Female Bodies: Gender Inequalities, Vulnerability, HIV and AIDS in Kenya

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Abstract

This paper emerged from a lack of literature on women’s vulnerability to HIV/AIDS in AIDS discourses. Women have been vulnerable to HIV/AIDS since the epidemic emerged but not much research has been done specifically on Kenyan women. The ways in which women are vulnerable to HIV infection were explored by examining social, economic, and cultural identities that affect women’s sexual relations using a feminist lens. In this research, it is postulated that HIV vulnerability has to be studied in the context of patriarchy and cultural constraints.

To address women’s vulnerability to HIV/AIDS, secondary analysis of data from the 2003 Kenya Demographic and Health Survey was utilized. Hence, demographic variables of age, education, religion, ethnicity, region of residence, marital status, and employment were the independent variables that were used to discern the factors associated with HIV vulnerability among women. A dependent variable, HIV vulnerability which I constructed from the 2003 Health and Demographic Survey was conceived of as a larger concept comprised of powerlessness in basic decision-making processes within the household, AIDS-related knowledge on transmission and prevention, cultural practices which encompassed polygamy, wife inheritance, and sexual behavior, and perceived risk of contracting the HIV/AIDS disease.

In this study, the data strongly suggested that women in Kenya are more vulnerable to HIV/AIDS when they are younger, have low levels of education, are from different ethnicities and from certain regions, are unmarried, and not employed. The findings supported the literature that women’s vulnerability is strongly influenced and tied by broader forces present in the society. Women’s vulnerability to HIV/AIDS is real and needs to be tackled for any progress to occur in the fight against AIDS. HIV/AIDS is a very expensive disease that totally drains economies of households, communities, and countries. Until HIV vulnerability is acknowledged and fought, women will continue to succumb to the disease overwhelmingly and Kenya will eventually disintegrate as it will be full of sick people intensifying underdevelopment. Women’s vulnerability to HIV/AIDS is an urgent issue that needs dire attention for Kenya to prosper. A healthy population fosters development and stability. However HIV/AIDS produces instability, suffering, extreme poverty, and underdevelopment.
Keywords: HIV/AIDS, vulnerability discourses and Kenyan women, female diseased bodies, gender inequalities, feminist theories, patriarchy, cultural constraints, powerlessness and women of Kenya.

Introduction

AIDS has steadily become a worldwide disease as people continue to move and interact in an increasingly global economy. The world has become a global village with much less restrictions on the movement of people, goods, and information than ever before. Opportunistic viruses such as HIV can easily travel throughout the world at a much faster rate than in the past. Currently, there is still no cure: the medications in place prolong life but do not cure AIDS. Because HIV is transmitted through the exchange of bodily fluids, this indicates that the best form of protection is to avoid contact with them. Therefore, one can suggest that until a cure is found, regardless of the economic might of a nation, HIV will continue to pose a serious health problem in the future.

In the East African region, Kenya is one of the countries where AIDS has taken a toll. The first AIDS case in Kenya was reported in 1984 (Republic of Kenya, 1999-2004). The spread of HIV in Kenya has been attributed mostly to heterosexual unprotected sex. The extent of risky sexual behaviors such as anal intercourse and homosexual activity are not yet known in Kenya, and are largely omitted from AIDS literature in most of Africa (Wilton, 1997).

The rapid spread of AIDS worldwide and the patterns that have been generated by this spread have transformed AIDS into a woman’s disease (Lindsey, 1997). HIV/AIDS has affected women from sub-Saharan Africa in disproportionate numbers more than anywhere else in the world. The number of women being infected with HIV through heterosexual transmission is rapidly rising. Women represent 59% of those infected in sub-Saharan Africa (UNAIDS, 2006) and are getting infected at a faster rate than men because of social, economic, and cultural vulnerabilities. HIV is not only a health problem, but also a social, cultural, and political phenomenon (Caldwell, 1993; Sargent & Johnson, 1996; Treichler, 1999). Since the beginning of the AIDS epidemic, women were suffering and dying from AIDS, yet the topic of women and HIV/AIDS was virtually non-existent. The experience of men dominated AIDS discourses and defined the symptoms of AIDS and course of the illness (Lindsey, 1997). The invisibility of women in AIDS literature led to a delay in understanding how HIV affected women (Baylies & Bujra, 2000). Women were virtually ignored in the literature as AIDS was presented as a homosexual disease and a male disease. The notion that women could not contract AIDS led to tragic consequences, because women were not getting tested, studied, or included in clinical trials (Squire, 1993).

Statistics depict a grim picture of AIDS in Africa, and unfortunately, the numbers represent only an estimate of actual prevalence. The actual number of people infected is believed to be higher than has been reported. Statistics are often based on testing that has been done mostly on pregnant women. Although voluntary counseling and testing centers are accessible in Kenya, most women are reluctant to take the HIV antibody test because of the stigma that comes with being HIV positive (Clark, 2004). Many women are afraid of the stigma, social isolation, loneliness, abandonment, and fear of violence for those who are suspected of being HIV positive (Caldwell, 2000; Smyke, 1991). As a result many women resort to self-imposed silences and do not disclose their sero-positive status.
AIDS brings to the individual the imminent threat of total annihilation, and women are the most vulnerable to disease and death (Bain, 2001; Murphy, 1995). AIDS has exploited, interrupted, and destroyed women’s lives in Kenya. The cultural, social, and environmental conditions that women are subjected to lead to vulnerabilities that attract HIV. Women continue to be powerless in these societies due to the patriarchy that continues to permeate throughout women’s lives (Nnaemeka, 1998). Although women are largely responsible for expressive roles such as childcare and cooking, women in Kenya are hardly given the opportunity to make simple decisions about what they cook, let alone issues that pertain to sexual matters. In sub-Saharan Africa, the vast majority of HIV infections among women occur through penetrative heterosexual sex (Das Gupta, Chen, & Krishnan, 1995). The cultural and economic context of heterosexual sex has had a significant effect on women’s vulnerability to HIV infection (Farmer, Connors, & Simmons, 1996).

The exponential increase in AIDS cases among women in Kenya (Republic of Kenya, 1999-2004) has created pain, suffering, and death. Women in Kenya are faced with insurmountable health problems such as malaria, and AIDS is another added problem they are blamed for and have to take responsibility for (Farmer, 1999). Since men are in power, it is men’s issues that get addressed as state concerns. This creates more problems for women whose concerns are seen as secondary, and thus not important to the state (National AIDS Control Council [NACC], 2002). AIDS is a serious, wasting, deteriorating, disease affecting Kenyan women in disproportionate numbers. HIV/AIDS is a women’s issue because the risks and consequences are different for women (Campbell, 1999) and therefore should be studied using a different, feminized perspective.

Conceptualization of Vulnerability

The concept of HIV vulnerability refers to Kenyan women’s multiple layered realities, characterized by social and cultural inequalities that perpetuate HIV vulnerability. In this context, attention has been given to the ways in which women may be vulnerable. Figure 1 depicts the five constructs that represent HIV vulnerability—powerlessness, cultural practices, lack of AIDS-related knowledge, sexual behavior, and perception of HIV risk.
Women and Powerlessness

AIDS brings to the surface neglected inequalities such as the power differences between women and men (Schneider & Stoller, 1995). Andersen (2003) defined power as a system of patriarchy, an organized structure whereby men hold more power than women. Power also determines whose pleasure is given priority and when and how sex takes place (Gupta, 2000). Furthermore, gender inequality often gives men more power to decide on the timing and conditions of sex and the means of preventing infection, and therefore limits women’s ability to negotiate protection with their partners (Das Gupta et al., 1995). Allen (1999) also stated that power can be defined as a relation of male domination over women. In this context, power is used to demonstrate how women lack power when it comes to decisions that pertain to sex and health care, as well as simple decisions such as purchasing household items.

A review of the literature shows that AIDS occurs in a cultural context whereby roles are culturally scripted and defined according to gender (O’Leary & Jemmott, 1996). Women tend to have little power within patriarchy in Kenya and few alternatives are available to them (GoK, 1997). According to Thiam (1986):

The African woman has no real power, only a pseudo-power. She can act, as long as she causes no embarrassment to her husband. Any power she may think she possesses is an illusion. The big decisions are the monopoly of the man, and she is not in any way involved in them. In Black Africa, the black man controls not only his own life but also that of his wife which makes her vulnerable to HIV. (p. 15)
In the African culture, male dominance permeates every sphere of the society (NACC, 2002). Men decide and make most of the decisions in the home and in the community because of male privilege, which transcends to issues of health care (Turshen, 2000).

Ogundipe-Leslie (1994) noted:

The entrenchment of patriarchy makes women react with fear, dependency complexes, and attitudes to please where more self-assertive actions are needed. The African man is still steeped in his centuries-old attitudes of patriarchy which he does not wish to abandon because male domination is advantageous to him. African women are shackled by their own negative self image, by interiorization of ideologies of patriarchy, and gender hierarchy. (p. 36)

The fear of upsetting the patriarchal system and dependency on men for resources contributes to HIV vulnerability among women in Kenya (Institute of Economic Affairs, 2001). Patriarchy is so deeply entrenched in the Kenyan society that women have little control over resources that would allow them to live independently of men. For example, customary law dictates that women should not own or inherit property unless through their sons or male relatives (Campbell, 1999; NACC, 2002).

Women are disempowered from the time they are young. The socialization of girls and women often curtails their autonomy and undermines their ability to negotiate with men. The ideology that men are naturally superior to women in essence, and in all areas, affects societal structures as women’s input or voices are submerged (Das Gupta et al., 1995; GoK, 1997). This ideology prolongs the attitudes of negative discrimination against women (Ogundipe-Leslie, 1994).

African women are socialized to be silent, and fear is instilled in them such that they learn not to question men. In Kenya, the social environment can be hostile to women, leading to violence (Mikell, 1997). The subordinate position of women articulated in much of the literature demonstrates a high level of vulnerability to diseases, particularly HIV (Smyke, 1991). The silence of women in Africa means that they cannot discuss or make decisions about sex (GoK, 1997). The extreme dependency of women on men creates a powerless situation in which women are ultimately vulnerable to HIV. Powerlessness contributes to women’s vulnerability curtailing their freedom to decide on their own on health issues without consulting their partners as they are not economically strong. A woman with a sexually transmitted disease cannot go to the doctor discreetly because of structural constraints that inhibit women from autonomy of movement including health care. Fear of the consequences of disclosure and lack of confidentiality are major impediments in women being unable to protect themselves without interference from the patriarchal gaze.

Because of shame and stigma, women who contract sexually transmitted diseases usually may not seek treatment. The fear is that if they seek treatment for sexually transmitted infections there is no guarantee of confidentiality and women are often accused of being promiscuous. Women are often in a bind because of cultural constraints and would rather not seek help in case they discover that they are HIV-positive and get abandoned. Researchers must be aware of what
it means to be a female in the patriarchal culture (Patton, 1994). Research consistently shows that women are more vulnerable because of the inequality that exists between the sexes (Fleischman, 2003). HIV vulnerability is prevalent in cultures where women have little power in the family (Gupta, 2000).

Women and AIDS-Related Knowledge

Women are more at risk for HIV due to the society that denies them knowledge and access to upward mobility. Most women in Kenya lack basic information about sexual and reproductive health because of the culture of silence that exists in African culture. African women’s vulnerability is exacerbated by social perceptions of female roles (Mann & Tarantola, 1996). A good woman is one who is ignorant about sex. Ignorance about sexuality is encouraged, and women are made to believe that men should be more experienced in sexual matters, while women should remain ignorant (Bethel, 1995; GoK, 1997). Women are discouraged from learning about their own bodies and sexual health. This may put them in a position of being dependent on men for information, information that may be factually wrong (Mann & Tarantola, 1996; NACC, 2002; 1996; Nnaemeka, 1998).

Ignorance about sex is rewarded and viewed as a sign of purity; too much knowledge is considered a sign of immorality (Gupta, 2000). Mann and Tarantola (1996) indicated that many cultures all over the world view female ignorance of sexual matters as a sign of purity and knowledge of sexual matters as a sign of diminished virtue. In addition the cultural norm that insists that women should remain virgins until marriage inhibits women from seeking AIDS-related knowledge lest they are accused of being sexually knowledgeable and experienced (NACC, 2002). However, the lack of knowledge about HIV transmission displayed by women puts them in a disadvantaged position because they do not have the tools to protect themselves. Kenyan women are unable to exercise their sexual rights because the culture disempowers them as they lack power in the economic, social, and political arena. Because women in Kenya are often economically, culturally, and socially disadvantaged, they lack equal access to treatment, financial support, and education (GoK, 1997; NACC, 2002).

Women, Cultural Practices, and AIDS

Culture can be defined as a way of life of a group of people. According to Macionis (2006), culture refers to values, beliefs, and behavior that together form a people’s way of life. Culture is a powerful force that shapes not only what people do but also what they think and feel. However, cultural practices are rituals that are carried out in a specific ethnic group or groups. Culture is not synonymous with cultural practices because not all ethnic groups in Kenya engage in female circumcision, widow inheritance, or polygamy.

Cultural practices that contribute to HIV vulnerability among women are significant topics affecting women but have generally been understudied. According to Bloor (1995), cultural differences can be useful in explaining different HIV vulnerabilities. The following cultural practices that contribute to HIV infection are discussed: female circumcision, polygamy, and widow inheritance.
Female circumcision. Female circumcision is a collective name given to several different traditional practices that involves surgeries of the female anatomy intended to curtail women’s sexuality. Female circumcision has existed in Africa since time immemorial and continues to this day (Rahman & Toubia, 2000; Turshen, 2000). Female circumcision is a secret society whereby women get together in a ritualized female bonding environment and is viewed as a form of female empowerment by African women only. Female circumcision is a complex ritual that brings in a lot of income and is intertwined in the political, social, and economic sphere, especially in the rural areas where resources are scarce (Lightfoot-Klein, 1989).

Female circumcision is a deeply ingrained custom that is still widely practiced in Kenya. Research has shown that some Kenyan women continue to practice female circumcision even after it was outlawed and banned in 1982 (Toubia, 1999). For some societies that practice female circumcision, a family or clan’s honor depends on a girl’s virginity or sexual restraint. Face and honor are two virtues that are highly prized in Kenya; however, a double standard exists because men do not have to live their lives under the same microscope (Lightfoot-Klein, 1989). In some societies, the rituals is a time of joyous celebration and elaborate festivities, while in others it is shrouded in concealment and secrecy (Abusharaf, 1995).

Female circumcision, once considered concealed and hidden, was brought into the forefront in the Western world through writings by Hosken (1993). Hosken started the dialogue on female circumcision by using maps to catalogue all the countries that practiced this ritual. Western feminists were outraged by female circumcision and vowed to eradicate the practice as they viewed it to be barbaric with no value for women. Female circumcision became a highly charged debate and in the early 1990’s, Western feminists embarked on this issue, renaming the ritual to female genital mutilation (FGM). In spite of rising opposition from Western feminists and scholars to end the practice, there was a backlash from some African women at the 1995 Fourth World Conference on Women in Beijing, China. African women vehemently denounced Western feminists for condemning female circumcision on the basis that it was an attack on their culture (Paterson, 1996). African women refused to listen to the voices of Western feminists, and the topic on female circumcision was simply submerged. However, female circumcision is an important topic in AIDS discourses because circumcision performed on women, not men, makes women more vulnerable to HIV infection because the possibility of HIV entry is high due to the sharing of instruments that are tainted with blood (NACC, 2002; Turshen, 2000).

Few studies have attempted to connect female circumcision as “woman on woman” violence and the relationship to HIV/AIDS vulnerability (Nnaemeka, 1998; Toubia, 1999). Women have been continuously portrayed as victims, but the power of women cannot be underestimated. African women are often portrayed as passive victims who have their genitalia removed in the name of tradition.

However women can be victimizers, as evidenced in female circumcision. It is women who have gone undergone this practice who put pressure on other women to undergo female circumcision (Lightfoot-Klein, 1989). Through this practice, women are directly involved in spreading HIV in the name of upholding tradition. Little research has been done on the effects of female circumcision on sexuality and the likelihood of HIV transmission (Doyal, 1995). Further studies need to investigate the underlying structure of men’s power over women’s lives that
enforce such practices (Sen & Grown, 1987). Women as agents of patriarchal violence in female circumcision need urgent attention and intervention (Nnaemeka, 1998).

**Polygamy.** Polygamy is a cultural practice found in most parts of Africa that allows a man to marry more than one wife. Polygamy is still widely practiced in Kenya particularly among Muslim communities (NACC, 2002). Polygamy, another cultural practice, predisposes women to HIV infection. Few studies have been done with regards to HIV and polygamy. However, polygamy may influence sexual behavior in ways that are relevant for HIV infection (Cleland & Ferry, 1995). Locating research that pertained to the association of polygamy and HIV was very difficult because of the silence that is prevalent in Kenya. Africans are very conservative and will not discuss topics that deal with sex. Sex is still considered a private affair. In Kenya, polygamy is still culturally valued even though many men have only one wife. Some men in Kenya do not even admit that they are in polygamous relationships, despite the fact that they have two wives who would be living in different residences (NACC, 2002; Turshen, 2000). However marriage arrangements are risky for women because men are not accountable for their behavior and can easily blame their wives if they are HIV infected.

Polygamy benefits men at the expense of women. However, marriage is so much valued in this society that some women with very low self-esteem do not care about sharing a man, and in the process they may contract HIV, and in turn become responsible for spreading it (GoK, 1997; NACC, 2002; Turshen, 2000). Promiscuity from both men and women is one of the factors that have influenced HIV vulnerability (Sabatier, 1988; Schoepf, 1988). Promiscuity is a concept that is hidden in order to save face but it needs to be exposed because of the high prevalence of HIV cases among women in sub-Saharan Africa (UNAIDS, 2004a).

African scholars are reluctant to talk about promiscuity in the African culture, but promiscuity exists and people have still not changed their behavior in spite of being aware that a serious disease looms (Bethel, 1995; Sabatier, 1988). The multiplicity of partners leads to women’s vulnerability because the likelihood of coming in contact with an infected person is very high (Mann & Tarantola, 1996). Thus, with HIV/AIDS in the country, the practice of polygamy puts women at risk for HIV infection for the mere fact that an infected husband can introduce the virus to all of his wives. Likewise, if one wife is infected, she can also infect the husband and put other wives in danger. Another factor that has not been explored in polygamous households is adultery. The younger wives are known to keep lovers while still married (Ogundipe-Leslie, 1994). Since the relationships are secret, and occur through a code of silence, younger wives can also bring HIV to the bedroom introducing HIV to the husband and the rest of the wives. Secrecy is a breeding ground for HIV vulnerability because it impedes a person’s ability to communicate honestly about sexual matters and relationships that can drastically alter an individual’s life forever (Eng & Butler, 1997). This becomes a vicious cycle of HIV vulnerability, infection, and spread.

**Widow inheritance.** Widow inheritance found among some ethnic groups in Kenya is another practice that exposes women to HIV infection. This is a cultural practice that involves the inheritance of a widow by the brother or male cousin of the deceased husband. According to Kenyan customary law, when a husband dies, the widow is absorbed into the husband’s family as a way to ensure that the widow and her children are provided for and the family name is kept.
Widow inheritance has become dangerous with the advent of HIV/AIDS. This practice increases the risk of contracting the AIDS virus particularly when the new bride is infected or if the inheritor is infected, putting both at risk. In summary, in terms of cultural practices, the vulnerable position of women has to be recognized (Lindsey, 1997) particularly because there are some cultural rituals that pose a danger to women because of the vulnerability of the female anatomy.

**Sexual Behavior, Women, and AIDS**

Little is known or understood about influences on sexual behavior among women from different classes and ethnic groups (Cleland & Ferry, 1995; Treichler, 1999). Sexuality remains an extremely private and complex subject of human behavior surrounded with socio-cultural taboos that make talking about sexuality virtually impossible (Eng & Butler, 1997). The meaning of specific behavior patterns that place women at risk must be thoroughly understood in order to educate vulnerable women about their own HIV vulnerability (Smyke, 1991; Worth, 1989). In the context of Kenya, not much has been written on women’s sexual behavior because of the dichotomy between a good and a bad girl (Belenky, Clinchy & Goldberger, 1986; Sacks, 1996). The image of a good girl is prevalent, and most women try to emulate that good girl image even when their behavior contradicts that model (Mann & Tarantola, 1996). Women are reluctant and refuse to engage in open discussions about sex for fear of being branded knowledgeable about sex, which makes them experienced. Women who seek information about sex are frowned upon (GoK, 1997, NACC, 2002). Cultural inequality contributes to women’s silence, which leads to secrecy about their sexual behavior because of fear and shame. Face and honor are two virtues that are highly valued in African societies (Toubia, 1999).

Patriarchy reinforced through culture needs to be examined in relation to women’s vulnerability to HIV/AIDS. Women and girls are often powerless to abstain from sex or to insist on condom use. Lack of consistent condom usage by women can be attributed to low sexual power (Fonck et al., 2005). Women may be coerced into unprotected sex or run the risk of being infected by husbands in societies where it is acceptable for men to have more than one partner (Baylies & Bujra, 2000). Conversely, the more fragile women’s economic situation is, the less likely women are to insist on their partner using protection, even when they know they are at risk for HIV infection (Bethel, 1995). Condom use, a tool that can prevent HIV infection, has been received with a lot of negativity by Africans (Sargent & Johnson, 1996). Women’s objections to condom use is related to ideas about men’s sexual pleasure and fear of its disruption (Wilkinson & Kitzinger, 1994). Women who engage in sex for money, gifts, or other favors are also highly vulnerable to HIV infection because of the frequency of partners from different ethnicities that have different practices, which leads to sexual mixing (Sargeant & Johnson, 1996). Kenya is reported as having one of the highest rates of prostitution in Africa (Institute of Economic Affairs, 2001). Women sex workers typically represent the groups that are at high risk for HIV infection. For example, 90% of women sex workers in the city of Nairobi are HIV infected (Institute of Economic Affairs, 2001). However, there are limited studies as to what happens to women whose partners patronize sex workers, leading to sexual mixing (Mann & Tarantola, 1996). The vulnerability of women in Kenya is greater than that of men because a man has the sole control of whether he wants to wear a condom or not (Sargent & Johnson, 1996). In addition women are prohibited from suggesting condom use because it is seen as evidence of a
woman’s infidelity (Smyke, 1991). Women risk physical violence if they ask their partners to use condoms (Sargeant & Johnson, 1996). With the advent of AIDS, it is becoming increasingly apparent that heterosexual sexual interaction is a dangerous practice if one of the partners is infected with HIV (Lester, 1989). Thus condom use and engaging in sex for money are sexual practices that should be examined in a study of HIV vulnerability.

### Women and Perception of Risk

Risk has been recognized as an important variable in theory and intervention in HIV prevention, but little attention has been made in examining what factors cause people to see themselves at risk (Prohaska, Albrecht, Levy, Sugrue, & Kim, 1990). Few empirical studies have assessed the relationship between perception of risk to HIV/AIDS and sexual behavior in Kenya. The context and meaning of sexuality is complex, diverse, and varies across ethnic lines in Kenya (NACC, 2002).

Perception of risk is a difficult concept in health education because a person’s own idea of his or her own risk of HIV infection often bears little relation to an individual’s actual risk (Panos Institute, 1990). In Kenya, on an individual level, people do not perceive themselves to be at risk because of the denial that pervades the Kenyan culture. There has been widespread denial of the extent and risk of sexual transmission of HIV through heterosexual sexual contact (Berer & Ray, 1993). Furthermore, stereotyped representations of who is at risk give women a false sense of security, which prevents women from realizing that they might be at risk for HIV infection (Cleland & Ferry, 1995). In summary, women who on an individual level, do not perceive themselves to be at risk for HIV infection are less likely to take safety measures because of the marriage myth that women are safe if they are married (Fleischman, 2003). Yet in the context of Kenya this is not always the case because of polygny and the rampant of extramarital affairs (NACC, 2002).

### Conceptual Model of Feminist Theories and HIV Vulnerability

A conceptual model shown in Figure 2 represents feminist theories utilized in this study as a guide in illuminating gender inequalities in the society which prevent women from enacting control over their social and sexual lives increasing their vulnerability to HIV infection. Feminist theories in this study provided an alternative lens in examining women’s vulnerability to HIV/AIDS by looking at social and cultural conditions and disparities that affect women in the Kenyan society. According to the principles of liberal feminist theory, women are vulnerable to HIV infection due to lack of equal opportunity and education exacerbated by traditional practices which keep women misinformed, disempowered, and dependent on men.

Liberal feminist theory suggests that women can reduce their vulnerability to HIV infection if they have access to education and equal opportunity; however liberal feminism is deficient because it does not believe in upsetting the status quo. Liberal feminist theory suggests that traditional practices that impede women’s progress should be deconstructed to benefit women.
Socialist/Marxist feminist theory attributes women’s vulnerability to HIV to the capitalist system and patriarchy endemic in the society. Socialist/Marxist feminist theory argues that capitalism and patriarchy inhibit women from acquiring complete independence over their lives which enhance HIV vulnerability. The remedy is to overthrow the capitalist system and patriarchy which would give women spaces in which they can have some say and control over their lives.

The radical feminist theory is more beneficial in fighting HIV/AIDS because it states that women are extremely vulnerable to HIV infection due to patriarchal processes in the culture and environment that affect their health, and therefore women should strive to overthrow patriarchy. Radical feminist theory suggests that the only way to fight women’s vulnerability is to expose what is considered private and make it public. According to research on African women, many women are getting infected by their husbands or partners (Fleischman, 2003). With the aid of liberal, socialist/Marxist and radical feminist theories, an HIV vulnerability model was constructed for this study that consists of powerlessness, lack of AIDS-related knowledge, cultural practices, sexual behavior, and perception of HIV risk. Feminist theories guided this study by demonstrating that women are most vulnerable to HIV infection when they have the least control over their sexual lives because of lack of economic power, cultural constraints, and disparities created by patriarchy (Lindsey, 1997). Patriarchy is a strong force in Kenya (Mikell, 1997; Turshen, 2003) and feminist theories are needed to expose what is in the society that creates conditions of vulnerability to HIV infection among women.

**Factors Related to HIV/AIDS Vulnerability**

**Age, Women, and AIDS**

HIV risk among young girls is steadily rising in Africa for several reasons. For economic and social reasons, women are forced to engage in relationships with older men in order to gain access to their money and material goods. Cross generational sex (Fleischman, 2003), age-mixing (Sargent & Johnson, 1996), and the concept of sugar daddies all refer to older men who entice younger women and have sexual relationships with them, believing that they will be cured if they sleep with a virgin (GoK, 2002; Leclerc-Madlala, 1996; Shell & Zeitlin, 2000). Studies have shown that young girls are infected with HIV infection at younger ages because of their association with older men who may be infected (Okeyo, Baltazar, Stover, & Johnson, 1998). In countries such as Botswana, Malawi, South Africa, Zimbabwe, and Kenya, it is well documented that older men seek younger girls in the hope that the girls are not sexually active and are therefore free of HIV (Common Secretariat, 2001; Kalipeni, 2000; Smyke, 1991). From the Democratic Republic of Congo, to Uganda, to Malawi, research has shown that young girls are vulnerable to the enticement of older men who promise money and material benefit in exchange for sex (Mann & Tarantola, 1996; Sargent & Johnson, 1996).

In addition, younger women are biologically more prone to HIV infection than older women because of the vulnerability of the female anatomy (Doyal, 1995; Patton, 1994). Women are more vulnerable to HIV given that they are the receptors while the men are the depositers of semen, which when contaminated with HIV is a danger to women. Thus, younger women may be more vulnerable to HIV than older women.
Feminist Theories

**Liberal**
- Disparity due to lack of access to equal opportunity and education and traditional practices
  - Work within system

**Social/ Marxist**
- Disparity due to capitalist system and Impact of patriarchy
  - Capitalism and patriarchy need to be overthrown

**Radical**
- Personal is political.
  - Disparity due to patriarchy
  - Patriarchy needs to be overthrown

**DISPARITIES CREATE GENDER INEQUALITY**

Social and cultural inequalities make women vulnerable.

The five constructs below

1. Powerlessness
2. Lack of AIDS-related knowledge
3. Cultural practices
4. Sexual behavior
5. Perception of HIV risk

**HIV VULNERABILITY**

*Figure 2. Conceptual Model: Intersection of feminist theories and HIV vulnerability.*
Women, Education, and AIDS

Illiteracy has been said to play a major role in HIV vulnerability. In sub-Saharan Africa, women are at the bottom in terms of education. Illiteracy and ignorance are two major obstacles in curbing HIV/AIDS. Kenya has made enormous strides in educating girls. However, women are still largely under-represented in education. Statistics indicate that many girls are enrolled to go to school in the primary level, but few women seem to enroll at the secondary level. In addition, males seem to enroll more than females (King, 1993). Browne and Barrett (1991) proposed that girls go to school in lesser numbers than boys, although considerable variations exist, making it difficult to generalize rates of participation and educational attainment. There are various explanations for this inequality in school enrollment between boys and girls in Kenya, for one, traditional attitudes place more emphasis on the education of boys, and parents continue to encourage boys to enroll in secondary schools (Eshiwani, 1988). Secondly, when a family member becomes sick, girls are the first to leave school so that they can take care of the family obligations. In this respect, girls tend to grow up to be illiterate and dependent on men for information (Nnaemeka, 1998).

Other factors that account for low enrollments of girls in Kenya are early marriages, secret societies, that is, the seclusion of girls at puberty, and the opportunity costs of schooling relative to more traditional forms of training for adulthood at home (Fafunwa, 1982). The cultural aspect of son preference also lowers female chances of going to school. Research on son preference reveals the dynamic by which the status of women can have a negative effect on their health (Smyke, 1991). Because of poverty, families prefer to educate boys; as a result, many women are denied the opportunity to go to school. Women are given low priority and the society views them as dispensable. In addition, educating a woman is seen as a waste of resources, as the belief is that women get married and leave the family. Conversely, investing in a man is viewed as a badge of honor and is highly encouraged by the society. Men are viewed as the providers while women are relegated to the passive role of being the caretakers and homemakers (NACC, 2002).

However, one finding does appear firm: Girls who stay in school tend to be from families of higher socio-economic status than boys, and these differences are compounded at higher levels of education (Abigail, 1976; World Bank, 2002). These sex differences in education can be traced in broad cultural patterns on women’s access to education (GoK, 1997; NACC, 2002). Turshen (2000) has argued that women’s access to schools depends on the extent to which cultural and religious beliefs accord women a role in life outside the family.

Lack of education for women results in low exposure to HIV/AIDS education messages (NACC, 2002). Women with education are more likely to understand how HIV is transmitted and thus how to protect themselves. Conversely, illiterate women are less likely to have the education and knowledge of the disease, how HIV is transmitted, and how to prevent it. Limited information has been a significant contributing factor in the spread of HIV (Berer & Ray, 1993).

When women are less educated, they have less knowledge, and do not possess ways of protecting themselves against AIDS (Wilkinson & Kitzinger, 1994). Growing up in ignorance, fear, and shame regarding their bodies, women’s subordination starts early through a clear
definition of what a female should be (Das Gupta et al., 1995; Mann & Tarantola, 1996). Education inequality affects women’s ability to take informed decisions on risk reduction (Turmen, 2003). Thus, low levels of education may be related to higher levels of vulnerability (Fleischman, 2003; Mann & Tarantola, 1996).

Religion, Women, and AIDS

The complexity of Kenyan women’s lives is negatively influenced by some religious sanctions. Religious beliefs contribute to women’s vulnerability especially when some religious leaders reinforce the idea that AIDS is caused by taboos and curses (Douglas, 1999). Some religious denominations in Kenya have not fully engaged in open discussions about sexual health and HIV discourse (NACC, 2002). Many religions have branded AIDS as a punishment from God brought about by deviance. Therefore, religious leaders are reluctant to talk about HIV because it involves sex. Talking about sex is still considered a taboo (Mann & Tarantola, 1996). The situation of women with AIDS cannot be improved without openly addressing issues of sexual health and formulating policies that would uplift women (Murphy, 1995).

Mann and Tarantola (1996) conducted research on religion and HIV vulnerability and contended that “AIDS reveals the unspeakable which seems to shake religions in their moral substance and their social influence” (p. 156). Religion can facilitate HIV vulnerability because of a denomination’s views on sexuality. Denominations like the Roman Catholic Church are very influential in people’s lives but the Church has been silent and reluctant to discuss sexual health issues (NACC, 2002). In Kenya, the Roman Catholic Church is very conservative and discourages the use of sex education in schools and the distribution of condoms (GoK, 1997), on the premise that distribution of condoms would encourage promiscuity. Also recently in 2009, the Pope denounced the use of condoms on the assertion that condoms promote sex leading to AIDS. This is unfortunate because in the absence of a cure, condoms are considered one of the safer preventative methods against HIV infection. The Church in this instance inhibits people from being open about sexuality, HIV/AIDS, and ways of prevention. In churches, talks about sexuality are discouraged and people are afraid to speak or ask questions regarding sexuality. Their voices are muted because they are taught that it is wrong to think, talk about, or engage in sex. However, people are getting infected everyday because of their own sexual behaviors and these issues need to be brought out in the open. Religion, where people seek solace, is a hindrance to many women because they are not protected from a deadly disease. Consequently, religious affiliation may put women in a more vulnerable position in relation to HIV/AIDS. Studies on religiosity versus those with no religion should be further explored in identifying HIV vulnerability among women.

Ethnicity, Women, and AIDS

Kenya consists of 40 ethnic groups (CIA-Factbook, 2005). Each ethnic community has its traditional customs, beliefs, and laws (GoK, 1997). However, some ethnic groups share common cultural beliefs and practices, for instance female circumcision, polygamy, and widow inheritance, and these are practices that have major repercussions for women (NACC, 2002). Not much AIDS research has been done on pastoralists groups like the Masai and Turkana. Women in these communities may be more vulnerable to HIV infection because their communities are
mobile and unstable. In such complex, difficult environments most women do not go to school, which explains the low levels of education and lack of AIDS-related knowledge found among these two groups (GoK, 1997; NACC, 2002). While not all practices found in different ethnic groups are harmful, the practices that affect HIV vulnerability cannot be overlooked under the guise of keeping tradition. Thus, women may exhibit different levels of vulnerability based on their ethnic group affiliation.

Region of Residence, Women, and AIDS

Kenya is divided into eight provinces, which are further subdivided into 72 districts (KDHS, 2003). HIV prevalence varies in each region as each ethnic group tends to congregate in a particular province. Some provinces have been affected by AIDS more than others depending on the culture and environment. Stark imbalances are vivid between urban and rural areas because of the uneven regional investment in the rural areas enhancing impoverishment (Susser & Stein, 2000). The urban areas are more endowed with resources than the rural areas, which may contribute to vulnerability among women. Because of scarcity of jobs there is increased involuntary migration of men in all rural areas into the city in search of jobs. This raises new issues because the men and women who are left behind engage in extra-marital and casual sex contributing to HIV vulnerability (Turmen, 2003).

The most impoverished areas are found in the rural areas where there is little development. The Western provinces of Kenya are said to have the highest adult HIV prevalence rates in the country, with recent estimates for Nyanza province at 28-35% (UNAIDS, 2004). In addition to chronic underdevelopment, cultural practices play a role in HIV vulnerability and cannot be overlooked. The practice of widow inheritance is more common in certain regions of the country. In the Mombasa region, women may be more vulnerable due to the practice of polygamy. Although women are expected to remain virgins until marriage (Ogundipe-Leslie, 1994), polygamous marriages do not prevent vulnerability to HIV infection particularly when infidelity occurs. In the Rift Valley region, wife sharing found among the Masai enhances higher vulnerability for women because of the frequent change of partners increasing the chances of encountering infected men (Lesathage, 1989; NACC, 2002). Although some women try to resist the custom, many women relent because of societal pressures. Some women from the Central region still practice female circumcision in the traditional way using a common knife on all their clients given that it is a ritual that is based on sisterhood, sharing, and transfer of blood, thereby increasing vulnerability to HIV infection (Toubia, 1999).

Other factors such as geographic location may make issues such as transportation and communication more or less available potentially increasing vulnerability among women because of scarcity of resources. The nature of the environment contributes to the scarcity of resources in some areas (rural vs. urban). Education levels may vary and economic opportunities maybe limited based on the area. Discrepancies in resources between the urban and rural regions have led to underdevelopment, poverty, and diseases.
Marital Status, Women, and AIDS

Marriage is a very important concept in African culture (Ogundipe-Leslie, 1994). Some women strive to get married because it is a symbol of social status, prestige, and access to resources. In addition, many women view marriage as a way out of poverty when there are few options available. According to studies on AIDS (Schoepf, 1988), marriage can offer protection to women if both parties are faithful. However, marriage can be oppressive, intensified by cultural and economic circumstances that favor men and leave women powerless in most decisions. Studies done in India, Brazil, and Africa suggest that marriage can be a risk factor for women who believe they are in a monogamous relationship because of the behavior of their partners (Fleischman, 2003).

Women are especially more vulnerable to HIV if they are part of polygamous relationships, on the basis that infidelity is inevitable especially among the younger wives. Many women are being exposed to HIV in their own homes from their husbands or partners (Bandyopadhyay & MacPherson, 1998; Fleischman, 2003; GoK, 1997). However, men’s behaviors are often overlooked and the blame is shifted onto women, who are often portrayed as the agents of HIV transmission (Booth, 2004). Marriage, which was considered a safe haven, can be toxic and lead to fatality, particularly in Kenya where polygamous relationships and concubinage co-exist side by side. Marriage is not a panacea for AIDS; consequently, marriage does not protect women from contracting AIDS. In addition, being married does not mean immunity from AIDS in a society like Kenya where extramarital affairs are a common occurrence. Many women live with the fear of becoming infected by their partners or husband because of the patriarchal system that condone men having multiple partners (Fleischman, 2003; Mwale & Burnard, 1992). The threat of AIDS for women begins with a lack of control over the sexual lives of their husbands outside of marriage, and in decisions about what takes place sexually, women are voiceless and do not discuss sexual matters with men (Wilkinson & Kitzinger, 1994).

Widowed women are vulnerable to HIV infection when they belong to cultures that promote and practice widow inheritance. If the husband died of AIDS, chances are that the widow is infected and can introduce the virus to the new husband and his family. Conversely, the widow could be HIV negative and get infected by the new husband. In summary, relative to marital status, different situations enhancing vulnerability are present for unmarried, married, and widowed women. From the available literature, it is unclear which group maybe more vulnerable based on their marital status.

Employment, Women, and AIDS

Research has shown consistently that women who earn an income independent of men are less depressed and derive satisfaction from work (Donovan, 1985; Frankenhaeuser, Lundberg, & Chesney, 1991; Sen & Grown, 1987). However, women who stay at home with little income are dependent on men and are more likely to be depressed and feel less worthy (Andersen, 2003; Lindsey, 1997; Patton, 1994). Often, women are not able to adequately compete in the job market because they lack the education and skills needed for the job. In
addition, women are relegated to lower paying jobs and stereotyped positions that carry low status in the private and public sector (Adepoju & Oppong, 1996; Mikell, 1997).

Poverty affects the health of everyone as well but has further repercussions for women (Mascie-Taylor, 1995). Poorer women spend more time on subsistence farming because they cannot afford to buy enough food to feed the family (World Bank, 1994). Being uneducated and unskilled means that women work longer hours and make less pay, and the kind of work women engage in is often back-breaking and dangerous (Sen & Grown, 1987). A woman who is illiterate and poor has few options as she does not have skills; therefore, her female anatomy becomes a sexual commodity which makes her vulnerable to HIV (Sacks, 1996). Women’s economic dependency often means that they offer and exchange their unpaid labor for male support, favors, and resources (Sacks, 1996). Research shows that women who have independent incomes are able to control their sexual health and are in a position to insist on condom use (Worth, 1989). But the reality is that most women in Kenya do not have independent incomes and are dependent on men for material goods (Smyke, 1991). Thus, women who are unemployed tend to be dependent on men for survival material goods and hence are more vulnerable to HIV/AIDS.

In summary, AIDS vulnerability discourses reveal that feminist theories are crucial in exposing gender inequalities in a society that prevents women from enacting control over their lives, and thereby increases their vulnerability to HIV infection. The Kenyan woman is like a trapped bird in a cage, as she is surrounded by economic, social, and cultural inequalities that engulf her entire life. With nowhere to go, African women suffer in isolation and silence. Liberal feminist theories inform us that women can begin to reduce their vulnerability to HIV infection if they are accorded equal opportunity and education. Socialist/Marxist feminist theory argues that capitalism and patriarchy are major impediments to women acquiring complete independence, which enhances HIV vulnerability. Radical feminist theory suggests that the only way to fight vulnerability is by exposing what is considered private and make it public. These three theories reveal that women who are most vulnerable to HIV infection are those who have least control over their sexual lives compounded by broader social issues such as lack of economic power, sexual power, cultural constraints, and disparity due to patriarchy (Fleischman, 2003; Smyke, 1991). These socio-cultural factors conversely affect women depending on their age, education, religion, ethnicity, region, marital status, and employment.

**Methodology**

This research investigated the factors that influence women’s vulnerability to HIV/AIDS in Kenya. To address the research questions, secondary data analysis of the 2003 Kenya Demographic and Health Survey was undertaken. Herein, the methodology used to examine the relationship between HIV vulnerability and various demographic variables is explained. First, the method of data collection, the sampling design, and the questionnaire are described.

**Kenya Demographic and Health Survey**

The data used in this research were derived from the 2003 Kenya Demographic and Health Survey (KDHS). The survey is an ongoing process conducted to monitor population and
health in Kenya. Data were collected in 1989, 1993, 1998, and 2003 however the present study used only the 2003 data set.

**Data Collection and Sampling Design**

The 2003 KDHS was administered by the Central Bureau of Statistics in collaboration with the Ministry of Health, the National AIDS and Sexually Transmitted Infections Control Programme, the Kenya Medical Research Institute, and the National Council of Population and Development. The data were collected from April to September of 2003.

The sample included 10,000 households randomly selected throughout Kenya. The sample incorporates the eight provinces in Kenya as well as rural and urban areas. A two-stage sample method was utilized in the KDHS survey. In the first phase, “clusters” were collected from a main sample frame under the Central Bureau of Statistics Department (the fourth National Sample Survey and Evaluation Programme). From this main sample frame, 400 clusters, 129 urban and 271 rural, were selected.

In the second stage, selection involved a sampling of all households that had been collected in 2002 by the National Sample Survey and Evaluation Programme. An update was reconfigured in May and June of 2003 in 50 selected samples because of the rapid change of residential places in the urban areas.

**Sample**

There were 8,195 women aged 15 to 49 and 3,578 men aged 15 to 54 who responded to the survey throughout Kenya. The present study utilized only the female data because of the research focus on vulnerability. The final sample size was reduced to 3,697 because of the use of listwise deletion, which is the exclusion of all respondents with a missing value on any given independent variable in the analysis. The average age of respondents was 28 years and the minimum and maximum ages were 15 and 49 respectively. In sexual relationships, AIDS exposes women’s vulnerability. Women are particularly affected by AIDS, given how gender relations intersect with sexual behavior and economic security (Baylies & Bujra, 2000). The present study shows that women who were younger, had low levels of education, were from certain ethnicities and from certain regions, were unmarried, and not employed were more vulnerable to HIV infection.

**Survey Instrument**

The KDHS (2003) study utilized three separate questionnaires for the study: the Women’s questionnaire, the Household questionnaire, and the Men’s questionnaire. However, in this study the primary focus was on the Women’s questionnaire. The Women’s questionnaire collected information from all women aged 15-49 on various topics ranging from reproductive history to experience with domestic violence. The survey examined issues of HIV/AIDS with emphasis on “awareness, sexual behavior and sexually transmitted diseases” (p. xix). The KDHS (2003) also added new features such as domestic violence and HIV testing which had not been included in prior research. In this study, however, the area of interest was about women and HIV
vulnerability in relation to Kenyan women. Selected items from the survey were operationalized to create the dependent and independent variables for this study.

Operationalizing the Dependent Variable: Vulnerability

The dependent variable created was HIV vulnerability. This variable was constructed through a review of the literature that identified five concepts that were shown to be related to the topic of interest which were powerlessness of women, lack of AIDS–related knowledge, cultural practices, sexual behavior, and perception of HIV risk. The vulnerability variable consisted of 21 items. The vulnerability score was calculated only if the respondent answered at least 10 of the 21 questions. The average of the items answered was calculated as the vulnerability score. In cases where the responses to more than 11 questions were missing, those responses were not taken into account and were eliminated because the low response rate did not represent the full scope of vulnerability, Table 1 shows the number of women who responded to each number of questions. According to Table 1, it is evident that only three people were excluded for the analysis because they answered fewer than 10 questions. Over half (57%) answered at least 18 of 21 questions. For purposes of this study, the vulnerability score was measured on a scale from 0 to 1 such that a low score represented low vulnerability and a high score represented high vulnerability to HIV. The composite score was arrived at by calculating the mean of the non-missing responses. The sum of the responses could not be used because of missing values that would not have given an accurate representation of the vulnerability score, hence mean scores were used. In the following section, each of these five constructs will be examined to show the frequency distribution of respondents on each of the dependent items.

Table: 1

Number of Respondents for Vulnerability Items

<table>
<thead>
<tr>
<th>No. of Questions</th>
<th>No of Respondents</th>
<th>Cumulative number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8.00</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>9.00</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>10.00</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>11.00</td>
<td>85</td>
<td>117</td>
</tr>
<tr>
<td>12.00</td>
<td>68</td>
<td>185</td>
</tr>
<tr>
<td>13.00</td>
<td>124</td>
<td>309</td>
</tr>
<tr>
<td>14.00</td>
<td>161</td>
<td>470</td>
</tr>
<tr>
<td>15.00</td>
<td>147</td>
<td>617</td>
</tr>
<tr>
<td>16.00</td>
<td>476</td>
<td>1093</td>
</tr>
<tr>
<td>17.00</td>
<td>490</td>
<td>1583</td>
</tr>
<tr>
<td>18.00</td>
<td>725</td>
<td>2308</td>
</tr>
<tr>
<td>19.00</td>
<td>1110</td>
<td>3418</td>
</tr>
<tr>
<td>20.00</td>
<td>269</td>
<td>3687</td>
</tr>
<tr>
<td>21.00</td>
<td>10</td>
<td>3697</td>
</tr>
<tr>
<td>Total</td>
<td>3697</td>
<td></td>
</tr>
</tbody>
</table>
Powerlessness

To measure women’s powerlessness, a scale was created that consisted of six items representing aspects of daily living (Table 2). Respondents were asked to determine whether they or someone else had a “final say” on issues such as health care, daily needs, food, purchases, money, and family visits. The initial response categories included (a) the respondent, (b) the husband/partner, (c) the respondent and husband/partner jointly, (d) someone else, and (e) respondent and someone else jointly. Low vulnerability was indicated by whether the woman herself, or if the woman and someone else jointly shared the responsibility for these decisions, and was therefore coded 0. If someone else had the final say, the woman was considered more vulnerable, and these responses were therefore coded as 1.

Table 2

Coding of Powerlessness

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Who decides how the money you earn will be used?</td>
<td>0= respondent, respondent &amp;</td>
</tr>
<tr>
<td></td>
<td>husband/partners jointly,</td>
</tr>
<tr>
<td>2. Who has a final say on your own health care?</td>
<td>respondent &amp; someone else</td>
</tr>
<tr>
<td>3. Who has a final say on making large household purchases?</td>
<td>jointly</td>
</tr>
<tr>
<td>4. Who has a final say about household purchases for daily needs?</td>
<td>1= husband/partner/someone</td>
</tr>
<tr>
<td>5. Who has a final say about visits to friends and family?</td>
<td>else</td>
</tr>
<tr>
<td>6. Who has a final say about what food should be cooked daily?</td>
<td></td>
</tr>
</tbody>
</table>

AIDS-Related Knowledge

To measure knowledge about HIV/AIDS, a number of questions were utilized from the original survey. The knowledge scale consists of eight items that ask respondents about their knowledge of factual information related to the transmission of HIV. The response categories were either ‘yes’ or ‘no’. The coding of these responses depended on whether the correct answer was yes or no; with correct answers (i.e., more knowledge) indicating low vulnerability. Answers indicating that the respondents had more knowledge, and hence were less vulnerable, were coded as 0. Those who answered in a way that indicated less knowledge and were therefore more vulnerable, were coded as 1. Table 3 provides the specific coding for each of the knowledge items.
Table 3

Coding of AIDS-Related Knowledge

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can one reduce their chances of getting the AIDS virus by having one sex partner who has no other partners?</td>
<td>0=Yes 1=No</td>
</tr>
<tr>
<td>2. Can one get the AIDS virus from mosquito or insect bites?</td>
<td>0=No   1=Yes</td>
</tr>
<tr>
<td>3. Can one reduce their chances of getting the AIDS virus by using a condom every time they have sex?</td>
<td>0=Yes 1=No</td>
</tr>
<tr>
<td>4. Can one get the AIDS virus by sharing utensils with a person who has AIDS?</td>
<td>0=No 1=Yes</td>
</tr>
<tr>
<td>5. Can one reduce their chances of getting the AIDS by not having sex at all?</td>
<td>0=Yes 1=No</td>
</tr>
<tr>
<td>6. Is it possible for a healthy-looking person to have the AIDS virus?</td>
<td>0=Yes 1=No</td>
</tr>
<tr>
<td>7. Have you ever been tested for the AIDS virus?</td>
<td>0=Yes 1=No</td>
</tr>
<tr>
<td>8. Do you know where you could go to get an AIDS test?</td>
<td>0=Yes 1=No</td>
</tr>
</tbody>
</table>

Cultural Practices

Two items were utilized to represent cultural practices. The respondents were asked to indicate whether or not they were circumcised and if their husband had more than one wife. Those who responded yes were coded as 1, indicating higher vulnerability. Conversely, those who responded no were coded 0, which demonstrated lower vulnerability (see Table 4).

Table 4

Coding of Cultural Practices

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does your husband have other wives?</td>
<td>0= No 1=Yes</td>
</tr>
<tr>
<td>2. Are you circumcised?</td>
<td>0=No   1=Yes</td>
</tr>
</tbody>
</table>

Sexual Behavior

Four items were used to measure respondents’ risky sexual behavior. The items asked about condom usage and whether the respondent had received money or gifts in exchange for
sex. The response categories were ‘yes’ or ‘no,’ with yes responses indicating low vulnerability (Table 5).

**Table 5**

**Coding of Sexual Behavior**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The first time you had sexual intercourse, was a condom used?</td>
<td>0=Yes, 1=No</td>
</tr>
<tr>
<td>2. The last time you had sexual intercourse, was a condom used?</td>
<td>0=Yes, 1=No</td>
</tr>
<tr>
<td>3. Intercourse with another man, was a condom used?</td>
<td>0=Yes, 1=No</td>
</tr>
<tr>
<td>4. Ever given/received gifts, money, or favors in return for sex?</td>
<td>0=No, 1=Yes</td>
</tr>
</tbody>
</table>

**Perception of HIV Risk**

To measure perception of HIV risk, respondents were asked to determine perceived risk of HIV vulnerability. There was one question with four possible responses. The response category ranged from no risk to small, moderate, or great risk. Those who stated that their chances of getting AIDS were “no risk” were coded 0, small risk was coded .50, moderate risk was coded .75, and great risk coded 1 (see Table 6).

**Table 6**

**Coding of Perception of HIV Risk**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you think your chances of getting AIDS are no risk, small,</td>
<td>No risk =.00</td>
</tr>
<tr>
<td>moderate, or great?</td>
<td>Small   =.50</td>
</tr>
<tr>
<td></td>
<td>Moderate=.75</td>
</tr>
<tr>
<td></td>
<td>Great   =1.00</td>
</tr>
</tbody>
</table>

**Operationalizing the Independent Variables**

According to the literature, a number of demographic differences exist among women with regards to vulnerability. People who are less educated are shown to be more vulnerable to HIV than those with more education (NACC, 2002; World Bank, 2002). Younger adults are more vulnerable to HIV than older adults. There are also certain ethnic practices or religious practices that may increase HIV vulnerability (Mann & Tarantola, 1996). Therefore, it is paramount that studies take into account basic demographic differences in studying the level of vulnerability among women. In this study it was expected that age, education, religion, ethnicity, region, marital status, and employment were the independent variables that would be related to HIV vulnerability among women. The independent variables are summarized in Table 2.
Age

Age is one of the variables identified in the literature as a factor in HIV vulnerability among females. The literature has widely suggested that younger adults are more vulnerable to HIV infection because of social, cultural, and economic reasons (Kalipeni, 2000; NACC, 2002). Age was measured in the following increments:

1. 15-19
2. 20-29
3. 30-39
4. 40-49

Education

The literature suggests that those with higher levels of education tend to be more knowledgeable about HIV transmission and prevention and hence less vulnerable to HIV infection than those with lower levels of education (Cleland & Ferry, 1995; World Bank, 2002). Education was classified into four categories:

1. No education
2. Primary
3. Secondary
4. Higher education

Religion

HIV vulnerability is expected based on religious affiliation. For example, Douglas (1999) and Mann and Tarantola (1996) suggested that certain religions promote practices such as polygamy, which can create an easier channel for the transmission of sexually transmitted diseases including HIV/AIDS. In this study it is expected that there will be differences in vulnerability to HIV/AIDS based on religious affiliation.

Five religious categories were identified for the purpose of this study.

1. Roman Catholic
2. Protestant/other Christian
3. Muslim
4. No religion
5. Other

Ethnicity

As suggested by the literature, it is expected that there will be differences among the various ethnic groups with regards to HIV vulnerability. Certain cultural practices such as female circumcision have been criticized for contributing to the spread of disease among women,
making some ethnic groups more vulnerable than others. The ethnic groups included in this study are as follows:

1. Embu
2. Kamba
3. Kisii
4. Luo
5. Meru
6. Taita/Taveta
7. Kuria
8. Kalenjin
9. Kikuyu
10. Luhyaa
11. Masai
12. Mijikenda/Swahili
13. Turkana
14. Other

Region of Residence

Different lifestyles influenced by access to resources in different regions may exhibit different levels of vulnerability. The region of residence variable was divided into eight categories:

1. Nairobi
2. Central
3. Coast
4. Eastern
5. Nyanza
6. Rift Valley
7. Western
8. North Eastern

Marital Status

The literature has suggested that all categories of women are vulnerable to HIV infection due to different reasons (Fleischman, 2003; NACC, 2002). In this study it is expected that there will be differences in HIV vulnerability based on a woman’s marital status. The marital status variable comprised of six categories:

1. Never married
2. Married
3. Living together
4. Widowed
5. Divorced
6. Married, Not living together

Employment

In this study it is expected that there will be differences in HIV vulnerability based on whether someone currently works or not with those who are unemployed being more vulnerable (Farmer et al., 1996; Mann & Tarantola, 1996). The original categories were as follows:
1. Household and domestic
2. Professional, Technical, Managerial
3. Sales
4. Agriculture-self employed
5. Not working
6. Clerical
7. Unskilled manual
8. Services
9. Skilled manual

The original responses were disproportionately skewed towards ‘not working’ (37%), therefore the original occupation variable was collapsed into two new categories: (a) employed and (b) unemployed.

Analysis Plan

The Statistical Package for the Social Science (SPSS) was used for this analysis. Descriptive statistics were computed for independent variables. The statistical test used to analyze the data in this study was ANOVA, analysis of variance. A one-way ANOVA was performed to test if a significant relation existed between the independent variables and dependent variable. ANOVA was used because the data consisted of categorical factors which included age, education, religion, ethnicity, region of residence, marital status, and employment. Tests of between subject effects were conducted to ascertain significant factor effects (Table 7). For significant factors, multiple comparisons with Bonferroni adjustments were used to make all pair-wise comparisons of the individual levels of the factor.

Analysis of Variance

To gain an understanding of factors affecting HIV vulnerability among Kenyan women, analysis of variance (ANOVA) was used to study the effect of age, education, religion, ethnicity, region of residence, marital status, and employment. The tests of between-subject effects show that age \((F = 78.848, p = .000)\), region of residence \((F = 21.452, p = .000)\), education \((F = 130.088, p = .000)\), ethnicity \((F = 13.276, p = .000)\), marital status \((F = 39.002, p = .000)\), and employment \((F = 216.592, p = .000)\) were all statistically significant. However, religion \((F = .730, p = .572)\) was not statistically significant (Table 8).
Table 7.
Definitions, Measurement, and Coding of Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male or female</td>
<td>Only females included in study</td>
<td>N/A</td>
</tr>
<tr>
<td>Age</td>
<td>Chronological age</td>
<td>Age of respondent in Years</td>
<td>Years of age</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1= 15-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2= 20-29</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3= 30-39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4= 40-49</td>
</tr>
<tr>
<td>Education</td>
<td>Highest level of education of respondent</td>
<td>As reported by respondent</td>
<td>1 = no education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = primary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = higher</td>
</tr>
<tr>
<td>Religion</td>
<td>Religious affiliation of respondent</td>
<td>As reported by respondent</td>
<td>1 = Roman Catholic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Protestant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Muslim</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = No religion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = Other</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Ethnic origin of respondent</td>
<td>As reported by respondent</td>
<td>1= Embu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Kamba</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Kisii</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = Luo</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>5 = Meru</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = Taita/Taveta</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 = Kuria</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>8 = Kalenjin</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>9 = Kikuyu</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10= Luyha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11= Masai</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12= Mijikenda/Swahili</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13= Turkana</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14= Other</td>
</tr>
<tr>
<td>Region</td>
<td>Region of residence of respondent</td>
<td>As reported by respondent</td>
<td>1= Nairobi</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2= Central</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3= Coast</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4= Eastern</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5= Nyanza</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6= Rift Valley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7= Western</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8= North Eastern</td>
</tr>
<tr>
<td>Marital</td>
<td>The marital status of respondents</td>
<td>Whether respondent is married or not</td>
<td>1 = never married</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
<td>2 = married</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3= living together</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4= widowed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5= divorced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6= not living together</td>
</tr>
<tr>
<td>Employment</td>
<td>Employment status of respondents</td>
<td>Whether respondent is employed or unemployed</td>
<td>1 = not employed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = employed</td>
</tr>
</tbody>
</table>
It had been hypothesized that religion would play a significant role in HIV vulnerability. However, this was not the case, and was in contrast with the hypothesis. Thus, no further analysis was performed using religion. In the next phase of analysis, between-subject effects were identified and multiple comparison tests (Bonferroni) were conducted for these variables. Bonferroni was the preferred statistical test used in this analysis because more than one test was performed, and if Type 1 error were to occur, the significance would not be more than 0.05.

Table 8

Results of the Test of Between-Subject Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>3879</td>
<td>3</td>
<td>1.293</td>
<td>78.848</td>
<td>.000</td>
</tr>
<tr>
<td>Region</td>
<td>2.492</td>
<td>7</td>
<td>.352</td>
<td>21.452</td>
<td>.000</td>
</tr>
<tr>
<td>Education</td>
<td>6.399</td>
<td>3</td>
<td>2.133</td>
<td>130.088</td>
<td>.000</td>
</tr>
<tr>
<td>Religion</td>
<td>.048</td>
<td>4</td>
<td>.012</td>
<td>.730</td>
<td>.572</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2.830</td>
<td>13</td>
<td>.218</td>
<td>13.276</td>
<td>.000</td>
</tr>
<tr>
<td>Marital Status</td>
<td>3.198</td>
<td>5</td>
<td>.640</td>
<td>39.002</td>
<td>.000</td>
</tr>
<tr>
<td>Employment</td>
<td>3.551</td>
<td>1</td>
<td>3.551</td>
<td>216.592</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>59.964</td>
<td>3657</td>
<td>.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>110.191</td>
<td>3693</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion of Findings

This research explored the socio-cultural factors contributing to HIV vulnerability among women in Kenya. The present study indicates that there are differences in HIV vulnerability among young and older women, women with lower levels of education were more vulnerable than those who had higher levels of education, women from some ethnic groups exhibited higher vulnerabilities, women from the rural regions were more vulnerable than the urban areas, unmarried women were more vulnerable than married, widowed, and the divorced, and those who were unemployed tended to be more vulnerable than those who were employed.

Age

The current study found that females, as earlier identified, were more likely to be vulnerable to HIV infection at an earlier age. This is consistent with previous literature that age is a major factor in HIV vulnerability among younger women (Kalipeni, 2000). Young girls in relationships are more likely to be socially and sexually vulnerable because of their dependence on men economically and submissiveness of women in a society where women are often expected to be socially and culturally subservient to men (Fleischman, 2003; Zulu, Nii-Amoo Dodoo, & Chika-Ezeh, 2002).

In addition, young women get married to older men in Kenya increasing HIV vulnerability because of the power imbalance that exists in terms of experience, authority, and control over sexual activity and resources (Turmen, 2003). Studies done in the Caribbean, South Africa, Namibia, and Uganda have shown similar results that age plays a vital role in HIV vulnerability with younger women being more vulnerable (Bain, 2000; Kalipeni, 2000; NACC,
2002). The power advantage in patriarchy comes through in various ways and is wielded through older age, education, and social status (Bain, 2001). In Kenya, women are getting infected at a very young age with AIDS cases on the rise in the 20-45 age bracket and peaking at ages 25-29 (Akwara et al., 2003). Kalipeni (2000) further stated that age plays a significant role in increasing HIV vulnerability among younger women as middle aged men are known to seek younger girls 10-15 years of age in the belief that they are sexually inexperienced and free of HIV infection. This suggests that women usually succumb to older men for resources at an earlier age because of limited access to economic and educational opportunities (NACC, 2002). Poverty creates conditions whereby girls do not often have money to pay for basic amenities or even schooling and have to rely on men to pay for access to those resources. However in the process HIV can be introduced to women (Mann & Tarantola, 1996; NACC, 2002; Shell & Zeitlin, 2000). While all age groups have some degree of vulnerability, HIV/AIDS education efforts targeting girls and young women aged 15 to 19 should have priority. The few studies that have been done on sexually transmitted diseases indicate that the infrastructure is in disarray, health education is often neglected, and nothing is known about the quality of STD health education in Kenya (O’Hara et al., 2001).

Education

The findings that women with lower levels of education demonstrated higher vulnerability were consistent with other findings published in the literature. The unequal access of education of girls is widespread and has both economic and cultural roots (Das Gupta et. al, 1995). Previous studies have shown that individuals with less education are likely to have little access to resources as well as less specific AIDS-related knowledge (Abel & Chambers, 2004; Cleland & Ferry, 1995). Those women with low levels of education may experience HIV vulnerability as they may have inaccurate AIDS-related knowledge about transmission, spread, and care. Research suggests that those with higher levels of education have greater access to basic health care, better nutrition, and access to antiretroviral therapies (Baylies & Bujra, 2000).

According to the 2003 Kenya Demographic and Health Survey, intercourse starts as young as the age of eight among girls; hence provision of education should not have age boundaries. Recent studies emphasize the need for HIV education as it has been known to reverse and reduce the spread of HIV, and education in general contributes to women’s economic independence (Belenky, Clinchy, & Goldberger, 1986; Browne & Barnett, 1991; NACC, 2002; World Bank, 2002). Education is vital and significant in a person’s growth. The notion that education is a very important factor in reducing HIV vulnerability is in agreement with the liberal feminist perspective that advocates education for women. Education on sexual health is a process that should begin early in life as HIV affects women at an earlier age. Awareness must be raised as women lack the information to initiate change.

HIV education must be extended to grandmothers who are the main beneficiaries as the numbers of orphans are increasing in Kenya (GoK, 1997; World Bank, 2002). The essence of education should be more than just informative. It must seek to address three major key issues. First, education given to women must be relevant to their health needs and their priorities identified. Secondly, education must also be directed towards changing social attitudes that inhibit women from protecting themselves. Thirdly, it is important to maintain effective
communication and promote awareness through education. Education about sex and the female body is an important determinant of HIV vulnerability (Turmen, 2003). The literature shows that health education can influence cultural attitudes and beliefs about the explanations of disease and encourage women to interact and seek health services rather than rely on self-treatment (Caldwell, 1993). Furthermore, research shows that adequate knowledge may influence and change attitudes and make condom usage and change of behavior more attractive (Abel & Chambers, 2004). Women should be offered appropriate information and education so that they can make informed choices. Their particular social, cultural, and economic barriers should be considered (Visvanathan, Duggan, Nisonoff, & Wiegersma, 1997). However, education is helpful only if people can apply the knowledge. Educating women on AIDS and not providing women with protective devices is a losing battle. HIV health education should be a priority since it is very inexpensive and requires little resources compared with diagnosis and treatment (O’Hara, et al., 2001). HIV/AIDS is a multifaceted disease that carries connotations of fear, shame, and stigma. Because the disease is so heavily stigmatized, women resort to avoidance and refuse to engage in any issue that pertains to HIV/AIDS because they are afraid of being associated with the disease (Mikell, 1997).

However one major obstacle for women in Kenya is that women do not feel safe to go for HIV testing because of the stigma attached to the disease, and many avoid clinics even when they know where a voluntary and testing center (VCT) is available (NACC, 2002). Stigma of HIV/AIDS is so strong that women with HIV perceive little reason to seek medical services for fear of disclosure (UNAIDS 2006). Thus a significant number of women resort to self-medication, which is dangerous because it can result in the “breeding of resistant organisms” (Mascie-Taylor, 1996, p.20). Women in Kenya do not voluntarily go to clinics for HIV testing, they only go to clinics when they are pregnant and need prenatal care and an HIV test is mandatory (NACC, 2002). Most women find out their HIV status through ante-natal clinics (Clark, 2004). Sites where women can feel safe to go without being castigated have been slow to emerge in Kenya.

Religion

The findings in this study showed that religion was not significantly related to HIV vulnerability. However, other researchers propose that religion and faith-based organizations can have a positive influence on health behaviors, but little research has been done to examine religion’s role in educating people about HIV/AIDS issues (Douglas, 1999; Elifson, Klein, & Sterk, 2003). In a study done by Elifson et al. (2003), religiosity was found to be a strong predictor in women’s involvement in sexual risky behaviors with the less religious reporting greater risky sexual behavior hence greater vulnerability. However in the present study, religion was not significantly related to HIV vulnerability among women. This is likely because the majority of the respondents were Christians and therefore there was not much variation in this variable; only a small number indicated no religion. Further studies need to be done to understand the role religion plays in influencing vulnerability to HIV/AIDS.
Ethnicity

The results of the current study were consistent with the literature that women from different ethnicities experienced different levels of vulnerabilities based on their lives and environment (Sargeant & Johnson, 1996). In this study, the Kisii, Masai, Swahili, and Kuria women had higher vulnerabilities to HIV infection. In the present study, the Luo and Luyha ethnic groups had lower vulnerabilities; however, these results are in contrast with the AIDS literature on Kenya which shows that the Western provinces of Kenya have the highest adult HIV prevalence rates in the country, with recent estimates for Nyanza province at 28-35% (UNAIDS, 2004). Women’s vulnerability can be attributed to the social and cultural forces within each particular ethnic group that negatively impacts on their upward mobility (GoK, 1997; NACC, 2002; Schoepf, 1988; Turshen, 2000). Women from the Luo and Luhya ethnic groups have to rely on the social networks available such as widow inheritance because they are economically vulnerable and risk starvation if they go against tradition. As customary law takes precedence and dictates that women cannot own property independently of men only through husbands, sons or a male cousin in the absence of a male (Mikell, 1997; Ocholla-Ayayo, 1976) exacerbating women’s vulnerability. Consequently, women who belong to ethnic groups that are disadvantaged economically and socially tend to resort to harmful cultural practices such as widow inheritance and female circumcision as a way to generate revenue. These very practices increase vulnerability among women. Authors such as Mwale and Burnard (1992) and Lightfoot-Klein (1989) stated that African women live with the constant fear of being vulnerable to HIV as a result of remaining faithful to traditions, some of which may be harmful but continue in order to appease patriarchy. Cultural practices such as widow inheritance offer women support and protection in case the husband dies. Since women cannot own property they lose everything to the paternal family when the man dies. Women’s vulnerability to HIV infection increases when widowers remarry without having an HIV test (NACC, 2002). Female circumcision is another natural occurring system which provides a network for women to belong to a group, to satisfy a need even when it puts women at risk. However these practices need to be revisited and reexamined. They should not be totally abolished as there are no alternatives to female circumcision, polygamy, and widow inheritance (NACC, 2002). Without an income and no access to resources the systems in place although harmful provide some security, thus totally eradicating them would create other vulnerabilities. I propose that women should use these avenues to raise awareness and consciousness about HIV/AIDS and disseminate information that pertains to HIV and women. Practices that predispose women to HIV/AIDS should be done away with (Ogundipe-Leslie, 1994; Toubia, 1999), because they are not functional in today’s Kenya.

The Masai are pastoralists and are less likely to have knowledge of how HIV is transmitted because of low levels of education. Most of them do not go to school because of their nomadic lifestyle. They move from one place to another in search of water, food, and greener pastures for their cattle. Thus in some instances women are more vulnerable because they are geographically isolated and may have less access to information because they do not have access to modern amenities (GoK, 1997; Lesthaeghe, 1989). The concept of ethnicity is a complex issue because of the norms that each group has which is distinct from the other. Conversely, ethnicity has to delved into in order to examine what each ethnic group is doing enhancing situations of HIV vulnerability among women.
Region of Residence

The results of this study supported the hypothesis that women have varying vulnerabilities depending on where they reside. The urban areas of Nairobi and the Coastal regions showed lower vulnerabilities than the rest of the regions, which are classified as rural. Specific ethnic groups with almost similar cultural practices tend to congregate amongst each other within regions (Akwara et al., 2003). The characteristics of rurality differ by region and type of economy (Thomas, Lansky, Weiner, Earp, & Schoenback, 1999). The unequal distribution of resources found in the rural areas as opposed to the urban areas contributes greatly to HIV vulnerability among women. Women from the Nyanza, Rift Valley, Western, and North Eastern regions showed high levels of vulnerability. Another factor that may be responsible for HIV vulnerability among women is migration. Women who migrate to the city without a safety net run the risk of being jobless, living in deplorable conditions with limited basic amenities amplifying their vulnerability (Zulu et al., 2002), even though the city is more developed than the rural areas. Poverty forces inhabitants to migrate to the city in search of employment; this creates disruption of social and family networks increasing the likelihood of HIV infection (Turmen, 2003). Rural areas are fairly isolated and relatively stable but they are not isolated from urban areas and infections spread very easily because of the number of sexual relationships outside of main partnerships occurring between the two regions (Thomas et al., 1999).

Marital Status

There were differences in vulnerability based on marital status with those who were unmarried exhibiting higher vulnerability. From a vulnerability perspective, AIDS literature has provided conflicting perspectives about who is vulnerable depending on marital status. Previous research on Kenya has shown that the level of sexual relations among unmarried women is high and the average number of different partners greater for unmarried, than married, widowed, and divorced women (Caldwell, 2000).

Hence unmarried women would be considered more vulnerable to HIV infection. Research shows that sex within marriage is considered safer than sex outside of marriage (Clark, 2004). However some studies on African women have shown that married women are just as vulnerable and at risk for HIV infection because of the behavior of their partners (Abel & Chambers, 2004; Fleischman, 2003).

With the advent of AIDS, marriage does not automatically offer protection from risk for women who believe they are in a monogamous relationship yet their husbands may have multiple partners enhancing vulnerability (Baylies & Bujra, 2000; Mann & Tarantola, 1996). Nevertheless in some instances the behavior of a male partner may be more important in determining HIV vulnerability among married women (Mann & Tarantola, 1996). Research has demonstrated that women in Africa, Asia, and the Pacific are being infected in increasing numbers by their husbands who have commercial sex as well as concubine sex (Fleischman, 2003). In addition, polygamous sexual cultures also place women in marriages at risk for HIV infection because of both male and female infidelity (Fleischman, 2003; Mann & Tarantola; 1996; Sabatier, 1988; Turshen, 2000).
However, the present study supports the contention that unmarried women are more vulnerable. According to AIDS literature, sticking to one partner, also known as zero-grazing, is the best way to avoid HIV vulnerability, regardless of whether one is married or unmarried (Mann & Tarantola, 1996; Sabatier, 1988).

**Employment**

The findings are consistent with the literature that lack of employment plays a significant role in HIV vulnerability. Only 20% of women are employed in the formal sector, and many of the women’s economic roles are undervalued and highly marginalized, which leaves women highly vulnerable (Mikell, 1997). Of those who are employed in Kenya, women tend to occupy the lowest-paying and stereotyped positions that carry low status in the private and public sector (Mikell, 1997). Women in Kenya are faced with many obstacles that deflect their concentration in school forcing them to drop out of school and ultimately become unemployed and dependent. According to Kalipeni (2000), jobs and resources such as government training or extension services are directed toward men and income generating opportunities are generally unavailable for women. The financial vulnerability of women is intensified by lack of access to credit, land ownership, training, and education (Fleischman, 2003). Harsh economic realities and no possibility of acquiring jobs because of lack of skills leave women with few options and some have to resort to survival sex (Sacks, 1996) as a way of generating income, which increases their chances of vulnerability. Inferior economic and social status limits the ability of many women to refuse coerced and unprotected sex (Mann & Tarantola, 1996).

The results from this study concur with socialist/Marxist theory that women’s economic inequality and their dependence on men is a major factor in influencing greater vulnerability to HIV infection. Socialist/Marxist feminist theory states that without economic power, women are more likely to depend on men for economic resources (Blumberg, 1981, Farmer et al., 1996). Low wages paid to women and unpaid household labor creates situations in which women become dependent economically and emotionally on men (Donovan, 1985; Lindsey, 1997; Lorber, 2001). Employment is significant in empowering women because it creates economic freedom and independence, and women can have the option to leave a relationship that is toxic. Without an income, women are desperate and are forced to stay in disastrous relationships that create avenues for HIV vulnerability (Farmer et al., 1999; Fleischman, 2003).

In summary, the findings in this study indicate that women were vulnerable to HIV infection because many women lack power and economic independence over their sexual lives. However, as this study suggests, vulnerability cannot be blamed on the individual alone; cultural norms and a combination of social vulnerabilities places women and girls at high risk for HIV/AIDS. In addition, vulnerability to HIV infection is linked to people’s sexual behaviors. It is what people do that puts them at risk (Mann & Tarantola, 1996). Women are also vulnerable because sexual relationships between men and women in Kenya take place in a context where the roles are determined by patriarchal cultures where women have little say in sexual matters (Delor & Hubert, 2000; Mann & Tarantola, 1996). HIV affects women who are least able to protect themselves; the vulnerable, insecure, and weak (Bury, Morrison & McLachlan, 1992).
This study brings together social and cultural factors that influence HIV vulnerability among women. Women in Kenya are oppressed in numerous ways, increasing their vulnerability to HIV infection. Male dominance camouflaged through customs has prevented women from exerting control over their lives and bodies. Women are unable to protect themselves from HIV infection as they lack the power to negotiate in matters that affect their health and bodies because they are dependent on men for daily living, enhancing their vulnerability to HIV infection. In this context, women’s vulnerability to HIV infection is reinforced by processes and factors existing in the society and the environment that interact at different levels, affecting women depending on their age, education, ethnicity, region of residence, marital status, and employment.

Limitations

The results of this study should be viewed in light of several limitations that can be attributed to the use of secondary data analysis. Because variables had to be constructed from pre-defined survey items, it was difficult to create variables that could provide a comprehensive picture of vulnerability. For instance, the cultural practices question included only 2 items, not enough items when examining vulnerability. Important factors related to HIV vulnerability such as substance abuse and use of alcohol were not incorporated in the KDHS questionnaire. However, despite these limitations, I was able to conceptualize concepts that made this study possible.

Another limitation was missing data. In this study the vulnerability concept consisted of 21 items. This resulted in a sample that was half the size of the original survey. In cases where the responses to more than 11 questions were missing, those responses were not taken into account and cases were eliminated because of the low response rate. In cases where the responses to more than 11 questions were missing, those responses were not taken into account and cases were eliminated because of the low response rate. Because of missing data, the vulnerability score was calculated only when the respondent answered at least 10 of the 21 questions. Consequently, the average of the items answered was calculated as the vulnerability score. For purposes of this study, the vulnerability score was measured on a scale from 0 to 1 such that a low score represented low vulnerability and a high score represented high vulnerability to HIV. The composite score was arrived at by calculating the mean of the non-missing responses. Because of missing values, mean scores were used.

Another limitation was underreporting by the respondents; only one woman admitted to having AIDS. This is in sharp contrast to reports that show cases of women with AIDS in Kenya rapidly rising (UNAIDS, 2000a). The underreporting might be attributed to the way the question “do you have AIDS” was phrased in the survey. Rather than asking “do you have “AIDS” as a separate question, this was a response on the perception of risk question (refer to Appendix A, Q816B1, p. 144). Another possible reason for the underreporting is the stigma associated with HIV, it is not safe to disclose one’s positive status particularly if you are a woman. Women are also afraid to be associated with AIDS because AIDS is linked with acts of deviance (Mann & Tarantola, 1996). Women with HIV are stigmatized because they are viewed as dangerous. The possibility of contagion is the basis for some of the fear (Feldman, 1990). Women face the risk of physical and mental violence once they disclose their HIV positive status. Stigma and discrimination prevalent in Kenya also makes women hide their status. Another limitation is that
the KDHS sample may not be representative for the general population of women in Kenya given the nature of the data. However, for the purposes of this study, I was able to discern concepts that were relevant given the variables available. The KDHS was a large sample and it incorporated 14 ethnic groups. Collecting such data would not otherwise have been feasible.

**Recommendations**

The current situation on women and HIV vulnerability cannot be rectified before the root causes are targeted. Social, cultural, and economic factors produce conditions that facilitate vulnerability. Among the most important tools to alleviate vulnerability is sex education, which empowers women and gives them the self-confidence and self-esteem to express their needs and negotiate condom usage (Visvanathan et al., 1997). Health education enables people to understand the problems they are facing and participate in choosing an appropriate solution to their health problems (Steady & Toure, 1995).

Education on sexuality and AIDS-related knowledge should begin early in life. Young girls before they are of child bearing age must begin to understand how their bodies function and how to protect themselves from sexually transmitted infections. Women of child bearing age, typically the target group, must also have health education reinforced. Having established the target groups and the importance of health education, the next step is to determine how the strategy is to be implemented. Who will provide the education? How will it be provided? In many African countries, health education is provided by community health workers as they constitute a large proportion of the health care sector. Large scale health providers such as the World Bank have recognized this and have begun to maximize their effectiveness (World Bank, 2002). The marginalized groups particularly the poor, uneducated, and pastoral communities in Kenya that have less access to information and health care should have their needs met by providing resources related to HIV/AIDS.

The resources must be distributed to women through some form of affirmative action with preference given to women who are more disadvantaged and hence more vulnerable by offering them opportunities so that they can advance to the level of the more privileged women. Women in Kenya should have access to knowledge about HIV and be equipped with tools on how to be assertive and good negotiators in sexual matters without fear of violence.

This study demonstrated that women are more vulnerable in their younger years; consequently interventions must be directed towards women at an early age. The fact that only one woman reported to having been HIV positive is disheartening because it still shows that women do not feel safe to disclose they are HIV positive because of the hostile environment prevalent in Kenya. I suggest that some kind of intervention needs to be directed to those women who know they are HIV positive but will not admit it for fear of retaliation by violence. Understanding of the culture is crucial to effectiveness in this area.

**Empowerment by providing equal opportunity.** Factors contributing to women’s vulnerability can only be changed with sufficient commitment and resources. In Kenya, girls are the first to be pulled out of school to help in taking care of the household and the sick (Fleischman, 2003). Girls need to stay in school so that they can better themselves in the future.
Women need to be empowered with tools on how to facilitate access to and control over their income (Zulu, Dodoo, & Chika-Ezeh, 2002). To achieve this goal, women must be given the opportunity to work and generate a substantial income and gain greater control over their destiny, health, and nutrition (Browne et al., 1991; NACC, 2002). Research has shown that the greater the degree of financial dependence, the greater the constraint exercised in sexual matters including condom negotiation (Doyal, 1995). Laws that discriminate against women on issues such as property ownership, employment, inheritance, divorce, and marriage need to be reexamined and repealed (Mikell, 1997; Turmen, 2003). Women need to be empowered so that they can escape from the cultural entrapments that require women to be submissive (Baylies & Bujra, 2000). Empowerment means the attainment and diffusion of information which enables women to participate fully in decisions about their bodies (Wilkinson & Kitzinger, 1994).

**Protective sex devices.** Women need to be equipped with tools that would enable them to have greater control over their bodies and health by introducing the female condom and making it readily available to women. A similar approach has been supported in the latest Global Report on AIDS (2006) which advocates for women’s empowerment through tools women can negotiate and use. According to AIDS literature, African women are highly enthusiastic about the female condom as it would give them power and control that they lack (Sacks, 1996). The silence about condom use should be broken as it would improve the prevention of HIV transmission in Kenya significantly (O’Hara et al., 2001).

**Inclusion of men.** One aspect that cannot be overlooked is that women cannot reduce vulnerability by themselves, therefore men must be included in AIDS discourses. Patriarchy has been identified from AIDS literature and radical feminist theory as one of the factors contributing to HIV vulnerability (Baylies & Bujra, 2000; Donovan, 1985; Lindsey, 1997). It follows that if women are vulnerable and at risk for HIV due to social norms and culture, then men, too, are entrapped by ideologies of masculinity (Baylies & Bujra, 2000). Since the society is so male dominated, male members of the household must also be included in the discourse because ultimately they are the final decision makers in regard to family matters. This was consistent with the current findings which showed that only 52% of the women had a final say on issues regarding their health care. Adopting the radical feminist dictum, “the personal is political”, legislation on the national level needs to be introduced and passed that imposes on men who prey on younger women for sex. In addition those who knowingly infect others need to be imprisoned and the crime classified as a felony.

**Unleash women’s voices.** Recent feminist writers (Belenky et al., 1986; Gilligan, 1982; Lorber, 2001) have convincingly argued that there is a masculine bias at the very heart of most societies. The omission of women from AIDS discourses is now being recognized. This responsibility has been taken by feminists who are now beginning to articulate the values of the female world and to reshape the disciplines to include the woman’s voice. In the process, they continue to press for the right of women to participate as equals in the male world. It may be reasonably argued that when the woman’s voice is included in the study of the factors that contribute to HIV/AIDS, women’s lives and qualities will be revealed and the unfolding qualities will be observed in men as well. Kenyan women need to reinvent themselves and bring their stories into existence to fight this deadly disease.
Recommendations for Future Research

HIV vulnerability in women encompasses many aspects of their lives and sexual health. The concept of vulnerability itself should be considered in future studies. Reducing HIV vulnerability among women will require further studies to explore the conditions that create vulnerability to HIV infection among Kenyan women, especially in sub-groups such as women in the rural areas and pastoral women who have less access to resources. Furthermore, studies need to focus on strategies of how these women can be reached with appropriate education and interventions. Research has shown that the threat of violence affects women’s power and ability to determine the conditions of sexual intercourse, to use services such as testing for HIV, and to seek social support if they test positive (Gupta, 2000; Turmen, 2003). Studies on women in Kenya and Tanzania have reported incidences of physical violence after a positive HIV diagnosis (Turmen, 2003). Evidence from recent studies suggests that an association between partner violence and HIV infection exists in women (Fonch, Els, Kidula, Ndinya-Achola, & Temmerman, 2005). This research lends support to the idea that more research needs to be done on the impact of domestic violence and vulnerability to HIV infection.

Further research is recommended to fully explore the concept of stigma as it relates to HIV vulnerability. AIDS-related stigma weighs heavily on women because in many parts of the world, HIV/AIDS is incorrectly perceived as “a woman’s disease” (Turmen, 2003, p. 416). Fear of stigma causes women to avoid seeking HIV prevention, testing, and accessing treatment and care, and has been cited as the most important reason why people do not get tested for HIV, as well as being inversely related to AIDS knowledge and years of education (Kalichman et al., 2005). Measures need to be adapted to be culturally relevant, for example, as has been done in South Africa (Kalichman et al., 2005). A similar process outlined by Kalichman and his colleagues (2005) could be followed in Kenya to develop a measure that investigates what constructs influence stigma, such an instrument could be used to investigate the demographic characteristics and attitudes towards HIV testing and disclosure (Kalichman et al., 2005). Stigma of AIDS is a complex issue for women who are HIV positive because they are often rejected, abandoned, and shamed by family and the community at large(NACC, 2002). Parker and Aggleton (2003) stated that it is significant to examine how “stigma is used by individuals, communities, and the state to produce and reproduce social inequality and social exclusion (p, 16). Research has shown that stigma of AIDS causes women to hide their status leading to secrecy. Secrecy breeds death because women who are afflicted with this disease do not seek help and avoid the subject of HIV leading to early death (Meursing, 1997). The functionalities of stigma and stigmatization of others have to be examined not as an isolated ideology that is emotionally charged but as central to the constitution of the social order (Parker & Aggleton, 2003). In order to reduce stigma, vigorous and extensive HIV/AIDS education is needed (Kalichman et al., 2005) and education has to start in the family and society (UNAIDS, 2000b). Since Kenya is a communal society, the government and its citizens have to all work together to reduce stigma so that people’s lives can be saved. Stigmatization is a part of a complex social struggle that intersects with structures of inequality (Parker & Aggleton, 2003).

In addition, further research should be conducted on denial, since denial seems to be prevalent in Kenya and has created conditions whereby some people are infecting their unsuspecting partners leading to a cycle of HIV transmission. Both stigma and denial have been
described as being “as central to the global AIDS challenge as the disease itself” (Mann as cited in Parker & Aggleton, 2003, p. 13).

Further research is recommended to fully explore Kenyan women’s substance abuse and drinking habits, as they may increase their vulnerability and risk of HIV infection. The role of alcohol in exposing women’s vulnerability to HIV infection has not been well researched in Kenya. Alcohol is known to impair one’s judgment resulting in irrational decisions such as engaging in risky behavior (Baylies & Bujra, 2000; Mann & Tarantola, 1996). Further studies need to be done on drinking habits and substance abuse by Kenyan women and how they contribute to risky behaviors enhancing their vulnerability.

Supplementary research is proposed to fully explore HIV vulnerability among women in plural marriages. Polygamous sexual cultures and HIV vulnerability have not been adequately studied. Research has shown that when infidelity occurs in polygamous marriages, women are extremely vulnerable to HIV infection (Sabatier, 1988).

Additional research needs to focus on women’s migration and HIV vulnerability. Research has shown that men often migrate in search of employment and leave their wives behind for long periods of time, increasing the chances of risk infection given that men are known to visit sex workers while away (Turmen, 2003). Future studies need to focus on HIV vulnerabilities among pastoral and nomadic women. Pastoral and nomadic women are often invisible and marginalized in the Kenyan society. There is a needed focus on the special needs and vulnerabilities of these women in terms of this deadly disease. Religion as previously mentioned in relation to HIV vulnerability needs to be explored further to better understand how religion influences vulnerability, although religion was not statistically significant in this study.

In order to get a deeper understanding of women’s vulnerability to HIV, future research can utilize a multivariate analysis to get to the complexity of an issue such as HIV vulnerability. Integrating qualitative research methods is highly recommended in order to get the full scope of vulnerability (Takyi, 2003). It is imperative that research on HIV/AIDS vulnerability ask women better questions such as what does vulnerability mean to them? How and when do Kenyan women feel most vulnerable to HIV infection, at what points in their lives, place, or location? These questions have important implications because such real situation vulnerabilities cannot be fully explored in a quantitative survey, hence qualitative methodology is suggested. Statistics are important in research but they do not tell the entire narrative. Other variables such as culture cannot be easily quantified; therefore narratives need to be incorporated to get a holistic picture of what is in the culture and environment that is attracting HIV vulnerability among women.

**Conclusion**

This research grew from a recognition that women in Kenya do not constitute a homogenous category. It is evident that there are stark differences among women in Kenya in relation to HIV vulnerability. These differences range from age, education, ethnicity, region of residence, marital status, and employment status. The root of HIV vulnerability among women in Kenya is exacerbated by the strong patriarchal nature of Kenyan society where men are the
critical decision makers in family, household, and the wider social order (Das Gupta et al., 1995; 1995; NACC, 2002). Women are rendered vulnerable to AIDS through social and cultural processes that shape HIV transmission. The power imbalance between men and women in sexual relationships makes it difficult for women to implement and insist on protective behaviors (Eng & Butler, 1997). This study recognized that in spite of efforts to spread information about the dangers of HIV/AIDS, social, economic, and cultural factors play a significant role in women’s vulnerability. In line with liberal feminism, women can begin to alleviate HIV vulnerability if they are accorded the same opportunities in terms of equal opportunity and education so that they can fully participate in all aspects of social life, reflecting personal choices (Lindsey, 1997). Education is the most powerful tool for reducing women’s vulnerability. Education has been shown to provide women with knowledge in order to make healthy decisions concerning their own lives and bring about long-term health behaviors (World Bank, 2002). Education can contribute to female economic independence, delayed marriage, and work outside the home (World Bank, 2002). HIV/AIDS must be addressed through education and prevention efforts that are culturally feasible (Treichler, 1999).

HIV vulnerability discourse is a complex issue because women’s vulnerability to HIV and sexuality is related to life within the realm of a patriarchal society. The forces present in patriarchal societies negatively impact a woman’s ability to stand up against all odds in order to protect herself. However, feminist theory can assist and guide in dissecting the oppressions present in the society that create conditions conducive for HIV infection and provide solutions. The results of this study suggest that younger women, women with lower levels of education, women from specific ethnic groups, unmarried women, and unemployed women are extremely vulnerable to HIV infection. I postulate that HIV vulnerability will continue to persist as long as women are socially, economically, and culturally helpless. There needs to be awareness and increased emphasis on improving the conditions of women, particularly those who are most vulnerable.

Good health is basic to human life and fundamental to social and economic development. Unfortunately, most countries in Africa have lagged far behind in providing this basic need (World Bank, 1994). Women are vulnerable to HIV infection because of economic, social, and cultural factors and processes within the society. Therefore, HIV vulnerability can only be reduced if contributing factors are identified and positive action redirected in the right direction. Women need to be shielded from this disease as they contribute immensely to the economic and social fabric of Kenya as women, daughters, wives, and mothers (Mwale & Burnard, 1992; Smyke, 1991). While Kenya is taking positive action to fight AIDS, a lot of work remains to be done and the HIV/AIDS vulnerability struggle continues around HIV/AIDS.
References


**Biography**

Dr. Waithera Sesay is an HIV/AIDS activist, counselor, and educator who earned her Master’s degree in international affairs, specializing in African women and Global health and earned a Ph.D from the Ohio State University. Her writings span diverse fields-the intersection of Feminist theories and HIV/AIDS Vulnerabilities, African patriarchy, Kenyan women and HIV/AIDS.