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A Qualitative Study of Migrant-related Stressors, Psychosocial Outcomes and HIV Risk Behavior among Truck Drivers in Zambia

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Abstract

Truck drivers are part of mobile populations which have been noted as a key population at risk of HIV in Zambia. This study was aimed at 1) determining Potentially Traumatic Events (PTEs), labor migrant-related stressors, psychosocial problems and HIV risk behaviors among truck drivers in Zambia and 2) examining the relationship between PTEs, migrant-related stressors, psychosocial outcomes and HIV sexual risk behavior among truck drivers in Zambia. We conducted fifteen semi-structured interviews with purposively sampled male truck drivers at trucking companies in Lusaka, Zambia. Findings indicate that truck drivers experience multiple stressors and potentially traumatic incidences, including delays and long waiting hours at borders, exposure to crime and violence, poverty, stress related to resisting temptation of sexual interactions with sex workers or migrant women, and job-related safety concerns. Multiple psychosocial problems such as intimate partner violence, loneliness, anxiety and depression-like

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symptoms were noted. Transactional sex, coupled with inconsistent condom use were identified as HIV sexual risk behaviors. Findings suggest the critical need to develop HIV prevention interventions which account for mobility, potentially traumatic events, psychosocial problems, and the extreme fear of HIV testing among this key population.

Keywords

Labor migration-related stressors; truck drivers; HIV risk behavior; Zambia

The relationship between migration and the spread of the Human Immunodeficiency Virus (HIV) has been determined in multiple contexts (Dude, et al, 2009; Webber, 2007; Weine & Kashuba, 2012). This connection may be due to frequent travel between work and home country, with an increased risk of sexual behavior with concurrent multiple partners (Kramer, 2008; Wolffers, Fernandez, Verghis & Vink, 2002; Yang, et al, 2005). Labor migrants from low and middle income countries (LMIC) migrate for economic reasons but are frequently employed in what has been termed 3-D jobs (dangerous, difficult and demeaning), where they are vulnerable to hazardous working environments, exploitation, violence and other stressors, including potentially traumatic events (PTEs) (International Organization for Migration; IOM, 2013). Research has indicated that high levels of stress and psychosocial problems (e.g. depression, post-traumatic stress disorder and anxiety) among labor migrants from LMIC may be related to HIV risk behavior (Amirkhanian et al., 2011; Michalopoulos, Aifah & El-Bassel, 2015; Meyer, Robinson, Chhim, & Bass, 2014). In a systematic review of studies in Africa, the Americas, Europe, Southeast Asia and the Western Pacific, Weine and Kashuba (2012), found that difficult and dangerous housing and working conditions, as well as mental health problems were associated with HIV risk among labor migrants. Previous research in South Africa has also indicated that migration and migrant-related stressors are associated with high risk sexual behavior, resulting in the spread of HIV (Coffee, Lurie & Garnett, 2007; Zuma, Gouws, Williams & Lurie, 2003).

Among migrant and mobile populations, truck drivers have been specifically noted as a key population at risk for HIV. Prevalence rates of HIV among truck drivers in low and middle income countries range between 17.8% in Kenya (Rakwar et al., 1999) to an astonishing 56% in South Africa (Rakwar et al., 1999). Factors contributing to the disproportionate rates of HIV among truck drivers include having multiple and concurrent partners (Gibney, Saquib & Metzger, 2003), unprotected sex with sex workers (Rakwar et al., 1999; Ramjee & Gouws, 2002; Gibney, Saquib & Metzger, 2003), lack of or inconsistent condom use (Rakwar et al., 1999; Gibney, et al., 2003; Dude, et al, 2009), drug and alcohol abuse (Malta et al., 2006; de Lind van Wijngaarden & Schunter, 2014) and extended time away from home (Dude et al., 2009; Delany-Moretlwe, et al., 2014). Extant literature also indicates that truck drivers are often victims of traumatic events such as traffic-related accidents and violence (Charbotel, Martin, Gadegbeku & Chiron, 2003). Subsequent psychosocial problems resulting from traumatic events have been linked to HIV risk behavior in multiple settings among non-migrant populations (Kalichman, Gore-Felton, Benotsch, Cage & Rompa, 2004; El-Bassel, Gilbert, Vinocur, Chang & Wu, 2011; Machtinger, Wilson, Haberer & Weiss, 2012). Specifically among truck driver populations, Wong and colleagues

(2007) found that cross-border truck drivers in Hong Kong were at risk for road traffic accidents, subsequent symptoms of anxiety and depression, and an increase in risky sexual behaviors.

Zambia is a particularly burdened nation with 13% prevalence rates of the population from ages 15–49 living with HIV (Central Statistical Office, 2014). Mobility among Zambians has been identified as one of the essential forces of the AIDS epidemic (National AIDS Strategic Framework, 2010; National AIDS Strategic Framework, 2016). However, despite the burgeoning scholarship examining the association between migration and HIV risk behavior elsewhere, reviewed literature shows that there are no such studies to date in Zambia. As such, our understanding of the relevance of migrant-related stressors and the relationship with sexual and drug risk behavior specifically among truck drivers in Zambia is unknown. This study fills the gap in the literature related to the potential relationship between psychosocial factors and HIV risk among truck drivers from Zambia. It specifically aims to: 1) determine potentially traumatic events (PTEs)/migrant-related stressors, psychosocial outcomes and HIV risk behaviors among truck drivers in Zambia and 2) examine the relationship between stressors and HIV risk behavior among truck drivers in Zambia. It is crucial to understand psychosocial factors associated with HIV risk behavior among truck drivers as doing so would help inform the development of needed HIV prevention services and programs.

Methods

Study site

The study was conducted amongst three long distance trucking companies in Lusaka. The companies were purposively sampled on the basis of plying out of town and out of country routes. Each selected company had a driver workforce of at least twenty. Workers from these trucking companies were purposively selected from amongst the truck drivers who met the inclusion criteria.

Study design

This study was conducted between August 2014 and March 2015. Qualitative methods were employed, specifically semi-structured interviews. The study relied heavily on community engagement and local partners to establish trust among the truck drivers and to ensure cultural relevance. A local male migration and gender officer conducted the semi-structured interviews in Bemba, a local Zambian language. The interviewer was fluent in Bemba and well versed in qualitative interviewing methods. The interviewer received training from the PI (LM) on the purpose of the study, interview guide and key themes. The interviewer was also trained by the PI on research ethics and safety protocols related to sensitive issues of mental health, sexual behaviors and potentially traumatic events. The interview guide was translated to Bemba by a certified translator from the University of Zambia and back-translated to English by another certified translator from the same University. The guide was then pre-screened and reviewed for feedback and relevance with the study team including a migration health officer at the International Organization for Migration, Zambian lay HIV counselors and a social worker from the Truck Drivers Association of Zambia.

Study population

Fifteen semi-structured interviews were conducted with the following inclusion criteria: between the ages of 18 and 70; employed as a truck driver by self-report; being a citizen of Zambia AND maintaining a permanent residence that is beyond commuting distance to the study site OR travels beyond commuting distance from the study site for work; and able to speak Bemba fluently. The focus of the current study was limited to male truck drivers in order to obtain the unique perspective of men who engage in this occupation. Previous qualitative research has suggested that saturation may begin to occur after 10–15 interviews have been conducted (Guest, Bunce & Johnson, 2006). As such, we felt that 15 interviews would be sufficient to reach saturation with this understudied population.

Measures

The key terms for the current study are listed below with a definition and brief description of how each were measured: 1) *HIV risk behavior*: open-ended questions related to sexual relationships, condom use, engagement in transactional sex and concurrent relationships. Lack of or inconsistent condom use, concurrent partners, and transactional sex as reported by the truck driver were indicated as HIV sexual risk behavior; 2) *Migrant-related stressors/potentially traumatic events*: open-ended questions related to the experience of or witness of any stressful events specifically related to the truck driver profession. Any event described related to the truck driver profession deemed to cause stress from the perspective of the truck driver was indicated as a migrant-related stressor. Any event experienced, witnessed or heard of by the participant that was potentially life threatening, was a threat to one's well-being or was violent in nature as reported by the truck driver was deemed a potentially traumatic event; 3) *Psychosocial outcomes*: open ended questions related to any thoughts, feelings or behaviors resulting from a stressful/traumatic event, as well as the impact of adverse events on social relationships. Any outcome described as a result of a migrant-related stressor or potentially traumatic event from the participant's perspective was indicated as a psychosocial outcome.

Ethical approval

Ethical approval was obtained from Columbia University Research Ethics Committee and the Eres Converge IRB Review Committee of Zambia. Due to possible limited education among truck drivers, each participant was read a consent form and was asked to provide consent verbally and written by signature or thumbprint. Before consenting, each participant was asked if he understood the procedures, risks and benefits, and was allowed to ask any questions.

Data analysis

Data analysis for the current study was informed by the template analysis approach (Crabtree & Miller, 1999; Braun & Clarke, 2006). Template analysis is a structured technique for analyzing qualitative data, which allows the researcher to establish order of the data from the start of the analytic process, based on the research question and a priori codes. Hierarchical coding is emphasized within template analysis, using broad themes and successively becoming narrower. The analysis is also flexible in that any of the main or sub-

themes identified can be modified or removed if they do not prove to be useful for the data (Braun & Clarke, 2006). In addition, the approach allows for emergent themes which may not have been identified from the original 'template' (Crabtree & Miller, 1999).

In the current study, the following *a priori* themes were coded from the data: 1) migrant-related stressors/potentially traumatic events; 2) HIV sexual risk behaviors; and 3) psychosocial outcomes. Sub-themes for each of the above noted *a priori* themes were deemed emergent, as well as any additional recurring themes determined from the data.

A number of steps were taken to increase reliability and ensure cultural accuracy. For an independent scrutiny of the analysis, three members of the research team (LM, SS, and JR) conducted an initial review of the data for the semi-structured interviews and discussed relevance of each *a priori* code and any emergent codes. Where there was a discrepancy, the group discussed the data until consensus was reached. In addition, all sub-themes from the interviews that were identified were reviewed by a local research partner in Zambia (SS) to ensure for cultural relevance and accuracy.

Results

Basic demographics of our total sample are shown in Table 1. The results are presented with the following *a priori* and emergent themes: 1) Migrant-related stressful life events/potentially traumatic experiences (PTEs) by truck drivers; 2) Psychosocial problems/outcomes as a result of stressors/PTEs; 3) HIV sexual risk behavior commonly practiced by truck drivers in Zambia; 4) the relationship between stressful life events/psychosocial problems and HIV risk behavior; and 5) social support. Emergent sub-themes are described for each of the *a priori* themes below.

Truck driver related stressors and potentially traumatic events

Findings from the analysis revealed a number of ongoing daily stressors and potentially traumatic events related to being a truck driver in Zambia. The results indicate that financial stress, safety issues and resisting transactional sex with sex workers are the common stressors and PTEs.

This study revealed that financial stressors result from delays at border stops in processing documents. Drivers described this as problematic because they often did not have enough money for food and other basic needs while in the process of waiting for clearance. Drivers also reported that their financial difficulties are exacerbated by lack of support from their employers in terms of inadequate remuneration for their difficult job and extended periods of time spent away from home. As such, participants commonly reported stress in not being able to cover expenses for their families:

Sometimes border officials tell you that the people who processed your papers made a mistake and that the documents will have to (be) sent back to Lusaka...that process will take a good number of days meanwhile you only have ration money for food and other necessities for two days only.

It's a very difficult job. It's hard work. Sometimes we are made to work at awkward hours due to the high demand of our labour, our salaries too are very little that it even makes it hard for us to pay for our rented homes. This makes us fall into perpetual debt. Look here, I get paid K1, 700 and my house costs K 1, 000. Just imagine.

The nature and conditions of employment make truck drivers susceptible to engaging in illegal activities in order to make ends meet. However, this often comes at a cost, causing further financial strain:

Yes, I can't deny, a lot of illegal things happen on the highway like syphoning of fuel, pilferage of the goods in transit etc. this means that you have a shortage and management will have to make you pay for it.

Safety and environmental stressors were revealed in terms of lack of proper sanitary conditions along their route which often times force them to use the bush as toilets. Safety issues related to long distance night travel were also mentioned. Due to the pressure to deliver goods from the trucking company within the required period of time, many drivers would drive through the night, circumventing night driving restrictions. As a result of night driving, fatigue and limited safe roads throughout Zambia and surrounding countries, all of the drivers indicated either witnessing or experiencing a horrific truck accident. Following the trucking accident, truck drivers in our study reported lack of support from their employers:

I remember an accident which I was involved in...when I was in South Africa. I broke my neck and I almost died. I stayed in the hospital for six painful weeks. I had no hope of surviving...my spinal cord was damaged. I was very worried and feared death. In that state I regretted that I ever took up that job...and one thing that really troubled me when I was bed ridden, management didn't care at all.

Truck drivers reported that they tried to push themselves as long as possible while driving at night. As a result of fatigue, they are often forced to park their trucks in the middle of the night on the roadside or in local villages in order to make it to their delivery location in time. Most of the participants reported being victimized by locals while in their truck at night. As foreigners in long distance routes, many reported exposure to crime at night in surrounding countries causing distress and worry. Similar to experiencing accidents, participants reported additional financial burden from the trucking company as they were often made responsible for stolen goods when victimized by locals:

... I was attacked and robbed. I had a breakdown on the highway...we always move without a lorry mate, so by the time I realized a group of boys approach me with all (sorts) of weapons. They demanded money and the goods I was transporting. I had to surrender in order to save guard my life. But it was a very depressing and scary moment.

Resisting temptation of sex workers and migrant women was also emphasized in this study as a stressor for the truck driving occupation. Most participants admitted engaging in sexual interaction with sex workers and migrant women, although they described giving into the temptation as a sign of weakness:

It is difficult because women (are) like a magnet you can't resist them when they come...some carry condoms and beg for sex...they want to have fun with you and normally they don't charge you anything, they offer themselves for free.

They are women who come to our trucks and they don't have a place to sleep and they would like to sleep with us in trucks, so if you are weak because some of them look so decent like they have come from a marriage but no they are just prostitutes, so if you are weak, you will fall for their proposal and end up having sex with them.

Psychosocial outcomes related to truck driver stressors

Study participants reported multiple psychosocial problems as a result of truck driver-related stressors/PTEs. Specifically, issues of marital conflict, depression-like symptoms related to financial stressors, depression and anxiety-like symptoms related to HIV sexual risk behavior and witnessing friends go through HIV-related deaths were prominent.

Marital conflict was reported to be the result of sexual relationships with women on the road. It is commonly manifested in violent incidences with resulting adverse consequences on truck drivers' jobs:

Like most men, yes (in experiencing marital problems). The problem has always been something to do with other women when she discovers. And you know these are some of the issues that disturb you at work. You can even have an accident and lose your job

(Related to intimate partner violence)...Yes, I remember there was a time when I had a lot of problems at home and I could not be allowed to go back home to solve those problems. I felt very tired and sick.

Many participants reported mental health problems related to financial stressors. Specifically, participants reported that they experienced depression-like symptoms such as hopelessness, a sense of resignation, depressed mood (feeling low) and ongoing suffering:

It is salaries. Our friends who work in some other companies as truck drivers get more than we get at this company. We have tried to talk to our bosses but they tell us to go if we want. But where can we go since we have children to take care of. We have no option but to suffer silently.

I feel very bad and low but I have no choice but to go for work. I almost quit my job last week because of what I am telling you (stress of the job)

The most prominent psychosocial problems described among truck drivers in our study, however, were comprised of anxiety and depression-like symptoms as a result of engaging in sexual interactions with sex workers and migrant women while on the road. Findings from our study suggested that mental health problems described resulted in avoidance of HIV testing:

I wouldn't want to know my status now because of what I have been doing though deep down my heart I feel (I) am negative. The other reason is that am not ready for VCT because I don't want to fall into depression.

No No No, I have never and I can never (get tested for HIV). I am very afraid. (I) am dead scared. My heart is scared and I don't even want to hear about it.

Participants also reported symptoms of grief and loss resulting in anxiety and avoidance of HIV testing. Symptoms of avoidance and anxiety were described as resulting from seeing friends die of AIDS.

I fear because I have done a lot of sexual activities on the road and I have seen some people get finished so fast because of worrying when they know that they are positive. I don't think I am strong enough. Its better I don't know.

HIV risk behavior

Most participants reported sex with sex workers or migrant women (cross-border traders and fish traders). Only two participants reported not to have engaged in sex interactions while on the road. One reported the fear of God as a reason for not engaging in HIV sexual risk behavior, while the other indicated that he drinks beer as a coping mechanism against sexual advances from sex workers and migrant women.

Extended time away from their wives/main partner was the major reason for engaging in HIV risk behavior among truck drivers. In addition, many participants reported that an inability to control sexual urges and needs contributed to sexual interactions with sex workers and migrant women:

...You people in offices when you knock off you rush to your homes to have sex with your wives, you don't use condoms and you also go to pubs in the evening to look for sex workers. How about us, why don't they allow us to go on our trip with our wives? If they want us to stop having sex with other women let them allow us to be travelling with our wives otherwise it is very difficult to have self-control.

You see, we spend sometimes even up to one month in South Africa, so it is very difficult not to have sex because our bodies will not allow us.

Participants who reported sexual interactions with women while traveling commonly discussed the convenience and access they had in engaging in risky sexual behavior. A number of participants reported engaging in sexual interactions with women while traveling as a normative behavior:

When I mean to find a nice woman who suits me, I do it because I know how to get them.

Moreover, having one girlfriend will be very expensive because she will take you as if you are her husband and will be demanding a lot of money from you. So it is better to pick those on the road.

Low condom use also came out prominently among truck drivers. The major reasons for this were lack of trust in the safety of condoms and the desire to have maximum sexual pleasure. Many participants feared that condoms could be pre-infected with HIV and thus regarded their use as a greater risk. Others felt that sex with a condom is not pleasurable:

When I was in South Africa I heard that they found some condoms which had HIV. They tested them and found the virus so you can't trust the condoms...it was said in the news that they found the virus. I personally do not trust them.

The study discovered that participants were also not using condoms with their wives or main partners albeit for different reasons. They reported that condom use with wives and main partners brings about mistrust and suspicions in such relationships.

Relationship between stressors, psychosocial problems and HIV risk behavior

Findings from our study revealed a relationship between psychosocial outcomes and HIV sexual risk behavior among truck drivers. Specifically, participants reported that time away from family and their main partners, with subsequent feelings of loneliness increased the risk of transactional sex. Participants also reported the difficulty in maintaining a relationship with only one sexual partner due to the sense of isolation felt on the road during long trips. Although there seemed to be a direct relationship between psychosocial problems (e.g. isolation and loneliness) and HIV sexual risk behavior, this pathway was not clearly indicated from the stressors/PTEs:

You know when we go on trips, we don't have any company. So at some point loneliness will creep in and that's when one starts having other ideas

First of all it is stressful to travel a lot or being on the road for long hours every day. We only spend about three days at home with our wives and family and then we go out again. That is why you find that because of travelling some people have sex with other women they find out there.

A few participants reported that excessive alcohol use contributed to HIV sexual risk behavior through lack of condom use with sex workers:

...At times one is drunk...(or) that one wants to have direct skin contact for maximum enjoyment. And being honest with you I have done that a number of times.

Emergent code/theme

While many of the truck drivers reported ongoing daily stressors, PTEs and subsequent psychosocial problems increasing HIV sexual risk behaviors, social support from fellow truck drivers to cope with these concerns emerged as a theme from the data. Time spent with fellow truck drivers demonstrated a decrease in loneliness and stress related to the job:

All my workmates have been very supportive...I have two who I can refer to as brothers because I know that regardless of what may happen these will always be there (for) me and my family.

I have another very good friend of mine who I spend a lot of time with when am off. We live in the same community. He is part of my family.

Discussion

This is the first study to examine truck driver related stressors, PTEs, psychosocial outcomes and subsequent HIV sexual risk behavior among male truck drivers in Zambia. Findings from our study revealed that truck drivers from our sample experience ongoing daily stressors related to their jobs with subsequent psychosocial problems. With exposure to ongoing financial stress, dangerous night driving, frequent transportation accidents and crime, findings from our study are consistent with the literature that indicates the dangerous, difficult and demeaning nature of labor migrant occupations in LMIC (IOM, 2006). In addition, symptoms resembling anxiety, depression and grief are consistent with literature among other labor migrant populations from LMIC (Wong et al., 2007; Campbell, 1997). HIV sexual risk behavior was also consistent with the literature demonstrating lack of condom use and extended periods away from home increasing transactional sex with sex workers or migrant women on their route (Dude et al., 2009; Rakwar et al., 1999; Ramjee & Gouws, 2002; Gibney et al., 2003; Malta et al., 2006).

The relationship between stressors, PTEs, psychosocial problems and HIV sexual risk behavior was complex in our study. Consistent with previous research among cross-border truck drivers in Hong Kong (Wong et al., 2007), there was evidence from the study which suggested a relationship between psychosocial outcomes and HIV sexual risk behavior. In our study, however, there was no clear indication that the mental health problems associated with risky sexual behaviors were directly related to PTEs or migrant-related stressors. At the same time, participants from the cross-border truck driver study in Hong Kong (Wong et al., 2007) indicated that those who were engaged in risky sexual behaviors were more likely to have symptoms of depression and anxiety related to HIV infection, in line with our results. Perhaps truck drivers in our study who were exposed to migrant-related stressors were more likely to have symptoms of anxiety and depression, further exacerbated by their risky sexual behaviors. Conversely, this predominant theme found in our study is inconsistent with research by Malta and colleagues (2006) who found that truck drivers in Southern Brazil had a low perceived risk but high risk sexual behaviors. Our study found that participants had a high perceived risk which caused anxiety and depression, as well as avoidance symptoms related to HIV testing. The perception of high risk seemed to be couched within the gender normative belief that engaging in sexual interactions with sex workers was difficult to resist and within their right as a male away from their main partner for extended periods of time. Future research should examine the complex nature of this relationship among Zambian truck drivers through quantitative methods. In addition, future research should examine differences in the degree of exposure to migrant-related stressors and PTEs among truck drivers in Zambia to further disentangle the relationship with HIV sexual risk behavior.

Research among truck drivers and other migrant populations has also indicated that substance use as a coping mechanism to deal with dangerous, difficult and demeaning labor migrant work increases HIV sexual risk behavior (Malta et al., 2006; de Lind van Wijngaarden & Schunter, 2014). However, in our study truck drivers discussed excessive alcohol use as both increasing and protecting against sexual risk behavior. Future research should examine this relationship further and assess use of other substances as they may relate to risky sexual behavior.

This study also demonstrated the prominent role of social support among truck drivers in Zambia to cope with stressors as well as to decrease isolation and feelings of loneliness. Research has found that social support can be both a risk and protective factor for HIV sexual risk behavior (Miller, 1999). Specifically, social support can serve as a coping mechanism to deal with stressors but can also increase risk through modeling and encouraging sexual risk behavior. Future studies should examine the nature of social support in relation to HIV sexual risk behavior among truck drivers in Zambia, specifically understanding potential differences among those who have experienced potentially traumatic events and those who have not.

Limitations

While there are a number of strengths of our study, limitations should be noted. First, this study employed qualitative methods enabling us to obtain rich data about the experience of PTEs, psychosocial problems and HIV sexual risk behavior among male truck drivers in Zambia. However, caution should be taken in generalizing the results to all truck drivers in Zambia due to the small sample size and purposive sampling methods from three trucking companies in Lusaka. In addition, we conducted all of the interviews in Bemba, a common local language in Zambia to ensure for comfort in discussion and cultural relevance. Although we used rigorous translation methods (with back translation and a review of the interview guide by local Zambians), some mental health words and concepts do not have an equivalent Bemba word requiring the use of the English term in our study. This could potentially bias our results with the assumption that study participants experienced these exact symptoms.

Conclusions

This is the first study we know of to examine migrant-related stressors, PTEs, psychosocial problems and HIV sexual risk behavior among male truck drivers in Zambia. Our study provides rich data related to the experience of truck drivers who experience PTEs, ongoing stressors, subsequent psychosocial problems and HIV sexual risk behaviors. Our study revealed a strong relationship between mental health problems (e.g., symptoms of fear, anxiety, avoidance and depression) resulting from HIV sexual risk behavior preventing HIV testing. Future studies should examine this relationship through quantitative methods to further disentangle the nature of the association. Our study suggests that HIV prevention intervention efforts are critically needed among this key population. HIV prevention intervention efforts must account for mobility, gender norms of male truck drivers, sexual risk behavior with sex workers, low condom use and mental health symptoms in order to effectively reduce the spread of HIV in Zambia and neighboring countries in sub-Saharan Africa. As truck drivers indicated the prominent role of social support, community-based peer education may be an effective tool to increase condom use as deemed to be effective among truck driver populations in Tanzania (Laukamm-Josten, et al., 2000) and Morocco (Himmich, Ouarsas, Hajouji et al, 2015). Addressing mobility for HIV prevention among truck drivers through mobile technology has been deemed complicated (Schneider, Kondareddy, Gandham & Dude, 2012) but should be explored as a potential effective tool to reduce HIV sexual risk behavior.

At the community and policy level, services should be developed to address psychosocial needs of truck drivers through wellness centers or other health services along truck driving routes transport corridors. In addition, policy level changes should be made to enforce night time driving restrictions and develop safe truck stops which are secure and policed to reduce crime, victimization and accessibility of sex workers. Additionally, through community engagement efforts, truck stops and wellness centers can potentially include recreation activities for truck drivers to reduce loneliness leading to risky sexual behaviors.

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Table 1

Demographics of Truck Driver Sample (N=15)

Variable	
Age	M=46.6 (SD=13.32) range 27–68
Marital Status	
Married	N=13
Single	N=2
Education Completed	M= grade 8; range= grade 4-grade 12
Number of years as a truck driver	M=8.63 (SD=8.14); range= 2–29 years
HIV sexual risk behavior	
Endorsed sex with sex workers or migrant women	Yes: N=10 No: N=2 Refused to answer: N=3