

**Exploring risky sexual behaviours and
peoples' response to behaviour change/
HIV/AIDS prevention activities:**

The case of Boksburg town central mining community

By

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Dedication

To

My son Awesome-God Tidala Jamali,

My father James

My mother Mavelline

My wife Mercy (Tiyesere)

'To God be the glory for he's made me glad'

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Chapter 1 Introduction

1.1 Background

In the last two decades, there has been increased evidence indicating that heterosexual intercourse is the most common mode of HIV/AIDS transmission, particularly among people in Sub Sahara Africa (Fenton et al 2000; Booyerson and Summerton, 2002; Aral, 2004;, Oster, 2007). Coupled with absence of an HIV vaccine, poor access, distribution, and inefficient rollout of anti-retroviral therapies among many countries in the region, this finding has led to intensified studies on peoples' sexual behaviours, with the intention to unearth appropriate and effective ways to address the epidemic (Garnet, 2006). In addition, understanding changes in sexual behavior has been perceived crucial in predicting the future path of the epidemic, to develop appropriate policy and programmatic options for addressing HIV/AIDS (Garnet, 2006). Most popular among such options are behaviour change interventions, which have assumed a central role in the fight against the pandemic (Needle et al 2005).

In South Africa, mobile populations such as mine workers, commercial sex workers (CSWs), truck drivers, large and small-scale business operatives, have been singled out as population groups which engage in risky sexual behaviours, and thus at highest risk of HIV infections (IOM, 2003). Among others, such behaviours include; having multiple sexual partners, failure to use condoms when having sexual intercourse with a person whose HIV status is not known, commercial or transactional sex, and sexual violence (ibid). In its 2003 report on Migration and HIV/AIDS, the International Organization or Migration (IOM) argues that among other factors, poverty, low self esteem, social instability, and unequal gender relations, influence occurrence of such risky sexual behaviours among these groups of people. The report further asserts that these factors have been exacerbated by drug abuse and higher rates of alcoholism noted among people these people.

Mathew (2003) further reports that apart from the above mentioned population groups, risky sexual behaviours have also been noted among populations that interact with such groups. For instance, people residing in mining communities, alongside main traffic routes and booming trading centers, have all exhibited sexual behaviours akin to miners, commercial sex workers,

vendors and truck drivers, with whom they interact on daily basis. Campbell (1999) posits that though it is widely known that in this region, migrant labour has influenced the spread of STIs and HIV/AIDS, little has been done to reduce these infections among mobile populations in mining communities. In the case of the South African mining industry, Campbell (1999) contends that while many mines have made substantial efforts to establish HIV/AIDS prevention programmes, the efforts have generally resulted into a slow and negligible impact.

In essence, there still exist rampant risky sexual behaviours which could lead to high STIs/HIV infections not only among miners, but also people in neighbouring communities (Campbell, 1999). Drawing evidence from Summertown and Carletonville mines HIV/AIDS prevention projects, Campbell critically mentions that most HIV/AIDS prevention activities have often focused on biomedical and behavioural understanding of HIV/AIDS, neglecting the psychosocial and economic issues influencing the pandemic, such as work and living conditions which render miners vulnerable to STIs and HIV/AIDS. In a study to assess impact of HIV/STIs prevention project in Carletonville Township (1998-2001), Hutchinson et al (2002) notes that despite having adequate resources and good coordination, the project had mixed outcomes and little impact. For instance, its end of project evaluation showed a modest decrease in casual sexual partnerships among miners, decreased consistent condom use among local women, which influenced rises in ST1 infections among both sex workers and local men and women residing in the community.

William and Campbell (2002) further found that there was a complex sexual network involving mine and sex workers, local men, women and young people from the communities neighbouring the mines. In this network, mine workers had casual sexual relationships with not only sex workers, but also local women, and young girls from within the community and outside the hotspots targeted by the project. Furthermore, although local women did not self identify as sex workers; they engaged in transactional sex with miners and local men from within the community. The two suggest that such a complex sexual network could be an influence of a many factors which differ from one individual to another; as well as one group to another.

The team further argue that these factors did not only have an influence on peoples' sexual behaviours, but also how they responded to behaviour change or HIV/AIDS prevention activities to which they have been exposed. The current study investigates risky sexual behaviour among selected population groups in Boksburg Central mining community. The aim is to explore sexual behaviours believed to expose such groups of people to the risk of HIV/AIDS and STI infections, and further investigate how such groups of people respond to behaviour change and HIV/AIDS prevention activities to which they have been exposed. It is envisaged that through this inquiry, appropriate and effective strategies with which to facilitate sexual behaviour change among different groups of people in this community shall be unearthed.

1.2 Study Context

This study was conducted at Cinderella miners' hostel operated by East Rand Mines Properties (limited) in Boksburg Town, east of Johannesburg City. The history of Boksburg dates back to October 1886, when Pieter Kilian, (former secretary of state for Republic of South Africa) discovered valuable gold reefs on the Vogelfontein farm (BHA, 2004). In March 1887 the farm was declared open for public digging, marking the beginning of mining in the area. Boksburg was named after former South African secretary of state, Eduard Bok, on the former Witwatersrand, and was made an administrative center to serve the surrounding gold mine communities of the East Rand.

The discovery of coal mines and subsequent growth of industries in the 1940s made Boksburg one of the most rapidly expanding mining and manufacturing centers in Gauteng province, attracting an influx of job seekers from rural areas (within South Africa) and other neighboring countries (BHA, 2004). The increased road links with other towns (on the East Rand), the freeway link to the airport along large shopping facilities on its boundaries, have all contributed to the fast growth of the town (ibid). To date, Boksburg boasts of gold and coalmines, with manufacturing industries specializing in electrical and metal goods among others. Owing to the 'money and mine' factor associated with most mining and manufacturing towns, Boksburg was heavily flooded with various groups of people seeking economic opportunities in sectors such as mining, industrial, transport , entrepreneurial businesses and services (ibid).

Boksburg has adopted a life-style akin to Johannesburg, where high money circulation, alcoholism, sexual networking and crime are rampant (BHA, 2004). Like any other community with heterogeneous groups of people, the residents of Boksburg communities interact in many different ways (beyond economic interests), some of which nurture unsafe sexual behaviours, capable of intensifying STI/HIV transmission, in the area. In essence, as Boksburg attracts all sorts of people to its fortunes, their diverse backgrounds and interaction provides a requisite situation for practice of risky sexual behaviours, which could result to increased STI/HIV infections in the area.

1.3 Research problem and objectives

Campbell and Williams (2002) argues that although in most South African mining communities there have been interventions to foster sexual behaviour change in order to prevent spread of HIV/AIDS; little has been achieved. In essence, in many such communities risky sexual behaviours have persisted, further increasing the risk of STIs and HIV/AIDS. However, little is known about factors which influence people in such communities to engage in risky sexual behaviours, let alone how they respond to behaviour change or HIV/AIDS prevention activities to which they are exposed..

This study explored occurrence of risky sexual behaviours among selected population groups residing in Boksburg central mining community. It investigated factors influencing occurrence of such behaviours and how people in the selected groups respond to behaviour change interventions to which they have been exposed. Here, emphasis was placed on contextual factors impacting on peoples' sexual decisions and consequent sexual behaviours. Finally, the study investigated how best various HIV/AIDS prevention and behaviour change strategies could be improved in order to effectively deal with the epidemic in the concerned community. To achieve this end, the following questions were in focus;

1. What factors influence occurrence of risky sexual behaviours among people in this area?
2. How do people respond to HIV/AIDS prevention or behaviour change activities to which they are exposed.?

3. How should HIV/AIDS prevention and behaviour change activities be designed and implemented in order to address the HIV/AIDS pandemic in this community?

1.4 Significance of the Study

As the world becomes more and more desperate in the search for an HIV vaccine and the cost of anti-retroviral therapies continue to soar, amid poverty and growing inequalities in many developing countries, behaviour change remains the only effective option for preventing further spread of HIV infections. It then follows that for an effective design and implementation of such initiatives, a broader understanding of people's sexual behaviours and how such behaviours are influenced and sustained is required. This calls for an investigation on factors which impact on peoples' sexual decisions as well as consequent sexual behaviours, in order to understand how each individual or group of people respond to behaviour change interventions to which they are exposed. The above scenario further calls for an urgent task to investigate appropriate and impact focused strategies and interventions with which to fight against HIV/AIDS and STIs, across different population groups.

The current study therefore becomes significant as it attempts to unearth ways to deal with the HIV/AIDS pandemic among selected groups of people in the mining community under study. This study further provides evidence for the need to carefully design effective strategies with which to curb spread of HIV/AIDS in the mining industry and its communities, as part of broad based initiatives to deal with the epidemic in the country as a whole.

1.5 Operationalization of Concepts

In this study, a number of terms have been used in an attempt to explain particular views and ideas on the subject matter. This section provides definitions and explanations on concepts and terms as used in this report.

Behaviour Change

Parnell and Benton (1999) define behaviour change as a series of processes that take place over time when people transform their attitudes, beliefs, perceptions and actions. The process is never straight forward, nor is it a single event. In this study, behavior change has been discussed with regard to people changing from practicing risky sexual behaviours requisite for HIV/AIDS and sexually transmitted infections to adopting safe sexual behaviours such as having monogamous sexual relationships and using condoms when having sexual intercourse.

Behaviour Change Interventions

Behaviour Change programs are defined as a set of targeted activities aimed at helping a person or a community to reflect upon their risky behaviors and change them to reduce personal or collective risk and vulnerability (CDC, 2005). These interventions are hinged on a few behavioural science theories which gained ground in the 1980s. Such theories place much emphasis on individual actions as the locus of change. The theories include the Transtheoretical Model of Behavior Change', 'The Theory of Reasoned Action', 'The Health Belief Model', 'and The Stages of Change Model'. All these theories share a major commonality, defining individual actions as the locus of change (Elder et al, 1999).

In the current study, respondents reported about existence of such interventions being in work places, residences (communities) and places of entertainment. Although activities varied from one intervention to another, they all have a common goal; to prevent the spread of STIs, particularly HIV/AIDS among members of the community understudy, by providing services that facilitate sexual behaviours change.

Sexual Behaviour

Sexual behaviour is defined as any activity—solitary, between two persons, or in a group—that induces sexual arousal (DoH-STD Services, 2006). Some examples of sexual behaviours include; Abstinence, Masturbation, Coitus, Anal Intercourse, Orogenital Acts, and Prostitution (ibid)

Risky or Unsafe Sexual Behaviour

Youngerman-Cole (2005) describes risky or unsafe sexual behaviours as those sexual behaviours which expose an individual or groups of people to sexually transmitted infections and diseases and other sexuality related health risks. Such behaviours include; having unprotected sexual intercourse (intercourse without barrier contraceptives, such as condoms), unprotected mouth-to-genital contact, early sexual activity (before age 18), multiple sex partnerships and prostitution. Some of the health risks emanating from these behaviours include; unwanted pregnancy, venereal diseases (such as gonorrhoea, syphilis, herpes, lice, viral warts, chlamydia) HIV/AIDS, cancer of the cervix, and female and male infertility (Younger man). In this particular study some of the commonly mentioned risky sexual behaviours were; multiple sexual partnerships, unprotected sexual intercourse, non-use of condoms during intercourse, prostitution, transactional and trans-generational sex.

Prostitution or Commercial Sex

Prostitution is defined as a sexual behaviour or practice in which a person (prostitute) provides to another (client) his or her body for sexual gratification in return for material gain, more commonly, money (DoH, STD services, 2000). Although it is generally known that women form the majority of people involved in this sex industry (because they are more common), male prostitution is also becoming more common (DoH-STD services, 2000)). Respondents in this study generally portrayed a view that prostitution as a sexual behaviour has had a bigger effect in the spread of STDs and HIV/AIDS, particularly among poorer populations residing in urban areas.

Transactional sexual relationships

Transactional sex is defined as the exchange of sex for gifts or money (Murray et al 2004). Transactional sexual relationships are distinct from prostitution in that payment for sex is not limited to money, but includes other material and non-material favours. For instance; a woman living in extreme poverty and unable to pay her monthly rental charges might have sex with her landlord as a trade in for rental payment Bledsoe, (1990).

Castle and Konaté, (1999) argues that transactional sexual relationships are particularly common in sub-Saharan Africa, where they often involve relationships between older men and younger women or girls. Gregson et al., 2002 and Kim et al (2002) argues that anecdotal evidence and several qualitative studies suggest that transactional sex is common among adolescents throughout sub-Saharan Africa, where young women may be less able to decide the timing and conditions of sex. Kim et al (2002) further states that women who have little negotiating power fail to insist on use of condoms when having sex with their partners. Such people experience a higher risk of becoming pregnant and contracting sexually transmitted infections (STIs), including HIV/AIDS.

In this study, respondents reported about existence of transactional sex among population groups such as miners and taxi drivers. It was reported that taxi drivers engaged in such type of practices with female office workers, female vendors (particularly those doing business outside Cinderella miners' Hostel) and school girls from within Boksburg Central area, where Taxi drivers were offered school girls and businesswomen as well as female office workers free taxi rides to and from their work places or schools, in return for sexual favours which the women provided. Such situations make many taxi drivers to have plenty of sexual partners which expose not only taxi drivers themselves, but also local women to the risk of STIs and HIV/AIDS infections.

Sexual network

Jolly et al (2004) defines a sexual network as a type of social network that is defined by the sexual relationships within a set of individuals. It portrays sexual inter-relationships within a defined group of people, where people are connected to one another and other people through sex. The argument is that in only six steps, one can link any two individuals in the world, based on the assumption that 'we're all in bed together' (ibid). This type of approach helps a researcher to understand sexual interaction among different groups of people, and the context in which it occurs (Jolly, 2004). Such information does enable a researcher to see how efficiently sexually transmitted infections such as HIV and other STDs are transmitted, more especially transmission lines created by sexual relationships within a network (ibid).

In this particular study, it has been noted that there exist a complex sexual network involving miners, commercial sex workers, taxi drivers, vendors and office workers. There are various factors and motivations which encourage these groups to be involved in such a complex network, as would be noted later in the report.

1.6 Organization of the study

The report comprises 6 chapters covering introduction, literature review, methodology, and theoretical framework, results of analysis, conclusion and recommendations. Chapter 1 introduces the study, covering background, context, objectives, significance, and operationalized concepts. Chapter 2 is literature review which discusses the link between migration and sexual behaviours, risky sexual behaviours in mining communities, and how people in the targeted communities respond to HIV/AIDS/STI prevention interventions being implemented. Chapter 3 presents the methodology adopted in the study. It covers study design, sample and sampling methods, data collection tools and techniques, errors, biases and their control measures.

Chapter 4 reports about observed risky sexual behaviours and factors influencing occurrence of such behaviours among selected groups of people in this study area. Chapter 5 reports about HIV/AIDS/STI prevention interventions being implemented in the community understudy and how selected groups of people respond to such interventions. This chapter further presents the peoples' views on how the reported interventions could be improved in order to effectively fight the HIV/AIDS epidemic in the community under study. Chapter 6 discusses key issues emerging from the study and proposes the way forward as regards the fight against HIV/AIDS in communities like the one in focus.

Chapter 2 Literature Review

2.1 Introduction and Overview

Recently, there has been increased evidence indicating that heterosexual intercourse is the most common mode of HIV and STI transmission in Sub Saharan African region (Aral, 2004) (Graham et al, 2007). Fenton et al, (2000) contends that the HIV/AIDS situation has worsened in this region due to a number of factors amongst which are; absence of an HIV vaccine, poor access and inefficient rollout of anti-retroviral drugs for those infected with the virus. As a result, behaviour change interventions (BCIs) have been argued to be the only reliable strategy for addressing HIV/STIs, particularly among countries in this region (ibid). This scenario has led to increase of studies focusing on peoples' sexual behaviours in a bid to find effective means for dealing with HIV/AIDS and STIs (Garnett 2006).

With reference to mining communities, Campbell and Williams (1999) contends that while there have been mounting efforts to reverse the trend of HIV/AIDS in mining communities, little has been achieved in terms of sexual behaviour change and lowering of STI/HIV infections. The two argue that there is insufficient information to explain why amid well resourced and coordinated activities; the pandemic persists in many settings. This chapter reviews some of the studies that attempt to explain this discrepancy, and further suggest how best to implement behaviour change programs to fight against HIV/AIDS and STIs reported in most mining communities.

2.2 Relationship between migration and occurrence of risky sexual behaviours

Across Southern Africa, people are engaged in multiple forms of movements that vary in spatial, temporal, social characteristics, and motives. This mobility is influenced by various factors amongst which are political-economic instabilities and environmental uncertainties (IOM 2003). Due to these factors, many people experience exploitation, harassment (including sexual), poverty, disempowerment, isolation, job insecurity, stress (mental and physical), gender imbalances and discrimination (Coast 2004). In situations as these, people seek income opportunities in multiple locations and economic sectors, where their livelihood options are sometimes based on internal or international mobility, be it legal or illegal (IOM, 2003).

In such mobility, various forms of economic activities emerge, and these include informal trade, cross-boarder truck driving, formal and informal systems of migrant labour (ibid). Gebrekristos and Lurie, (2003) describes migrant labour system as a type of labour migration marked by circular patterns of movement from rural homes to work areas, which in most cases are urban based. In South Africa, this type of system started as early as 1889, when diamond mines provided contracts of limited duration to migrant labourers from the rural South African homesteads (ibid). In this system, cross-national border migrants traditionally came from neighbouring countries such as Lesotho, Mozambique, Malawi, Botswana, and Swaziland, who returned home upon periodically and upon expiry of contracts.

Karim et al (1997) argues that migration patterns do not simply arise out of chance. In South Africa for instance, migration patterns resulted from 'decades of legislation that restricted movements of the majority of the population in order to provide a steady flow of cheap black labour to the gold mines and other industries'. During that time, a number of laws prohibited black South Africans from settling permanently in areas designated 'whites only'. This resulted in a situation where local people (especially men) practiced circular migration in which migrant men maintained close links with their rural homesteads (Karim et al 1997). Jochelson, et al (1991) reports that in 1986 only, more than 2.5 million black South Africans were registered as migrant labourers in farms and mines.

However, although restrictive laws have been eliminated in post-apartheid South Africa, labour migration continues to be of circular nature and more so, an established way of life especially among black people (ibid). Lurie, (2000) contends that migrant labour system is marked by disruption of families and other stable sexual relationships, as well as increased risk of HIV/AIDS/STI transmissions. The assertion is hinged on the observation that 'migrants are more likely to have additional sexual partners than non-migrants. Karim et al (1997) supports this assumption arguing that in several parts of the world, geographic mobility, migration and widespread population displacement, have been identified as significant factors influencing occurrence of risky sexual behaviours which influenced the spread of HIV/AIDS and STIs.

Lurie, (2000) further explains that in South Africa, migrant labour system is not only circular with regards to labour migration, but also sexual networks between rural areas and labour centers. In the case of mining communities, miners have sexual partners at their places of work, at the same time they maintain long-distance sexual relationships with their regular partners back in their rural homes (ibid). Although little is known about miners' partners back in the rural homesteads, increasing evidence posits that these people also do have other sexual partners while their spouses work in the mines (Lurie, 2000).

In a study on migration and HIV/AIDS in southern Africa, the international organization on migration (IOM, 2003) found that there are myriad factors which expose miners to the risk of HIV/AIDS, particularly during their stay at the mines. The report contends that during the early part of the 20th century, male migrant labourers on South African gold mines were housed in single sex hostels where females were not allowed. In such conditions, they experienced social and health dysfunctional behaviours such as bigamy, prostitution, alcoholism, violence and corruption. These behaviours fueled break-up of families, transmission of venereal and infectious diseases (amongst which are STIs a, HIV/AIDS and tuberculosis), within mining communities, the rural homesteads within South Africa, and neighbouring countries where migrant labourers originated (Wilson, 1972, cited in IOM, 2005).

While there is no sufficient statistical evidence that migrant labour system encourages high-risk sexual behaviours, Jochelson, Mothibeli and Leger, (1999) cited in (Karim et al 1997) suggests that migrants' frequent and lengthy absences from home, 'disrupted stable familial and relationships ties' influence them to engage in multiple sexual partnership in coping with newly acquired life styles and living conditions, thus encouraging spread of infectious diseases such as HIV/AIDS and STIs. Jochelson, (1991) cited in Campbell and Williams, (1999) argues that among countries in east and southern Africa, migrant labour has played a crucial role in the dynamics of infectious diseases to new regions and communities, where HIV, venereal diseases suchas syphilis are believed to have spread following labour migration patterns across the countries.

Expounding the argument, Hunt (1989) contends that the organization of labour market and mobility patterns has for a long time affected sexual patterns of African families, creating a population which suffered from epidemics of sexually transmitted diseases and HIV in particular. For instance, Pison et al (1993) cited in Karim et al (1991) reports that in Senegal, HIV infections spread mostly first to men who got infected during seasonal migration, then to their rural partners upon returning home. These infections were 'mainly transmitted to adult men through sexual contacts with women they met during seasonal migration and later to their wives or regular partners upon returning home' (Ibid). Kark (1949) explains that widespread prevalence of gonorrhoea and syphilis in both urban and rural areas of South Africa was due to the migrant labour system and prostitution, resulting from separation of husbands from their wives and separation of single young men from their families. In this respect, more empirical evidence suggest that labour migration has been and continues to be a crucial factor in transmission of diseases, more especially in the context of HIV/AIDS and STIs in South Africa.

2.3 Risky sexual behaviours observed in mining communities

There are various risky sexual behaviours which intensify spread of HIV/AIDS in mining communities. These behaviours are influenced and sustained by different factors which differ in many other respects. Campbell and Williams (1999) contends that sexual behaviours are shaped by contextual factors in which health and sexuality is negotiated. Wilson (1995) further argues that conditions such as rural poverty, high unemployment and low education drive many people into urban areas, where they settle for low pay jobs to sustain themselves and their impoverished rural homesteads.

In the case of South African migrant mining communities, Armstrong (1995) and Wilson (1995) argues that occurrence of high-risk behaviours among these people is influenced by social (gender dynamics), economic and political factors. The two explain that among miners in particular, the link between social factors and risky sexual behaviours is mediated by a range of psychosocial factors such as masculine identities, low levels of self-efficacy, and knowledge or beliefs that compete with health education messages.

Moodie and Ndatshe, (1994) explains that most miners face long hours of physically taxing, grim and stressful working conditions, coupled with occurrence of accidents, injuries and deaths. In situations where such things characterize life at the mines, rampant sexual intercourse and excessive beer drinking are the major activities outside miners work life, in an attempt to drive out stress and worries during their stay on the mine (Campbell and Williams 2002). In a study on miners' sexuality and HIV/AIDS in mining communities, Moodie and Ndatsche (1994) reports that migrant miners admitted having sexual partners some of whom they established 'parallel families' while at the mine. Campbell and Williams (1999) explain that given the harsh realities surrounding miners' lives, unprotected sex with commercial workers becomes a readily available and most convenient option for sexual intimacy, a relief from their lonely and uncertain days on the mines. In such conditions, many miners treated HIV/AIDS as a less immediate and serious problem than accidents and injuries suffered on the mines. Such an attitude made them down play any possible dangers emanating from their loose sexual behaviours and HIV/AIDS.

Hutchinson et al (2002) further contends that gender dynamics also played a pivotal role in facilitating unsafe sexual behavioural observed in mining communities. The team explains that in the pre-democratic dispensation, employment opportunities favoured men while women had other livelihood options, such as farming. As such, many young single and married women (whose husbands migrated to urban areas) ventured into commercial or transactional sex as an economic option for supporting themselves and children. Those who migrated to urban areas such as mining communities soon became girl friends and parallel wives for sex-starved men working in the mines.

Campbell and Williams (1999) notes that in situations as above, multiple sexual partners and casual unprotected sex became a common occurrence among miners and commercial sex workers. For the women, coupled with a weaker bargaining power, these behaviours were the only way to securing economic support from their boy friends or 'husbands'. In essence, having many sexual partners ensured more sources of money while unprotected sex fetched more money and secured more sexual partners.

Among miners, gender dynamics were further exacerbated by masculinity identities, which served as mechanisms for coping with stress and dangerous under ground work. The two report that in view of their hazardous work and living conditions, miners constantly reminded and comforted each other to be strong and face challenges for the sake of their families. Such remarks drove out fears and built a macho spirit, which applied in other facets of their lives including sexuality. For instance, inspired with their macho life styles, the majority of miners linked having sex with without a condom with overtones of fearlessness and bravery. In fact for many miners, frequent STIs infections were signs of a 'real man' one who faces danger without fear. In that context, gender dynamics played a crucial role in driving unsafe sexual behaviours and consequent STI/HIV/AIDS infections among miners and their sexual partners. However, while miners' unwillingness to use condoms during sexual intercourse demonstrated their so called 'courage in the face of danger', it also highlights low self-esteem and inability to negotiate condom use on the part of their sexual partners, whether commercial sex workers or local women from within the community.

In another argument, Caldwell, et al, (1992) contends that the emergence of HIV/AIDS in sub Saharan Africa revealed more about inadequacy of knowledge on the extent of sexual networking in the region. The team argues that the epidemic has revealed much about the mechanics and directions of behavioural change, particularly the extent to which behavioural patterns influence pre-existing patterns of sexual networking among various groups of people. On that note, Ndhlovu et al, (2005) posits that since not much is known about sexual links among populations in mining areas, a study of sexual networks is therefore crucial as may provide insights into disease transmission patterns, risk factors for disease acquisition, and targeted strategies for infection prevention. According to Morris (1997) and Boiley et al. (2000) such a study would provide a wider focus for understanding risk or vulnerability of different community members to STIs and HIV/AIDS, especially how people can be affected by the behavior of others in the same network.

Murray (1981) cited in Hunt (1989) asserts that in South Africa, the introduction of migrant labour systems in agriculture and extraction industries created in-roads for severe poverty, mal-nutrition and diseases among many households.

These aspects disrupted traditional social support systems and eroded household economic well being, which in turn forced poor young married and unmarried rural women to migrate to larger cities in search for employment (ibid). Few of these women found wage employment owing to a male dominated Southern African labour market. As such, the majority entered marginal or secondary labour markets in areas surrounding the large concentrations of development, or became prostitutes in towns neighbouring extraction industries and farms (Hunt, 1989).

Moodie and Ndatshe (1994) reports that in situations as this, miners developed extra-marital and multiple sexual relationships with these women, a situation that affected flow of remittances and material support to miners impoverished families and rural homesteads. This situation in turn forced their wives back at home, to engage in extra-marital sexual relationships with other men to meet their economic and social needs. Such a scenario extended the sexual network map from the communities in which miners lived, where sexual relations involved miners, commercial sex workers, local men and women; to the rural homes when miners resumed their sexual lives with their wives and girl friends. Crush (2000) argues that such situations perpetrated transmission of HIV/AIDS/STDs, among migrant miners themselves, the women in communities where whom migrant miners work, as well as their wives and girl friends back at home.

Similar extensive sexual networks were noted in other mining towns in Tanzania, where miners in an artisanal mining town of Geita, Mwanza province, had sexual links with many women and girls from within the local communities. These sexual networks between miners and local community members increased whenever a gold rush occurred, and prospective miners descend on river beds to seek their fortunes. During such rush seasons, interactions between miners and members of the surrounding communities often led to increased sexual activity and a corresponding increase in STIs including the possibility of HIV/AIDS infections (IRIN, 2003). It is reported that following the opening of 5 new gold deposits in Geita town by some multinational corporations, there has been increased influx of single young people (male and female) into this town, and higher incidences of sexual networking which has led to STI and HIV/AIDS (ibid).

In a study to assess variations of HIV and STI prevalence within communities neighbouring the new goldmines, Clift, et al (2003) found that high risk sexual behaviours were common in these communities. 30 percent of male participants in the study reported having more than one sexual partner during the past 3 months prior to the study. More than half of these males (65 percent) were mineworkers, and over half of other men (54 percent) reported having more than one sexual partner within the past year. There were also increased cases of commercial and transactional sexual relationships, where half of the female population in food and recreation centers and a fifth (20percent) of other women from within the town, reported receiving payment for sex (ibid). Half of mine workers (55 percent) and half of local men reported having paid for sex. Few people in this type of sexual relationships reported consistent and correct use of condoms during sexual intercourse. For instance, of the men who had paid for sex in the past 12 months, 14 percent of mine workers and 46 percent of other men in the community reported that they had never used a condom.

Surprisingly on this aspect, there was a generally low perception of risk, particularly among miners although they engaged in such practices. For instance, only 8 percent of mineworkers and 11 percent of local men considered themselves at risk of acquiring HIV infections (Ibid). A picture emerging from these statistics is that people in this community and generally similar mining settings engage in sexual behaviours which expose them to the risk of STIs and HIV infections. The complexity of sexual networking as well as different factors argued to facilitate such networks further shows how difficult the bout to prevent STIs and HIV/AIDS spread could be.

In another report, a 3-year HIV/AIDS prevention project in the mining community of Carletonville in Johannesburg, further demonstrated the role of sexual networks on increasing levels of STIS/HIV infections among members of mining communities. Like other similar studies reviewed in this discussion, Mzaidume et al (2005) found that sexual relations occurred among sex workers, mineworkers, and local community members; males, females and young people. Although these groups lived in different locations within the town, there were some meeting places which facilitated easy contacts among these groups of people, where sexual activities took place.

Such places included bars, restaurants, and hotels. In such hotspots, sex workers interacted with mine workers and local men from the community. The team further reports that local men tended to seek casual sexual partners within their residential neighborhood, and it was the same for women living in council and private housing (relatively wealthy neighborhoods). Women from 'disenfranchised communities' such as hotspots or squatter settlements had more frequent relationships with mine workers, and mine workers also had several casual sexual partners in squatter settlements, private and council housing. This picture shows that there was a complex sexual network among different groups of people residing in this mining community. It has generally been argued that through this complex sexual network, people in this town were regularly exposed to STIs and HIV/AIDS infections, which spread to other peripheral populations with whom they related. In view of this finding, various organizations attempted to reverse the situation by introducing HIV/AIDS prevention and STIs treatment activities in this town as discussed in the following section.

2.4 Impact of behaviour change / HIV/AIDS/STI interventions in mining communities

Meekers (1997) argues that in South Africa, addressing STI/HIV/AIDS infections in mining communities has often been an urgent priority for many reasons. Among others, mining plays a pivotal role in the country's economy. As such, high STI/HIV infections among miners directly affect the scale of production, export volume and ultimately the economy. Studies have shown that miners have been noted to be at higher risk of catching and spreading HIV/AIDS and STIs, not only in mining communities but also in rural areas where the majority originate (Hutchinson et al, 2002; Campbell, 1999). In view of this factor, many HIV/AIDS and STI prevention programs implemented in mining communities have often targeted population groups perceived to be at high risk, such as miners and commercial sex workers, other than all members of these communities (local men, women and young people). The designers and implementers of these activities have often argued that by addressing STIs and HIV/AIDS among high risk groups in these communities, the programs will ultimately address these infections among population groups perceived to be at lower risk, and possibly the entire communities (Hutchinson et al 2002).

Furthermore, it has often been argued that in the case of such communities, targeting high risk population groups is a cost effective way of dealing with HIV/AIDS in view of resources limitations (Ibid). Given the situation, miners and commercial sex workers have often constituted prime targets for many behaviour change programs implemented in these communities. Activities have among others included STI/HIV/AIDS awareness campaigns, Voluntary Counseling and Testing (VCT), treatment of STIs and other opportunistic infections (OIs), as well as mitigating impact of HIV/AIDS on those infected and affected by the pandemic (Campbell and Williams, 2003). Most of these activities have been implemented by mining companies, government agencies, non governmental organizations (NGOs) and local community members.

Meekers (1997) reports that in South Africa, the mining industry has responded to the HIV/AIDS epidemic by embarking on various activities such as information education and communication (IEC) campaigns, free condoms distribution, and provision of voluntary counseling and testing services (VCT) to the labour force. In 1995 to 1997, Welkom mines located in Free State province introduced clinic based HIV/AIDS education and prevention program which targeted miners. The project had IEC and condoms distribution as its main strategies. However, though comprehensively supported by management and miners themselves, an intermediate impact assessment study indicated that the project had generated little impact. STI infections among miners remained high, and so was the risk of HIV/AIDS infections both among miners and local members of the community (Meekers, 1997).

To intensify the efforts, management involved local community members in implementing the project. The goal was to reduce HIV/AIDS infections not only among miners and their sexual partners, but also among local members of the community (Mini, 1995). Key strategies included peer education (particularly among miners) STIs treatment, and HIV/AIDS counseling services primarily to promote safer sex practices, correct and consistent condoms, early treatment seeking behaviours among STI patients. Social marketing of condoms was also introduced, where a new brand of condoms called 'Love Plus' was distributed during peer education and mass media campaigns, to promote safer sex.

Other activities included point-of-sale strategy for condoms, a radio campaign, press advertisements, billboard messages, road and in-hotels shows and video shows (Meekers, 1997). Meekers (1997) contends that although this project was comprehensively implemented, its impact was minimal, particularly in view of peoples' perceptions and attitudes on HIV/AIDS, and changes in sexual behaviours. The end of project evaluation study indicated that although miners' knowledge on HIV/AIDS/STI issues was high,(98 percent) few of them believed that HIV/AIDS existed in the community, and only half of them (54 percent) perceived themselves vulnerable to these infections, in spite of having unprotected sexual relations with commercial sex workers (Meekers 1997).

There was also a modest increase (46 to 47.4 percent) on correct and consistent use of condoms among miners, during the project period, while those who abstained remained constant at (4 percent), with a slight decrease (from 18 percent to 10.8 percent) of those who had more than one sexual partners. As it can be noted in the above reported, despite massive technical, financial and social support, these activities did little to change peoples' attitudes and sexual behaviours and consequently the scale and risk of HIV/AIDS in the area.

In the mining town of Carletonville, there also was implemented a similar project, which yielded dismal changes though well resourced and implemented. Mzaidume et al (2005) reports that realizing the scale of HIV/AIDS and STIs particularly among miners and residents close to the mine, a research project was launched to study the social determinants of the HIV epidemic and assess impact of a targeted program of HIV and STI prevention and service delivery which commenced in Carletonville in 1998. The goal of project was to reduce STIs and HIV/AIDS and to sustain the reductions through information, education, and communication (IEC) activities and effective STI services. The interventions targeted sex workers and mine workers in (Mzaidume, et al 2005), in a community characterized by poverty unemployment and rampant sex work (ibid). The intervention had three components namely: peer education on HIV/STI knowledge and prevention, condom promotion and distribution, and management of STIs, using periodic presumptive treatment (PPT) (ibid). In the peer education strategy, a number of sex workers were recruited and trained in community work, hygiene, HIV/AIDS, and signs and symptoms of STIs.

They provided information to other sex workers, and to a limited extent, local members of the local community. A similar strategy was designed for mine workers, who generally were perceived to be the primary clients of sex workers. In the other strategy condoms were distributed for free to sex and mine workers to encourage safe sex. The third strategy was aimed at strengthening STI services at private and public health facilities in Carletonville, through training of service providers in STIs case management. An assessment study indicated that through the project, sex workers were able to enroll in a presumptive treatment program for gonorrhea and chlamydia. Knowledge about HIV/AIDS issues, particularly how it is transmitted among the target audience, (miners and commercial sex workers) also increased. There was a notable improvement in the people's knowledge about erroneous modes of HIV transmission (e.g., whether mosquitoes transmit HIV). Such improvement in knowledge levels was attributed to widespread HIV/AIDS messages from multiple sources including the peer education program among mine workers and commercial sex workers.

However despite this positive picture, Mzaidume et al (2005) reports that between 1998 and 2001, with the exception of men in the community, all groups experienced an increase in HIV prevalence. Among mine workers, the HIV prevalence increased significantly (from 29 percent to 36 percent). It also increased among Sex workers from (69 percent to 78 percent). Further increases were significantly noted among women in the community, (from 37 percent to 45 percent), while local men experienced a slight decrease (22 percent to 20 percent). As regards STI prevalence, Mzaidume et al (2005) reports that despite administration of positive presumptive treatment (PPT) for bacterial STIs among sex workers over a period of 18 months and training providers for improved STI services, the prevalence of STIs among sex workers, mine workers, and local members of the community indicated an increase. Syphilis prevalence increased from 10 to 13 percent; Chlamydia increased from 8 to 12 percent, while gonorrhea prevalence increased from 7 to 11 percent.

The study further revealed that although the percentage of mineworkers reporting one or more casual sexual partners in the 12 months prior to each survey showed a decrease, 53 to 43 percent, the situation was different for local men from within the community.

In this group, the percentage of men reporting one or more casual sexual partner in the previous 12 months increased from 37 to 45 percent. The situation was even worse for women, where in 2001, 41 percent of local women reported having had casual sexual partners, indicating a 17 percent increase from 1998, and prior to the project. Few mine workers (6 percent in 1998 and 4 percent in 2001) reported regular condom use with sexual partners over the period of implementation, and fewer were those who reported consistent condom use with their regular sexual partners. The picture was even disturbing for commercial sex workers, where it was noted that there was a decrease on the proportion of sex workers who used condoms correctly and consistently with regular partners, (from 26 percent in 1998 to 12 percent in 2001). The scenario was the same among local men who reported having consistent protected sex with a regular sexual partner, where it is reported that the proportion of constant and consistent condom users decreased from 9 percent in 1998 to 6 percent in 2001.

Although the above picture appears gloomy, there were a few success points in the project. For instance, there was a significant increase on the percentage of people reporting consistent condom use with casual partners during the 3 year project. For instance among mine workers, there was an increase of 5 percent, a 9 percent increase among local men, and a modest 3 percent increase among local women. The situation was somewhat different for commercial sex workers, where it was noted that there was no change on proportion of sex workers using condoms correctly and consistently.

On the whole, it appears that like the Welkom mine intervention, this project had mixed results. Judging from the indicators (number of sexual partners, condom use, casual sex, knowledge about HIV/AIDS) as earlier discussed, it can be noted that little was achieved in changing occurrence of risky sexual behaviours and fostering sexual behavioural change among the targeted people. There were many factors believed to have influenced this situation. Campbell, et al (2003) argues that sexual networks in Carletonville town were more complex than originally believed. Mine workers had casual sexual relationships with sex workers as well as other women outside the "hotspots." Although women living in the local community did not self-identify as sex workers, many operated as such, but this population group was not targeted by the project.

Local men had sexual relations with local women either through marital unions or casual sexual friendships. These men were also noted to have sexual links with commercial sex workers whom they interacted with in hotspots and other entertainment areas. Such a situation presented a serious challenge on the success of the project, since only mine workers and commercial sex workers were targeted, leaving out other important population groups involved in the areas' sexual networks. Campbell (2002) further reports that another crucial factor contributing to the poor results of this intervention could be the way this particular society was organized.

Campbell explains that a social grouping to which one belongs was associated with either a greater or lesser HIV infection risk. For instance, local men who were members of sports groups, local women and mine workers who were active church members had a low risk of HIV/ST infections. On the other hand, members of *stokvels* (informal rotating credit schemes), political parties, and burial societies were associated with higher risk sexual behaviors which exposed them to infections. Churches, youth and sports clubs were noted to promote good moral behaviors, which prevented members from getting involved in risky sexual behaviours. *Stokvels*, political parties and burial societies were linked to events where alcohol consumption and loose sexual behaviors were common. As such, members of such associations easily got involved in risky sexual behaviours, from which they eventually got STIs and HIV infections which they spread to other members of the community.

In Tanzania, an HIV/AIDS prevention project similar to the two discussed above revealed other factors worth attention when designing and implementing HIV/AIDS prevention activities in mining communities. The project was implemented in the mining town of Geita, located 50 kilometers south of Lake Victoria in Mwanza province (WEF 2002). Since the commencement of mining in this town, its population swelled from 30,000 (in 1999) to 120,000 (in 2002) following influx of young men and women looking for employment and other economic opportunities accompanying mining. 2000 men under the age of 30 are reported to have been recruited as underground labourers in the mine, the majority of whom lived alone in guest houses and lodges within the town. A baseline survey conducted by the mining company in 2001 indicated that the opening of mining in this town precipitated conditions where the local HIV epidemic spread to the mine, ultimately posing a significant impact on the company's profits and

the future of the region. The HIV/AIDS prevalence survey showed that in the community; 19 percent of men, 16 percent of women and 39 percent of sex workers were already infected with HIV. However, mine workers prevalence was estimated at a low of 4 percent.

The study further revealed that both community members and mine workers were at high risk of becoming HIV positive. All groups reported very high rates of STIs in the last 12 months prior to the project, with high rates of positive syphilis serology. Most mine workers (35 percent) reported having more than one sexual partner in the last 3 months, and 54 percent had paid for sex in the last 12 months, while 30 percent of miners reported that they did not always use condoms during these paid acts. Predictions indicated that without an intervention to reverse this trend, up to 20-40 percent of mine workers could be infected with HIV during their working time at the mine (ibid).

In view of this situation, management of Geita gold mines in conjunction with the African Medical Research Fund (AMREF), introduced interventions aimed at preventing escalation of the HIV/AIDS in the area. This initiative involved establishing workplace and community based HIV/AIDS awareness and prevention programs, as well as providing care and support for infected and affected people. This involved a multilevel comprehensive approach where mineworkers, high-risk women (commercial sex workers) and local people from within the neighbouring communities were targeted. Key strategies involved peer education, where HIV/AIDS prevention messages were conveyed to miners on monthly basis. A special HIV/AIDS awareness and prevention booklet was developed and was routinely distributed to new recruits at the mine, to educate them about STIs and HIV/AIDS.

In addition, Voluntary Counseling and Testing (VCT) services were also introduced at Geita mines clinic, where miners and local community members had HIV tests and counseling on various health-related issues, particularly HIV/AIDS. Through a functional collaboration between mine management and local health office, a community peer health educators training was conducted and HIV/AIDS information center was also instituted in the town. This center provided opportunity for local people to learn more about HIV/AIDS, and how they could reach out to others WEF (2002).

One of the remarkable achievements of the project was that over the period it was implemented, there was increased awareness on HIV/AIDS issues and condom use among all the targeted population groups. However, abstinence (a strategy highly promoted by the program designers) was not evident enough among all the targeted groups.

Instead, there was increased demand for condoms among many of the miners and local men from within the community. However, despite calls for more condom supplies, peer educators reported that some men did not use the condoms, even during their sexual encounters with commercial sex workers. Furthermore, it was noted that although knowledge about HIV/AIDS/STI issues had increased among miners and local community members, it did not initiate changes in occurrence of risky sexual behaviours among miners, commercial sex workers and members of the local community (WEF, 2002). In essence, like other interventions discussed earlier on, though the project was fully funded and well collaborated at all levels, the project did little to change risky sexual behaviours among the targeted population groups, and nothing explained this discrepancy.

Meekers (1997) notes that although from the general perspective, these activities are argued to have improved awareness and knowledge about HIV/AIDS and STIs, there is limited evidence indicating that sexual behaviour change occurs among miners and members of surrounding communities. Machake (1995) and Warren (1997) further contends that despite intensive efforts to curb HIV/STI infections in most mining communities by mining companies and other partners, HIV/STI infections appears to persist particularly among mine workers and local women and girls living within the vicinity of the mines. Campbell (1999) argues that poor conceptualization, design and implementation of programs, coupled with inadequate insight on factors driving STI/HIV infections among different people within such communities, could explain what these programs have yielded slow changes in sexual behaviours or failed to facilitate behaviour change among targeted populations.

In the interventions discussed earlier, miners and commercial sex workers were commonly singled out as prime targets for these activities, leaving out an equally significant group of people, (local members of the community), with whom miners and commercial sex workers interact on a daily basis. Such a gross oversight and miscalculated strategic approach resulted in minimal change as only a small proportion of people involved in risky sexual practices were targeted. In view of a generalized pattern of the pandemic (where everybody is at risk), and also complex sexual networks existing in mining communities, Campbell (2003) suggests the need to scale-up these interventions to involve all population groups in the community.

Furthermore, there is need for in-depth exploration of situations under which different groups of people get involved in risky sexual behaviours, and consequently how they are likely to catch and spread HIV/AIDS infections within a given social setting. In essence, there is need to consider psycho-social and economic realities in which various groups of people operate, and how these in turn affect their decisions to engage in risky sexual behaviours. For instance, how various groups of people such as miners, women, young girls, ordinary men get their day to day economic, social and psychological needs, the situations under which those particular needs are gratified, population groups they socialize with, and how such socialization affects their perceptions, attitudes and behaviours towards sex and HIV/AIDS prevention. Such analysis shall provide a holistic and comprehensive picture on how people get involved in risky sexual behaviours and how best to deal with the pandemic in view of diverse factors driving the epidemic among such groups of people. The following section presents a theoretical explanation regarding occurrence of risky sexual behaviours among people residing in mining communities, indicating potential areas where interventions to prevent HIV/AIDS and STIs could target.

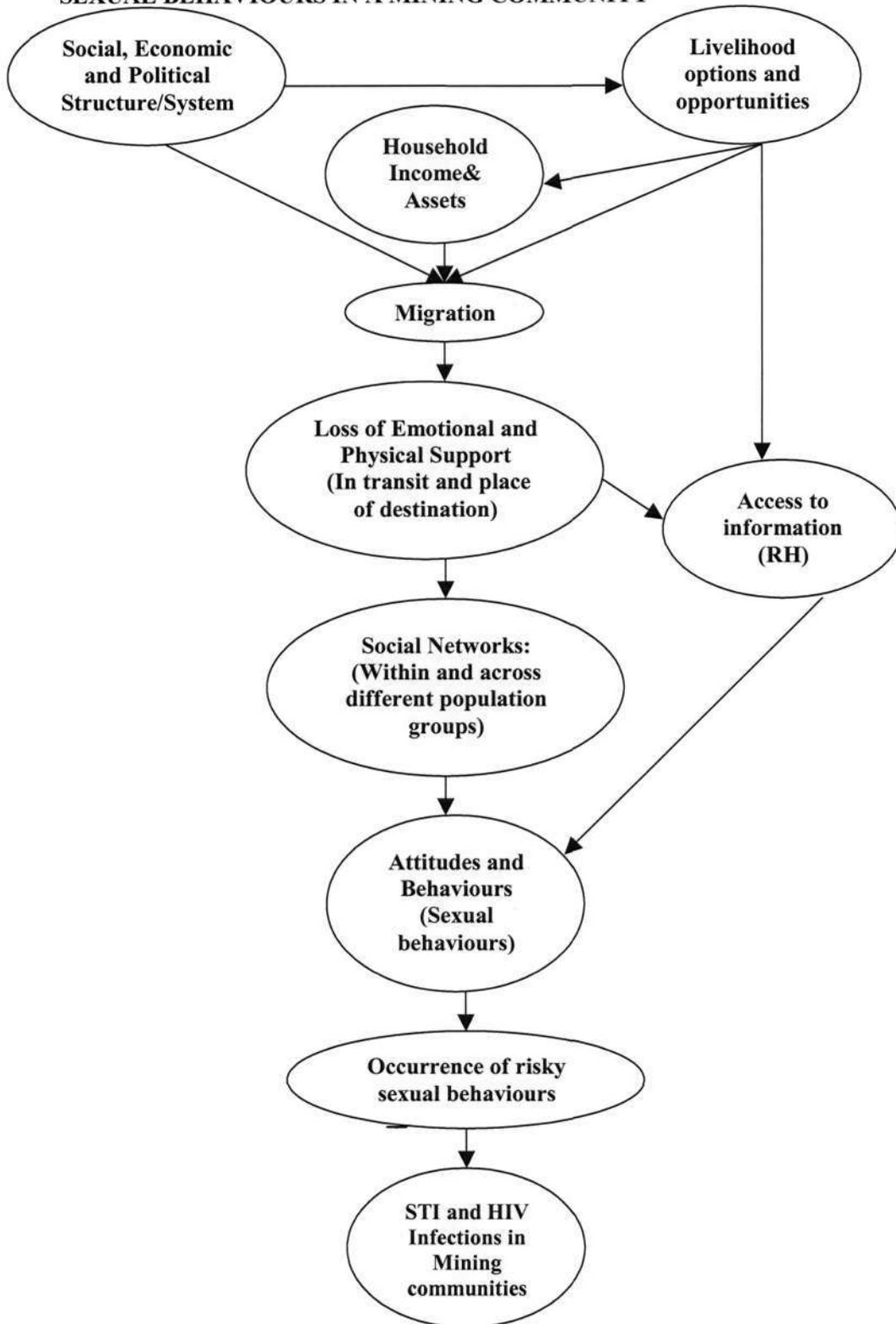
2.5 Theoretical framework for explaining occurrence of risky sexual behaviours in mining areas

This section discusses a theoretical conceptualization of how different risky sexual behaviours emerge and are influenced with reference to residents of mining communities. The framework also attempts to locate possible points of interventions in attempts to fight the HIV/AIDS epidemic and reduce the scale of STIs in mining communities. Start and Johnson (2004) propounds that peoples' livelihoods prospects are located in the economic, political

and social structures and processes, both at macro and micro levels of a country. Kadushini, (2004) further explains that at the centre of each livelihood pursuit is income or resources, through which people acquire assets essential for their survival and wellbeing. As can be noted in figure 1 below, the point of departure in this theoretical framework is that prevailing social and economic system or structure (in a society or country) influences how resources are produced and distributed across its population.

In the context of this study, it is conceived that prevailing social and economic structure influences in South Africa as a nation, (and also its neighbouring countries) influence the livelihood options pursued by different people. For instance, for a long time mining has been South Africa's economic mainstay, accounting for a major proportion of the migrant labour from its rural areas and neighbouring countries. As a result of improved infrastructure in most mining towns, other forms of productive activities such as manufacturing, transport (both road and railway), business (including entrepreneurship) have sprouted, further increasing migrants flocking to mining towns and communities, to pursue different forms of livelihoods (BAH, 2005).

Figure1. CONCEPTUAL FRAMEWORK EXPLAINING OCURRENCE OF RISKY SEXUAL BEHAVIOURS IN A MINING COMMUNITY



In the framework above, it is conceived that livelihood options, affect and influence the amount of income and assets people acquire at a given time in a given social setting. Where these assets or resources are not sufficient, or peoples' living conditions is in a state of vulnerability (As is the case in destitution) migration takes place (IOM, 2003). Waddington and Sabates-Wheeler (2003) explains that people might move out of poverty or socio-economic vulnerability, in which case migration becomes a strategy for livelihood diversification.

In this study, almost all the targeted population groups (miners, CSWs, Vendors, Taxi drivers) were migrants from within and outside South Africa, the majority of whom migrated to Boksburg town in search of better income opportunities and other socio-economic amenities. Kyu and Thu (2006) argue that as people move from one place to another (in search of various opportunities) they encounter loss of emotional and physical support which they had in their places of origin. The two explain that it is from such a position of loss that people team up together to share various things which attempts to fulfill their needs and aspirations triggered by migration. The two maintain that due to loss of emotional and physical support, migrants develop social and cultural networks that act as strong emotional support systems during migration and after migrating to new places. This marks the origin of social networks from which sexual networks emerge.

A social network is defined as a set of people, organizations or other social entities connected by a set of social relationships (Wellman, 1997; Kadushini, 2004). Through such relationships, people share living arrangements (staying in same flats), friendship, resources (food, money) and feelings about work, working and their social environment. (Kyu and Thu 2006). Stevenson et al (1992) further explains that individuals function through social networks that establish norms of behaviour, including safer sexual behaviours. In essence, social networks enforce behaviours, since by their nature they establish and enforce values beneficial to the network itself.

In the context of this particular study, respondents mentioned that people related with each other in small groups, influenced mainly by common attributes such as place of origin, common place of residence, occupation, and language. For instance, miners had their own group in which they related in various ways as they live and work together. This was the same case with CSWs, vendors and taxi drivers, who related amongst themselves based on common attributes. It was mentioned that in such groups, people share their day to day experiences about work, families' issues, religion, health and general information about different issues affecting their lives. Such experiences are shared amongst them as they routinely travel to and from their places work; during and after work (particularly as they relax in entertainment places); and also as they rest in their respective places of residence, either in hostels (for miners) or houses in the local communities (for other population groups).

It was mentioned that apart from sharing these issues, most people in these groups influence each others' attitudes and behaviours to the extent that, people in such groups might have similar attitudes and behaviours. For instance, mine workers visited beer drinking places together, and some of them were reported to have girl friends in same communities or visited same taverns to meet with regular commercial sex workers. Such behaviours were widespread not only among miners, but also vendors and taxi drivers doing business in the area under study. Most of them (particularly miners) reported that since they lived far from their committed sexual partners (back at home) drinking and casual sex were the only easy and available activities they did after work.

In their study on migration, sexual behaviour and the risk to HIV/AIDS in Kenya, Brockerhoff and Biddlecom (1999) found that male migrants between urban areas and female migrants within rural areas were much more likely to engage in risky sexual behaviours than their non-migrant counterparts. In the current study, it was further found that apart from the earlier mentioned social networks (intra-group relations); there was sexual networking across different population groups (inter-group networking). Such networks occurred between miners and commercial sex workers; male and female vendors; taxi drivers and school going girls and office women, and office workers.

The main resources shared among people involved in such networks were money, beer, and other non-material favours exchanged for sexual intercourse. As the framework suggests, through these social networks, people influence each others attitudes, perceptions and sexual behaviours, a situation that culminates into complex sexual relations among various population groups. Such a situation increases the spread of HIV/AIDS or STIs among the people involved in such networks, and also their sexual partners back in their places of origin.

In a study on migrant labour, sexual networks and multi-partnered sex in Malawi, Chijere-Chirwa (1997) found that migrant laborers, like truck drivers, itinerant traders, and prostitutes engaged in high risk sexual behaviours both at their place of work and in their areas of origin. The study reveals that at the place of work migrant miners had sexual relations with local women, mostly in pubs, canteens, and such places; and also with men. At home, returning migrants engaged in conspicuous spending, since their incomes are generally higher than those of the average peasants at home. As such, they become a major attraction to the rural women, a situation that influences them to have more than one sexual partner. Such intrinsic relationships between, on the one hand, migration and multi-partnered sex, and, on the other, migration and material comfort, facilitate the spread of HIV infection (ibid).

It is from this background that this study was conceived to understand factors influencing occurrence of risky sexual behaviours among different population groups existing in this particular mining community. In fact, the existence of social and sexual networks among different groups of people residing in this community provides better lenses with which to understand population groups involved in risky sexual behaviours, factors influencing occurrence of such behaviours, and how best to implement sexual behaviour change programs such communities.

Chapter 3 Methodology

3.1 Introduction and Overview

This study explored risky sexual behaviours feared to perpetrate spread of HIV/AIDS and STIs among selected population groups residing in Boksburg central mining community. It also explored how best to fight against HIV/AIDS through sexual behaviour change in the community under. The following key questions were in focus;

1. What factors influence occurrence of risky sexual behaviours among people residing in this community?
2. How do people in this area respond to behaviour change interventions to which they have been exposed?
3. How should HIV/AIDS prevention or behaviour change interventions in this community be improved to effectively address HIV/AIDS?

Specifically the study investigated risky sexual behaviours practiced by selected population groups residing in this community; how such behaviours are acquired and sustained, particularly situations under which people engage in such behaviours; interventions so far implemented or currently underway to foster sexual behaviours change and finally; how respond to improve these interventions in order to deal with HIV/AIDS.

The study adopted a qualitative approach, where data was collected through semi structured individual in-depth interviews. A sample of 25 respondents was purposively selected, comprising miners, commercial sex workers, taxi drivers, vendors and office workers, all from residences and companies within Boksburg Town. To ensure flexibility for the researcher and respondents, interviews were conducted in three languages, IsiZulu, IsiXhosa and English, at participants' own choice of time and venue. Analysis begun right in the field, where data were sorted, coded, and appropriate adjustments made on questions and interview guide in order to improve on data to be collected, to ensure that it is responsive to the research. All interviews were tape recorded and notes (during interviews) taken, after which transcripts were produced.

Coded data from transcripts were categorized into themes representing respondents' views on the particular subject domain, after-which appropriate judgments were made on respondents' views and arguments emerging from data. This involved arrangement of common themes and sub-themes into relevant blocks representing respondents view point and arguments, to ensure that only relevant issues were reported. A draft report for the study was then compiled and reviewed after which a final report was produced.

3.2 Study Design

The study adopted a qualitative approach. Marshall, (1996) explains that this approach provides illumination to complex psychosocial issues relating to a particular phenomena in a given situation or context. Key questions in this process relates to 'why' and 'how' certain things are like they are, and perhaps how the phenomena under observation operates in a given context (ibid). The approach emphasizes examining a phenomenon in a natural setting, so as to gain more understanding about its existence or occurrence (ibid). In this study, this approach was chosen with the purpose of gaining a detailed understanding with regards to occurrence of risky sexual behaviours among selected groups of people in the targeted mining community. To achieve this goal, information was sought from respondents' own point of view, interpretation and explanation, on the concerned subject.

Key, (1997) explains that in investigations of this nature data is better collected with participatory techniques and tools, in order to elicit more information. Such techniques include, unstructured open ended questions administered through individual in-depth interviews or focus group discussions. The approach differs from the quantitative one, which uses pre-determined close ended questions to test a pre-determined hypothesis and produce generalizable results (Marshall, 1996). Furthermore, while qualitative research collects rich and in-depth data that reflects reality of particular phenomena from the perspective of respondents, quantitative research gathers information about relations, comparisons, and predictions about a particular phenomena or situation (Ulin et al (2003). In this process, the researcher is part and parcel of the investigation, guiding the inquiry to ensure that issues being investigated are focused and responsive to the key questions of the study (Key, 1997).

The use of flexible and participatory techniques in this approach further enables the researcher to elicit original views, attitudes, perceptions and meanings of particular phenomena in a given context, without the researcher's interpretation, thus enhancing validity of results (Ulin et al 2003).

In the current study, the use of qualitative data collection and analysis techniques helped the researcher to gain more insight on risky sexual behaviours that occur among selected groups of people, and factors which influence their occurrence within the area under study. Through these techniques, participants were free to express themselves in the language of their choice (even slang), as they explained and clarified various issues which the researcher missed or could not understand at first hand. Flexibility also accorded respondents a chance to reflect on their day to day lives, mapping out situations under which they get caught up in risky sexual behavioural practices, exposing themselves and others to the risk of HIV/AIDS infections. Such a process further enabled both the researcher and respondents to collectively explore better ways through which sexual behaviour change activities being implemented in area could be improved in order to prevent spread of the HIV/AIDS pandemic. To the researcher, such flexibility enabled review of questions and interviews guides right in the field, to ensure that the study remained focused and data responsive to the investigation is collected. In essence, the use of less rigid and less structured tools enabled the researcher and respondents to explore issues of interest in a broader context, elicit diverse views on issues being investigated, hence enriching the quality, reliability and credibility of the data collected and the study.

Ulin et al (2003) argues that people generally feel uncomfortable to discuss sexual issues openly, let alone with a stranger since in many societies, discussing sexual issues in public is taboo. Considering that this study hinged on individual sexual behaviours in relation to a similarly thorny issue of HIV/AIDS, it was deemed necessary to use research techniques which would break this barrier, and make people willing to talk about their realities on the subject matter. Patton, (1999) argues that in such situations, unstructured or semi-structured data collection techniques become vital, as they enable both the researcher and the respondent to engage in a seemingly informal conversation which breaks barriers to free flow of views and opinion on a subject matter.

In the study, using semi-structured interviews during data collection enabled respondents to relate with the researcher on the same wave-length, where conversation was less formal, as they both explored intricate issues on the subject matter. Through this approach, rich text of information responsive to the investigation was unearthed. However, although qualitative methodologies have the ability to initiate free flow of rich information on rather difficult subjects as the one in context, it is impossible to generalize the results (Ulin et al, 2003). A number of factors contribute to this set back, one of which is that studies of this nature collect data from a relatively small sample unlike in quantitative studies, where information is gathered from relatively large samples (Ulin et al, 2003). Since the smaller the sample, the higher the degree of error (Marshall, 1996), such a deficiency does affects the credibility of qualitative studies.

However, Marshall (1996) argues, this aspect does not render such studies ineffective since in its own respect, and even from its on set, qualitative studies are geared towards gathering rich and detailed information on the subject matter in its original context. Such a characteristic entails that even if the sample is small, the results remain reliable and credible above quantitative ones. The current study also reflects respondents' opinions on the subject matter in its original context, without the researcher's influence on the manner and order of presentation. In Marshall's (1996) explanation, such a characteristic adds to the credibility and reliability of view points on the subject matter and the study as a whole.

3.3 Sample and Sampling Method

This investigation aimed at gaining understanding of somewhat complex issues regarding occurrence of risky sexual behaviours in mining communities, particularly how such behaviours are influenced and how best to tackle them in view of HIV/AIDS/STIs. As such, the sampling technique, design and size were chosen to ensure that the selected participants would provide rich and relevant data responsive to the investigation. Woodsong et al (2005) explains that in qualitative studies (like the one in question) an appropriate sample size is one that adequately answers the research question. Furthermore, in qualitative research, the range and nature of views, experiences and behaviours is important more than the extent to which they occur in the population of interest, as is the case with quantitative inquiry (Key 1997, Marshall, 1996).

As such, in a typical ideal situation, case sampling would be based on grounded theory, based on understanding the process of data collection, where conceptualisation continues until 'saturation point', and where nothing new emerges out of the data collected (ibid). Woodsong et al (2005) then argues that such a situation calls for purposive sampling technique, where respondents are chosen because they have particular features or characteristics which will enable provide a detailed picture on the subject of the study. The sampling process therefore involves developing a framework of variables that might influence respondents' contributions (Woodsong et al 2005). This is based on the researcher's practical knowledge of the research area, reviewed literature and evidence from the study itself.

This procedure was adopted in this particular study, where as many respondents as possible were targeted (miners only) to provide their views on the subject matter. It was virtually difficult to capture as many respondents from other groups, such as commercial sex workers and Taxi drivers, since many of them were not interested to participate for concealed reasons. The eligible sample therefore comprised of 25 purposively selected respondents comprising mine labourers, sex workers (in taverns and bars), small-scale business people (vendors), office workers (white collar job employees) and taxi drivers, from within Boksburg town central. Selection of this sample was inspired by literature on the subject matter, where the researcher made appropriate judgment to include respondents who have specific experiences (critical case samples) and subjects with special expertise (Key informants) on the issues being investigated.

Studies have shown that among other factors, socioeconomic status and income availability have a strong influence on peoples' sexual behaviours (Moodie and Ndatsche, 1994; Hallman, 2005; Kyu and Thu, 2006). Money and monetary inducements have been argued to facilitate occurrence of risky sexual behaviours among people in mining communities, particularly among miners, commercial sex workers and poor local women and girls (Campbell, 2003). In view of this factor, the variable 'employment type' was used as a proxy for an individual's income level (Angabiti et al, 2006). Respondents in white –collar (professional) job had stable employment with higher income than those in blue collar (non-professional jobs) and business.

In this respect, office workers (including those in service jobs such as health) were considered higher on the income scale, followed by those in non-professional employment such as miners, commercial sex workers, and vendors (refer to table below)

Table 1 Distribution of respondents by employment type and income level (in descending order)

Income scale	Employment category
1	Office workers and HIV/AIDS programs coordinators
2	Miners (underground labourers) and hostel care taker
3	Taxi drivers, Bar manager
4	Vendors
5	Commercial sex workers

25 respondents were identified from 5 employment categories from which came miners, taxi drivers, commercial sex workers, a bar manager, HIV/AIDS programs coordinators, and street vendors . Table 2, 3 and 4 shows respondents' distribution by employment category by gender, age and educational level attained.

Table 2. Distribution of respondents by gender and category of employment

Employment Category	Respondents	Gender		Total
		Male	Female	
Mining	Miners	6	-	6
	Miners hostel care taker	1	-	1
Entertainment	Commercial sex workers	-	3	3
	Bar manager	1		1
Business	Vendors	2	3	5
Transport	Taxi Driver	2	-	2
Services	Office Workers	2	3	5
	Project Coordinators	-	2	2
	Total	14	11	25

Table 3 Distribution of Respondents by Age and Gender

Age category	Male	Female	Total
20-24	2	4	6
25-29	3	-	3
30-34	2	1	3
35-39	3	2	5
40-44	1	3	4
45-49	2	1	3
50-54	1	0	1
Total	15	10	25

Table 4 Respondents' distribution by category of employment and highest education level

Grade / Educational Level	Employment category						Total
	Miners	CSWs	Taxi Drivers	Vendors	Office & service	Bar Manager	
1-6	4	-	-	2	-		6
7-12	3	3	2	3	-	1	12
High school					4		4
College					1	1	2
Tertiary/University						1	1
Total	7	3	2	5	5	3	25

Although it was initially designed that 5 people from each of the mentioned categories be interviewed, it was difficult to reach this target as some respondents turned down the invitation to participate in the study for unexplained reasons. Apart from qualifying as members of the above mentioned population groups, there were other characteristics which were considered when choosing eligible respondents. These include ability to speak and understand Isizulu and Isixhosa, flexibility in time for the interview, as well as ability to read and write. Meekers (1997) suggests that in South Africa, underground mining work has historically been dominated by black people from within the country and its neighbours. As such, it was therefore deemed proper to target black respondents, other than struggle to include minority racial groups (particularly on underground mining) such as Indians or coloreds.

The study also targeted people who could read and write with the assumption that it would not be difficult to engage with them and for them to indicate their consent to participate in the study by signing consent forms. Flexibility with language meant that an interviewee could speak and understand both languages used in the study. Such a quality was thought to enable them freely express themselves during the interviews therefore releasing detailed information on the subject matter. Flexibility on time was considered to ensure that the interviews were conducted at a time convenient for the interviewee and the researcher, at the same time ensuring that respondents' commitments were respected. An assessment of the individual's qualification for these criteria was done during the introductory part of the interview, where the researcher cut short the conversation if an individual failed to meet these criteria.

Deliberate efforts were made to strike a gender balance in the sample, except for the categories like miners and commercial sex workers, which are strictly males and females respectively due to the nature of their job. The assumption was that as noted by Campbell (2003), gender dynamics could explain why and how different groups of people in this community engage in risky sexual behaviours. To collect detailed and quality data on the subject matter, an attempt was made to include key informants in the interviews. McKillip (1997) describes a key informant as anyone who knows more about something, who could provide more enlightenment. This could be a local public official, school teacher, clergy, manager or leader of any social group. In this study, 4 key informants were purposively selected comprising of 2 HIV/AIDS prevention program coordinators; one for a project targeting miners and the other for projects targeting local members of the community; a Bar manager and miners hostel supervisor.

The HIV/AIDS programme coordinators were selected to provide information on risky sexual behaviours prevalent in the area, how miners and local community members get involved in such behaviours, HIV/AIDS prevention activities being implemented and how people respond to the interventions. The miners' hostels supervisor was included in the sample to provide detailed information on miners' sexual behaviours in view of their day-to-day experiences, during their stay on the mine. The bar manager was included in the sample to provide more information on commercial sex workers and their clients behaviours at beer drinking places such as bars and Taverns, and how such hotspots facilitate spread of HIV/AIDS in the area.

Although a local councilor, church official, trading center chairperson, and taxi rank controller were sampled as key respondents, it was difficult to get them involved because of their tight schedules and reluctance to participate in the study. Although purposive sampling technique was used in many cases, snow-bowling technique was also applied in other situations to find respondents who could fit in where those who initially had agreed to participate in the study changed their minds for unexplained reasons. Ulin et al 2003 explains that this technique relies on referrals from initial subjects to generate additional subjects; identifying cases of interest from people who know what cases are information-rich.

Patton (1990) further explains that this technique is suitable when collecting information from respondents whose behaviours deviate from expected social norms, or anyone fearful of public exposure. Considering the nature of the study (focusing on sexual issues and HIV/AIDS) and also categories of participants to be involved (whose jobs and living conditions might be perceived as de-meaning), respondents in categories like vendors, taxi drivers and commercial sex workers were also sampled using snow bowling technique, where taxi ranks, bars or taverns and trading centers were respectively used as reference points for would-be interviewees

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3.4 Data Collection

Data were collected between the 1st and 7th of February 2007. Before this exercise, 2 preliminary visits were made by the researcher to, Boksburg Town Central, to make a feasibility assessment for the study. This involved locating mines, miners' hostels bars and taverns frequently visited by miners, CSWs and other community members. A deliberate attempt was made to target the mine close to Boksburg town central, to ensure easy access to public transport and accommodation for the research team. During the first visit, a mine shaft for East Rand Mine Properties (ERMP) a subsidiary of DRDG gold company was identified to the east of Boksburg town. A meeting was held with the Human Resources Manager of the mine to seek permission for conducting interviews with employees of this mine. This involved briefing the officer about the study's focus and its relevance to mining industry, after which permission was granted. Cinderella miners' hostel was also visited prior to the study, where the research team had some prior to interviews observations on the hostel, and held informal talks with people found there.

Among other features noted was a bar close to 10 meters outside the hostel, where miners and non-miners including local men, women and young people were drinking beers and watching television in what appeared to be their free time. A few meters to the south of the hostel were vendors (both male and female) selling food items (including beer and roasted meat) and various merchandize. An informal taxi rank was noted close by the trading place, where taxis queued as they waited for their turn to carry people, while their drivers were chatting either in the tavern or by the trading place. These features provided a hint as regards the kind of interaction expected (among different groups of people) on this place, further confirming the importance of the current study to be conducted in this area.

Fieldwork preparations commenced on 9th the through 27th of January 2007. This involved designing interview schedules, liaising with the University of Kwazulu-Natal on ethical clearance for the study, making appropriate bookings for field transport and accommodation. Recorders and transcribers for use during data collection and analysis were also booked from the School of Development Studies. Further preparations included recruiting and training a research assistant in qualitative research skills, particularly conducting interviews, notes taking, recoding and coding. A pilot study to pre-test the research instruments was also conducted for 3 days, from 28th to 30th January 2007, in Durban city. The purpose of this exercise was to check whether the designed interview guides would elicit information responsive to the study. 6 people comprising 2 commercial sex workers contacted from bars within West Street in Durban, 2 female students from Howard College University of KwaZulu-Natal, 1 woman cleaner at Howard College Anglo cluster residence, and 1 man doing maintenance work at the same University campus were involved as respondents in this pilot exercise.

The interviews were recorded and notes carefully taken down after-which transcripts were prepared, analyzed and reviewed accordingly. Following the exercise, interview schedules were reviewed many times to ensure that they elicit relevant information. The last version of the schedules was then translated into English, Isizulu and Isixhosa languages in which the interviews were conducted.

Data was collected using individual in-depth interviews where before each interview, researchers introduced themselves, explained purpose of the study, rationale and relevance to the individual, community and the country at large. In other instances, some miners turned down invitation to participate in the study as they thought it was commissioned by the company authorities with the intention of establishing how many employees had HIV, so as to terminate their contracts. To help lessen this fear, management did not make any formal notification to the miners about the study to avoid causing unease. In addition, the researchers approached miners individually, assuring them that the study was being conducted in secret and that the authorities were not aware about it. 7 miners were purposively sampled, but snow balling sampling technique was also applied to get more informed respondents in this category. This technique was also used to identify commercial sex workers at Central Hotel in the heart of Boksburg town, where bars were reference points for identifying would-be respondents.

It was initially designed that 5 commercial sex workers be interviewed. However, only 3 were identified and interviewed since some commercial sex workers refused to be interviewed, arguing that they were busy. This appeared to be no new phenomenon as Elmore-Meegan. et al (2004) explains. The team argues that in many societies (particularly Africa), commercial sex is not condoned both as a practice and way of life even though there are no legal implications for those found in this trade. In many cases, commercial sex workers are often isolated, ostracized and stigmatized by fellow members of the society. As such, many of them often express unwillingness to participate in studies pertaining to their 'business' as they become suspicious about how their views would be used or interpreted. As a result of this situation, many studies on commercial sex, particularly those that target commercial sex workers, often suffer from high non-response rates. In this study, although commercial sex workers gave a valid argument as to why they could not participate in the study, hence their demand for payment for their participation in the study, the researchers felt it was unethical to pay respondents for their input in the study.

Low response was also encountered with taxi drivers, such that out of the planned 5, only 2 were interviewed. Although many taxi drivers were locally available on the rank just outside Cinderella hostel, it was difficult to have them for the interviews. Many of them complained of being busy, although some were noted idle as they waited on the queue for their turn. In this situation, snowball sampling was again applied, where the first respondent was requested to choose another person whom he thought could participate in the interview. However, though a fellow taxi driver was used to identify other participants, many of them showed no interest to participate in the study again for unexplained reasons. Out of all the 5 categories of respondents, vendors, office workers and key informants were the only groups identified and interviewed without hustles. In these categories, respondents were purposively selected and interviews were held right at their place of work, following their managers' approval, (particularly for office workers and key informants).

3.5 Errors, biases and control measures

Norris (1997) contends that research, whether quantitative or qualitative, experimental or naturalistic, is a human activity. As such, it is prone to some biases. However, different forms of research endeavors may be prone to different errors and biases, and no study is clearly immune to this situation (Ibid). Norris however argues that in qualitative research, one practical way to assess validity is to understand sources of errors and biases and how these factors have been dealt with in the study. Such knowledge assists the researcher to efficiently assess the validity and credibility of the study (Ibid). Norris (1997) explains that in qualitative research, errors or biases emanate from a number of sources. There are errors or biases which emanate from selection processes (selection biases), these are also known as methodological errors or biases. Such errors or biases relates to sample design and selection, techniques and tools for data collection and analysis, and other technical aspects of a study (Ibid).

In other situations, errors and biases arise due to reactivity of researchers with the providers and consumers of information, while some errors and biases occur as a result of inabilities of researchers; particularly their deficiencies in knowledge, skills, methodological strengths, capacity for imagination, and value preferences. All these sources of errors and biases have serious implications on a study's validity and credibility (Norris, 1997).

In the case of this particular study, errors and biases might have originated from selection biases, particularly sampling of respondents, methods of investigation, especially techniques and tools used during data collection and analysis. Furthermore, some errors and biases might as well have surfaced as a result of the sensitive nature of the issues being investigated (sexual behaviours and HIV/AIDS), the influence of the researchers' own perspective or views on subject being investigated and the researcher's own technical inexperience in qualitative research. On sampling method and techniques, it is argued here that although purposive sampling helped the researcher to collect in-depth data from respondents' own lived experiences, and also from diversified sources (different population groups), there are potential flaws associated with this method. For instance, the selection of respondents (in each population group) was done with due consideration to certain respondents' specific attributes which the researcher thought would help to provide rich and relevant data.

Such attributes include ability to speak and understand the language chosen for interviews (Isizulu), race (particularly black South Africans), ability to read and write, period stayed on the company or in the community (6 months and over). Such criteria were arbitrarily chosen by the researcher, of course with inspiration from literature. This scenario entails that anybody falling short of this criteria, irrespective of whether they know the subject matter better, or were more experienced in such type of research, were barred from participating. Another flaw with this sampling method is that it is more suitable to experienced researchers, who have thorough knowledge about the likely degree of variability among selected participants in a given study area (McCoy, 2005). Such experience would determine where sample sites of the study should be, in order to represent the best variation within a category of respondents (Ibid).

In the case of this study, the researcher did not have prior knowledge about characteristics of selected groups of people within the research community, such that the extent of variation among selected cases was not clearly considered. Such a gap entails that the sample selected for each targeted population group did not have much variability, which in a way might have resulted into gathering data that reflects limited perspective or views on the subject matter, other than a diversified perspective, which would have further influenced depth of this study.

However, as Thorne, (2000) argues, the goal of qualitative research is rather to uncover knowledge about how people think and feel about the circumstances in which they find themselves, and how such circumstances affects their way of life. As such, although methodological issues arise as to how such type of knowledge is obtained; the primary focus is on the value and detail of the information on the subject matter. Such a goal is beyond making judgments about whether those thoughts and feelings are valid and representative, as may be the case in quantitative research. As such, in spite of the above mentioned error, in its own respect this study's validity still stands, particularly when considered from its focus, methodology depth of information and relevance.

3.6 Methods of Analysis

In this study, data was analyzed using thematic analysis technique. Aaronson, (1994) explains that this technique uses ideas and views emerging from interviews, informal conversations with respondents and observations on issues being investigated. The first step in this process is obviously to collect the data. In the case of this study, audiotapes were used to record each interview. Although not much was gathered from observations, the researcher also took notes of features, and subject of conversations shared among respondents, particularly in places of entertainment such as bars and taverns. Such notes also provided information that was classified, coded and integrated to related issues emerging from other interviews.

Analysis began right in the field with sorting and coding of loose data notes collected from individual in-depth interviews and observations. This exercise was done at the end of each data collection day during fieldwork. The process helped the researcher to make appropriate adjustments on questions and sample of respondents, to ensure that collected data was rich and responsive to the study's objectives. The next step in the analysis process was to transcribe the collected data, particularly that from recorded individual in-depth interviews. This process involved word by word writing and translating of each interview from the language in which data was collected to English (language in which the study's report is presented). Following this process, the researcher identified and selected all data that related to already classified patterns and codes, (representing a particular view point or behaviour).

This involved classifying all of the talk that fits under the specific pattern, thought or opinion, and checking whether the data answers the research questions. The next step was to combine and catalogue related patterns and codes into sub-themes. Here, the word 'theme' was used as described by Taylor & Bogdan, (1989), as 'units derived from patterns such as conversation topics, vocabulary, recurring activities, meanings, feelings, or folk sayings and proverbs' on a particular subject of inquest. These themes and sub-themes were pieced together to form a comprehensive picture representing respondents' collective view points and experience on the particular research question. Leininger, (1985) argues that at this stage, the coherence of ideas rests with the researcher, based on a rigorous analysis of how different ideas or components of respondents' views fit together in a meaningful way when linked together.

In the case of this study, the researcher kept referring back to different issues reviewed in related literature, in order to gain information that would strengthen inferences on issues emerging from the study. Preliminary findings were constantly reviewed as part of fine-tuning the report, to ensure that issues were well articulated, and also that conclusions and recommendations on the subject matter were plausible. A draft report was submitted for external review and critique, after which corrections were made as per recommendations. The final report was finally submitted to the School of Development Studies, University of Kwazulu-Natal.

3.7 Limitations of the Study

The first limitation of this study is that by virtue of its methodology and techniques used during data collection and analysis, its results can not be generalized or inferred to other populations or places. Mays and Pope (2005) contends that the value and relevance of research studies is judged by the knowledge it adds, or by the extent to which findings can be generalized beyond the setting in which they were generated. However, these are not the only qualities for measuring relevance of studies; neither do all these conditions occur simultaneously all times in a study for it to pass the mark of credence and relevance. Key (1997) argues that other than considering these characteristics alone, the focus of an enquiry, its investigative methodology, objectives and nature of research questions, are direct parameters which could be used to measure the study's relevance and value.

In this study, other than seeking a representative sample of respondents, hence collecting information that is generalizable to other populations (as is common in quantitative studies), the goal of this investigation was to gather rich and detailed contextual data on the subject being investigated. As such, its design, sampling method and data collection techniques were all geared towards this cause. In such a scenario, issues of balanced representation of respondents' characteristics (which is one major pursuit when selecting sample for quantitative studies), and (consequently) high sample sizes, were in this study out of question. The results of this study therefore are only limited to the population groups interviewed and the study's geographical boundaries. In essence, the value and relevance of the study is in the depth and detail of the information uncovered from it, other than how generalizable or transferable its findings could be.

Another major set back in this study was that due to the sensitivity of the research focus, (HIV/AIDS and sexual behaviours) many people felt uncomfortable to talk about sexual issues in public, let alone with strangers (researchers). For instance, some respondents felt it was taboo to discuss such issues. Others argued that their religion does not permit them to talk about such issues, while some argued that they could not discuss such issues with youngsters who comprised the research team for this study. As such, respondents found it generally hard to freely express their views on the subject. Miners were in particular uncomfortable to explain how they quench their sexual drives, apart from having relations with sex workers, although it was understood that some engage in masturbation and homosexual activities (Campbell (2002).

A similar situation was noted among respondents in all other population groups (commercial sex workers, vendors), where they openly argued that issues of sex are private and can not be discussed openly. Although researchers produced a proof of ethical clearance for the study and made assurances of confidentiality, some respondents were generally cold on the subject. Such a scenario limited both the amount and depth of information yielded in such interviews. Another important and equally crucial factor related to stigma associated with the topic of study. On this aspect, there appeared to be a general feeling among respondents that those being interviewed were worse off in their sexual behaviours, and that the study was meant to establish whether they had HIV/AIDS or not.

Such a feeling was generally common among miners and taxi drivers, who during the interviews questioned the researchers why among other population groups in this community, they had been chosen for the interviews. This feeling again made some of them to withdraw when asked some questions that somehow pointed to what they do, or what their colleagues do, particularly on sexual behaviours and practices. In such situations, many of them coiled back and withdrew their participation. To overcome this problem, the researcher clarified the purpose and limits of the study, and assured respondents of confidentiality and value of their in-put in the study, prior to the study. This brought about some trust and confidence to respondents, some of whom even mentioned issues that were secretive, but crucial to the study. For instance, number of sexual partners they have, how often they have sex; how often they have it safe, and many other relevant issues. Such free-flow of information enhanced the depth and detail of the investigation.

Chapter 4 Reported risky sexual behaviours

4.1 Introduction and Overview

This study has found that some people in the community understudy engage in risky sexual behaviours which facilitate spread of sexually transmitted infections (STIs) including HIV/AIDS in this area. Respondents in all the 5 target groups (miners, commercial sex workers, vendors, taxi drivers and office workers) reported that there are people who have more than one sexual partner but engage in casual as well as unprotected sexual intercourse. Such behaviours take place in a complex sexual network involving various groups of people residing in this area. This sexual network is influenced by many different factors operating both at individual and group levels. This chapter reports about risky sexual behaviours among selected groups of people in this area. It also reports about factors believed to facilitate and influence occurrence of such behaviours among these people.

4.2 Observed risky sexual behaviours in Boksburg central mining community

As afore-mentioned, this study found that some groups of people in the study area engage in risky sexual behaviours, which spearhead spread of sexually transmitted infections (STIs) and HIV/AIDS. This finding confirms earlier arguments by Campbell, 2003; Moodie and Ndastche (1994), Hutchinson et al (2002) about risky sexual behaviours occurring in mining communities. Some of the risky sexual behaviours reported in this study include; non-use of condoms during sexual intercourse, casual sex, multiple sexual partnerships, commercial and transactional sex as well as traces of trans-generational sex.

4.2.1 Non use of condoms during sexual intercourse

Among the targeted five population group, non use of condoms during sexual intercourse was reported to be a common practice among miners, commercial sex workers, and taxi drivers. In one interview, a taxi driver reported as indicated in the excerpt below;

'I can say many of these guys are careless. They usually have sex without any form of protection like condoms. You know these girls here usually they want something and the guy just do not protect themselves so these girls are not safe..., guys meet these girls in the tavern and they are both drunk and irresponsible. They just do it without condoms'. (Taxi Driver, Cinderella Hostels in Boksburg)

Commenting about this behaviour among miners, a key informant at a miners' hostel in the area reported as indicated below;

"...You know every time when I see sick people here, it is usually sexually related and most of them die. So I don't really think that most of them do protect themselves when having sex, because they get these diseases; these sex related diseases, otherwise, why should they die...'? (Key informant interview – miners, Joe Slovo hostel, Reiger Park)

Although the respondent could not explain what these sex related diseases could be, a common opinion on this matter could be that the miners might have caught HIV or some STIs such as syphilis or ghonorreah.

4.2.2 Multiple sexual partnerships

It was also reported that in spite of not using condoms during their sexual encounters, some miners and taxi drivers had more than one sexual partner as one key informant explained;

'Actually many of them do not like the condom...he's got a wife at home, he doesn't obviously use a condom, he's got a girl friend here, whom he considers to be his wife or his second wife, and when he says he's leading a promiscuous life, it is if he has a third or Fourth person' (Key Informant, Far East Shaft, Boksburg)

In another interview, it was learnt that some miners argue that apart from having a wife, men need 'someone' who can treat them 'nicely', hence their having more than one sexual partner. From such views, it appears most of the miners and taxi drivers had poor perception about the risk of getting infected or they did not care about it at all.

4.2.3 Casual Sex

Casual sexual relations and intercourse was another risky behaviour reportedly common among respondents in this study. This practice was noted to be common among miners, vendors and even local men known to be excessive beer drinkers. Although miners were reported to be the worst group involved in risky sexual behaviours (such as the ones mentioned above), some respondents mentioned that other people doing business around Cinderella hostel were equally involved in such behaviours. However, in a separate interview with a food selling female vendor outside Cinderella hostel, it was reported that vendors and taxi drivers who patronize the hostel have on several occasions made moves towards females (doing business on the hostel) asking for sex. Many of them out rightly say that they just want to have casual sex, not a committed relationship.

'You know what happens here, when these men come to buy food from us, they tell us that if we open our thighs they are going to give us money. They make it clear that there is no love involved; it is just that they want to sleep with us. So some women go ahead and do it. That's what happens'.(Individual In-depth Interview, Female food vendor -Cinderella Hostel).

In another interview, a miner further explained that even them (miners) they do have such kind of sexual experiences not only with women doing business at the hostel, but also commercial sex workers at bars and hotels down town.

'...sometimes these guys visit Central Hotel in town, where they drink. There are girls that hang out there, guys do shit with these girls and go and sleep with them. I do not know whether they use condoms or not but sometimes when one is drunk, they do their thongs the fast way' (Miner, Individual In-depth Interview Cinderella Hoste)l

A crucial factor emerging from these excerpts is that most of these practices, particularly casual sexual intercourse and non-use of condoms have been commonly reported among those who drink beer excessively.

Some respondents argued that for miners, beer drinking and casual sex were almost an after work-routine activity. In another interview, it was mentioned that as they return from the drinking spree (especially at night), some miners bring women with them and have sex within the confines of buildings nearby the hostels.

'...they (miners) come out and cross here, if you were here during the night you would have seen them, most of them go and drink that side. Towards the night they cross this side going this way, cause even some of them want just to have a fast fuck, so they go behind that checkers store,...because there in the hostel they are not allowed to bring a lady'. (Miner, Individual In-depth Interview, Boksburg Central)

In an interview with a miner at another hostel, Joe Slovo , unprotected sex was directly linked to beer parties often held in the hostel during weekends. One respondent mentioned that during such times, commercial sex workers, local women, girls as well as other groups of people from within the residences surrounding miners' hostel get involved in the party. In such situations, excessive beer drinking and unprotected sexual intercourse occur, exposing people to HIV infections.

'...am sure there are others who got it (HIV) because of alcohol since yesterday was Saturday. I know there are other people who do sex on their sober senses, especially those who just look and think fresh, but most of the people are taken up by beauty, so they end up falling'. (Male Vendor, Cinderella Miners' Hostel, Boksburg)

4.2.4 Commercial sex

It was also reported that while on one hand the tavern (located just outside Cinderella hostel) provides entertainment to miners and other groups of people patronizing the hostel, it also provides an environment where commercial sex and transactional sex involving miners, taxi drivers, vendors and local women and young girls from within the neighbouring communities thrive.

In an interview with a taxi driver at a rank close to the hostel, it was mentioned that commercial sex workers patronize this place because they know that in most cases, people who do their business on this hostel (miners, vendors and taxi drivers) have money, as such their business would be successful.

'... most of these women just come here to get money from these men and drink with them. When you go to Central Hotel you will also find them. They don't hide it, some of them will tell you to see how they are sitting and how they are dressing, and people go there... they drink and have sex with them. They pay them'.(Miner - Individual In-depth Interview , Cinderella Hostel).

In another interview, a respondent further mentioned that some men do have sexual relationships with some local women or their daughters who do business around the hostel. Although the relationships may not be categorized as commercial in nature, where only money is exchanged for sexual favours, they are still transactional since in some instances, gifts are exchanged for sex.

'These young women drink and sleep with men here. The men give them money or things and that is how these women stay here. They meet and do their things behind the rank and in the tavern there, hee!' (Female Vendor, Cinderella Mines, Boksburg)

In another interview, a respondent further mentioned that Cinderella hostel has also become a place where not only commercial and transactional sex finds its market, but also trans-generational sex. In a study on cross-generational and transactional sex in Sub Saharan region Kurz and Luke (2002) found that financial reasons were the main motivation for girls to engage in sexual relations. In Swaziland, a study by McLean, (1995) found that 20 percent of girls aged 14 and older were sexually active because of financial reasons. In rural Tanzania, 52 percent of female primary school students and 10 percent of female secondary school students reported that money or presents was the reason for having sex (Matasha et al. 1998).

One interviewee in this study mentioned that trans-generational sex was as a common occurrence, where young girls and women from within residences neighbouring Cinderella hostel were reported to have sexual relations in exchange for money and gifts from miners and other men doing business at the hostel.

'You also have to know that people do like having sexual partners off their age. These old ladies (pointing to an older woman selling clothing nearby) like young men, and the young men like them because they have money. The young girls like old men and they call them sugar daddies'. (Miner, Cinderella Miners' Hostel, Boksburg)

From the above excerpt, it may as well be argued that as long as a female provide the needed sexual pleasure, miners will engage in such relationships with them irrespective of their age. On the other hand, it appears that so long as they get financial or material rewards, females also engage in sexual relationships with any man irrespective of their age and marital status. Such relationships could lead to HIV/AIDS or STIs transmission among the people involved.

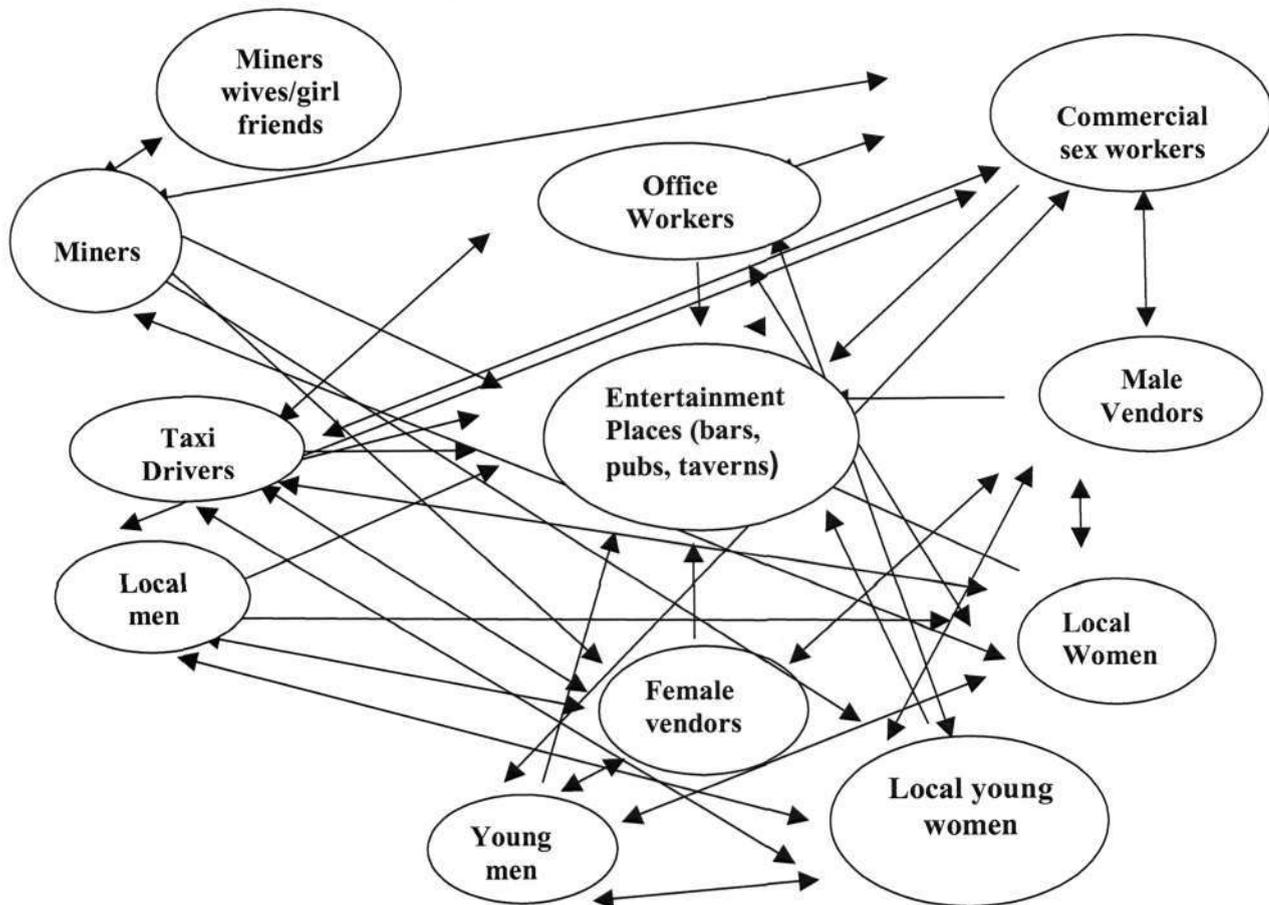
4.3 Sexual networks in Boksburg central mining community

A general picture emerging from this analysis is that there is a complex sexual network in which risky sexual behaviors occur among various groups of people residing within the vicinity of Cinderella miners' hostel. Singh et al (2004) argues that a sexual network portrays the sexual inter-relationships within a defined group of people that helps to study the spread of sexually transmitted infections (STIs) within the context of social interactions. In that respect, it supplies useful theoretical frameworks, methodologies and analytical techniques for traditional contact tracing by identifying specific network members for intervention (ibid).

Boiley et al. (2000) and Morris (1997) further explains that a sexual network study provides insights into disease transmission patterns, helps identify risk factors for disease acquisition, and also helps create targeted prevention strategies. Such knowledge also provides a wider focus for understanding risk for different community members and how individuals can be affected by the behavior of others in the same network.

In an evaluation study of an intervention to reduce STI and HIV transmission in the mining community of Carletonville, Ndlovu et al (2002) reports that the role of sexual networks in Carletonville gathered additional information with which to better understand high levels of STIs and HIV that were detected, three years after the initiation of the project. The detected sexual networks showed relationships between sex workers, mine workers, males, and females in the community. In the case of the current study, a sexual network map linked miners, commercial sex workers, male and female vendors, taxi drivers, office workers as well as local men, women, boys and girls as involved in a complex intertwined sexual interrelationship. Refer to the figure below;

Figure 2 A sexual network map for selected population groups in the mining community of Boksburg Town Central



The illustration above shows that sexual interaction among members of this community does not have a consistent and fixed pattern, where only one group interacts with another. As can be observed, miners have sexual relationships with commercial sex workers, female vendors, local women and girls residing in the community while maintaining links with their wives and committed girl friends (for those not married) back at home. The same commercial sex workers who interact with miners do have links with other population groups such as vendors, taxi drivers, office workers and young men from within the neighbouring communities. Similarly, local women and girls have sexual interactions with vendors, taxi drivers, and young men from the community and office workers. Such complex sexual interactions as above were reported common in entertainment hotspots such as the tavern at Cinderella hostel, and Central Hotel in Boksburg town, where such groups of people often meet.

One crucial implication of this type of sexual network is that in a complex sexual network as illustrated above, it would be easy to transmit HIV/AIDS and other sexually transmitted infections, since if one person in this group happens to have infection, it might easily be transmitted to all people involved in this network. Furthermore, as complex as this network appears to be, any infection among people involved would certainly have ripple effects to other people who are not directly involved in such a network (those not living in this community), but relate with people involved. For instance, if a miner gets infected, the chance of his wife or girl friend getting infected is high. So too are spouses of local members of the community involved in such a network. As such, such a network poses a serious challenge in the design and implementation of target specific interventions, in view of constraints in time and resources, amid a fast growing and devastating epidemic such as HIV/AIDS.

4.4 Factors influencing occurrence of risky sexual behaviours in Mining Communities

This study has found that there are different factors which influence occurrence of risky sexual behaviours among people residing in this community. Such factors are influenced by day to day experiences which ultimately shape peoples' perceptions, values, judgments and decisions regarding sex and sexual behaviours.

Hallman (2004) argues that young peoples' (particularly young women's) situations are characterized by economic and social disadvantages that in many cases increase their odds of exchanging sex for money or goods, and raises the likelihood to experience coerced sex. In that respect, low socio-economic status among women increase the odds of multiple sexual partnerships. It also lowers chances for secondary abstinence, age at sexual debut, condom use, and communication with their sexual partners on sensitive sexual issues affecting their sexuality (Ibid).

Turning to mining communities and particularly miners, Meekers (1997) contends that their work and social environment influences them to engage in high-risk sexual behaviors. For instance in many cases, mine labourers are migrants from different places, particularly rural areas within South Africa and other neighbouring countries (like Lesotho and Mozambique). As such, they experience long absences from their families, obviously disrupting long established and stable familial ties and relationships. Such prolonged separations from spouses (wives and girl friends) lure them to have sexual relationships with other women from within the community, particularly commercial sex workers. Jochelson, Mothibeli, and Leger (1991) further explain that mining attracts more male than female mobility. As such, in many instances, mining communities experience a sex imbalance, where the proportion of men is greater than that of women. In that situation, miners experience panic to have stable sexual relationships with local women from within the communities, and consequently resorting to sexual relationships with commercial sex workers, local women and girls.

This study also found similar factors influencing miners to engage in risky sexual behaviours. However, respondents further mentioned factors such as migration, high incidences of alcoholism, lack of prudence in the use of money, and complacent life styles as equally crucial influences in the occurrence of risky sexual behaviours. For other groups such as commercial sex workers, local women and girls from within the community, respondents mentioned desire for more money, fashion, special favours or treatment from influential men (rich men, businessmen, bosses and supervisors) and peer pressure, as other factors encouraging such people to engage in certain risky sexual behaviours.

4.4.1 Migration

Although it was generally observed that different people have different factors which influence them to engage in risky sexual behaviours, there were other factors which cut across the majority of residents in this community. Such factors include; insufficient and inaccessible HIV/AIDS information, dislike of condoms, belief that HIV can be cured, witchcraft, alcohol and drug abuse. However, this finding does not overshadow specific factors reportedly significant when explaining occurrence of risky sexual behaviours among other groups of people, such as commercial sex workers and miners. For instance, among miners, staying away from wives and committed girl friends (as they serve contracts at the mines) pushes many of them to quench their sexual desires with commercial sex workers, as long as they (miners) have money to pay for sex. A key informant reported that in many circumstances, miners found themselves overcome by sexual desires when in contact with commercial sex workers, usually in taverns and bars where they relax after a long working day.

'Sometimes you know we have some hostels up there, so people who stay in those hostels come and drink here, especially during weekends. They come here and have drinks, after that, may be at night, they pick women with them. You know that most of them come from far places like Mozambique, and they leave their wives at home. So they come here and pick these women'. (Key Informant Interview, Bar Manager Boksburg Town).

Situations as above plunges many miners into the risk of catching STIs and HIV/AIDS, which they spread to other people with whom they have sexual links, such as their wives back at home.

4.4.2 Excessive beer drinking

Apart from separation from spouses or girl friends back at home, it was also reported that alcohol and drug abuse plays an equally bigger role in influencing miners to engage in risky sexual behaviours. In one interview, a respondent argued that mining in itself is a strenuous and life-risking activity, such that most men who join this type of job does so as a last and only option from which to earn a living.

The interviewee maintained that miners experience a lot of stress as a result of being separated from their usual life back at home, and suddenly confined in single sex hostel and exposed to tough and dangerous work situations (underground), for relatively low pay. As Campbell (1997) mentions, such situations continually cause stress and lack of control over miners' day to day experiences such that for many of them, beer drinking and sex offers relief from such hardships. Although in a miner's perspective beer drinking is portrayed in a positive sense as a stress killer, respondents noted that it is also a catalyst of certain risky sexual behaviours, as explained in the excerpt below;

'You know these guys, sometimes they like ladies when they are drunk but when they are not, they don't do such things. Because they get drunk they lose their heads and just want fun, they don't care how or with whom'. (Individual In-depth interview, Cinderella Miners' Hostel, Boksburg)

In this study, it was not only miners who were reported to engage in risky sexual behaviours under the influence of alcohol. Taxi drivers and vendors doing business just outside Cinderella miners' hostel also reported that most of their colleagues do have sexual relations with commercial sex workers patronising the tavern at the hostel. It was mentioned that oftentimes taxi drivers have money readily availability to them, such that they become a target for women doing business around the hostel (female vendors) and commercial sex workers. However, respondents argued that this factor aside, many of the Taxi drivers engage in risky sexual behaviours under the influence of alcohol. In many instances, as they (Taxi drivers) wait to load their taxis, they go into the tavern (at the hostel) to have a bottle of beer or two. When they get drunk they engage in sex with commercial sex workers just behind the tavern or rent a room in town, where they briefly have sex with such women, as reported in the excerpt below;

'...like I said, guys do different things as they wait for their turn here. Others just stay in their Taxis, others just go and eat in those small restaurants, but others just go and drink in the tavern...you know Taxi drivers like women so much... They have so many girls, including those in the bar. They meet girls there and get drunk. They just do it without condoms, they are irresponsible'. (Individual In-depth Interview, Taxi Driver, Cinderella Hostel)

In another interview with a vendor food selling outside the hostel, it was also mentioned that beer drinking does pose a significant influence not only among miners, but everyone who drinks at Cinderella tavern.

'People here start drinking from monday up until Sunday. So when they get drunk they want to have sex'. (Individual In-depth Interview, Food Vendor, Cinderella Hostel, Boksburg)

Although some respondents argued that it young people (who mostly were vendors, taxi drivers and even some miners) who loses their minds and dive for women when drunk, another interviewee argued that everybody at the hostel is involved;

'... it is not only young people who do such things, even married older men, especially those who drink and play with these women found in taverns. Perhaps because they do not love their wives or may be because they drink; because when somebody drinks they do crazy things which they do not normally do'. (Individual In-depth Interview, Office worker, Boskburg Town)

4.4.3 Poor knowledge and information on HIV/AIDS issues

Although many respondents in this study felt that there is high awareness about HIV/AIDS or STI issues among people in this area, there still were indications that not many people believe whatever they hear about it. In one interview a respondent mentioned that there are others who do not believe that HIV/AIDS exists. Others even argued that if at all it exists, then it is in urban other than rural areas. Such people also hold as gospel truth, some myths and misconceptions related to STIs and HIV/AIDS which circulate in their areas, most of which perpetrate STIs and HIV/AIDS. In this study, some people were reported to believe that what may be thought to be HIV/AIDS, is witchcraft, while others argued that AIDS can be cured by traditional medicine like any other ordinary disease, as explained by a key respondent in this excerpt;

'You remember that when it comes to the mining industry most of the people that are employed are people from rural areas or other countries, or the homelands. So you find that when they come back from that side, they still have the mentality that HIV or AIDS is caused by witchcraft. They believe that if HIV/AIDS is a disease it can be cured by traditional doctors like any other disease. As such, you can still engage in a promiscuous life ...'
(Key Informant, EPRM, Boksburg)

Views and perceptions as expressed above makes many of them get caught up in behaviours and practices that expose them to the risk of HIV/AIDS. Another respondent explained that it is mostly traditional healers or doctors, who reinforce and propagate such information; especially whenever a person seeks treatment for an infection that others suspect could be as a result of HIV infection. The respondent maintained that traditional doctors argue that AIDS is like any other disease, which they could cure. It was further mentioned that people (miners) who visit traditional doctors are in most cases adamant to change their sexual behaviours, for instance using condoms when having sexual intercourse.

With such adamancy some miners even argue that if AIDS is spread through sexual intercourse, then just like all other diseases spread through sex (like gonorrhoea and syphilis), it should have some cure. Others even testify that they once got STIs and when they took some herbs from traditional healers, they got cured. As such, HIV/AIDS can as well be cured. Such testimonies were in most cases made by fellow miners who are regarded as well informed in such issues, particularly those that have stayed long on the mines. This mis-information influenced other junior miners to engage in risky sexual behaviours even if they were aware about possible risks that might arise.

In another interview, a respondent reported that it is not only miners who happen to be ignorant concerning HIV/AIDS issues. This respondent argued that even people residing in urban areas, (where HIV/AIDS information is expected to be readily available) do not know much about it. The interviewee opined that there are many factors which could be attributed to this situation, one of which is how accessible the information is to different groups of people residing in this community.

For instance, if HIV/AIDS information is in written materials and in a more technical form, it is accessible to literate and technical people only. If it is relayed through TV and radio drama, such information is limited to those with TVs and radios. If it is relayed through health centers, awareness campaigns, or work place, it becomes available only to those who visit such places and attend such services, while the majority is unable to get it.

'You know most people like those who stay in the hostels come from rural areas, and you know rural people they don't really believe in these things...Besides, not all people read news papers or watch TV, its only the people in towns not in the villages, so most people don't know. Most of them hear about these things when they go to the clinic, when they have STIs, that's when they are told about it and advised'.(Key Informant Interview -Bar manager in Boksburg Central).

4.4.4 Complacency and lack of seriousness

In another interview an office worker from within Boksburg town argued that although it may be perceived that people in this town were already aware about HIV/AIDS, many of them are complacent in their sexual behaviours. The respondent argued that particularly in urban areas, people have normalized the HIV/AIDS pandemic such that they do not take the issue seriously.

'You have to know that there are some people who do not know much about HIV/AIDS. Of course many of them know that there is HIV/AIDS, but you see people just don't want to take it seriously' (Office Worker, Checkers Superstore, Boksburg)

This respondent further opined that this lack of seriousness is influenced by many factors among different groups of people. For instance, some men fail to adjust to the changing realities as regards their sexual lives in view of sexually transmitted diseases including HIV/AIDS. The respondent argued that most men who engage in multiple sexual partnerships or those who do not use condoms during sexual intercourse were born way back in the past, and they cherish olden views some of which influence them to believe that sexual pleasure is achieved with penetrative and unprotected sex only, or that STIs including HIV/AIDS were curable.

As a result of nursing such beliefs, it becomes an uphill battle for them to believe that times have changed and they need to check their risky sexual behaviours, especially in the face of an incurable HIV/AIDS pandemic.

' ... I also think that most men who practice these things, like those who don't like condoms grew up in the era when everything was fine, there were no infections like HIV and that is why they continue doing these things ...it is difficult for them to change now'. (Individual in-depth interview, Office worker, Boksburg town)

Such scenario as reported in the above excerpt has resulted into many men leading complacent lifestyles where among other ills, they have many sexual partners; engage in casual sex, and have unprotected sex. In another interview, a respondent mentioned that with respect to miners, many of the old men who argue that AIDS does not exist or is curable, were known to be adamant when confronted with any messages that rebuke them on risky sexual behaviours. Some of them used sayings and arguments common among miners like the saying that; 'a man is known by how many animals he's killed during hunting', meaning that a man is respected among his peers if he boasts of having slept with many women. Such men were also reported to place more value on penetrative sex, unprotected or 'flesh to flesh' sex, arguing that it offers maximum sexual pleasure. According to this respondents' opinion, it is such beliefs which strengthen complacency, carelessness and a general lack of control in most men's sexual behaviours.

'Some tell you that they slept with a woman without a condom and when you ask them why, they say there was no time for a condom. They say that whatever happens is fate, because even if you love your woman, they cheat as well so you just have to trust yourself...' (Individual In-depth Interview, Miner, Cinderella Hostel, Boksburg).

In another interview, a respondent argued that some people make all sorts of unfounded arguments based on wrong information. For instance, some say condoms do not fit them, while others complain that they take long to ejaculate if they use condoms. Some even argued that condoms contain worms which carry the HIV itself.

'There are those that think that using condoms is actually going to make them sick; there are some who say that a condom does not fit them; there are some that say that a condom has got worms...so they can not use them' (Key Informant Interview, ERMP, Boksburg)

Similar views as in the above excerpt were reported among Taxi drivers and vendors where in a related interview, a respondent mentioned that people often argue that the fluid found in condoms is HIV itself. This respondent further mentioned that many of his colleagues argue that condoms are a political move by white people to reduce the population of black people in South Africa, and that is why they are offered free.

'...some say condoms themselves contain the disease itself and that is why they are distributed free. They say it is the whites who put some things in the condoms so that when black people use them they should get it (HIV) and spread it. So people refuse to use them'. (Individual In-depth Interview, Vendor Cinderella Hostel, Boksburg)

Misconceptions as above facilitate occurrence of risky sexual behaviours among people with such views, further scaling up transmission of HIV/AIDS in the area.

4.4.5 Unequal power relations on sexual decisions

Moodie and Ndastche (1994) argue that gender dynamics have often played a significant role on occurrence of risky sexual behaviours and rapid HIV/AIDS and STI incidences among many people in Africa. Commenting on the issue, a female vendor respondent in this study argued that in most cases, it is men who like having more than one sexual partner, and yet they do not want to use condoms also, even against the will of their sexual partner. The respondent maintained that for many females, it not necessarily their will not to use condoms during sex intercourse, but rather pressure from their partners.

'... I think males act as if they have one sexual partner, but they have many. With the females, when you want to use condoms, they say you don't trust them, so you end up doing it without condoms'. (Individual In-depth interview- Female Vendor outside Cinderella Miners Hostel ,Boksburg)

Among commercial sex workers, the decision to have safe sex is in many situations predominantly influenced by gender dynamics and socio-economic factors. In a study on challenges to condom use among commercial sex workers in Bukit Bintang, Kuala Lumpur, Khalib (2000) found that sex workers of 6 brothels chose not to use condoms in order to increase chances for clients and to remain competitive. In the current study, commercial sex workers argued that they often opt for unprotected sex other than protected one, because it attracts more money. The respondent further argued that in many situations, it is the clients who dictate the rules of 'business'.

'I don't really know whether these girls fuck without condoms or not. I can not go there to find out if they fuck with condoms or not, but I think some do fuck without condoms, ya! Most of them don't fuck with condoms, because if a man wants it without condoms, what do you think you can you do'? (Individual in-depth interview, commercial sex worker, Central Hotel, Boksburg town).

This report concurs with findings of an earlier study by Kurz and Luke (2002) on transactional sex and risky sexual behaviours. The two found that in sexual relationships where gifts or money are involved, the female partner becomes less able to control or negotiate for any options for safer sex. Such a situation increases the risk of catching and spreading STIs and HIV/AIDS infections among commercial sex workers and their clients, as well as everybody involved in the sexual network of the community.

4.4.6 Peer pressure and modernized life styles

CHGE (2003) argues that in many countries, women and girls who engage in commercial or transactional sex are primarily driven by poverty and economic dislocation, either at individual or family/household level. These factors also hold for single women who are the main source of support for their children and relatives. Moodie and Ndastche (1994) argues that in the past, commercial sex workers frequenting miners' hostels and the surrounding entertainment places mainly comprised of women and girls originating from rural the homelands, and Lesotho.

Many of such women were driven by poverty and economic insecurity following their husbands' joining and establishing themselves with other women at the mines. However, the current crop of commercial sex workers generally comprises of young women probably from townships and residences surrounding mining centers. None of the interviewed commercial sex workers mentioned that they ventured into this business because of poverty. For these respondents rather it is peer pressure, desire for fashion, modernity and exercise of individual rights that influenced them into commercial sex work.

'One day I met one of my friends, she never told me that she was doing business (Commercial Sex Work),... I asked her because every time she came wearing nice clothes, and also with money, doing ...then the other day, it was Friday, I just saw her dressing nicely, so I told her I know everything because the other girl told me she was doing business, and she said, yes, because I want money. I said ooh!. Then one day I was also broke, I wanted money, so I just went to a club and that was it...' (Individual In-depth Interview- Central Hotel Commercial Sex Worker, Boksburg).

Asked why she does commercial sex work in spite of its generally known risks, another 23 year single respondent explained that to her sex is an adventure and if one is to enjoy it, they ought to be adventurous as well. Such type of adventure is only possible when one experience sexual pleasure with many people and it is only through commercial sex work that one gets in touch with many different men. She firmly explained that unlike others, to her sex is more of fun than a way of solving financial hardships.

'...I come from a rich family and I don't miss anything in my life, but I just chose this job because to me, sex is an adventure. If you are to enjoy it, you have to do it with different people. I like it, I enjoy it and I don't have any regrets. I am not poor,t I just like this job'.(Individual In-depth Interview, -Commercial Sex Worker, Central Hotel, Boksburg)

Though desire for money doesn't seem to be a crucial influence for many girls to engage in commercial sex work, peer pressure appears to be once crucial factor.

'I can't ask my mum for everything. I am old enough, she's my mum I know but I don't have to trouble her. I can ask her to give me money but not everyday. Like today, this is month end, I know she can give me, but that money is too small, you know we girls, girls like nice things. You have to wear nice clothes, nice shoes you see? Anything, even hair, it has to be nice hair, and other things, you see my hair is not like the other girls outside, so.... My problem is that I don't want to do this everyday. I just come here sometimes like when I am broke. When I want to buy something, when I see something like it, I just come here. I just get the money and then I go...'. (Individual In-depth Interview- Central Hotel Commercial Sex Worker, Boksburg).

Chaterji et al, (2004) contends that high rates of sexual partner change which is characteristic of commercial sex work generally accounts for almost 75% of HIV/AIDS infections world over. This means that commercial sex workers are seriously at risk of STI/HIV/AIDS infections, and so are their clients. Such a situation entails that areas where this trade is firmly established are likely to have more HIV/AIDS infections. Such a situation worsens the HIV/AIDS particularly in areas where sexual networks are as complex as the one being reported in this study.

Despite all reasons given for venturing into this profession, another commercial sex worker conceded that as a way of getting their desires, commercial sex work is not a good option. Surprising enough on this point, the interviewee did not mention things like sexually transmitted infections, or HIV/AIDS infections as possible reasons why they felt commercial sex work is bad. According to her, this trade is suitable for people who are very poor or have no one to support them in anyway, such as orphaned girls, divorced, widowed or jobless women. In her opinion, when sex is commercialized or transacted as is the case with many vulnerable women, it loses its core value and robs a person off their dignity.

'... You know I don't like coming here because its not nice, yaaa, it's not nice. You see this thing is for someone who' got problems, real problems aa!, like someone who's got no family, no one can help her, you see, yes. To fuck with a guy you don't love aai! It's not nice. When you have sex with your boy friend or man, you can make love with that boy or that man. But here you cannot make that love, you are busy, you just want money, then you can fuck fuck fuck and you go...' (Individual In-depth Interview- Central Hotel Commercial Sex Worker, Boksburg)

However sincere and real the remarks made above could be, it still remains clear that some commercial sex workers do not really take seriously the risk associated with this behaviour or trade. It is argued here that where one does not have a conscientized sense of personal risk or danger associated with certain behavioural practices, it is difficult to motivate them to change or make them see the positive returns associated with changing that behaviour. However, although the case in point does paste a gloomy picture as regards the possibility of behaviour change becoming a reality (among such groups of people) in view of STIs and HIV/AIDS, views presented from the excerpt above provide a ray of hope as regards how best people in this group could be motivated to change their behaviours.

In essence, the fact that some commercial sex workers see this job as risking their dignity does provide enough basis from which effective behaviour change communication could be framed. For instance, other than presenting a gloomy and threatening picture as regards health effects of commercial sex work, communicators might have to focus their attention to making people value their personal sense of worth, and making them reflect on it before committing themselves to this behaviour. In fact, with the fact that due to their trade, most commercial sex workers are ostracized and segregated by society, messages that can foster self valuing and respect could be vital in fostering behaviour change.

4.4.6 Lack of Maturity in making sexual decisions

Among miners, it was reported that some of them fail to make right decisions when it comes to issues to do with sex. One interviewee in this study argued that today's mining is more patronised by immature young boys than elderly responsible men as was the case in the past.

This respondent argued that since most of the miners are young and unmarried they generally have no self control in every facet of their lives. For instance, although miners were generally reported to be excessive beer drinkers, it is mostly the young ones who patronized most drinking places in Boksburg town. In such places, many of them are reported to have sexual encounters with commercial sex workers and local women, a situation that exposes them to great risk of HIV/AIDS, as can be noted in the view of a respondent below;

'You see these days we as old people see a great change compared to our times. Before we could stay until our contracts are finished without indulging in sexual intercourse, but these days, young people behave differently from us. They do not know how to handle money and they do not want to listen to adults. They say that they are exercising their rights. Sex is their big priority. They do not have control. There are girls from the surrounding townships who come here, they buy those girls and have sex with them'. (Individual In-depth Interview with a miner, Cinderella Hostel, Boksburg)

Such behaviours as reported in the above excerpt exposes many young miners into the risk of contracting STIs including HIV/AIDS, which is further transmitted to their partners in the community and back home.

4.4.8 Absence of role models

In another interview, a respondent argued that young people do not have positive role models from whom they can emulate good manners and behaviours. This respondent argued that young people get confused when they hear or see some influential figures in the community or on TVs and radios confessing being HIV positive, advising people to abstain only because they are in such situations. This respondent argued when questioned about their sexual life styles and behaviours, young people often argue as indicated below;

"...they say even high profile people who talks about AIDS also have it, so how can they listen to such people. They say if high profile people have it, they might as well just have it, who are they not to have it?"(Male Vendor, Cinderella Miners Hostel, Boksburg)

Such a scenario entails that though such groups of people might be aware of the possible risks associated with risky sexual behaviours and make a decision to change, their self esteem might not be strong enough to drive them into adopting better sexual behaviours, so as to avoid contracting infections. As a result, such people continue with their risky sexual behaviours putting their lives and those of their partners at risk of infections.

This chapter has discussed sexual behaviours of selected groups of people living in communities surrounding Cinderella miners' hostel in Boksburg central, and factors influencing different groups of people residing or working in this area to engage in such behaviours. It has generally been observed that there is a complex sexual network that involves miners, commercial sex workers, female and male vendors, local men, women and girls, taxi drivers and office workers (white collar) people. Among other risky behaviours, non-use of condoms, commercial sex, transactional as well as trans-generational sexual intercourse, casual sex, unprotected sex and multiple sexual partners are some of the behaviours reported common in this community. It has also been noted that among other factors, inadequate and proper knowledge on STIs and HIV/AIDS, myths and misconceptions propagated by traditional healers, beer drinking, gender and socio-economic dynamics, modernity, peer pressure and migration are some of the factors influencing many people to engage in risky sexual behaviours.

It is therefore argued in this report that such a myriad influencing factors, coupled with a complex sexual network involving different groups of people residing in this community pose a serious challenge in the design and implementation of audience specific and effective STIs and HIV/AIDS prevention programs. This challenge is further compounded by the fact that although there are other cross-cutting factors influencing occurrence of risky sexual behaviours, each group has different factors influencing their involvement in this sexual network. Such factors are bound to affect how each group of people in this community, respond to STI and HIV/AIDS prevention interventions, and the overall efforts to facilitate sexual behaviour change among members of this community.

In essence, if behaviour change efforts are to be effective, there is need for a careful exploration and analysis of factors influencing each group of people to engage in risky sexual behaviours and situations which provide recipe for such behaviours in order to effectively address them.

Chapter 5 How selected population groups in Boksburg mining community respond to HIV/AIDS prevention/behaviour change activities

5.1 Introduction and overview

Meekers (1997) argues that mining constitutes a vital part of South Africa's economy, generating approximately 50 percent of all export earnings and 20 percent of the gross domestic product (GDP). As such, preventing the spread of STIs and HIV/AIDS in mining communities has been a priority for government and the private sector (*ibid*). This chapter reports about HIV/AIDS/STI prevention activities implemented in the mining community under study, and how people respond to these activities. The chapter comprises 4 sections. Section 5.1 provides background information and overview. Section 5.2 discusses efforts the South African government has undertaken in an attempt to deal with the HIV/AIDS pandemic in the mining sector. Section 5.3 outlines isolated initiatives taken by private sector organisations (particularly mining companies) and local communities, in their attempt to prevent the spread of HIV/AIDS among employees and local community members. Section 5.4 reports about how people in the community under study respond to HIV/AIDS prevention or behaviour change activities to which they have been exposed.

5.2 Government initiatives on HIV/AIDS prevention in mining sector

In a bid to prevent the spread of HIV/AIDS infections in the mining sector, the South Africa government adopted broad based policy and programmatic initiatives which include legislation to guide implementation of awareness campaigns; voluntary counseling and testing (VCT) services, treatment of HIV/AIDS induced infections (opportunistic infections) and administration of anti-retroviral treatment to infected people (IOM, 2003). In 1998, the governments' white paper on mining and minerals outlined the need to develop an HIV/AIDS policy for the mining sector (IOM, 2003). The policy addresses issues such as migrant labour, miners' housing and living conditions and the respective responsibilities of government and employers in addressing miners' problems in relation to HIV/AIDS (*Ibid*).

The paper further emphasize protection of human and labour rights, and a range of tenure types for workers, such as rental accommodation, home ownership and social housing. Particular focuses is accorded to changes in housing options to include both single and family accommodation, accommodation in nearby settlements where feasible, and accommodation in mineworkers' home areas (*ibid*). Other critical issues highlighted in the paper include the need to address migrant labour, disintegration of families, citizenship, suitable living conditions, and remuneration levels. Of particular emphasis was the issue that the principle of choice for mineworkers from a wide range of flexible housing options should apply; where hostels currently available in mines should be converted steadily into family and single units for mine workers without families or who choose not to live with their families.

The paper maintained that provision of family housing should include access to community and education services and facilities; and each mine should, in conjunction with representative trade unions, be required to draw up a five-year plan for the improvement of living conditions for workers, incorporating specific targets (*ibid*). It also called for democratization of management hostels so that residents participate jointly with mine management in all areas of decision-making around the running of the hostels.

Trade unions have also taken positive steps to refine their agenda and policy objectives in view of escalating prevalence of HIV/AIDS in mining communities. The South African national union of mineworkers (NUM) established an HIV/AIDS policy which among other pertinent issues addresses the problem of single-sex housing on the mines (IOM, 2003). This policy was created in line with other legislative instruments such as South African constitution, mine health and safety act, labour relations act, employment equity Act and the basic conditions of employment act, taking into account the rights of workers. On the whole, the policy calls for management of the mines to be committed to providing family housing and facilities for visiting wives and other members, as well as humane hostel management.

5.3 Private sector initiatives

Several private sector organizations have also joined the fight against HIV/AIDS prevention and behaviour change interventions; targeting different areas feared to cripple the success of the mining sector. Lonmin Platinum in Rustenburg built a family housing in an effort to stem the spread of HIV and nurture a more stable workforce. Emphasis was on replacing crowded, all-male accommodation with low-cost family housing, by building new houses, converting old hostels into family dwellings and offering financial stipends to miners who live off company property and wish to have their families present (IOM, 2003).

AngloGold, another mining franchise operating in the country, engaged in provision of on site STI treatment service amongst other health care services. The company introduced a clinic and wellness centre, where treatment of opportunistic infections and provision of anti-retrovirals to the workforce is done. It also consented to a policy on HIV/AIDS in the workplace with various trade unions (ibid). The policy agreement recognizes the combined role of all stakeholders in combating HIV/AIDS and it supports an approach that includes prevention and care. It also makes provision for counseling, awareness, education, testing and disclosure, and highlights the need to address housing issues (IOM, 2003). Goldfields (another mining company) established an HIV/AIDS in the Workplace Policy as early as December 2000. Although this policy resembled that of Anglo Gold, it went further to emphasize the need for activities and programmes that will focus not only on migrant workers but also their families and communities. Its three-pronged approach included education, home-based care activities and counseling (IOM, 2003).

Erbelding (2000) reports about another project called Lesidi HIV/AIDS prevention project, implemented in a mining community called Virginia in the Free- State province. It was initiated and implemented through collaboration of Harmony Gold Mining Company (Ltd) Goldfields (Ltd) Joel Mine, the local branch of the National Union of Mineworkers and the local, state, and national health departments. Among other activities, the project provided diagnosis and treatment of STIs at no cost to miners and their female sexual contacts (Policy Project, USAID, 2001).

Erbelding (2000) explains that prior to its initiation; women who provided sexual services to the miners had essentially no access to healthcare, though miners had access as part of their employment benefits. Its interventions consisted of an outreach peer education program to CSWs which offered education regarding services available, prevention advice on condom use, monthly examination for STDs along with syphilis screening. At the end of project, it was found that STI and HIV/AIDS infections were reduced and the targeted people adopted safer sexual practices. For instance, there was also an increase in self-reported rates of condom use among sex workers. Although the intervention focused only on the CSWs and not on the miners, there was a 4 percent decline in the number of urethritis episodes diagnosed in miners in the company clinics and an 80 percent decline in genital ulcer episodes. A statistical modeling conducted towards the end of the project predicted that the intervention averted 41 HIV infections in the 400 sex workers treated, and 200 HIV infections in the 4,000 miners within the Lesidi community (Erbelding, 2000).

The few cases discussed above shows that significant efforts have been taken to reverse the HIV/AIDS and STIs prevalence through implementation of various programs and activities in mining communities within South Africa. The following section reports about HIV/AIDS or behaviour change activities that have taken place in the area understudy.

5.4 HIV/AIDS prevention activities in a selected mining community within Boksburg

In the current study, HIV/AIDS prevention activities were reported at the Far East shaft of the East Rand Mines Properties (ERMP) limited, a gold mining company located at the east of Boksburg town. In an interview with the company's health and wellness coordinator, it was noted that apart from providing general curative services, the mine's clinic implements an HIV/AIDS prevention and sexual behaviour change project, whose goal is to reduce occurrence of HIV/AIDS and sexually transmitted infections (STIs) among its employees. Although the project targets the entire company's labour force, underground labourers (miners) are the prime target. This is the case in view of the realization that most of the workers in this category were noted to frequent STI cases than other categories of the workforce.

Activities in this project include; HIV/AIDS and sexual reproductive health counseling, voluntary counseling and testing (VCT) for HIV and provision of information, education and communication (IEC) sessions and materials on general hygiene and sexual health. Although the activities are provided at scheduled intervals; weekly, monthly or quarterly, other activities such as counseling, treatment of opportunistic infections and referral of patients to other support services are done alongside general curative services, as reported in this excerpt;

'...when it comes to the clinic, cause you can see the clinic is packed up now, its full, that's when we get time to give health education, and also when somebody comes for consultation, you do not only focus on the sickness the person is coming for, okay, you also want the primary health care, you do the health education at the same time. There are those that you see that they came for counseling, at the same time during primary health (general curative services) you have to give the counseling'. (Wellness Coordinator, ERMP-Boksburg)

To ensure effective implementation, the services are provided in collaboration with other institutions involved in health care and HIV/AIDS prevention programs within Boksburg. These include the government hospital (Boksburg municipal hospital) religious organizations and hospices within the town. Through collaboration with these institutions, the clinic gets various kinds of support services which include free condoms, information, education and communication (IEC) materials, counseling, STI treatment, VCT and ARV treatment.

Apart from activities initiated by the company, there are others which are implemented as part of commemorating specific events, such as the World AIDS day on 1st December, TB day and others. These events are held in collaboration with the national union of mine workers (Far East shaft members) the mine's clinic, local municipal health office and NGOs dealing with HIV/AIDS from within and outside Boksburg. It was mentioned that during such occasions, miners are released from work early so that they attend the events, right in their hostels. Some of the activities conducted to mark this day include health talks, debates on HIV/AIDS and related issues which are facilitated by experts from local municipal hospital and NGOs from within and outside the town.

It was reported that on this occasion, miners seize the opportunity to ask questions on various HIV/AIDS related issues, particularly how HIV/AIDS is spread, treatment of HIV/AIDS induced illnesses, and controversies surrounding its cure. In addition, drama performances, songs, and comedies are performed, focusing on issues relating to STIs and HIV/AIDS, as a way of disseminating information while entertaining participants. Written materials such as leaflets and pamphlets are also distributed to participants for them to know various STIs /HIV/AIDS issues.

Apart from activities taking place at the mine (Far East shaft) another HIV/AIDS program was reported at a local community called Joe Slovo, located near ERMP's Cinderella miners' hostels. Unlike activities at the Far East mine, the project is a community based initiative introduced and implemented by local members of the community through support from an international organization. Pholong'o community based HIV/AIDS prevention project commenced its operations in 2005/06, primarily targeting terminally ill people residing in another hostel located within the community and the neighbouring squatter settlement behind it. Contrary to the project at the Far East shaft, this initiative targets occupants of the hostel (miners and construction workers) the squatter settlement behind it, and local members of Joe slovo community.

This initiative was introduced as a response to increasing number of people suffering from HIV /AIDS induced infections such as tuberculosis and pneumonia from within the community, particularly the hostel and squatter settlement. The primary objective was to assist terminally ill people in accessing and administering treatment for their ailments, as well as preventing spread of HIV/AIDS and Tuberculosis among occupants of the hostel, the adjacent squatter shelters and the entire Joe Slovo community. Although the project is sorely run by community volunteers, there are health personnel from the nearby Reigerpark township hospital, who provides technical and resource support to the project. Main services provided through this initiative include door to door visits to provide ARVs and Tuberculosis drugs to terminally ill people, HIV/AIDS counseling, and condoms distribution to men in the hostels, residents of the squatter camps and local community members. The organization also refers people to the nearby hospital, for TB and HIV/AIDS tests.

These services are conducted by trained community based health service assistants who run the home based care centre. Reigerpark township hospital and NGOs from within Boksburg town as well as Johannesburg, provide support to the project in form of IEC materials for STIs and HIV/AIDS prevention and also providing STIs treatment. Apart from these activities, the project also conducts periodic mass awareness campaigns in the community, focusing on HIV/AIDS, VCT and promotion of positive living (PL) among those people infected and affected by the pandemic. In such meetings emphasis is placed on preventing the spread of HIV/AIDS by adopting safe sexual behaviours, as well as how to provide better care for infected and affected people. Further, additional activities were reported to be conducted during commemoration of events, such as the world HIV/AIDS day, TB day, candle light day, women's day, condom day, and youth day. During these events, it was mentioned that implementers of this project make deliberate efforts to include on the agenda activities pertaining to prevention of HIV/AIDS and STIs issues; particularly those which could facilitate adoption of safer sexual behaviours to prevent the spread of these infections in the Joe Slovo community.

In addition to a work based HIV/AIDS prevention initiative implemented at the Far East shaft, there were other non-routine activities conducted in other companies, which like those of the mine, aimed at preventing employees from STIs and HIV/AIDS. In an interview with an office worker (sales personnel) in Boksburg town central, it was learnt that there was once an HIV/AIDS education session at the shop conducted by health experts from a local NGO.

'... eee may be two years ago; apparently the people were visiting all Elleries Holding company. They were telling us about HIV/AIDS, mainly about how one could be at risk, and so to be careful, okay! To use condoms as well if you can't abstain. Also to be faithful to our partners and to have periodic checks of our HIV status...' (office worker, Boksburg Central)

The initiative was a management effort to promote HIV/AIDS and STIs awareness amongst its workforce, in an attempt to compliment the fight against HIV/AIDS and STIs. These sessions focused on general HIV/AIDS information; particularly how it is spread, how it could be prevented from spreading; the need for VCT, sexual behaviour change, and how its impact could be mitigated both at personal as well as corporate level.

In addition to this initiative, another respondent further reported that there were some STIs and HIV/AIDS preventive activities which were being implemented in entertainment places such as bars and taverns. In one of the interviews with a key informant (Bar Manager) it was learnt that some taverns and bars within Boksburg town central offered free condoms to their customers (particularly those obtained from the local municipal hospital). Some of these buildings had posters on safer sexual practices hang on walls, as one way of disseminating information about safe sexual practices. In one interview, a bar manager explained this matter as follows;

'... I have condoms in here for free...I get them from Boksburg hospital, one opposite the central hotel, yes, I get them for free, but most of the times they are not available. I go there may be twice a week, but normally when I am in town around that place, not always'.) (Bar Manager, Boksburg town central) (A dispenser of condoms was noted at the extreme right of the counter in this bar)

The manager further explained that oftentimes he runs out of free condoms as customers (particularly commercial sex workers, miners and transporters) demand them regularly. To counter this situation, the bar offers other brands of condoms at a price, which ranges from R2 to R20. However, it was learnt that most customers prefer the free ones, other than those offered at a price. Commenting on the success of this initiative the respondent opined that although it is not systematically implemented and monitored, it does contribute towards facilitating adoption of safer sexual practices, thereby preventing the spread of STIs and HIV infections among people in this town, particularly those patronizing such places.

In this section, it has been noted that there are some behaviour change and HIV/AIDS prevention activities being implemented in the mining community understudy (Boksburg town central). As has been reported, these activities are implemented by different organizations such as the mining company (ERMP limited), the community, and some unsystematic initiatives by entertainment places such as bars and taverns. However, it has been noted that unlike in the case of miners, not all population groups studied in this research project have been directly targeted by these activities.

Although this is the situation, other population groups have in one way or the other come across situations where they indirectly get exposed to HIV/AIDS prevention activities or access some of the services such as free condoms, particularly for those patronizing entertainment places. In view of those factors, an attempt was made to find out how the selected population groups targeted in this study respond to these activities. This was done by exploring their perceptions, attitudes and consequent sexual behaviours and practices. The section below presents some of the views made by respondents as regard their response to HIV/AIDS prevention or behaviour change initiatives.

5.5 Peoples' response to HIV/AIDS/STI prevention activities in a selected mining community within Boksburg

Respondents were asked to give their views and opinions on how people in this particular area respond to HIV/AIDS prevention activities being implemented. In this respect, the concept of herd immunity was adopted. Fine (1993) describes herd immunity as protection from infection of a particular population, brought about by the presence of a section of the population immune to that particular infection. The concept implies an extension of the protection imparted by an immunization program beyond vaccinated to unvaccinated individuals, as a means to totally eliminate infectious diseases (ibid). The core argument in this theory is that 'if a larger proportion of members in a community is immune; there is less likelihood of a person with a disease coming into contact with a susceptible individual' (Fine, 1993). Fine explains that the popularity of this concept emerged as a consequence of several major achievements of vaccination programs, such as the historic success of eradicating diseases such as small pox, measles and polio.

In this study, this concept was adopted on the understanding that the selected population groups (miners, commercial sex workers, vendors, taxi drivers and office workers) were reported to engage in risky sexual behaviours which facilitate and increase spread of STIs and HIV/AIDS in this community. The assumption was that as population groups feared to drive and propagate occurrence of risky sexual behaviours and STIs/HIV/AIDS in this community, their perceptions, attitudes and consequent sexual behaviors affect other people within the community, particularly those with whom they have sexual relations.

In view of this situation, it is argued here that these peoples' attitudes, perceptions on HIV/AIDS prevention activities, as well as consequent sexual behaviours (after being exposed to HIV/AIDS prevention interventions) might give a hint on the future situation as regards risky sexual behaviours, and the spread of STIs HIV/AIDS in this community. In essence, if people in these groups change their risky sexual behaviours to adopt relevant safer sexual practices and behaviours, then there would be less likelihood for other people in this community to catch or spread STIs or HIV/AIDS.

Taking all other necessary factors constant, in the passing of time, there should be fewer cases of these diseases, until it is finally wiped out of the community. On this assumption, it then follows that as high risk population groups, if the selected population groups have negative perceptions, attitudes and more so persist in their risky sexual behaviours (leading to the spread of infections) then there would be a high likelihood of soaring STIs and HIV/AIDS infections among them and the overall population in the community. On the other hand, if these targeted populations report positive changes in attitudes, perceptions and sexual behaviours with regard to HIV/AIDS, then the spread and impact of the epidemic in this area will be contained, consequently wiping out infections in the area. In this regard, the attitudes, perceptions and practices of people in the selected population groups could provide a reflection of the impact of HIV/AIDS and STI prevention activities in this area, and further provide sufficient basis for improving the activities.

As envisaged, peoples' opinions, attitudes, perceptions and sexual behaviours differ from one individual to another, as well as from one population group to another. Such attitudes and perceptions have been noted to have an influence on their sexual behaviours, which in turn does affect and might (in addition to other factors) determine the trends of HIV/AIDS and STIs in the community. As mentioned earlier on, the study investigated changes in the previously reported risky sexual behaviours, from the perspective of selected population groups residing in this community. The section that follows presents results of this endeavor.

5.5.1 Complacency on HIV/AIDS issues

Most respondents in this study opined that although there have been activities to address the spread of HIV/AIDS and STIs in the area under study, many people have not responded positively to these initiatives. In one interview, a female vendor doing business at Cinderella miners' hostel mentioned that few people really take heed to the information they get through the activities implemented at various points whether at health centres or the community. This respondent explained that the majority is so casual about HIV/AIDS although they acknowledge its existence and effects. With this attitude, these people (particularly men) continue to engage in casual sexual relations with commercial sex workers, local women and girls from within the community.

'Only few people listen to these things because you see people still sleeping around with women, especially with prostitutes. Even when they have a wife and children at home, they still do those things. These activities take place yes, but after that, people go back to do what they do'. (Vendor, Cinderella miners' hostel)

In another interview, a respondent specifically mentioned that although miners are constantly reminded about their risky sexual behaviours (at Far East shaft) they (miners) normally play down the risk arguing that everybody shall die anyway.

'They know that HIV/AIDS kills, and they know that it exists. All they say is that where we come from, it is something just like flue, if you got AIDS you got AIDS, you've got it, you've got it, you can sleep around and it's fine. You can still continue to live a promiscuous life. The fact is that we are all going to die anyway, whether you die of HIV or you get knocked by a car, you still are going to die'. (Key Informant – Wellness coordinator ERMP, Boksburg)

A response as in the above quotation suggests that these miners would continue with such risky sexual behaviours putting themselves and their partners at risk of STIs and HIV/AIDS. In a similar interview with a female vendor outside Cinderella miners hostel she opined that although awareness about risky sexual behaviours and HIV/AIDS infection has increased, there has been

negligible change in peoples' sexual behaviours. In fact, many of them are still involved in risky sexual behaviours.

'... in my place I can say people listen to these things (messages about behaviour change), but I can say that there has not been so much change in the way people behave. Even at church, they preach about these things, especially abstinence, but although people listen, they forget quickly. If you try to talk to them they just laugh at you'. (Vendor, Cinderella miners' hostel).

A taxi driver expressed similar views when asked about how fellow taxi drivers behave following their knowledge about risky sexual behaviours and their consequences, particularly amid the scaring HIV/AIDS. The respondent explained as indicated below;

'...most of them have not changed their risky life styles. They still have many girl friends although some of them are married. They also drink a lot. They say they want to see sick people themselves speak to them about their situation, and then they'll change' (Taxi drive-Cinderella miners' hostel, Boksburg).

Such attitudes and remarks suggests that occurrence of risky sexual behaviours among people in this community is still persistent , and this situation is likely to scale up possible HIV and STI infections among people in this area, particularly those who relate with high risk people.

5.5.2 Feelings of remorse and vengeance

Apart from being casual about their sexual life styles, it has been learnt that for some people, getting involved in risky sexual behaviours is a matter of trying to react to their realization that they could be infected, and so would want to spread the infection to others as a way to drive out bitter feelings about themselves. A key respondent at ERPM Far East shaft reported that some men (particularly miners) upon realizing that they are infected decide to go on a rampage to infect others although they are counseled about their situation.

'Unfortunately, there are those who already know that they are positive, so whether you give them education or not, he's just told himself that I am going for a killing spree, unfortunately...' (ERMP Wellness coordinator, Boksburg).

In a situation like the one above, where counseling fails to convince people and motivate them to face their situations with courage, one wonders how best to deal with such people, particularly when they resolve to spread the infection as reported in the above excerpt.

5.5.3 Denial about existence of HIV/AIDS

Some respondents argued that generally, many people in this community do not want to think about consequences of their sexual behaviours, even though they appear to be well aware. In one interview at Cinderella hostel, a respondent argued there is seemingly an element of unwillingness to accept that HIV/AIDS is a reality.

'When you ask some people if they are aware that AIDS kill, they just say that the thing does not exist. But the truth is that everybody knows about it. If you check, almost everybody here has had a family member who has been killed by AIDS, but people don't want to admit that it could kill them as well. People are very stubborn here, they say that they arrived on earth through sex, if they have to die through it, then it is okay'. (Individual in-depth interview, Miner, Cinderella hotel)

Such response was noted to be common among respondents in the category of miners, vendors and taxi drivers, who despite acknowledging being exposed to behaviour change activities, still maintained their risky sexual behaviours, exposing themselves and their sexual partners to HIV and STIs. In another interview, a respondent argued that people do not really believe that AIDS does kill, they think it is some other infections other than HIV/AIDS.

'.... You see, it is going to take some years for people to believe that AIDS kills. Some believe that there are traditional medicines that cure AIDS, and that makes them not to believe about AIDS'. (Office worker, Boksburg town centraltown centraltown central)

Views as reported in the above excerpt that HIV/AIDS can be cured are likely to influence people to engage in high risk sexual behaviours, particularly those who believe such stories. Such people will further discourage their peers or other people with whom they interact, to take positive steps in changing their behaviours, further discouraging efforts to curb STIs and HIV/AIDS in the community.

5.5.4 Lack of positive attitude /motivation to change

It has been reported in this study that some people in the selected groups do not have the motivation to adopt safer sexual behaviours. For instance, some respondents reported that people have negative views about condoms. In one counseling session, the wellness coordinator at the ERMP Far East shaft clinic reported that even after a demonstration to dispel some popular belief that condoms had worms inside; a miner still argued that he can not use it anyway.

*'...I put it on the sun with some water and there was nothing coming out from there. And I said to the guy, so now what do you say, and he said probably this is another condom. And I said either the condom you used had already been used by someone, and still got rotten sperms, which caused the worms, not the condom itself. I actually tried with 2 or 3 condoms to show him that he was wrong and eventually he accepted. But he still said, anyway condoms are not nice; to me I want flesh to flesh'.
(Wellness coordinator, ERMP, Boksburg)*

In a related interview with a vendor doing business at Cinderella miners' hostel, it was mentioned that some people argue that condoms burst; that is why they would not prefer them.

'In this community, people ask questions about condoms. They say that even if you use it, it bursts, so they would rather not use it because there is no difference' (Vendor, Cinderella miners' hostel, Boksburg town centraltown centralcentral)

In another interview, a respondent argued that people generally do not believe that condoms can protect from infection. This respondent opined that many people; particularly miners and taxi drivers at Cinderella miners' hostel believe their friends or traditional healers, who in most cases present untrue and erroneous information.

For instance, one respondent reported that some miners believe that condoms themselves got HIV, and they believe this information other than the truth that condoms are in fact crucial for STIs and HIV/AIDS prevention. However, there are some who believe that condoms are indeed important when it comes to preventing HIV/AIDS or STIs, irrespective of popular misconceptions against them.

'I know condoms were brought by government as a way of protecting people from catching HIV, but people in their knowledge they say that condoms can kill us. These things happen because many people do not believe that sexual intercourse should be done using condoms even though they see people dying'. (Miner, Cinderella miners' hostel)

Although some respondents have generally reported negative perceptions on condoms, there are some who have contrary opinion about this matter. In one interview with a commercial sex worker, there was a rather positive remark about condoms as can be noted in the excerpt below;

'...myself I trust that a condom works. I know they protect from these diseases because you know the things remain inside in the condom. But also do you think government lies about these things? I don't think so. (Commercial sex worker, Central Hotel, Boksburg town central)

On the same note, another interviewee argued that people should not create all sorts of stories about condoms, because on a major part, prevention for HIV/AIDS or STIs is more of an individual attitude and choice. This respondent argued that nobody in this particular community would really claim that they have not heard enough about HIV/AIDS, particularly how it is spread and how to prevent it. But that they just chose not to believe whatever they have heard about HIV/AIDS.

'I think people in this community they know about these things. Do you think they don't know? They know the consequences of these behaviours. They know that they that it is dangerous. They know all these things but they ignore it...' (Office worker, Boksburg town central)

Another interviewer argued that it is more of peoples' own choice to get infected other than ignorance all other factors. The interviewee maintained that government and NGOs have done their best to ensure awareness about these issues but people choose to ignore this knowledge.

'I think nowadays it is more of one's choice, other than blaming other factors. Myself I chose to protect myself in this job, because I know my life is my life. I don't wanna die, I want to live long so I can see my kids. So I always use condoms whenever I want to have intercourse. So I think it's what you want and what you choose...' (Commercial sex worker, Central Hotel, Boksburg town Central)

Similar views were also reported in an interview with a Taxi driver doing business at Cinderella miners' hostel. This respondent argued that other people say that it is cultural factors or traditional beliefs which encourage them to engage in risky sexual behaviours. The interviewee countered this assertion arguing that there is however no traditional beliefs which tells people not to use condoms.

'I think it is peoples' own will not to follow proper ways of behaving. I don't think there are beliefs that stops people from using condoms to protect themselves. It is rather peoples' own will. If I don't want condoms that's it, not tradition'. Taxi driver, Cinderella, Boksburg.

This respondent stressed that as far as he's concerned; people follow their own will and use their own arguments to justify their risky behaviours. In such situations, risky sexual behaviours persist. However, although this respondent down-played the influence of traditional beliefs in influencing sexual beliefs and practices, some respondents reported that for people with lower education (such as those from the rural, like miners) such beliefs are more revered and held with higher esteem than information from health personnel.

In fact, this situation indicates the need for partnership between organizations implementing HIV/AIDS or behaviour change activities with local authorities (traditional leaders) and custodians of culture, in reinforcing dissemination of true and relevant information to the people.

5.5.5 Limited access to HIV/AIDS prevention services

In this study, it has been noted that location and schedule for services does affect peoples' ability to access the services as well as interest to make use of these services. Although respondents reported about availability of services at the clinic both at the mine, in town, as well as a few in the community, there was mention of poor patronage of these services because of inconveniences of time and location. Some respondents in this study reported that they fail to access free condoms, STIs testing and treatment, as well as HIV testing and counseling, at Boksburg town municipal hospital.

A commercial sex worker reported that she does not go to this hospital for these services since it located at an inconvenient place. The interviewee explained that though she would love to access these services, she's afraid her friends might see her and think she's got an STI, and this would impact on her 'business'. Apart from friends, she further mentioned that since the hospital is just opposite to where she does her business, some service providers at the hospital might recognize her (as a commercial sex worker) and spread the news that she has diseases.

'...myself I prefer private clinics not this local hospital. The problem with this hospital is that my friend can see me and so think I have got a disease, or there may be people, some of whom might know me so if I go there they will say this one came to the hospital, or this one has a disease... so aaa! I can't go there' (Commercial sex worker, Central hotel, Boksburg)

The need to consider convenience on service provision was also mentioned by miners at Cinderella miners' hostel. In one interview, a miner argued that the services are only available at the clinic (Far East shaft) and not at the hostel, where miners spend most of their free time. This respondent argued that even for services offered at the clinic, there are often offered during work time along side general curative services.

As such, most miners only attend counseling and read IEC materials when they fall ill and happen to visit the clinic for medical attention other than services to do with HIV/AIDS. Such a scenario entails that the majority of miners do not access these services, although they appear to be freely available.

5.5.6 Confusion on some HIV and AIDS issues

While respondents argued that many people are aware about HIV/AIDS issues, it was learnt that some people get confused with other technical explanations about the epidemic, a situation that erodes their trust on any information about this issue. In one interview, a respondent argued that people are often confused on the issue of being HIV positive and having AIDS. Such confusion creates feelings of uncertainty about their situation which in turn affects their perception and attitudes to HIV/AIDS activities, as explained in the excerpt below;

'... You know sometimes there is a problem. When you go to test at the hospital they tell you that your CD4 count is okay. You don't have AIDS. You are just HIV positive. When you go again, they say you should get a referral for a doctor. So people do not really understand these things. I think some of these messages are confusing. I don't know how it can be addressed but people do not understand some of these things' (Miners' Hostel Care taker, Joe slovo community, Boksburg town central)

In this section, respondents have on the whole indicated that people in this community are well aware about the dangers associated with risky sexual behaviours, and more precisely, HIV/AIDS. However, it has been generally reported that people (particularly in the groups targeted in this study) have not positively responded to these activities, such that there are still situations where they engage in risky sexual behaviours. Even their perception and attitude to HIV/AIDS and STI prevention activities is generally negative, to the extent that it led to persistent occurrence of risky sexual behaviour changes, requisite for the spread of HIV/AIDS.

In view of this situation, an attempt was made to explore how best HIV/AIDS prevention and behaviour change activities could be implemented in this community, in order to reverse the situation. The following section presents some of the views emerging from the endeavor.

5.6 Suggestions for improving STI/HIV/AIDS prevention interventions

Respondents in this study had different views on how best to improve design and implementation of various HIV/AIDS prevention and behaviour change activities in the community under study. Some of these included; scaling up interventions from central positions such as clinics and hospitals, to the residential community; devising strategies that would ensure more access and patronage to HIV/AIDS prevention activities by all members of the community other than only considering population groups perceived to be at risk being infected and spreading the diseases; intensifying availability of quality information on HIV/AIDS prevention and behaviour change infection; and ensuring more partnership and coordination among stakeholders on implementation of the activities.

5.6.1 Scale up HIV/AIDS prevention / Behaviour change activities

There was a concern among some respondents that most HIV/AIDS prevention or behaviour change interventions are implemented in confined places, such as work based clinics and hospitals, where only few people visit the centers, and more so on occasional basis. In the case of miners, they argued that these activities are conducted at work place, (where most of the time miners are busy working underground), other than at the hostels, (where they spend a lot of their free time in which some risky sexual behaviours take place). In such a situation most miners do not access the services being offered at the clinic. Although there are schedules deliberately created to accommodate all, most miners argued that the fact that this is a work environment makes it difficult for them to have interest in these activities.

Another respondent argued that generally, many people in this community only visit clinics or health centers when they fall ill, and not to broaden their understanding on HIV/AIDS issues, or to be counseled.

In view of these factors, respondents argued that there is need to scale up the activities to reach people in the community, other than offer them only in centralized positions. One miner respondent suggested that in addition to services at the clinic, management make initiatives to extend these services to the hostel.

'... with the situation that most miners do not use services available at the clinic, management should bring services closer to the hostel so that when people leave the work place, they can access the same services at home...' (Miner, Cinderella miners' hostel, Boksburg)

Another respondent commented on the matter as indicated below;

'I think it would be better if these activities happen all the time in the communities also. Now the clinic people do not go down to the community, it is only the church people who go around, but we need the clinic people as well. Even here on the rank (Taxi rank) we need somebody who can be here always to educate people. People do not have to go to the clinic only, if we can have someone here, it would be better' (Taxi driver, Cinderella miners' hostel, Boksburg)

5.6.2 Improve access and availability to quality information

Some respondents argued that although many people (in this community) were aware about risky sexual behaviours, there were some who still believe wrong information pertaining to HIV/AIDS, while others believe various misconceptions, discarding what is true. In view of this scenario, there was a suggestion to improve both access and quality of information, one that is reliable and effective enough to facilitate adoption of safe sexual behaviours. As one way to increase access and availability of HIV/AIDS prevention information, a respondent suggested of having information centers in strategic places within the town and the residential communities.

'I think here in town we need something like an information centre, where people can have regular information about HIV/AIDS. But it should be managed by well qualified and trained people who know HIV/AIDS issues. It should not be for youth only, but for everybody.'

It could also have other things like gyms and games, you know?. Just as in the community, people should come for different games but also should be told about HIV/AIDS. You know not everyone goes to the clinic, but almost everyone loves sports these days. If they put a TV there, people will be coming and they will be told about HIV/AIDS as well. These centers could be in locations as well and entertainment places. Like here, may be posters... you know, ...' (Bar manager, Boksburg town central).

5.6.3 Devising effective strategies for implementing HIV/AIDS/STI prevention programs

Another respondent argued that although much has been done about creating awareness about risky sexual behaviours, HIV/AIDS and STIs prevention, there is need for more tact to ensure that people get interested to attend the services. This respondent argued that there was need to introduce activities that attract people's attention as well as leave them with an urge to reflect on their life styles in view of the HIV/AIDS pandemic. This respondent suggested involving admired models in disseminating crucial HIV/AIDS and STI information. Such people should be made to take leading roles in dispelling or discrediting certain misconceptions, cultural practices, traditional beliefs and practices related to HIV/STI transmission and prevention and motivate people to change their behaviours. The respondent commented as indicated below;

'People like entertainment here. There is an artist they admire like Zola 7 on SABC (A local Television channel in South Africal). So if people like him, he can come here to perform, then before performing do HIV/AIDS education talks, you see. People would wait and listen. If you only make these talks, hee! then they won't listen to you. They'll tell you they want to drink beer. (Miner, Cinderella miner Hostel, Boksburg town central)

Complementing to the opinion in the above excerpt, another respondent maintained that people might listen when someone they respect and admire says something about HIV/AIDS. Such attention might influence them to slowly reflect on their sexual behaviours and change accordingly.

'... You could also have musicians like Reverend Khathide someone that people listen to, and they will be motivated. You can have a hip-hop artists sing about HIV/AIDS, because people like them and they listen to their music. There are people that are known through gospel music. People like Rebecca. If people like these keep quiet, then people will not stop these things. If Rabecca can sing about AIDS, people will listen and think about it. There are a lot of them, people like Arthur, Mdu etc. So these people need to say something about these things. People will listen'. (Taxi Driver, Cinderella Hostel, Boksburg Central)

Commenting on the same, another respondent argued that even on the national Television, there is need to have more HIV/AIDS programs and more so encourage artists to take part in disseminating vital information about the epidemic, particularly in places where people meet for entertainment.

'Government has done great when it comes to information; it is easy to get these materials about HIV/AIDS or STIs, and also condoms. But when it comes to the education part, I think there is need for more TV programs. They should add these programs even on the radios. When these singers and artists have got something to do in the community, they should also involve them. They must have a session where they will pause for a few minutes here and there, just to tell people about these things. They could also have these singers perform in shebeens and bottle stores, places where you find many people, because you know it is where all the mischief is so rife' (Key informant, Wellness coordinator, ERPM Far East Shaft, Boksburg central)

This respondent further proposed that for some population groups such as miners, apart from special education sessions at the mine's clinic, there could be other informal gatherings at their hostels, which could be used as avenues for disseminating more information to encourage sexual behaviour change among miners.

'What I think is that apart from these clinic services, management should also provide other activities at the hostels, something that is informal like a party, yea! Some sort of a party but may be call it another name, where we can provide provisions like food or something like that, and when people

come for these things, we get sometime to speak to them about all that... Because it does not necessarily mean that when we have health promotion meetings then everybody will turn up, and with the shifts that we have in the mines it is difficult...' (Key informant (EPRM Wellness coordinator, Far East shaft, Boksburg town central)

Apart from involving models (like artists) and tactically implementing awareness or education sessions in entertainment places or parties, another respondent argued that there was need to review some of the HIV/AIDS information being given to people. This respondent stressed that there was need to disseminate information which is effective enough to influence and motivate people to change their risky sexual behaviours. In essence, there was need to move beyond providing information for awareness, to providing information for behaviour change. For instance, instead of the traditional ABC approach (abstain, be faithful and condomize), people could be taught about how precious their lives are; making them to value their lives, and more so that of others. People could be given information that strengthens their esteem enough to master their situations and make commitment to change their risky sexual behaviours.

'I believe the umbrella thing in this issue is that people should just understand what they want in life. They must be taught to examine their behaviours and find out what they want in life, find they value of their lives and really change. They must abstain and really ask what they want in life...' (Office worker, Boksburg town central)

5.6.4 Strengthen partnership with organizations on HIV/AIDS activities

It has been noted in this study that both government and private sector organizations are taking a part in the fight against the pandemic, by implementing activities that aim at changing peoples' sexual behaviours to prevent the spread of STIs and HIV/AIDS. It has again been observed that these organizations support each other in the implementation of these programs. For instance, the ERPM limited clinic at the Far East shaft benefits from free condoms and IEC materials obtained offered at Boksburg municipal hospital. In addition to these services, the clinic refers some of its patients to the hospital for thorough examination, particularly those in need of ARV and STI treatment.

On its part, the Far East clinic complements governments' efforts to bring down STI and HIV/AIDS infections in the community, by targeting one of the most risky population groups in this community; miners. However, although there is such a symbiotic partnership between these two organizations, some respondents felt that there are other partners which have been left out in this relationship, and this has implications on the success of STI and HIV/AIDS prevention efforts in the community. Respondents argued that there is little involvement of crucial social groups such as religious organizations (such as churches) and traditional healers in these programs. This oversight was argued to slow down effective implementation of these activities, and realization of desired change in people's sexual behaviours.

In one of the interviews, a respondent argued that due to limited partnership among relevant stakeholders in the fight against HIV/AIDS in this community, there are some hindrances to successful implementation of these activities. For example, some traditional healers argue that HIV/AIDS can be cured with traditional medicine, an argument widely held by many people (particularly from rural areas). Such a claim gives these people confidence to engage in risky sexual practices such as casual and unprotected sexual intercourse, with a belief that if they get infected they'll be cured by traditional medicine.

On the same note, while the clergy strengthen abstinence as the most important way to prevent the spread of STIs, the clinic and NGOs are promoting condom use, which have already been discredited by traditional leaders and the clergy. As such, there is conflict in messages getting to the people about how to prevent HIV/AIDS in the community. Furthermore, due to poor partnership among stakeholders, behaviour change interventions in this community have targeted selected population groups of interest to individual organizations implementing the programs, other than the whole community, considering that almost every member of the community is potentially at risk of being infected. Such a situation has led to other equally crucial population groups persisting with risky sexual behaviours, further putting other people (particularly with whom they interact sexually) at risk, creating an endless cycle of infections in the community.

In view of these factors, respondents suggested the need for strengthened partnership among actors as a way of effectively dealing the STIs and HIV/AIDS in this community, particularly religious and traditional healers as explained below.

'I think another thing is to enhance our relationship with even traditional healers, you know people also believe them. So if we tell them to teach people that yes traditional medicines are also there but they do not prevent a person from getting the virus and also do not curb the spread if a person does not use protection, say a condom. Yes, then may be people might then listen to them'
(Key informant, EPRM Far East shaft, Borksburg central)

This chapter has discussed respondents' views on how people in the community understudy respond to sexual behaviour change or HIV/AIDS prevention activities to which they have been exposed. The discussion has also highlighted respondents' suggestions on how best to improve design and implementation of HIV/AIDS prevention programs in order to prevent further spread of the epidemic. Among other issues in this discussion, respondents' acknowledge that though awareness about risky sexual behaviours and HIV/AIDS is generally high in this community, people still engage in sexual behaviours that propagate the spread of STIs and HIV. As such, among other things envisaged to bring about the desired change are increased knowledge about HIV/AIDS, particularly availability of information that will make people reflect on their behaviours, and be motivated to change for the better.

It has further been suggested that there ought to be increased partnership among stakeholders particularly local government institutions, private organizations, the clergy and traditional healers, in order to have a multi-pronged strategy, which considers various factors influencing occurrence of risky sexual behaviours among different population groups in this community, so as to implement target specific and impact oriented activities. Such an approach is envisaged to ensure success of the programs as it takes into account both the general and specific factors spearheading occurrence of risky sexual behaviours among different groups of people in this community, (and how in view of those factors), to effect the desired change. More so, there is need for more programs to be scaled up to the community and places where most of the risky sexual practices take place.

Such an approach will not depend on people go to services points, as has been traditionally the case in this community, but rather bringing the activities to the people to ensure that they constantly are reminded about the need to curb HIV/AIDS not only in their lives, but the community at large.

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

This study aimed at exploring risky sexual behaviours among people residing within the mining community of Boksburg town central. The study further investigated factors contributing to occurrence of the reported risky sexual behaviours among selected population groups in this community; the interventions that have so far been implemented by different organizations in an attempt to facilitate sexual behaviours change and how people in this community respond to these interventions.

Results of the investigation indicate that people in this community do engage in risky sexual behaviours which encourage the spread of HIV/AIDS, and STIs. In fact, it has been found that there exists a complex sexual network involving people in the targeted categories (miners, commercial sex workers, vendors, taxi drivers, office workers as well as other members of the community whose social status was not classified (local men, women and young people). It was further found that there are many and different factors that influence occurrence of the reported risky sexual behaviours among different groups of people.

Realizing the effects of such practices and behaviours, some organisations were noted to have taken major steps to try and address the situation, particularly prevent the spread of STIs and HIV/AIDS in the area. For instance, management at ERPM Far East shaft introduced activities aimed at creating awareness and facilitating sexual behaviour change among its labour force. In the residential area, the study found that there was a community based initiative particularly targeting terminally ill residents, like those suffering from HIV/AIDS related opportunistic infections such as Pneumonia, Tuberculosis. Another intervention was also reported at one of the bars within Boksburg town, where it was reported that there were free condoms offered to people patronising the bar, on a non-routine basis.

However, in spite of the reported initiatives being implemented at various points in the community, respondents argued that there has not been a noticeable change on peoples' attitudes, perceptions and consequent sexual behaviours. Although there were few respondents who indicated that these services have facilitated changes in peoples' attitudes and consequent sexual behaviours, the majority of respondents felt that there have not been sufficient changes. In essence, it has been reported that although these activities are implemented, there is seemingly a negative response from the people.

In view of these issues, respondents made suggestions on how best to facilitate adoption of safer sexual practices among people residing in this community. Some of the suggestions include; scaling up interventions from central service points such as health centers (hospital or clinics) and work places e.g. mine and offices, to the community (where people live), entertainment places such as bars or taverns, as well as hostels (where miners and construction workers live). In addition, respondents suggested intensifying spread of HIV/AIDS information through mass media channels such as TVs and radio, creation of strategic IEC points (such as information centers) within Boksburg town and the residential areas. Furthermore, respondents felt that there was a need for HIV/AIDS and STI prevention IEC activities to go beyond creating awareness about these issues, and provide information that incite self reflection and self value, raising personal esteem and motivating people to adopt safer sexual practices.

More so, respondents stressed the need for a strong partnership among all actors in the fight against HIV/AIDS in this community. For instance, it was suggested that local people from within the community, religious leaders and their organizations, local authorities (such as councilors), government agencies and departments (particularly the municipal health) and the private sector organizations (companies, trade union and employees) work together in designing and implementing the activities to prevent STIs and HIV/AIDS spread. Such an approach was envisaged to help in minimizing costs of implementing the activities, as a result of a pool effect on resources, as well as ensuring a common strategic approach adopted by all actors involved in the fight against the pandemic. Furthermore, such a joint approach was also envisaged to prevent duplication of efforts and conflict of interests among actors in the endeavor to minimize STIs and HIV/AIDS infections in the community.

In addition to these suggestions, there were a few recommendations that were made by the researcher, based on the findings of the study. The following section presents a few of the recommendations.

6.2 Recommendations

Unlike some studies on sexual behaviours and HIV/AIDS in mining communities (Campbell, 2003, Moodie and Ndatsche, 2000), this study has found that occurrence of risky sexual behaviours among residents of these communities is not only restricted to miners and commercial sex workers. Although these population groups could indeed be more pronounced in terms of their involvement in such behaviours, other members of the community are equally involved in such activities.

As noted in the study, there is a complex sexual network that links the entire community (miners, vendors, taxi drivers, office workers local community members). Such a situation entails that the risk of STIs and HIV/AIDS among residents of this community is also generalized. In view of this finding, there is need for interventions that not only targets miners, but the entire members of the community, in their different social groups. Such an approach will ensure that not only a segment of the community is targeted with HIV/AIDS prevention or behaviour change activities, but every member of the community, to ensure that the pandemic is dealt with entirely, and facilitate sexual behavioural change among all groups in the community.

Furthermore, it has been noted that there are various factors which expose and facilitate occurrence of different risky sexual behaviours among different groups of people in this community. Although there were some common factors argued to encourage occurrence of risky sexual behaviours (such as inadequate information on STIs and HIV/AIDS) among many people in this area, there were some groups of people who had their own situations and experiences argued to increase their vulnerability to STIs and HIV/AIDS. For instance, miners' staying away from their wives or regular sexual partners back at home for longer periods (as they serve their contracts at the mine) and living in single sex hostels where women are not allowed, were some of the recurring views which respondents believed do expose miners to the risk of casual sex and

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Appendix 1 Individual In-depth interview Guide

UNIVERSITY OF KWAZULU-NATAL
SCHOOL OF DEVELOPMENT STUDIES
CHANGING SEXUAL BEHAVIOUR IN THE ERA OF THE HIV/AIDS EPIDEMIC IN
SOUTH AFRICAN MINING COMMUNITIES

INFORMED CONSENT FORM

My name is Andrew Jamali from the University of KwaZulu-Natal, School of Development Studies. I am conducting a research on sexual behaviour and understanding of HIV/AIDS programmes in this area. The research targets people residing in selected mining areas including this area. This study is crucial as it will shed some light on how best the campaign against the HIV/AIDS epidemic could be successful in this area and the country at large.

Owing to the nature of the study, we will discuss issues that are somewhat sensitive. I would like to assure you that your answers will be strictly confidential. Your name will not be written on this form and will never be used in connection with any of the information you tell me. You do not have to respond to any issue that you do not want to, and you may end this interview at any time you want to. However, your honest responses to these issues will help me understand what people think, say and do about certain sexual behaviours in this community. I would greatly appreciate your help in responding to this survey. The interview, which will take about 20 minutes, and will be kept strictly confidential, available only to members of the research team. Excerpts from the interview may be made part of the final research report but will be impossible to identify who said what.

If you consent to participating in this research, please print your name and sign below.

----- (Signed)

----- (Date)

----- (Print name)

INDIVIDUAL IN-DEPTH INTERVIEW GUIDE

Section 1. Ice Breaker

- 1.1 For how long have you been living in this community?
- 1.2 What do you like to do during your free time?

Section 2. Risky sexual behaviours

- 2.1. What behaviours do you think expose people to the risk of sexually transmitted diseases including HIV/AIDS?
- 2.2 How about in this area, what do people do which you think could expose them to HIV/AIDS or STIs?
- 2.3 Is it everybody or there are some specific people who do these things? (Please elaborate)
- 2.4 Why do these people do things that obviously increases their risk of catching and spreading infections in this area? (Please explain)
- 2.4 Are people in this area aware about dangers associated with STIs or HIV/AIDS?
- 2.5 What do they talk about on such issues?

Section 3. Behaviour change or HIV/AIDS/STI prevention activities and peoples' response

- 3.1 What activities are done in this community to reduce occurrence of HIV/AIDS/STIs transmission?
 - 3.2 How are these activities implemented, and who is targeted? (Probe why they target such people)
 - 3.3 How do people respond to the activities? (Probe what their perceptions and views are about the activities as well as on HIV/AIDS and STIs)
 - 3.4 Do you notice any changes in the way people behave in this community, particularly in view the of HIV/AIDS and STI?
 - 3.5 How do you know these changes have occurred?
 - 3.6 How do you think these activities could be improved to be more effective in preventing HIV/AIDS and STIs
-

Demographic data

1.1	Gender	<ol style="list-style-type: none"> 1. Male 2. Female
1.2	How old are you?	Age:
1.3	What is the highest level of education You have so far completed?	<ol style="list-style-type: none"> 1. No education 2. Grade one 3. Grade two 4. Standard 1-10 6. NTC 1 7. NTC 2 6. NTC3 7. High School 8. College or University
1.4	What is your current marital status?	<ol style="list-style-type: none"> 1. Single 2. Married 3. Divorced 4. Widowed 5. Separated 1 Disserted 6. Living together 7. Others
1.5	How many children do you have?	<ol style="list-style-type: none"> 1. None 2. One 3. Two 4. Three 5. Four 6. Five 7. Six and over
1.6	What type of work do you do for a living?	<ol style="list-style-type: none"> 1 Mining 2 Industrial labour 3 Office management, Admn, clerical 4 Business 5 Sex work 6 Others
1.7	To which tribe do you belong?	<ol style="list-style-type: none"> 1 Zulu 2 Xhosa 3 Venda 4 Batswana 5 Basuthu 6 Phedi 7 Indian 8 Others
1.8	What religious group do you belong to?	<ol style="list-style-type: none"> 1 Christians 2 Islam 3 Traditional 4 Others
1.9	For how long have you stayed in this Community?	<ol style="list-style-type: none"> 1. Less than one year 2. One to two years 3. More than 3 years

Appendix 2 Guide for Key informant Interviews

UNIVERSITY OF KWAZULU-NATAL
SCHOOL OF DEVELOPMENT STUDIES
CHANGING SEXUAL BEHAVIOUR IN THE ERA OF THE HIV/AIDS EPIDEMIC
IN SOUTH AFRICAN MINING COMMUNITIES

INFORMED CONSENT FORM FOR KEY INFORMANTS

My name is **Andrew Jamali** from the University of KwaZulu-Natal, School of Development Studies. I am conducting a research on sexual behaviour and how people respond to HIV/AIDS programmes in this area. The research targets selected people residing in mining areas including this area. This study will shed some light on how to formulate effective ways for implementing behaviour change interventions with which to prevent the spread of the epidemic in this community and the country at large. You have been chosen to take part in the study because of your thorough knowledge about people living in this community, their day-to-day experiences, and HIV/AIDS interventions implemented herein. Your views on the subject matter are very important since they will help in understanding how best to implement HIV/AIDS or behaviour change activities in this community.

Owing to the nature of the study, we will discuss issues that are somewhat sensitive. I would like to assure you that your answers will be strictly confidential. Your name will not be written on this form and will never be used in connection with any of the information you tell me. You do not have to respond to any issue that you do not want to, and you may end this interview at any time you want to. However, your honest responses to these issues will help me understand what people think, say and do about certain sexual behaviours in this community. I would greatly appreciate your help in responding to this study. The interview will take about twenty minutes. Although excerpts from the interview may be made part of the final research report, your responses shall be confidential. Please, feel free to give me any information you feel might be relevant to our discussion.

If you consent to participating in this study, please print your name and sign below;

..... (Signed)

..... (Date)

..... (Print Name)

INTERVIEW GUIDE FOR KEY INFORMANTS

Section 1 ICE BREAKERS

- 1.1 For how long have you lived in this community?
- 1.2 What recreational facilities exist in this area?
- 1.3 What do you like to do in your free time?

Section 2 Sexual behaviours and practices

- 2.1 I should think you have heard about sexually transmitted diseases such as gonorrhoea or syphilis and HIV/AIDS, how are these diseases spread?
- 2.2 Are there people in this community whom you think could be at risk of catching these diseases? (probe that they mention who they think could be at risk)
- 2.3 Do you have any idea about what encourage the spread of HIV/AIDS in this area ?
- 2.4 Are there specific things that some people in this area do, which could increase spread of these diseases?
- 2.5 What do they do when they realize they have the diseases? (probe why they do so)

Section 3 Prevention activities and how people respond

- 3.1 What activities take place to prevent transmission of these diseases in this area?
- 3.2 Who implements the activities?
- 3.3 How are they conducted or implemented?
- 3.4 What do people in this community say about these activities? (Elaborate their views and opinion)
- 3.5 Since implementation of the activities, have there been changes in relation to people catching the diseases? (Probe on sexual behaviours taking place in the area)
- 3.6 What do you think could be done to ensure effectiveness of the activities particularly in preventing spread of STIs and HIV/AIDS?

Conclusion

I am about to end the interview; do you have anything to say in relation to our discussion before I end the interview? Can you comment about how the interview went? End of Interview,
Thank you very much!
