

AN ANALYSIS ABOUT KNOWLEDGE, ATTITUDES, BELIEFS AND PRACTICES OF  
HIV AND AIDS AMONG THE HIMBA PEOPLE OF THE KUNENE REGION

A THESIS SUBMITTED IN PARTIAL FULFILMENT  
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**ABSTRACT**

The Himba people are a semi-nomadic community with rich cultural beliefs and practices and are unique among other communities in Namibia. The prevalence rate among the Himba community is slightly less than 8%, which is a reflection of the uniqueness of Himba practices and beliefs. However, it is still necessary to establish the levels of knowledge of HIV among the Himba based on factors such as education, family practices that initiate early sexual relations and the role of women in household decision making and safer sex negotiation.

The main purpose of the study was to evaluate the knowledge, attitudes, beliefs, practices and risk perceptions with regard to HIV/AIDS among the Himba people of the Kunene region; and to identify its determinant factors. The research study was quantitative, that is, cross-sectional, descriptive and analytical. Data were collected from respondents within the Himba community with an age range of 18 to 60 years and the data were compiled and analysed using SPSS version 21.

To measure the Himba people's knowledge of HIV/AIDS and evaluate their attitudes, practices and perceptions relating to HIV/AIDS, respondents were posed a number of multiple-choice questions about specific areas: HIV modes of transmission, knowledge on prevention measures, wrong conceptions of HIV/AIDS, beliefs, attitudes and practices. Each questionnaire section related to knowledge of HIV/AIDS had specific points for an overall score of 30. Descriptive statistics were performed to find the central tendency and variation parameters (mean standard deviation). Inferential statistics were obtained using a chi-square test to identify factors associated with unacceptable levels of knowledge about HIV/AIDS.

Interviews were held with 290 respondents – 147 females and 143 males. The minimum age was 15 years and the maximum age was 70. The mean overall age was 29.3 years, with a 95% confidence interval of [28.0; 30.7] years. Considering the gender, the mean age for females was 27.8 years with a 95% confidence interval of [26.2; 29.4] years, whilst the mean age for males was 30.9 with a 95% confidence interval of [29.6; 32.2] years. It was established that 42% of the respondents in this study were aged 24 years or less followed by 26% of respondents who were between the ages of 25 and 30 years.

In this study, the mean overall score of knowledge of HIV/AIDS and its transmission modes was found to be 15.8 out of 30 with a 95% confidence interval of [15.1; 16.5]. It was found that the Himba people's knowledge on HIV/AIDS does not differ according to the gender of the respondent. In fact, the mean score of knowledge of HIV/AIDS and its modes of transmission among females was 15.9 with a confidence interval of [15.1; 16.8], whilst the mean score of knowledge of HIV/AIDS and its modes of transmission among males was 15.7 with a confidence interval of [14.5; 16.8].

Using a bivariate analysis, factors such as condom use as a safer sex practice, level of education, type of marriage, and the gender of the respondents showed a statistically significant association with HIV knowledge at a 0.05 level of significance.

Therefore, in order to increase knowledge that can be translated into change in behaviour and practices among the Himba, the efforts of all stakeholders are required. Such efforts include promoting education through mobile schools, intensifying sex education within the community through outreach programmes and putting in place policies integrated with indigenous cultural practices that will lead to positive attitudes and beliefs.

**Keywords:** Himba, nomadic ethnicity, Kunene region, Namibia

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## **DEDICATION**

This thesis is dedicated to my darling son, Royce Elago N. Nandiinotya. Let this accomplishment be a source of encouragement for your future studies.

## DECLARATION

- . I, Filippine N Nakakuwa, hereby declare that this study is a true reflection of my own research, and that this work, or part thereof, has not been submitted for a degree at any other institution of higher education.
  
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## **ABBREVIATIONS AND ACRONYMS**

<b>AIDS</b>	Acquired immunodeficiency syndrome
<b>ARV</b>	Antiretroviral drugs
<b>ART</b>	Antiretroviral treatment
<b>ABC</b>	Abstain, Be faithful and use a Condom
<b>HIV</b>	Human immunodeficiency virus
<b>HBM</b>	Health Beliefs Model
<b>IWGIA</b>	International Work Group for Indigenous Affairs
<b>KAPB</b>	Knowledge, attitudes, practices and beliefs
<b>KAB</b>	Knowledge, attitudes and beliefs
<b>MOHSS</b>	Ministry of Health and Social Services
<b>MOEYAS</b>	Ministry of Education, Youth Affairs and Sports
<b>MDGs</b>	Millennium Development Goal
<b>NDHS</b>	Namibia Demographic and Health Survey
<b>NPC</b>	National Planning Commission
<b>NASOMA</b>	National Social Marketing Programme
<b>UN</b>	United Nations
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>STI</b>	Sexually transmitted infection
<b>TB</b>	Tuberculosis
<b>TV</b>	Television
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>WHO</b>	World Health Organization

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# CHAPTER 1

## ORIENTATION OF THE STUDY

### 1.1 Introduction and background information

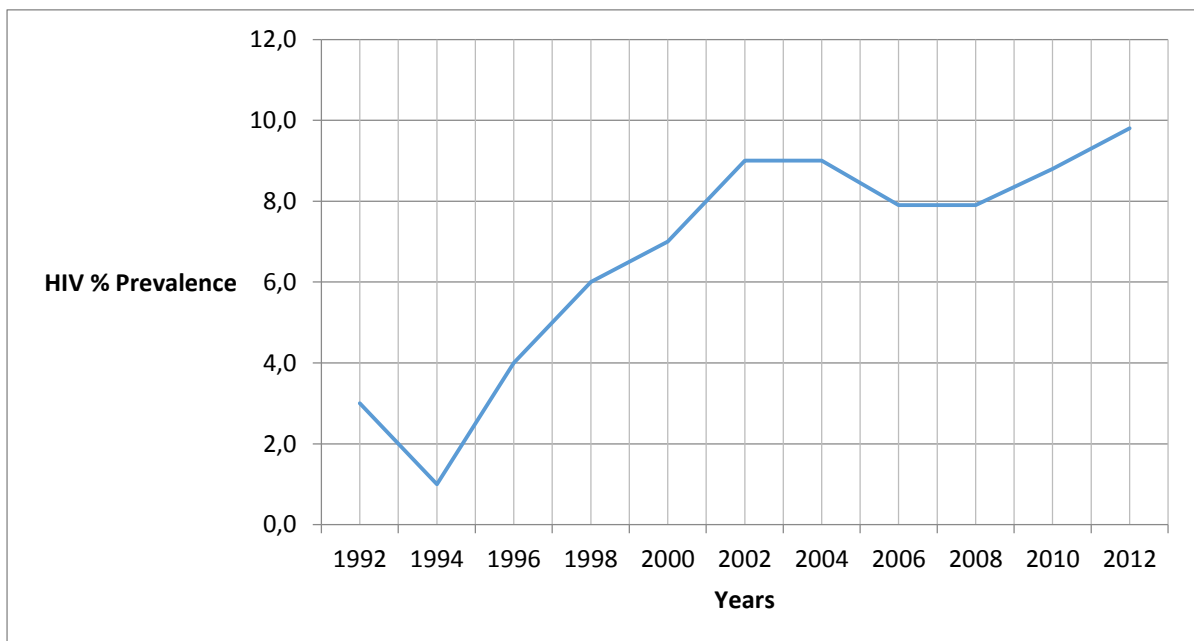
Globally, as a result of prevention programmes, the 33 countries worst affected by HIV/AIDS have recently registered a reduction in the incidence of HIV (Van Zyl, 2012). This success can be attributed to the Joint United Nations Programme on HIV/AIDS (UNAIDS), a programme for universal access to HIV/AIDS prevention, which is critical to achieving the Millennium Development Goal (MDG) 6, namely, to halt the spread of the disease (UNAIDS 2010).

The reduction in the incidence of HIV can be mainly attributed to behaviour change among young adults. With the potential of HIV/AIDS prevention programmes to reduce HIV incidence, UNAIDS (2010) has called for countries to strengthen public health approaches. HIV/AIDS awareness could lead to community discourses and social interactions that can influence common-sense assumptions and meanings linked to HIV/AIDS prevention (Green & Thorogood, 2009). Similarly, the World Health Organization (WHO) has urged for country surveillance to include exploring *who*, *where* and *why* people are acquiring HIV in order to improve and scale-up effective HIV/AIDS prevention programmes (WHO, 2011).

Namibia is one of the countries affected by HIV, with an HIV prevalence rate of 18.2% according to the 2012 National Sentinel Survey, compared with 4.2% in 1992 (Ministry of Health and Social Services (MOHSS), 2012). HIV and AIDS remain the gravest development challenge for Namibia. With 23% of deaths being AIDS-related, the impact of the epidemic is

deep, multi-sectoral, and intergenerational. Almost one in every five persons in Namibian communities is living with HIV: an incurable, lifelong infection that is robbing communities of their bread winners and leaders and, consequently, the knowledge and skills necessary to sustain livelihoods and economic development (MOHSS, 2010).

Kunene is one of the 14 regions in Namibia. It has a surface area of 144,255 square kilometres and is home to the Himba ethnic group. According to the Namibia 2011 Population and Housing Census main report, Kunene has a population of 86,856 (Republic of Namibia and Namibian Statistic Agency, 2013). However, Kunene remains underdeveloped and this may be due to its rugged, dry, remote and mountainous terrain, which significantly hinders infrastructural development. Opuwo is the capital of the Kunene region and most of the Himba people live here. Between 1994 and 2006, Opuwo was reported to have a low HIV prevalence rate, despite an average increase of 1% annually. It was rated fourth in HIV prevalence in Namibia in 2008 and third in 2012 (MOHSS, 2012).



**Figure 1.1: HIV Prevalence trends in Opuwo district, 1992–2012**

**Source: Ministry of Health and Social Services, 2012**

The Himba people are an independent pastoral society that lives in the rocky terrain of north-west Namibia in the Kunene region. The Himba have lived in relative isolation and even the successive colonial administrations rarely interacted with them. The South African colonial administration placed restrictions on the movement of livestock and cut off opportunities for trade and wage labour. The Himba are known to have a successful subsistence economy which was imposed on them by colonialists during the 1920s (International Work Group for Indigenous Affairs (IWGIA), 2004).

According to the International Work Group for Indigenous Affairs (IWGIA, 2004), HIV prevalence among the Himba is considered low at 7%, compared to the national average of 20%. Historically, Himbas are a healthy community with a unique life style and diet, and with malaria, tuberculosis and sexually transmitted diseases as their most common illnesses. IWGIA attributes low HIV infection among the Himba to their geographical isolation and strong cultural sexual practices; however, practices such as polygamy and the lack of sexual independence among women may likely reverse this trend (IWGIA, 2004).

The Himbas live by herding sheep, goats and cattle and they move location several times a year to find grazing for their livestock. In addition, the Himba maintain their traditional beliefs including ancestor worship and rituals (Zijlma, 2011). The Himba community has largely remained separated from the rest of Namibian society because of its unique way of life, but its cultural practices and isolation from HIV/AIDS prevention efforts could heighten its vulnerability to the virus. The Himba people have over the years jealously guarded their customs and traditions. Charles Uarije, the Namibia Red Cross Society's regional HIV/AIDS coordinator in the Kunene region, told Plus News that HIV/AIDS was not an immediate concern for the pastoralists, who were more concerned with the state of their cattle. This is

why men often preferred to live with the cattle at distant grazing sites, giving them the opportunity to have extramarital relationships (Plus News Namibia, 2006).

HIV/AIDS activities related to prevention, treatment, care and support have been supported throughout all the regions of Namibia but doubts remain as to whether the Himba people actually have knowledge and understanding on HIV/AIDS-related issues. The Himba as a community have not embraced education and prefer traditional medicine to modern medicine. Women have minimal choices with regard to husbands, since they are married off at a tender age; while wife inheritance after loss of a husband is commonly practised, with polygamy prevalence estimated at 17% in Kunene (MOHSS & Macro, 2008). Data from the Namibia Demographic and Health Survey (MOHSS & Macro, 2008) indicate that only 38.8% of women and 62.4% of men in Kunene region have comprehensive knowledge of HIV/AIDS. However, the survey did not indicate which tribe has less understanding about HIV/AIDS since the region has six different ethnic groups: the Himba, Herero, Zemba, Damara, Nama and Owambo (MOHSS & Macro, 2008).

## **1.2 Statement of the research problem**

Sexual practices and behaviours among the Himba people in north-western Namibia are of concern because it is uncertain whether they have knowledge and understanding of HIV/AIDS and other related issues. In fact a study by Taravera (2004) among the Himba people culture-sexual models conducted in Kunene on HIV/AIDS established that the Himba people can ably identify and describe sexually risky behaviour; however, nothing is documented on the Himba people's HIV/AIDS knowledge, attitudes, beliefs and practices.

Culturally, Himba children are initiated into sexual practices at an early age, even before puberty, which discourages abstinence. Moreover, there is no evidence of any safe sex practices being attached to this early sex initiation. The Himba, like any other semi-nomadic community in the world, are ever on the move with their animals in search of pasture and water and this limits their children's school attendance, as well as their access to information technology (radios, computers and television) that could relay information on HIV/AIDS to them (Taravera, 2004). Accordingly, and because no such a study has so far been documented, an analytical study of the HIV/AIDS-related knowledge, attitudes, beliefs and practices among the Himba people of the Kunene region was undertaken.

### **1.3 Purpose of the study**

The purpose of the study was to ascertain the knowledge, attitudes, beliefs, practices and risk perceptions relating to HIV/AIDS among the Himba people of the Kunene region.

### **1.4 Objectives of the study**

The research objectives of this study are to

- evaluate the level of knowledge, attitudes, beliefs and practices related to HIV/AIDS among the Himba people
- identify the risk factors relating to the perceptions of HIV/AIDS among the Himba people.

### **1.5 Significance of the study**

This study has relevance on various levels of the HIV/AIDS programme in Namibia. The findings obtained in this study could guide interventions to address HIV/AIDS issues among the Himba people as follows:

- Contribute to the awareness of HIV/AIDS among the Himba people without interrupting their culture. The results of this research could provide suggestions on ways to reduce HIV infection among the Himba people.
- Information obtained from the study may assist health workers to comprehend the Himba people's level of understanding as it relates to HIV/AIDS and to build on it in order to support the community in understanding the dynamics of HIV/AIDS.
- Provide information that could be used to assist policymakers, as well as networking and empowerment, in pursuit of better and safer living conditions for the Himba people.
- Assist health workers to provide relevant health education in relation to general health, as well as HIV/AIDS prevention, among the Himba community.

### **1.6 Summary**

This chapter gave a general overview of the proposed research problem. It provided background information about the knowledge, attitudes, beliefs and practices with regard to HIV and AIDS among the Himba people of Kunene. In addition, the research process (statement of the problem, purposes, objectives, hypothesis, research questions and the significance of the study) was discussed in order to give the reader an overview of the study. The statement of the problem thus makes it clear that there is a need to investigate the knowledge, attitudes, beliefs, practices and the risk perceptions of HIV/AIDS among the

Himba people. The next chapter contains a review of the literature on HIV and AIDS knowledge.

### **1.7 Thesis outline**

**Chapter 1** presented an overview of the whole research process. It offered an introduction to the context of HIV/AIDS, highlighting HIV/AIDS globally and in Kunene region, specifically the Opuwo district. Furthermore, the chapter discussed the problem statement, the aim and the objectives of this research.

In **Chapter 2**, the emphasis is on a discussion of HIV/AIDS and the nature of the disease; its origins, detection and transmission. The chapter also gives an overview of HIV/AIDS and the Himba people, as well as examining other studies that have been done on the same topic or ethnicity group.

**Chapter 3** covers the study research design and the methodology. Included in this chapter is a discussion on the research design and the instruments used to collect the data, a description of the sample of participants, the procedures undertaken and the analysis conducted.

In **Chapter 4**, the results of the study are presented thematically and statistically. Chapter 5 discusses the findings, which are then compared with the literature review and other studies conducted.

Finally, **Chapter 6** gives the conclusions and limitations of the study and makes recommendations for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The current HIV and AIDS epidemic is characterised predominantly by heterosexual transmission, which has emerged over the two decades during which HIV and AIDS has been the scourge of Sub-Saharan Africa (WHO 2011). HIV/AIDS has proved to have many challenges to its management, starting with prevention, control, care and support treatment. Each of these comes with diverse challenges that are rooted in individuals' behaviour, cultural practices, attitudes and beliefs across a wide spectrum of the affected population (UNAIDS, 2011; UNESCO, 2010). This section discusses the different issues related to the HIV/AIDS epidemic in its entirety based on different scholars drawn from different fields, which include but are not limited to the social sciences, epidemiology and psychology. The review includes an overview of the history of HIV/AIDS, definitions, causes, signs and symptoms, as well as prevention and building a case for the study of HIV/AIDS in relation to the Himba people. They are also discussed as a community with unique attributes, knowledge, attitudes, practices and beliefs as these relate to HIV/AIDS. The chapter is guided by the relevant theories in line with a health and conceptual framework that provides a map for the logical flow of the variables under study, which in turn determine knowledge of HIV/AIDS as well as the cultural attributes of the Himba as a community.

#### **2.2 The Health Belief Model**

The Health Belief Model (HBM), which was developed in the 1950s, is a psychological model that explains and predicts health behaviours. It is focused on individual beliefs and attitudes that determine the search for health solutions in response to long-term illnesses such

as tuberculosis and HIV/AIDS. The HBM is based on the understanding that a person will take a health-related action such as the use of condoms if the person feels that a negative health condition such as HIV can be avoided; for example, when a person has a positive expectation that by taking a recommended action he or she will avoid a negative health condition (using a condom will be effective in preventing HIV) and believes that he/she can successfully take a recommended health action (i.e. she/he can use condoms comfortably and with confidence).

The HBM proposes that people make their health decisions based on their perceived susceptibility to disease, their perceived severity of the disease, their perception of the benefits versus costs and their cues to action (Glanz, Rimer & Lewis, 2002).

The HBM spells out four perceptions as the main constructs of the model: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. It is accordingly proposed that these concepts account for people's "readiness to act". Other constructs have been added to the HBM over time: cues to action that will activate that readiness and stimulate overt behaviour; and self-efficacy or one's confidence in the ability to successfully perform an action (Glanz et al., 2002). The latter two constructs were added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviours, such as being sedentary, smoking, or overeating.

**Perceived susceptibility** to disease may be described as the subjective perceived risk of contracting a disease (Glanz et al., 2002). Perceived susceptibility may motivate youth and adults to believe they may have been exposed to sexually transmitted infections (STIs) or HIV: the greater the perceived risk, the greater the likelihood of engaging in behaviours to decrease the risk. This is what prompts people to use condoms in an effort to decrease susceptibility to HIV infection (Joanna, 2009). However, the perception of susceptibility is

not always linked to the adoption of healthier behaviours (Courtenay, 2000). For example, the Himba people have heard about HIV/AIDS, they know they should be using condoms to protect themselves but only a few are doing so.

The **perception of benefits** versus costs refers to the evaluation of the effectiveness of the various actions that may be taken in order to reduce either the threat of disease or the burden of the disease (Glanz et al., 2002). People tend to adopt healthier behaviours when they believe that the new behaviour will decrease their chances of developing the disease. For example, people believe that the recommended action of using condoms will protect them from getting HIV or that being tested for HIV will benefit them, possibly by allowing them to get early treatment or preventing them from infecting others.

**Perceived severity** speaks to an individual's beliefs about the seriousness or severity of a disease. While the perception of seriousness is often based on medical information or knowledge, it may also come from the beliefs a person has about the difficulties a disease will create or the effect it will have on his or her life in general (McCormick-Brown, 1999). For example, people believe that the consequences of having HIV are significant enough to try to avoid getting infected.

According to Glanz et al. (2002), a **perceived barrier** encompasses the tangible costs that may influence the decision to seek care. It also includes, inter alia, emotional, economic, social and physical factors that may prevent an individual from seeking care. In order for a new behaviour to be adopted, a person needs to believe that the benefits of the new behaviour outweigh the consequences of continuing the old behaviour (United States of America Center of Disease Control and Prevention, 2004). People identify their personal barriers with regard to using condoms (condoms limit the feeling or they are too embarrassed to talk to their partner about it) and explore ways to eliminate or reduce these barriers (teach them to put

lubricant inside the condom to increase sensation for the male and have them practise condom communication skills to decrease their embarrassment level).

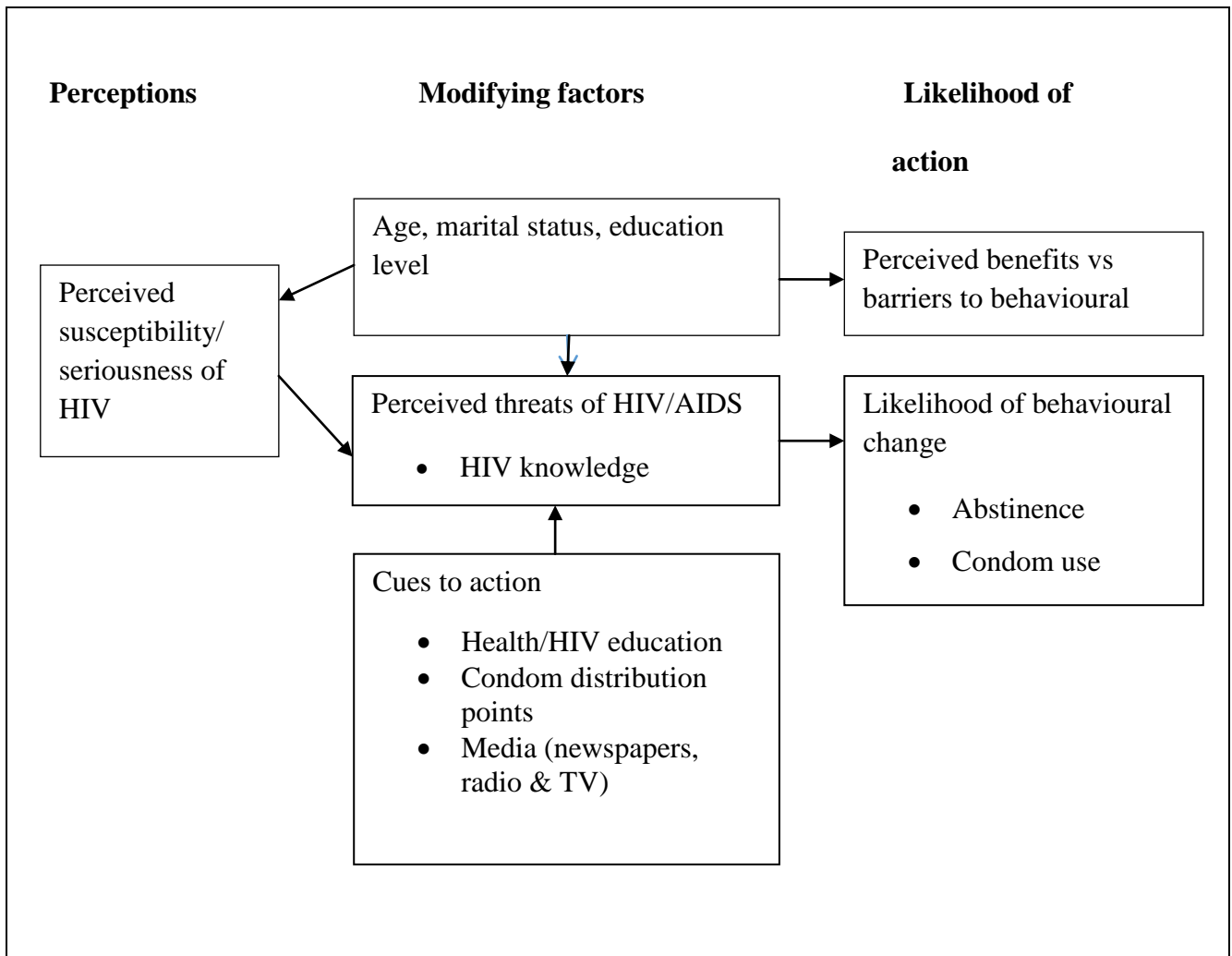
### **Modifying variables**

The four major constructs or perceptions, as found in the HBM, are modified by other variables such as culture, educational level, past experiences, ethnicity, gender, skills and motivations. These are individual characteristics that influence personal perceptions (see Fig. 2.1).

### **Cues to action**

The HBM suggests that behaviours are also influenced by cues to action. Cues to action are the events, people or things that move people to change their behaviours (Joanna, 2009). For example, having and seeing a family member suffering from opportunistic infection may make someone change their behaviour, such as making sure they have protected sex in order to protect themselves from HIV.

**Self-efficacy** is the confidence someone has in their ability to perform an action successfully. People generally do not try to do something new unless they think they can do it. If someone believes a new behaviour is useful, but does not think he or she is capable of doing it, the chances are that they will not try to perform that action (Joanna, 2009). For example, the Himba people are confident in using a condom correctly in all circumstances.



**Figure 2.1 Conceptual model**

**Source; Glanz.k., Rimer, B.K., & Lewis. F.M (2002)**

The HBM has been applied to a broad range of health behaviours and subject populations. Three broad areas of health behaviour can be identified (Conner & Norman, 1996) and may include, 1) preventive health behaviours, which involve health-promoting (e.g. diet, exercise and condom use), 2) health-risk (e.g. smoking, concurrent sexual partnerships) behaviours, and 3) vaccination and contraceptive practices.

### 2.3 HIV/AIDS

According to the WHO (2011), acquired immune deficiency syndrome (AIDS) is a clinical syndrome caused by a virus called the human immunodeficiency virus (HIV). Hence, HIV leads to the development of AIDS. AIDS is not a disease in itself but is a failure of the immune system which leads to a collection of rare, life-threatening opportunistic infections. The HIV infection is spread by sexual intercourse, contact with HIV-infected body fluids such as blood, semen and vaginal fluid, and mother to child infection during pregnancy or labour, and through breast milk. The virus transmission can be prevented by abstaining from sex, having a faithful partner, using condoms whenever having sex and avoiding coming into contact with human body fluids, and the sharing blades, needles and any other sharp instruments (WHO, 2011).

There is no cure for AIDS, thus prevention will remain the backbone of programmes to curb the HIV/AIDS epidemic for the foreseeable future (Peter, Merywen, Dara, & Yvette, 2002). AIDS is the end stage of the HIV infection. However, HIV infection is not a death sentence – a person can live a positive, healthy and productive life with HIV as long as they are receiving antiretroviral treatment (ARV).

The origin of HIV/AIDS is not known and, indeed, is unlikely ever to be known. AIDS was first discovered in the United States of America in late 1980 and early 1981. The year 1982 saw the emergence of the disease in European countries and in Africa (Sanjay, 2011). HIV infection has reached epidemic proportions in many regions of the world and this is often referred to as a pandemic. However, no countries have suffered as much from the ravages of HIV and AIDS as the African countries (Consuelo, & Caridad, 2004, p.34). AIDS in Namibia was first detected in 1986 (MOHSS, 2003), when four Namibian people were diagnosed with HIV.

The HIV/AIDS epidemic has subsequently become one of the most destructive health crises of modern times, ravaging families and communities throughout the world (Ashford, 2006). Accordingly, HIV/AIDS poses both an economic and a social challenge (Van Niekerk & Kopelman, 2005).

#### **2.4 HIV/AIDS knowledge and prevention**

According to Gabe, Bury, and Elston (2004), people's attitudes to health and illness are socially defined, although they originate from biomedical exposure. In developing countries and in southern Africa, HIV/AIDS prevention programmes are based on biomedical approaches and this situation is identified as one of the barriers that prevent the influencing of lay perspectives on HIV/AIDS (Van Zyl, 2012).

In a qualitative study conducted by Mbananga (2004) on HIV/AIDS, sexual and reproductive health among teachers and learners in rural settings in Africa, she found that HIV/AIDS prevention programmes in schools and communities, which were intended to create HIV/AIDS awareness, used only biomedical facts and often disregarded culture. Communities considered these programmes unacceptable and consequently dismissed them. Therefore, she attributed the poor outcomes of HIV prevention programmes in southern Africa to the non-recognition of socio-cultural differences and lay perspectives of HIV/AIDS, which are formed by people's values, customs and language. The lived experiences of communities might fall outside the biomedical health education presented in these programmes and, viewed from this perspective; a serious public health dilemma exists in creating HIV/AIDS awareness among southern African adults (Mhlongo, 2001).

These views were earlier referred to in recommendations by UNAIDS (2010) and the WHO (2011), suggesting that local knowledge and culture should be integrated into HIV/AIDS prevention programmes. In comparing effective HIV/AIDS prevention programmes in Uganda between 1980 and 1990, their successes were attributed to viewing the HIV epidemic as behaviour and not a medical problem (Green & Thorogood., 2009). Therefore, poor health outcomes on HIV/AIDS prevention could be reversed through an upstream health-promoting strategy that impacts on HIV/AIDS awareness in a culture-sensitive approach. This, when viewed at the level of the Himba with their unique cultural complexity, seems to mean that HIV knowledge shared with such a community needs to be integrated in their cultural context to enable behaviour modification that does not compromise their natural setting. Therefore, the study will explore ways in which such a sensitive and crucial Himba cultural orientation has been considered during the dissemination of HIV/AIDS awareness programmes.

## **2.5 HIV/AIDS and the Himba people of Namibia**

The Himba people, who lead a pastoralist life in north-western Namibia, have over the years guarded their customs and traditions jealously, but these same cherished values now threaten their health and are a route to health problems, most especially HIV. Customs such as polygamy and overdependence on cattle as a pillar on which all economic activity rests are making the Himba particularly vulnerable to HIV/AIDS. Himba culture also encourages older men who are rich in cattle to monopolise the women – many of the men marry several young girls whose offspring help in the important task of raising cattle (IWGIA, 2004).

It is further revealed that Himba women often reside at distant cattle posts where grazing is good while the husband remains in the homestead, which gives husbands the opportunity to have extramarital relations. The Himba culture also allows loose sex – an old uncle will

readily offer one of his many wives to a nephew during visits –which has contributed to the spread of HIV/Aids among the Himba. The Himba have also in recent times been ignoring some of their age-old customs and traditions by intermarrying. “The Himba have begun to intermarry with the Zemba and the Herero ... by marrying out of their tribe they have exposed themselves to HIV/AIDS,” IWGIA concludes. This has exposed a community that has been otherwise sexually closed to the outside world to the risk of HIV/AIDS.

A survey conducted by Dr Taravera in the Kunene Region in early 2001 looked at the Himba people’s cultural sexual model in an HIV/AIDS context. However, the truth is that the HIV which leads to AIDS is transmitted during unprotected sexual intercourse. Taravera points out that sexual behaviour and the risks involved will put the Himba population at risk of HIV/AIDS because of practices such as the early sexual involvement of children, the absence of a notion of abstinence, the association of sex with penetrative sexual intercourse, polygamy and the multiplication of sexual partners by both women and men. In addition, traditional customs put them at risk, including a man lending his wife to a guest for sexual intercourse, the absence of the concept of faithfulness and the tradition of wife inheritance (Taravera, 2004).

A number of studies have been done across the world among semi-pastoral societies. One survey was conducted in the Garissa District on the knowledge, attitudes, beliefs and practices related to HIV/AIDS among nomadic communities. The study was a cross-sectional survey among nomadic pastoralists living in four divisions. The study established that knowledge of HIV/AIDS among the study group was inadequate; group members’ attitudes toward condom use and people infected with HIV were negative and cultural practices with the potential for spreading HIV were common. The study recommended that a community-based programme be initiated. Accordingly, the most

popular traditional practitioners could be identified and the community informed about the risk of HIV transmission posed by some of the practices that are carried out under unsafe condition (Ahmed, 2002).

The study is relevant since it was done among the semi-pastoral communities of Garrisa with relatively similar characteristics. However, this does not refer directly to the Himba situation, as the study was based in a different setting, a different geographical region and had different aims and objectives. Nevertheless, this can give a snapshot in terms of which a similar study may be undertaken in a different region in order to evaluate the Himba community, since such a study has not previously been done.

## **2.6 Knowledge, Attitudes, Practices and Beliefs on HIV/AIDS**

Knowledge, attitudes, practices and beliefs (KAPB) surveys are traditionally used to gauge the knowledge, attitudes and practices of a group of people in respect of HIV/AIDS. According to the Namibia Demographic and Health Survey (NDHS), the predominant mode of HIV transmission in Namibia is through heterosexual intercourse, followed by perinatal transmission, in which the mother passes the virus to the child during pregnancy, delivery or breastfeeding (MOHSS & Macro, 2008). Other modes of transmission are through infected blood and unsafe injections. In Namibia in 1992, the estimated rate of transmission was 4%; however, HIV prevalence rose rapidly to 22% in 2002, although the national prevalence showed a small decline to 20% in 2004 and remains at this level, according to the 2006 HIV Sentinel Surveillance Report (MOHSS, 2007).

The future course of Namibia's AIDS epidemic depends on a number of factors, including levels of HIV/AIDS-related knowledge among the general population, the social

stigmatisation of people living with HIV/AIDS, risk behaviour modification, access to high-quality services for STIs, the provision and uptake of HIV counselling and testing, and access to care and ART, including the prevention and treatment of opportunistic infections.

A phenomenological study conducted in Botswana in 2004 among five ethnic groups revealed the importance of taking into account cultural sexual realities when prevention strategies for HIV/AIDS are considered and implemented. Furthermore, the study threw light on the ineffectiveness of the current national HIV/AIDS prevention strategy of Abstain, Be faithful, and use a Condom (ABC). The study indicated that an effective and sustainable alternative to the current national ABC strategy is to engage people meaningfully in analysing their current cultural situation and coming up with working strategies that can make a difference in a country seriously affected by the HIV/AIDS pandemic (Ntseane, 2004). This study relates to the current study because it analysed the HIV and AIDS attitudes, beliefs and practices within the prevailing culture and tried to come up with interventions to improve the situation.

Research and surveys conducted by the Namibian government from 2006 to 2007 found that educational attainment has a strong influence on health behaviours and attitudes. The survey showed that Kunene is the region with highest number of people with no education (38.3% female and 41.7% male) in Namibia. Furthermore, the survey indicated that polygyny is most prevalent in Kunene at 17% (MOHSS & Macro, 2008). Since the region in the current study has been found to have a low number of educated people, the study has to establish the level of knowledge of HIV and AIDS among both the educated and uneducated Himba people.

## **2.7 Knowledge of HIV/AIDS transmission and prevention methods**

### **Knowledge of AIDS**

According to studies conducted by Nawa Life Trust and National Social Marketing Programme (NASOMA), knowledge of HIV/AIDS in Namibia is high. However, the results of the sero-surveillance survey conducted in 2006 and the KAPB surveys indicate that there has been no significant change in sexual behaviour. Therefore, new HIV prevention strategies are needed to address the factors driving the epidemic effectively (Parker & Connolly., 2007).

In the 2006 NDHS, in which respondents were asked whether they had heard of AIDS, knowledge of AIDS was almost universal (99% for both men and women aged 15–49). This level of knowledge is similar to that recorded in the 2000 NDHS (98% of women and 99% of men). There are no significant differences in AIDS knowledge by urban–rural residence or region. Women without any formal education show the lowest level of knowledge (93%). This analysis was based on national level statistics that do not highlight the Himba as a community and there is therefore a need for the study to establish the level of knowledge of HIV/AIDS among the Himba.

A study carried out by the WHO (2006) found that young people lack information about HIV/AIDS. In countries such as Cameroon, Central African Republic and Lesotho, more than 80% of young women aged 15 to 24 do not have sufficient knowledge about HIV. Uganda, on the other hand, is one of the first countries in Sub-Saharan Africa with success stories in the region and succeeded in lowering its high infection rate from 31% in 1993 to 14% in 1998 (UNICEF, 1998). Besides the firm political commitment and a broad-based national effort on the Abstinence, Be Faithful and Condom (ABC) strategy, Uganda has sex education programmes in schools and on the radio which encourage students to delay the age at which

they first have sex. Condoms at subsidised prices are used increasingly from 7% nationwide to 50% in rural areas and over 85% in urban areas and self-treatment kits for men with all the basics like 14-day course tablets, condoms, partner referral cards and information leaflets have been designed to improve STI treatments. This has proved to be successful in the treatment of STIs and HIV infection.

In an experimental study by the Shimbuli et al.,(2009), using an approach to increase the knowledge of students on HIV/AIDS and to prevent the spread of HIV/AIDS amongst its students, supported by Bandura's social cognitive theory (Bandura, 1989), it was predicted that adolescents will be better able to engage in positive self-directed change if they have knowledge about HIV/AIDS. Individuals who are less knowledgeable about HIV/AIDS are more likely to engage in risky behaviours as they do not perceive themselves to be at risk. In another study by Herek (2002), it was found that almost everyone has information about HIV/AIDS although they think it can only happen to others.

### **Knowledge of HIV prevention**

The NDHS 2006 indicated that, in Namibia, HIV is transmitted among adults primarily through heterosexual contact between an infected partner and a non-infected partner. Consequently, HIV prevention programmes focus their messages and efforts on promoting three specific behaviours: use of condoms, limiting the number of sexual partners or staying faithful to one uninfected sexual partner and, for young persons, delaying first sexual intercourse (sexual debut) through abstinence.

In a study carried out in three states of Nigeria, Chamberlain, Seyi, Folani, and Kale, (2011) found out that respondents could ably identify methods to prevent HIV infection, and

abstaining from sex was the most frequently mentioned in both states – 73% in Cross River and 61% in Kogi. In descending order, other methods mentioned were avoiding the use of unsterilized sharp objects (69% in Cross River and 54% in Kogi); using condoms correctly (44% in Cross River and 35% in Kogi); avoiding unscreened blood transfusions (51% in Cross River and 23% in Kogi), and being faithful to one sexual partner (23% in Cross River and 11% in Kogi). Chamberlain et al. also identified a very small proportion of respondents who believed HIV can be prevented by avoiding blood contact and blood oaths; getting tested for HIV before sex; avoiding deep kissing; taking honey and drugs, including ARVs; and not sharing a meal, cup, or other personal items with people living with HIV (PLHIV) and isolating them.

### **Attitude towards people living with AIDS**

People infected with AIDS or who are HIV positive and the social groups they belong to have been stigmatised worldwide since the epidemic began (Taylor, 2001). Stigma has interfered with effective societal responses to AIDS and has imposed hardships on people either perceived to be or actually infected and living with HIV. Comprehensive assessments of attitudes associated with stigmatisation regarding HIV/AIDS are important in guiding efforts to remove barriers to HIV prevention.

Studies have demonstrated that the majority of students believe that HIV-infected people experience stigma, discrimination and social exclusion. People often feel uncomfortable about contact with persons infected with HIV and avoid them because they have a lack of knowledge. There is a lot of discrimination towards HIV-infected people. However, the potential implications of stigma and discrimination have not been adequately addressed in

HIV prevention and awareness programmes (Shimbuli, Oyedokun, McNally, & Polytechnic of Namibia (2009).

Klein and Meekers(2002) warn that although much has been written on stigma and discrimination in the context of HIV/AIDS, it remains a complex phenomenon and has deep roots in the domain of gender, race, class, sexuality and culture. Widespread stigma and discrimination about HIV/AIDS in a population can adversely affect people's willingness to be tested for HIV and their adherence to ART. Reduction of stigma and discrimination in a population is an important indicator of the success of programmes targeting HIV and AIDS prevention, management and control.

To assess the level of stigma, the 2006–07 NDHS asked respondents who had heard of AIDS; a) if they would be willing to care for a relative sick with AIDS in their own household; b) if they would be willing to buy fresh vegetables from a market vendor who had the AIDS virus;c) if they thought a female teacher who hadthe AIDS virus but wasnot sick should be allowed to continue teaching; and d) if they would keep a family member's HIV status secret.

This finding of this survey was similar to that recorded in the 2000 NDHS, Whereby Over 90% of respondents said that they were willing to care for a family member with the AIDS virus in their home. Seventy-five percent of women said they would buy food from a shopkeeper who had the AIDS virus. This proportion varies by region, ranging from 47% in Kunene to 84% in Erongo, but was higher than the 2000 NDHS finding (67%). The proportion of women who expressed accepting attitudes ranges by region from 60% in Kunene to 96% in Ohangwena. Overall, 57% of women would not want to keep secret the fact that a family member wasinfected with the AIDS virus.

### **Attitudes towards negotiated safer sex**

The high levels of HIV transmission through sexual intercourse makes negotiating safer sex indispensable, especially in marital unions where women's status is compromised by societal expectations, thereby increasing their vulnerability to HIV transmission.

The NDHS asked women and men aged 15 to 49 whether they believed that, if a husband has a sexually transmitted disease, his wife is justified in refusing to have sexual intercourse with him or asking that they use a condom. The percentage of respondents who agree with this statement was high for both women and men (86% and 89%, respectively). The proportion of respondents who say that a wife is justified in asking her husband who has a sexually transmitted disease to use a condom was also high (89% for women and 92% for men).

Older respondents and those living in urban areas are more likely than younger and rural respondents to agree that a wife is justified in refusing to have sexual intercourse with her husband who has a sexually transmitted disease or insisting that they use a condom. For instance, 89% of urban women agree with these statements compared with 82% of rural women. Women and men who have not had sex and those with limited education are less likely to accept these attitudes towards women negotiating safer sexual relations with their husbands.

### **Attitudes towards condom education and beliefs about abstinence and faithfulness**

HIV prevention programmes focus their messages and efforts on promoting three specific behaviours: use of condoms, limiting the number of sexual partners or staying faithful to one uninfected sexual partner, and abstinence. This section measured respondents' perceptions of

women's and men's roles regarding these behaviours and perceptions about educating youth about the three behaviours. Condom use is one of the main strategies for combating the spread of HIV; however, educating youth about condoms is sometimes controversial, with some people saying it promotes early sexual experimentation.

There is a high degree of agreement that children aged 12 to 14 years should be taught about the use of condoms to avoid AIDS (84% of women and 85% of men). There were no substantial differences by marital status. Urban women are more likely than rural women to agree on teaching children aged 12 to 14 about condom use to avoid AIDS (86% and 82%, respectively).

It has been revealed that, in South Africa, more than 15% of women and almost 5% of men aged 15 to 24 years are infected with HIV (Rees, Pettifor, & Kleinschmidt, 2004). However, large-scale information campaigns and condom distribution programmes are successful among South Africans aged 20 to 34 years old (Ladipo&Nichols,1986). As a result of increased knowledge and more favourable attitudes towards the use of condoms, there was a reported decrease in the prevalence of HIV/AIDS in India and Uganda (Nehru, Avasthi, Kumar, & Pershad, 1998; Shaffer, Cherrie, & Boyer, 1991). This assertion disagrees with the fact that low levels of knowledge regarding the transmission and prevention of AIDS in adolescents is a predictor of non-use of condoms and a belief that condoms decrease pleasure (Speizer, Mullen, & Vignikin, 2002).

In Angola, consistent condom use is negatively associated with being married or in a cohabiting relationship. Men who believed that condoms were safe and those who had multiple partners were more likely to be consistent users (Ndola, Farnaz, & Fraser, 2005; Bankole, Ahmed, & Stella, 2007). It was also established that factors that lead to condom use are a belief in the effectiveness of condoms, peer approval of condom use, feeling confident

about being able to use a condom correctly, the ability to communicate the subject to partners and avoidance of drugs or alcohol during sexual activity. The type of relationship (adolescents use condoms more often in casual, than in long-term, relationships), communication between partners, fear, the need to prevent pregnancy, and knowledge of someone who has died of AIDS also influence condom use (Parcel & Basen-Engquist, 1992; Sonenstein, Ku, & Pleck, 1992).

In Cameroon, many young men change sexual partners often (Klein, Dominique, & Silva, 2011) and condom use is low in regular relationships, even though many young people have multiple regular partners. Accessibility and knowledge about condoms have not translated into condom use in Cameroon and South Africa (Rees & Cohen 2005; Klein et al., 2011). However, at a Nigerian university, 55% of the students were sexually active and 70% of the men used condoms during sex (Rotimi & Olley, 2003). In Rwanda, of the students who had sex, 71% of the women reported condom use during their last sexual act with a regular partner. These students used condoms more often with regular partners than they did with casual ones (Klein & Meekers, 2002).

## **2.8 Knowledge, Attitudes and Beliefs towards Age, Sex, Education Level, Type of Marriage, Source of Information and Number of Sexual Partners**

### **Source of information**

According to Johnson, Bockh, Trim, Cushnie, Rogers & Tureski (2012), the most preferred source of information for many health education is the media. In the study conducted in the Nigerian states of Cross River and Kogi, radio, television and newspapers were identified as the major sources of information. To a much lesser extent, school, friends, magazines,

enlightenment campaigns (awareness programmes), health workers, billboards, and comics were indicated.

### **Age at sexual debut**

Sexually active respondents were asked how old they were when they had their first sexual experience. Most respondents said they were between 15 and 17, with 15.2 as the mean age reported in Cross River and 16.3 in Kogi. The question was asked because early initiation into sex may result in health challenges, including HIV infection, and can negatively affect educational attainment and economic productivity.

According to Jonhson et al., (2012) in Nigeria, the main reason given for early debut was the fact that 12-year-old girls and 16-year-old boys feel they are mature enough for sex. Other reasons given for males included peer pressure, attraction to the opposite sex, exposure to pornography, and poor parental upbringing. These influences applied to females as well, along with additional factors: early onset of puberty and sexual harassment by adult males. For females, poverty was cited as the most important and pervasive reason for early sexual debut.

Most respondents believed that females who initiate sex early are motivated by financial and material gain. When asked to estimate the age at which boys and girls start having sex in their communities, respondents said between the ages of 10 and 16, although some participants in focus group discussions (FGDs) stated ages 7 and 8 (Chamberlain et al., 2011).

Chamberlain et al. (2011) further established from both Cross River and Kogi states that girls initiate sex earlier than boys, while motivating factors include a desire for pleasure (“to have fun”) (cited by 62% in Cross River and 76% in Kogi). More males than females in both states were likely to say that a desire to have fun motivated their initiation into sex. Next in

importance was peer pressure, more so in Cross River than in Kogi. “To obtain money” was cited by 19 respondents: eight in Cross River (2%) and 11 in Kogi (4%). Rape was cited by 19 female respondents: nine in Cross River and ten in Kogi. “Being drunk” was cited by eight males and four females, more often in Cross River than in Kogi.

## **2.9 Summary**

UNAIDS (2010), provides evidence that, globally, HIV/AIDS prevention programmes work. The public health concern is why countries in southern Africa, including Namibia, have not reaped more benefits from HIV/AIDS prevention programmes. Some studies have shown that a strictly biomedical approach does not fit in the socio-cultural worlds of southern Africans; while others have highlighted different lived experiences impacting on rural and urban people’s lay perspectives. Even perceptions of HIV risk and gender were shown to affect people differently in the region.

Limited studies exist among minority groups such as the Himba community of all age categories. In research, they are often included along with other groups of people who are socially and culturally different and are often indirectly affected by HIV/AIDS by caring for HIV-infected children or AIDS orphans. Therefore more research is required to shed light on the HIV-risk factors for this group so as to understand how they make sense of HIV/AIDS. Similarly, how should Himba people be approached? Clearly, more research should apply qualitative methods to understand how the life-worlds of people in Namibia, and Kunene in particular, influence their seeming ignorance of risk factors so as to contribute to effective HIV/AIDS prevention programmes.

Collectively, knowledge, attitudes, beliefs and practices among the Himba people served as the basis for this research, holding the potential to contribute to an upstream public health approach on HIV/AIDS prevention that might reduce the Himba's HIV/AIDS burden.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the methodology used to conduct this study, defines the study population and describes the sample selection criteria, the tools for data collection and data analysis, quality assurance, the research design, and the stages of data analysis.

#### **3.2 Research design**

This research applied a quantitative study design. In fact, a quantitative, cross-sectional descriptive, exploratory design was used to analyse the knowledge, attitudes, beliefs and practices relating to HIV/AIDS among the Himba people of the Kunene region. This approach is best suited for the study because it will present a picture of the specific details of a situation and social setting and will focus on ‘what’, ‘how’ and ‘why’ questions.

#### **3.3 Study population**

A population is the totality of persons, events, organisation units, case records or other sampling units with which the research problem is concerned (De Vos, Strydom, Fouche, & Delpont, 2011).

According to the projected population for 2011, Opuwo District has a population of 45,597, of which 13,129 people are in Epupa constituency. Of these, 45% of the population of Epupa constituency comprises adults (15–60+ years) (Government of the Republic of Namibia (GRN), 2005). This population includes children and adults in all five tribes in the region. The target study population was the Himba people of the Kunene region aged 15 years and above, specifically in the Epupa constituency (where most of the Himba live).

**Criteria for inclusion**

- The study focused on the knowledge, attitudes, beliefs and practices of the Himba people aged 15 years and above, both male and female.

**Criteria for exclusion**

- The study excluded Himba people younger than 15 years old and any other tribes living in the Kunene region.

**3.4 Sampling**

Sampling is a practical way in which to collect data when the population is either infinite or else extremely large, thus rendering a study of all the elements of the population impossible (Bless & Higson-Smith, 1995). A sampling is the most feasible way of studying large populations, given resource, time and financial limitations.

**3.4.1 Sampling frame**

A sampling frame is a comprehensive list of the sampling elements in the target population (Brink, 2010). In this study the sample was drawn from the population of Himba people who live in Epupa constituency aged 15 and above.

**3.4.2 Sampling size and approaches**

According to Brink (2010), a sample is a subset of the population that is selected to represent the population. In this study, random systematic sampling was utilised. The six research assistants (health extension workers) were selected and asked to provide a list of people living in their villages (from their census register). They were then each asked to interview 39 Himba people. If the village had 200 people ( $200/39= 5$ ) then every fifth person on the list was interviewed. In addition, two community counsellors were asked to interview every fourth Himba who visited the health facilities (Okangwati and Otjimuhaka) for treatment, as

long as they were not from the villages where the aforementioned health extension workers were based.

The sample size was calculated using a sample size formula:

$$n = \frac{N}{1 + Ne^2}$$

where N is the target population, n is the sample size, and (0.05) or 5% was the margin of error considered by the study (Israel, 2009) for Epupa constituency.

Based on the calculation and a published table (Annexure F), a sample size of  $\pm 7\%$  precision, giving a confidence level of 95% and  $p=0.05$ , was selected (Israel, 2009), which is equivalent to 197 Himba people.

### **3.5 Research instruments**

The researcher collected data by administering a structured questionnaire which contained open and closed-ended questions. However, the questions essentially assessed basic information regarding people's knowledge about HIV and AIDS, their attitudes regarding HIV and AIDS, the specific practices that they follow and their particular beliefs regarding HIV and AIDS. The questionnaire will be divided into three sections:

- Section A consists of demographic data.
- Section B captures knowledge and practices among the Himba people.
- Section C captures the attitudes and beliefs on HIV and AIDS of the Himba people.

### **3.6 Data collection procedure**

The six health extension workers and two community counsellors were trained to collect data. These interviewers received training on the survey objectives, review of the

questionnaires, sampling, confidentiality, informed consent, and interviewing techniques. These research assistants contacted the participants to explain the purpose of the study and to obtain their written, informed consent. The data were collected using a questionnaire completed during face-to-face individual interviews. The time frame for the collection of data was eight weeks. The researcher conducted a pre-testing of the instrument to ensure the validity and reliability of the data before the data collection process started. Thereafter questionnaires were updated for the final data collection process.

### **3.7 Data analysis**

Computer software, namely SPSS, was used to analyse the data. The researcher was also assisted by a qualified statistician. Descriptive statistics were used to describe and summarise the data. In addition, descriptive statistical procedures were applied to describe and calculate the central tendency parameters of the scores of the knowledge, attitudes and practices regarding HIV/AIDS, as well as the socio-demographic variables relating to the Himba people.

Statistical tests of a non-parametric nature were employed and a conventional level of significance of 0.05 was used to detect differences. A chi-squared test was used to test for relationships between the dependent (level of knowledge, practices, beliefs and attitudes) and independent (demographic information) variables of the study population.

### **3.8 Research ethics**

The following are identified for the purpose of ethical issues in this study:

- Approval was sought from the University of Namibia's Post Graduate Studies Committee.

- Permission to conduct the study was obtained from the office of the governor of Kunene region and the office of the Epupa constituency, as well as the local headmen where the study was conducted.
- Informed consent was obtained from the participants.
- Participants had the right to withdraw from the study at any time, to refuse to give information and to ask for clarification about the study.
- Anonymity was guaranteed – no names were used during this study and the researcher did not reveal any identities.
- The data gathered during the study was kept safe and was not made available to any other person apart from the interviewers.

### **3.9 Summary**

This chapter discussed the research methodology that was used in the study. A quantitative method was found to be the most appropriate approach for this study. The discussion in this chapter focused on the research design, population, sampling, research instruments, data collection procedure, data analysis and the issue of research ethics. The next chapter deals with the analysis of the data and the findings from the research.

## **CHAPTER 4**

### **RESULTS**

#### **4.1 Introduction**

This chapter presents the research findings in terms of the quantitative data and discusses them in relation to the analysed data. The data were analysed using SPSS version 21. The presentation of the results is presented under the demographic factors, and the HIV and AIDS knowledge, practices, attitudes and beliefs of the respondents relating to HIV and AIDS.

The information was collected from the Himba community in the Epupa constituency of the Opuwo health district of the Kunene region. In this research, interviews were conducted by health extension workers using a questionnaire. The research registered a 95% completion rate (290 out of 310 questionnaires were returned on completion). Two hundred and ninety respondents were interviewed – 147 females and 143 males.

#### **4.2 Demographic characteristics of the Himba study respondents**

Demographic characteristics are understood to be the unique attributes of the respondents which have the tendency to distinguish them into different sets of categories. In this study demographic characteristics included but were not limited to the following:

##### **4.2.1 Age of respondents**

Age is an important demographic factor since it shows the trends in age of the respondents who participated in the study and also their collaborative knowledge about HIV/AIDS. The minimum age was 15 years and the maximum age was 70. The mean overall age was 29.3 years with a 95% confidence interval of [28.0; 30.7] years. In terms of gender, the mean age

for females was 27.8 years with a 95% confidence interval of [26.2; 29.4] years, whilst the mean age for male was 30.9 with a 95% confidence interval of [29.6; 32.2] years.

It was established that 42% of the respondents in this study were aged 24 years or less, followed by 26% of respondents aged between 25 and 30 years. Therefore it can be deduced that the study respondents were among the youthful members of the Himba community, comprising 68% under 30 years with 33% over 30 years of age. According to Table 4.1, a minority of the respondents were above 40 years of age and the majority were the youth below 25 years of age.

#### 4.2.2 Gender of respondents

It is worthy of note that the gender of respondents registered a balance between female and male. Table 4.1 indicates that majority of the respondents were female at 51%, while males comprised 49% of the total respondents.

#### 4.2.3 Marital status

The study also established marital status in that the majority (53%) of the Himba respondents were single compared to 43% who were married. Less than 4% of the respondents were categorised under other forms, such as divorced, widowed or separated.

#### 4.2.4 Level of education

Out of a total of 290 respondents, 63% stated that they had never been to school, while 25% indicated primary level education and 12% had attained secondary education.

**Table 4.1: Socio-demographic characteristics of the Himba people**

<b>Age of respondents</b>	<b>Frequency</b>	<b>Percentage</b>
24 years or less	121	41.7
25–30 years	76	26.2
31–40 years	55	19.0
41–50 year	20	6.9
50 or more years	18	6.2
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Sex of respondents</b>		
Female	147	50.7
Male	143	49.3
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Level of education attainment</b>		
None	184	63.4
Primary	71	24.5
Secondary	33	11.4
Tertiary	2	0.7
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Marital status</b>		
Married	126	43.4
Single	153	52.8
Others	11	3.8
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Type of marriage/relationship</b>		

Monogamy	221	76.2
Polygamy	69	23.8
<b>Total</b>	<b>290</b>	<b>100</b>

#### 4.2.5 Type of marriage

The variable, type of marriage, is an extension of marital status. In this study, the research considered the type of marriage/relationships among the Himba community. It was established that 76% of the respondents were involved in a monogamous marriage or relationship, while 24% were in a polygamous marriage or relationship.

### 4.3 HIV and AIDS knowledge and transmission mode

Respondents' knowledge about HIV/AIDS was tested with a variety of questions that directly gauged the understanding of information and how HIV/AIDS is spread and can be controlled.

#### 4.3.1 Common sources of HIV and AIDS information

In addition to offering an assessment of their basic knowledge, respondents were also asked to identify their sources of information on HIV/AIDS. The findings revealed that information related to HIV/AIDS comes from various sources. Most prominent of these sources among the Himba community, as indicated in table 4.2, are the following: 64% derive their HIV/AIDS information from health workers, followed by 21% of the respondents who reported friends as a major source of HIV/AIDS information. Only 3% mentioned family members as a source of information, while 12% reported other sources (newspapers, churches, radios and traditional leaders).

#### 4.3.2 Condom use as a means of practising safer sex

It is widely known that condoms are an effective method for protecting oneself against HIV/AIDS. The study further investigated safer sex practices most especially condom use. It was accordingly revealed, as indicated in Table 4.1: the majority (57%) indicated not having used condoms, 24% used condoms to avoid HIV/STIs and pregnancy, while 19% used condoms as a control measure against pregnancy.

**Table 4.2: Common sources of information, sex partners and reasons for condom use**

<b>Common sources of HIV/AIDS information</b>	<b>Frequency</b>	<b>Percentage</b>
Health workers	187	64.5
Friends	61	21.0
Family members	8	3.1
Others (newspapers, churches radio etc.)	34	11.7
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Sexual partners</b>		
1–2 partners	171	59.0
3–5 partners	76	26.2
6 or more partners	43	14.8
<b>Total</b>	<b>290</b>	<b>100</b>
<b>Reasons for using condoms</b>		
Avoid pregnancy	54	18.6
Avoid STDs/HIV	30	10.3
Avoid both STD/HIV and pregnancy	40	13.8
No condom use	166	57.2
<b>Total</b>	<b>290</b>	<b>100</b>

#### 4.3.3 HIV/AIDS knowledge

In this study, the mean overall score of knowledge of HIV/AIDS and its transmission modes was 15.8 out of 30 with a 95% confidence interval of [15.1; 16.5]. The Himba people's knowledge on HIV/AIDS does not differ based on the gender of the respondents. In fact, the mean score of knowledge of HIV/AIDS and its modes of transmission among females was 15.9 with a confidence interval of [15.1; 16.8], whilst the mean score of knowledge of HIV/AIDS and its modes of transmission among males was 15.7 with a confidence interval of [14.5; 16.8].

The above results show that knowledge of HIV/AIDS and its transmission modes among the Himba community cannot be considered as acceptable (15.8 score out of 30).

As illustrated in Table 4.3, the majority (76%) of respondents were aware of diseases that are caused through sexual intercourse, especially STIs, with 89% mentioning syphilis. However, gonorrhoea was the least mentioned with only 39%, meaning that the majority (61%) of respondents did not know about gonorrhoea.

It is further illustrated in Table 4.3 that the majority (62%) of respondents mentioned and are aware of HIV/AIDS, with 88% being aware of how to avoid contracting HIV, 81% mentioning condom use as one way to avoid HIV, but only 14% mentioning abstaining from having multiple partners as a way to avoid HIV.

**Table 4.3: HIV/AIDS knowledge (cont)**

<b>Probing responses from a total of 290 respondents</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Don't know (%)</b>
Ever heard of a disease transmitted through sexual intercourse?	75.9	23.1	1.0
Ever heard of gonorrhoea?	39.3	60.7	0
Ever heard of syphilis?	89.3	10.7	0
Ever heard of HIV/AIDS?	62.4	37.6	0
Is there anything you can do to avoid HIV?	87.7	6.2	5.9
Use of condom	80.7	19.3	0
Avoid multiple partners	13.8	86.2	0
Sexual abstinence	8.3	91.7	0
Use of disposable syringes	1.7	98.3	0
<b>Wrong perception about HIV/AIDS</b>			
Can a person get HIV from using public toilets?	20.0	57.2	22.8
Can a person get HIV from the mosquito bite?	41.0	39.7	19.3
Can a person get HIV by touching someone who has AIDS?	14.5	71.0	14.5
Can a person get HIV by eating from the same plate as someone with AIDS?	17.9	63.4	18.6
<b>Knowledge on prevention measures</b>			
Using a condom reduces the chances of becoming infected with HIV	76.9	14.1	9.0
Having no sex keeps you from becoming infected with HIV	60.0	30.3	9.7
Having faithful sexual partners prevent you from being infected with HIV	45.2	42.1	12.8
Can you get infected by having unprotected sex with a person who looks healthy?	53.4	32.4	14.1

#### 4.3.4 Wrong perceptions about HIV/AIDS

The study also established that 57% of the respondents mentioned that it is not right that one can get HIV by using a public toilet, 41% believed that mosquito bites can transmit HIV, while 40% rightly believe that mosquito bites cannot lead to one contracting HIV. It is further illustrated in Table 4.3 that 71% of the respondents among the Himba study population believe that a person cannot get HIV by touching someone with AIDS, nor can they contract it by sharing food or eating from the same plate (63%).

#### 4.3.5 Knowledge on prevention measures

Table 4.3 illustrates that the majority (76%) of respondents were aware that using a condom reduces the chances of becoming infected with HIV. Sixty per cent of respondents were also aware that having no sex keeps one from becoming infected with HIV; while 45% believed that being faithful to your partner can prevent you from becoming infected by HIV, compared to 42% who say that it does not.

53% were aware that having unprotected sex with a person who looks healthy can get one infected compared to 32% who were not aware.

### **4.4 Practices and HIV/AIDS**

As illustrated in Table 4.4, 97% of the study respondents were sexually active at the time of the study, with 73% having an extra sexual partner other than the spouse. The majority (56%) reported having not used a condom during the last sexual encounter with a partner, and 43% of respondents did feel at risk of contracting HIV compared to 42% who did not feel at risk.

The study also indicated that 70% of the respondents had never been tested for HIV, while 69% do negotiate safer sex with the spouse. In addition, 64% knew a place where they can get

condoms in their local area, while 67% of the respondents were willing to use a condom during each sexual encounter.

#### 4.4.1 Respondents and number of sexual partners

The study also investigated whether respondents were sexually active, and how many sexual partners each active respondent had during the six-month period prior to the study. Table 4.2 indicates that the majority (59%) of the respondents reported having 1-2 sexual partners, followed by 26% of the respondents who reported three to five sexual partners, while 15% of respondents indicated having more than six sexual partners in the six months prior to the study.

#### **4.5 Attitudes and HIV/AIDS**

As illustrated in Table 4.4, there was an equal proportion of 49% being willing and unwilling to go for HIV counselling and testing among the study population, while 71% had received or heard a message about HIV in the past 12 months, 72% believed they would disclose to a family if s/he became infected with HIV and 68% would be willing to care for an HIV/AIDS patient.

It was further revealed in table 4.5 that half (50%) would be willing to share utensils or eat with an HIV-positive person and share a toilet, as 61% and 57% were willing to hold hands and share a room respectively with an HIV-positive person.

**Table 4.4: Practices about HIV/AIDS**

<b>Practices (290 total respondents )</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Don't know (%)</b>
Are you sexually active?	96.6	3.4	0.0
If sexually active, do you have a sexual partner other than your spouse?	72.8	27.2	0.0
Did you use a condom the last time you had sex with a partner not your spouse?	42.4	55.5	2.1
Do you feel you are at risk of becoming infected with HIV?	43.1	42.4	14.5
Have you ever tested for HIV&AIDS?	30.3	69.7	0.0
Do you negotiate for safer sex with your spouse or sexual partner?	69.3	26.9	3.8
Do you know of a place where you can get condoms in this area?	63.8	29.7	6.2
Are you willing to use condoms for each sexual encounter?	67.2	28.6	4.1

**Table 4.5 Attitudes about HIV/AIDS**

<b>Attitudes (290 total respondents )</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Don't know (%)</b>
Would you be willing to go for counselling and testing?	49.0	49.0	2.1
Over the past year have you heard of any message about HIV?	71.0	26.6	2.4
If you became infected with HIV would you disclose to your family?	72.4	23.8	3.8
Would you be willing to care for HIV/AIDS patient?	68.3	24.1	7.6

Would you be willing to share utensils or eat with a person who is HIV-positive?	50.0	42.1	7.9
Would you be willing to share a toilet with an HIV+ person?	50.0	43.1	6.9
Would you be willing to hold hands with someone who is HIV+?	61.4	32.1	6.6
Would you be willing to share a room with someone who is HIV+?	56.9	35.5	7.6

**Table 4.6: Beliefs about HIV/AIDS**

<b>Beliefs (290 total respondents )</b>	Yes (%)	No (%)	Don't know (%)
Do you believe HIV/AIDS is just a myth (does not exist)?	64.5	30.2	5.2
Would you prefer going to the hospital or a traditional healer when sick?	86.9	5.5	7.6
Do you believe that traditional healers can cure HIV/AIDS?	8.6	81.4	10.0
Do you believe that witchcraft causes HIV/AIDS?	30.7	54.5	14.8
Do you believe it is acceptable for married couples to use condoms?	34.1	55.5	10.3
Does a condom reduce sexual pleasure?	51.7	27.2	21.0
Do women have a right to demand the use of condoms?	33.4	59.0	7.6

#### **4.6 Beliefs and HIV/AIDS**

The majority (65%) of the respondents' believed HIV/AIDS is not a myth but that it does exist, with 89% preferring the hospital over a traditional healer when seeking health care. The

majority (81%) believed that traditional healers do not cure HIV/AIDS, while 55% of the respondents believed that HIV is not caused by witchcraft.

The majority (55%) believed that it is acceptable for married couples to use condoms, while 59% believe that women have a right to use condoms. However, it was surprising to note that 52% of respondents believe that condoms reduce sexual pleasure.

#### **4.7 Relationship between socio-demographic variables and HIV/AIDS knowledge among the Himba community**

In order to assess the influence of the socio-demographic characteristics of Himba respondents on knowledge, practices, attitudes and beliefs in HIV and AIDS, cross tabulations were done and the chi square statistic was used as a measure of association as illustrated below.

##### **4.7.1 Age of respondents and HIV/AIDS knowledge**

Age is one of the most influential demographic variables considered in this study, as indicated in Table 4.5. The study revealed that the majority (72 out of 121) of respondents aged 24 years and below were knowledgeable about HIV/AIDS, compared to 55 out of 76 respondents' in 25 to 30 year age group. Further analysis indicates that the number of people with knowledge about HIV/AIDS declines as the age of the respondents increases. However, the study indicates no significant association between age of respondents and HIV knowledge among the study population, with  $p=0.157$ .

##### **4.7.2 Gender of respondents**

The study emphasised the role played by one's gender in knowledge about HIV/AIDS and, as illustrated in Table 4.5, 90 out of 147 female respondents were knowledgeable about HIV/AIDS compared to 91 out of 143 male respondents who were knowledgeable about

HIV/AIDS. A slight difference between male and female in terms of numbers of those who are knowledgeable about HIV/AIDS is indicated. There is also a statistically significant association between the respondents' gender and knowledge about HIV/AIDS, with  $p = 0.000$ .

#### 4.7.3 Marital status

As illustrated in Table 4.5, a larger proportion, that is, 79 out of 126 married respondents, were knowledgeable about HIV/AIDS compared to 95 out of 163 respondents who are not married. However, of the married and single respondents a relatively large proportion showed that they were knowledgeable about HIV/AIDS, but no significant relationship between marital status and HIV/AIDS knowledge was found among the Himba population ( $p=0.991$ ).

#### 4.7.4 Type of marriage

In this study, type of marriage was categorised as monogamous and polygamous marriage types. As indicated in Table 4.5, more respondents were in monogamous marriages at 221 compared to the 69 respondents in a polygamous relationship. Table 4.5 further illustrates that 136 out of 221 respondents in a monogamous relationship were knowledgeable about HIV/AIDS compared to 45 out of 69 respondents in a polygamous relationship. There is also a statistical relationship between type of marriage and HIV/AIDS knowledge, with  $p=0.000$ .

**Table 4.7: Cross tabulation of socio-demographic factors and HIV/AIDS knowledge**

	<b>Dependent variable</b>		
<b>Independent variables</b>	<b>HIV/AIDS knowledge</b>		
<b>Age of respondents</b>	<b>Not knowledgeable</b>	<b>Knowledgeable</b>	<b>Total</b>
Less or equal 24 years	49	72	121
25–30 years	21	55	76

31–40 years	20	35	55
41–50 years	9	11	20
50+ years	10	8	18
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(4)= 6,628, p=0.157</b>			
<b>Sex of respondents</b>			
Female	57	90	147
Male	52	91	143
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(1)= 0.180 , p=0.000</b>			
<b>Marital status</b>			
Married	47	79	126
Single	58	95	163
Others	4	7	11
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(2)=0.018, p=0.991</b>			
<b>Type of marriage</b>			
Monogamy	85	136	221
Polygamy	24	45	69
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(1)= 0.303, p=0.000</b>			
<b>Level of education attained</b>			
No education	76	108	184
Primary	16	55	71

Secondary	17	16	33
Tertiary	0	2	2
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(3)=11.874,p=0.008</b>			
<b>Sexual partners</b>			
1–2	57	114	171
3–5	31	45	76
6 or more	21	22	43
<b>Total</b>	<b>109</b>	<b>181</b>	<b>290</b>
<b>Chi2(2)=3.971, p=0.137</b>			

#### 4.7.5 Level of education

Education, both formal and non-formal, is considered to be the most powerful tool in understanding and interpreting symbols to make meaningful decisions. In this study, education level was considered as a measure of the study population's ability to utilise knowledge gained through education to understand HIV/AIDS issues. Table 4.5 illustrates that a large proportion of respondents, that is, 108 out of 184, with no education were knowledgeable about HIV/AIDS, compared to 55 out of 71 respondents with primary education, and 16 out 33 respondents with secondary education. As illustrated, there were a large proportion of respondents who had no education but who had knowledge about HIV/AIDS, which we attribute to informal means of education. Moreover, a significant relationship was found between level of education and knowledge of HIV/AIDS among the study population, with  $p = 0.008$ .

#### 4.7.6 Sexual partners

Having many sexual partners is known to be one of the behaviours recorded by many scholars that put one at risk of HIV, and this study considered this variable according to the level of association. Table 4.5 illustrates that the majority (114 out of 171) of respondents reported having one to two sexual partners, 45 out of 76 participants reported having three to five sexual partners, while 22 out of 43 reported having six or more sexual partners within the six months prior to the study. However, there was no significant relationship between sexual partners and HIV/AIDS knowledge among the Himba community ( $p=0.137$ ).

#### 4.7.7 Condom use as a safer sex practice

As already noted, a large proportion of the respondents who reported having a sexual partner who was not their spouse, reported not using condoms at all. It is further illustrated in Table 4.5 that 95 out of 166 respondents who reported not using condoms were knowledgeable about HIV/AIDS. This implies that it is not a lack of understanding about HIV/AIDS or a lack of access to condoms but rather other cultural practices and beliefs that define sexual practices in the study population. There was a statistically significant relationship between condom use as a safer sex practice and HIV/AIDS knowledge, with  $p=0.019$ .

**Table 4.8: Cross tabulation of socio-demographic variables and HIV/AIDS knowledge**

	Dependent variables		
Independent variables	HIV/AIDS knowledge		
Why use condoms	Not knowledgeable	Knowledgeable	Total
Avoid pregnancy	18	36	54
Avoid STD/HIV	4	26	30
Avoid both STD/HIV and	16	24	40

pregnancy			
No condom use	71	95	166
Total	109	181	290
Chi2(3) = 9.940, p= 0.019			

#### 4.8 Summary

This chapter presented the quantitative data generated by the study. Results of the study were presented in this chapter in the form of the tables and figures.

## **CHAPTER 5**

### **DISCUSSION**

#### **5.1 Introduction**

This study examined the knowledge, practices, attitudes and beliefs about HIV and AIDS of the Himba people. This particular group of people was chosen because it is a unique group with a unique lifestyle. The discussion of the results is presented in terms of the demographic factors, knowledge, practices, attitudes and beliefs about HIV and AIDS.

#### **5.2 Demographic characteristics**

In our study the participants' age ranged between 15 and 70 years of age, of which 68% were under 30 years old. Therefore, it can be deduced that the study respondents tended to be the youth in the Himba community. This youthful age group is regarded as being enlightened and mobile in nature and is regarded as knowledgeable about current events not limited to HIV/AIDS but that includes general global trends in many aspects of life.

There were an almost equal number of male and female Himba respondents, that is, 49% male versus 51% female. This was achieved because the study was rural based and the Himba community tend to be concentrated around their grazing areas, which enabled the achievement of almost an equal proportion of gender.

Sixty-three per cent of the respondents had never attended school and only 12% had attained secondary education. By nature, the Himba community is a nomadic community; thus the low level of education does not come as a surprise. However, with the introduction by the government of mobile schools in the Kunene region, the researcher expects an improvement in the numbers obtaining primary education and a reduction of the non-primary proportion of the youthful respondents considered in this study.

The study revealed that 24% of the respondents were in a polygamous relationship. This is higher than the NDHS 2006–07 survey indicated; that is, 17% polygamy in the Kunene region (MOHSS & Macro, 2008). This factor is important in that it gauges how vulnerable the respondents are because polygamous relationships are at times associated with risky behaviours that promote HIV risk, especially partner unfaithfulness.

### **5.3 HIV and AIDS knowledge and transmission mode**

The study revealed that the main sources of information about HIV/AIDS are health workers (64%) and friends (21%). This indicates that the Himbas do not have ready access to radio or television, or educational programmes, such as *My Life is My Choice*. Nor do they have access to pamphlets or booklets containing HIV/AIDS information. This may also be a result of the fact that they do not attend school and the majority cannot read.

The only HIV prevention method the Himba community was aware of was condom use (81%). This study revealed that the majority of the respondents did not think that avoiding multiple partners or abstinence or the use of disposable syringes would be any use in avoiding HIV. These findings show that the Himba people do not have access to the right information about how HIV is transmitted. Therefore, providing information about HIV/AIDS transmission that emphasises the lack of scientific evidence to back up these beliefs should be a priority for any future information, education and communication campaigns about HIV/AIDS.

Of the respondents, 81% mentioned condom use as one way to avoid contracting HIV; moreover, 57% had not used a condom in the past six months. This shows that they lacked knowledge of condom use. This is not a good practice in the era of HIV/AIDS and in a region where people cannot relate easily to modern sexual practices such as safer sexual practices. This finding is in agreement with the results of Masoda (2010) and Meekers, Silva, and Klein

(2003). A study in rural South Africa by Versteeg and Murray (2008) describes some of the reasons why condoms are not used consistently. These reasons include perceived and real physical side-effects, including reduced pleasure; distrust in the efficacy of condoms; gender-related reasons; and trust in relationships. Dual protection, defined as any strategy that prevents both unwanted pregnancy and STIs, including HIV, has long been promoted as an important preventive approach in reproductive health (Department of Health, 2011; Myer, Morroni, & Mathews, 2002).

#### **5.4 Wrong perceptions about HIV and AIDS**

Of the respondents, 41% believe that mosquito bites can transmit HIV. These findings are consistent with a study conducted in Sana'a City in Yemen among students of health institutions (Al-Rabeei, Dallak, & Al-Awadi, 2012). The findings of this study showed that 41.5% have misconceptions about how HIV and AIDS are transmitted.

#### **5.5 Practices and HIV/AIDS**

Ninety-seven per cent of the study respondents were sexually active at the time of the study, with 73% having an extra sexual partner other than the spouse. Fifty-six per cent had sexual intercourse without a condom and only 43% felt that they were at risk of contracting HIV. Moreover, 70% had never been tested for HIV. This result is consistent with those who were never tested in Kunene region (MOHSS & Macro, 2008) – 69.5% of males and 53.4% of females.

The respondents were asked how many sexual partners they had in the six months prior to the study, as having many sexual partners is well documented as a risky behaviour where safer sex is not practised and faithfulness is not maintained.

## **5.6 Attitudes and HIV/AIDS**

Persons with HIV/AIDS are likely to conceal their HIV status for fear of rejection and stigmatisation. The survey sought to determine what proportion of respondents would be willing to disclose their status, having discovered that they had contracted HIV. Accordingly, 72% believed that they would disclose to a family member if s/he became infected with HIV. This is in agreement with a survey done, that is, the National Youth KABP Survey on HIV/AIDS (MOEYAS, 2001), which revealed that 74.7% of the respondents were also willing to disclose their status. These findings show a high willingness for disclosure among the Himba people.

## **5.7 Summary**

Majority of participants in this study were youth, younger than 30 years. Factors like poor education and traditional beliefs are some of the factors that hinder Himba people from acquiring proper information regarding HIV/AIDS. Poor knowledge on HIV/AIDS practices place Himba community on highly risk life.

## CHAPTER 6

### CONCLUSION, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

#### 6.1 Introduction

This chapter discussed the implications of the study findings in the light of other studies, including the study's strengths and the public health relevance to the study population (Himba). A number of feasible recommendations are also made in this chapter.

#### 6.2 Conclusion

The results showed that knowledge of HIV/AIDS and its transmission modes among the Himba community cannot be considered as acceptable (a score of 15.8 out of 30). The study further confirmed the low consistent use of condoms amongst the Himba of the Kunene region of Namibia, despite the Himba population demonstrating adequate general knowledge of HIV and its transmission through unprotected sexual intercourse. Whilst there was some evidence that knowledge supports behaviour (e.g. the association between knowledge that sex is the main way of transmitting HIV and consistency in condom use), on most parameters there seemed to be a gap between knowledge and practice. This study found that 57% of the study population, that is, members of the Himba community, did not use a condom during their last sexual encounter. This proved to be inconsistent with the 76% of the Himba who understood that condom use reduces the risk of HIV. This finding is consistent with that of Pettifor et al., (2004) earlier study set in South Africa, in which only 29% of the respondents who knew that condom use could protect HIV transmission were consistent in condom use.

In this study, the Himba showed a wide deviation from the dual protection strategy by indicating that 97% of the study population were sexually active, 68% were below 30 years of age, 73% were involved in an extramarital relationship and 57% had never used condoms.

This implies that the Himba community does not practically support the public health message of delayed sexual debut, which is an important strategy for reducing risky sexual behaviour in the youth. It is believed that the substantial HIV reductions in Uganda resulted from public health interventions that triggered a social process of risk avoidance. In eastern Zimbabwe, delayed sexual debut has been associated with a reduction in HIV prevalence in the younger population. This should, however, be viewed positively as other factors, such as HIV knowledge and cultural practices that inhibit modern messages cannot be fully integrated in the Himba context.

In a setting such as the Himba community where integrated services are desirable, it is disappointing that the majority of respondents are sexually active and that, in an environment with a tendency for extramarital relations, there are no integrated efforts to regulate their sexuality.

No other studies have been published that assess the extent of HIV prevention knowledge in general among this community in Namibia. It is, however, worth noting that HIV prevention knowledge is lower than the national community-based prevalence in rural Namibia, as measured in the Demographic and Health Survey 2006–2007. This may be due to the fact that the study setting is considering one of the rural communities with a unique culture – it is deeply rural with particularly poor socioeconomic indicators.

Generally, knowledge of HIV/AIDS and its transmission is widely publicised and community awareness campaigns influence the knowledge, attitudes, beliefs, and sexual behaviour change and confidence of sexual practices. However, there were some misconceptions about HIV/AIDS treatment. Misconceptions concerning a ‘cure’ for HIV/AIDS are one of the risk factors for contracting the virus. Awareness campaign may not remove this risk however, as a

paradigm shift is required and the onus rests on the government and community initiatives to integrate or find ways of changing the misconceptions using various approaches.

### **6.3 Recommendations**

Based on the conclusions obtained from the research findings, the following recommendations are made:

- The MOHSS and other non-governmental organisations should target education and awareness initiatives among the Himba to emphasise HIV/AIDS transmission, as well as to address the use of condoms.
- A programme should be launched that targets behaviour change among the Himba people in order to enable them better protect themselves from HIV/AIDS infection.
- More health extension workers should be employed and new and innovative messaging such as radio transmission should be established as a means for overcoming the challenges of illiteracy.
- Government health practitioners and others should be incorporated into an awareness campaign programme and educational plans relating to HIV/AIDS in the Himba mobile schools education system to match the Himba mobile lifestyle.
- Increased research should be conducted on the effects of education initiatives on the young Himba's knowledge, attitudes, beliefs, sexual behaviour change and confidence as they relate to sexual practices. This could be in collaboration with the MOHSS and any other organisations associated with HIV/AIDS education among the youth.

#### **6.4 Limitations of the study**

- Newly employed health extension workers in Epupa constituency affected the outcome of the survey because it is their duty to give health education on various health topics, including HIV and AIDS. This is why most of the Himba people had heard about HIV and AIDS.
- Some Himba people did not feel free to share what they actually practised or believed.
- The original timeframe for collecting the data in Epupa constituency was four weeks. However, this had to be extended to eight weeks for a variety of reasons:
  - the movement of people in search of better grazing due to the drought
  - having to ask permission from the headman and chief in every village
  - long distances that had to be travelled between households and villages

#### **6.5 Suggestions for future research**

- Future research needs to look at gender differences and the effects of HIV/AIDS awareness campaign programmes. Such research would have to focus on possible gender differences and the interrelationships between knowledge and attitudes within the Himba social structure.
- Future research could also look at knowledge of condom use, the reasons for not using condoms and cultural beliefs attached to condom use.

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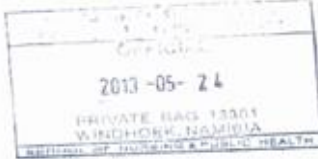
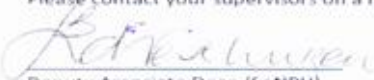
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## ANNEXURES:

## Annexure A: Letter of approval from the Post Graduate Studies Committee –University of Namibia

	<small>Private Bag 13301 Windhoek</small>
<b>Inspiring minds &amp; shaping the future</b>	
<small>Enquiries: Dr. H. J. Amukugo Private Bag 13301 Mandume Ndemufayo Windhoek</small>	<small>Tel No.: 061- 2064617 Fax No.: 061- e-mail: <a href="mailto:postgrad@unam.na">postgrad@unam.na</a></small>
<i>All correspondence must be addressed to the Office of the Associate Dean</i>	
<b>LETTER OF PERMISSION POST GRADUATE STUDENTS</b>	
<p>Date: 24 May 2013</p> <p>Dear Student: Ms Fillpine N. Nakakuwa Student Number: 200108980</p> <p>The post graduate studies committee has approved your research proposal.</p>	
<b>AN INVESTIGATION OF THE HIV/AIDS RELATED KNOWLEDGE, ATTITUDES, BELIEFS AND SEXUAL PRACTICES AMONG THE HIMBA PEOPLE OF KUNENE REGION</b>	
<p>It may be required that you need to apply for additional permission to utilize your target population. If so, please submit this letter to the relevant organizations involved. It is stressed that you should not proceed with data collection and fieldwork before you have received this letter and got permission from the other institutions to conduct the study. It may also be expected that these organizations may require additional information from you.</p> <p>Please contact your supervisors on a regular basis</p>	
 Deputy Associate Dean (SoNPH)	

**Annexure B: Letter of permission from the Kunene Regional Governor –Office of the Governor**



**OFFICE OF THE GOVERNOR-KUNENE REGION**



Tel: +264 - 65 - 27 3600  
Fax: +264 - 65 - 27 3961

P/ Bag 502  
**OPUWO**

29 Aug 2013

To: All the Traditional Leadership/ Kunene

From: The Office of the Governor

**RE: PERMISSION TO CONDUCT HIV/AIDS INVESTIGATION/KUNENE NORTH**

I the undersigned, Josua Hoebeb, Governor of the Kunene Region hereby testify that I have read and satisfied myself that the request for academic reasons, to carry out an investigation into HIV and AIDS in the Kunene North has been made in good faith and in the national interest of Namibia in general, and of the Kunene in particular.

I therefore have no hesitation to urge all Traditional Leadership and all men/women of goodwill to give full support and cooperation to our Namibian daughter and student at the University of Namibia, Ms Phillipine N Nakakuwa in this regard.

Your appreciation and understanding is highly appreciated in advance.

Signed   
Josua Hoebeb  
Governor/Kunene

Date 29/08/2013 Place: Opuwo



**Annexure C: Letter of permission from councillor of the Epupa constituency –Office of the Epupa Constituency.**



**Kunene Regional Council  
Epupa constituency Office**



Tel: +264-65-274522  
Fax: +264-65-274524

Private Bag 502  
Opuwo

Enq: Hon. J.N Muharukua

To: Ms Filippine N. Nakakuwa  
P.O. Box 80047  
Opuwo  
Namibia

02 August 2013

**RE: APPLICATION FOR PERMISSION TO CONDUCT THE STUDY ON AN INVESTIGATION OF HIV AND AIDS KNOWLEDGE, ATTITUDES, BELIEFS AND PRACTICES AMONG THE HIMBA PEOPLE, KUNENE REGION, NAMIBIA.**

1. This letter serves to acknowledge that this office received your application letter as per caption above.
2. Therefore, you are hereby informed that your application is approved and welcomed, for you to come to Epupa Constituency and conduct the activity as per your request.

Thank you.

Hon. J.N Muharukua  
Councillor: Epupa Constituency



**Annexure D: Research instrument –questionnaire**

**An investigation of HIV and AIDS knowledge, attitudes, beliefs and practices among the Himba people of Kunene Region**

**Date of visit.....**

**Informed consent**

My name is Filippine Nakakuwa. I am a student at UNAM doing a Masters in Public Health.

I am authorised by the Ministry of Health and Social Services to carry out a survey on the HIV and AIDS knowledge, attitudes, beliefs and practices among the Himba of Kunene Region.

The study has two main purposes:

1. The information is needed academically as a requirement for completion of MPH course.
2. To analyse the HIV and AIDS related knowledge, attitudes, beliefs and practices among the Himba people of the Kunene Region

The survey takes about 10 to 15minutes to complete. The information you will provide will be kept strictly confidential and anonymous: therefore honest answers to the questions are expected.

Participation in this study is voluntarily, and if you could come to the question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time. Your participation in this study will be highly appreciated.

Participant's signature.....

Respondent ID: \_\_\_\_\_

**Section A: Demographic Information**

SA01- How old are you? \_\_\_\_\_

SA02- Sex:

\_\_\_\_\_1) Female      \_\_\_\_\_2) Male

SA03- Have you ever been to school?

\_\_\_\_\_1) Yes      \_\_\_\_\_2) No

SA04- If yes to 03, what is your level of schooling?

\_\_\_\_\_1) Primary

\_\_\_\_\_2) Secondary

\_\_\_\_\_3) Tertiary (universities)

SA05- What is your current marital status?

\_\_\_\_\_1) Married      \_\_\_\_\_2) Divorced

\_\_\_\_\_2) Single      \_\_\_\_\_3) Widow/Widower

\_\_\_\_\_3) Cohabiting

SA06- If married

\_\_\_\_\_Polygamy      \_\_\_\_\_Monogamy

**Section B: Knowledge and Practices**

**Knowledge about HIV/ AIDS and transmission mode (for each good answer get 2points score)**

	Yes	No	Don't know	Point scored

SB-01	Have u ever heard of a disease that can be transmitted through genital during sex intercourse (STI)?				
SB-02	If yes can you name two? (Name any two STIs)				
SB-03	Have you ever heard about HIV/AIDS?				
SB-04	If yes, from what source have you heard information on HIV/AIDS?	<ul style="list-style-type: none"> <li>■ Newspaper</li> <li>■ Health workers</li> <li>■ Family member</li> <li>■ Friends</li> <li>■ Pastors/minister</li> <li>■ Traditional leaders</li> <li>■ Radio</li> <li>■ Partner</li> <li>■ Others</li> </ul>			
SB-05	Is there anything you can do to avoid getting HIV?				
SB-06	By what means can we avoid getting HIV/AID? <ul style="list-style-type: none"> <li>■ Use a condom</li> <li>■ Avoid multiple partners</li> <li>■ Sexual abstinence</li> <li>■ Use of disposable syringes</li> </ul>				

**Wrong conception about HIV/AIDS (for each good answer get 2points score)**

		Yes	no	Do not know	Points scored
SB-07	Can a person get HIV from using public toilets?				
SB-08	Can a person get the HIV from mosquito bites?				
SB-09	Can a person get the HIV by touching someone who has AIDS?				
SB-10	Can people get the HIV by eating from the same plate as someone who has AIDS?				

**Knowledge on prevention measures (for each good answer get 2points score)**

		Yes	No	Don't know	Point scored
SB-11	Can you reduce the chance of becoming infected by using condoms during sex?				
SB-12	Can you keep yourself from becoming infected by having no sex?				
SB-13	Can you keep yourself from becoming infected by having faithful sexual partners who are not infected with HIV?				
SB-14	Can you become infected by having unprotected sex with a person who looks healthy?				

**Subsection B3: Practices**

		Yes	No	Don't know
SB3-01	Are you sexually active?			
SB3-02	If so, do you have a sexual partner other your spouse(s)?			
SB3-03	Did you use a condom the last time you had sex with person (s) other than your spouse(s)?			
SB3-04	If yes, for which role?	<ul style="list-style-type: none"> <li>■ Avoid pregnancy</li> <li>■ Avoid STD/HIV</li> <li>■ Avoid both STD/HIV and pregnancy</li> </ul>		
SB3-05	How many sexual partners have you had over the past six months?( number)			
SB3-06	Do you feel you are at risk of becoming infected with HIV?			
SB3-07	Have you ever been tested for HIV/AIDS?			
SB3-08	Do you have the right to negotiate safer sex with your spouse or sexual partners?			
SB3-08	Is there a place where you can get condoms here in the village and do you know that place?			
SB4-09	If you can, are you willing to use condoms for each sex intercourse?			

**Section C: Attitudes**

		Yes	No	Don't know
SC-01	Would you go for HIV counselling and testing?			
SC-02	Over the past year have you ever heard any message about HIV/AIDS?			
SC-03	If you become infected would you tell your family that you have HIV?			
SC-04	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?			
SC-05	Would you be willing to share utensils or eat with a person who is HIV-positive?			
SC-06	Would you be willing to use the same toilet with a person who is HIV-positive?			
SC-07	Would you be willing to hold hands with someone who is HIV-positive?			
SC-08	Would you be willing to share a room with someone living with HIV/AIDS?			

**Section D: Beliefs**

		Yes	No	Don't know
SD-01	Do you believe that HIV/AIDS is just a myth (does			

	not exist)?			
SD-02	Would you prefer to go to hospital or a traditional healer when sick?			
SD-03	Do you believe that traditional doctors can cure HIV/AIDS?			
SD-04	Do you believe that witchcraft can also cause HIV/AIDS?			
SD-05	Do you believe that it is acceptable for married men/women to use condoms at home?			
SD-06	Do condoms reduce sexual pleasure?			
SD-07	Do women have the right to demand the use of condoms?			

THANKS VERY MUCH!!!!!!

**Annexure E: Determining sample size by Israel**

Mathematical Formula to determine sample size  $n = \frac{N}{1 + Ne^2}$  & Calculated sample sizes.

Table 1

Sample size for ±3%, ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5.				
Size of Population	Sample Size (n) for Precision (e) of:			
	±3%	±5%	±7%	±10%
500	A	222	145	83
600	A	240	152	86
700	A	255	158	88
800	A	267	163	89
900	A	277	166	90
1,000	A	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100

50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100
A = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.				

Source: Israel, G.D (2009).Determining sample size IFAS Extension, University of Florida.