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Experiences of Heterosexual Couples Who Undergo HIV Counseling and Testing in Nakuru-Kenya

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Walden University

College of Health Sciences

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Stephen Mucheke

has been found to be complete and satisfactory in all respects,
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Walden University
2016

Abstract

Experiences of Heterosexual Couples Who Undergo HIV Counseling and Testing in

Nakuru-Kenya

by

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MPH, Boston University, 2002

BA, University of Nairobi, 1987

Dissertation Submitted in Partial Fulfillment

of the requirement of the degree of

Doctor of Philosophy

Public Health

Walden University

August 2016

Abstract

The increase in new human immunodeficiency virus (HIV) infections among heterosexual couples in Africa may reverse the gains made by HIV prevention programs. HIV screening among such couples remains low and understudied. This qualitative study focused on the motivations for HIV screening among heterosexual couples. The primary research goal was to examine the lived experiences of heterosexual couples who were screened for HIV and received their results in Nakuru-Kenya. The health belief model (HBM) served as the theoretical framework and as a basis for the secondary questions which sought to explore the participants' perceptions on HIV based on the constructs of the HBM. Semi-structured interviews were conducted with a purposively selected sample of 14 heterosexual couples. Data were collected through face-to-face audio-recorded interviews, which were coded and analyzed using Moustakas's phenomenological data analysis method. Six major themes emerged from the clustered responses of the participants. Couples recognized that they may be susceptible to HIV infection because HIV is transmitted primarily through sexual contact. Some couples perceived HIV as a severe, life-threatening condition in their lives; others perceived HIV as chronic disease that could be managed through treatment and good health care. The fear of negative consequences was cited as a barrier to couples' willingness to receive HIV counselling and testing. Couples perceived HIV testing as having multiple benefits, including freedom from worries and as a motivation to plan their lives. Health messages and partner dialogue were major cues that encouraged couples to undergo HIV testing. Testimonials from other couples who had been tested and chose to talk about their experiences contributed to a strong feeling of self-efficacy. These study findings may help to improve HIV prevention interventions for heterosexual couples.

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Dedication

I dedicate this dissertation to my wife Mwendwa and our children, Gakii, Kiogora, Bundi and Munene whose great expectations always inspired me to strive to higher goals and be a role model. Their strong belief in the success of everything I did, inquisitive minds from an early age and love, were the greatest motivations for me to explore the depths of knowledge through reading. To my wife, my best friend and sharpest critic, “I owe it to your love, encouragement and steadfast support as the anchor of our family”. I also dedicate this work in the loving memory of my departed parents, the late Erasto Mucheke and the late Anna Kanuu, for nurturing the values of faith in God, honesty and hard work. Wherever you are, be happy, your strong legacy continues, and I am forever grateful to God for having given me you as my parents.

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Chapter 1: Introduction to the Study

Background

Human Immunodeficiency Virus/Acquired Immune-Deficiency Syndrome (HIV/AIDS) is a major global health and development challenge in the 21st century. The Sub-Saharan region of Africa bears a large burden of the impact of HIV/AIDS (Bertozzi, 2010). According to the World Health Organization (WHO), approximately 24.7 million of the 35 million individuals with HIV/AIDS are living in this region (WHO, 2014). In 2013, 1.5 million deaths worldwide were attributed to HIV/AIDS, with 71% of these occurring in Sub-Saharan Africa (WHO, 2014).

HIV is transmitted mainly through sexual contact. Over 85% of all new infections were transmitted in this way (Morison, 2001). Sex workers, men who have sex with men, persons using injected drugs, and those who have multiple sexual partners are associated higher risk of HIV (UNAIDS, 2007). However, there is a reported decrease in the number of infections within the general population in this region (UNAIDS, 2012). An estimated total of 1.9 million people contracted HIV in 2010. This figure represents a 16% decline from the estimated figure of 2.2 million in the year 2000. It also represents a 27% decline in the annual estimates of new HIV infections between 1996 and 1998 in particular countries (WHO, 2011). This decline could be attributed to HIV prevention and treatment efforts, and provides some hope for an AIDS-free generation in Africa (Clinton, 2011).

Despite the reduction in HIV cases within the general population, there is an emerging trend indicating that 60--94% of new cases in Sub-Saharan Africa occur within marriage and stable cohabiting relationships. The majority of HIV positive persons are not aware that they are infected (Dunkle, Stephenson, Karita, Chomba & Kayitenkore,

2008; Chemaitelly, 2012). Voluntary counseling and testing has provided promising results when individuals who test positive are enrolled in health care early and are provided with antiretroviral drugs (ARV) (WHO, 2002). ARV drugs reduce the potential risk of infecting a partner by 96% among discordant couples (Attia, 2009; Baeten et al., 2012; Donnell et al., 2010). Inadequate risk assessment coupled with a slow uptake of counseling and testing services are barriers to effective HIV prevention. Individuals who are infected do not access treatment services or protect themselves and their partners, especially in situations in which only one partner in a couple relationship is infected (Gebremariam, Bjune & Frich, 2010; Unge, Södergård & Marrone, 2010).

Voluntary counseling and testing services are underutilized by couples in Sub-Saharan Africa. Many infected couples test only when testing is recommended by health care workers, when they present with symptoms of AIDS (Kwobah et al., 2015). Couples' testing has been the subject of a number of studies. One study focused on the use of Nevirapine in antenatal clinics after couples' voluntary counseling and testing (Conkling et al, 2010). Another study analyzed the adoption of preventative behaviors among couples after testing, and couple experiences with provider-initiated testing (Musheke et. al, 2013). One study analyzed the effectiveness of network agents in promoting couple's counseling. Another study sought to establish the effect of inviting male partners to test together with their wives (Kebaabestwe, Ndase, Mujugiira & Sekoto, 2010; Mohlala, Boily & Gregson, 2011). The results demonstrate a positive association between couples' knowledge of HIV status and increased HIV preventive behaviors (Bonnenfant, Hindin, Gillespie, 2012).

Despite these efforts, there is still a gap in the research literature on what motivates couples to go for voluntary counseling and testing. A dyadic approach, which considers the couple as a unit of analysis, in HIV prevention behaviors is lacking (El-Bassel & Wechesberg, 2012). Furthermore, the majority of HIV prevention interventions continue to target individuals within relationships instead of using dyadic models of behavior change (Karney, Hops, Redding, Heis, Rotham & Simpson, 2010).

The purpose of this study was to explore and describe the lived experiences of heterosexual couples who choose HIV counseling and testing, using a dyadic approach, based on the health belief model (HBM). The results provide additional knowledge and understanding of factors that motivate couples to choose to undergo HIV counseling and testing together. This knowledge may be particularly important in designing dyadic HIV prevention programs to address the emerging trends of increasing infections in married heterosexual couples. In addition, it may contribute to the design of intervention that promotes couples' communication and change the way communities perceive the role of partners in protecting health.

This introductory chapter includes a description of the topic of the study, the importance of the research, the research gap, the background to the research, the problem statement, and the purpose of the study and research questions. The theoretical framework, definition of terms, assumptions, scope of delimitations, limitations and significance of the study are also discussed. The chapter ends with a summary of the chapter and transition into Chapter 2.

HIV counseling and testing is a conversation between a client and a trained counselor in which a client is psychologically prepared to be tested and receive results (WHO, 2014). Couples' HIV testing and counseling involves two people in an intimate relationship engaging in a discussion with a professional counselor. The discussion entails how testing is done, the benefits and risks, the possible outcomes, the implications of the results and follow-up services (WHO, 2014).

The HIV test results for couples may turn out to be concordant positive, concordant negative, or discordant. Concordant positive means both partners are infected with HIV. Concordant negative means both partners are not infected. Discordant means only one partner in a relationship is infected (Effective Interventions, 2012). Couple testing provides a motivation for preventive behaviors for those who are negative and opens an opportunity for care and management for individuals with positive HIV status (UNAIDS, 2000). The aim of couple counseling and testing is to provide support in a secure and private setting for counselling and referral for health services and psychosocial support depending on test results (UNAIDS, 2000).

Couple-focused testing and counseling programs are known to motivate preventive behaviors among couples in discordant and concordant positive couples (Roth, Stewart, Clay, 2001). Research suggests that couples who test for HIV together are more likely to practice health protective behaviors. Individuals within a coupled relationship are less likely to test without partner involvement even when there are suspicious about their health status. On the other hand, young individuals in premarital relationships may

opt to test independently before committing to a relationship (Bonnenfant, Hindin, Gillespie, 2012).

Couple counseling and testing interventions targeting women who abuse drugs and their male partners was more effective in risk-reduction compared to ordinary urban based HIV counselling and testing (McMahon et. al, 2012). There is additional evidence to suggest that women who test with partners have a higher probability of using HIV preventive methods and using Nevirapine treatment for themselves and their infants (Becker, Mlay, Schwandt & Lyamuya, 2010). Fear of positive results and perceived lack of confidentiality are potential barriers to couple uptake of counseling and testing in home-based care settings (Njau, Wattc, Ostermannc, Manongia & Sikkemac, 2012).

Most of the research targeting couples has focused on men and women individually in the context of their relationships. Other researchers focused on barriers to testing among couples who undergo provider initiated testing when they present symptoms of HIV infection. There was a gap in understanding the motivations of couples' testing based on the free will of the individuals involved (Musheke, Bond & Merten, 2013). This study analyzed the thought processes and influences of couples who choose voluntary counseling and testing, and received their results together.

Problem Statement

Kenya ranks as the country with the third highest prevalence of HIV/AIDS in Africa, after Nigeria and South Africa (CIA, 2013). Despite the government's efforts to increase counseling and testing services, only 47% of married or cohabiting couples have taken HIV tests together (NAS COP, 2012). Consequently, knowledge of the health status among couples is low, and 83.6 % of couples neither know their own HIV status nor that

of their partners (Kaiser, et al. 2011). Poor knowledge of HIV status within relationships hinders HIV prevention efforts (Cherutich et al., 2012). These couples represent an unrecognized source of HIV risk (Isaacs, 2013); Kelly, Karita, Sullivan & Katangulia, 2011).

HIV prevention interventions targeting couples have not been adequately studied despite the theoretical appropriateness of considering both partners simultaneously (Gray, Kelpinger, Billy, & Cubbins, 2010). HIV prevention programs tend to target individuals among intimate couples. These individuals lack the ability to protect themselves adequately because of power dynamics within relationships (Bolton, McKay, & Schneider, 2010). For example, some of the pregnant women attending antenatal clinics in Kenya declined to take a test for fear of rejection by husbands if test results turned positive. On the other hand, men refused to test because of the fear of the psychological burden of living with HIV, or fear that positive results would be a proof of their infidelity (Musheke, 2013); Turan, Bukusi, Onono, Holzemer, Miller, & Cohen, 2011).

There was evidence to suggest that the use of HIV prevention is higher among people with multiple partners in casual sexual encounters than among those with a stable partner (Comer & Nemeroff, 2000). However, that protection does not seem adequate considering that extra couple relationships (having sexual relationships with other partners outside of marriage) contributed to 65% of new infections among men, and 47% among women (Bellam et al., 2013). Some past researchers focused on benefits as motivations for couple testing, thereby providing insights only on the expected outcomes as a motivation for testing (Desgrees, Brou, Djohan & Becquet, 2009; Sterck, 2013).

Other researchers focused on the outcomes of HIV testing among couples in high prevalence settings (Tabana et al., 2012).

Given that researchers in the past focused on issues like benefits and negative consequences of counseling and testing for individuals in coupled relationships, it was important to consider a dyadic approach to understand HIV infections among heterosexual couples (El-Bassel et al, 2012). Furthermore, the acceptance of couple counseling in Kenya was not entirely understood (Njororai, 2009). In this study, I analyzed and documented the lived experiences of couples who were voluntarily tested and received HIV results together as a means to contribute to a deeper understanding of couple motivations surrounding and perceptions concerning HIV prevention.

Purpose of the Study

The purpose of this study was to contribute to knowledge and understanding on how heterosexual couples manage HIV issues within relationships. The study used a qualitative methodology with a phenomenological approach to analyze the motivation that inspired heterosexual couples to undergo voluntary HIV counseling and testing and to receive their results together.

Research Questions

The overarching study question was, “What are the lived experiences of couples who have undergone VCT and obtained their results together?” The specific questions were based on the constructs of the HBM of behavior change. The model focused on the perceptions and beliefs of individuals and how these beliefs shaped their health behaviors (Champion & Skinner, 2008).

Primary Research Questions

The following are the primary research questions for this study:

1. How do couples who have undergone VCT and received the results together describe their initial thoughts and beliefs on the likelihood of being infected with HIV? (Perceived susceptibility).
2. How do couples who have undergone VCT and received their results together describe their perceived severity/seriousness of being infected with HIV? (Perceived severity).
3. How do couples who have undergone VCT and received results together describe the benefits of couple counseling and testing? (Perceived benefits).
4. How do couples who have undergone VCT and received their results together experience obstacles to testing? (Perceived barriers).
5. How do couples who have undergone VCT describe the cues that prompted them to take actions, i.e. consider testing? (Prompts to action).
6. How do couples who have undergone VCT and received their tests together describe their confidence in managing the test results? (Self-efficacy)

Theoretical Foundation

A theoretical framework is an application of a set of concepts drawn from a theory and used in an explanation to a research problem (Imenda, 2014). Theories of health behavior change have been used previously in the design of health behavior interventions. Some of the commonly used theories for this type of research include: diffusion of innovation (Rogers, 1983), the theory of reasoned action (Fishbein & Ajzen, 1975), and social learning/cognitive theory (Bandura, 1986). In this study, I used the

HBM because of its foundation in decision theory and its appropriateness in prediction of health behaviors based on personal beliefs (Rosenstock, Stretcher & Becker, 1988). The HBM was widely used in health and disease prevention campaigns in the 1950s, when it was first developed in an effort to evaluate the poor performance of a free tuberculosis (TB) screening campaign by the United States Public Health Service (Glanz, Rimer & Viswanath, 2008).

The HBM posits that health behavior change involves six levels, the constructs of which are: perceived susceptibility (the belief about the possibility of contracting an illness), perceived severity (feelings severe consequences of contracting an illness), perceived benefits (beliefs regarding positive outcomes of the new behavior), perceived barriers (potential hindrances in taking the new behavior), cues to action (the triggers for actions), and self-efficacy (confidence in performing the desired behavior). The HBM is related to the socio-psychological presumption of how individuals change behaviors due to health related considerations (Harrison, Mullen & Green, 1990). It is one of the common theories used in the studying study of human behavior (Glanz et al., 1997).

The Conceptual Framework

A conceptual framework is a synthesized model designed to suit the needs of a study. A conceptual framework is a theory supported model developed to address the particular needs of the problem (Imenda, 2014). In this study, I applied the conceptual framework based on HBM to describe the phenomenon of voluntary HIV counseling and testing for heterosexual couples. The conceptual framework was formulated on a dyadic approach in order to address a couple as the unit of study.

A dyadic perspective on HIV prevention pays attention to how individuals in a relationship interact with and influence each other over an extended period of time (Reis, Collins & Berscheid, 2000). Dyadic approach to health behavior change in couples' counseling and testing is critical considering the increasing cases of HIV among heterosexual couples. There was need to explore the impact of one partner's feelings and actions on their partner (Karney, Hops, Redding; Reis Rothman, Simpson, 2010; Kelley et al., 2008). In HIV counseling and testing, a dyadic model of behavior provides an opportunity to observe mutual influence between two persons where one partner's attitudes, personal choices, and preferences influence the other partner's intentions.

A dyadic model for couples' counseling and testing has three levels of behavioral change processes. In the first level, the thoughts and actions of the individual create some awareness on the partner. The second level is the initiation of dialogue between the partners. The third level is the action of a joint behavior based on a shared understanding and a common goal. The perceptions of being susceptible to the risk of infection and benefits of practicing protective behaviors lead to some behavioral intention. An individual's behavioral intentions, when shared, may transform into motivation for change in their partner. In this dyadic model communication conveys the intentions of each partner, leading to joint action.

HBM constructs related to the phenomenon of voluntary counseling and testing for heterosexual couples through the particular constructs that build towards behavior adoption. For example, analyzing how couples perceive susceptibility and how these perceptions trigger the motivation for joint counseling and testing provided a deeper

understanding of how individual thoughts build in joint action among couples. The same question applied to all of the other constructs of HBM. This study sought to establish what the perceived benefits for testing are and how they act as a motivation for joint action.

In regard to self-efficacy, this study sought to understand how couples perceived their ability to deal with the results of joint testing and the effect of their perception on their final decision regarding their ability to manage the outcomes. By considering the lived experiences of heterosexual couples who undergo voluntary counseling and testing using HBM, this study demonstrated how individual behavior models could be adapted to address dyadic behaviors in relationships. The selected conceptual framework was appropriate for a phenomenological study in that the questions enabled couples to narrate their lived experiences and their thought processes before going for counseling and testing.

Nature of the Study

This qualitative study aimed at describing the lived experiences of heterosexual couples who voluntarily tested for HIV and received their results together. A qualitative research method allowed me to examine human experiences in detail and to understand the feelings and thoughts of individuals in relation to their experiences. Qualitative methodology and the interpretive paradigm share a common perspective that supports the existence of different and varied interpretations of a single experience. This perspective is consistent with concepts development, which looks at individuals holistically in the context of their environment (Creswell & Clark, 2007).

In this approach, the researcher attempts to understand how people ascribe meaning to their experiences within their environments (Merriam, 2009). Using the HBM model of behavior provided a systemic behavior change model by analyzing individuals' perceptions regarding the risk of infections, the benefits barriers, as well as the cues to action. Qualitative research methodology is consistent with a research inquiry that seeks to understand aspects of human behavior and has been used widely in studying human behavior and habits (Creswell, 2009). This method was also appropriate for this study because it is linked to the constructivist theory of knowledge. Qualitative approach provides a means to understand perceptions and deeper thoughts of individuals who experience particular phenomenon (Rudestam & Newton, 2007). Qualitative research provides a means to explore the depth of issues within small groups of respondents, focusing on the phenomenon of study (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008). The hermeneutical phenomenology approach in the qualitative research tradition allows the researcher to focus on details that are important in establishing a broad understanding of how individuals experience and interpret their world (Laverty, 2003).

The key concept of this study was couple counseling and testing. Couples' HIV counseling and testing is a process that involves two people in an intimate relationship engaging in dialogue with a professional counselor. The discussion helped the couple to understand the process. The discussion included information on how testing was carried out, the benefits, risks, the possible outcomes, the implications of the results for the couple and follow-up services. The method of data collection was through interviews with couples, with both partners' present, using semi-structured, open-ended questions.

These questions prompted a discussion that revealed the perceptions, emotions, and motivations of the respondents in relation to the topic of discussion (Mariampolski, 2001). I transcribed, coded, and analyzed the data based on emerging themes as recommended by Creswell, (2007).

Definition of Terms

The following are the operational definitions of the terms used in this study:

Acquired immunodeficiency syndrome (AIDS): AIDS is a state of fragile body immunity during which a person often becomes ill from opportunistic infections (WHO, 2007).

Dyad: A dyad is two things of similar kind or nature. In humans, it defines two individuals in a relationship (Merriam-Webster.com).

Human Immunodeficiency Virus (HIV): HIV virus breaks down the body's immunity, resulting in constant opportunistic infections (Lamptey, Johnson, & Khan, 2006).

Sub-Saharan Africa: Sub-Saharan Africa (SSA) refers to the African continent south of the Sahara desert. There are 54 African nations within the SSA region (The Library of Congress, 2010)

Perceived susceptibility: An individual's perceived understanding of the risk of becoming infected by a disease (Rosenstock, Stretcher & Becker, 1994).

Perceived severity: An individual's understanding of the dangers posed by an illness (Rosenstock, Strecher & Becker, 1994).

Perceived benefits: An individual's personal belief that the desired behavior is of advantage to the individual (Rosenstock, Strecher & Becker, 1994).

Perceived barriers: The hindrances or negative consequences of taking action, as perceived by an individual (Rosenstock, Stretcher & Becker, 1994).

Self-efficacy: An individual's perceived behavioral control or ease of performing the desired behavior (Bandura, 1997).

Heterosexual: Heterosexual refers to a person who is attracted to members of the opposite sex (American Psychological Association, 2008).

Assumptions, Delimitations, and Limitations

Assumptions

The purpose of this study was to explore the lived experiences of heterosexual couples who chose to undertake HIV testing and received the results together. The primary assumption was that I would be able to contact couples who met the criteria of having undergone counseling and testing, and received their tests together. In addition, I assumed that the respondents would accept to participate, and would engage in an honest and open discussion during the interviews. I approached the participants in a transparent manner, informing them that their participation was voluntary. I also informed them that they could stop at any time if they felt the need to. I assured them of the confidentiality of their responses.

Delimitations

Delimitations are the deliberate set parameters that define the scope of the study (Rudestam & Newton, 2007). They include choices made on study populations, sample definition, and settings that limit the study in answering the entire question relevant to the topic. The selection of the study site was delimited to Nakuru City Municipality, focusing on heterosexual couples who had undergone counseling and testing over the last six months, and received their results together at the comprehensive care center. Couples

who may have tested separately did not qualify for the study even if there was mutual disclosure of outcomes. Although the definition of a couple did not imply an age limit, the study addressed couples between the ages of 25 and 55 years, the age group most affected by HIV.

Limitations

Limitations in research comprise all the inherent weaknesses of the study that are outside of the researcher's control (Simon, 2011). This study involved only a few couples who had undergone counseling and testing and lived in Nakuru Municipality in Kenya. The results of the study, therefore, reflect the views and experiences of this particular group and may not be generalizable to all couples. Secondly, the study solicited self-reported information which created a possibility for the respondents to provide answers that they considered good even if they did not necessarily reflect their real experience. At the conceptual level, the HBM was initially conceptualized to evaluate intrapersonal beliefs and perceptions but does not take the environmental influences of behavior into account (Champion & Skinner, 2008). To address this weakness, the conceptual framework for this study was developed to handle a dyadic approach to behavior, taking into considerations the influences that partners have on behavioral change.

Significance of the Study

This study focused on heterosexual couples' counseling and testing because there was an apparent gap in knowledge and a lack of couple-based intervention strategies (El-Bassel et al, 2012). Kenyan heterosexual couples were at an increasing risk of HIV infection because of high-risk sexual behaviors (Kaiser, et al., 2011). Despite the reported

decrease in prevalence from 7.2% in 2007 to 5.6% in 2012, the patterns of infection are increasing from 7.8 % in 2007 to 9.1% in 2012 among adults ages 45-54, the majority of whom are married or in cohabiting stable relationships. Furthermore, the high HIV prevalence of 10% within the reproductive age group of 35 to 44 is alarming. This situation is of concern because it has the potential to reverse the positive gains in HIV prevention programs (Bukonya, 2013).

This problem was compounded by the fact that only half of HIV-infected adults (53%) know their HIV status (NAS COP, 2012). There was a need for preventative interventions to focus more on couples because of the elevated incidence among this portion of the population. HIV prevention interventions need to emphasize couple testing in order to increase knowledge of status and inspire behavioral change among partners (Kaiser, 2011).

Couple testing facilitated early enrollment into care and treatment of HIV-related opportunistic infections (WHO, 2013). In addition, it enabled discordant couples to access relevant information and education on preventing the uninfected partner from becoming infected (Desgrees-du-Lou et al., 2008; Kelley et al., 2011). Increasing knowledge of this critical area of program intervention would promote early diagnosis and complete other evidence-based approaches including clinical male circumcision and prevention of mother to child transmission of HIV (Kaiser et al., 2011).

Implications for Social Change

Social change is a process of positive transformation within the community social structures through deliberate actions for the common good (Preserve Articles, 2012). In

public health, social change is the modification of community behaviors and habits that has the benefit to the health of individuals, families and communities. Positive social change implies a transformation that results in positive outcomes (Walden, University, 2013). The WHO recognized that couple counseling and testing are important in preventing new infections among serodiscordant couples (WHO, 2012). Furthermore, couple counseling was one way of increasing the role of men in the prevention of mother-to-child-transmission of HIV. Because the role of men in decision making is critical in the provision of PMTCT services in Africa, positive change in this regard would be difficult to achieve without their involvement (Akarro, Deonisia, & Sichona, 2011).

Summary

HIV/AIDS is a major health and development challenge in many Sub-Saharan African countries despite the decrease in prevalence. Heterosexual couples are a hidden group that is at higher risk of HIV infection due to increasing cases of infection among couples, the majority of whom do not know their HIV status. There is inadequate research to guide prevention and care interventions in dealing with HIV within these unions and therefore a need for more research on how couples deal with HIV in order to support couple-based interventions. The results of this study may contribute to improving the understanding of the experiences of couples who undergo counseling and testing jointly and inform new HIV prevention interventions targeting couples.

In Chapter 2, I provide a review of literature on the current status and the impact of HIV/AIDS in Africa and discuss the emerging trends of new infections among couples. I present the theoretical model and conceptual framework for the study. I also examine the issues surrounding couple counseling, a dyadic approach in couple studies,

evidence and controversies in couple counseling. I conclude with a summary and conclusions, and a transition to Chapter 3.

Chapter 2: Literature Review

Introduction

This chapter contains a literature review on heterosexual couples' HIV counseling and testing. Couple counseling and testing is important in identifying persons who are eligible for HIV prevention support and those who are eligible for treatment, care, and support owing to their HIV status (WHO, 2014). Despite this importance, there is inadequate knowledge of how couples prevent or manage the risk of HIV within their relationships (El-Bassel et al, 2012; Liu, Hindin & Becker, 2008). Furthermore, a consistent increase in the incidence of HIV infections among heterosexual couples in sub-Saharan Africa is causing concerns about the effectiveness of HIV prevention programs among couples (Kaiser et al., 2011; Padian, Shiboski, & Jewell, 1991).

This chapter includes the following key sections: introduction, literature search strategy, databases and search engines, key search terms, relevance of the problem, theoretical propositions of HBM, and the conceptual framework. The applicability of this model to a dyadic relationship is presented in detail. An overview of qualitative research and the phenomenological approach are examined. Couples' HIV counseling and testing, and dyadic approaches are explored in the literature and related to the key concepts. A summary of the discussion and conclusions are presented at the end of the chapter.

Literature Search Strategy

Databases and Search Engines

The literature search involved accessing various databases using different search engines. First, I searched for relevant literature on topical issues including the latest HIV

trends and the impact of AIDS, issues surrounding couple's counseling and testing in Sub-Saharan Africa and Kenya in particular, counseling and testing for HIV prevention, and data and trends in counseling and testing. I searched for literature on these topics through the Centers for Disease Control and Prevention (CDC), UNAIDS, WHO, and the Kenya Medical Research Institute (KEMRI) websites.

I undertook an extensive literature search for peer reviewed articles from the Walden University Library EBSCO databases. These are: Academic Search Complete/Primer, ProQuest Central, Science Direct, CINAHL and MEDLINE Simultaneous Search, CINAHL Plus, MEDLINE, PubMed, Nursing and Allied Health Source, Health Sciences (SAGE), Google Scholar, Walden Dissertations, and the Networked Digital Library of Theses and Dissertations.

Key Search Terms

The search terms included a combination of keywords related to the topic of my study. The terms included: *HIV/ADS, HIV risks, HIV testing, HIV behaviors, HIV and dyads, HIV discordance, HIV screening, HIV concordance, HIV couples*. For the theory part, I used the following search terms, *health belief model, history, constructs, susceptibility, seriousness, risk perceptions, barriers, cues to prevention, self-efficacy, studies, evaluation, reviews, and application*. The search yielded over 215 articles on various aspects of the subject of study. The selection criteria included articles published in peer-reviewed journals between 2004 and 2014, articles published earlier than 2004 that were relevant to the topic of study, articles that focused on heterosexual couples counseling and testing issues in Africa and Kenya, and articles on behavior and social

aspects of counseling and testing. I selected articles focusing on counseling and testing for HIV prevention. I dropped articles that did not meet the criteria. These included articles that were not original or reviews that presented information already available in the original published research. I left out articles that were outside the context of the study. For example, articles that focused on clinical aspects of counseling and testing, issues of discordance, and physiological vulnerability were excluded.

Problem Relevance

HIV in Sub Saharan Africa

The United Nations Joint Program on AIDS (UNAIDS) report indicates that Sub-Saharan Africa has an enormous HIV burden. 23.8 million (69%) of the 34 million people infected globally living in this region (UNAIDS, 2012). In addition, 71% of the global HIV-related deaths in 2010, and 88 % of world's infected children live in this region (UNAIDS 2012). However, there are variations in prevalence by geographic area within the continent. North African countries including Chad, Northern Sudan, Egypt, Libya, Morocco, Djibouti, Eritrea, and Tunisia have an HIV prevalence of 0.1 to 0.5% within the general population (UNAIDS, 2012). The West African countries, including Nigeria, Cameroon, Ghana, Senegal, Burkina Faso, have a prevalence of between 2% to 5% (UNAIDS, 2012). A number of factors may be responsible for this level trend. These include long distances between cities, general insecurity, inadequate communication infrastructure, and conservative cultures that result in minimal travel and interactions with people from outside of the communities (Avert, 2013).

The prevalence is higher in the Eastern and Southern African regions. Kenya, Uganda Tanzania, Zambia, and Malawi have a prevalence of between 5 % and 7% (Avert, 2013). The highest prevalence in the region is in the Southern Africa countries. Swaziland has (26.0%), the Republic of South Africa (17.3%), Botswana (23.4%), and Lesotho (23.3%) (WHO/UNAIDS/UNICEF, 2011). A number of factors are responsible for these trends. They include a high level of population mobility through labor migration, low male circumcision, concurrent sexual partnerships, and the existence of sexually transmitted diseases within the populations (Avert, 2013). A high rate of concurrent sexual relationships between sex workers and other mobile populations resulted in a rapid spread of HIV in East Africa over the past decades. For example, in 1986, some 85% of sex workers who tested for HIV in Nairobi were seropositive (Piot et al., 1987). In another report, 35% Ugandan truck drivers who tested over the same period were HIV positive (Carswell, Llyond & Howells, 1989).

In many communities within sub-Saharan Africa, male-dominant practices allow multiple sexual partners for men. In addition, labor migrations make HIV infections a male-driven problem among people in stable, conjugal relationships (Rujumba & Kwiringira, 2010). Furthermore, sexual interaction between high-risk persons and individuals in the general population may result in an increase in new infections among groups like community men and young girls. HIV prevention programs do not consider these groups as high-risk in HIV prevention programs. According to WHO (2014), high-risk populations include female sex workers, persons using injecting drug, men who have sex with men, persons incarcerated in jails, and transgender persons. There is evidence

that suggests that early exposure to sex among girls increases their risks for contracting the disease. Consequently, some women may be entering into marriage when they are seropositive (Sia, Onadjia, Nandi, Foro & Brewer, 2013).

Impact of HIV/AIDS Affected Countries

HIV/AIDS has a negative impact on social and economic development of affected countries. It affects food security, as economic productivity breaks the family structure and reduces the efficiency of services providers in health and other sectors. UNAIDS estimates indicate that human labor dependent Sub-Saharan countries had their agriculture production reduced by more than 50% due to HIV over the last two decades (UC Atlas of Global Inequality, 2012). According to the Commission on HIV/ AIDS and Governance in Africa (CHGA), industries suffer losses of skilled labor when people die at the prime of their life due to HIV/AIDS (CHGA, 2012). In South Africa, about 60% of miners currently between the ages of 30 and 45 may be reduced by 10% in 10 years due to HIV/AIDS (Daniel, 2013). This reduction in labor output has a big impact on the country's economy because it reduces the per capita income, increases the cost of living, and increases poverty within the general population.

At the social level, HIV/AIDS breaks down the family structure and creates vulnerability among children when both parents die of AIDS. The death of both parents due to AIDS results in dissolution of the home, which puts children under the care of relatives (Hosegood, McGrath, Herbst, & Timaeus, 2004). The burden of children orphaned by HIV/AIDS continues to impact households of surviving relatives, creating an extra expense that increases the cost of living in low resource settings (UNAIDS,

2006). HIV/AIDS thus creates a high level of the economic burden of surviving members of the family and lowers the standards of living within families.

HIV/AIDS increases spending on health care in multiple ways. According to UNAIDS, HIV positive individuals fall sick more often and may be hospitalized for longer periods than other patients (UNAIDS, 2006). In the highly affected countries, half of the beds in hospitals are occupied by people with an HIV-related illnesses (UNAIDS, 2006). At another level, HIV poses a challenge to health care delivery when it affects health care providers. For example, between 2005 and 2009, Botswana lost 17 % of its medical personnel due to AIDS-related illnesses (UNAIDS, 2006). In South Africa, approximately 20% of student nurses have tested positive for HIV (Daniel, 2013). The cost of training such personnel is enormous, and their contribution to health care is compromised by HIV/AIDS.

The health care systems of countries most affected by HIV have continued to struggle with a double burden of sickness and the low productivity of health care workers affected by HIV (UNAIDS, 2006). According to Mathers & Loncar, (2006), HIV/AIDS will continue to be a primary cause of illness and death in developing countries, even with availability of treatment services and increased access to antiretroviral drugs. Thus, HIV has a devastating effect on a country's economy, social systems, and institutions responsible for growth and development, making it a global concern and a key health priority.

Emerging Trends in HIV Infections

The 2012 UNAIDS World AIDS Report shows a decline in new infections in Kenya, Uganda, Burundi, Namibia, South Africa, and Zambia (UNAIDS, 2012).

However, prevalence, which is an indicator of the total number of people living with the virus, may not be an absolute measure. Lower HIV prevalence may be an outcome of other factors such as the high death rate among the infected persons. Incidence, which is the measure of new infections within a population, is a more effective indicator because it presents the number of new infections within a period (Shields & Twycross, 2003)

Evidence shows that between 60% and 94% of all new HIV infections occurred within stable relationships or among married or cohabiting relationships (Dunkle, Stephenson, Karita, Chomba & Kayitenkore, 2008). In addition, there is a high number of discordance (only one partner HIV- infected). The majority of the infected are not benefiting from health care because they do not know their status (Guthrie, de Bruyn, Farquhar, 2007; Lingappa, Lambdin, Bukusi et al., 2008).

Within the East African countries, there is evidence that between 40 and 50% of married or cohabiting couples are discordant, but they are not aware because they have not tested (Bunnell, Mermin & De Cook, 2006; Chemaitelly, 2012). Treatment with antiretroviral drugs reduces the chances of transmission of HIV in discordant partners by 96%. Lack of knowledge of the status denies couples this benefit and is also a demotivation to adopt healthy behaviors (Staveteig et al, 2013)

Kenya has a 5.6% HIV prevalence within the general population (National AIDS and STIs Control Program (NASCO), 2012). According to the UN General Assembly Special Session on Drugs (UNGASS), close to 50% of new HIV cases in the country

occur within married or cohabiting relationships (UNGASS, 2010, Kimani, Ettarh, Ziraba & Yatic, 2013). An additional 20% of these infections are transmitted through unprotected sex with other partners. The underlying causes of this trend in infections are male partners having sexual relationships outside of marriage and young women entering into long term relationships when they are already infected through earlier exposure, as well as women's extramarital relationships (Kaiser, 2011; Kwena, et al., 2014). As a result, there is a renewed commitment focus to make prevention interventions responsive to the emerging challenge of increasing infections among couples.

WHO consultative meeting held in Geneva, Switzerland, in November 2002, recognized the importance of counseling and testing as an effective approach in HIV prevention, and recommended its use in HIV response strategies (WHO, 2003). Among couples, the benefits of counseling and testing include preventive actions such as consistent condom use, reduction in sexual partners, and prompt enrollment into treatment and care (Allen, 2003; Dunkle, 2008, Grabbe & Bunnell, 2010). Another benefit of couple testing is the initiation of antiretroviral (ARVs) treatment among discordant couples. ARV treatment reduces the risk of infecting the partner among discordant couples by up to 96% (Attia, 2009, Baeten et al., 2012, Donnell et al., 2010).

Following the recommendation for increase the access of counseling and testing by scale-up of services, the Kenyan government increased the network of voluntary counseling and testing (VCT) centers from three centers in 2000 to 4,438 centers by 2010 (WHO/UNAIDS/UNICEF, 2011). Despite the increase, utilization of such services remains low. By 2012, only 47% of heterosexual couples had tested for HIV together to

know their status compared to 72% of adults between the ages of 15 and 64. More women than men had tested (80% vs. 63%) nationally (NASCOP, 2012). Partners in stable relationships account for over 80% of unprotected sex among HIV positive persons (Bunnell et al., 2008). The lack of knowledge of HIV status among these couples impedes efforts to avoid getting infected or transmitting the HIV. Furthermore, 83.6% of discordant couples have no mutual knowledge of their partners' HIV status (Cherutich et al., 2011; Medley, et al., 2013). Couple-focused approaches are necessary to curtail the incidence of HIV, but there is little knowledge on such approaches (WHO, 2012). This gap underscores a need for more research on HIV prevention in coupled relationships (Burton, Darbes & Operario, 2010; Grabbe & Bennel, 2010).

Lack of knowledge of HIV serostatus in couple relationships is an obstacle to HIV prevention efforts because those infected do not access treatment services or protect themselves from opportunistic diseases which affect people with low immunity (Unge, Södergård & Marrone, 2010; Gebremariam, Bjune & Frich, 2010; Duff et al., 2010), Kaiser et al., 2011). Lack of knowledge among such couples increases the vulnerability of the uninfected partners because they tend to underestimate their vulnerability to HIV infection (NASCOP, 2007; Brou et al., 2008). Poor assessment among stable couples contributes to high risk sexual behavior among heterosexual couples in Kenya (NASCOP, 2009 & Bellan, 2013). This is partly because majority of the interventions continue to target men and women separately despite the identified need for a dyadic approach to couple HIV prevention (Painter 2001; Semrau 2005; Liu, Hindin & Becker,

2008; Du Lou, & Orne-Glieman, 2008; El-Bassel ,2012). There is the need for more research on couples-based HIV prevention.

The Theoretical Foundation

Health-promotion interventions that are based on theories of social and behavioral science provide a better foundation for evaluation than those without a theoretical base (Glanz & Bishop, 2010). Thus, health education and disease prevention theoretical models provide a basis for designing and evaluating the impact of such programs. Some of the commonly used theories include health belief model (HBM), social learning theory (Bandura, 1986), the theory of reasoned action (Fishbein & Ajzen, 1975), diffusion of innovation (Rogers, 1983).

The social learning/cognitive theory (Bandura, 1986) posits that behavior change among individuals is influenced by personal and external factors. The personal factors include instincts, motivations, traits, and other internal behavioral forces that are unique to an individual. The external factors are influences and experiences within the environment in which behavior is performed. A number of constructs and variables which contribute to individual behavior include; a confidence in performing the behavior or self-efficacy, a judgment of possible consequences a behavior or outcome expectations, the ability of the individual to have control over the new behavior as well and reinforcements to practice the desired behavior; the ability of an individual to cope with emotional stimuli or emotional coping and an opportunity to observe the new behaviors from others also contributes to behaviors change (Perry, Barnowski & Parcel, 1990). The context in which the behavior occurs is an important factor in health behavior

change but public health programs have not emphasized on this aspect. One criticism of the social learning theory is that it does not consider emotions or other types of motivations as contributing to behavior (Perry, Barnowski & Parcel, 1990).

The theory of reasoned action (Fishbein & Ajzen, 1975) is based on the view that an individual consider the outcome of a behavior before taking action. The intention for the new behavior is rooted in the perception of a behavior as positive or negative as well as the individual's impression of societal perceptions of the particular behavior (Fishbein & Ajzen, 1975). In this regard, attitude and social pressure influence the intention to perform the new behavior. Personal attitude toward the behavior and the expected value in the outcome, together with other influences from the person's social environment provide the necessary motivations for behavior change. Some of the limitations of this theory are failure to consider the role of opportunities and resources to adopt the desired behavior. Another limitation is failure to take variable that inspires behavioral change such as fear or past experiences into account. These limitations can however be addressed when it is used in combination with other models.

Diffusion of Innovation (Rogers, 1962), is among the earliest of social science theories. This theory is based on proposition on how new ideas or inventions filter through from a source to individuals, communities and the society through a process of diffusion. The theory is based on communication presents the process change as adapted by groups of individuals in a social system. The groups that respond to a change are categorized as follows; innovators, early majority, late majority and laggards. The innovators group is the first to try out a new idea. The next group is the early majority,

the people who only change when they have seen positive results on the new innovation. This group needs the assurance from the early majority to adapt new innovations. The other group is the late majority, comprised of people who are skeptical about change but willing to try the new idea after the majority has tried. The last groups are the laggards who comprise of traditional conservatives. This group comprised of people who are skeptical, and are most difficult to change.

Five factors influence adoption of an innovation, and each has a different appeal to the categories of adopters. These include; 1, Relative advantage, the perception to which an innovation is considered better than the existing, 2, Compatibility, how well they agree with the values, experiences, and needs of people it is meant for., 3, Complexity, the ease of understanding or using the innovation. 4, Testability: the extent to which the innovation is testable, and 5. Observability: the evidence of results.

Whereas this theory is among the oldest model to explain how individuals adapt new behavior, it is not based on public health and the process of change does not reflect health behavioral change. However, it provides strong behavioral insights how communities could emblaze new public health practices through the understanding of factors contribute to individuals falling into the group of early adapters down to the laggards. A good understanding and follow-up to address the needs of different categories would result in more successful interventions.

The Health Belief Model

The health belief model (HBM) is a psychological model, based on the attitudes and beliefs of individuals, and devoted to explaining health behaviors (Champion & Skinner, 2008). The model is used to predict the actions of individuals when they considered themselves to be at risk of an illness and are motivated by the benefits of the desired behavior to prevent illnesses or undesirable condition. The model posits that individuals act to avoid negative consequences, when motivated by a belief that the action may not be difficult for them (Rosenstock, 1966). HBM has been used extensively in health promotion and education as well as health behavior research specifically on studies concerned with how people respond to disease symptoms and behaviors related to adherence to medication after diagnosis (Kirscht, 1971).

History

The HBM was developed in the 1950s by behavioral psychologists in an attempt explain the reasons behind a poor performance of a free tuberculosis screening program (Hochbaum, 1958; Rosentock, 1960, 1974). It has been used over decades to explore different health behaviors including preventive vaccinations and other behaviors related to responses to acute illness (Janz & Becker, 1984). The first version of HBM had four concepts namely: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. The cues to action and self-efficacy were added later, to address the emerging behavioral issues and habits such as smoking (Seydel et al. 1990; Schwarzer 1992). The self-efficacy construct explains the importance of self-confidence in determining adoption of new behaviors (Rosenstock, Stretcher & Becker, 1988).

Theoretical Propositions of HBM

The HBM posits behavior is an outcome of various perceptions of an individual towards a health-related behavior. The constructs are perceived susceptibility, perceived seriousness, perceived benefits, perceived barriers, cues to action and self-efficacy (Strecher & Rosenstock, 1997). Thus health behavior is initiated by an individual when they consider themselves to be susceptible to a health condition, they consider the seriousness of the condition to their health, the benefits of the new behaviors, an understanding of the barriers to the new behavior, motivation and cues to the desired action and self-confidence in practicing the desired behavior.

Health behavior based on the value that an individual associates with the desired goal and the conviction that the planned action supports achievement of the goal determines their behavior (Maiman & Becker, 1974). Self-efficacy is the tipping point for new behavior. It is the intrapersonal and self-conviction successfully to undertake the new behavior (Bandura, 1977, Champion & Skinner, 2008). Other factors that may have an influence on the behavior include, demographic and psychological variables including age and gender, ethnicity. Personality traits also contribute to the behavioral thought process (Rosenstock, 2000). The HBM is recognized for showing human behavior as an evolving process (Bandura, 1977).

Despite its popularity, critics of this model observe that health behavior may not always be the result of rational thinking as proposed in this model (Taylor et al., 2007). Another criticism is that that it does not recognize the role of fear and denial as necessary factors in the behavior adoption (Seydel et al. 1990; Schwarzer, 1992). More arguments observe that the definition of the constructs may be subjective among researchers.

Champion & Skinner, (2008) suggest consistency in the definition of the constructs with original conceptualization of the HBM theory in order to maintain a general approach and scope when conducting measurements associated with this theory. Despite the criticism, HBM is extensively employed in health promotion and education as well as health behavior research specifically on studies concerned with how people respond to disease symptoms and behaviors related to adherence to medication after diagnosis (Kirscht, 1971).

Significance of HBM

The HBM is applicable to the decision-making process in couple counseling and testing in the following way. First couples would assess the likelihood of contracting HIV (perceived susceptibility) based on knowledge of knowledge of the trends of new infections or experience of a sexually transmitted infection. They would consider the implications of getting infected in terms of health breakdown and all the consequences (perceived severity). They would believe that counseling and testing help to protect their health (perceived benefits). The couple would then consider the costs and challenges of testing together are worth, considering the benefits (perceived barriers). Surmounting the barriers would mean they have consciously considered all the potential impediments and determined that they are capable of overcoming them (Janz & Becker, 1984). The couple may have learned about counseling and testing from media campaigns, or it could be suggested to them by their health care provider prompting some action. The prompts are combined into a broad range of behavioral actions triggered by knowledge of symptoms, social interactions health messages which are collectively referred to as cues to action

(Abraham & Sheeran, 1996). Assurances on the benefits of testing together would make them confident that they can deal with the test outcomes (Janz & Becker, 1984).

The HBM has been used as the model in designing of health behavior interventions and assessments for such interventions. In these studies, fear emerged as major barrier to HIV counselling and testing (De Paoli, Manogi & Klepp, 2002). The survey involved 500 pregnant women, through focus group discussions. The perceived susceptibility to HIV/AIDS, confidentiality, partner involvement, self-efficacy and availability of alternative feeding methods were some of the motivations for couples to undertake counseling and testing (Paoli et al. 2004). The study also found that women's acceptance of VCT was motivated by access to alternative feeding methods for their babies. Men's support to their partners encouraged more women to test during pregnancy (Paoli et al. 2004).

Oyekale & Oyekale (2010) applied the HBM in promoting health behavior change among Nigerian youths. The study analyzed the factors influencing youth's uptake of HIV testing and change in behavior after testing. The outcomes suggested there was the impact on behavior from moderating factors such as age, access to radio, television and per capita expenditure, and formal education. However, the study does not explain how the constructs of the model applied to the adoption of the new health behavior (Oyekale & Oyekale, 2010).

Vermeer, Bos, Mbwambo, Kaaya, Schaalma (2008) conducted a study on the social and cognitive variables that predicted use of HIV voluntary counseling and testing among medical students using HBM. The study results indicated that fear of positive

results, self-suspicion and inability to determine how to cope with the results if one turned out to be positive and fear of stigma were barriers to testing. The researchers concluded that promotion of HIV testing interventions needed to address such barriers to achieve program impact (Vermeer et al., 2008).

In another study, Sullivan et al., (2004) found that the predictors of couples' participation in counseling and testing were based on their perceptions of how to overcome the barriers and appropriate cues to action including encouragement by health service providers. The desire for HIV counseling and testing in Kenya was motivated by anxiety over HIV status, level of knowledge for both women and men (Liu & Becker, 2008). Other motivations included having a history of sexually transmitted infections. The findings confirm Liu et al., (2008) suggestion that the desire for counseling among individuals was related to their perceptions of personal risk.

That knowledge and stigma are modifiable factors means they provide a potential as entry points for interventions aimed at increasing the utilization of counseling and testing services (Liu et al., 2008). Other previous studies, had demonstrated an association between perceived risk and the desire for counseling and testing for adults (Fylkesnes, Haworth, Rosensvard & Kwapa, 1999.) and youth (Fylkesnes, Siziya, Denison, 2005) in Zambia. In addition, similar studies in Tanzania (Mbago, 2005) and Uganda (Gage, 2005), concluded that HIV anxiety (perceived susceptibility) was the motivation for testing among adults.

Liu et al. (2008) observed that the factors associated with the desire for HIV counseling and testing were different between women and men. The rationale for testing

was different from men and women. In addition, the study observed that testing opportunities and general access to treatment exist between men and women and recommend gender-sensitive provision of counseling and testing services (Liu et al., 2008). They further suggested the need for studies to improve understanding of the interaction between men and women, and the dynamics of couple's decisions to undergo counseling and testing. The rationale for choosing this theory is on the understanding that a failure of the government's campaign on TB screening in the United States prompted behavioral scientists to develop HBM theory as they searched for answers to that failure. This situation has a parallel to the current status of HIV testing in Kenya where despite government efforts to expand counseling and testing services in Kenya. Less than 50% of couples know their HIV status. From then the health belief model has been widely used to examine what stimuli leads to behavior change

Conceptual Framework

HBM Model to Dyadic Relationships

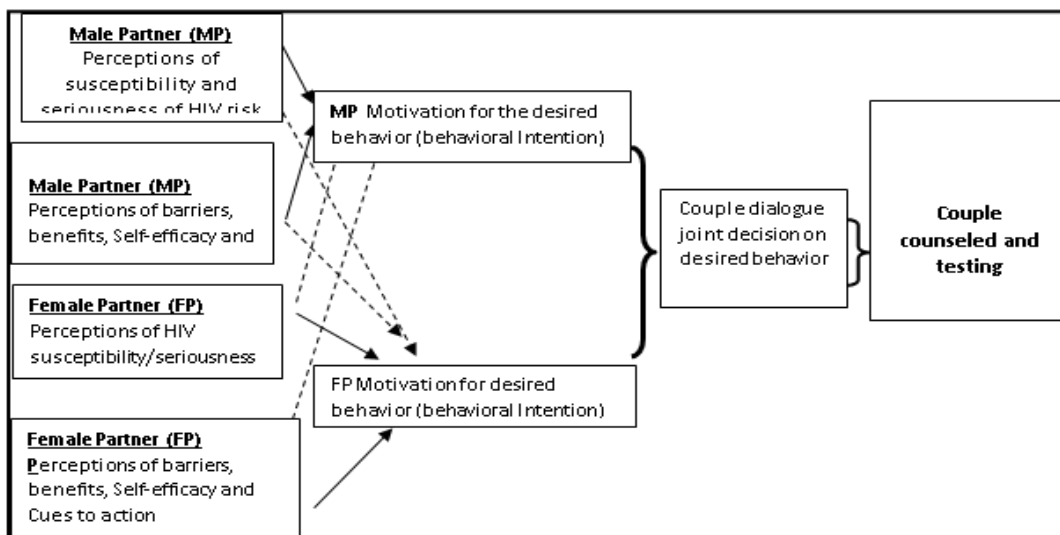
The HBM is an individual focused model of behavior change and therefore used in HIV prevention interventions that target individuals. Sexual contacts are the most common mode of HIV transmission and primarily involve a dyadic relationship (Karney et al., 2010; Piot, Bartos, Larson, Zewdie & Mane, 2008). A dyadic relationship presents a critical unit of focus in HIV prevention focusing on the influence of one partner to the other (Kelly et al., 2008). A reciprocal sequence of influence occurs where there is mutual influence in behavior between two partners (Karney et al., 2010). This mutual influence does not negate the individual attributes of behavior, but present the view that

personal attributes and mutual influences between partners determine individuals' behavior (Kashy & Kenny, 2000).

A dyadic relationship has elements of interaction between partners over time, with influences on the present actions and creating the prospects of a future (Reis, Collins & Berscheid, 2000). This creates a standard approach in which partners coordinate their behaviors with a common purpose (Karney et al., 2010). Overall, the commitment to mutual actions is subject to relationship factors such as; commitments, trust, satisfaction, intimacy which are fundamental foundations factors that define the quality of a relationship (Simpson, 2007; Reiss & Shaver, 1988; Huston & Power, 1984). These factors contribute to the way partners are supportive, feel understood, valued and cared for in a relationship (Reis & Chaver, 1988).

Many models of behavior change that are individual-centered like HBM do not incorporate the influence of a second person to an individual behavior change. However, they provide a basis for a conceptual framework that includes the influence that couples may have on each other as one individual to the other or mutually (Karney et al., 2010). HBM can accommodate a modification to incorporate dyadic consideration of behavioral intentions highlighting the mutual influence where one partner's perceptions influence the other (Karney et al., 2010). In this connection, HBM is an appropriate model for behavior analysis in a dyadic relationship.

Fig. 1. HBM derived conceptual framework in a dyadic relationship.



Note: Adapted from Dyadic model of two persons (Karney et al., 2010). A framework for incorporating dyads in models of HIV-prevention. AIDS and Behavior, 14(2), 189-203.

The solid line arrows represent the effects of HBM constructs as an individual behavioral model. The dotted lines represent the partner effect based on a dyadic interpretation. This model demonstrates the actions of each partner individually and their effect on the other. The decision process for couple counseling and testing fits this model of mutual influence and health behavior change.

Applicability of HBM to Couple Counseling and Testing

A notable strength of the HBM is its ability to evolve and adaptability to different situations over time (Bandura, 1977). Counseling and testing is a psychological process to prepare an individual(s) for HIV testing and receiving of the results (WHO, 2014). The psychological origin of the model makes it appropriate to explore the thought process and behaviors that are related to HIV counseling and testing. Secondly, the current status of

low utilization of HIV testing services in Kenya draws a parallel to the low turnout of tuberculosis screening program that inspired the development of HBM theory.

HBM was applicable in exploring the lived experiences of heterosexual couples who undertake HIV together. Seeking to know one's HIV status is a risk avoidance behavior that falls in line with HBM. A couple may determine their susceptibility to HIV infection based on knowledge of trends or personal experience. They might consider how the illness would have a severe impact on their health and how it might impact on the family. They may consider the benefits of counseling and testing especially how it would help them to remain faithful and protect each other from infection. The couple would consider the barriers that stand in their way when thinking of testing together. Surmounting the barriers would mean they had considered all the possible impediments and decided that they were capable of overcoming them (Janz & Becker, 1984).

The media or health care worker could provide information that leads a couple to undergo counseling and testing. Assurance of support by health care worker would increase their confidence in dealing with the test results (Janz & Becker, 1984). Considering that behavior was the outcome of the combined level of perceptions of susceptibility and severity of the health problem (Rosenstock, 1966), the HBM was appropriate to model to guide research related to couple HIV counselling and testing.

The formulation of research questions to inspire couples to describe their experiences when testing for HIV together created a deeper understanding of the underlying motivations, attitudes and perceptions of couples in relation to HIV testing. The HMB guided the research questions construct as follows:

1. How do couples who have undergone VCT and received the results together describe their initial thoughts and beliefs on the likelihood of being infected with HIV? (Perceived susceptibility)
2. How do couples who have undergone VCT and received their results together describe their perceived severity/seriousness of being infected with HIV infection? (Perceived severity)
3. How do couples who have undergone VCT and received results together describe the benefits of couple counseling and testing? (Perceived benefits)
4. How do couples who have undergone VCT and received their results together describe any obstacles to testing? (Perceived barriers)
5. How do couples who have undergone VCT describe the cues that prompted them to take action i.e. considers testing? (Prompts to action)
6. How do couples who have undergone VCT and received their tests together describe their confidence in managing the test results? (Self-efficacy)

The research questions were based on the HBM and are considered appropriate for exploring the lived experiences of heterosexual couples who test for HIV together in Nakuru County of Kenya.

The HBM Constructs and Related Literature

The HBM suggested that health behavior change was a process which started with the individual knowledge of the existence of a health related problem, an appreciation of the seriousness of the problem, the benefits of preventing the problem, perceptions of what barriers may prevent individuals action, confidence in adapting the health-

preserving behavior, and a stimulus to trigger the desired health behavior (Glanz, Karen; Bishop, & Donald, 2010). This is the process of change is categorized in five perception constructs namely; susceptibility, severity, barriers, benefits, self-efficacy and cues to action.

Perceived susceptibility

The perceived susceptibility constructs emphasized that health preventive behavior is an outcome of personal feelings of being vulnerable to disease. It is the perception of vulnerability that prompts an individual to take a protective behavior (Fisher & Ficher, 1992, Rosenstock, Strecher & Becker 1988). However, there has been researched evidence to show that individuals underestimate the risk of illness (Redding et al., 2000).

Susceptibility to HIV risk differed between men when compared to women. Men have a poor HIV risk perception even when involved in behaviors that expose them to the likelihood of infection (Obermeyer & Osborn, 2007). On the other hand, risk perception among women was higher than men partly due to the power imbalance and men's suspected infidelity even in stable relationships (Kengeya-Kayondo et al., 1999). Men are more likely to assess their risks more accurately based on peer influence and interaction with their social environment (Obermeyer & Osborn 2007; Buhler & Kohler, 2003).

Susceptibility to HIV may not automatically lead to preventive behaviors because there are factors that may deter the desired behavior. For example, married women may not suggest condom use even when they suspected that their partners had other sexual relationships due to fear of an adverse reaction from the partner (Buhler & Kohler, 2003).

On the other hand, couples who are in a stable relationship may underestimate their risk, or that of their partner due to their marital status (Gilbert et al., 2010; Ciccarone et al., 2003). Therefore, susceptibility to HIV risk at individual and couples level is subject to interpersonal relationship and the social environment of persons.

Perceived Severity

The perceived severity construct posits that individuals exercise health preventive behaviors dependent on their perception of the seriousness of a disease condition and its consequences (Rosenstock et al., 1988). Studies on perceived severity of HIV focus on the fear of infection and considerations of how AIDS affects the life of individuals (Hämäläinen & Keinänen-Kiukaanniemi, 1992). The association between perceived severity and HIV prevention behaviors is debatable (Brunswick & Banaszak-Hall, 1966). For example, although there is a high perception of the severity of HIV many married men in Kenya are involved in multiple relationships (Kaiser, 2011). Therefore, severity alone may not account for effective health behavior change in the absence of other enabling factors.

Perceived Benefits

Couple HIV testing provides an opportunity to partners to learn about their status together and enhances partner dialogue (Katz et al., 2009). Receiving HIV test results together inspires positive behavior change (Rosenberg, 2013). In addition, a couple gets an opportunity to discuss post-test prevention with the support of health care provider based on the needs of each partner (WHO, 2012). There is evidence and consensus that

couple testing has benefits to couples and is an appropriate approach to strengthen HIV prevention interventions (WHO, 2012).

Perceived Barriers

Perceived barriers entail the totality of adverse effects that can interfere with the adoption of health behaviors (Rosenstock et al., 1988; UNAIDS, 2000). When the perceived costs of the new behavior outweigh the benefits, an individual is less likely to adapt health preventive behaviors. According to Janz and Becker (1984), the main barriers to couple voluntary counseling and testing include fear of stigma associated with HIV positive status.

Barriers to couple testing include fear of stigma and discrimination by the community, potential relationship disharmony and concerns over confidentiality (Opoti, 2010; Kelly et al., 2011). For example, some pregnant women decline to be tested at the antenatal clinic because of fear of rejection by husbands if test results turned positive while men decline to test for fear of the psychological burden of living with HIV (Turan et al, 2010; Musheke, 2013). Fears of receiving a positive result, death, social discrimination, radical change in one's life are some of the barriers that prevent individuals from testing (Kelly et al. 2001). Other factors such as culture, poor health delivery systems and perceived lack of confidentiality of individuals' health information at the health facilities are hindrances to couple testing (Murphy, 2007; Skinner, Mfecane, & Gumende, 2005; Njau, Wattc, Ostermann, Manongi & Sikkemac, 2011). Perceived lack of confidentiality and lack of skills to handle couples among service providers also form barriers (Becker, Mlay, Hilary, 2010; USAID & World Bank, 2010).

Self-Efficacy

Self-efficacy is a measure of an individual's perception of competence in dealing effectively with a variety of challenging circumstances (DeVellis & DeVellis, 2000). Self-efficacy determines how people take on challenging behavioral goals in the interest of their health. It is manifested in the totality of beliefs in performing certain health actions. The concept of self-efficacy was introduced into HBM by Bandura (1977) as well as in other models of behavior (Berendes & Rimal, 2010). Self-efficacy is described as the perceived behavioral control (Ajzen, 1991). Some studies have shown that self-efficacy can predict behaviors related to uptake of testing services (Kakoko, Astrom, Lugoe, & Lie, 2006). Support to practice a new behavior in individuals contributes promotes self-efficacy. For example, availability of alternative breast feeding methods increased willingness to test for HIV among women (de Paoli, Manongi, & Klepp, 2004). This is an especially relevant consideration because the highest incidence of HIV in sub-Saharan Africa is happening among stable heterosexual couples.

Cues to Action

Cues to action represent the internal and external motivations that prompt an individual to take decisions on a health-related behavior. External motivators may include information and message from the media on a health issue while internal motivations a personal reflection on the need for action. Thus, when an individual considers the severity of HIV and determines that the preventive behavior is affordable and has benefits, they are likely to take action in adopting the new behavior. They have self-efficacy in dealing with the new behavior; cues to action would provide a tipping point for new behavior (Redding et al. 2000, Rosenstock, Strecher & Becker 1994). This

implies that people who have knowledge about the risk associated with HIV and know the prevention have control over their behavioral choices.

The phenomenological approach has been used by researchers in various studies involving different age groups and on a variety of health issues. Outlaw, Naar-King, Janisse and Parsons (2010) conducted a study on condom use for HIV prevention among youth ages 16-24, using a phenomenological approach. They concluded that those with higher self-esteem, self-efficacy and motivation had higher chances of using condoms.

McGee, (2012) used a phenomenological approach in her dissertation to explore the lived experiences of internally motivated, healthy, middle-aged women. The central question examined is, what are the lived experiences of the women who are willfully engaged in a proactive, preventative lifestyle? The study results provided an increased understanding of the women's inner motives for healthy living. The study illuminated five themes as intrapersonal processes that have supported the participants' internal motivation for healthy aging. The participants' health values, personal belief systems, ability to self-regulate, self-awareness, and future-orientation towards life formed the major themes (McGee, (2012).

In her dissertation, Nix (2012) examined the lived experiences of the African American with end-stage renal disease patient receiving hemodialysis perspectives using a purposive, volunteer sample of 16 adult African Americans. The key research questions focused on the roles of spirituality, health beliefs, and different social support systems used in coping with end-stage renal disease (ESRD). The health belief model was the conceptual framework of this study, based on an empirical phenomenology approach.

Five major themes and twenty-three subthemes emerged; they included nursing as a trusted profession, the role of prayer, importance of health beliefs before and after diagnosis, and impact of the quality of life managing the disease (Nix, 2102).

Etoh (2013, investigated the lived experiences of African American youth with an HIV-positive parent, using a phenomenological approach. The study focused on youth ages 13-18 with at least 1 HIV-positive parent and aimed at exploring whether parental HIV status had an impact on the behavioral practices and overall outlook on the lives of the study participants. The participants included four HIV-positive and four HIV-negative males and females recruited from a local agency in the Southeastern United States.

Data from the audio-recorded interviews were transcribed and analyzed thematically based on the lived experiences of participants. The results of this study revealed key themes including interests, disinterests, and future ambitions and the age of comprehension regarding HIV information. In addition, it provided insights into the emotional impact of parental or personal HIV status, their coping strategies and support systems (Etoh, 2013). Phenomenology is an important and efficient approach used in research on a wide variety of topics to gain insights into the lived experiences of the participants.

Studies on HIV Counseling and Testing Among Couples

Many studies have been undertaken on couple's health behaviors involving the concepts of the health belief model. McMahon, et al., (2013) analyzed the outcomes of a couple HIV counseling and testing intervention targeting drug-related and sexual risk

behaviors among women and their male partners. The results suggested that couple counseling contributed to risk reduction behaviors in this group (McMahon et al., 2013).

In another research, couple counseling and testing resulted in an increased uptake of Nevirapine and formula feeding among HIV-positive mothers (Farquhar, et al., 2004; Grace Stewart, 2004). Antenatal couple counseling improved formula feeding by fivefold among HIV-seropositive women receiving couple counseling compared with those counseled individually (Farquhar, et al., 2004). Another study on benefits of counseling and testing, researchers observed that couple counseling during prenatal health care led to increased condom use (Desgrees -du-Lou, 2007). Other benefits of couple testing include ease of disclosure and management of the condition compared to individual testing that creates fear of violence, abandonment or divorce among female partners (Becker, Mlay, Schwandt, & Lyamuya, 2009). Motivations for counseling and testing are knowledge of HIV, perceived risk and knowing someone with AIDS (De Graft-Johnson, et al., 2005; Wu, Rou, et al., 2005). HIV prevention programs targeting adults have shown some increase in condom use and significant decreases in partner concurrency (LaCroix, Pellowski, Lennon & Johnson, 2013), these programs focused only on one partner (Eyawo, et al., 2010).

Evidence and Controversies

A number of studies on couple counseling and testing for HIV prevention have demonstrated its positive effect in HIV prevention. For examples, Antenatal couple counseling increases use of Nevirapine and formula feeding. It is therefore considered a potential strategy for HIV prevention interventions (Farquhar, et al., 2012). Furthermore,

couple counseling and testing contributes to an increase in condom use and other preventive behaviors, and to motivate dialogue of self and partner prevention. However, many counseling services are organized for individual and are mostly gender-specific services. Pregnant women are more often targeted for testing but the underlying causes of women vulnerability to HIV is the perceived infidelity among men ((Desgrées-du-Loû & Orne-Gliemann, 2008, Grabbe & Bunnell, 2010).

This notion arose from research on couples in countries with generalized HIV epidemics whose results supported the view that women's primary risk of HIV infection was related to their male partners casual sexual relationships. However, recent large-scale studies reveal that extramarital relationships among women in stable relationships contribute to HIV risk in couples (Grabbe & Bunnell, 2010). There is therefore a need to interrogate the assumption men are the primary sources of risk cohabiting couples (Grabbe & Bunnell, 2010).

Knowledge of serostatus has many positive outcomes but at times discordant couples experience a feeling of alienation within the relationship with some finding it difficult to relate intimately (Straten, Vernon, Knight, Gómez & Padian, 2010). On the other hand, the seronegative partner shared the burden of stigma of the infection status of their partner. Therefore, serostatus and stigma contribute to the shaping partners' experience of HIV, sex and risk (Straten et al., 2010).

Couple counseling can be a complicated process that requires a systematic approach to delve into the interpersonal factors within a relationship. Qualitative phenomenological methodology and approach allow the researcher to interrogate the

deep interpersonal issues including perceptions and behaviors among couples. Increasing understanding of couple counseling and testing is a significant step in addressing vertical and horizontal HIV transmission and opportunities for mutual protection (Bellam, 2013). The study approach addressed the gap in knowledge on dyadic approach to couple HIV prevention and management.

Summary and Conclusions

This qualitative phenomenological research on the lived experiences of couples to undertake HIV counseling and testing together in Nakuru Kenya was an effort to understand the thought process discussions and other factors on how couples manage the risk of HIV within a relationship. Qualitative research provides a method for deeper exploration and understanding of issues. Phenomenological approach allows gaining insights into how people perceive issues that are of value in their lives and the meaning they attach to those issues in relation to health behaviors.

Researches on couple counseling and testing have been carried out but not using a dyadic approach. This study aims to increase the understanding of health behaviors within dyadic relationships and to fill gaps related to understanding the motivations for couples counseling and testing, which is remains an underutilized service in Kenya, despite government effort to improve access. In chapter 3 which follows, I have explained the process of field, data collection, transcribing, and analyzes. In addition, I have discussed the role of the researcher, issues of bias, ethical concerns, research methodology, recruitment of participants, the data collection instrument, data security, and issues related to trustworthiness.

Chapter 3: Research Method

Introduction

The purpose of this qualitative phenomenological study was to describe the lived experiences of heterosexual couples in Nakuru County in Kenya, who had undergone VCT and received the test results together. The findings may create a deeper understanding of the motivations for VCT among couples, and hopefully contribute to improved couple testing programs and more efficient HIV prevention interventions.

Nakuru County has a 5.6 % HIV prevalence according to the National AIDS Control Council (NACC). An estimated 44% of new HIV infections occurred in stable cohabiting or married heterosexual couples (NACC, 2012). Despite the increasing availability of VCT services, over 50% of individuals in couple relationships did not know their status or the status of their partner (NACC, 2012). Furthermore, there is a gap in knowledge on how couples addressed or managed HIV issues in relationships (Njororai, 2009).

Knowledge of HIV status through VCT was a crucial step in HIV prevention and an indicator of positive health behavior change among couples (Musheke, Bond & Merten, 2013). Furthermore, VCT opens opportunities for enrollment in antiretroviral therapy treatment that reduces the risk of transmission to partners especially in discordant relationships (WHO, 2012). Couples who had undergone counseling and testing could provide crucial insight on how they manage HIV matters in their relationships.

This chapter on methodology covers the research design and the rationale, the research questions, and selected qualitative research tradition. It also includes a description of the role of the researcher and considerations for managing ethical issues, potential biases, and power relationships. I have discussed the criteria for the recruitment of study participants, instrumentation and data collection procedures, and the data analysis plan. Finally, a description of issues of trustworthiness, a strategy to establish and maintain transparency and credibility as well as ethical procedures including working with the IRB board, data storage, protection, and confidentiality are presented. The chapter concludes with a summary of key points and a transition to Chapter 4.

Research Design and Rationale

Although a dyadic approach to HIV prevention among couples is desirable, many studies and interventions continue to focus on individuals within relationships, creating a gap in knowledge of HIV prevention strategies for couples (El-Bassel & Wechsberg, 2010). Evidence suggests that behavior change interventions are effective when they address different social aspects that shape behaviors (Albarracin, Tannenbaum, Glasman & Rothman, 2010). These include individual motivations and skills, interpersonal level choices that are subject to the influence of social environment, and the structural influences such as material and social conditions that affect behaviors (Albarracin et al., 2010).

When HIV infections occur in established heterosexual couples, the majority of them may not know they are infected (Grabbe & Bunnell, 2010). Expanded implementation of couples' HIV testing and counseling could increase universal

knowledge of both individual and partner HIV status, alter societal and cultural norms around HIV prevention, and reduce HIV incidence. Couples-centered approaches to HIV prevention, care, and treatment may be critical for sustaining the historical investment and gains made in HIV treatment (Grabbe & Bunnell, 2010).

Despite the critical need for couple approaches in HIV prevention, interventions continue to focus on the individual, ignoring the increasing potential of dyadic interventions. The dynamics of dyadic-level interventions have not been adequately studied (Montgomery, Watts & Pool, 2012). Karney et al. (2010) suggest that a dyadic perspective offers a method for analyzing relationships within a continuum of levels of acquaintance. The study may provide additional knowledge on heterosexual couple's management of HIV in a relationship to support new prevention efforts.

Research Questions

The overarching study question was: What are the lived experiences of couples who have undergone VCT and obtained their results together? The specific questions were based on the constructs of the HBM of behavioral change. The model focuses on the perceptions and beliefs of individuals and how these beliefs shaped their health behaviors (Champion & Skinner, 2008).

Primary Research Questions

1. How couples who have undergone VCT and received the results together describe their initial thoughts and beliefs on the likelihood of being infected with HIV?
(Perceived susceptibility)

2. How do couples who have undergone VCT and received their results together describe their perceived severity/seriousness of being infected with HIV infection? (Perceived severity)
3. How do couples who have undergone VCT and received results together describe any benefits of couple counseling and testing? (Perceived benefits)
4. How do couples who have undergone VCT and received their results together describe any obstacles to testing? (Perceived barriers)
5. How do couples who have undergone VCT describe the cues that prompted them to take actions i.e. consider testing? (Prompts to action)
6. How do couples who have undergone VCT and received their tests together describe their confidence in managing the test results? (Self-efficacy)

Study Phenomenon

The central phenomenon under investigation in this study was VCT among couples. Counseling is a confidential face to face conversation between an individual and trained counselor conducted before taking an HIV test and after the results (UNAIDS 2002). Counseling helps individuals to reflect on the impact of the results on their lives and provides psychological support on how to handle the test results. Knowledge of HIV status through VCT is considered a critical entry point for HIV infection prevention, treatment and care, and psychosocial support for the infected and affected individuals and families. Couples VCT involve partners who are in a conjugal relationship undergoing the testing and receiving their results together.

There are some benefits associated with couple VCT. First the provider-assisted mutual disclosure of test results immediately after testing reduces the burden of disclosing one's HIV-positive status to a partner alone (WHO, 2014). It also provides an opportunity to receive support from health professionals on how to deal with the emotions and feelings on receiving the results. It further facilitates partner dialogue and inspires positive behavior change (Katz et al., 2009, WHO, 2012). VCT prompts couples to consider a risk-reduction among partners based on the HIV status and facilitates the entry into a support network for persons living with HIV (Rosenberg et al., 2013). Couple VCT also supports pre-exposure prophylaxis (PrEP) and condom use, which could help prevent further HIV transmission. Antiretroviral therapy reduces the risk of HIV infection among discordant couples (only one partner is HIV-positive) (WHO, 2012). Prevention efforts among after VCT could decrease the number of new infections among married or cohabiting partners (Kaiser, 2011, WHO, 2012).

Research Tradition

Qualitative Research

A qualitative research method facilitates the interpretation of social phenomena such as behaviors, thoughts and relationships (Pope & Mays, 2006). It has provision for different approaches including narrative, phenomenology, ethnography, grounded theory and case studies (Creswell, 2007). The methodology allows the researcher to learn about behavioral patterns and to record the results based on the participant's viewpoints (Patton, 2002). HIV prevention issues among heterosexual couples including counseling and testing are complex, diverse and not well understood (Painter 2001; Desgrées- Du-

Lou & Orne-Glieman, 2008). A qualitative research design facilitates more open and free-flowing investigations with no predetermined variables or categories (Patton, 2002). Qualitative research sampling is different from quantitative in that the researchers use purposeful sampling strategy to select the study participants with the aim of gathering information through their narrative experiences or stories. The flexibility of purposeful sampling is a major strength in qualitative research in that data is collected from participants who are considered more suitable for the study (Patton, 2002). In this study, I used a qualitative approach to facilitate a deeper understanding of the lived experiences of couples who have undergone VCT and received their results together.

Phenomenology

In the 1990s, five distinct qualitative approaches have emerged as the most used in research (Creswell, 2009). The five are; ethnography, grounded theory, case studies, narratives, and phenomenology. Ethnography approach is applied in studying whole cultural groups in the natural settings. Grounded theory focuses on the development or discovery of a theory or process to explain an experience. Case studies approach takes an in-depth analysis of an occurrence. Narrative approach documents the written or spoken of an individual (Creswell, 2007).

In the research, the phenomenology approach focused on understanding people's perceptions of issues in their world by exploring their narrative experiences (Langdrige, 2007; Grbich, 2007; Moustakas, 1994). The phenomenological approach is concerned with people's experiences with the goal of identifying the essence of the shared

experience and meaning it creates in their lives (Patton, 1990). This approach was selected to facilitate the exploration of motivations for couple counselling and testing.

Role of the Researcher

The role of the researcher is central in a qualitative design and touches on every aspect and activities of the research (Patton, 2002). This role begins with an empirical observation followed by a question on a particular issue. This question provides the entry point into the topic and is further subjected to inductive logic and a proposition to form the broader basis of the study (Rudestam & Newton, 2007). The researcher then designs the study protocol and other instruments, collects the data, conducts the analysis, interprets the outcomes and writes a report. The overall quality of the research in a qualitative study is dependent on the researcher (Creswell, 2007; Moustakas, 1994; Patton, 2002).

Given this central role, a researcher contributes to the validity and reliability of the study by upholding standards that maintain a high degree of scholarship (Miles & Huberman, 1994). However, the presence of a researcher during the interview process can have an effect on research outcomes (Miles & Huberman, 1994; Patton, 2002). Therefore, professionalism and competence of the researcher are desirable qualities in planning, collecting and interpreting qualitative data (Creswell, 2007, 2009; Moustakas, 1994; Patton, 2002). Furthermore, the researcher's viewpoint in the research process can impact on interpretations and the final research report (Creswell, 2007, 2009; Moustakas, 1994; Patton, 2002). It is, therefore, important that the researcher remains committed to

methods and approaches that establish and maintain credibility of the process and authenticity of the results.

My role as a researcher was to plan and undertake the study following the guidelines of qualitative research tradition and maintaining a high degree of scholarly integrity. As a researcher, it was my duty to develop the research protocols, seek IRB approval, recruit study participants, obtain participants informed consent, schedule participants' interviews, and conduct interviews. The questions covered their perceptions of susceptibility to HIV, the seriousness of being infected, considered benefits of testing, perceived barriers, the cues to action and self-efficacy. I sought to understand the essence and meanings of these variables based on participant's experiences. I transcribed and analyzed the data maintaining confidentiality of the participants, wrote the report with conclusions, and suggested opportunities on for further research.

The purpose of the study was to engage and probe participants' responses to gain deeper understanding into their experiences. I had no personal or professional or supervisory relationship with the participants now, and I did not anticipate any such relationship during or after the study. Furthermore, I did not anticipate any conflict of interest with the study participants in the course of this study.

I upheld professionalism to minimize biased interpretations or preconceived ideas on the subject of study. A researcher needs to keep in mind that biased interpretations and lack of transparency in the process was a threat to their professional integrity and validity of the study. In this study, I committed to addressing these threats throughout as explained below.

Managing Bias

Bias could affect the validity and reliability of the findings (Mehra, 2002). A researcher's knowledge of the different types of biases and the potential point of interfering with the process was critical. Researcher bias could emanate from the researcher disposition such as tone, attire, expressions or gender. These attributes may influence the quality of the data. Questioning bias may occur when the questioning tends to influence participants' responses. Biased answers are a result of respondents false or partially true answers, based on what the participants believe is the correct answer or what they believe the researcher is expecting a response. Sample bias may come if the research participants do not meet the study criteria. Reporting bias may be a result of the researcher attempt to modify the results to favor the objectives of the research (Krueger, 1998).

Bias could arise from preconceived ideas and assumptions which may interfere with judgment or honest presentation of the findings (Patton, 2002). In addition, lack of gender sensitivity and sexual profiling in the choice of words could result in bias (Rudestam & Newton, 2007). A researcher should exercise diligence in the use of language to eliminate biased presentations and also maintain an empathic neutrality to avoid being too involved to cloud judgment or too distant to reduce understanding of outcomes (Patton, 2002).

I managed bias by avoiding the use of previous knowledge and information related to the literature review, and recorded the participant's views in detail during the interviews. I listened keenly to the study participants, sought clarifications and close checked their responses to ensure the accuracy (Patton, 2002, Rubin & Babbie, 2008). I

conducted the interviews in a confidential and secure site where the participants were free from any form of discomfort. I allowed the participants ample time to respond and expand on their responses in line with the research questions as recommended by Creswell, (2007).

Transparency

Transparency involves clear documentation of every step in the research process to allow for contribution and value-adding criticism from other researchers. Transparency requires systematic documentation of the process and availing data to other researchers and users to maintain credibility of the research (Miles & Huberman 1994; Moustakas, 1994). Lack of transparency and variability of reporting of qualitative studies are significant threats to the credibility of qualitative research. These threats can obscure a robust research and limit the value and application of qualitative findings in the relevant areas (Craig, 2014).

The need for transparency places an obligation on researchers to reveal their data theory and methodology supporting their conclusions. Comprehensive documentation and accurate reporting contribute to the essences of credibility (Moravcsik, 2014). A researcher is therefore duty bound to establish a foundation for trust, openness to scrutiny, criticism and a possibility for further research questions.

I maintained transparency by keeping an organized documentation of the entire research process and explaining the rational of all the choices made at every step. All materials for this research were available for scrutiny where needed. In addition, the researcher

maintained openness through documentation; include the data in the report to support the analysis of the data and the findings of the study.

Epoche

Epoche is the effort by researchers conducting phenomenological investigations to exorcise themselves of any existing or potential biases before engaging in the research. Patton (2002) describes epoche as phenomenological attitude shift. It is a constant consciousness that enables the researcher to have a fresh encounter with the research data without preconceived ideas or prejudgment (Moustakas, 1994). Epoche facilitates the qualitative researchers to be aware of their intellectual process used in the research and contributes to transparency (Patton, 2002). Maintaining a record of ideas and prejudgments can help the researcher to prepare mentally to understand the phenomena in the research process.

I conducted a phenomenological investigation following the procedures of qualitative tradition. Being a professional working in HIV prevention programming, I was aware of the potential for preconceived ideas borne out of work experience. However, I had no direct work experience or involvement in couple counseling and testing. My professional duties involved management functions to HIV prevention with community mobilization for utilization of health services as the primary focus. I eliminated every possibility of potential bias through transparency, diligent practice of mindfulness and epoch procedures throughout data collection, analysis, and reporting (Moustakas, 1994, Patton, 2002, Moravcsik, 2014).

Methodology

Recruitment of Participants

A sample universe is the broader population of all the eligible persons who qualify to participate in a study (Mason, 2002). Study populations are a subset of the sample universe, selected based on a particular criterion to take part in the study (Mason, 2002). The study populations were middle-aged married heterosexual couples, 25 to 55 years. This age bracket represented the population that is most affected by HIV. Women ages 35 to 39 years present a 12.3% HIV prevalence while men ages 45 to 54 present 7.2% prevalence. In addition, the percentage of young women aged 15-24 living with HIV was twice that of young men of the same age (Avert, 2012). Some of the contributing factors to these trends include multiple sexual partners among males and women entering marriage relationships while already infected as teenagers in earlier relationships (Kaiser, 2011; Kwena, et al., 2014).

Sampling Strategy

A sampling plan is important in qualitative research because it enables the researcher to identify a representative study participant from a bigger population (Mason 2002; Patton, 2002). The selection of study participants is critical to the design of a research project. In the study, I used a purposeful sampling strategy. This approach enabled me to identify and select ideal candidates who are information-rich resources experienced in the study phenomenon. A researcher uses an inclusion and exclusion criteria to select the ideal sample from a population of eligible participants (Luborsky & Runinstein 1995, Patton 1990).

Selection of Participants

The selection criterion of the participants for this study included legally married or cohabiting heterosexual couples, between the ages of 25 to 55 years. They had lived together as a couple for at least the last two years and undergone VCT and received results within the last six months. They were to share their experience through the interviews. They also must be able to express themselves in English. The study did not attempt to categorize the participants by zero status but rather go for all those who have tested voluntarily.

The recruitment of the participants was done with the support of the Comprehensive Care Centre (CCC) of the Ministry of Health at Nakuru provincial hospital. The CCC is a particular clinic within the Ministry of Health set-up that provides counseling and testing services, psychosocial care, antiretroviral therapy and health monitoring for persons living with the HIV.

At the community level, there exists a community HIV prevention and care program that targets families with health education and psychosocial support. The community program refers cases for VCT to the CCC. After medical services, the CCC cross-refers those in need of social support after testing to the community program.

Gaining Access to the Participants

The CCC nurse/counselor distributed letters of request to clinic attendants requesting those willing to participate in the interviews to send toll free responses. Then I made telephone follow-up contacts, explained the purpose of the call and request to them to participate in the research. I gave couples who needed time to discuss the request time, then called them on phone to confirm their availability.

Twenty couples were selected and contacted by telephone. They were given details about the purpose of the research and the interview process. Only couples, where both partners agreed to participate, were recruited for the study. A further screening of participants followed to ascertain, the suitability and availability as per the criteria. The willingness and availability for both partners to participate as a couple was considered voluntary participation. All couples had tested and obtained results within the last six months.

Sample Size

There are varying views of the adequate sample size in phenomenological research. Creswell, (2007) posit that a minimum of eight participants is adequate for this type of research while Walden University recommends 5-10 cases. Other research theorists consider a sample size of 12 is optimum for this type of studies (Patton, 2002). My approach in determining the sample size was based on a balance between research breadth and depth of the expected results (Onwuegbuzie & Leech, 2007). This approach emphasized that a sample should be adequate to provide data on a broad range of issues and experiences with the phenomenon while at the same time allowing sufficient detail to emerge.

Secondly, a sample size was determined based on the probability of achieving data saturation from the selected sample. Data saturation is the point beyond which interviewing more does not result in new information (Onwuegbuzie & Leech, 2007). It was on this basis that I recruited 20 participants for interviews but achieved saturation with 14 participants.

Data Collection Instruments

I developed all the instruments for the purpose of this study because there is no qualitative research on couples testing carried out in the past primarily using the health belief model. The study instruments included the following documents:

1. A contact list sheet with details of participants, names, date and time for the interview
2. Interview protocol and questionnaire to guide the discussions
3. Summary sheet of the field work summarized the accomplishment

I used a pocket tape recorder to record the interviews. Acceptance of audio taping of the interview was an inclusion criterion. The interview questions followed the framework of the HBM constructs that are based on perceptions of HIV susceptibility to HIV, seriousness, benefits, barriers, cues to action and self- efficacy. The questions were designed to motivate a free flow of thoughts and ideas from the couples. The study site (Nakuru Municipality) is a cosmopolitan community whose inhabitants are from different Kenyan communities.

Validity

I sought approval from the Institutional Review Board (IRB) on ethical procedures of the research before conducting a pilot study. I conducted a pilot study to ensure the questions for the participant's interviews are well understood, and they could elicit fluent responses and inspire dialog with adequate, relevant information. I selected two couples from eligible participants and interviewed them using the data collection instruments... The pilot allowed me to determine how well the participants understood the

questions and the amount of time taken to administer the instrument. Data from the pilot was not included in the main study

Data Collection

Before the commencement of data collection for the pilot and main study, I submitted the study protocol to the Walden University Institution Review Board (IRB) seeking for review and approval. The recruitment of participants was conducted using a list of contacts drawn from the registers of the CCC in Nakuru. Interviews were scheduled based on participants' convenience.

All the participants were contacted by telephone the day before the interview to confirm their availability in line with the plan. Participation was voluntary. The discussions took approximately 30 to 45 minutes to complete. I explained the purpose of the research and how the information would be used based on the research protocol. I requested the participants to sign an informed consent form before the start of the interviews.

I used an alphanumeric system to identify the participants to conceal their identities. I asked each question and recorded all responses, both electronically and by taking handwritten notes on the questionnaire. The interviews started with a question to the participants about the time they started thinking about getting tested for HIV. I guided the participants systematically through the questions and following their feedback, to build on their recollections. Once the interviews were complete, I granted them time to ask questions, and then thanked them for participating and assured them that their responses will be handled in confidence. I gave all the couples who participated a small

token of appreciation of 500 Kenya Shillings (5 dollars). This amount is considered a standard token going by experiences of other researches. I conducted the interviews over a 5 day period. I debriefed after each interview by reading through the notes to obtain a complete and accurate transcription of the interview, and obtained a clear understanding of outcomes.

Data Analysis

Immediately after the conclusion of the interviews, I reviewed all the participants' responses, transcribed and analyze them using the recommended qualitative methods by Creswell (2009). I started the coding process by drawing a data table that contained a list and number of participants and their assigned identification and a second table containing all respondents' numbers and their responses to the questions. Then I recorded the emerging themes under each question and continued to organize the material into smaller segments of text prior to assigning some meaning to the information. According to Creswell, (2009), using a combination of predefined codes along with those that emerge from the data can be an invaluable tool for the development of codes and themes. Use of nodes can allow a simpler visual method to organize the material in themes. After establishing the themes, I reviewed the data once more time looking for similarities and differences in the participants' responses (Taylor-Powell & Renner, 2003). The emerging themes formed the basis for interpreting the answers and writing of the report. I engaged research assistant to independently code and identify the themes to establish concordance and add validity to the study. (See Appendix E. Letter of confidentiality)

Discrepant Cases

Discrepancy in qualitative research comes from information by respondents that diverts or tends to contradict the general pattern of presented ideas. Stand-alone data that did not fit any category and nodes is considered discrepant (Kaczynski, 2004). Sometimes the discrepancy is as a result of irrelevant information or incomplete statements that significantly deviate from the views of the majority of the participants. I analyzed the data looking for discrepant cases. I conducted member checks on discrepant cases to confirm authenticity. This approach allowed me to identify outlying or discrepant data.

Trustworthiness

Trustworthiness and authenticity have been used in recent years to define a researcher's balance, fairness and completeness (Patton, 2002). Trustworthiness manifests in the accuracy of the researcher in reporting participants' experiences. It touches on validity of the data and the theoretical explanation of the phenomenon (Shenton, 2004). Trustworthiness calls on the researcher to present a genuine and accurate account of the central phenomenon as described by the respondents, in a comprehensive and impartial account (Patton, 2002). This section outlines aspects of trustworthiness.

Credibility

Credibility refers to the authenticity of data, the interpretation and presentation by the researchers (Polit & Becker, 2012). Credibility is established by engaging the participants through a verification process. Some evidence of credibility in a study is the

recognition of the described experiences by other individuals who share the same experience with the study participants (Sandewolski, 1986). According to Patton, (2002), the philosophy, the theoretical model and the purpose of qualitative inquiry present specific criteria for judging credibility and quality. The criteria include the researchers being explicit about their data, theoretical explanations and methodology used to arrive at their conclusions (Moravsik, 2014). This openness enables other researchers to scrutinize critique and debate and add value to the results.

A number of techniques are employed to ensure credibility these include persistent observation, prolonged engagement and member checks. I ensured that I spent adequate contact time with the respondents at the study site. This type of engagement built trust between respondents and researcher. It also created a better understanding of the local context and culture and overcome the effects of misinformation (Bitsch, 2005; Patton, 2002).

Reflexivity is the skill of interpreting the findings and an attempt to verify how the research process contributes or affects the results. It provides a check and balance that enables the researcher to separate influences of the process and the outcomes ensuring that the study results are free from effects of the process reflexivity contributes to credibility (Kisley & Kendal, 2011).

In order to maintain credibility in this study, I ensured that every aspect of the research is subjected to continuous checking, and all the necessary steps are planned for and undertaken with quality in mind. In addition, I documented all the steps in details, and maintain a rigorous process to support quality data. I ensured that the research

participants were recruited using an explicit criterion that involving screening process to get people who could share their lived experiences in taking an HIV test together as a couple. I counterchecked and sought concurrence on my views with the research assistant regarding the readiness of the couple to continue with the interview.

In addition, I prolonged engagements by providing each couple with ample time to talk about their experiences to and encourage each to narrate their experiences exhaustively. Selecting couples who had been tested over the last six months ensured that the majority of them could recall their experiences vividly to satisfy the research questions and expectations. I also ensured that the interviews achieved data saturation by interviewing respondents until there are no new themes from the responses. I ensured that the discussions all the interaction with the participants focused on couples lived experiences in undergoing VCT and receiving their results together.

Transferability

Transferability is the extent to which the findings of one study can be applied to other similar situations, settings or groups (Houcgtou, Casey Shaw & Murphy 2013, Polit & Beck, 2012). The criterion of transferability depends on the study purpose and may only be applicable if the aim of the study is to generalize a phenomenon (Sandewolski, 1986). Transferability is possible when a researcher is thorough and detailed in providing a thick description and variation of participants' selection for widest representation. Transferability is attained when the results make meaning to other individuals not involved in the study (Cope, 2014). Transferability can be achieved by explaining the

phenomenon of study in a way that other researchers can use the information on another study, test a model or theory (Shenton, 2004).

To achieve transferability in this study, I provided details of the study site, the data collection methods and number of participants. I have provided information on the number and length of the data collection sessions and the period over which the data was collected. These details make results of this qualitative study to be understood within the particular characteristics and social context and location of the participants. In addition, this approach contributed to the transferability of this research and could also be used to test the application of other models of behavior change.

Dependability

Dependability is defined as the constancy of study outcomes over similar conditions (Polit & Becker, 2012, Ulin et al., 2005, Tobin & Begley, 2004). It means the same results would be witnessed if the same study is repeated under same circumstances. Dependability can be measured based on the extent to which other researchers concur with the decisions at different stages of the study. In this study, I ensured dependability is achieved by working closely with the dissertation committee, seeking their advice at every stage of the process. In addition, I conducted an accurate data collection, careful and reliable data analysis, consistency and thorough reporting of findings.

Confirmability

Confirmability is the researcher's ability to demonstrate that the data on which the various findings are made is based on the participants' responses (Polit & Beck, 2012, Tobin & Begley, 2004). It is a form of warranty that the information gathered through

research is subjective and reflects the experiences and ideas of the participants free from the researcher's views (Patton, 2002, Ulin et al., 2005). Confirmability is established by the researcher through adequate descriptions and rationale for the conclusions. A researcher can demonstrate this by providing generous quotes from participant's responses that form the thematic basis of the analysis (Cope, 2014). In this study, I maintained confirmability through research rigor by following procedures that guarantee the confirmability of results, use tested data tools, and consulted regularly with the dissertation committee for guidance. I conducted member checks to clarify issues that were not clear from the participants' responses. In addition, I worked with a research assistant to conduct independent coding as a means of triangulation

Ethical Procedures

Institutional Review Board

I undertook a human research and certification test to ensure familiarity with ethical rules and procedures, and also consulted the dissertation regularly on ethical issues to ensure observance. I sought approvals from the National Commission for Science, Technology and Innovation and the Walden University Institutional Review Board (IRB) before venturing conducting the field research.

Participant's Informed Consent

Informed consent by an individual to participate in research is a fundamental ethical issue (Bogdan & Biklen, 1992). I gave a letter of invitation to all the participants explaining the purpose of the study. The letter contained an explanation on the voluntary nature of their participation, the benefits of the study, and confidentiality of the

information they gave to the researcher. Those who accepted to participate were requested to sign a consent form to support their willful participation. All the signed consent forms were filed for record.

Ethical Considerations during Recruitment

It is a standard procedure for research participants to receive a token of appreciation for their participation. I provided Kenya shillings 500 (USD 5) to the study participants. This amount was based on what other researchers have provided to study participants. This amount was considered to be minimal and did not create a sense of a disadvantage for those not meeting the criteria.

Ethics of Data Collection

Regarding the ethics of data collection, I informed the participants about the purpose of the research and that their participation was voluntary. The informed consent and assent forms described the potential risks and the benefits. The form also stated that the interviews would be recorded for the purposes of this research only. During the signing, I gave the participants a chance to ask questions or raise concerns regarding their participation. The benefits included the opportunity to reflect on a major decision in their lives and to share their thoughts to increase the understanding that could support HIV programs for couples in future.

This research focused on couple relationship issues that touch on their health behavior. The questions led couples through the decisions process, exploring their perceptions of susceptibility to HIV, about its seriousness, encountered barriers, expected benefits, cues to action and confidence in being able to live with the outcome. There was

no emotional or psychological trauma occurring among the participants during the interviews. I thanked each couple upon the completing the interview and gave them contact information should they have further questions.

Data Security

Participants' responses may have included confidential information related to couples' experiences in regard to HIV-AIDS within their relationship. The data collected from the participants is treated in confidence. In compliance with standard research guidelines and personal information privacy standards, information gathered from participants is secured. The names of the participants were not recorded to prevent exposure. Couples were assigned codes which were used to identify participants' details and the interview materials. I have securely stored all the records in my private study in securely locked files. Electronic files are protected with a password in my computer. All records of this study are maintained in an archive and will be available to the committee members, and myself, for five years after the study after which it will be destroyed.

Summary

This chapter on methodology includes a discussion of the purpose of this qualitative phenomenological study which is to describe the lived experiences of heterosexual couples in Nakuru County in Kenya, who have undergone voluntary HIV counseling and testing (VCT) and received the test results together. In this chapter, I discussed the steps in addressing the research questions, the research design and tradition, the role of the researcher in collecting and analyzing the data. I further included approaches to establish trustworthiness and ethical procedures and presented the methods to ensure credibility

transparency, transferability and confirmability, dependability and authenticity of the study results. The study results are presented in Chapter 4.

Chapter 4: Results

Introduction

The Purpose of the Study

The purpose of this study was to describe the lived experiences of heterosexual couples who attend VCT and receive results together. The main research question was: What are the lived experiences of couples who have undergone VCT and obtained their results together? Based on the health belief model, the specific questions sought to establish the perceived susceptibility, perceived severity, perceived benefits, perceived barriers, prompts to action, and self- efficacy in HIV voluntary counseling and testing among couples.

This chapter covers the following topics: The pilot study, the setting and the participants' demographics, data collection procedures, and the method of analysis. The evidence of quality and trustworthiness and results of the data collection are presented. This is followed by a summary of the research questions and a transition to Chapter 5.

The Pilot Study

I conducted a pilot study on February 1, 2016 with two couples, before commencing the main study. The pilot study was a test on the suitability of the questionnaire and other aspects of the planned interview. I started by explaining the purpose, process, and expectations of the interviewer to the participants and obtained their consent by requesting they sign the consent form. Assuring the couples that the interview was an open discussion for each to state their views freely made their responses more spontaneous and rich in detail. The participants responded to all the research

questions, and spoke about their motivations and challenges in making a choice to test together. The pilot study helped to ascertain that the interview questions were well understood and responded to by the participants. With that assurance, I proceeded to the main study.

Location, Frequency and Setting

I conducted the study at the Family Health Options Kenya in Nakuru from February 1st 2016 through February 5th 2016. I interviewed a total of 14 couples, with each interview lasting between 30 and 55 minutes. This timeframe allowed for good discussions and generated rich data from the participants. I started the interview by explaining the purpose and the process to the participants, and then obtained their consent. I conducted the interviews in a secure, quiet room with the doors closed for privacy. The interviews progressed as initially planned. All the participants talked about their experiences regarding couple counseling and testing. Some couples said the discussions strengthened their relationship and encouraged a dialogue on important issues in their lives. There were no major issues in the interview protocol that would have necessitated any changes.

Participants Demographics

The couples were all residents of Nakuru Municipality in Kenya. The majority, 10 out of 14, or 71%, were legally married. Four out of 14, or 29%, had cohabited as partners for at least two years. All had undergone voluntary counseling and testing within the last six months and received their results. Six, or 42 %, were of had college level of

education while eight (58%) were had completed high school level of education. All the 14 participants were of age range 25-55. The majority had between 3 to 4 children.

Table 1

Age ranges, education levels and parity of participants

Participants	Age Range	Years in Marriage	Education	No. of Children
C1	40-44	18	College	4
C2	35-39	10	High School	3
C3	30-34	5	College	2
C4	25-29	3	High School	1
C5	45-49	28	High School	3
C6	25-29	2	College	0
C7	45-49	21	High School	4
C8	40-44	17	High School	3
C9	25-29	3	College	0
C10	30-34	7	High School	3
C11	40-44	19	College	5
C12	50-54	30	College	6
C13	35-39	12	High School	4
C14	45-49	22	High School	4

Data Collection

I collected data guided by the research design and conducted data collection procedures as described in Chapter 3. I recruited 20 couples (40 individuals) to

participate in the study. I interviewed 16 couples; two couples in the pilot study and 14 in the main research. I attained data saturation after interviewing 14 couples. I conducted the interviews using a semi-structured questionnaire to guide the process. All the participating couples reported having been counseled and tested and received their results together. This means that they had made a joint decision to go for counseling and testing out of their own free will. I engaged the couples in a dialogue, guided by the data collection tool. I collected qualitative data by taking notes of the participant's responses and recorded the discussions electronically.

The participants' responses were spontaneous. I also sought clarifications and encouraged partners to provide their views to collaborate the information that was given by the other partner. I made sure that I created trusting and nonintrusive discussions throughout the interviews. I ensured that couples were not providing information that was outside of the scope of the study. After the completion of each interview, I read responses as I prepared for the next interview. I debriefed myself after each interview in the interview room by reading and listening to the recordings. I was able to determine where to seek more clarification in the subsequent interview.

I used a researcher notebook through the interview process to record any interesting observations or remarks from the participants that were not directly answering the question but were important to the context of the interview. The notes helped me to recall the details of how the participants responded to the questions and my thoughts. I made sure that my thoughts were not included in the analysis.

Data Saturation

Data saturation is the point in qualitative data collection at which there is no new information from the participants (Morse, 1995). Attaining data saturation is an important measure of rigor in completeness of research findings. There are different views on what sample size is adequate in qualitative phenomenological research (Mason, 2010). A researcher is expected to determine and recruit a sufficient sample size.

I recruited a sample size of 20 couples to participate in the study. This number is slightly higher than the 12 to 15 individual sample size recommended for phenomenological approaches (Patton, 2002). I wanted to ensure there were adequate respondents to attain a justifiable saturation as recommended by Kerr (2010). I attained data saturation after interviewing 14 couples. To ascertain that I had attained data saturation, I scrutinized the responses and determined there was no new information coming from the participants, as suggested by Mapp (2008). I used a codebook to note the common words and phrases that were used by the participants. This approach provided a basis for recording formation of themes and evidence of saturation (Guest, Bunce & Johnson, 2006).

Data Analysis

The foremost challenge in qualitative analysis is the need to synthesize massive amounts of data in order for it to make sense (Patton, 1992). In addition, researchers need to be constantly aware that data may occur in a more hidden and not easily noticeable form (National Science Foundation, 1997). Based on this knowledge, I started data analysis in an effort to strengthen my understanding of the contents by reading through

the transcripts and listening to recordings. I used Moustakas' (1994) recommended approach for analyzing phenomenological data and synthesis. The steps are explained below.

Epoche is a cleansing process which enables the researcher to approach the collection, analysis, and reporting of data without a biased mind (Moustakas, 1994; Patton, 2002). In practicing epoche, I interrogated my mind and set aside any prior thoughts of 'knowing' about the participants' responses. I spent time every day reading the data, listening to the transcripts, and considering what new perspectives were emerging. I transcribed the data from the recordings into the questionnaire under each relevant question. I considered how each of the respondent's discussion addressed the questions of the study. I considered the nuances of each answer, the commonality in the answers, as well as the discrepant cases. This enabled me to better understand the intended meaning each statement by the participants. It also gave me a degree of confidence that I was adequately prepared to move into the stage of data reduction to facilitate the analysis process.

Data reduction involves selecting and condensing the data from the participants' responses into meaningful summaries (Miles & Huberman, 1994). After thoroughly scrutinizing the data, I identified and bracketed textural descriptions for the raw data by highlighting phrases and statements directly related to research question. I then conducted the data reduction process by eliminating repetitive and irrelevant expressions, building segment of data that provide patterns of meaning in line with the questions.

Setting of horizons involves processing and arrangement of data into a visible format or display. Data display is an important aid and indicator of validity in analysis. It involves systematically arranging data to answer each question thereby permitting the viewing of a full data set in one location (Huberman and Miles, 1994). I listed the words and phrases that described the experiences of the participants in an effort to spread the data (Patton, 2002).

The spreading out of data provided a visual display that made it possible to carry out a delimitation process. At this stage all the irrelevant, repetitive, or overlapping data were cut off (Patton, 2002). The data reduction process refines the horizons of the study, resulting in meaningful units also known as “invariant constituents” (Moustakas, 1994), with the aim of filtering the unique expressions, or invariant constituents that describe the shared experiences of the study participants. I read through the participants’ statements to assure myself that I was completely immersed in the meaning of their statements as I undertook the data reduction process. I condensed the horizons into invariant constituents using 70% as the threshold for the reduction. All invariant constituents that appeared 11 or more times, out of a sample of 16, were considered as meeting the threshold and were marked for the next level of analysis.

Identifying the Themes

The next step was to identify the themes and subthemes from the reduced data. Moustakas (1994) outlined the researcher process for this stage, which permits the use of the researcher’s imagination. I considered all the multiple possible meanings and marked color-coded related invariant constituents into groups with same meanings. I used

different markers to label the commonalities among the many constituents. The emerging color-coded groups describing the couples shared experiences with voluntary counseling and testing became the themes of the study. I gave each thematic group a title that reflected the presented the specific construct of the health belief model.

Table 2

Themes and Codes from interviews on HIV testing with study participants

Theme 1.	Associated codes
Every sexually active person can Contract and transmit HIV to their partner.	Sexually active, at risk, Lifestyl diseases, suspicion among couples. Multiple partners, HIV positive couples, positive famil members. Couple dialogue, Media messages
Theme 2.	Associated codes
HIV infection has severe consequences.	Suffering, poverty, premature death, bedridden, orphans, neglected children, stigma and discrimination
Theme 2 (a)	Associated codes
HIV infection is like any other chronic disease.	Treatment options, chronic illness, adherence to ARVs, diet, acceptance, health living,
Theme 3.	Associated codes
Fear of negative consequences.	Blame, psychological torture, threat to marriage, suffering, hopelessness, neglected children, dependency, stigma and discrimination.

Theme 4.	Associated codes
Couples' testing has many benefits.	Planning for children, successful treatment, freedom of conscience, protection, control, acceptance,
Theme 5.	Associated codes
Positive messages motivate couples to test.	Media messages, testimonies, life experiences, hope for a future, treatment
Theme 6.	Associated codes
HIV positive couples can live a healthy life.	Future of children, discordant couples, testimonials, acceptance,

Identifying Discrepant Cases

Identifying discrepancy in data analysis involved searching for data that are negative or inconsistent from the main data. Any information provided by the participant that seems to contradict an emerging pattern was considered discrepant. Analyzing data systematically in a two round approach allowed me to establish and record all the responses that emerged as patterns of similar responses from the participants. By this method, I was able to factor in the divergent views that did not conform to the general pattern but held important information regarding the participant's experiences. For example, majority of the participants said contracting HIV would have very serious consequences to their health and could lead to premature death. A minority of the participants perceived HIV as a chronic disease adding that with proper medication and good health care, an HIV positive person could lead a healthy and productive life.

Evidence of Trustworthiness

Trustworthiness demonstrates that the research process is comprehensive and that the results are evidence-based, and presents a strong argument (LaBanca, 2010).

Trustworthiness is dependent on the degree of confidence that the research results were credible, transferable, dependable, confirmable and transparent. Transferability is a measure that the research methodology could be applied in other similar contexts.

Dependability shows that the findings are consistent and could be repeated elsewhere, and confirmability, which is an affirmation that the results represent the respondents' views and are free from biases from the researcher (Polit & Becker, 2012). In this study, I made a deliberate effort to increase the trustworthiness as explained in the section below.

Credibility

I followed a thorough recruitment process and conducted a pilot study to ensure that I had a clear understanding of how to conduct the interviews. I subjected every aspect of the research to continuous checking, to ensure all the steps were addressed as originally planned. In addition, I documented all the steps in details, and maintained a rigorous process to support quality data. After the interviews, I verified the findings with the participants by reading through their key points to them for confirmation. In addition, I have also provided theoretical explanations and methodology used to arrive at their conclusions as a measure of credibility as recommended by Moravsik (2014). This openness enables other researchers to scrutinize critique and debate and add value to the results.

I prolonged my engagement with the participants at the beginning of the interview and provided them time to ask questions before starting the interviews in order to build trust. This engagement enabled me to better understand the local context and culture and overcome the effects of misinformation (Patton, 2002, Bitsch, 2005). I was able to determine how to interview couples giving equal chances to the male and female partner. I encouraged each partner by continuously reminding them it was a dialogue and that all responses were correct as long as they represented the true position of the point of discussion. I verified the key points at the end of the interview and gave the participants an opportunity to add any new information and ensuring that they agreed with the statement.

I provided each couple with ample time to talk about their experiences. I also sought clarifications and encouraged them to speak freely about their experiences. Selecting couples who have had tested over the last six months ensured that the majority of them could still recall their experiences vividly to satisfy the research questions and expectations. Throughout the interviews, I ensured that the data collected in interaction with the participants focused on their lived experiences in undergoing VCT together.

Transferability

In order to achieve transferability, I have provided a detailed description of the study including the data collection sessions and analysis. I have also included details the steps I took to ensure thorough familiarity with the data during the analysis. I have presented the results with a view to make them understood within the particular characteristics and social context and location of the participants.

Dependability

In this study, I ensured dependability was achieved by working closely with the dissertation committee, seeking their advice at every stage of the process. In addition, I endeavored to conduct an accurate data collection, a thorough data analysis, and detailed reporting of findings. In addition, I have explained the methodology in detail a possibility of carrying out a similar the study by other researchers in different sites. I also present considered opportunities for additional research.

Confirmability

I maintained research rigor by following documented study procedures that guarantees the results. I tested the data tools through the pilot study, and consulted regularly with the dissertation committee for consensus. I practiced epoch in the data analysis and provided generous quotes from participant's responses from which the codes are derived. In addition, working with a research assistant provided a means of triangulation for an independent analysis.

I maintained confirmability through research rigor by following procedures that guarantee the confirmability of results. I used tested data tools, and consulted regularly with the dissertation committee for guidance. I conducted member checks to clarify issues with participants. In addition, I worked with a research assistant to conduct independent coding as a means of triangulation. A similarity in coding between the research assistant and me was a mark of confirmability.

Transparency

Transparency contributes to the overall quality of qualitative research. It is also considered as the benchmark in the dissemination of research findings. It is therefore important that for a researcher to provide a clear and comprehensive narrative on every step and also be open about the assumptions, methods and procedures used as well as a thorough explanation of choices and justifications of major decisions (Seale, Gobo, Gurbrium & Silverman, 2004). I made efforts to enhance transparency and credibility of this study in a number of ways. I have provided a background and justified the choice of research tradition. I have explained the setting, selection of participants, data collection and analysis procedures in in detail. I have also explained the decision made in interpreting the data. Overall, I have provided enough information with a view to make the procedures replicable.

Data Validation

Data validation is an important measure of quality and requires a number of approaches (Moustakas, 1994). The first step is to ensure that the conceptual framework and the research questions are linked. The second is to conduct member checks to solicit for affirmation that recorded and interpretation is a true representation of the findings. This ensures that there is no misinterpretation of the meaning of answers from the study population. It can also help in checking researcher biases and misinterpretations. Analysis of discrepant cases provides a test on the conclusions of the study.

To incorporate this important recommendation, I used member checks by giving the respondents an opportunity to review their responses. I also listened to each recording against the transcripts and checked through the synthesized data to ensure the major ideas were not lost. I asked the research assistant to code independently. The coding by the research assistant and the researchers were similar. I was satisfied that there was congruence between the researcher and the research assistant coding results.

Results

The results of the interviews with couples who had undergone HIV counseling and testing, and received their results are presented in this section. The section is organized per research question followed by the emerging theme. Out of the 20 couples recruited for the study, 14 couples completed the interviews. They were labeled as couples 1-12, (C 1, C2, C3, C4, C5.....C14). The results capture the responses from each partner separately, labeled Couple 1, Male Partner (C1 MP and Couple 1 Female Partner (C1 FP). The separation allows for the analysis on actor-effect in the decision making process, in line with the adapted model of behavior change, discussed in more detail in Chapter 5.

Research question 1: How do heterosexual couples who have undergone VCT and received their results together perceive their risk of HIV?

Couples were asked to share their perceptions of susceptibility to HIV before they made the decision to test together. All 14 couples (100%) said they perceived themselves to be at the risk of HIV and gave reasons for their perceptions. 10 couples (71%) of the

participants said the knowledge that HIV was mostly transmitted through sexual intercourse made them aware that every sexually active person is at the risk of getting infected. Three couples (21%) said that the knowledge that HIV could be transmitted by contaminated instruments like injection needles, body piercing instrument or contact with blood of an infected person made them more realistic in determining their susceptibility. One couple reported that their susceptibility was prompted by recurring symptoms of an illness on the male partner.

Theme 1: Sexually active persons are at risk of contracting and transmitting HIV

All fourteen couples (100%) said they perceived themselves as being susceptible to HIV because of the knowledge that sexual contact is the most common mode of HIV transmission. They therefore recognize that every sexually active person is at a risk of HIV. Couple 1 explained:

C 1 (MP). When you consider that HIV is mostly transmitted through sexual contact, it challenges you to accept that you are at risk. C 1 (FP). Yes, HIV is not a problem that can be hidden any more. We know it exists and we know how it is transmitted between man and woman. We cannot pretend to be safe until you are tested.

Two couples (14%) perceptions of susceptibility were as a result of first-hand experience with relatives who had passed on from what they considered HIV-related disease, as explained by couple 4.

C 4 (FP), I told my husband, you see your brother and his wife are now gone [dead] because of this disease (HIV), and he was a good man, anybody can get this disease [HIV]”. It is good to test be sure. C 4 (MP) It is true, at first we did not think much about the risk of HIV until we saw it among people we knew, some in our own family who were infected, then we knew it can infect anyone.

One couple (7%) reported that their perceptions of susceptibility to HIV were a result of personal experiences where one of the partners was falling sick often showing suspicious symptoms. Couple 13 explained:

C 13 (MP). I had a constant recurring illness which made me worried; I could see my wife was uncomfortable because I was not myself {fell sick often}. C 13 (FP). It is true he was not well for some time. I decided to say what was in my heart about testing and we agreed to test together.

Research question 2: How do heterosexual couples who have undergone VCT and received their results together perceive severity of HIV infection?

10 couples (71%) reported that HIV would have very severe consequences to them and their families. They said that it would affect their health leaving them helpless and dependent on other people. Another couple said that it would result in suffering to them and emotional trauma to the entire family. Other couples said that it could result in death leaving their children as orphans. Some couples said the infection with HIV could lead to loose premature death. It could disrupt the order of things in their family creating new

levels of dependency on the older generation of grandparents. Those who had this view seemed to all agree that HIV would have severe consequences on their lives.

Theme 2 (a): HIV is a severe health problem that leads to a serious breakdown in health causing suffering and premature death.

C 2 (MP). When you look at our communities today, you can see how serious HIV is, there many people have died and left orphans. There is no other disease that kills both man and woman and even affects children. I look at this issue as it applies to me and my family. It is very serious. C 2 (FP). I concur; having HIV would mean that instead of us taking care of our children, they are cared for by their grandparents when we are gone. That is very traumatizing even to imagine.

C 5 (MP). The seriousness with HIV is that it robs one the ability to work. I know I cannot manage work if I was unwell. C 5 (FP). Being HIV positive for me means that I cannot work for my family because I am weak or my mind is disturbed and I don't want to interact with people.

C 11 (MP). You know HIV problem is a serious one because when it results in death of parents, children become orphans and they have to be taken care of by the relatives. C 11 (FP). Any family that has been affected by HIV will tell you things are not easy; sometimes grandparents have to take care of their grandchildren after the death of the parents.

Themes 2 (b): HIV is not any more serious than other chronic diseases.

Four couples (29%) had a different view to the effect that HIV infection was not a serious health problem because it was like any other chronic disease. They said that their perception was based on the understanding that individuals who test positive can lead a normal productive and happy life if they know their status early, and take good care of their health through regular medical checkup and good nutrition and proper hygiene.

C 1 (MP). With proper self-care and medication, HIV positive person can lead a normal productive life. In any case, if you count the number of people with such chronic illness like Asthma and diabetes, you notice that HIV is one of the many.

C 1 (FP). There are many sicknesses these days and HIV is one of them. Look at cancers for example, cases of cancer are increasing by the day and there is no cure. At least HIV has medicines that can keep it down.

C 10 (MP). It is all in peoples mind, the way they look at it when one is infected creates a lot of fear. But it should not. Some people will die of other diseases like alcohol abuse faster than HIV. C10 (FP). You see people who have accepted their status doing their job very well and they take care of their health and are happy. It is all depends on the way one takes it.

C 12 (FP). We now know there are cases where only one partner could be infected and the other is not (discordant couples). If one partner is taking medication and using protection, the other partner can remain uninfected. C12 (MP). When only one partner is infected like she said, the other partner has to cooperate and do

what the doctor advises like taking medicines and eating a healthy diet. HIV will just be like other illnesses that daily medication.

Research Question 3: How do heterosexual couples who have undergone VCT and received their results together perceive barriers to VCT?

All the 14 participating couples said that they encountered many barriers in their decision making to take an HIV test together. Fourteen couples (100%) cited fear of stigma and discrimination as the most common barrier. They also mentioned anxiety that positive results would make them to be shunned by relatives, friends and family. Some couples said that they feared that knowing their positive status would lead early death. Other couples said that ignorance of testing process, fear of blood, perceived lack of confidentiality at the testing centers and the fear that positive results would bring disharmony, separation and even divorce haunted them individually as they thought about testing as a couple.

Theme 3: Fear of negative consequences prevents couples from testing together.

C 3 (FP). Testing together is not easy and straight forward action, one has to think about it, then discuss with the partner. The fear of not knowing how my partner would respond even to the suggestion of taking a test was a barrier. C 3 (MP) sometimes is the fear of the unknown, you don't really know what to expect and many questions keep on running through the mind. Sometimes me feel that I the results are positive they are the ones to blame"

C10 (MP). I feared that if you are seen going into the testing center, somebody will say that you are HIV positive but hiding your status. C 10 (FP) you know also, now people know that one partner can have HIV when the other does not, that brings a lot of fear that it might mean one partner had secret sexual relationships.

C 6 (MP). Like me, I don't like the site of blood, I dislike injection. So before testing, I had to convince myself that I should do it. C6 (FP). You see the other fear is also that one might get infected while testing, for me I used to say if contaminated needles can spread HIV, How sure is I that VCT is safe for me, I had to get assurance before accepting we test together with him.

C 14 (MP). Until we talked, with my wife, I feared that if I tested and was positive, that would kill me faster than when I didn't know. You know we say what you don't know does not kill you. C 14 (FP). What he is saying is true, but then when you hear testimonies about those who have known their status and are living a good life you say, why not me. So there is fear but it kind of challenges the individual to take a personal decision.

Research Question 4: How do heterosexual couples who have undergone VCT and received their results together perceive the benefits of testing and receiving the results together?

The 14 couples who were interviewed reported that the perceived counseling and testing to have multiple benefits in their lives 10 (71%) said that when one knows

their status they can protect their health by starting treatment early. Three couples (21%) reported that being able to plan for the future of their children was the greatest benefit. One said that knowing of a status led to freedom of conscience where one did not have anxiety wherever they were unwell.

Theme 4: Couples knowledge of HIV status important and has many benefits.

C 1 (FP). One benefit is to protect the health knowing what you are protecting. I felt that testing is giving a new beginning, another chance regardless of the challenges C 1 (MP) when you test; there is some feeling in it that it is you in control. It helps you to take care of each other more.

C 4 (MP). When you discuss about testing together, it creates trust and when you know your status, you adapt a healthy lifestyle and you can plan for the future of you children. C 4 (FP). The benefit of knowing status is the treatment and support people get when they need it.

C 7 (MP). We know our status and we know we are protecting each other. So it's not about so many things but to support each other to bring up our children in the best way possible. C7 (FP). When you know your status you can protect your baby even if you know you are infected"

Research Question 5: How do heterosexual couples who have undergone VCT and received their results perceive cues to take the final decision to test together?

All the fourteen couples (100%) said there was a final trigger that made them to take the final action of testing together. The final decision was made after hearing of media messages on how VCT is good and confidential. Other prompts were testimonial by those who had been tested and come out in the open. Then there were those who went to test because of a negative experience they observed and those who had an ailment some symptoms of in one of the partners. All these experiences lead to the final couple dialogue and decision to test together.

Theme 5: Positive messages and dialogue motivate couples to test for HIV together.

C 2 (FP). In our women group meeting, we discussed about HIV and families. One woman told us she and her husband had been tested. I thought about it and later talked to {him} about it, then we decided to test together. C2 (MP). It is true she is the one who brought the matter up. I did not think I could do it but she kept on suggesting in a clever way that we test.

C 3 (MP). There was this media campaign on radio and TV that was targeting couples. The more I heard about it the more I became convinced that we were meant to test then I talked to my wife and we both agreed to test. C3 (FP). I knew from the way we kept hearing the messages about couple testing were like it was talking to us directly. So we agreed to take the challenge together.

C 6 (MP). Knowing that the results will only be known by me and my wife made me confident to test. C 6 (FP). We decided to test because we were assured

nobody will know our status. But as time went on, some couples decided to disclose their status then we realized that times had changed.

Research Question 6: How do heterosexual couples who have undergone VCT and received results perceive their self-efficacy in dealing with the results after testing?

Ten couples (71%) said they believed that knowing their status would help them live a better healthier life. Others said they wanted to know their status so they could take care of their health better regardless of the results. They all said that their motivation and confidence to test together was the knowledge that those who know their status better knew how take care of their health and live a productive life. All the participants said that knowledge that they could live a healthy lifestyle made them confident that they could deal with the results of their testing.

Theme 6: Knowledge of status allows couple to live a healthier, happier life.

All the 14 couples (100%) who were interviewed said that they were confident that testing together would enable them to live a healthier, happier life by protecting each other and adhering to healthy lifestyle. Other said they had seen other successful cases of parents who had tested positive, accepted their status and even disclosed to the community. Another couple said that they were confident to live with the results because they could protect their babies through medication.

A number of factors including better health, testimonies from those who had tested and partner support were some of the motivation that made couples to want to test together. The following quotes summarize the motivations:

C 7 (FP). When we know our status, we can take care of our health better be happy and focus on the families issues. C 7 (MP). The challenge of being HIV positive can be overcome if there is couple unity. To me that was very important.

C 8 (FP). We were seeing others who had tested and come to the open about it. So I we said it the others were doing it, we could also do it. C 8 (MP), I think many people nowadays do not hide their status and when they come out and are seen to be healthy, they become a motivation.

C 12 (FP). When my husband accepted we test together, I knew that whatever they outcome, we could together live with the results. C12 (MP). She assured me that it was for our own good and kept on insisting that it will was for the interest of our children.

C 11 (FP). I considered that if we don't know our HIV status I cannot benefit. C 11 (MP). The knowledge that there is support and that even the law protects HIV positive persons from discrimination made me confident to test.

C 1 (MP). When you consider where we have come from, the days of silence and rumors and finger pointing, you appreciate that a lot has changed, now those who accept test and accept their status are heroes in their own community. C 1 (FP).

There is a woman, who contributes to a column in a Newspaper, she and her husband are openly positive. They have three children who are negative, this couple is my hero. We thought that if they have been this much, we too can.

Discrepant Cases

On the question regarding the severity of HIV impact in their lives, 11 couples (79%) reported that contracting HIV would have a very severe impact in their lives including being bedridden due to poor health, psychological trauma, inability to work and provide for their families and premature death. The severity of the impact of HIV in their lives was summarized in words such poor health, suffering, poverty, early death orphaned children. Three couples (21%) seemed to suggest that HIV would have no severe impact in their lives adding that HIV positive persons had a chance to live a normal productive life if they are tested early and put on ARV treatment. They added that acceptance of one health condition and adherence to treatment among HIV infected individuals prevented HIV from having a severe impact on their health.

Summary of Responses**Research Question I: Couples perceived susceptibility to HIV**

The couples said because sexual contact was the most common mode of HIV transmission, every sexually active individual was at the risk of contracting and transmitting HIV. The participants explained in detail that health education programs and media information had created the awareness on the risk of HIV. In addition, they said their own experiences within families and sharing among friends and dialogue between couples increased their risk perception. They said that the information challenged them to critically assess their risk as a couple. They said that couple risk to HIV infection could be minimized through mutual faithfulness.

Research Question 2: Couples perceived severity to HIV infection

A majority (79%) of the couples were of the view that HIV would have a severe impact in their lives. It would bring about severe breakdown in health, suffering and sometimes early death. They said that the impact of their infection would be felt by their children who have to nurse them in poor health and immediate relatives taking care of their children in the event of their death. That it had a major impact on individuals and families. They further said that their orphaned children would suffer stigma and discrimination.

A minority of couples (21%) said that HIV severity was minimized by with treatment and good care. They felt that HIV was like any another chronic disease. Some said that HIV positive couples were leading a more quality life due to the common effort dialogue and encouragement to one another. They said that acceptance of a positive status and commitment to make the best out of it was the way to go, they said that the most effective drug against HIV was acceptance, positive attitude, personal initiative and love for the partner and family.

Research Question 3: Couples perceived barriers to HIV counseling and testing.

Some couples who were interviewed said that fear of the consequences of testing positive and the effects of the results in their lives was a big barrier. Other couples said that their fear included not knowing how the process of testing goes and whether there is any pain experience. Some said that fear of stigma and perceived lack of confidentiality of results were barriers to counseling and testing. Another type of fear was that of

disharmony in their relationship in the event of testing positive. Others feared that they would give up life and die quickly leaving their children without help.

Research Question 4: Couples perceived benefits for counseling and testing?

The couples said that counseling and testing had many benefits. Knowledge of status was a motivation for couples to practice healthy behaviors and plan for their children. In addition, knowing their status had the benefit of peace of mind and protecting each other's health. Some said that they felt a sense of relief and being at peace with themselves.

Research Question 5: Cues that prompted couples to take the final decision to test together

The knowledge and belief that HIV was a reality and that it required a personal commitment to deal with it was key in prompting couples to test. Furthermore, intrapersonal reflections by individuals and dialogue between the couples triggered the action to test. Health benefits and other media messages on how VCT is good and confidential contribute to the final decisions among couples to test together. Other prompts were testimonial by those who had been tested and come out in the open. Then there were those who went to test because of a negative experience they observed and those who had an ailment some symptoms of in one of the partners. All these experiences lead to the final couple dialogue and decision to test together.

Research Questions 6: Couples perceive self-efficacy in dealing with the outcome of testing together.

Self-efficacy among couples was boosted by the belief that knowing their status would help them live a better healthier life. Others said they wanted to know their status so they could take care of their health better regardless of the results. They all said that their motivation and confidence to test together was the knowledge that those who know their status better knew how support their health. This would enable them to live a productive lifestyle. All the participants said that knowledge that they could live a healthy lifestyle made them confident that they could deal with the results of their testing. Others said that they were taking care of orphans left behind by families' members who have passed on because of HIV related illness. They said that the age for denial was over. It was time for action.

The findings suggest that the lived experience of couples who have undergone counseling and testing and received their results together can be summarized into several themes, which are presented. In Chapter 5, the interpretation of these findings, limitation of the study, the recommendations, implications and conclusions of the findings are presented.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Purpose of the Study

The purpose of this study was to describe the lived experiences of heterosexual couples who attend VCT and receive results together. The study was conducted using qualitative research methodology with a phenomenological approach. I sought to explore the perceptions of susceptibility, seriousness, barriers, benefits, cues to action, and self-efficacy and the ways these aspects influence on couple's decision to attend voluntary counseling and testing and receive results together. The open-ended questions yielded a holistic overview of behaviors, perceptions, insights, and emotions as well as motivations of the respondents as suggested by Mariampolski (2001). Given that researchers in the past have focused on issues like benefits and negative consequences of counseling and testing for individuals in coupled relationships, it was important to consider a dyadic approach to understand increasing HIV infections among heterosexual couples in Sub-Saharan Africa (El-Bassel & Wechsberg, 2012).

Key Findings

Seven major themes emerged as follows:

1. The participants recognized that they are vulnerable to HIV because it is commonly transmitted through sexual contact.
2. Some couples perceived HIV as a severe problem with a negative impact on their lives and their children.

3. Other couples perceived HIV as like any other chronic disease.
4. Couples fear of negative consequences prevented them from testing together
5. Couples believed that knowledge of HIV status through testing has multiple benefits (5) Encouraging messages from multiple sources on benefits of testing prompted couples to test together.
6. Couples belief that knowledge of status allowed those tested to live healthier and productive lives.

Interpretation of Findings

There is limited research on the motivations for couples counseling and testing in Kenya. The findings of this study extend the current body of knowledge surrounding couples HIV testing by documenting the perceptions and beliefs of 14 couples in Nakuru. The findings could be used to promote couple counseling and testing as a means to reducing the rate of HIV infections among couples and their unborn babies.

Most couples interviewed in this study stated that they believed themselves to be at a risk for HIV infections and therefore had made deliberate efforts to test in order to protect and manage the test outcomes. This information could be used to explore better ways to engage couples in advocating for knowledge of status through counseling and testing. The findings indicate that couples perceived themselves to be susceptible to HIV because the primary mode of transmission is sex. Therefore, every sexually active individual has the potential to acquire or transmit HIV.

The majority also believed that the choices they made in regard to sexual behavior could reduce or increase their chances of becoming infected. Couple perceptions were based on real life experiences through observations and from testimonials of infected individuals who had tested and chosen to disclose their status. The choice to undergo HIV counseling and testing together was an effort to secure their health and mitigate risk.

Corroborating Findings

These findings are consistent with other studies on the subject. Fisher et al, 1992) state that individual's perceptions of vulnerability to a health problem prompt individuals to take a protective behavior. Previous studies had demonstrated an association between perceived risk and the desire for counseling and testing for adults (Fylkesnes et al, 1999; Fylkesnes, et al, 2005). In addition, Mbago (2005) and Gage (2005) concluded that HIV anxiety (perceived susceptibility) was a motivation for HIV counseling and testing among adults.

On the perception of severity, the majority of the couples perceive HIV infection to be a problem with severe consequences to their health. The negative impact was cited as a likely death of couples, which would result in leaving behind orphaned children. Another serious problem was the inability of the couples to support their family due to illness as a result of their HIV positive status. Poverty, dependency, and burdening of grandparents with care of grandchildren were also cited as negative and severe outcomes of HIV among couples. The other couples felt that HIV was a very serious problem because of the impact it had on children who are born positive. The findings were consistent with studies on perceived severity of HIV and the focus on the fear of infection

and considerations of how AIDS affects the life of individuals (Hämäläinen & Keinänen-Kiukaanniemi, 1992).

However, this study revealed contrary view: some of the couples did not perceive HIV infection as having severe consequences. They said HIV could be managed successfully if persons were tested and put on treatment promptly. This view was supported by an assertion that there were HIV positive individuals leading normal and productive lives. They argued that prompt diagnosis, treatment, and acceptance of one's condition was an important step in successful treatment, adding that the availability of antiretroviral drugs and self-care had improved the lives of HIV-positive individuals significantly. These perceptions are consistent with observations that HIV is no longer a threat to the lives of patients who have access to treatment (Deeks, Lewin, Havlir, 2013).

In addition, other studies stated that the delay of the onset of AIDS through treatment may reduce the fear of living with HIV/AIDS, and could lead to risky behaviors (Dodds, Nardone, Mercey & Johnson, (1996). Overall, although a good number of respondents still believed that HIV was a threat to life, the increase in successful treatments is bringing about a change in which HIV is no longer perceived as a life threatening condition. Fear of the consequences of testing was cited as one of the common barriers that prevented couples from undergoing VCT. There was the fear of not knowing what to do if they were positive, fear that knowledge about their positive status would lead to a breakdown in health, fear of relationship disharmony, and the fear of stigma and discrimination by the community.

These findings are consistent with previous studies. Janz and Becker (1984), presented the view that the main barriers to VCT include fear of stigma associated with HIV positive status. Other fears include that of potential relationship disharmony and concerns over confidentiality (Kelly et al., 2011; Opoti, 2010) and the fear of the psychological burden of living with HIV (Musheke, 2013; Turan, et al 2010). Fears of receiving a positive result, death, and radical change in one's life are some of the barriers that prevent individuals from testing (Kelly et al. 2001). Other fears emanate from inadequate information, ineffective communication, and perceived lack of confidentiality (Mfecane, & Gumende, 2005; Murphy, 2007; Skinner, Njau, Wattc, Ostermann, Manongi & Sikkemac et al, 2011).

On the question of the benefits of testing, couples perceived knowledge of HIV status through counseling and testing as having many benefits. The couple's perceptions on benefits included a stronger relationship with partner and a peace of mind knowing ones' HIV status. Enrollment into treatment and taking good care of their health after results were the other perceived benefits. In addition, there was the motivation that knowing their status allowed couples to plan for having children in the future. Initiation into early treatment and care, and an opportunity to join support groups which provided moral spiritual and even physical support to their members were also perceived benefits.

These findings are consistent other studies that concluded that HIV testing provides an opening for couple dialogue and a chance to learn about their status together, thereby eliminating the challenge of one partner disclosing to the other (Katz et al., 2009). Rosenberg (2013) noted that receiving HIV test results together inspires positive

behavior change, and additionally testing together accords couples an opportunity to discuss post-test prevention with the support of health care provider based on the needs of each partner (WHO, 2012). Other researchers indicate that benefits of counseling and testing include adoption of preventive behaviors and prompt enrollment into treatment and care (Allen, 2003; Dunkle, 2008, Grabbe & Bunnell, 2010).

On the question about cues to action, all the couples reported that they first perceived HIV as real threat to health and wellbeing that cannot be ignored, and one that requires a personal commitment to deal with it. This perception was based on real life experiences, where couples had witnessed close family members, friends, and neighbors falling sick or dying due to AIDS related illnesses. Some of the cues to action included health messages, couple dialogue, and testimonials. In some cases, the decision to test was based on health symptoms of a partner in a coupled relationship.

These findings are consistent with some previous research. For example, Abraham & Sheeran, (1996). that suggested that personal experiences such as symptoms of an illness and influences from within the social environment as well as health messages are important cues that trigger action among individuals. A belief that testing together increases couples' confidence in handling the outcome is also a motivation for testing (Janz & Becker, 1984). In addition, a real life experience such as witnessing the death or illness of a close friend or relative due to AIDS can be a strong source of motivation to test (UNAIDS 1999). Health messages through the media encouraged couples to go for HIV testing. In addition, symptoms of an illness experienced by the individual could also prompt action (Janz, Champion & Strecher 2002).

Couples' perceptions on self-efficacy were based on considerations that knowledge of the status would enable those who were HIV negative to take protective measures to prevent infections. They considered early diagnosis as an advantage, as it would allow them to be enrolled into treatment early and protect their health. All the participants said that knowledge that they could live healthier and longer made them confident that they could deal with testing results. All reported that knowing ones' status was an important step towards health livings.

These findings are consistent with earlier research findings which indicate that self-efficacy represents an individual's confidence in dealing with challenging circumstances (DeVellis & DeVellis, 2000). Self-efficacy is a manifestation of perceived behavioral control over a situation (Ajzen, 1991). Other studies have attempted to predict the intention to use testing services based on self-efficacy (Kakoko, Astrom, Lugoe, & Lie, 2006). Overall, the study findings agreed with previous research that was presented as part of literature review in Chapter 2. However, in this study, I have noted new observations including an increased perception of risk among men and women's in couple relationships initiating dialogue with their partners on need for testing.

Non-corroborating Findings

The findings of this study suggest that although susceptibility to HIV differs between men and women, men did not have a poor HIV risk perception as suggested by Obermeyer and Osborn (2007) and Redding et al. (2000). Men were fully aware that HIV is a sexually transmitted infection and sexually active individuals stand the risk of being infected. For example, C1 (MP) stated:

When you consider that HIV is mostly transmitted through sexual contact, it challenges you to accept that you are at risk.” Another example of men’s awareness about their risk is from couple C 2 (MP) who says: “When you look at our communities today, you can see how serious HIV is, I look at this issue as it applies to me and my family

My findings were also inconsistent with the view that couples who are in a stable relationship may underestimate their risk, or that of their partner, due to their marital status (Ciccarone, Kanouse, Collins et al., 2003); Gilbert et al., 2010)

C 1 (FP) explains:

Yes, HIV is not a problem that can be hidden any more. We know it exists and we know how it is transmitted between man and woman. We cannot pretend to be safe until we are tested.

Buhler & Kohler, (2003) noted that married women may not suggest a preventive behavior such as condom use due to fear of an adverse reaction from the partner. In the findings of this study, we found a number of female partners suggested VCT to their male partners. 4 (FP) said:

“I told my husband, you see your brother and his wife are now gone [dead] because of this disease (HIV), and he was a good man, anybody can get this disease [HIV]. It is good to test be sure”. C12 (MP), “She assured me that it was for our own good and kept on insisting that it will was for the interest of our children”.

In this study, more women than men initiated discussions and suggested couple testing to their male partners. This observation is supported by Liu et al.'s 2008 findings that there was a variation in the desire to test between men and women. Motherhood, gender roles and socialization made cues more accessible to women than men.

Theoretical and Contextual Interpretations

The qualitative research methodology used was appropriate for this study. This approach provided a means for exploring the motivations for VCT among couples. Qualitative methodology and interpretive paradigm have a common foundation and a belief in the existence of many truths and multiple realities. These many truths and multiple realities provide a means for understanding a person's experiences in a holistic perspective (Weaver and Olson, 2006). In this regard, a qualitative approach allowed the researcher to document the lived experiences as narrated by the participants (Langdrige, 2007).

In this study I used HBM of behavior to understand the motivations that led couples to undertake voluntary counseling and testing together. The choice to use the HBM was based on the understanding that theory-based research will provide evidence to support health behavior interventions (Orleans, 2008).

The questions were modulated to decipher the reciprocal influence in which each partner's perception of susceptibility, seriousness, benefits barriers, self-efficacy and cues to action influence the other partner's perceptions and actions (Karney et al., 2010). The findings presented in Chapter 4 included the major perceptions that lead couples to VCT and to receive their results together. The discussion recorded the responses of each

individual in a dyad separately considering the extent to which one partner influences the other by their thoughts, feelings and actions as suggested by Kelly et al., (2008

As noted by Karney et al., (2010), there was a reciprocal sequence of influence where one partner exerted some influence on the other. The reaction of the recipient partner verbal or in actions further influences the originator. This mutual influence does not negate the individual attributes of behavior, but present the view that behavior can be jointly determined by personal attributes as well and mutual influences between partners (Kashy & Kenny, 2000). A dyadic relationship has elements of interaction between partners over time, with influences on the present actions and creating the prospects of a future (Reis, Collins & Berscheid, 2000). This creates a standard approach in which partners coordinate their behaviors to achieve a common goal (Karney et al., 2010). This view is supported by the response from C 13 (MP) said:

“I had a constant recurring illness which made me worried; I could see my wife was uncomfortable because I was not myself {fell sick often}. C 13 (FP). It is true he was not well for some time. I decided to say what was in my heart about testing and we agreed to test together”.

The influence of one partner to the other in a decision making process is evident for the response of this couple. 12 (FP) responded:

“When my husband accepted we test together, I knew that whatever they outcome, we could together live with the results. C 12 (MP). She assured me that

it was for our own good and kept on insisting that it will was for the interest of our children”.

Health Belief Model

The health belief model was appropriate as the theoretical framework because it provided for an approach to gather and analyze and interpret data in line with the behavior change process. All the couples said they perceived themselves to be vulnerable to HIV. Their perceptions were based on the knowledge that every sexually active individual was susceptible to contracting and transmitting HIV even within couple relationships. Some couples said that their perceptions of susceptibility to HIV were built through observations, health education programs, and real life experiences shared by friends and workmates and testimonies from infected couples aired by the media.

Some couples explained that they viewed HIV as a severe health problem with life changing consequences including a breakdown in health, being bed-ridden, causing suffering and premature death. The couples further said that being infected with HIV denies parents the ability to provide for their children’s needs. The other couples felt that HIV was a very serious problem because of the impact it had on children who are born positive. They observed that when HIV affects a couple adversely, the impact is felt not only by the couples who suffer ill health directly but also the immediate family and the community. They noted that in the event of death of the parents immediate family members would have to take responsibility over the orphaned children.

Fear of negative consequences emerged as a major barrier to HIV counselling and testing among couples. Some couples said they feared they would not know what to do if

they test results turned out positive. The participants also said that they feared that they would turn out to be positive leading to anxiety, hopelessness and complete breakdown of their health. There was also the fear that an HIV positive status would be proof of infidelity especially among men. This was because many African cultures tolerated multiple sexual relationships among men. The participants also cited the fear of breakdown in couple relationship, stigma and discrimination by the community if they turned out to be positive. The participant's responses affirm that perceived barriers as stipulated in the HBM were applicable to couple counseling and testing. The couple's perceptions on benefits ranged from intra- personal where the knowledge of status was perceived as giving the couple a peace of mind devoid of worries. Other participants observed that testing together was an act of faith and commitment to their relationship. The benefit of planning for the future of children was cited by majority of the study participants. Other benefits included prompt enrollment into treatment and care programs and livingly a healthy spiritual life. The groups also said that those who were counseled and tested and disclosed their status had the opportunity to join support groups which provided psycho-social support to their members.

On the question of what cues inspired action, media messages and testimonials by those who had tested had a big impact. These findings are in line with the earlier HBM conceptual models which indicated that factors within the individual physical and social environment, the feelings of susceptibility, benefits and cues triggered actions (Hochbaum, 1958)

Couples perceptions on self-efficacy were based on their considerations that knowing their status would enable those who were HIV negative to take protective measures to prevent infections. There were couples who though not sure of the outcomes determined that by testing and receiving their results together, they would get an early opportunity to enroll into treatment and care programs and consequently be able to protect their health. This would enable them to live a productive lifestyle. All participants reported that knowing ones' status was an important step and they were confident that they had the necessary skills to deal with the outcome of the test results. Self-efficacy is victory over the barriers and a key determinant of action and behavior changes among the couples.

Limitations of the Study

This study involved 14 couples who have undergone counseling and testing and who live in Nakuru Municipality of Kenya. The results of the study reflect the views and experiences of this particular group and may not be generalizable to all couples. The results from this study may not be generalized to other populations and therefore readers should interpret the findings within the limitations of the study. However, the study findings can be used for further research on couple HIV prevention behaviors. During the entire study, I ensured clarity of the process by describing the data collections, coding, analyzes, and reporting in a way that other researchers could understand the process and the logic of arriving at the conclusions. In ensuring credibility, I made sure that the participants were able to recall events and to provide detailed information about their actions at the time. They provided complete answers to all the questions and clarifications

where needed. When participants understand the central phenomenon and respond to all questions, it is an indication there are no issues of credibility (Patton, 2002).

Maintaining confirmability requires an assurance that research participants' responses are not influenced by the researcher in any way (Creswell, 2007). The recruitment of participants, eligibility criteria and data collection processes were completed with the same steps for each participant. The only variance were the date and time for the interview. These methods ensured dependability during this research.

Recommendations

Prevention of HIV transmission among discordant couples, and the prevention of infection to babies born of HIV-positive mothers remain daunting challenge in Kenya (Kaiser, 2011, Tsuma, 2015, Finocchario-Kessler et al, 2015). One of the underlying reasons for this challenge is that less than 50% of cohabiting couples are ignorant of their HIV status and the status of their partner. Women who test routinely as part of antenatal health care services may keep their status secret from their partners because of fear of adverse consequences in their relationship.

Couple testing provides an important basis for strong programs that protect both partner and their infants. According to WHO, 2014, encouraging more couples to test opens avenues for focused prevention and use of ARV subsequent to testing can reduce infection by 96%. The findings in this study may inform the design of stronger couple testing interventions to help couples embrace knowledge of HIV status through counseling and testing as shared responsibility. As knowledge of HIV status is associated

more with health behaviors (Kilembe et al, 2015), the outcomes of the study are aligned with larger societal goals to improve health and Kenya Road map to Zero infections by 2030.

I used a qualitative phenomenological to explore the lived experiences of participants who have undergone counseling and testing and receive their results together. The study findings have addressed gaps in knowledge on how couples manage HIV testing issues in their relationships. However, it is never possible to adequately answer all the research questions in a topic such as this due to study limitations. The unanswered questions and the emerging issues present opportunities for additional research. The following are recommendations for future research studies.

A longitudinal research study could provide a deeper perspective of couples and HIV including how testing contributes to healthier lifestyles, coping mechanisms and family support. Such a study could reveal how well the expressed perceptions and benefit such as the benefit of planning for the future translate into action. This information would be particularly important in designing programs that provide support and embolden families to take a central role in supporting their members. It would also provide programs with other forms of support to enable them live up to the expectations. A qualitative study addressing support over several years by following a cohort of participants could provide new information about different ways of how couple manages HIV issues in the long-term.

Several participants said that their confidence in dealing with the outcomes, even if positive, was emboldened by couple testimonies on TV and other media. A study exploring issues of role models and public disclosure of HIV status could provide new insights into this phenomenon and hopefully contribute to strategies for strengthening couple testing programs. This study focused on couples testing at the partner level but it would be important and interesting to know if the results are shared with the rest of the family and how the family support system adapt bearing in mind some of the family members turn out to be care givers where there is need.

Finally, the study findings may be generalized to heterosexual couples living within Nakuru. It would be worth the effort to carry out the same research in a different setting like a rural community far from the urban influences and determine how such couples manage the same issues in a different social setting.

Implications

Positive Social Change

Positive social change is positive society transformation through deliberate efforts by people to develop and improve their lives (Walden University, 2012). In this study, I have attempted to add to the knowledge regarding couple counseling and testing. The findings could be used to increase the demand for voluntary counseling and testing among couples by developing strategies that minimize the barriers and increase the perceived benefits. The identified themes hold the key to some important factors in promoting couple counseling and testing. These findings may have information critical

for the success of couple campaigns and changing the misconceptions regarding couple testing and the stigma associated with HIV positive status.

Organizational Level: Several organizations working in HIV prevention interventions and specifically those working in prevention programs that target mothers and babies (PMTCT) could use this information to design interventions that address couple communication in regard to the protection of mothers, fathers and unborn babies. This approach could further be extended to strengthen male involvement in HIV prevention and mitigation for mothers and babies.

Societal/Policy Level: Kenya has an ambitious plan of eliminating new HIV infections by 2030 through a multi-pronged strategy targeting priority groups considered to be at high risk in certain geographical areas and social settings (NACC, 2014). This study suggests that health communication play an important role in promoting voluntary counseling and testing among couples. These findings are critical in designing programs that incorporate health communication theories to address the emerging challenges in HIV prevention among couples (Tomori, Risher, Rupali Lynn Gibbs, Smelyanskaya, Celentano, 2014).

Conclusion

Knowledge of HIV status among couples could increase preventive behaviors and decrease HIV incidence among couples and their unborn babies. Although Kenya has made efforts to provide counseling and testing services, the number of couples who know

their HIV status remains low. There is need for continued efforts to promote HIV prevention among couples to lower the risks among couples and babies.

In this study couples considered they were at risk of HIV infection; they understand the severity of getting infected but have the resilience and coping mechanisms where circumstance demand. Despite several barriers including fear of stigma and discrimination, the benefits and confidence in managing the new behavior leads them into action, with hope that their action enable them to protect their lives and to live healthy, productive lives. These findings provide information that could be useful to the Kenya government in supporting policies and programs to increase the use of voluntary counselling and testing services.

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Appendix A: Participant invitation Letter and Consent Form

Dear couple,

You are invited to participate in a research study on the experiences of couples who have tested for HIV and received their results together. This study will involve 14 couples who have undergone VCT at the Comprehensive Care Centre. The participation in the study is voluntary and free from any obligations on the participating couples. The whole exercise will take some 45-60 minutes. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether or not to take part. This study is being conducted by Stephen Mucheke, a doctoral student at Walden University.

Background Information

The aim of this study is to gain a deeper understanding of lived experiences couples who have undergone counseling and testing together, in order to gain insights into their lives particularly in choosing to take a test together. It is important that both partners agree to participate and contribute to the answers freely.

Procedures

If you choose to be part of this study, you will be asked to participate in an interview as a couple with the researcher (Stephen Mucheke) that will last approximately 45-60 minutes. At the end of the interview, you may be requested to review your responses for accuracy briefly.

Participation in the Study is Voluntary

Participation in this study is voluntary. The researcher will respect your decisions about whether or not to be in the study. No one will treat you differently if you decide not to be in the study. If you choose to join the study now, you can still change your mind during the study if you feel uncomfortable and choose to leave.

Risks and Benefits of Being in the Study

Being in this type of study may involve some discomfort that can be encountered in daily life, such as anxiety or unpleasant memories. It does not pose any risk to your safety or well-being. Interviews will be audio recorded for data analysis purposes, and this information will be kept confidentially. The significance of this research is that it may clarify the decision-making process of couples, their perceptions of susceptibility, seriousness, benefits barriers, cues to action and self-efficacy and any other factor that contributes to couples uptake of HIV tests together. This information may be used to interventions aimed increasing couple's use of counseling and testing to increase knowledge of the status which is important in the prevention, treatment care and support for HIV.

Payment

At the completion of the interviews, couples will receive Kshs 180 (\$ 2) per couple as a token of appreciation. All couples will be given a token irrespective of whether they finish the interview or not.

Privacy

All the information you provide will be kept confidential. The researcher will not disclose or use your personal information for any purposes outside of this research project. In addition, the researcher will not record your names or anything else that could expose the participants in the study reports. Data will be kept secure in a locked file cabinet in a secure office. Data will be held for a period of at least five years as required by Walden University.

Contacts and Questions

You will be given a chance to ask questions at the end of the interview or communicate with the researcher later on the provided contacts. If you want to talk privately about your rights as participants, you can call the researcher on +254, 722446498 or email stephen.mucheke@waldenu.edu

Statement of Consent

I have read the above information, and I feel I understand the study well enough to make a decision about my involvement. By signing below, returning this form, or replying to this e-mail with the words "I consent," I understand that I agree to the terms described above.

Printed Name of Participating couple.....

Date of Consent.....

Participants' Signature (woman).....

Participants' Signature (man).....

Researcher's Signature.....

Appendix: B. Qualitative Research Instrument

Walden University

Researcher: Stephen Mucheke

“Thank you for agreeing to be in this research study. The information you provide today is important in the work of HIV prevention because it helps professionals know more about the experiences of couples who test for HIV together. Couple testing is an indication of joint decisions about their health and wellbeing. In this research, I am interested in knowing and recording your thought process and other issues that you went through as a couple in making the decision to test. I want to understand what motivated you to take an HIV test, how serious you thought HIV infection was, what barriers may have hindered your choice to test together, what benefits you expected and prompted you to go for testing after all. Finally, how confident were you to live with the outcome of the test results.

I would like to ask you some specific questions about the experience you have as a couple on your decision to test together. This may include your discussions as couple. This information will not be used to identify you in any way. I would also like to ask if it is ok for to record our interview. The recording is to enable me confirm that what I write as the response is correct. This information will not be used for any purpose other than this research study. At this time, I would like to turn on the recorder and begin our interview. This is participant No

1. Tell me about how you perceived yourselves to be at risk of HIV before you tested.
2. Tell how you saw HIV to be a serious threat to your health.
3. Can you tell me about any barriers encountered on your decision when you chose to test/how did you overcome them?
4. What benefits did you foresee/expect as the results of testing
5. Is there an experience that may have prompted you taking the final decision?
6. What made you confident that you would be able to live with the test results

End of recording Thank you very much for your time. Accept this token of appreciation for your participation.

Appendix C: Interview Response Form

Time of Interview: _____ Date: _____

Place: _____

Interviewee: _____

Questions:

1. Tell me about how you perceived yourselves to be at risk of HIV before you tested.
2. Tell how you perceived HIV to be a serious threat to your health.
3. Can you tell me about any barriers encountered on your decision when you chose to test/how did you overcome them?
4. What benefits did you foresee/expect as a results of testing?
5. Is there an experience that may have prompted you take final decision?
6. What made you confident that you would be able to live with the test results

Appendix D: Research Assistant Confidential Agreement

Name

During the course of my activity in collecting data for this research: I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

I will not disclose or discuss any confidential information with others, including friends or family.

I will not in any way divulge copy, release, sell, and loan, alter or destroy any confidential information except as properly authorized.

I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.

I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.

I agree that my obligations under this agreement will continue after termination of the job that I will perform.

I understand that violation of this agreement will have legal implications.

I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature:

Date: