CHAPTER 2:
Perceptions, Knowledge, Attitudes, Practices among Farm Workers Regards HIV&AIDS: A Review

HIV&AIDS is predominantly a sexually transmitted disease (Barnett & White, 2006). It causes illness and death among people. The greatest people at risk are between 15 and 50 years of age and these are often described as the sexually active and most productive people in society (FAO, 2006). This section reviews literature concerning levels of HIV infection, knowledge, perceptions, attitudes, practices among farm workers, and the impact of HIV&AIDS has on the agricultural sector.

Globally, it is estimated that 33.3 million people were living with HIV&AIDS in 2009 (UNAIDS, 2011). Approximately, 2.6 million new HIV infections occur each year (UNAIDS, 2011) (Table 2.1.1). A cumulative total of 1.8 million people has died from AIDS between 2001 and 2009 (UNAIDS, 2011) (Table 2.1.1). Worldwide, the HIV adult prevalence rate (15-49) is 0.8% (UNAIDS, 2011) (Table 2.1.1). However, the global estimates given are not sector specific. They are general estimates that do not specify estimates for people living with HIV&AIDS in farm communities globally.

Table 2.1.1: Global HIV&AIDS Estimates, end of 2009 (*UNAIDS Report, 2011)*

	Estimate	Range
People living with HIV&AIDS in 2009	33.3 million	31.4-35.3 million
Adults living with HIV and IDS in 2009	30.8 million	29.2-32.6 million
Women living with HIV&AIDS in 2009	15.9 million	14.8-17.2 million
Children living with HIV&AIDS in 2009	2.5 million	1.6-3.4 million
People newly infected with HIV in 2009	2.6 million	2.3-2.8 million
Adults newly infected with HIV in 2009	2.2 million	2.0-2.4 million
AIDS deaths in 2009	1.8 million	1.6-2.1 million
Orphans (0-17) due to AIDS in 2009	16.6 million	14.4-18.8 million
Prevalence rate in 2009	0.8	0.7-0.8

The epidemic in Sub-Saharan Africa varies considerably with Southern Africa still being the most severely affected by HIV&AIDS (Table 2.2.1) (UNAIDS, 2011). About 68% of people living with HIV are found in sub-Saharan Africa, a region with only 12% of the global population (UNAIDS, 2011). People living with HIV&AIDS in Sub-Saharan Africa in 2009 were 22.5 million while newly infected people were 1.8 million (Table 2.2.1). People living with HIV in the Southern

Africa in 2009 were nearly a third of the global total. People who died of HIV illness in Sub-Saharan Africa in 2010 comprised 72% of the global total of 1.8 million (UNAIDS, 2011). Prevalence varies widely by regions, with the highest levels in Sub-Saharan region of 5.0% and lowest levels in East Asia of 0.1% (Table 2.2.1). However, Sub-Saharan region carries the greatest burden of the global HIV epidemic. Although there was a notable decline in the regional rate of new infections, the epidemic continues to be most severe in Southern Africa. Almost half of the deaths from AIDS-related illness in 2010 occurred in Southern Africa. Epidemics in Asia have remained relatively stable and are still largely concentrated among high-risk groups such as sex workers, drug abusers and to a lesser extent men who have sex with men. Conversely, the number of people living with HIV in Eastern and Central Asia has almost tripled since 2000 from 760 000 to 1.4 million (UNAIDS, 2011) (Table 2.2.1). The regional overview shows the general HIV&AIDS estimates for 2009 regionally. However, the estimates are not sector specific. Thus, they do not specify the regional agricultural estimates.

Table 2.2.1 Regional HIV&AIDS estimates, end of 2009 (*UNAIDS Report, 2011)*

Region	Adults & children living with HIV&AIDS	Adults & children newly infected	Adult prevalence*	AIDS-related deaths in adults & children
Sub-Saharan Africa	22.5 million	1.8 million	5.0%	1.3 million
North Africa & Middle East	460,000	75,000	0.2%	24,000
South and South-East Asia	4.1 million	270,000	0.3%	260,000
East Asia	770,000	82,000	<0.1%	36,000
Oceania	57,000	4,500	0.3%	1,400
Central & South America	1.4 million	92,000	0.5%	58,000
Caribbean	240,000	17,000	1.0%	12,000
Eastern Europe & Central Asia	1.4 million	130,000	0.8%	76,000
North America	1.5 million	70,000	0.5%	26,000
Western & Central Europe	820,000	31,000	0.2%	8,500
Global Total	**33.3 million**	**2.6 million**	**0.8%**	**1.8 million**

For the past two decades, FAO (1995; 2002; 2006), IOM (2010) and SAFAIDS (2000) carried out studies on HIV&AIDS regionally. The studies concentrated on the need to reduce the spread of HIV, the prevalence of HIV&AIDS, impact of

HIV&AIDS and vulnerability to HIV&AIDS. It should be argued that very few studies have concentrated on the factors underlying to HIV&AIDS transmission among farm workers, hence, scarcity of data on the levels of HIV infection among farm workers. There is also limited understanding on the dynamics of the HIV&AIDS in the agricultural sector, hence, the need to carry out a study of this nature.

The first case of HIV&AIDS was positively identified in Zimbabwe in 1985. While Zimbabwe has experienced some of the highest levels of HIV infection rates, prevalence rates have been declining. Downward trends were witnessed from 24.6% in 2004 among adults aged 15-49 years to 20.1% in 2005, 15.3%% in 2007 and further to 13.6 in 2010 (USAID, 2010) (Figure 2.1). The decline in the prevalence rate is attributed to many factors among them being the increase in condom use and reduction of sexual partners (Zimbabwe HIV&AIDS Estimates, 2010; UNAIDS, 2011; USAID, 2010). Although the incidence rates have declined, Zimbabwe still needs to continue reducing the prevalence rate (Zimbabwe HIV&AIDS Estimates, 2010).

Given that Zimbabwe has a young population where most of the people are sexually active and where homosexuality is culturally prohibited, heterosexual intercourse which accounts for 92%, becomes the likely mode of HIV transmission (MoHCW, 2005; NAC, 2005; UNAIDS, 2010). Perinatal transmission accounts for 7% of all infections and the remaining 1% constitutes other modes of transmission.

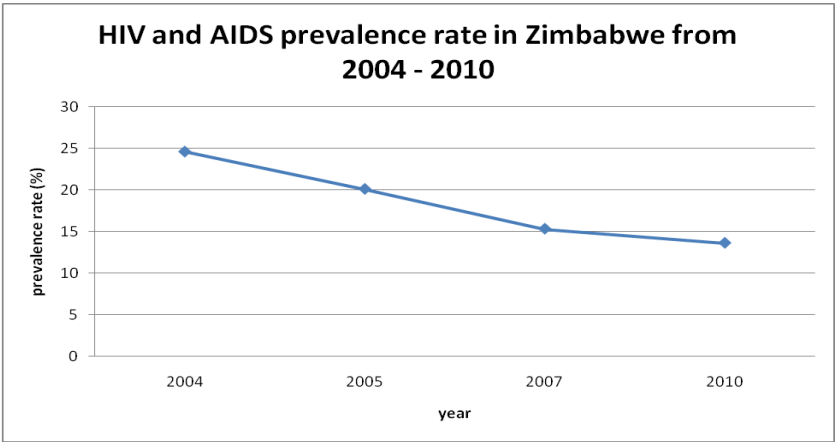

Figure 2.1: The Decline in HIV&AIDS Prevalence in Zimbabwe (*USAID 2010)*

WHO (2005), NAC (2005), FCTZ (2005) and IOM (2010) assert that the most severely affected areas (with average HIV prevalence of about 35%) are large-scale commercial farms and mines. The HIV prevalence rate (35%) shows that levels of HIV infection is very high in farms and mines compared to 28.1% and 20.9% of people living in towns and rural areas respectively (FCTZ, 2005). Research by IOM carried out in 2010 at Hippo Valley Estates revealed a prevalence rate of 35% among Hippo Valley Estate farm workers. Conversely, NAC (2005) carried out a National HIV survey among Antenatal Clinic attendees aged 15-24 and found out that HIV prevalence varies geographically (Figure 2. 2). The survey showed that the prevalence was high (50.5%) in commercial farms and mining, followed by border post (45.7%), growth points (38.7%), urban (27%) and rural areas (26.1%). The prevalence in commercial farms of female ANC attendees aged 15-24 declined, from a highest level of 50.5% in 2000 to 22% in 2007 (Ministry of Health and Child Welfare Zimbabwe, 2007). WHO (2005) asserts that, the high prevalence rate among farm workers was mainly because these are the areas that best illustrate development vulnerabilities in the population. Compared to cities and other urban centres, these areas do not receive adequate financial attention from the government hence they are always lagging recreationally, economically and industrially.

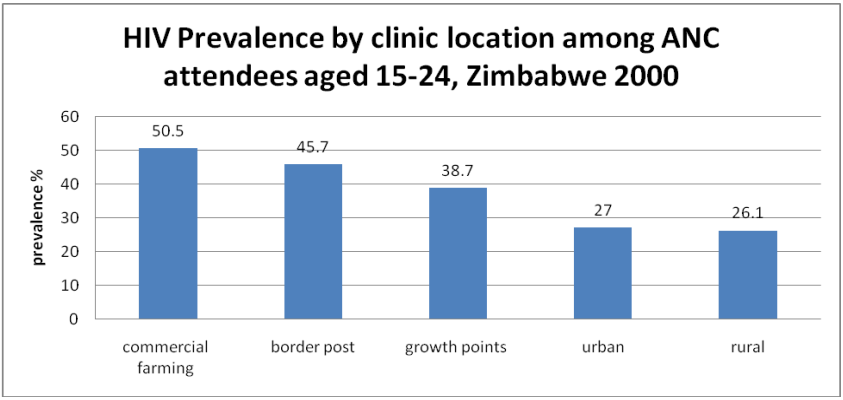

Figure 2.2: HIV Prevalence by clinic location among attendees aged 15-24 *(NAC Report, 2005)*

Knowledge about HIV&AIDS is universal. Globally, about 60% of both young men and women have comprehensive and correct knowledge about HIV&AIDS (UNAIDS, 2010). Although HIV prevention programmes have improved HIV knowledge and awareness around the globe, many new infections occur daily (UNAIDS, 2006; 2007; 2008; 2010). Globally, approximately 2.6 million people were newly infected in 2009 (UNAIDS, 2010).

As part of the effort to assess HIV&AIDS knowledge in Zimbabwe, ZDHS (2005/6) found out that knowledge levels of HIV&AIDS were very high (98%) for women and 99% for men. Mhloyi & Mhloyi (1996) carried out a baseline survey on KABP among Triangle Limited workers in Zimbabwe and found out that knowledge of HIV&AIDS was very high (85%).

The association between perception of risk of HIV infection and sexual behaviour remains poorly understood, even though perception of risk is the first stage towards behavioural change. A study by NCFH in Washington in 2003, revealed a negative attitude and perceptions towards HIV&AIDS among farm workers. Approximately 32% of respondents believed AIDS can be spread through kissing. About 15% of respondents reported that HIV&AIDS can be transmitted through bathing in the same shower while about 22% reported using the same eating utensils with someone with AIDS. Again, 11% reported that HIV can be transmitted through mosquito bites. About 28% of respondents reported that sharing of toothbrushes transmits HIV&AIDS while 9% reported having poor hygiene (NCFH, 2009).

A study by Mhloyi & Mhloyi (1996) among Triangle Limited workers in Zimbabwe revealed that risk perception was somewhat low. Approximately 40% of adults, 32% of youth and 76% of commercial sex workers perceived themselves at risk of HIV infection. Thus, these beliefs exacerbate the spread of HIV&AIDS because people may see the use of condoms as futile. Condom use is seen by men as rather disruptive to the natural flow of events in sex and intimacy (Chiororo *et al.*, 2002; SARD, 2006; Gunda, 2008 and IOM, 2010).

Research by NCFH (2009) in South Florida with regards to attitudes toward control measures against HIV&AIDS infection revealed that men have got a negative attitude towards condom use. Approximately, 85% reported that condom use diminishes sexual sensation, hence, the reason for not using them. Research by Chiororo *et al.* (2002) in Zimbabwe revealed that men do not perceive sex as an expression of love and intimacy between equal partners in a relationship but as an activity that should result in optimal sexual satisfaction for the man. As such, they engage in having unprotected sex. Therefore, according to Chiororo *et al.* (2002), there was a negative attitude towards condom use among men and male youths in Zimbabwe. Approximately, 90% of men and male youths reported that condoms are infected with diseases including HIV virus while 75% of men in rural areas believe that they can tell whether a woman they are about to sleep with is HIV positive or not, just by looking at her. If they conclude that she is healthy, most men and male youths would not use a condom because it diminishes sexual sensation and deprives men of sexual satisfaction, therefore, they are not comfortable in using them. Research by

Gunda (2008) revealed that, men need to enjoy unprotected sex with their wives and decent partners, hence, rejection of condom use in marriages.

Misconceptions were also noted during the study that condoms are only used with mistrusted new partners. Research by NBCSP (2006) revealed that condom use with casual partners in Zimbabwe is relatively high, but it is partially inconsistent. Condom use in longer-term and marital relationships remains low even though most couples do not know their HIV status, and unfaithfulness within marriages was reportedly high. Studies by Chikovore & Mbizvo (1997) revealed that 62% of commercial farm residents in Zimbabwe viewed condom use in marriage as totally unacceptable because it is associated with infidelity. Thus, women reportedly said "am I a prostitute?"

Culturally, women are unable to negotiate safer sexual relations, including condom use as well as refuse male demands for sexual intercourse. Barnet & White (2006) found out that women find it difficult for them to initiate or introduce contraception in their relationships as it was bound to raise a lot of questions including mistrust and one's morale standing in society. Research by Gunda (2008) revealed that 85% of women in farms were finding it difficult to refuse sex without protection in their sexual relations as they fear risk of losing their partners. Again, ZDHS (2005/6) reported that the extent women have over when and with whom they have sex has important implications on HIV&AIDS transmission.

The period between age at first sex and age at marriage are often of experimentation. ZDHS (2006) revealed that 4.9% and 5.2% young female and young male, respectively, had sex before age 15. According to the Global Health Council (2010), the early age at first sexual intercourse is associated with high propensity to HIV infection because their reproductive canal is not fully developed. This period is also associated with a higher propensity to contract HIV&AIDS infection and early pregnancies.

Meier& Allen (2008) defines premarital sex as any sexual activity practiced by persons prior to marrying each other. SARD (2006) and Farm Worker Justice (2009) assert that premarital sex is common among farm workers due to poverty which increases their vulnerability to HIV&AIDS infection. Barnet & White (2006) and Global Health Council (2010) propounded that premarital sex among girls predisposes the girl child to reproductive health problems such as birth complications.

SARD (2006) defines transactional sex as sex that involves non-marital sexual relationship in which a man provides cash, gifts or favours in exchange for sex.

For women such relationships are ways to survive in difficult circumstances. Farm workers, both males and females, engage in transactional sex (IOM, 2010; JICA, 2004). From the study that was carried out by IOM in 2010, 52% of women reported exchanging goods for sex with sugar daddies while being in a steadily relationship with a boyfriend. A total of 13% of male workers reported having offered gifts in exchange for sex with women. Farm girls and women gave themselves for simple things such as chicken feet and offals due to poverty (Ziningi, 2009). The transactional nature of the sexual relationships that often seem to develop in the farm setting reveals high dependency among female workers. Thus, they use transactional sex for their subsistence and that of their children, a structural powerlessness which makes female workers more vulnerable to HIV infection.

Poverty contributes to epidemic disease and epidemic disease contributes to poverty. According to Global Health (2010) the causation is bi-directional and occurs through many different pathways. According to ARASA (2008), poverty increases the risk vulnerability of HIV infection in farming communities as girls and women will be looking for survival. This leads women into transactional and intergenerational sex (Barnett, 2006; SARD, 2006). This further broadens sexual networks in farms and inter-infections are easily spread due to poverty (Ziningi, 2009).

FAO (2006) and ZHDR (2003) asserts that intergenerational sexual relations are common among young women than they are among young men. Young women argue that 'sugar daddies' provide material needs whilst young men are potential husbands in marriage. ZDHS (2005/6) further propounded that if a younger uninfected partner has sex with an older, infected partner, this means that the virus is introduced into a younger uninfected cohort. The young cohort cannot negotiate for safer sex.

MoHCW (2004, 2007) asserts that multiple sexual partnerships, especially those that occur concurrently in a person's life, contribute greatly to the spread of HIV&AIDS. An increase in the number of sexual partners greatly increases the probability that one will become infected by sexually transmitted diseases and HIV infection. According to MoHCW (2004; 2007), people with multiple sexual partners have a high risk of HIV infection. Ziningi (2009) asserts that, in farms, sexual networks which promote inter-infections are very broad. In most societies, sexual masculinity is expressed in virility. Thus, the virility of a man is proved by having many sexual partners. This however increases the vulnerability of both men and women to HIV infection (Farm Worker Justice, 2009). The ideologies of masculinity and femininity may help to shape an individual's sexual behaviour.

Polygamous behaviour has been considered one of the major factors promoting the spread of HIV in Africa, where the highest rates of HIV infection often are found in areas with high rates of polygamy Reniers & Watkins (2010). ZDHS (2006) states that 11% percent of women in Zimbabwe are in polygamous unions. According to ZDHS (2006), the proportion of women in polygamous unions increases with age, and rural women are almost three times as likely as urban women to be in a polygamous relationship (15% compared with 5%, respectively).

Condom use is one of the main strategies for combating the spread of HIV. Low condom use has huge implications for the prevention of HIV among farm workers and the use differs basing on whether the person is the primary or occasional sex partner (SARD, 2006). With occasional sex partners, male farm workers use condoms slightly over half of the time, and it is also linked to whether they have a condom with them and how confident they feel in negotiating the use of protection. When it comes to primary sex partners, the situation is different because approximately about 20% of farm workers use condoms with their primary sex partners and usage is dictated by social norms (SARD, 2006). Lack of condom use therefore increases rates of HIV infection among farm workers. Gunda (2008) asserts that, farm workers have a very inconsistent condom use especially with regular partner. Furthermore, condom use among farm workers was affected by myths and misconceptions. According to Gunda (2008), men reportedly said that "condoms were too small as African men are known to have big sexual organs that cannot fit in the condoms."

Even if farm workers can recognise their health problems, make decisions to seek care, but still some obstacles remain to obtaining good quality health care. These obstacles relate to availability, accessibility and affordability of HIV&AIDS services. SARPN (2008) asserts that access to health and care facilities in commercial farming areas is very poor and becoming more difficult for farm workers and their children. USAID (2010) asserts that Health institutions in most developing countries have deteriorated because of economic meltdown. This has resulted in health services crumbling down. Zimbabwe's public health system has been declining since 2000 (USAID, 2010). SARPN (2008) found out that farm clinics provide primary care which only attends to minor ailments. More complicated cases that need further management are referred to general or mission hospitals which are far away from the farms *(ibid)*. According to Heidman (2010) the transport service between the health centres from a clinic to general hospital in the farming community is very poor.

Correct information on HIV testing procedures, availability of ARVs for HIV positive farm workers are vital for farm workers to make informed decisions.

However, these services are not readily available in farms. Where available, the health centre will be manned by staff who are pressurised and demotivated (USAID, 2010). The geographic location of farm communities hinders availability and accessibility of HIV&AIDS services. Thus, NAC (2005) stated that the nature of farm communities makes it difficult for NAC to effectively plan and implement its programmes in large-scale commercial farms. According to NAC (2005), there has been a rise in the number of terminally ill people in farms who need services and facilities. Furthermore, ARVs are being piloted in Central, Mission and Provincial hospitals which make it difficult for farm worker communities to benefit since most of these sites are in urban areas of in communal areas. According to SARD (2006), the farm dichotomy typical of southern African countries impacts negatively on accessibility of services which is generally biased towards urban areas. USAID (2010) propounded that economic problems and political instability that occurred since 2000 in Zimbabwe have incapacitated the health sector to provide quality services.

The commercial agriculture sector is highly dependent on human labour that is undermined by morbidity and mortality associated with HIV infection (FAO, 2006). Morbidity and mortality effects of HIV infection are not systematically documented on many commercial farms. Therefore, many myths about the disease go unchallenged (Gunda, 2008; IOM, 2010). Although farm labourers are easy to replace, HIV&AIDS affect production as well as the balance of labour available. AIDS-related morbidity and mortality affect productivity in the commercial agriculture due to absenteesim, loss of skills and decline in available labour (Figure 2.7.1) Barnet & White (2006) stated that some people might not be absent but they are unproductive while they are at work due to morbidity. In a study that was carried out in Kenya, one of the farm owners attributed failure to meet production targets due to AIDS morbidity and 75% of lost labour was due to illness attributed to AIDS (FAO, 2006). Rugalema *et al.* (1999) asserts that frequent illness and deaths due to HIV&AIDS creates adverse financial and psychological effects on the workforce. This negatively affects motivation and labour productivity. Furthermore, among the 25 farms that were surveyed in Swaziland, more than half reported that AIDS was the leading factor that was affecting production (FAO, 2006). Therefore, the impact of the pandemic on agriculture compromises the quantity and quality of labour through incapacitation and deaths.

Productivity in the agricultural sector is undermined by lost labour and time due to HIV&AIDS morbidity and mortality. Illness compromises productivity by reducing on-the-job performance because of physical, physiological and phsychological factors associated with HIV (Figure 2.7.1). The Centre for International Health and Development (2006), carried out a study in Zambia and

found out that the average reduction in on the job performance was associated with HIV, with 27% of workers being infected. Apart from affecting on the job performance, HIV infection impacts negatively on the quality of the labour force resulting in low production (see Figure 2.7.1). Conversely, employees may force themselves to come to work because they fear loosing their job but due to ill-health, their performance is reduced. This results in low production and further leads to loss of revenue (Figure 2.7.1). Consistently, employees who retire on medical grounds or who die must be replaced and their replacements may be less skilled and experienced, therefore require training. According to Barnet & White (2006) recruitment and training of workers incur extra cost for an organisation which might also lead to potential collapse of the entire business (Figure 2.7.1). Again, as skilled workers become scarcer, wage rates may increase, as a result, the business environment may change with investors being reluctant to commit funds if they suspect that AIDS will compromise their investments and returns (Figure 2.7.1).

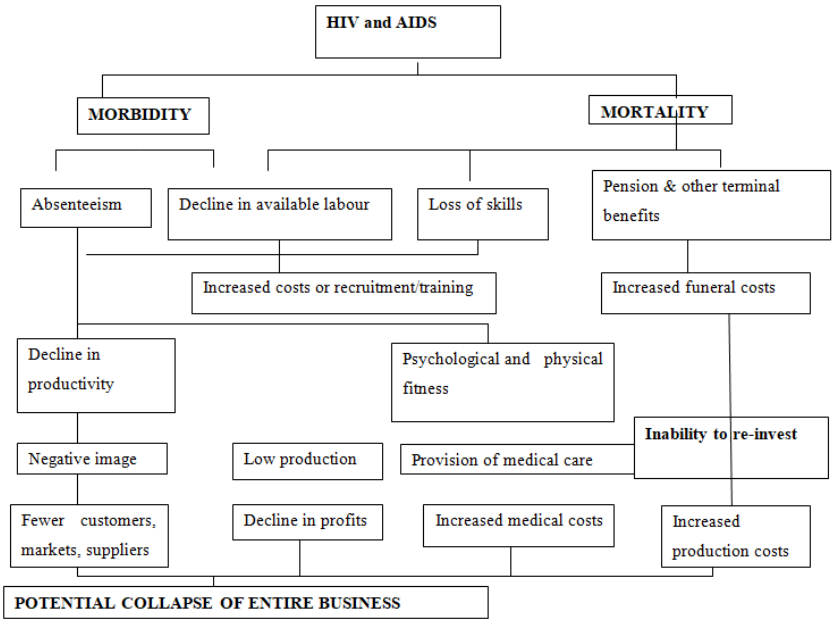

Figure 2.7.1: Overview of the main aspects of HIV&AIDS on commercial agriculture *((*Rugalema *et al., 1999) in FAO, 2006)*

FAO noted that the number of hours per week in agriculture fell from 33.6 hours in non-afflicted households to between 11 and 16 hours in afflicted households. According to Barnet & White (2006), a study of African enterprises found out

that HIV-related absenteeism accounted for 37% of increased labour cost and AIDS absenteeism accounted for a further 15% while funeral attendance and burial accounted for 6% and 16%, respectively (Figure 2.7.2 below). The reduction in labour supply due to funeral attendance and burial at crucial periods of planting and harvesting could significantly reduce the size of the harvest, therefore, affecting food production.

Rugalema *et al.* (1999); FAO, (1999); FAO, (2004); FAO, (2006), studies that were carried out in Kenya, revealed that prolonged AIDS-related morbidity and mortality in the workforce was forcing commercial farms to allocate additional resources for medical care and funerals. Farms in Swaziland attributed increased costs of production to rising healthcare costs largely associated with HIV, in addition to funeral costs and early retirement on medical grounds (Muwanga, 2002; FAO, 2006).

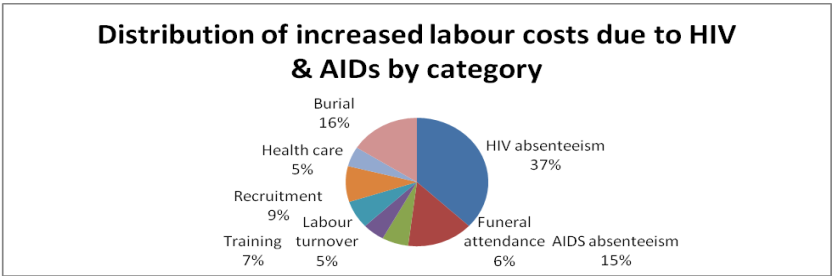

Figure 2.7.2: Percentage Distribution of increased labour costs due to HIV&AIDS *(Barnett & White, 2006)*

The most disastrous effect of HIV&AIDS on the agricultural community is a direct attack on food production as the infected and affected will completely abandon agricultural life (Goma, 1998; Neema, 1998; FAO, 2005). As a result, agricultural production would suffer losses because the infected and affected will be searching for treatment of opportunistic infections. For example, a survey that was carried out by Kwaramba (1997) in Zimbabwe revealed that agricultural output declined by nearly 50% in the households affected by AIDS. FAO (2006) asserts that in Sub-Saharan Africa, crop yields have declined significantly, partly due to AIDS. Although Zimbabwe is yet to conduct a comprehensive study on the impact of HIV&AIDS on the agricultural sector, findings from Gunda (2008)'s case studies on farms show that the pandemic remains an enormous challenge particularly on commercial farms. Kwaramba (1998), Neema (1998), Goma (1998), and SARD (2006) further propounded that the deterioration of agricultural output due to AIDS implies serious deterioration of household food security. Therefore, people may suffer from food deficiency, leading to malnutrition on both the affected and infected.

Basset & Mhloyi (1991), FAO (1995), Ncube (1998), and FAO (2006), highlighted their concerns about HIV&AIDS and women in Zimbabwe, as the epidemic is reportedly taking a heavier toll on women who are involved in care-giving, production of food and general household decision making and planning. According to Ncube (1998) and FAO (2006), women are the most affected because of the triple role they play in society which includes looking after the sick, dead before they are buried and caring for the family.

HIV&AIDS also have a negative impact on farm children especially when their parents die due to HIV&AIDS for they are left vulnerable to the pandemic. They may be forced to leave the farms and either re-join the ranks of destitute rural poor or live on the streets in urban areas. On the other hand, if they are allowed to remain on the farm, they may be at risk of exploitation as cheap farm labourers. Furthermore, the children may face sexual abuse and exploitation by other families within the farm compound (Barnet & White, 2006). A study by Gunda (2008) concluded that there are a lot of girls and women in farm operations who are being abused by the systems.

The conceptual framework shows factors underlying HIV infection among farm workers. It is important to understand the context of risk perception in relation to sexual behaviour because it is the first stage towards behavioural change from risk-taking to safer sex. It is assumed that people will respond to risk in a way that reflects their HIV&AIDS awareness levels. Thus, this assumption relies heavily on the Health Belief Model (HBM). To better understand the factors underlying HIV infection among farm workers, the HBM was adapted. This model was first postulated by Rosenstock in 1974.

Health Belief Model is a model for individual health that attempts to explain the thought processes behind individuals' decisions related to health behaviour change and maintenance. It also acts as a guiding framework for health behaviour interventions. The model suggests that individuals determine the feasibility benefits and costs related to an intervention or behaviour change based on the six constructs. These constructs are perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy (Figure 3.1).

Perceived susceptibility are beliefs about the likelihood of getting a disease or a condition. It is assumed that women believe they are at low risk of acquiring HIV because they are in a monogamous relationship, therefore, they neglect condom use with their partners. This means that women will not change their health behaviour unless they believe that they are at risk.

Perceived severity is one's opinion of how serious a condition and its consequences are. For example, young girls can engage in unprotected sex with

their boyfriends because of trust thinking that having unprotected sex has no problem. This means that young girls will not realize the consequence or seriousness of having unprotected sex because they trust their boyfriends.

Perceived benefits are beliefs that a certain action will reduce risk or seriousness of impact. Thus, men who have HIV infection may be sceptical that Antiretroviral (ART) treatment and behaviour change will actually have any long-term impact on their health. This belief can affect behaviour change. Perceived benefits play an important role in the adoption of secondary prevention behaviours, such as HIV testing and counselling.

Since change is not something that comes easily to most people, the HBM addresses the issue of perceived barriers to change. This is an individual's own evaluation of the obstacles in the way of him or her adopting a new behaviour. Janz & Becker (1984) assert that perceived barriers are the most significant in determining behaviour change. For a new behaviour to be adopted, a person needs to believe the benefits of the new behaviour outweigh the consequences of continuing the old behaviour. This enables barriers to be overcome and the new behaviour to be adopted. For example, a commercial sex worker would like to remain HIV negative by having protected sex but thinks that she will lose out business when she initiates condom use. In this scenario, fear of losing out business is the barrier to condom use.

The HBM also suggests that behaviour is also influenced by cues. Cues to action are events, people or things that move people to change their behaviour. For example, media reports, campaigns and advice from other people or peer educators. Hearing TV or radio news stories about HIV&AIDS are cues to action associated with safer sexual practices. Self-efficacy are beliefs in one's ability to take action to produce desired outcomes. People generally do not try to do something new unless they think they can do it. For example, if someone believes that a new behaviour is useful (perceived benefit), but does not think he or she is capable of doing it (perceived barrier), chances are that it will not be tried. For example, women may want to have sex but due to poverty, they may lack skills to negotiate for condom use. According to the HBM, modifying variables, cues to action and self-efficacy affect our perception of susceptibility, seriousness, benefits and barriers and therefore our behaviour (Figure 3.1).

The HBM framework assumes that the background variables operate through a range of proximate variables to influence perception of risk and sexual behaviour. These factors may be socio-demographic, for example, marital status, levels of education, religion, ethnicity and gender. The proximate variables may be access to information, early sexual debut, multiple concurrent sexual partners,

transactional sex and intergenerational sex. However, these two variables (background and proximate/intermediate) are discussed below.

The age of a person is another factor that may influence sexual behaviour and the level of perceived risk to HIV infection. Young girls and boys (adolescents) are at an increased risk of HIV infection because they often engage in unprotected sexual intercourse because they do not perceive their risk to be high. It is assumed that sexual intercourse at an early age is associated with a long period of exposure to sexual activity.

Marital status influences perception of the risk of HIV infection and sexual behaviour. Non-married women may have the ability to negotiate safer sex, but married women face extra challenges because of fear of being suspected of promiscuity by their spouses. This may lead to unwanted consequences such as separation or divorce. Often, married women acquiesce on unsafe sexual practices, even if they suspect or know of their partner's extramarital relations. Although HIV cannot be spread through sexual intercourse in stable monogamous relationships between uninfected partners, among married women the presence and nature of their partners' casual or extramarital sexual practices largely determine the risk of HIV transmission.

Educational level may influence perception of HIV risk and sexual behaviour. It is assumed that a higher level of education increases contraceptive use. It is hypothesized that education equips one with knowledge on HIV due to exposure to AIDS information through mass media. Furthermore, education breaks down cultural practices that perpetuate HIV infection, such as polygamy. Polygamy promotes multiple concurrent partnering which increases one's chances of contracting HIV&AIDS.

Religion perpetuates HIV&AIDS because it can influence intermediate variables such as the age at first sexual encounter, marital status and access to information and services. It is assumed that some churches which encourage polygamy approves multiple partnering which result in exposure to HIV. Religion can also influence people's attitudes and perception of risk to HIV infection. It is assumed that some religions believe that AIDS is a disease that affects those who transgress against God. Consequently, those who are religious perceived their risk of HIV infection to be low. Religion can also work to influence community practices and national policies. It is hypothesized that AIDS programmes might face opposition or resistance from religious leaders at the onset particularly on the issue of introducing sex education in schools and condom use. This can be mistaken as encouraging promiscuity among school children.

Ethnicity may influence sexual behaviour through cultural beliefs and practices. It is assumed that the practice of levirate, where a dead man's widow is remarried to one of his brothers, is still practiced in some areas in Zimbabwe despite the high prevalence of HIV. Thus, the pressure to conform to cultural beliefs and practices may override concerns about HIV infection. Another risky sexual practice is that of wife sharing among farm workers. FOST (2005) asserts that, farm women move from farm to farm in search of men.

The impact of HIV&AIDS differs markedly along gender lines. Women's and men's roles put women at greater risk of HIV infection. Gender roles place women in subordinate positions. It is assumed that men have stronger sexual drives than women, and men cannot survive without sex. These assumptions exacerbate the spread of sexually transmitted diseases, including HIV. Furthermore, women are 2-4 times more likely than men to become infected with HIV after having intercourse with an infected partner due to physio-biological differences and their low socio-economic position. Due to economic power, men can have many wives. As a result, women are easily infected with HIV because they do not have the power to negotiate for safer sex. It is assumed that, culturally, women have no right to initiate condom use because condomised sex is associated with prostitutes. However, lack of power to negotiate safer sex among women is assumed to be perceived susceptibility.

There is also culture of silence on sexual matters among women. This assumption contributes significantly to women's inability to negotiate when, where and how sexual intercourse takes place. Figure 3.1, captures in a schematic diagram the Health Belief Model.

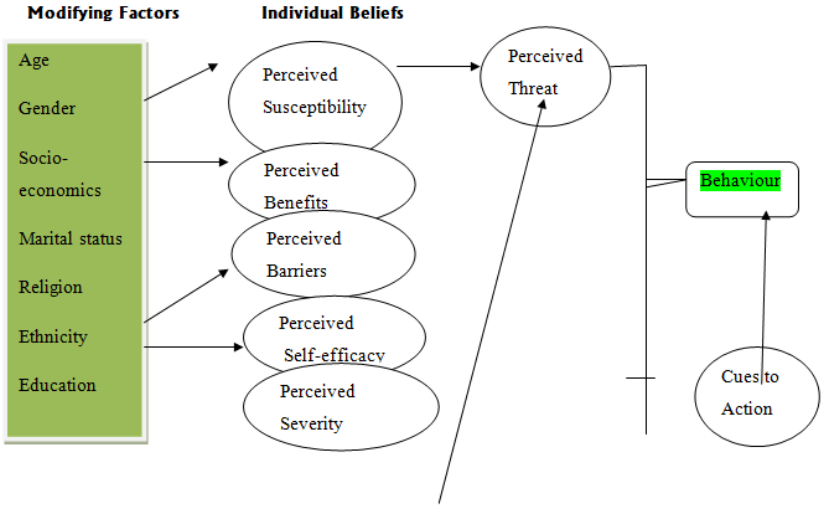

Figure 3.1: The Health Belief Model (*Champion & Skinner, in Glanz et al., 2008).*

HIV&AIDS remains a major health issue, especially among sexually active and productive individuals such as farm workers. Factors like limited access to healthcare, education, and awareness contribute to their heightened risk. The impact of HIV&AIDS extends to reduced productivity and economic stability within the agricultural sector. Using the adapted Health Belief Model (HBM) helps understand and address this risk by focusing on perceptions and attitudes towards sexual behaviour. The HBM's constructs, perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy, can guide targeted interventions to improve awareness, reduce barriers, and promote safer sex practices among farm workers, ultimately enhancing their health outcomes and productivity.