

El rol de la comunicación en la lucha contra el HIV y el SIDA en la construcción

The role of communication in the fight against HIV and AIDS in construction

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Resumen

El único medio viable para contrarrestar la propagación de las nuevas infecciones de HIV es el cambio de la conducta sexual. Se ha argumentado que el contenido de los programas de prevención de la conducta debiera incluir información básica a la vez que exacta acerca de este riesgo, que sea comunicada en forma reiterada e intensiva en los foros que promueven una discusión abierta y una participación activa de los involucrados. Por tanto, una comunicación efectiva sobre VIDH (Virus de Inmuno Deficiencia Humano) y SIDA implica proporcionar información en forma consistente, reiterada y recurrente, usando diversos métodos, medios de comunicación y lenguajes, incluyendo el lenguaje vernacular para contribuir al conocimiento previo acerca del VIDH Y SIDA (Síndrome de Inmuno Deficiencia Humano), mientras que simultáneamente se reconocen las diferentes historias humanas de trabajadores en un ambiente que lleva a una interacción desinhibida. Sobre la base de un repertorio de anécdotas recopiladas durante un serie de talleres nacionales en que participaban múltiples sectores de opinión, como asimismo los hallazgos de conocimiento, actitudes y comportamiento derivadas de encuestas (KAB) basadas en dos muestras, la primera una muestra de 300 trabajadores de la construcción en Sud África y la segunda una muestra de 400 trabajadores en Namibia, los autores postulan por una mayor participación de los trabajadores de la construcción en programas de comunicación sobre VIDH y SIDA dirigidos por la administración y orientados a ejercer influencia sobre la conducta sexual. Considerando que la televisión y radio fueron los medios de comunicación más populares y de mayor influencia masiva, se debe promover que los empleadores apoyen, refuercen y complementen las campañas y mensajes relacionadas con el VIDH y SIDA a través de estos medios como parte de los programa orientados a promover la salud primaria. Los autores recomiendan que los empleadores creen oportunidades para la educación de los trabajadores acerca de VIDH y SIDA entre sus pares.

Palabras clave: Comunicación, VIDH, SIDA, medios de comunicación de masas, cambio conductual

Abstract

The only viable means of countering the spread of new HIV infections is sexual behavior change. It has been argued that the content of behavior prevention programs should include basic, accurate information on risk that is communicated repetitively and intensively in forums that promote open discussion and participant involvement. Therefore, effective HIV(The Human Immunodeficiency Virus) and AIDS communication involves providing relevant and meaningful information accurately, consistently, reiteratively, and repetitively using multiple methods, mediaums, and languages, including vernacular, that build on previous HIV and AIDS (Acquired Immunodeficiency Syndrome) knowledge while at the same time recognizing the differing personal backgrounds of workers in an environment conducive to open an uninhibited interaction. Drawing from anecdotal evidence gathered during a series of national multi-stakeholder workshops as well as the findings of knowledge, attitude and behavior (KAB) surveys of two samples, namely a sample of 300 construction workers in South Africa and another of 400 workers in Namibia, the authors argue for greater involvement of construction employers in structured management led and targeted HIV and AIDS communication programs designed to influence sexual behavior. Considering that television and radio were the most popular and influential mass mediaums of communication, employers are encouraged to support, reinforce and complement HIV and AIDS campaigns and messages via these mediaums as part of primary health promotion programs. The authors recommend that employers create opportunities for HIV and AIDS education of workers by their peers.

Keywords: communication, HIV, AIDS, media, behavior change

1. Introduction

HIV and AIDS is a real disease caused by a real virus that has killed large numbers of persons across the

world. There is growing consensus that the only viable means of limiting the further spread of HIV infection is

behavior change. Considering that very few interventions have influenced the prevalence or incidence of HIV, the task of achieving behavior change is not easy. Strategies that have been used to date include raising awareness, educating persons about the nature of HIV and AIDS and ways of preventing infection, condomization and reducing high-risk behaviors (Harrison, Smit and Myer, 2000). It has been argued that the content of behavior prevention programs should include basic, accurate information on risk that is repeated intensively for three to five sessions in forums that promote open discussion and participant involvement. However, knowledge by itself is not sufficient to bring about behavioral change. When targeted at specific risk groups the communication of information that focuses on deficient knowledge of that particular group about the affliction has a greater chance of influencing behavior. Such programs require increasingly intensive, individually focused and longer-term efforts to prevent HIV transmission and bridge the gap between high levels of knowledge and low levels of practice (Harrison et al., 2000; Varga, 1997). For example, many researchers have found that respondents have deficient knowledge about certain forms of HIV transmission such as by mosquito bites (Lim and Loo, 2000; Haupt and Smallwood, 2003a; 2003b; Smallwood, Godfrey and Venter, 2002). Simply communicating dry scientific evidence in media messages is insufficient to convince persons about how HIV cannot be contracted (Nicoll et al., 1993) such as by this means. Booth (1987) suggests, for example, that it would be more effective to indicate that mosquitoes can only transmit HIV if 10 million mosquitoes fed on an HIV affected person and then all of them flew to feed on another person.

Several studies including those conducted by the authors have confirmed that high levels of awareness about HIV and AIDS exist among the Southern African population (Harrison et al., 2000; Lim and Loo, 2000; Haupt and Smallwood, 2003a; Haupt and Smallwood 2003b). These findings suggest that the Southern African mass media campaigns to inform about the threat of HIV and AIDS have in the main been successful. These have included leaflets, posters, television and radio messages in multiple languages. Recent work by the Human Sciences Research Council (HSRC) suggests that South Africans are having less sex with fewer people than a decade ago confirming the success of the various HIV and AIDS education programs (Hanlon, 2004). In the Netherlands, Empelen et al. (2003) found that mass media had contributed to awareness of HIV risks and related behavior and strategies to reduce the chance of HIV risk. The results

of a study conducted in Ireland by Sixsmith, Kelleher and Crangle (2000) found that 70% of respondents reported that media campaigns would reduce the risk of HIV infection. Considering that information in the mass media does not necessarily reach everyone, high profile and targeted communication is necessary to reach "hidden" groups in the general population (Wellings and Macdowall, 2000). These hidden groups are those who need better and focused information about specific aspects of the disease especially where their knowledge is deficient and uncertain. It is necessary though when targeting specific groups that prejudice against them is discouraged and not reinforced. The limitations of the mass media are that they are less effective in conveying complex information, teaching skills, shifting attitudes and beliefs, and changing behavior in the absence of other enabling factors (McGuire, 1995; Wellings and Macdowall, 2000). Messages may fail to reach the audiences for which they were intended while they may reach audiences for which they were not intended. Mass media messages may also be misunderstood. On the other hand, targeted interventions are more easily controlled and followed up.

The major challenge is maintaining high levels of public awareness against the increasing levels of complacency and apathy towards the threat of HIV and AIDS (Lupton et al., 1993). Little attention has been devoted to the investigation of HIV and AIDS at the workplace suggesting that the workplace is often not associated with the high-risk behaviors leading to the transmission of HIV (Lim and Loo, 2000; Goss and Adam-Smith, 1995). Further, while persons living with HIV are capable of performing to the same levels of other workers, many employers have opted for rather dismissing them once their serostatus is known (Lim and Loo, 2000).

This paper reports on the findings of studies conducted in Southern Africa based on knowledge, attitude and behavior (KAB) surveys of two samples. Sample A comprised of 300 construction workers in the Western Cape and Eastern Cape provinces of South Africa, and Sample B of 400 construction workers in Namibia. The authors argue that before an objective and appropriate HIV and AIDS information sharing program can be designed, program designers should be fully aware of the potential of various forms of communication relative to their effectiveness to influence behavior change relative to relevant aspects of the disease.

2. Research

KAB surveys are used to investigate exposure to, recall and comprehension of information and self-reported behavior change. The authors are aware of the limitations of such an approach relative to monitoring changes in the social context since they focus on the responses of individuals; validity and reliability; and socially desirable responses.

Different research instruments were used for each of the two samples. For Sample A the investigators adapted a questionnaire previously developed by the Human Sciences Research Council (HSRC)¹ Many questions were directed at the role of the media and employers as sources of HIV and AIDS information. The questionnaire used for Sample B concentrated more on the role of employers and interventions.

2.1 Sample A – South Africa

The ethnic make-up of Sample A was as follows:

- Africans 70.3%;
- Coloreds 28.3%; and
- Whites 1.0%.

Most respondents (77%) had at least 8 years of schooling. Xhosa was the most widely spoken language followed by Afrikaans. English was therefore largely a third language. While no Africans in the sample had English as their home language, 1.5% spoke predominantly Afrikaans and 89.7% Xhosa. Similarly, while only 3.7% of Coloreds spoke mostly Xhosa at home, 37.0% spoke English and the remaining 59.3% Afrikaans. All the white respondents had English as their home language.

Workers had worked in construction for a median 2.0 years (range 0.01 to 38 years). They had worked a median 0.5 years (range 0.01 to 30 years) for their current employers. Further, they had worked for a median 0.25 years (range 0.01 to 10 years) on present projects. The sample consisted of:

- Unskilled workers 48%;
- Semi-skilled workers 12%;
- Skilled workers 23%; and
- Site administration 17%.

This result is indicative of the ratio of unskilled workers to other categories of workers on South African construction sites.

From Table 1 it is evident that most (70.4%) of the respondents had often obtained information about HIV and AIDS during the previous six-month period. Less

than 10% of them had never been exposed to any information during that period.

Table 1. Frequency of HIV and AIDS information during previous 6 months

Often	Seldom	Never
70,4%	20,9%	8,7%

The main sources of information about HIV and AIDS during the previous six months are shown in Table 2. Most respondents obtained their information from radio (96.3%) and television (95.4%) programs and advertisements. Posters (88.4%), magazines (87.3%) and newspapers (84.1%) were the next popular sources of information. Only 61% of respondents reported that they had obtained any HIV and AIDS information at work.

Table 2. Sources of information during previous 6 months

Source	Yes	No	Don't know
Radio	96.3%	2.3%	1.4%
Television	95.4%	3.7%	0.9%
Posters	88.4%	11.1%	0.5%
Magazine	87.3%	7.8%	4.9%
Newspapers	84.1%	10.8%	5.1%
Brochures/pamphlets	66.5%	16.5%	17.0%
Advertisement on taxis and buses	63.9%	27.7%	8.4%
At work	61.0%	38.0%	1.1%
Videos or films	57.1%	40.2%	2.6%
Audiotapes	25.1%	62.0%	12.8%

Television (77%) and radio (73.8%) were the two most frequent sources of obtaining information. Posters (64.4%), magazines (63.5%) and newspapers (65%) were less frequent sources used. These sources also increasingly required respondents to read. This finding hints at the likelihood of most of the respondents having low levels of literacy or access to reading material in their mother tongue. Information at work was obtained often by only 43.2% of the respondents. These results

¹ Human Sciences Research Council Study of knowledge, attitudes, perceptions and beliefs regarding HIV and HIV AND AIDS. South Africa: Human Sciences Research Council (Focus Group Health Care Group, 1992; Pretoria: South African Data Archive distributor, 2000)

are shown in Table 3. These findings in Tables 2 and 3 are consistent with the study of Smallwood, Godfrey and Venter (2002) where television and radio predominated with 69.0% and 76.7% respectively.

While advertisements on taxis and buses provide much needed additional revenue (operator were estimated to earn about ZAR600 per month for operators of these services they appear to fail as vehicles to convey information about HIV and AIDS considering that only 41.5% of respondents obtained information in that way during the previous six months.

Table 3. Frequency of obtaining information during previous 6 months

Source	Often	Seldom	Never	N/A	Mean ²	Std. Dev.
Radio	77.0%	15.6%	4.8%	2.8%	1.33	0.69
Television	73.8%	18.6%	5.7%	1.9%	1.36	0.68
Posters	64.4%	19.9%	12.3%	3.4%	1.55	0.84
Magazine	63.5%	20.2%	9.9%	6.3%	1.59	0.91
Newspapers	65.0%	19.3%	10.3%	5.3%	1.64	1.58
Brochures/pamphlets	46.2%	33.8%	14.1%	6.0%	1.80	0.90
Advertisement on taxis and buses	41.5%	36.8%	17.1%	4.7%	1.85	0.87
At work	43.2%	15.7%	36.2%	4.8%	2.02	1.00
Videos or films	37.4%	18.9%	36.1%	7.5%	2.14	1.01
Audiotapes	17.2%	29.1%	41.4%	12.3%	2.48	0.92

²On the four-point Likert scale of frequency the closer the mean is to 1 the greater the degree of frequency (often)

As evidenced in Table 4, slightly more than half of the respondents (51.2%) reported that they had proactively sought information about HIV and AIDS; two-thirds had during the previous month discussed the issue with fellow workers; and a similar proportion wanted their employers to provide them with information. However, 13.7% of them were uncertain about the role of employers in providing information. Further, considering that more than two-thirds of respondents had proactively and of their own volition sought information about HIV and AIDS through discussions with their fellow workers the important role of peer educators is evident. In terms of South African legislation, namely the Occupational Health and Safety Act 85 of 1993 contractors need to have at least one full-time worker as a health and safety representative for every 50 workers or part thereof. These persons if adequately trained would be ideal candidates to perform the function of peer educators.

Table 4. Proactive efforts for information

	Yes	No	Don't know
Have you ever tried to obtain information about HIV and AIDS yourself?	51.2%	48.2%	0.4%
Have you ever discussed HIV and AIDS with any of your workers during the past month?	67.0%	31.6%	1.4%
Should your employer provide you with information about HIV and AIDS?	69.7%	16.5%	13.7%

The use of a knowledgeable speaker as part of an awareness education program at work was the most preferred form (95.6%) of employer-driven information sharing about HIV and AIDS. Counseling provided or made available during worker wellness management was also highly popular (85%). Other popular forms of preferred employer information sharing included posters (82.3%), and induction or orientation programs that include information about HIV and AIDS (80.8%). Table 5 shows these responses ranked according to degree of preference.

Persons associated with medical experience were the most influential sources of information to bring about change in behavior or lifestyle, which is the desired response to HIV and AIDS information. Employers as influential agency for changed behavior ranked 11th out of 12 sources of information. This finding suggests that construction employers are not as influential as they should be probably because of their lack of involvement in HIV and AIDS awareness and support programs.

Contrary to expected popular belief, traditional healers such as sangomas were rated as the least influential sources of information. These results are shown in Table 6. Of note is the rating of TV and radio above employers as sources of influence confirming the importance of their role to inform and influence behavior change.

The employer intervention most preferred by workers (93.7%) to combat HIV, AIDS and STIs was the provision of condoms reflecting the effectiveness of the national "condomization" campaign in the popular media such as radio and television.

Table 5. Preferred form of information sharing by employer

Source	Yes	No	Don't know
Awareness education (speaker)	95.6%	2.5%	2.0%
Wellness management eg. Counseling	85.0%	8.3%	6.7%
Posters	82.3%	15.4%	2.3%
Induction	80.8%	9.3%	9.3%
Newspapers	75.7%	16.8%	7.5%
Videos or films	75.2%	18.6%	6.2%
Newsletters	75.0%	20.3%	4.7%
Toolbox talks	73.9%	15.2%	10.8%
Role plays	70.3%	19.8%	9.9%
Brochures/pamphlets/flyers	63.6%	18.2%	18.2%

Table 6. Influence of source of HIV and AIDS information to change behavior or lifestyle

Source	Not at all	Slightly	Very much	Mean ³	Std. Dev.
Doctor	16.7%	9.7%	73.2%		
Nurse	15.1%	14.3%	70.5%	2.55	0.74
Health worker	15.7%	16.5%	67.7%	2.52	0.75
Infected person	18.9%	27.6%	53.5%	2.35	0.78
Family	18.5%	43.8%	37.8%	2.19	0.73
TV	21.7%	45.0%	33.3%	2.16	0.92
Friends	17.7%	49.4%	32.9%	2.15	0.70
Radio	21.2%	44.9%	33.9%	2.13	0.73
Fellow workers	18.9%	51.6%	29.5%	2.11	0.69
Literature	23.2%	46.5%	30.3%	2.07	0.73
Employer	26.5%	40.8%	32.7%	2.06	0.77
Traditional healer (Sangoma)	66.7%	19.6%	13.8%	1.47	0.73

³On the three-point Likert – scale of influence the closer the mean is to 3 the greater the degree of influence according to the respondents

Table 7. Employer interventions to combat HIV and AIDS and STIs

Intervention	Yes	No	Don't know
Provision of condoms	93.7%	4.2%	2.1%
Awareness education (speaker)	93.6%	3.4%	3.0%
Wellness management eg. counselling	84.2%	7.7%	8.1%
Posters	82.4%	12.3%	5.3%
Induction	75.0%	9.6%	15.4%
Newsletters	71.1%	18.4%	10.5%
Videos or films	68.7%	21.7%	9.6%
Newspapers	68.1%	21.2%	10.6%
Toolbox talks	68.1%	14.9%	17.0%
Role plays	66.7%	12.6%	20.7%
Brochures/pamphlets/flyers	62.2%	16.5%	21.3%

This finding confirms the reliance on protection rather than changed behavior to prevent infection. This finding is similar to the study of Smallwood, Godfrey and Venter (2002) where the provision of condoms predominated (76.5%) as the preferred employer related intervention. The use of condoms creates a false sense of security among workers much in the same way as personal protective equipment (PPE) does to the hazards they are exposed to during construction activities. Condoms should like PPEs preferably be the measure of last resort and not first resort as the finding in Table 7 suggests. Similarly, the use of an invited speaker as part of an education awareness program rated as the next preferred intervention, namely 93.6% in Table 7 and 74.1% in the Smallwood, Godfrey and Venter (2002) study.

2.2 Sample B - Namibia

In this sample of 400 Namibian workers only 23.1% reported at least 8 years of schooling while 57.6% had either completed 12 years of schooling or obtained a Matriculation Certificate. This finding suggests a well-educated labor force. Workers had worked in construction for a median 2.0 years (range 0.08 to 40 years). They had worked a median 0.8 years (range 0.08 to 25.5 years) for their current employers. Further, they had worked for a median 0.75 years (range 0.08 to 4.5 years) on present projects. The sample consisted of:

- Unskilled workers 32%;
- Semi-skilled workers 35%;
- Skilled workers 16%; and
- Site administration 17%.

The distribution of levels of skills was reflective of the high levels of education of the labor force with the number of semi-skilled workers exceeding the number of unskilled workers.

From Table 8 it is evident that almost all the workers reported that they had heard about HIV and AIDS and that they were convinced that both existed, confirming an effective information sharing campaign in Namibia. Although almost all of them (92.9%) considered HIV and AIDS serious problems in their local communities, significantly fewer (76.5%) of them reported them as serious work-related problems. This finding suggests that Namibian employers are like their SA counterparts not as influential as they could be relative to HIV and AIDS.

Table 8. Awareness of HIV and AIDS

	Yes	No	Unsure
Have you heard of HIV and AIDS?	95.2%	4.2%	0.6%
Is there something such as HIV and AIDS?	95.1%	1.9%	3.0%
Is HIV and AIDS a serious problem in your community?	92.9%	3.8%	3.3%
Is HIV and AIDS a serious problem in your workplace?	76.5%	11.2%	12.3%

The findings in Table 9 suggest that where employers presently provided information about TB (49.8%), STIs (55.8%), and HIV and AIDS (61.7%), construction workers wanted them to play greater roles in providing information relative to all three issues, namely TB (67.9%), STIs (73.8%) and HIV and AIDS (74.4%).

Table 9. Role of employer relative to information

Want to have provided	Issue			Presently provided		
	Yes	No	Unsure	Yes	No	Unsure
67.9%	28.4%	3.7%	Tuberculosis (TB)	49.8%	39.7%	10.5%
73.8%	25.0%	1.2%	Sexually Transmitted Infections (STIs)	55.8%	31.8%	12.4%
74.4%	23.8%	1.8%	HIV and AIDS	61.7%	31.1%	8.1%

When asked about the treatment of HIV and AIDS 78.3% of workers correctly reported that doctors could not at present cure infected persons. A similar proportion (77.7%) of them opined that traditional healers such as sangomas and sanusi could also not treat and cure infected persons from HIV and AIDS. Likewise 71.1% of workers correctly reported that a vaccine or injection against infection did not exist. Of concern though are the remaining workers who were unsure about the possibilities of these agencies to treat and cure infected workers. These results are shown in Table 10.

Table 10. Treatment and curing of HIV and AIDS

Agent	Yes	No	Unsure
Doctors	11.4%	78.3%	10.3%
Traditional healers (sangomas or sanusi)	5.0%	77.7%	17.0%
Vaccine (injection)	9.7%	71.1%	19.2%

Table 11 indicates the responses of workers relative to interventions that construction employers could introduce at work. As with the South African sample the Namibian workers favored the provision of condoms above other forms of interventions. The other interventions differed from the responses of their SA counterparts. For example, awareness education in the form of an invited speaker ranked lower (5th) than in South Africa (2nd) with a smaller proportion (73.3%) than the South African workers (93.6%). However, pamphlets and flyers, plays and toolbox talks in both countries ranked lowest as preferred employer related interventions. This finding suggests preference for the soft and non-confrontational option of condom usage instead of the harsher confrontation with the need to change sexual behavior.

Table 11. Employer related HIV and AIDS interventions

Rank	Intervention	SA Rank	Yes	No	Unsure
1	Provision of condoms	1	88.5%	6.9%	4.7%
2	Induction programs	5	81.2%	7.2%	11.6%
3	Video	7	76.0%	14.5%	9.5%
4	Newsletters	6	74.7%	14.1%	11.2%
5	Awareness education (speaker)	2	73.3%	12.8%	13.9%
6	Posters	3	70.5%	20.5%	9.0%
7	Pamphlets/flyers	11	65.1%	18.3%	16.6%
8	Plays	10	57.7%	28.0%	14.3%
9	Toolbox talks	9	53.7%	31.7%	14.7%

3. Characteristics of effective communication

Communication has been described as an action that provides information that is relevant and meaningful to persons receiving that information. This information might not have the same meaning to different people and may not produce the same outcomes. These outcomes are typically manifested in people's behavior and actions (Emmitt and Gorse, 2003). Effective communication involves cognition, a process of transforming and contextualizing sensory information to enable understanding, storage, recovery and use. It therefore follows that assimilated cognition does not occur when information stands on its own and is not relevant to previous information (Emmitt and Gorse, 2003). Further,

the accuracy and consistency of the words and symbols used to communicate information is critical if optimal mutual understanding is to be achieved. The success and effectiveness of communication involves the correct use of language that includes words, pictures and body language, and how these are received and interpreted. Language used on construction sites is different from that used in office environments as construction workers create their own construction vernacular to communicate among themselves. That vernacular needs to be recognized and acknowledged for effective communication to occur. Effective communication is a two-way process that involves listening, clarification, explanation, reinforcement and feedback. Further, information that is shared must account for personal capability to process the information itself as well as the volume of it. Emmitt and Gorse (2003) argue for a phased approach over time using different communication methods that include reiteration and repetition to avoid boredom, monotony, and apathy. Correct interpretation of information received is dependent on personal experiences, previous knowledge, schooling, training, attitudes and emotions.

Effective HIV and AIDS communication in construction, therefore, involves providing relevant and meaningful information accurately, consistently, reiteratively, and repetitively using multiple methods, mediums, and languages including vernacular, that build on previous HIV and AIDS knowledge while at the same time recognizing the differing personal backgrounds of workers in an environment conducive to open and uninhibited interaction.

4. Observations and recommendations

The study has shown that most construction workers in South Africa had obtained information about HIV and AIDS even though they had not been overly proactive in seeking out this information for themselves. The public media in South Africa and Namibia have been effective in communicating HIV- and AIDS-related information confirming their pivotal role in the prevention campaign. Radio and television programs, advertisements and messages were the most popular and frequent information sources. However, the continuing increase in the rate of new HIV infections supported by anecdotal evidence gained from a series of national workshops conducted by the authors with industry participants is

disturbing and suggests that these messages might no longer be as effective as before. For example, attendees at these workshops reported the abuse of the child grant system in South Africa in terms of which the monthly amount of ZAR160 (about equivalent of US\$25 per month), per child is paid to qualifying mothers. Against the background of unemployment rates ranging between 30 and 40%, women, especially young women, choose to fall pregnant to access this 'regular source of income' not considering the threat of possible infection with HIV through unprotected sex with any willing partners. In many cases the identity of the father is inconsequential. The transient employment in construction of workers, who are often migrant, renders them particularly vulnerable to this apparent abuse with unintended consequences to the industry, while contributing at the same time to the rising rates of HIV infection.

Neither radio nor television is a form of communication that is employer driven or related. In fact, the study found that construction employers were not major influences relative to HIV and AIDS. Employers were the 11th (out of 12) least likely agency to influence existing behavior and bring about lifestyle and behavior changes. If the war against the ravages of HIV and AIDS is to be effective and the rate of new infections reversed construction employers have to become more involved. Participants at the national series of workshops held by the authors confirmed that very few industry stakeholders were involved with primary health promotion programs or had in place any HIV and AIDS interventions. The forms of employer involvement should not only include the provision of both male and female condoms, awareness and induction programs but also increased focused HIV and AIDS education that fulfills multiple purposes. These include the dissemination of necessary information that includes primary health issues; persuasion to change attitudes and behavior; the equipping of workers with life skills necessary to prevent the spread of HIV infection; and the care of infected workers (Van Dyk, 2001).

Considering that both South Africa and Namibia are multilingual countries with several official languages information should be shared in at least all of these languages. Further, regional approaches should be adopted especially where certain languages predominate. For example, the Department of Health in South Africa has produced a HIV and AIDS information flyer (attached as an appendix), which is region-specific in at least 3 of the dominant regional languages. It is also important to ensure that communication about HIV and AIDS

incorporates construction vernacular to improve understanding of communicated information. Where not possible, words and concepts should be carefully defined to ensure common understanding.

Workers need to be educated about the need for universal protection against infection in situations of possible infection in the workplace that includes the use of gloves and the correct methods to clean up accidental blood and body fluids – whether injured workers are HIV positive or not. Further, workers need to be made aware that they can be held liable for damages if they infect sex partners without informing them about their HIV serostatus.

Considering the importance accorded to health care professionals such as doctors and nurses as well as persons infected with HIV as agencies most likely to influence risky sexual behavior, they should be included in employer-driven education and communication programs. In this effort the local and primary health care clinics and voluntary organizations should be invited to participate. This participation should form part of structured primary health promotion (PHP) programs that include information on correct diet and exercise that are known to improve the immune system of the body, enabling it to better resist opportunistic infections. As these cells are attacked by HIV the CD4 or T helper cell count drops too low, opportunistic infections such as tuberculosis (TB), herpes, thrush and meningitis become life threatening. PHPs demonstrate the commitment of management to improve the general quality of life of workers and should involve them. Research has shown that peer education programs both empower and educate workers as part of a holistic continuum that includes counseling support and care services; wellness management, monitoring and evaluation; and resources provided by employers (Smallwood et al., 2002).

Historically, South Africans have been largely influenced by both Calvinistic and traditional cultural value systems, which inhibited the discussion of stigmatized issues such as HIV and AIDS in an open and free manner. Even during the national workshops referred to earlier delegates were restrained in their contributions to the discussions on HIV and AIDS. For any employer-initiated intervention or program to succeed employers must create environments that promote and foster open and uninhibited dialogue among all parties around the issue. In such an environment workers need to be made aware despite their right under law to confidentiality relative to their HIV serostatus that the benefits of informing the employer could include allowances for time off to

visit the clinic or doctor to obtain treatment and provide their employers with the opportunity to change the type of work they are doing to make their jobs a bit easier. Part of this process must include clearly demonstrated management commitment and involvement that will include establishment of employer-worker consultative forums such as HIV and AIDS committees, partnerships with labor unions and movements, and liaison with local communities. The focus of these relationships must be prevention, care and non-discrimination (Smallwood et al., 2002). These forums and relationships should form part of strategic planning and operational interventions.

5. Conclusion

While this study in Southern Africa has surveyed the effectiveness of various forms of HIV and AIDS communication, employer involvement and employee preferred employer driven interventions, it has implications for the construction industry in all parts of the world including Latin America. In order for HIV and AIDS to be effectively combated it is necessary for all construction employers to become more involved and facilitate better communication about the pandemic. This involvement is important not only to reduce the number of new worker infections as well as treat workers already infected.

Communication must not be on a "one-off" basis but rather form part of a structured program that is management led. It must be multilingual, consistent and repetitive while at the same time diversified to prevent staleness and complacency. Construction employers must support, reinforce and complement television and radio HIV and AIDS campaigns and messages that form part of primary health promotion programs. Local clinics and primary health care practitioners should be invited to be involved in these programs.

Additionally, HIV and AIDS communication must be escalated and focus on areas of deficient knowledge to prevent risky sexual behaviors. Consequently, it must feature high profile and targeted communication that takes place openly and involve construction workers. Since education of workers by peers has been found to be effective, opportunities must be created by employers for training of and participation by workers as health and safety representatives.

Clearly, if the present rates of HIV infection are to be reversed everyone needs to become increasingly involved in communicating new and effective messages that lead to changed sexual behavior. All construction

employers cannot be inert bystanders.

Finally, the business case for construction employer involvement is evident. By improving the quality of life of their workers who are in reality their most valuable asset, the health condition of workers will improve which in turn positively impacts productivity on construction sites while at the same time enhancing the welfare of workers and their families.

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