

## **HIV/AIDS INTERVENTIONS IN TRUCK DRIVER POPULATION IN SOUTHERN AFRICA: A REVIEW OF LITERATURE AND BCC MATERIALS**

### ***TARGET POPULATION***

It is generally accepted and well-documented that long distance truck drivers have been and remain one of the key forces in the spread of HIV/AIDS pandemic across the African continent. The role of truck drivers in the transmission of HIV/AIDS and other sexually transmitted diseases is rooted in the lifestyle that comes with the profession, as well as the broader social and economic societal factors.

Truck drivers are highly mobile and spend long hours on the road away from their families. Their need for entertainment and female companionship, coupled with relative solvency compared to the rest of the population, makes them very likely to use the services of commercial sex workers in stop-over towns near major transportation routes. These truck stop towns have developed an entire infrastructure of networks and services meeting the business and recreation needs of truck drivers, including gas stations, inspection points, lodges, bars and brothels, and a high population of commercial sex workers.

The resulting co-mingling of the two mobile, sexually active, high-risk populations explains high prevalence of HIV and STI rates in truck drivers and the subsequent spread of the disease through the African continent. In addition to having sex with FSW, most truck drivers have regular girlfriends or wives at home who are likely to become infected with HIV by their husbands and boyfriends, and continue spreading the virus in their local communities (Hudson, 1996).

A survey of truck drivers visiting sex workers at truck stops in KwaZulu-Natal found an overall HIV prevalence of 56% - staggering, but hardly surprising considering the findings of a related study by the same authors (Ramjee et al. 1998) that found similar rates of infection in sex workers servicing the same truck stops along the major road between Durban and Johannesburg in summer 1996/spring 1997. Half of the women were HIV seropositive, and the occurrence of various STIs was between 14% and 71% (Ramjee et al, 2002, 1998).

A high HIV prevalence is, of course, not limited to truck drivers only in Southern African countries. A survey of 236 truck drivers in Burkina Faso (Lankoande et al, 1998) in 1994 found HIV prevalence rates of approximately 18%. In Eastern Africa, several studies reported HIV prevalence rates of 25% to 32% among truck drivers in Kenya and Uganda. (Mbugua et al., 1995; Bwayo et al. 1994).

## **KNOWLEDGE, ATTITUDES, BELIEFS AND BEHAVIOR**

### **Sexual practices**

Truck drivers as a group are highly sexually active. A survey of truck drivers visiting sex workers at truck stops in KwaZulu-Natal, South Africa, indicated that 37% of all men always stopped for sex along the route, and 42% practiced anal sex, with less than 25% reporting the use of condoms during anal sex. 70% of men reported having wives or regular girlfriends; 29% reported never using condoms with sex workers, and only 13% used condoms with their wives (Ramjee et al, 2002).

The actual percentage of truck drivers who have sex with female sex workers may be higher than 37% reported above. In studies of Kenyan truck drivers, 61% of the truck drivers surveyed by Bwayo et al. (1991) reported frequenting CSW. Of the truck drivers surveyed by Wilson et al. (1994) 64% reported visiting prostitutes while away from home for work and 20% reported hiring CSW when they were not traveling.

Yet another piece of the truckers' sexual activity pattern is made of regular or semi-regular "girlfriends" in the communities along the route. As truckers begin to associate sex workers with a risk of STIs and HIV transmission, several studies note a trend toward casual sex with women they perceive as "clean", not toward less casual sex as a whole. To make this distinction, truckers rely either on their own judgment, or sometimes on the services of middlemen, as reported in Uganda (Gysels et al, 2001). Although these women typically have sex with truckers in exchange for gifts or money, the truckers do not perceive them as sex workers, and believe that a personal relationship of sorts exists between them. They will be less likely to use a condom during sexual relations with such a woman as their perception of risks decreases.

Although underreported, men having sex with men (MSM) may be contributing to the risk of HIV/AIDS transmission in the truck driver population. There are some studies by AMREF in Kenya that report sexual activity between older drivers and their male assistants aged 12 to 16 years old. Hard statistics are hard to come by in a society disapproving of sexual practices between men; however, there is anecdotal evidence that sex with men is more common than believed, and unprotected sex between these men and their wives increases the risk of transmission (African Health, 1998). There are similar reports out of Nigeria (Nnoli, 1992) suggesting that many drivers were unacknowledged bisexuals who had sex with their motor boys.

### **Knowledge of HIV/AIDS**

Studies published to date demonstrate that although truck drivers do have some knowledge of HIV/AIDS, this knowledge is not consistent or comprehensive, and furthermore, that knowledge and practice frequently do not go hand in hand. Despite general awareness of HIV/AIDS and its dangers, truck drivers do not report a uniform

reduction in risky behaviors, such as the use of sex worker services and casual sex with multiple partners.

High awareness of HIV/AIDS amongst truckers also does not imply they always have the necessarily knowledge of transmission routes and prevention methods. For instance, although nearly all (96%) truckers in a Burkina Faso study of high-risk populations have heard of AIDS, their knowledge of HIV transmission routes, transmission risk and available preventive measures was quite low (Meda et al, 1998). In a 2001 survey of Mozambican truckers, only a quarter could point out positive aspects of condom use (Mohamed & Pacca, 2002.) In studies of Kenyan truck drivers, almost all of them (99%) have heard of HIV/AIDS (Bwayo et al., 1991), although the extent of knowledge about specific aspects of HIV/AIDS was less consistent.

### **Perception of Risk**

Truck drivers also seem to have a problem translating the knowledge they do have into perception of individual risk, and denial is a part of their attitudes to HIV/AIDS. In a Burkina Faso study cited above, fewer than half of drivers felt they were at risk, and less than one-fifth (18%) reported using condoms. In a 2001 survey of Mozambican truckers, three quarters of the respondent did not perceive themselves to be at risk of HIV/AIDS infection (Mohamed & Pacca, 2002).

### **Machismo and culturally sanctioned promiscuity**

The working context of truck drivers is an all-male environment that encourages machismo behavior, adventurousness, risk-taking and exaggerated virility – resulting in a feeling of entitlement to lots of sex with lots of partners. This trend is not specific to Africa - the SYNERGY Project (“Putting on the Brakes”, p. 35) reports the same attitude across trucking cultures in many areas of the world.

Wilson et al (1994) in his research on Zimbabwe truck drivers found that there was a type of driver who was sexually very active, never going a day or two without sex, who regularly had sex with prostitutes and belittled those who did not. In addition, many Zimbabwe studies cited drivers’ remarks that being content with one woman was not manly (Mupemba 1999).

In Ntozi et al (2003), Ugandan truck drivers in focus group discussions were aware that sex with multiple partners increased the probability of HIV/AIDS infection and reported using condoms as a preventive strategy. Still, they insisted that they needed female company to alleviate the stress of lonely travels and to have fulfilled sexual lives. This seeming sense of entitlement to extramarital sex may be important for design of BCC campaigns.

### **Fatalism and acceptance of risk**

Drivers' lifestyle comes with inherent risks, such as infectious diseases in many places they drive through, robbery, war zones and lengthy delays, and there is a point of view that most truck drivers accept a high level of risk as a matter of course. This compounds an attitude prevailing in many African cultures that there is an underlying cause of all illness and death.

However, there is evidence that it IS possible to change sexual behavior through well-designed interventions even against a hostile cultural backdrop. For instance, voluntary testing and counseling services offered to truck drivers in Kenya did result in a decreased sex worker contact and a decreased STIs incident rate. (Jackson et al. 1997). The percentage of men reporting extramarital ex also went down from 49% to 36%, and sex worker contact rates decreased in half (from 12% to 6%), but there was no change in reported condom use.

### **Stigma**

The role of truck drivers in spreading HIV/AIDS in Africa is generally accepted and quite well documented, and some BCC campaigns targeted at youth and adolescent girls cast truckers as immoral characters to be avoided and feared. For instance, a 1997 UNICEF campaign in Kenya targeting adolescent girls (Sara Communication Initiative) portrayed truck drivers as predators seeking to exploit young girls in financially difficult situations. The abstract of an animated film titled "Sara Saves Her Friends" reads (note a truck in the background):

*"Amina is tricked into drinking by some truck drivers. They promise her a job in the city...their main aim to is to exploit her sexually....Sara exposes the truck drivers' immoral intentions to the police."*

The effects of this and similar campaigns often result in feelings of anger and stigmatization in truck drivers because they feel that society perceives them as AIDS carriers. Campaigns directed at truck drivers may reinforce these perceptions, which unfortunately can make truckers less than receptive to risk reduction messages and condom distribution. "Putting On the Brakes: Preventing HIV Transmission Along Truck Routes", an in-depth report by The SYNERGY Project, reports that truckers are "being 'disgusted' with the people and agencies that supply condoms and brochures on AIDS to them. They felt that they were being stigmatized as AIDS carriers (Bikaako-Kajura, 2000). They also felt that HIV prevention programs aimed at them were to blame for the resentment and hostility they receive from the communities they pass through as part of their job."

There is some evidence that truck drivers and others whose work involves traveling in Zambia are seen as promiscuous people who spread the disease from place to

place. (International Center for Research on Women, 2002). In addition, programs that create social stigma for the truckers may unwittingly encourage high-risk behavior. “A trucker in South Africa reported that he needed to visit sex workers because other women reject him because he was a truck driver and women were scared of being infected by him (Abdool-Karim et al., 1995).

### **Family Responsibility**

Sexually promiscuous lifestyle on the road and exaggerated macho attitude seem to coexist with the truckers’ perception of themselves as family men and providers. In SYNERGY Project in-depth report on truck drivers (“Putting on The Brakes”), many participants said the sense of responsibility for the financial well-being of their families motivated them to put up with frustrations and risks of what seemed like one of the few available ways to earn a steady living. Many also said too little time to spend with their families is a major disadvantage of the truck driver job.

There is some evidence that truckers realize that their sexual behavior on the road may endanger their wives and families. In the study of Malawi truck drivers and sex workers in 1999, Walden recorded the following quotes by the drivers:

*“You get worried and start thinking about the number of years you are going to stay alive. A thing which you do in few minutes, but you get worried for the whole year about what you have done, knowing that you could as well do it with your wife.”*

*“No one keeps your health and well-being but yourself, but today this no longer applies, your wife keeps yours and you your wife’s.”*

### **Perceived Lack of Choice in Sexual Behavior**

Training in negotiation skills has traditionally been offered largely to sex workers trying to insist on the use of condoms with clients. However, there is some evidence that similar services may need to be offered to truck drivers who are potential clients of sex workers. Wilson (1994) reported truck drivers’ comments that sex workers can be very persistent in offering their services, especially when drivers are perceived to be drunk or bored. Drivers therefore may need counseling in rejecting the offers of sex. (Mupemba, 1999), and perhaps there is a need to develop similar scenario-based behavior modeling materials for drivers. In a study of Malawi truck drivers (Walden, 1999), one says:

*“After everyone drops out of [long distance] bus, you see these women remain, maybe one of them wants to sleep with the driver or conductor, so even if the driver or conductor had no plan of sleeping with a woman, he ends up doing so because the woman is there.”*

## Condom Use

Prevention efforts and information campaigns led to increased condom use among truck driver population; however, available research, including FHI's own behavioral surveys in target countries, suggests that consistently with trends present in the general population, such increase applies primarily to casual and commercial sex partners, not committed relationships. In addition, most studies show that although the target population is aware of condoms as a prevention strategy, there is much to be done in making the use of condoms more consistent.

For instance, baseline and follow-up surveys of truck drivers in 1997 and 2000 in Togo and Burkina Faso reflect the changes in sexual patterns – truck drivers were 3 times more likely to use condoms with occasional partners at follow-up than at baseline. This shows that truckers are aware of the need to change their sexual behavior; the challenge will lie in extending this approach to regular partners. (Rachelle et al, 2002).

Studies on Tanzanian peer education in truck drivers and prostitutes suggest that men and women who were most likely to use condoms did not have a stable partner and perceived themselves to be at risk (Laukamm-Josten et al, 2000). At the same time, focus groups of truckers and prostitutes in Kenya (Witte et al, 1998) showed that participants wanted more information on negotiation of condom use with reluctant partners – a clear indication that the use of condoms in casual and transaction sex remains far from uniform. This mirrors early prevention efforts in Malawi that attempted to generate condom use through peer educators among bar girls, truck drivers and STD patients, where men preferred to have sex without condoms because “it made it more exciting” (Chirwa, 1993).

In earlier studies of Kenyan truck drivers, only 17% (Bwayo et al., 1991) and 11% (Nzyuko et al., 1991) cited condoms as a methods of preventing HIV transmission, and 50% of Wilson et al.'s (1994) study population did not know that condoms prevent transmission. The popular public health messages of abstinence and faithfulness were more often cited as methods of prevention. 73% of Nzyuko et al.'s (1991) study population said that HIV can be prevented by sex with one partner, abstinence or no extra-marital sex. In addition, faithfulness to one's partner and avoiding sex with prostitutes were answered by 67% of the truck driver population (Bwayo et al., 1991).

In a 2001 study of Nigerian long-distance truck drivers, few reported using condoms regularly, if at all, despite fairly high knowledge of HIV/AIDS and accurate perception of risk (almost 70% reported knowledge of HIV/AIDS and nearly half believed HIV may be prevented by the use of condoms; over two-thirds of drivers never or rarely used condoms, although over 70% of them identified themselves as being at risk. (Oduwole et al, 2000).

Promotion of condoms is often achieved through peer health educators, who complement their education activities with condoms demonstration and distribution.

Condoms are distributed through bar and hotel counters, guest rooms, condom dispensers, individually on the street and in CSW residences (Mwizarubi et al., 1994). There is some evidence that the rise of demand for condoms makes 24-hour availability important – which would recommend a switch to automated means of distribution rather than individuals who may not be available around the clock.

### **RESEARCHER RECOMMENDATIONS**

A team of researchers who wrote and reported extensively on HIV and STIs in South Africa truck drivers and sex workers (Ramjee et al 1998, 2002) recommended the following BCC strategies to curb the spread of HIV/AIDS in truck driver population in South Africa:

- ***“Information*** about the transmission of HIV and STDs, and about effectiveness of condom use with all partners needs to be targeted at truck stops, toll plazas, border posts and at the work places of truck drivers. Misconceptions about condom use need to be eliminated and the seriousness of untreated STDs needs to be emphasised.
- ***Condom distribution*** is recommended at truck stops, toll plazas, work places and border posts. A partnership needs to be formed between the Department of Health, the road freight agency, workforce unions and the trucking industry as a whole...
- ***Use truck drivers and sex workers to spread positive messages.*** Peer education programmes targeted at truck drivers and sex workers can be used as a bridge in the spread of positive attitudes regarding condom use and HIV education. A concerted effort is needed to target high-risk populations in a non-discriminatory manner, and to use their occupation to spread HIV-prevention messages and promote condom use throughout the rural and urban areas of southern Africa.
- ***Southern African initiative.*** There is an urgent need for southern African countries to work as a whole... HIV-prevention programmes in southern African countries should work together to reiterate common prevention messages and target appropriate interventions..”

## ***BCC STRATEGIES USED IN TRUCK DRIVER INTERVENTIONS***

### ***Education***

It is noteworthy that the motor park and truck stop environment forms its own sub-culture, and as such, frequently presents a challenge to HIV education efforts by perpetuating its own myths about HIV/AIDS treatment and transmission. Early efforts by AMREF targeting truck drivers operating on the Mombasa-Nairobi-Uganda highway discovered that AIDS was regarded as an “invisible disease affecting foreigners” but harmless to plump women. Results of focus group discussions were used to develop positive AIDS prevention messages, which led to increased condom use and early treatment of STIs by the truck drivers. The program has since spread along the major truck routes in Kenya and neighboring Tanzania (Nyamwaya 1993).

Furthermore, the link between knowledge and practice is not entirely clear. Longitudinal studies of truck drivers in South Africa (Marcus, 2000) indicated that more drivers get tested and more report knowing someone with HIV as disease spreads throughout the continent (67% in 1995 vs. 32% in 1992, and 32% in 1995 vs. 52% in 1995, respectively.) There is also some change in patterns of sexual activity, although it is not necessarily proportionate to the factors above. In addition, these studies indicated that truck drivers viewed commercial sex as something inherent in their profession due to loneliness and isolation.

### ***Peer education***

Peer education appears to be a strategy of choice in intervention campaigns targeting truck drivers. Most stop-over towns are located in remote areas and are beyond the reach of mass media (except radio.) In addition, truck drivers are in daily contact with other high-risk populations concentrated in fairly small areas, which should make peer education outreach programs easier to plan.

What distinguishes peer education efforts targeting truckers from many others is their involvement of peer educators from other populations interacting with truckers on a daily basis, such as sex workers, bar maids, garage workers, hotel workers, retired drivers and fuel station attendants (Blair, 1997, *Aids Analysis Africa*, 1995). Truck drivers know these individuals, they share the same background and know the community, and therefore are more likely to be trusted and accepted. Gysels (2001) also suggested that middlemen, who are increasingly important in buying goods and procuring sex for truck drivers at truck stops, can serve as “opinion leader” group providing condoms and information on STD/HIV, and possibly referrals to treatment and testing centers. The fact that most of these groups are found in the same relatively small area is an opportunity to plan integrated peer education campaigns where the same message can be repeated from a variety of sources for more credibility and impact.

The use of peer educators from affiliated populations amongst truck drivers has been reported in several studies. A peer education program targeting long-distance truckers in Zimbabwe in 1992 recruited and trained sex workers, hotel workers, customs and immigration officers at fifteen project sites along the country's major highways. They were given condoms and literature emphasizing the dangers of unprotected sex and large numbers of sexual partners and encouraging the use of condoms for distribution to truck drivers and the local community. AIDS awareness and condom use rose dramatically from 1992 to 1995 and smaller changes occurred between 1995 and 1997 (Mupemba, 1999). Motlhabane (1996) reported the use of sex worker peer educators in Botswana who successfully reached 600 truckers (although the main focus of this project was elsewhere.)

Peer education was found to be effective in increasing condom distribution and promoting the use of condoms with paying partners amongst truckers and prostitutes in Malawi as a result of sex workers peer educators (Walden et al, 1999). The peer educators were trained to promote and distribute condoms and to promote safe sex negotiation skills. Interestingly, truck driver peer educators were found to be generally inactive and ineffective in holding meetings or in distributing condoms. However, the companies where training had occurred were more likely to encourage and distribute condoms, and to have reduced high-risk sexual behavior. The concerns with regard to peer educator efforts included acceptance of peer educators, non-use of condoms with non-paying partners and randomness of criteria for condom use in both populations.

The Bulawayo project initiated in Zimbabwe in 1991 used a combination of intervention strategies to target CSW and their truck driver clients (Wilson et al., 1994). AIDS education, condom promotion and STD control through training, peer education, community outreach, and condom provision were the intervention strategies. The evaluation found increase in condom use, but only on the part of female sex workers.

These peer education efforts utilize a variety of formats, such as community health education meetings including lecture, discussion, perhaps a drama or video, and condom demonstration (Wilson 1994A). Mupemba et al. (1999) reported the success of drama groups of local teenagers who performed beyond the target populations and into the local communities. Face to face personal communication has been described as important in delivering education to CSW and truck drivers (Mwizarubi et al., 1994). The venue of communication need not be formal. Talks have been conducted in a variety of locations, such as inside trucks, bars, guest houses, petrol stations, on the street and in CSW residences. (Ritter 2000).

Instruction of truck drivers by peer educators at rest areas was offered as early as 1989 in Project Truckstop in Tanzania. After bar owners and others were educated about HIV, they offered counseling and condoms to truck drivers in bars and rest houses. Although truck drivers showed resistance to local education campaigns and radio information, truck stop programs seemed to work: project evaluation in 1992 showed increased use of condoms from 54% to 74% among drivers, with even the most obstinate

older drivers changing their minds during the 3-year period. (Barstad, 1993). Edutainment methods such as theater and songs supplemented the message.

AIDS Analysis Africa (1995) reports the use of prostitute peer educators (“Mama Condoms”) in a small town providing food, lodging and sex services on a truck stop on the highway traversing Uganda, Tanzania and Burundi. The efforts of these trained peer educators include distribution of condoms and counseling of sex workers to persuade them to insist on the use of condoms with their clients. AMREF continued similar efforts at truck stops along Tanzania – Zambia highway using condom distribution by gasoline pump attendants and prostitutes and distribution of “condoms prevent AIDS” stickers. In addition, barmaids at truck stops were trained as peer educators and inject pro-condom messages into dialogue with customers while serving drinks urging them to stay with one partner or use condoms. The message there was that one should avoid assuming "*labda huyu hana ukimwi*" (hopefully this one is AIDS free). (Kilimwiko 1991.)

Olomi (1998) reported some success of peer health education programs targeted at truckers in Tanzania where inter personal discussions reinforced by health learning materials has been the major strategy. Knowledge about HIV transmission rose from 90% (1993) to 97% (1996). Truckers had reduced their number of partners from 6 (1993) to 2 (1996). Condom use remained low 35% (1993) and 40% (1996), pointing out one of the major challenges, i.e. that the high level of knowledge or awareness about HIV transmission does not necessarily lead to behavior change.

A two year project in Kenya aimed to identify strategies for behavior change which would motivate truck drivers and CSW to adopt lower risk practices including condom use and the limitation of sexual partners (Nzyuko et al., 1991). Based on the baseline data obtained, the project staff produced a series of education messages and delivered them largely by word of mouth through peer educators and community residents. Qualitative data from the stop-over towns suggest the messages are having an impact.

### ***Media and Collateral Materials***

Several interventions have made use of the media, usually radio, and educational materials as health promotion tools. One project conducted a weekly radio program for truck drivers with AIDS messages (Mupemba, 1999). Promotional materials such as posters, stickers, pamphlets, key rings and other such items contained messages and information reminding people about reducing their risks (Jackson et al., 1997; Mwizarubi et al., 1994, cited in Ritter 2000).

### ***Workplace-based Interventions***

There is some evidence of truck driver industry’s efforts to participate in the HIV prevention. Men As Partners program in South Africa (implemented by EngenderHealth

and Planned Parenthood Association of South Africa) is working to train “master trainers” or peer educators recruited from identified institutions and community settings, which included associations of truck and taxi drivers.

In other areas, a truck driver association in Ghana collaborated with YWCA and young male street vendors to distribute condoms in the marketplace (CEDPA News, 1993). AMREF has also conducted workplace programs in Tanzania at a brewery where 11% of truckers were found to be HIV-positive. Following the testing, the men participated in an informal AIDS education session conducted by Peer educators with help from the brewery STD/AIDS coordinator. (Henry, 1995.)

### ***Community Involvement***

The importance of community involvement and participation of stakeholders (including government workers, business owners, opinion leaders and representatives of target populations) in design and implementation of any behavior intervention is crucial. This includes selection and training of peer educators, design and testing of messages, and establishment of condom distribution networks. Research suggests that projects where the sentiments of the community were neglected often run into problems.

For instance, the Motor Park AIDS Education Program in Nigeria conducted education and outreach effort (Stop AIDS Organization) in 1998 in motor parks where drivers stop to rest. However, many Nigerians were opposed to discussion of HIV and homosexuality and considered MPAEP people to be intruders. In Tanzania, designers of awareness and prevention programs have turned to peer education as the only effective alternative to prevent the spread of HIV after their frustration with the failure of top-down health messages to change behavior (AIDS Analysis Africa, 1995).

As early as in 1989, the African Medical and Research Foundation launched a small project targeting truck drivers and prostitutes along the country's major highways. The program involved peer education, condom promotion, and encouraging people to seek treatment for sexually transmitted diseases. AMREF credited the success of the program to their determination to ensure that everyone in the community fully understands and accepts the project.

## ***MESSAGES AND MATERIALS USED IN PREVIOUS BCC CAMPAIGNS***

### **Risk reduction messages**

Risk reduction messages typically exploit the feeling of fear to communicate the severity of the threat (i.e. “AIDS Kills”), or offer solutions to create the feeling of self-efficacy in addressing the problem (i.e. “Use Condoms”), or both. Research shows that the combination of the two delivers the best results, and fear messages are rarely effective when they do not offer an alternative to risky behavior.

Below are two examples of materials exploiting the fear of consequences of promiscuity associated with truck driver lifestyle. The first poster used in Cameroon in 1996 brings attention to the dangers of sex with multiple partners (the driver in the pictures tells three different women he'll be back soon.) In a second, older poster used in Cameroon in 1987, a truck driver talking to a woman by his truck is one example of three high-risk interactions where all participants end up in the same clinic:

### **“Roulez Protégé” Campaign**

A campaign targeting truck drivers, seasonal workers and sex workers along transport routes in West Africa used an overarching slogan “Roulez Protégé, or “Drive Protected.” The campaign, implemented by USAID, PSI and SFPS included a film drama shown on TV and through mobile video units, billboards, radio and TV spots. Peer educators who conducted large meetings, discussion groups and condom use demonstrations supplemented mass media efforts.

Evaluation of this campaign indicated that the billboards had the most recall (95%), followed by TV (45%) and radio (38%) spots. This two-year campaign, according to Tamashe et al., (2003) did not achieve a direct behavioral impact. Exposure to radio spots and participation in group discussions had the most association with truckers discussing AIDS with peers or reporting the intention to use condoms in future, while exposure to billboards and TV spots was not associated with any of these two indicators. (Interestingly, there was some focus group-based evidence that drivers did not consider television medium appropriate to their lifestyle.)

### **Truckers as Family Men**

Because the truckers think of themselves as family men and good providers despite their actions on the road, a theme of protecting families by staying away from extramarital sex has been used in several BCC campaigns. For an example of materials built around this theme, see a poster produced by Uganda Ministry of Health for truck drivers who are able to get home healthy because they avoided temptation on the road. FHI also produced another poster produced for Tanzanian drivers depicting a driver back home from this trip with gifts for his family.

### **Participant Feedback on Materials**

Witte (1998) analyzed a number of materials used along Trans-Kenya highway based on discussions in focus groups consisting of sex workers, truck drivers and young men who live near truck stops. In this study, participants felt that the best materials were those that did not simply emphasize the threat, but delivered explicit information and skills training on self-protection, modeling the desired behavior. Pamphlets and comic strips were preferred to posters because they contained more detailed information and focused on self-efficacy and response efficacy.

Participants also reported needing more information on condom effectiveness. Specifically, many of them heard stories about condom being infected with AIDS, or having holes in them. Campaign materials therefore need to explicitly attack these fears, and on a general level, take into account existing myths and audience perceptions. Overall, the audience preferences went to materials containing richly detailed information, scenarios and life-like characters like comic strips and pamphlets. Some noted that posters like this can be taken home and used as room decorations.

This finding is consistent with our internal information – a 1996 comic book depicting adventures of the promiscuous truck driver who felt entitled to casual sex and was later found to be HIV-positive after infecting his family and his newborn baby. The book was very well-received by the audience who wanted more of these comics with different messages. Messages in the book encouraged truckers to stay faithful to their partners and emphasized interpersonal communication and peer education as a way to reach drivers.

## Appendix 1

## Truck Driver Matrix

Current Behaviors	Desired Behaviors	Hopes, Fears and Perceptions	Existing Messages
<p>Frequent commercial sex with female sex workers, bar maids, hotel workers, etc.</p> <p>Several extramarital “relationships” with women along the route not perceived as sex workers</p> <p>Occasional and unacknowledged sex with male assistants, turn-boys, helpers, etc.</p> <p>Irregular use of condoms with women identified as sex workers</p> <p>Non-existent use of condoms with extramarital partners not perceived as sex workers</p> <p>Irregular use of VCT services</p> <p>Irregular testing and treatment of STIs</p>	<p>Reduce the frequency of sex worker visits</p> <p>Reduce the number of extramarital partners not perceived as sex workers</p> <p>Use condoms during every sex act between two men</p> <p>Always use condoms with sex workers</p> <p>Always use condoms with extramarital partners</p> <p>Increase the use of VCT services</p> <p>Get tested and treated for STIs</p>	<p>Feeling of entitlement to abundant extramarital and commercial sex, the perception that a driver is not meant to be satisfied with one woman</p> <p>Perception of self as a family man and good provider</p> <p>Feeling that risks come with the job, and that the risk of HIV/AIDS infection is an occupational hazard</p> <p>Perception of helplessness and lack of choices in sexual behavior at rest stops and motor parks</p> <p>Anger at being perceived as an AIDS carrier; fear of being stigmatized</p> <p>Loneliness and boredom caused by job conditions</p> <p>Fear of losing families because of too much time on the road</p>	<p>“Drive Protected: Use Condoms”</p> <p>“Be Careful Free Boy – STDs/AIDS is On your Way”</p> <p>“Attention Travelers: AIDS”</p> <p>“Safe Sex is Having One Faithful Partner for Life”</p> <p>“Unprotected Casual Sex Can Cost You Your Life” (brochure with condom)</p> <p>“Sex is Healthy but STDs Can be Dangerous to Your Health”</p> <p>“Thank God I said No to AIDS – I am driving straight home to my wife.”</p>

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