealing with stigma and disclosure at the organisational level (Dickinson 2009; Spicer et al. 2010; Whelan et al. 2010).

Limitations of the Study

The limitations of this study relate to the small sample size. A larger workplace-based sample could have been more preferable. However, organisations may not have as many employees working in one shift as the study would need. There could have been some unidentified confounding variables in the study design which could not be established. Participants' responses and knowledge about HIV and AIDS risk could have been enhanced by public health educators in South Africa who offer free services to primary health care centres. It is argued in this study that the findings could serve as a guide for future large-scale workplace HIV and AIDS risk reduction studies in South Africa.

CONCLUSION

This comparative study provides insight into the necessity of HIV and AIDS training interventions in the workplace. The results of this study suggest that organisations which provide workplace-based risk reduction interventions are more likely to reduce HIV and AIDS risk among employees than those that do not. Organisational involvement in workplace-based training interventions could make employees realise the severity of HIV and AIDS on employee health and organisational effectiveness. Future studies could focus on the role of corporate involvement and HIV and AIDS risk reduction among employees in South Africa.

REFERENCES

Aaro LE, Flisher AJ, Kaaaya S, Onya H, Fuglesang, M, Klepp KI, Schaalma H 2006. Promoting sexual and reproductive health in early adolescence in South Africa and Tanzania: Development of a theory and evidence-based intervention programme. *Scandinavian Journal of Public Health,* 34: 150-158.

Becker K 2010. Facilitating unlearning during implementation of new technology. *Journal of Organisational Change Management,* 23: 251-268.

Berger BE, Ferrans CE, Lashley FR 2001. Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in Nursing and Health,* 24: 518-529.

Bhana A, McKay MM, Mellins C, Petersen I, Bell C 2010. Family-based HIV prevention and intervention service for youth living in poverty-affected contexts: The CHAMP model of collaborative, evidence-informed development. *Journal of International AIDS Society,* 13: 8.

Billings ME, Engelberg R, Curtis JR, Block S, Sullivan AM 2010. Determinants of medical students' perceived preparation to perform end-of-life care, quality of end-of-life care education, and attitudes towards end-of-life care. *Journal of Palliative Medicine,* 13: 319-326.

Bogale G W, Boer H, Seydel E R 2010. Condom use among low-literate rural females in Ethiopia: The role of vulnerability HIV infection, condom attitude, and self-efficacy. *AIDS Care,* 22, 851-857.

Carlson J, O'Cass A 2010. Exploring the relationship between e-service quality, satisfaction, attitudes, and behaviours in context-driven e-service websites. *Journal of Services Marketing,* 24: 112-127.

Chan VKY 2009. Using neural network to model the behavior and decisions of gamblers in particular cyber-gamblers. *Journal of Gambling Studies,* 26: 35-52.

Charalambous S, Grant AD, Day JH, Pemba L, Chaisson RE, Kruger P, Martin D, Wood R, Brink B, Churchyard GJ 2007. Establishing a workplace antiretroviral therapy programme in South Africa. *AIDS Care,* 19: 34-41.

Chimbindi NZ, Herbst K, Tint KS, Newell M 2010. Socio-demographic determinants of condom use among sexually active young adults in rural KwaZulu-Natal, South Africa. *AIDS,* 4: 88-95.

Connelly P, Rosen S 2006. Will small and medium enterprises provide HIV/AIDS services to employees? An analysis of market demand. *South African Journal of Economics,* 73: 613-626.

Darke S, Hall W, Heather N, Ward J, Wodak A 1991. The reliability and validity of a scale to measure HIV risk-taking among intravenous drug users. *AIDS,* 5: 181-185.

De Hart DD, Birkimer JC 1997. Trying to practise safer sex: Development of the sexual risks scale. *Journal of Sex Research,* 34: 11-25.

Dickinson D 2004. Corporate South Africa' s response to HIV/AIDS: Why so slow? *Journal of Southern African Studies,* 30: 627-650.

Dickinson D 2006. Fight for life: South African HIV/AIDS peer educators as a new industrial relation actor? *British Journal of Industrial Relations,* 44: 697-717.

Dickinson D 2009. *Changing the Course of AIDS: Peer Education in South Africa and its Lessons for the Global Crisis.* New York: Cornell University Press.

Dickinson D, Stevens M 2005. Understanding the response of large South African companies to HIV/AIDS. *Journal of Social Aspects of HIV/AIDS*, 2: 286-295.

East L, Jackson, D, Peters K, O'Brien L 2010. Disrupted sense of self: Young women and sexually transmitted infections. *Journal of Clinical Nursing*, 19: 1995-2003.

Feeley FG, Rosen S, Connelly PJ 2009. The private sector and HIV/AIDS in Africa: Recent developments and implications for policy. In: E Lule, RM Seifman, AC David (Eds.): *The Changing HIV/AIDS Landscape: Selected Papers for the World Bank's Agenda for 2007-2011*. Geneva: World Bank, pp. 267-293.

Fink B, Hamdaoui A, Wenig F, Neave N 2010. Hand-grip and sensation seeking. *Personality and Individual Differences,* 49: 789-793.

Fisher JC, Cook PA, Kapiga SH 2010. Alcohol use before sex and HIV risk: Situational characteristics of protected and unprotected encounters among high risk African women. *Sexually Transmitted Diseases*, 37: 571-578.

Frankenhuis WE, Dotsch R, Karremanns JC, Wigboldus DHJ, 2010. Male physical risk- taking in a virtual environment. *Journal of Evolutionary Psychology,* 8: 75-86.

Gilbert L, Walker L 2010. "My biggest fear was that people would reject me once they knew my status": Stigma as experienced by parents in a HIV/AIDS clinic in Johannesburg, South Africa. *Health and Social Care in the Community,* 18: 139- 146.

Girard F, Ford N, Montaner J, Cahn P, Katabira E 2010. Universal access in the fight against HIV/AIDS. *Science,* 329: 147-149.

Gray L, Ferrer S, Ortmann G 2010. KwaZulu-Natal commercial farmers' perceptions of and management responses to HIV/AIDS. *African Journal of AIDS Research,* 8: 147-156.

Hernandez-Mogollon R, Cepeda-Carrion G, Cegarra-Navarro JG, Leal-Millan A 2010. The role of cultural barriers in the relationship between open-minded and organisational innovation. *Journal of Organisational Change Management,* 23: 360-376.

Huang JH, Jacobs DF, Derevensky JL, 2010. Sexual risk-taking behaviours, gambling, and heavy drinking among US college athletes. *Archives of Sexual Behaviour,* 39: 706-713.

Imrie J, Stephenson JM, Cowan FM, Wanigaratne S, Billington AJP, Copas AJ, French PD, Johnson AM 2001. A cognitive behavioural intervention to reduce sexually transmitted infections among gay men: A randomised trial. *British Medical Journal,* 322: 1451-1451.

Iwelunmor J, Zungu N, Airhihenbuwa CO 2010. Rethinking HIV/AIDS disclosure among women within the context of motherhood in South Africa. *American Journal of Public Health,* 8: 1393-1399.

Kalichman SC, Simbayi LC, Jooste S, Cain D, Cherry C, Kagee A 2005. Development of a brief scale to measure AIDS-related stigma in South Africa. *AIDS and Behaviour,* 9: 135-143.

Kang HS, Moneyham L 2010. Attitudes towards and intention to receive the human papilloma virus (HPV) vaccination and intention to use condoms among female Korean college students. *Vaccine,* 28: 811-816.

Keikelami MJ, Murphy CK, Ringheim KE, Woldehanna S 2010. Perceptions of HIV/AIDS leaders about faith-based organisations' influence on HIV/AIDS stigma in South Africa. *African Journal of AIDS Research,* 9: 63-70.

Keller PP, McCarthy K, Mosendane T, Tellie M, Venter,F, Noble L, Scott L, Steven W, van Rie A 2009. HIV and AIDS prevalence among medical students in Johannesburg, South Africa. *South African Medical Journal,* 99: 72-72.

Kranzer K, Bekker LG, van Schaik N, Thebus L, Dawson M, Cadwell J, Hausler H, Grant R, Wood R 2010. Community health care workers in South Africa are at increased risk for tuberculosis. *South African Medical Journal,* 100: 224-226.

Lee S, Blake H 2010. The price is right: Making workplace wellness financially sustainable. *International Journal of Workplace Health and Management,* 3: 58-69.

Lopez-del-Burgo C, Lopez de Fez CM, Osorio A, Guzman JP, de Irala J 2010. Spanish women' s attitudes towards post-fertilisation effects of birth control methods. *European Journal of Obstetrics, Gynaecology, and Reproductive Biology,* 151: 56-61.

Mahara P, Cleland J 2005. Risk perceptions and condom use among married or cohabiting couples in KwaZulu-Natal, South Africa. *International Family Planning Perspectives,* 31: 24-29.

Maughan-Brown B 2010. Stigma rises despite antiretroviral roll-out: A longitudinal analysis in South Africa. *Social Science and Medicine,* 70: 368-374.

Michielsen K, Chersic, MF, Luchters S, De Koker P, van Rossen R, Temmerman M 2010. Effectiveness of HIV prevention for youth in Sub-Saharan Africa: Systematic review of meta-analysis of randomised and non-randomised trials. *AIDS,* 24: 119-1202.

Michinobu R 2009. "HIV is irrelevant to our company": Everyday practices and the logic of relationships in HIV/AIDS management by Japanese multinational companies in Northern Thailand. *Social Science and Medicine,* 68: 941-948.

Ndirangu J, Newell ML, Transer F, Herbst A, Bland R 2010. Decline in early life mortality in a high HIV prevalence rural area of South Africa: Evidence of HIV prevention or treatment impact. *AIDS,* 24: 593-602.

Neal TMS, Lichtenstein B, Brodsky SL 2010. Clinical implications of stigma in HIV/AIDS and the other sexually transmitted infections. *International Journal of STD and AIDS,* 21: 158-160.

Nkomo JC 2010. Development and health: The case of HIV/AIDS in Southern Africa. *Eastern African Social Science Research Review,* 26: 111-126.

Nock MK, Prinstein MJ, Sterba, SK 2010. Revealing the form and function of self-injurious thoughts and behaviours: A real-time ecological assessment study among adolescents and young adults. *Psychology of Violence,* 1: 36-52.

O'Donnell MP 2010. Integrating financial incentives for workplace health promotion programs into health plan premiums is the best idea since slice bread. *American Journal of Health Promotion,* 24: 4-6.

Oluga M, Kiragu S, Mohamed MK, Walli S 2010. "Deceptive " cultural practices that sabotage HIV/AIDS education in Tanzania and Kenya. *Journal of Moral Education,* 39: 365-380.

Peltzer K, Simbayi LC, Kalichman S, Jooste S, Cloete A, Mbelle N 2009. Drug use and HIV risk behaviour in three urban South African communities. *Journal of Social Sciences,* 18: 143-149.

Peltzer K, Tabane C, Motseke G, Simbayi LC 2010. Lay-counsellor-based risk reduction intervention with HIV positive diagnosed patients at a public HIV counselling and testing in Mpumalanga, South Africa. *Evaluation and Program Planning,* 33: 379-385.

Pereira A 2010. HIV/AIDS and discrimination in the workplace: The cook and the surgeon living with HIV. *European Journal of Health Law,* 17: 139-147.

Perroud N, Uher R, Hauser J, Rietschel M, Henigsberg N, Placentino A, Kozel D, Maier W, Mors O, Souery D, Dmitrzak-Weglarz M, Jorgensen L, Kovacic Z, Giovannini C, Mendlewicz J, Zobel A, Strohmaier J, McGuffin P, Aitchison KJ, Farmer A 2010. History of suicide attempts among patients with depression in the GENDEP Project. *Journal of Affective Disorders,* 123: 131-137.

Peters A, Jansen W, van Driel F 2010. The female condom: The international denial of a strong potential. *Reproductive Health Matters,* 18: 119-128.

Reece M, Herbenick D, Hollub A V, Hensel D J, Middlestadt SE 2010. A psychometric assessment of the multi-factor attitude toward condoms scale (MFACS). *International Journal of Sexual Health,* 22: 119-129.

Rehle T M, Ballett T B, Shisana O, van Wyk P, Zuma K, Carrara H, Jooste S 2010. A decline in new HIV infection in South Africa: Estimating the HIV incident from three national HIV surveys in 2002, 2005, and 2008. *PLoS One,* 5: 11094-11094.

Ricks JL, Chang-Arratia C, Lansinger DJ, Dziegielewski S 2010. Men who have sex with men and methamphetamine use. *Social Work in Mental Health,* 8: 160-173.

Rigillo N 2009. "Free condoms are like cheap clothes, they tear quickly": Mistrust in condoms among young people in Windhoek, Namibia. *Explorations in Anthropology,* 9: 189-202.

Scott S 2009. HIV/AIDS: Understanding socio-cultural factors and their influence on sexual behaviour and decision making in Africa. *Journal of Manitoba Anthropology Students Association,* 28: 83-93.

Rispel LC, Peltzer K, Nkomo N, Malomo B 2010. Evaluating a HIV and AIDS community training partnership program in five diamond mining communities. *Evaluation and Programme Planning,* 33: 394-402.

Shah D, Thornton S, Burgess AP 1997. Sexual risk cognitions questionnaire: A reliability and validity study. *AIDS Care,* 9: 471-480.

Sloan NM, Myers JE 2005. Evaluation of a HIV/AIDS peer education programme in a South African workplace. *South African Medical Journal,* 95: 261-264.

Smith AD 2010. Corporate social responsibility in the health care insurance industry: A cause-branding approach. *International Journal of Electronic Health Care,* 5: 284-302.

Sowell RL, Phillips KD 2010. Understanding and responding to HIV/AIDS stigma and disclosure: An international challenge to mental health nurses. *Issues in Mental Health Nursing,* 31: 394-402.

Spicer N, Aleshkina J, Biesma R, Brugha R, Caceres C, Chilundo B, Chkhatarashvili K, Harmer A, Miege P, Murzalieva G, Ndubani P, Rukhadze, N, Semigina T, Walsh A, Walta, Zhang X 2010. National and sub-national HIV/AIDS co-ordination: Are global health initiatives closing the gap between intent and practice. *Globalisation and Health,* 6: 1-3.

Sullivan SG, Xu J, Feng Y, Su S, Xu C, Ding X, Gao Y, Dou Z, Wu Z, China CIPRA Project 2 Team 2010. *AIDS Care,* 22: 104-111.

Tafuri S, Martinelli D, Germinario C, Prato R 2010. Determining factors for condom use: A survey of young Italians. *The European Journal of Contra-ception and Reproductive Health Care,* 15: 24-30.

Taylor TN 2010. "Because I was in pain, I just wanted to be treated": Competing therapeutic goals in the performance of healing HIV/AIDS in rural Zimbabwe. *Journal of American Folklore,* 123: 304-328.

Tee Y, Huang M 2009. Knowledge of HIV/AIDS and attitudes towards people living with HIV among the general staff of a public university in Malaysia. *SAHARA,* 6: 179-187.

Yap MHT, Ineson EM 2010. Hospitality managers' knowledge of HIV and AIDS: An exploratory study. *International Journal of Contemporary Hospitality Management,* 22: 69-69.

Wang Z 2009. *Parent-adolescent Communication and Sexual Risk-taking Behavior of Adolescents.* MA Thesis, Unpublished. University of Stellenbosch.

Whelan R, Dickinson D, Murray T 2008. Use and neglect of best practice in HIV/AIDS programme guides by South African companies. *African Journal of AIDS Research,* 7: 375-388.

Wymer W 2010. Rethinking the boundaries of social marketing: Activism or advertising? *Journal of Business Research,* 63: 99-103.