FACTORS INFLUENCING TREATMENT OF HIV/AIDS AMONG MARRIED WOMEN IN KENYA: A CASE OF PARTNERS FOR HEALTH AND DEVELOPMENT IN AFRICA (PHDA) PROJECT, KASARANI CONSTITUENCY, NAIROBI COUNTY, KENYA

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DECLARATION

This research project report is my original work and has not been submitted for examination in any other university.

Signature…… Date…….

NAOMI WANGUI KAHORO

L50/ 73461/2014

This research project report has been submitted for examination with my permission as the University supervisor.

Signature…….. Date……..

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LECTURER

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DEDICATION

I dedicate this research project to my husband Joseph, children Claire and Lee for their love, support, patience and encouragement.

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ABSTRACT

This study sought to establish the factors associated with ART adherence among married women in Kenya. This study used a cross-sectional survey research design owing to its ability to allow quantitative and qualitative data from a large population. The target population of this study comprised of all married women living with HIV in PHDA project, Baba dogo health centre, Kasarani Constituency, Nairobi County. This study used two instruments; a questionnaire and an interview schedule. Quantitative data was analyzed using descriptive and inferential statistics. Content analysis was used to analyze qualitative data. Inferential statistics such as Pearson chi-square test were used to analyze quantitative data. The study found that there is a statistically significant association between informing spouse HIV status and adherence to ART program. The study established that there is a statistically significant association between having a treatment buddy and adherence to ART program. The study found that there is a statistically significant association between self esteem after knowing HIV status and adherence to ART program. The study established that there is a statistically significant association between society's attitude towards people living with HIV and adherence to ART program. The study revealed that there is a statistically significant association between the extent ARVs side effects affected married women living with HIV in Baba Dogo daily life and adherence to ART program. The study found that there is a statistically significant association between problems experienced in dietary requirements of ART and adherence to ART program. The study established that there is a statistically significant association between perceived ease of ART program by the respondents and adherence to ART program. The study has shown a statistically significant association between empathy of healthcare providers and adherence to ART program. The study revealed that there is a statistically significant association between nature of communication with healthcare provider and adherence to ART program. The study also revealed that there is a statistically significant association between healthcare providers' know-how as perceived by married women living with HIV in Baba Dogo and adherence to ART program. Adherence to ART program by married women living with HIV in Baba Dogo as measured by number of missed doses for one week was found to be 73.6% and for two weeks was 67.9% while adherence to ART program for four weeks was 35.8%. This study concluded that informing spouse HIV status and having a treatment buddy have been shown to promote adherence to ART program. Being accompanied by spouse or not among married women living with HIV does not have an impact on adherence to ART program. This study concluded that stigma has reduced as majority of married women living with HIV in Baba Dogo have not experienced prejudice based on their HIV status. Reduced stigma has led to high self esteem even after knowing their HIV status among married women living with HIV. The fact that married women living with HIV in Baba Dogo have termed society's attitude towards people living with HIV as positive serves to show reduced stigma. This study concluded that high self esteem encourages adherence to ART program. This study concluded that ARVs side effects affected married women living with HIV in Baba Dogo daily life either to a little extent or not at all. This study concluded that ART program is easy or moderately easy to adhere. This study concluded that healthcare providers at Baba Dogo health centre have empathy as they were described by married women living with HIV in Baba Dogo as either compassionate or very compassionate. The same apply to communication between patients and healthcare providers as well as perceived healthcare providers' know-how by the patients. The study concluded that adherence as measured by self report matched adherence measured using missed doses for one and two weeks but differed with that for four weeks. This could be attributed to recall bias among the studied population. This study recommends that married women living with HIV should be encouraged to inform spouse their HIV status and have a treatment buddy to enhance adherence to ART program. Although stigma has reduced, the government through the Ministry of Health and other stakeholders should sustain efforts to ensure it does not recur as it can negatively affect adherence to ART program. Ease of drug regimen has encouraged adherence to ART program hence manufacturers and researchers should put more efforts towards even easier drug regimens. Patient-healthcare provider relationship should be positive as it can affect adherence to ART. Healthcare providers should be compassionate and ensure good communication with their patients. The healthcare providers should also be knowledgeable as the perception of patients on their know-how can affect adherence to ART.

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LIST OF ACCRONYMS AND ABBREVIATION

AIDs	Acquired Immune Deficiency Syndromes
ART	Anti-Retroviral Treatment
ARV	Anti-Retro-Viral
HCT	HIV Counseling and Testing
HIV	Human Immunodeficiency Virus
KNBS	Kenya National Bureau of Statistics
MEMS	Medication Event Monitoring System
MTCT	Mother-To-Child Transmission
NACOSTI	National Commission for Science, Technology and Innovation
PHDA	Partners for Health and Development in Africa
PLWHA	People Living With HIV/AIDS
SCAN	Schedule for Clinical Assessment in Neuropsychiatry
UNAIDS	United Nations
USAID	United States Agency for International Development
WHO	World Health Organization

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

HIV/AIDS is one of the greatest health problems in the world. Globally, HIV/AIDS related illnesses are the leading cause of death among women of reproductive age (UNAIDS, 2010). In Europe women account for a relatively low percentage of people living with HIV but in regions such as sub-Saharan Africa and the Caribbean, the percentage is significantly higher. At the end of 2012 it was estimated that 52% of people living with HIV and AIDS in low and middle-income countries are women (UNAIDS, 2010). Every minute one young woman becomes infected with HIV, with sub-Saharan Africa reporting the percentage of young women aged 15-24 living with HIV being twice that of young men.

A study done in South Africa found that 12% of new HIV infections in women were attributable to intimate partner violence (Jewkes, 2010). Gender Based Violence (GBV) was found to increase the risk of HIV infection by 55% in a study done in Uganda (Vyas, 2009). Women often suffer the heaviest burden of HIV stigma and discrimination, as they are often expected to uphold the moral traditions of their societies; being HIV infected is considered evidence that they have failed in this regard HIV positive women experience discrimination, stigma and other human rights violations within families and communities. HIV positive women have also experienced the denial of services, lack of confidentiality, harsh and judgmental treatment, and lack of informed consent (UNAIDS 2010).

Biologically, women are more likely to become infected with HIV through unprotected heterosexual intercourse than men. In many countries women are less likely to be able to negotiate condom use and are more likely to be subjected to non-consensual sex (UNAIDS, 2010). The HIV and AIDS epidemic impact upon women has been exacerbated by certain roles within society. The responsibility of caring for people living with HIV and orphans is an issue that has a greater effect on women. Additionally, millions of women have been indirectly affected by the HIV and AIDS epidemic through issues such as mother-to-child transmission (MTCT) of HIV. Sub-Saharan Africa carries 68% of the global total HIV burden (22.5 million people) (Mitiku, Abdosh and Teklemariam, 2013).

Although HIV prevalence among the general population has fallen in Kenya, women continue to be disproportionately affected by the epidemic. In 2012, 6.9% of women were living with HIV compared with 4.2% of men (NASCOP, 2012). Young women (aged 15-24) are almost three times more likely to be living with HIV than men of the same age (3% and 1.1% respectively) Like in many parts of sub-Saharan Africa, women and girls in Kenya face discrimination in terms of access to education, employment and healthcare. As a result, men often dominate sexual relationships with women not always able to practice safer sex even when they know the risks. According to KNBS (2010), young women in Kenya are three times more likely to be exposed to sexual violence than young men. They are forced into early marriage and often unable to negotiate safe sex. Young women also have a lower level of HIV knowledge than young men in Kenya. A study by USAID (2013) found that only 47.5% of young women could correctly identify ways of preventing sexual transmission of HIV and reject misconceptions about HIV transmission compared to 54.9% of young men (USAID, 2013). This study will take place in Baba dogo health centre, Kasarani Constituency, Nairobi County where Partners for Health and Development in Africa (PHDA) project has been undertaken. PHDA is project that focuses on treatment of HIV/AIDS among married couples. It started in 2008 and serves a community of 69,000 people in Baba dogo and its environs. Currently the active adult population in PHDA project is 1606 out of which 489 are men and 1115 are women (PHDA, 2015).

Women often suffer the heaviest burden of HIV stigma and discrimination, as they are often expected to uphold the moral traditions of their societies; being HIV infected is considered evidence that they have failed in this regard (Vyas et al., 2009). HIV positive women experience discrimination, stigma and other human rights violations within families and communities.HIV positive women have also experienced the denial of services, lack of confidentiality, harsh and judgmental treatment, and lack of informed consent (UNAIDS 2010). As a result of stigma, women are often reluctant to seek HIV testing and are not empowered to enact HIV prevention.

HIV treatment commonly known as antiretroviral therapy (ART) increases the length, quality of life, and productivity of the people living with HIV (PLWH) by improving survival and decreasing the incidence of opportunistic infections through reduction of the viral load and increase of the level of CD_4 cells (UNAIDS, 2010).

HIV treatment effectiveness relies on a strict adherence to ART hence non adherence to ART can result in inadequate viral suppression, immunologic failure, rapid disease progression, and the development of drug resistance (Carpenter et al., 2000). Realizing the danger of emergence of the resistant strains of HIV virus due to non adherence to ART, World Health Organization (WHO) recommended at least 95% of adherence to ART (Stone, Hogan and Schuman et al., 2001)

1.2 Statement of the Problem

Many of the reported adherence rates are still below the WHO recommended rate (Okoronkwo et al., 2013). Understanding of factors associated with non treatment of HIV/AIDS would mitigate the problem. Forgetfulness, lack of understanding of treatment regimens or benefits, ease of drug regimens, disclosure of status, stigma, and depression are some of the factors that has been attributed to non treatment of HIV/AIDS (Murray et al., 2009). It is against this backdrop that the importance of adhering to ART has been widely publicized and accepted as a critical element in the success of ART.

In Kenya, HIV prevalence among women in 2012 was 6.9% as compared to 4.4% among men (Kimanga et al, 2014). Women are more susceptible to HIV infection than men as a result of biological and social disadvantages. The study focused specifically on married women in both monogamous and polygamous unions since they are at a high risk of being infected with HIV and their adherence to ART could also be affected by their marital status. PHDA project focuses on treatment of HIV/AIDS among married couples. Despite efforts by PHDA and other stakeholders in treatment of HIV/AIDS among married couples, the ART adherence among women remains low. This prompted this study to investigate factors associated with treatment of HIV/AIDS among married women in PHDA project, Baba dogo health centre, Kasarani Constituency, Nairobi County.

1.3 Purpose of the Study

The purpose of this study was to establish the factors associated with the treatment of HIV/AIDS among married women in PHDA project, Baba dogo health centre, Kasarani Constituency, Nairobi County.

1.4 Research Objectives

1. To establish the extent to which disclosure of HIV status influences the treatment of HIV/AIDS among married women in Kenya.
2. To determine the influence of stigma on the treatment of HIV/AIDS among married women in Kenya.
3. To assess the influence of ease of drug regimen on the treatment of HIV/AIDS among married women in Kenya.
4. To establish the influence of patient-health-care provider relationships on treatment of HIV/AIDS among married women in Kenya.

1.5 Research Questions

1. To what extent does disclosure of HIV status to partner influence treatment of HIV/AIDS among married women in Kenya?
2. How does stigma influence treatment of HIV/AIDS among married women in Kenya?
3. To what extent does ease of drug regimen influence the treatment of HIV/AIDS among married women in Kenya?
4. How do patient-health-care provider relationships influence treatment of HIV/AIDS among married women in Kenya?

1.6 Significance of the Study

This study is important for understanding the factors influencing treatment of HIV/AIDS among married women in Kenya. The Ministry of Health may benefit from findings of this study as policy makers can formulate and implement informed policies that reduce HIV prevalence as well as ensuring those who need treatment get it without hindrances. Not for profit organizations such as partners for health and development in Africa (PHDA) may also benefit from the findings of this study. Understanding of the factors influencing treatment of HIV/AIDS among married women in Kenya may inform the approaches that they use in their projects to make them more effective. The results of this study may also indirectly be of help to married women in Kenya living with HIV as they will benefit from interventions by policy makers. Scholars might also benefit from this study as they may use its findings as reference in future studies.

1.7 Delimitation of the Study

There are many factors that could influence treatment of HIV/AIDS among married women in Kenya. However, this study focused on four namely disclosure, stigma and ease of drug regimen. The study covered geographical area of Kasarani Constituency in Nairobi County. It involved married women getting treatment at Baba dogo health centre under the Partners for Health and Development in Africa (PHDA) project.

1.8 Limitations of the Study

There were limitations expected in data collection where some of the targeted respondents were unwilling to provide information. The information sought was of sensitive nature and therefore respondents were hesitant to provide it. The researcher explained the purpose of the study and guaranteed them to hold information provided in strict confidence.

1.9 Assumptions of the Study

The assumptions of this study were: that there would be cooperation from the targeted respondents and would answer questions asked truthfully. Another assumption is that the PHDA project managers would allow data collection in regard to their project and offer any other relevant information that would be helpful for this study. Finally, this study presupposed that there would not be any significant change in PHDA project activities that could affect the study before its completion.

1.10 Definition of Significant Terms

Disclosure: in this study disclosure will be the act of making known ones' HIV status to others

Stigma: in this study stigma is the condition of being considered unworthy of devalued in the estimation of others due to having an alleged fault or character trait

Regimen: regimen in this study is a systematic plan (as of diet, therapy or medication) especially when designed to improve and maintain the health of a patient

Treatment buddy: this refers to that gives help or support to another person who needs the support to adhere to a treatment therapy.

Adherence to ART treatment: in this study, adherence to ART treatment is the rate at which a patient under antiretroviral drugs program sticks to it without missed medications

1.11 Organization of the Study

This study has five chapters. The first chapter is a layout of the study that describes contextual and conceptual background of the study. The first chapter defines the problem and outlines the set objectives. The second chapter covers review of relevant literature. It presents the conceptual framework and establishes research gaps from literature reviewed. The third chapter details the methods and procedures that were used to achieve the set objectives. It comprises of the research design, population, sampling, data collection and data analysis methods. The fourth chapter presents data analysis, interpretation and discussion of the study findings. The fifth chapter presents the summary of study, conclusions and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter covers review of relevant literature on the four variables of the study. They include disclosure of HIV status, stigma, ease of drug regimen, adherence to treatment. It also presents the conceptual framework of the study.

2.2 The concept of treatment of HIV/AIDS

Antiretroviral treatment (ART) has changed Human Immunodeficiency Virus (HIV) infection from a fatal disease to a chronic illness which can be managed much like other chronic illness (Machtinger et al., 2005). The importance of high levels of adherence to ART in the management of HIV infection is well documented (Coutsoudis et al., 2007; Mills et al., 2006) and are critical in preventing the development of viral resistance and subsequent immunological and clinical failure of ART. Multiple issues have been identified which may affect adherence, including patient factors (depression, substance abuse, treatment beliefs), treatment factors (regimen ease, side effects), and contextual factors (Olubusoye and Meshesha, 2008).

There are only a few comprehensive studies of adherence to ART and its challenges in Africa. Reda and Biadgilign (2012) assessed the evidence on the challenges and prospects of ART adherence in sub-Saharan Africa. The authors reviewed original and review articles involving HIV-positive individuals that measured adherence to ART and its predictors in the past decade. They found that against expectations, sub-Saharan Africa patients have similar or higher adherence levels compared to those of developed countries. The challenges to ART adherence include factors related to patients and their families, socioeconomic factors, medication, and healthcare systems. Reda and Biadgilign (2012) concluded that despite good adherence and program-related findings, antiretroviral treatment is challenged by a range of hierarchical and interrelated factors. There is substantial room for improvement of ART programs in sub-Sahara African countries.

A study was conducted by Sow et al (2012) to determine factors such as clinical and demographic variables that may affect medication adherence among people living with HIV/AIDS (PLWHA) receiving treatment at the Institute of health and hygiene of Dakar. HIV/AIDS group based in Dakar are affiliated to Non Governmental Organizations which are all

consenting. Groups were enrolled into study but 305 PLWHA volunteered to participate throughout the three months period of the study. The study was conducted with the aid of structured interview assisted questionnaires to obtain information on demographic characteristics such as age, sex, occupation, marital status, educational backgrounds, and source of support. Information on availability and side effects of antiretroviral drugs were also obtained.

The study by Sow et al (2012) indicated that majority of people living with HIV/AIDS interviewed were females (80.3%) while (19.7%) were males. Male respondents show better adherence (91.7%) to ARV medications than female counterparts (83.7%). Subjects in age the age groups 24-35 years which is the most sexually active groups are more vulnerable (59.1%) when compared to other age groups. A large number, (67.2%) were married and there was a significant difference between marital status of PHWHA ($P<0.05$) and level of adherence to antiretroviral medications. Descriptive and Chi-square statistical tests were used respectively to evaluate the distribution of respondent's opinion and investigate the level of association between the variables being considered and respondent's adherence to antiretroviral medications. Sow et al (2012) concluded that there is need to carry out further study in order to fully explore the extent to which marital status and other factors can affect medication adherence of people living with HIV/AIDS.

A study by Olisah, Baiyewu and Sheikh (2009) sought to determine the prevalence of depressive disorder in patients with HIV/AIDS receiving HAART. Their study sought to determine the effect of depressive disorder on adherence to antiretroviral therapy; and to determine the significance of the association. The study was conducted amongst outpatients of Ahmadu Bello University Teaching Hospital, Zaria. A socio-demographic and drug adherence questionnaire was administered. The Centre for Epidemiological Studies Depression Scale (CES-D) was used to screen for depressive symptoms while the Schedule for Clinical Assessment in Neuropsychiatry (SCAN) was used to confirm the diagnosis of depressive disorder. Their results indicated that a total of 310 patients with HIV/AIDS receiving HAART participated in the study. 68.4% were female and the mean age was 35.5 (± 8.97 years). 37.4% had secondary education, while 27.1% had tertiary education. Sixty-six participants (21.3%) had significant depressive symptoms while 14.2% met ICD-10 diagnostic criteria for depressive disorder. Overall, 73% of participants had good adherence to HAART. 63.6% of participants with depressive disorder had

poor adherence to HAART compared to 21.1% of participants without depressive disorder ($p<0.05$). Olisah, Baiyewu and Sheikh (2009) concluded that depressive disorder in patients with HIV/AIDS is associated with poor adherence to antiretroviral medication. Early identification and treatment of depression in such patients may improve antiretroviral medication adherence and treatment outcomes.

A study by Vyavaharkar et al (2007) examined the relationships among socio-demographic factors, social support, coping, and adherence to antiretroviral therapy (ART) among HIV-positive women with depression. Their study was limited to the 224 women receiving ART of 280 women recruited from community-based HIV/AIDS organizations serving rural areas of three states in the southeastern United States. Two indicators of medication adherence were measured; self-report of missed medications and reasons for missed medications in the past month. Descriptive statistics, correlation, and regression analyses were performed to systematically identify socio demographic, coping, and social support variables that predicted medication adherence. In regression analysis, three variables were determined to be significant predictors accounting for approximately 30% of the variability in the self-report of reasons for missed medications.

According to Vyavaharkar et al (2007), coping focused on managing HIV disease was negatively associated, while coping focused on avoidance/denial and numbers of children were positively associated with reasons for missed medications. Coping by spiritual activities and focusing on the present mediated the effect of social support on self-reported missed medications. The relationship of predictor variables to self-report of missed medications was assessed using t-test statistics and logistic regression analysis to determine the odds of self-reported medication adherence. Satisfaction with social support ($p=0.04$), and coping focused on managing HIV disease ($p=0.002$) were the best positive predictors, whereas number of children ($p=0.02$) was the lone significant negative predictor of medication adherence. Vyavaharkar et al.'s (2007) study findings have implications for designing, implementing, and testing interventions based on social support and coping theories for achieving better adherence to HIV medications.

2.3 Disclosure of HIV Status and treatment of HIV/AIDS

Disclosure of HIV positive status has key role in the prevention and control of HIV/AIDS. Reports of non-disclosure and negative outcome of disclosure are also common. Gari, Habte and Markos (2010) found that overall 85.7% of the women at Hawassa University Referral Hospital had disclosed their HIV positive status to sexual partner. Main barriers of disclosure reported by non-disclosed subjects were; fear of abandonment, fear of break-up in relationship and fear of stigma. More than 59% of the women with regular sexual partner faced negative partner reaction after disclosure. Compared with married women, those women who were in a cohabiting relationship were less likely to disclose their HIV status to sexual partners (AOR 0.16; 95% CI 0.04, 0.60); women who did not know HIV status of their sexual partners were less likely to disclose their HIV positive status than their counter parts (AOR 0.02; 95% CI 0.00, 0.08) and women who had been on ART for more than one year were more likely to disclose their HIV positive status than the reference groups (AOR 8.62; 95% CI 1.35, 55.22).

It is important to encourage disclosure and address coping with negative reactions after disclosure. Gari, Habte and Markos (2010) concluded that HIV positive status disclosure to sexual partner in this study was higher than what was reported in other studies in Ethiopia, for Mettu and Gore (69%) but slightly lower than the report from Jimma (94.5%) and Addis Ababa (92%). Negative partner reaction following disclosure was higher. Effectively addressing issues of disclosure was recommended to encourage disclosure and cope with negative reactions after disclosure in People Living with HIV/AIDS (PLWHA). They recommended that interventions on HIV/AIDS should be strengthened, to reduce negative partner reaction following disclosure.

Worldwide heterosexual sex is the most common mode of HIV transmission, with the marital heterosexual route becoming a major contributor in sub-Sahara Africa. Adekanle et al (2015) examined the role of inappropriate HIV status disclosure, after diagnosis, on marital sexual experiences of HIV positive women. The study employed a descriptive cross-sectional design. An interviewer administered questionnaire that elicited information about HIV status disclosure to partners, sexual experiences, condom use and parity was administered to 122 married women living with HIV/AIDS. Participants were referred from peripheral health centres to receive comprehensive HIV care at the State Specialist Hospital, Osogbo, Nigeria.

Adequate training and retraining of health care workers on HCT and HIV status disclosure are important to improve adherence to ART treatment. Adekanle et al (2015) revealed that mean age (SD) of respondents was 33.8 (8.9) years. Only 23.8% of partners had HIV screening, with 3.3% being HIV positive. A majority (62%) of respondents reported experiencing marital sex deprivation since their partners became aware of their HIV status. There was a reported rejection (74.3%) of condom use by partners during sexual intercourse. Fear of becoming infected (85.7%) and blaming the women for their positive status (85.7%) were the main reasons the respondents gave for being sexually deprived by their partners. Adekanle et al (2015) concluded that inappropriate status disclosure due to poor HIV counseling and testing (HCT) practices resulted in sexual deprivation of married HIV positive women. The authors recommended that adequate training and retraining of health care workers on HCT and HIV status disclosure will reduce experience of sexual deprivation among married HIV positive women.

Previous studies in Africa on HIV status disclosure have documented low rates of disclosure that vary between countries. According to Baso (2012), it is estimated that about 1.4 million people in Tanzania are infected with HIV, with 90,000 being infected annually. Limited data indicates that the disclosure rate in Tanzania ranges from 16.7% to 55%. PLWHA have difficulties in disclosing their HIV status to others for fear of negative consequences. This attitude affects the tempo of HIV prevention. Disclosure of HIV positive status in Tanzania has been focused on various areas but its association with social cultural factors remains unclear.

In assessment of the magnitude of HIV status disclosure, Baso (2012) explored determinants of disclosure among people living with HIV/AIDS (PLWHA) attending care and treatment centre at Kisarawe District Hospital. Baso employed a cross- sectional study design where both quantitative and qualitative data were collected from consenting PLWHA. Univariate, bivariate and multivariate analyses were performed using SPSS statistical software. Baso's (2012) findings total of 402 PLWHA were recruited, among them, 132 (32.8%) were males. The mean age of the participants was 42.0 years (standard deviation 9.9) with majority aged 25-49. The overall disclosure rate to somebody was 98% while the disclosure to spouses was 56.3%. The greater number of study participants (43%) disclosed their status to five people and above. Males (74.2%) disclose more to their spouses than females (47.7%), ($p<0.001$). The main determinants of HIV status disclosure were gender (AOR 0.28; 95%CI 0.14-0.56) and receiving counseling

(AOR 0.33; 95%CI: 0.10- 0.81). Qualitative findings also show that cultural beliefs and attitudes influence HIV status disclosure among PLWHA. Baso (2012) concluded that overall disclosure rate is high though relatively low among spouses. Male gender and counseling were the most important determinants of disclosure. Baso (2012) recommended that interventions that target women and expand counseling should be intensified.

A study by Okareh et al (2015) examined if disclosure to their spouses by married women living with HIV/AIDS resulted in conflicts in southwest Nigeria. Fifty-seven women completed a questionnaire on conflict indicators. While 93% disclosed their status within 6 months of diagnosis, 12.3% did so through a third party. More than thirty-six percent (36.8%) confirmed that disclosure led to conflict. Although 19.3% had their conflicts resolved through a third party, 10% suffered separation. Marital status and fear of stigma significantly influence time to disclose ($p < .01$ and $p < .05$), while type of marriage strongly influences whether status will be disclosed ($p < .01$). Okareh et al (2015) recommended that programs for women with HIV should consider conflicts that may arise from disclosure.

2.4 Stigma and treatment of HIV/AIDS

HIV/AIDS-related stigma is recognized as a major barrier to HIV prevention efforts and an impediment to mitigating its impact on individuals and communities. Bharat (2011) reviewed the existing research literature on AIDS stigma in India with the objective of documenting the current status of research, highlighting major findings and identifying key gaps remaining. Thirty publications were identified through a careful search of which a majority focused on stigma assessment and very few on stigma measurements, conceptual aspects of stigma or stigma reduction interventions. Bharat (2011) found that a few standardized stigma measures are available but more are required to assess causes of stigma among general population and compounded and internalized stigma among positive people. Research exploring linkages between stigma and HIV services uptake or the effect of HIV care and treatment programs on stigma levels are largely missing and need to be prioritized.

More research is needed to advance conceptual understanding of stigma within the cultural context of the country including research on the neglected groups. Context-specific (health care, community) interventions are needed to address various forms of stigma – enacted, perceived, internalized and layered–including structural approaches besides inter-personal and information-

based approaches. A major gap relates to meager research on developing and evaluating stigma reduction interventions and needs priority focus. Overall, the review recommends developing a national agenda on AIDS stigma research and interventions to help realize the government's goal of stigma reduction (Bharat, 2011).

The nature and intensity of AIDS stigma are shaped by the social construction of the epidemic in different locales. Stigma therefore needs to be discussed in its cultural context. Thomas et al (2005) conducted a clinic-based study aimed at understanding stigma among 203 HIV positive individuals from Chennai, South India. Their study throws light on the impact of stigma on the quality of life among these individuals. It also discusses the gender implications of stigma. The study by Thomas et al (2005) brings out the findings that actual stigma experienced among those infected with HIV is much less (26%) as compared to the fear of being stigmatized or perceived stigma (97%). Internalizing of stigma was found to have a highly significant negative correlation with quality of life in the psychological domain and a significant negative correlation in the environmental domain. However individuals who did experience actual stigma seemed more determined to live and experience an above moderate quality of life. The implication of this study encourages HIV infected individuals to rise above stigma, avoid internalizing their stigmatized feelings and work toward a better quality of life. Thomas et al (2005) recommended that health providers need to address these issues in their care for HIV infected individuals.

In Kenya, it is estimated that the numbers of people living with HIV (PLHIV) range from 1,300,000 to 1,600,000. This is because many individuals fail to report their status (UNICEF, 2010). At 38 percent, death from HIV/AIDS and its complications is a Kenyan's most likely cause of death, thereby forcing individuals to live in a constant state of awareness to the harsh reality of a positive HIV diagnosis (World Health Organization, 2006). With a countrywide HIV prevalence of 6.3 percent, the disease demonstrates itself to be highly virulent and lethal to equate to such a disproportionately high mortality rate (UNICEF, 2010). As a result, many non-profit organizations currently work in Kenya to aid government efforts to control the HIV/AIDS epidemic. However, the difficulties in treating the epidemic lie deeper than merely supplying sufficient antiretroviral medications and medical personnel. In order to effectively contain and address the HIV/AIDS epidemic, health workers and government officials must also understand and work towards the elimination of the cultural stigma surrounding the epidemic in Kenya.

Although there are no hard indicators demonstrating whether or not women feel stigmatized by an HIV positive diagnosis, one can extrapolate its presence upon surveying surrounding lifestyle indicators including domestic abuse, women in the labor force, nutrition, and ideas of "womanhood."

Stigma is the condition of being considered unworthy of devalued in the estimation of others due to having an alleged fault or character trait (Mwaura, 2008). It is an unfortunate consequence for many Kenyans living with HIV/AIDs. By reinforcing other prejudices especially that of gender, HIV/AIDs-related stigma increases one's vulnerabilities and exacerbates the impact of infection. A violation of fundamental human rights, statistically higher levels of discriminatory and stigmatized practices are aimed towards women than their male counterparts. In Kenya, the community perceives HIV positive women as a disgrace and a threat to the family's social status, security and well-being, thereby stigmatizing the disease. Culturally deemed worthless if unable to bear a child, cultural stigmas regarding motherhood thereby increase the possibility for mother-to-child (MTC) HIV transmission by pressuring high-risk women to have children (Mwaura, 2008).

2.5 Ease of Drug Regimen and treatment of HIV/AIDS

Antiretroviral therapy has led to a substantial reduction in HIV-associated morbidity and mortality. Efficacy of antiretroviral treatment in HIV/AIDS is showing inhibition of viral replication and reduction of viral load to a point where viral particles are undetectable in the blood of infected individuals. This has led to the realization that HIV/AIDS is a chronic illness and hence the quality of life of People Living with HIV/AIDS (PLWHA) needs to be enhanced. Mweemba et al (2010) conducted a literature review to analyze quality of life and adherence to antiretroviral drugs. He observed that antiretroviral regimens are demanding and difficult, with numerous possible side effects and patients need to take the pills for indefinite periods of time. Efficacy of antiretroviral drugs in HIV/AIDS is showing inhibition of viral replication and reduction of viral load to a point where viral particles are undetectable in the blood of infected individuals.

Persons with HIV/AIDS that adhere to medication for at least one year are less likely to experience AIDS related mortality. Hence adherence to antiretroviral regimens is imperative not only for the health of individual patients but also for the health of the public as a whole.

Determination of medication adherence leads to development of innovative, effective interventions needed to facilitate behavior change, improve quality of life and prevent resistance to antiretroviral drugs. Mweemba et al (2010) concluded that the WHO has developed a comprehensive culturally sensitive definition of quality of life. Generally, there is an agreement that quality of life should be measured subjectively from patient self reports and not from clinical assessments. However, there are very few interventions that have been developed to assist persons with HIV/AIDS improve their quality of life. Meanwhile studies on medication adherence have shown that there are three main ways of measuring medication adherence, pill count, self reports and the Medication Event Monitoring System (MEMS). There is need to identify measurement suitable for different economic and cultural groups and this will enhance the development of interventions that would apply to each situation appropriately. Empirical evidence on quality of life and medication adherence can be used to identify, develop and implement interventions that would enhance both adherence to antiretroviral drugs and quality of life.

2.6 Patient-provider relationship and treatment of HIV/AIDS

The relationship cultivated between a patient and a healthcare provider plays a role in determining patient oriented healthcare outcomes. A patient's relationship to their healthcare provider is considered to be stronger when they develop greater trust with their healthcare practitioner. This relationship becomes a critical factor in determining a patient's likelihood of adhering to recommendations. Specifically, the level of trust is particularly important in shaping medication adherence. This is becoming an even greater obstacle to successful healthcare as it is estimated that upwards of 50-70% of patients are non adherent (Cheung et al., 2012).

A good patient–health-care provider relationship may be an important motivating factor for taking and adhering to complex combination drug therapies (Stone et al., 1998). A qualitative study by Schilder et al. (1998) of homosexual youths in United States of America showed that primary-care providers exhibited judgmental behavior, stereotyping, homophobia, and failure to address cultural issues when administering care (Schilder et al., 1998). Such experiences are likely to lead some people with HIV infection to avoid the healthcare system. Factors that have been identified as strengthening patient–health-care provider relationships include perceptions of health-care provider competence, communication quality and clarity, compassion, willingness to

include patients in treatment decisions, adequacy of referrals, and convenience of visiting the doctor (Scott-Lennox et al., 1998). Conversely, frustration for health-care providers is associated with lack of patient adherence to treatment, miscommunication, missed appointments, ease of treatment regimens, and medication side effects (Kristofco et al., 1998). In light of these problems, it is heartening to find that initiatives are underway to encourage health-care providers to work with patients as "partners" in care and to involve representatives from the entire HIV community (Lubin et al., 1998).

2.7 Theoretical Framework

This study will be guided by two theories. The theories include theory of planned behavior and rational choice theory. The subsequent sections discuss the two theories and their link to the study.

2.7.1 Theory of Planned Behavior

Theory of planned behavior was developed by Icek Ajzen (Armitage and Conner, 2001). It is a theory that links beliefs and behavior. The theory states that attitude toward behavior, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions and behaviors. This theory attempts to predict occurrence of behavior as long as that behavior is intentional. Three perceptions serve as the main construct of the model: attitudes, subjective norms and perceived behavior control. Attitude towards the behavior refers to an individual's belief about the outcome of behavior and the evaluation of such an outcome. Subjective norm about the behavior refers to an individual's estimate of the social pressure to perform the target behavior, that is, belief about how significant others may expect them to behave. Perceived behavior control is the degree to which a person feels able to perform the behavior, that is how much an individual has control over the behavior and how confident one feels about being able to enact or not enact the behavior (McConnon *et al.*, 2012).

An adherence level of 95% and above of the prescribed pills is expected among those taking antiretroviral medications. Regarding one's attitude towards a behavior, the belief that if one takes the prescribed pills they will feel better creates the positive attitude that can influence adherent behavior. Also when a patient keeps on evaluating the expected outcomes of taking ARVs, which in this case is improved health outcome that also motivates the individual to continue adhering to the medications. Regarding the subjective norm towards a behavior, refers

to the belief about how other people (and in this case this could be family members, treatment buddies and health care providers) would like an individual to adhere to the medications. So an individual feels the pressure to adhere to the medication since they want to do what other people expect of them. This pressure is also important in ensuring one forms a positive attitude that influences adherence. Regarding the perceived behavioral control, this is where a patient on ART constantly remembers that adhering to the medications can be a difficult task and hence develops mechanisms of enhancing adherent behavior. For instance if an individual finds that they keep forgetting to take their medication, then they can control the forgetfulness by using reminder tools such as an alarm or can identify a treatment buddy to remind them to take their medications.

2.7.2 Rational Choice Theory

The basic premise of rational choice theory is that aggregate social behavior results from the behavior of individual actors, each of whom is making their individual decisions. Gary Becker was an early proponent of applying rational actor models more widely in his studies of discrimination, crime, and human capital (Scott, 2000). This theory attempts to explain behavior in terms of how individuals make choices under the influence of their preferences. The theory develops on similar foundations as those of the social exchange theory where all parties try to maximize their advantage or gain and to minimize their disadvantage or loss hence human beings base their behavior on rational calculations in order to optimize their pleasure or profit.

In rational choice theory, the value of a reward is the 'utility' it has for that person. Utility is an economic term referring to the total satisfaction received from consuming a good or service. In general, utility in someone's behavior is seen in terms of such things as the amount of time that it takes up and the frequency with which they are able to do it (Scott, 2000). The rational choice theory also recognizes that the threat of punishment or the promise of a reward may motivate people just as much as the punishment or reward itself. The threat of punishment, for example, may call forth appropriate behavior from those who wish to avoid the punishment.

Patients on antiretroviral drugs are expected to adhere to the drugs in order to optimize the benefits of these drugs. According to the rational choice theory, this interaction will only continue if the patients find the drugs to be useful. If at any point the patient experiences a 'loss'

then they find adherence to be more costly than rewarding and so will opt to skip medicines, miss clinic appointments or drop out of the treatment program. The adherence behavior is seen as an exchange of perceived costs (loss) and observed drug efficacy (profit). In the context of this study, we would expect patients in an ART program to continuously engage in a calculus of rewards and costs and adherent behavior will only be achieved if they are making a 'profit'. Those who experience a 'loss' will withdraw and seek alternative profitable interactions. Hence if individuals feel that the ART program is costing them time, money and infringing on their lifestyle and social interactions they may not sustain the adherent behavior. Alternatively, if individuals experience benefits from the program such as improved health, the adherent behavior will continue.

2.8 Conceptual Framework

This study conceptualizes that treatment of HIV/AIDS among married women in Kenya as the dependent variable will be affected by disclosure of status, stigma, ease of drug regimen, and patient–health-care provider relationship. This relationship is expected to be moderated by social demographic characteristics. Figure 1 shows the graphical representation of the relationship of the variables.

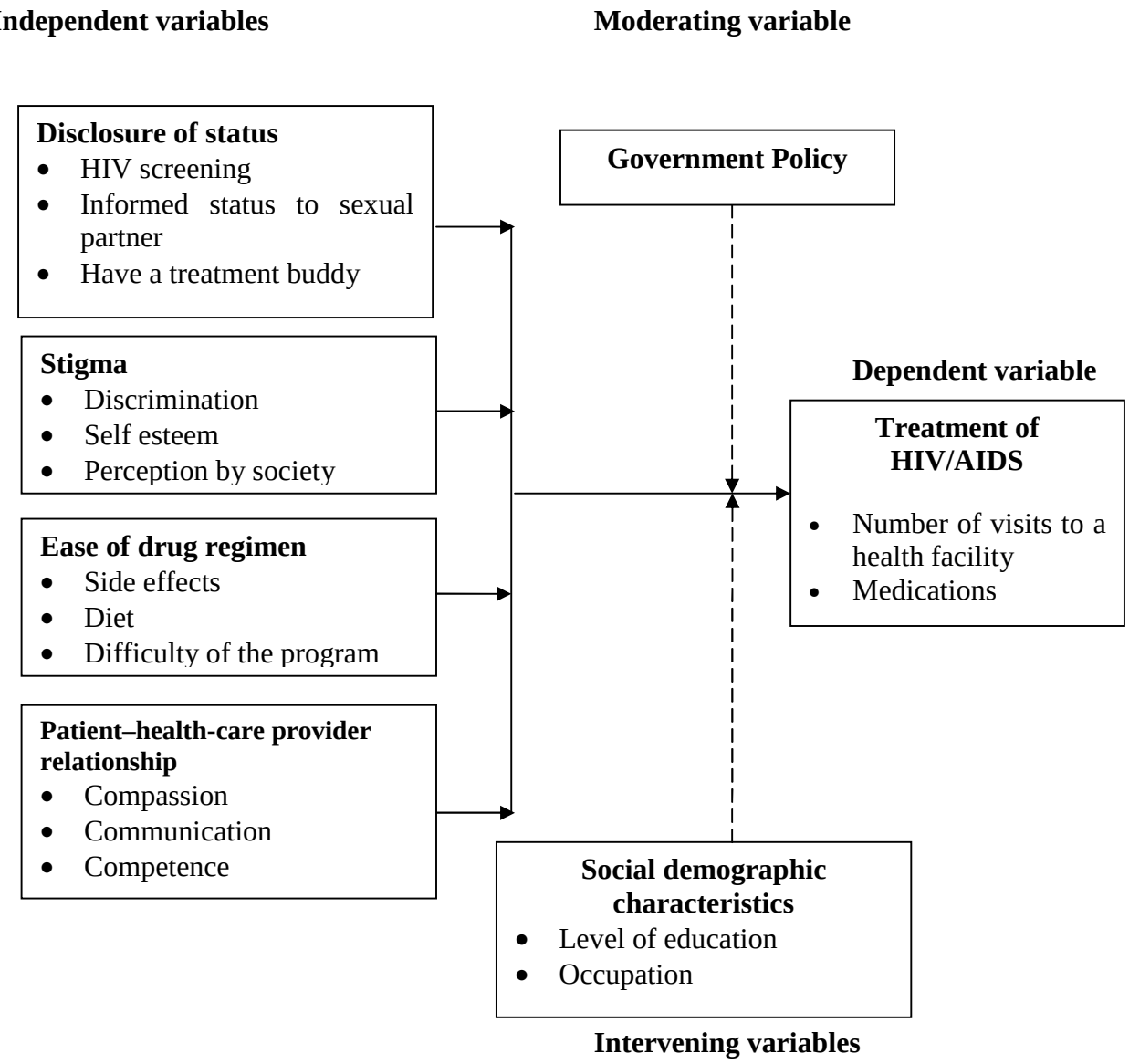

Figure 1: Conceptual Framework

2.9 Research Gap

Many of the studies that cited the factors influencing adherence to ART focused on the general population of women (Olubusoye and Meshesha, 2008; Reda and Biadgilign, 2012; Sow et al, 2012). None has specifically focused on married women. Most of these studies have been conducted outside Kenya and many of them used qualitative methods (Vyavaharkar et al., 2007; Gari, Habte and Markos, 2010; Adekanle et al., 2015; Baso, 2012; Okareh et al., 2015; Bharat, 2011; Thomas et al., 2005; Cheung et al., 2012). Kenya has different social demographic

characteristics from other countries. It is therefore important to understand factors associated with non adherence to ART among married women in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methods and procedures that were used in this study to achieve the set objectives. It entails research design, target population, sampling procedure, methods of data collection and data analysis.

3.2 Research Design

This study used a cross-sectional survey research design owing to its ability to allow quantitative and qualitative data from a large population. Quantitative methods were used to collect and analyze data whereby closed ended questions in questionnaire yielded quantitative data. Qualitative methods were utilized to collect data such as in in-depth interviews, as well as open ended questions in questionnaires. The two methods were useful in triangulation of the study findings.

3.3 Target Population

The target population of this study comprises of married women living with HIV in PHDA project, Baba dogo health centre, Kasarani Constituency, Nairobi County. PHDA project started in 2008 and serves a community of 69,000 people in Baba dogo and its environs. Currently the active adult population in PHDA project is 1606 out of which 489 are men and 1115 are women. Out of the women population, 804 are married. The target population of this study therefore was 804 (PHDA, 2015).

Table 3. 1: Target Population

Category	Figure
PHDA adult population	69000
Active adult population in PHDA project	1606
Men	489
Women	1115
Married women	**804**
Other women	311

3.4 Sampling Procedure and Sample Size

The study used systematic random sampling to select 10% of the target population to take part in the study. Kothari (2004) recommends that 10-30% of the target population is representative of

the target population. The sampling frame was obtained from PHDA project in Baba dogo health centre where 10% of married women living with HIV were selected for this study. Ten percent of 804 is 81 respondents as recommended by Kothari (2004). The sample size for this study was therefore 81 respondents. Every third female patient was recruited to participate in the study. The first respondent was selected purposively. Five project staff were also interviewed. They included the project manager, pharmacist, adherence counselor and community health worker.

3.5 Data Collection Instrument

This study used two instruments to collect data. They included a questionnaire and an interview schedule. The questionnaire had five sections. The first section collected data on social demographic characteristics of the respondents while the second section collected information on disclosure of status. The third section collected information on stigma while the fourth section collected data on ease of drugs regimen. The fifth section collected data on the adherence of ART. Questionnaires were administered by the researcher at Baba dogo health centre.

The interview schedule also had guiding questions and probing questions along the five themes which were the focus of this study. In-depth interviews were administered to the staff of PHDA project as they had important information that was of use in this study by virtue of their position in the project.

3.6 Validity of Research Instrument

Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Validity was ensured by having objective questions included in the questionnaire. The validity of research instruments used in the study were ensured by reviewing and discussing them with the supervisor. The supervisor was able to advice on the most appropriate indicators that measured variables.

3.7 Reliability of Research Instrument

Mugenda and Mugenda (2003) asserted that, the accuracy of data to be collected largely depended on the data collection instruments in terms of reliability. Reliability is the degree to which a research instrument is consistent in capturing information on a phenomenon. This was achieved by pre-testing the instrument to be used to identify and change any ambiguous, awkward, or offensive questions and technique as emphasized by Cooper and Schindler (2003).

In this study, reliability was ensured through pilot testing of the research instruments. According to Connelly (2008) 10% of the sample population was selected to take part in pilot test. This translated into 8 respondents participating in the pilot study. The respondents involved in the pilot study did not take part in the main study to avoid bias.

Cronbach's Alpha was used to test for reliability. The data collection instrument was considered reliable as Cronbach's Alpha value of 0.734 was realized which is above the basic recommended threshold of 0.7. Table 3.2 shows the reliability test results.

Table 3. 2: Reliability Test Results

Overall Cronbach's Alpha	N of Items
.734	21

3.8 Data Collection Procedure

The researcher took the respondents through the questionnaire writing down the responses. This ensured that clarifications were given to the respondents where need arose. The questionnaires collected were consolidated and cleaned in preparation for data analysis.

3.9 Methods of Data Analysis

The study had have both quantitative and qualitative data. Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics such as frequencies, percentages and mean scores were used to analyze quantitative data. Inferential statistics such as Pearson chi-square test were also used to analyze quantitative data. Statistical Package for Social scientist (SPSS) was used as an aid in data analysis. Results of quantitative data analysis were presented in tables and charts.

Content analysis was used to analyze qualitative data. Responses from open ended questions in the questionnaire and interviews were categorized based on emerging themes. The emerging themes were used to supplement quantitative data and make conclusions in the study.

3.10 Operational Definition of Variables

This study has four independent variables and one dependent variable. Disclosure of status was measured by undergoing HIV screening, informing HIV positive status to sexual partner and

having a treatment buddy. Stigma was measured by discrimination due to HIV positive status, low self esteem and being viewed a disgrace in society. Ease of drugs regimen was measured by side effects, diet required to take drugs, and demanding and difficult nature of ART program. Patient–health-care provider relationship was measured by compassion, communication and competence from patients' perspective. Socio-demographic characteristics were measured by age, level of education and occupation. Adherence to ART was measured using self-report of missed medications and reasons for missed medications in the past month.

Table 3. 3: Operational Definition of Variables

Variable	**Type**	**Indicators**	**Type of analysis**	**Scale of measurement**
Disclosure of status	Independent	• HIV screening • Informing HIV status to sexual partner • Having a treatment buddy	Descriptive statistics	• Percentage • Frequency
Stigma	Independent	• Discrimination • Self esteem • Perception by society	Descriptive statistics	• Percentage • Frequency
Ease of drugs regimen	Independent	• Side effects • Diet • Difficulty of the program	Descriptive statistics	• Percentage • Frequency
Patient–health-care provider relationship		• Compassion • Communication • Competence	Descriptive statistics	• Percentage • Frequency
Socio-demographic characteristics	Intervening	• Level of education • Occupation	Descriptive statistics	• Percentage • Frequency
Adherence to ART	Dependent	• Self-report • Missed medications	Descriptive statistics Inferential statistics	• Percentage • Frequency

3.11 Ethical Considerations

The researcher sought approval and obtained a research permit from National Commission for Science, Technology and Innovation (NACOSTI). The researcher sought informed consent from the respondents. The respondents were requested not to indicate any identifying information in the questionnaire. Confidentiality was upheld throughout the study.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents data analysis, interpretation and discussion of study findings. It starts with the questionnaire response and demographic information. It also presents data analysis results based on the study variables which were disclosure of HIV status, stigma, ease of drug regimen, patient provider relationship and treatment of HIV/AIDS.

4.2 Questionnaire Return Rate

In this study, 81 questionnaires were administered. However, 66 questionnaires were filled and returned. The response rate was therefore 81.5% which is considered adequate for analysis and making conclusions. According to Babbie (2002), a response rate of 50% and above is adequate for making conclusions.

4.3 Demographic Information

This section presents the demographic characteristics of the respondents in the study. These include distribution of respondents by their age, level of education and occupation.

4.3.1 Respondents Distribution by Age

Respondents were asked to indicate their age bracket. Half of the respondents (50%) were aged 21-30 years while 28.8% were aged 31-40 years. Respondents who were 41-50 years and above 50 years were 7.6% each while those who were 20 years and below were 6.1%. Table 4.1 shows these results.

Table 4. 1: Distribution of the Respondents by Age

	Frequency	Percent
≤20 years	4	6.1
21-30 years	33	50.0
31-40 years	19	28.8
41-50 years	5	7.6
≥50 years	5	7.6
Total	66	100.0

4.3.2 Respondents distribution by level of Education

The respondents were asked to indicate their highest level of education. The results show that 45.5% of the respondents had primary education while 37.9% had secondary education. Only 6.1% of the respondents indicated that they had no education while 10.6% of the respondents had tertiary education. These results are presented in table 4.2.

Table 4. 2: Highest level of Education

	Frequency	Percent
No education	4	6.1
Primary education	30	45.5
Secondary education	25	37.9
Tertiary education	7	10.6
Total	66	100.0

4.3.3 Respondents Distribution by Occupation

Respondents were asked to indicate what they do for a living. Majority of the respondents (59.1%) were found to be housewives while 21.2% of the respondents were in business. Only 19.7% of the respondents were in formal employment. Table 4.3 shows these results.

Table 4. 3: Respondents Distribution by Occupation

	Frequency	Percent
Housewife	39	59.1
Formal employment	13	19.7
Business	14	21.2
Total	66	100.0

4.4 Disclosure of HIV Status

To establish disclosure of HIV status of the respondents, they were asked whether their spouse accompanied them for HIV screening. Majority of the respondents (57.6%) indicated that their spouse did not accompany them for HIV screening as compared to 42.4% who did. Table 4.4 shows these results.

Table 4. 4: Spouse accompanied them for HIV Screening

	Frequency	Percent
Yes	28	42.4
No	38	57.6
Total	66	100.0

To know whether there is association between spouse accompanying respondents for HIV screening and adherence to ART program, a Pearson chi-square test was done. The results in tables 4.5 and 4.6 show that there is no statistically significant association between spouse accompanying respondents for HIV screening and adherence to ART program (8.150, df=4, p=.086).

Table 4. 5: Spouse accompany for HIV screening and Adherence

		Spouse accompany for HIV screening		Total
		Yes	No	
Rating on adherence to ART	Very poor	0	1	1
	Poor	0	1	1
	Moderate	2	9	11
	Good	11	17	28
	Very good	15	9	24
Missing				1
Total		28	37	66

Table 4. 6: Spouse accompany for HIV screening and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.150[a]	4	.086
Likelihood Ratio	9.152	4	.057
Linear-by-Linear Association	7.796	1	.005
N of Valid Cases	66		

The respondents were asked whether they informed spouse their HIV status. Majority of the respondents (84.6%) indicated that they informed spouse their HIV status as compared to 15.4% who indicated that they did not. Table 4.7 presents the results.

Table 4. 7: Informed Spouse their HIV Status

	Frequency	Percent
Yes	55	84.6
No	10	15.4
Total	66	100.0

Pearson chi-square test was done to establish the association between informing spouse HIV status and adherence. The results in tables 4.8 and 4.9 show that there is a statistically significant association between informing spouse HIV status and adherence to ART program (22.996, df=4, p=.000). Respondents who informed spouse their HIV status were more likely to adhere to ART program than those who did not inform their spouses. These results were collaborated by key informants who observed that married women who have not disclosed their HIV status to partners do not adhere well to treatment. Patrick (not real name) one of the key informants indicated that most married women prefer to involve their partners in their decisions to start ART treatment. This, according to Patrick, affects adherence because if they have not disclosed their status, they do not adhere well. Patrick further noted that if partners have not disclosed status to each other, they tend to hide their drugs which could lead to poor adherence to ART as they take drugs when the other partner is not around. The findings of this study are congruent with those by Gari, Habte and Markos (2010) that the main barriers to disclosure are fear of abandonment, fear of break-up in relationship and fear of stigma.

Table 4. 8: Informing Spouse HIV Status and Adherence

		Informed spouse HIV status		Total
		Yes	No	
Rating on adherence to ART	Very poor	0	1	1
	Poor	0	1	1
	Moderate	6	5	11
	Good	25	3	28
	Very good	23	0	23
Missing				2
Total		54	10	66

Table 4. 9: Informing Spouse HIV Status and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.996[a]	4	.000
Likelihood Ratio	21.249	4	.000
Linear-by-Linear Association	19.876	1	.000

N of Valid Cases	66

The respondents were asked to indicate whether they have a treatment buddy. Majority of the respondents (72.7%) indicated that they have a treatment buddy as compared to 27.3% of the respondents who indicated that they do not have a treatment buddy. Table 4.10 shows these results.

Table 4. 10: Have a Treatment Buddy

	Frequency	Percent
Yes	48	72.7
No	18	27.3
Total	66	100.0

The researcher tested association between having a treatment buddy and adherence to ART program using Pearson chi-square test. The results in tables 4.11 and 4.12 show that there was a statistically significant association between having a treatment buddy and adherence to ART program (16.913, df=4, p=.002). The respondents having a treatment buddy are more likely to have a better adherence to ART program than those who do not have a treatment buddy.

Table 4. 11: Having a treatment buddy and Adherence

		Have a treatment buddy		Total
		Yes	No	
Rating on adherence to ART	Very poor	0	1	1
	Poor	0	1	1
	Moderate	4	7	11
	Good	21	7	28
	Very good	22	2	24
Missing				1
Total		47	18	66

Table 4. 12: Having a treatment buddy and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.913[a]	4	.002
Likelihood Ratio	17.024	4	.002
Linear-by-Linear Association	15.606	1	.000
N of Valid Cases	66		

Respondents who indicated that they have a treatment buddy were asked to indicate who their treatment buddy is. Majority of the respondents (79.2%) indicated that their treatment buddy is

their spouse while 12.5% of the respondents indicated that their treatment buddy is their sibling. Only 2.1% of the respondents indicated that their treatment buddy is their parent while 6.2% of the respondents indicated that their treatment buddy is their friend. Table 4.13 shows these results.

Table 4. 13: Treatment Buddy

	Frequency	Percent
Spouse	38	79.2
Sibling	6	12.5
Parent	1	2.1
Friend	3	6.2
Missing	18	
Total	66	100.0

4.5 Stigma

The researcher sought to establish whether there is dishonor or a sense of shame experienced by respondents due to their HIV status. Majority of the respondents (71.2%) of the respondents indicated that they have not experienced prejudice based on their HIV status. However, 28.8% of the respondents indicated that they have experienced prejudice based on their HIV status. These results are presented in table 4.14.

Table 4. 14: Experienced prejudice based on HIV status

	Frequency	Percent
Yes	47	71.2
No	19	28.8
Total	66	100.0

Pearson chi-square test has shown that there is no statistically significant association between experienced prejudice based on HIV status and adherence to ART program. These results are shown in tables 4.15 and 4.16.

Table 4. 15: Experienced prejudice based on HIV status and Adherence

		Experienced prejudice based on HIV status		Total
		Yes	No	
Rating on adherence to ART	Very poor	0	1	1
	Poor	0	1	1
	Moderate	3	8	11
	Good	10	18	28
	Very good	6	18	24
Missing				1

Total	19	46	66

Table 4. 16: Experienced prejudice based on HIV status and Adherence Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.623[a]	4	.805
Likelihood Ratio	2.165	4	.705
Linear-by-Linear Association	.044	1	.833
N of Valid Cases	66		

To establish respondents' level of self esteem, the researcher asked respondents to rate how they regard themselves after knowing their HIV status. Majority of the respondents (56.1%) indicated that they regarded themselves highly while 37.9% of the respondents indicated that they have moderate regard for themselves. Only 6.1% of the respondents have low regard of themselves after knowing their HIV status. Table 4.17 shows the results.

Table 4. 17: Self esteem after knowing HIV status

	Frequency	Percent
High regard	37	56.1
Moderate regard	25	37.9
Low regard	4	6.0
Total	66	100.0

Tables 4.18 and 4.19 show that there is a statistically significant association between self esteem after knowing HIV status and adherence to ART program (25.120, df=8, p=.001). The results show that respondents who regarded themselves highly were more likely to have a good adherence to ART than those who had a low regard of themselves.

Table 4. 18: Self esteem after knowing HIV status and Adherence

		Self esteem after knowing HIV status			Total
		High regard	Moderate regard	Low regard	
Rating on adherence to ART	Very poor	0	1	0	1
	Poor	0	0	1	1
	Moderate	3	6	2	11
	Good	16	11	1	28
	Very good	17	7	0	24
Missing					1
Total		36	25	4	66

Table 4. 19: Self esteem after knowing HIV status and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.120[a]	8	.001
Likelihood Ratio	16.633	8	.034
Linear-by-Linear Association	11.101	1	.001
N of Valid Cases	66		

The researcher wanted to know the respondents view of society's attitude towards people living with HIV. Majority of the respondents (53%) indicated that society's attitude towards people living with HIV is positive while 34.8% indicated that it is negative. Only 12.1% of the respondents indicated that they were not sure of the society's attitude towards people living with HIV. Table 4.20 shows these results.

Table 4. 20: Society's attitude towards people living with HIV/AIDS

	Frequency	Percent
Positive	35	53.0
Negative	23	34.9
Not sure	8	12.1
Total	66	100.0

Pearson chi-square test results have shown that there is a statistically significant association between society's attitude towards people living with HIV and adherence to ART program (19.470, df=8, p=.013). Respondents who perceived society's attitude towards people living with HIV/AIDS as positive were more likely to adhere to ART program than those who perceived it to be negative or not sure. These results are shown in tables 4.21 and 4.22. The results are congruent with those of key informants. Patrick (not real name) who was one of the key informants noted that married women who suffer from stigma are unlikely to adhere well to ART. Florence (not real name) another key informant indicated that stigma may also hinder disclosure to the other partner and therefore will affect adherence to ART. Findings on stigma reflects observation by Thomas et al (2005) that actual stigma experienced among those infected with HIV is much less as compared to the fear of being stigmatized or perceived stigma.

Table 4. 21: Society's attitude towards people living with HIV and Adherence

		Society's attitude towards people living with HIV			Total
		Positive	Negative	Not sure	
Rating on adherence to ART	Very poor	0	1	0	1
	Poor	0	1	0	1
	Moderate	3	7	1	11
	Good	12	9	7	28
	Very good	19	5	0	24
Missing					1
Total		34	23	8	66

Table 4. 22: Society's attitude towards people living with HIV and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.470[a]	8	.013
Likelihood Ratio	21.718	8	.005
Linear-by-Linear Association	8.204	1	.004
N of Valid Cases	66		

The researcher wanted to know whether or not the society's attitude towards people living with HIV concerns the respondents. Majority of the respondents (81.5%) indicated that they are concerned about society's attitude towards people living with HIV as compared to 18.5% of the respondents who indicated that it does not concern them. These results are presented in table 4.23.

Table 4. 23: Concerned about society's attitude

	Frequency	Percent
Yes	53	81.5
No	12	18.5
Total	66	100.0

The researcher wanted to know the association between respondents' concern about society's attitude and adherence to ART program. Results in tables 4.24 and 4.25 show that there is no statistically significant association between concern about society's attitude and adherence to ART program (0.433, df=3, p=.933).

Table 4. 24: Concerned about society's attitude and Adherence

		Concerned about society's attitude		Total
		Yes	No	
Rating on adherence to ART	Poor	1	0	1
	Moderate	9	2	11
	Good	22	6	28
	Very good	20	4	24
Missing				2
Total		52	12	66

Table 4. 25: Concerned about society's attitude and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.433[a]	3	.933
Likelihood Ratio	.615	3	.893
Linear-by-Linear Association	.001	1	.979
N of Valid Cases	66		

4.6 Ease of Drug Regimen

The respondents were asked to rate in a scale of 1-5 the extent ARVs side effects affected their daily life. In the scale, 1=not at all, 2=little extent, 3=moderate extent, 4=great extent and 5=very great extent. The results in table 4.26 shows that 36.5% of the respondents indicated that ARVs side effects affected their daily life to a little extent while 27% of the respondents indicated that ARVs side effects did not affect their daily life at all. Only 1.6% of the respondents indicated that ARVs side effects affected their daily life to a very great extent while 25.4% and 9.5% indicated that ARVs side effects affected their daily life to a moderate extent and great extent respectively.

Table 4. 26: Extent ARVs side effects affected daily life

	Frequency	Percent
Not at all	17	27.0
Little extent	23	36.5
Moderate extent	16	25.4
Great extent	6	9.5
Very great extent	1	1.6
Missing	3	
Total	66	100.0

Results in tables 4.27 and 4.28 show that there is a statistically significant association between the extent ARVs side effects affected respondents' daily life and adherence to ART program (77.386, df=16, p=.000). Respondents whose daily life was not affected or affected to a little extent by ARVs side effects were more likely to adhere to ART program than those whose daily life was affected to a great or very great extent by ARVs side effects.

Table 4. 27: Extent ARVs side effects affected daily life and Adherence

		Extent ARVs side effects affected daily life					Total
		Not at all	Little extent	Moderate extent	Great extent	Very great extent	
Rating on adherence to ART	Very poor	0	0	0	0	1	1
	Poor	0	0	0	1	0	1
	Moderate	2	3	3	2	0	10
	Good	6	13	7	2	0	28
	Very good	9	7	6	1	0	23
Missing							3
Total		17	23	16	6	1	66

Table 4. 28: Extent ARVs side effects affected daily life and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.386[a]	16	.000
Likelihood Ratio	19.589	16	.239
Linear-by-Linear Association	9.461	1	.002
N of Valid Cases	66		

Respondents were asked to indicate whether they experienced problems in dietary requirements of ART program. Majority of the respondents (81.5%) indicated they do not experience problems in dietary requirements of ART program as compared to 18.5% of the respondents who indicated that they experienced problems in dietary requirements of ART program. Table 4.29 shows these findings.

Table 4. 29: Experienced problems in dietary requirements of ART Program

	Frequency	Percent
Yes	53	81.5
No	12	18.5
Total	66	100.0

Tables 4.30 and 4.31 show that there is a statistically significant association between problems experienced in dietary requirements of ART and adherence to ART program (10.040, df=4, p=.040). Respondents who did not experience problems in dietary requirements of ART are more likely to have a better adherence to ART program than those who experienced problems in dietary requirements of ART program.

Table 4. 30: Experienced problems in dietary requirements of ART and Adherence

		Experienced problems in dietary requirements of ART		Total
		Yes	No	
Rating on adherence to ART	Very poor	1	0	1
	Poor	1	0	1
	Moderate	2	9	11
	Good	3	25	28
	Very good	5	19	24
Missing				1
Total		12	53	66

Table 4. 31: Experienced problems in dietary requirements of ART and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.040[a]	4	.040
Likelihood Ratio	8.119	4	.087
Linear-by-Linear Association	1.682	1	.195
N of Valid Cases	66		

The researcher asked respondents to rate ease of adherence to ART program. The results in table 4.32 shows that 36.9% of the respondents indicated that ART program is easy to adhere while 29.2% indicated that it is moderately easy to adhere. However, 18.5% and 3.1% of the respondents indicated that ART program is difficult and very difficult to adhere respectively. Only 12.3% of the respondents indicated that ART program is very easy to adhere.

Table 4. 32: Rating of ART program Adherence ease

	Frequency	Percent
Very easy to adhere	8	12.3
Easy to adhere	24	36.9
Moderately easy to adhere	19	29.2
Difficult to adhere	12	18.5
Very difficult to adhere	2	3.1
Missing	1	
Total	66	100.0

Tables 4.33 and 4.34 show that there is a statistically significant association between perceived ease of ART program by the respondents and adherence to ART program (85.406, df=16,

p=.000). Respondents who perceived ART program as easy to adhere were more likely to adhere to ART program than those who perceived it as difficult to adhere. These results were collaborated by Florence (not real name) one of the key informants who observed that ease of drug regimen has influence on adherence to ART as it is much easier to adhere to a simple regimen as opposed to a complex one. Patrick (not real name) another key informant added that if the drugs to be taken are few and taken less often, women can easily adhere to the regimen. Results on ease of drug regimen agree with Mweemba et al (2010) who found that ease of the regimen translate to adherence and improvement in the quality of life of People Living with HIV/AIDS (PLWHA).

Table 4. 33: Perceived ease of ART program and Adherence

		Rating on adherence to ART					Total
		Very poor	Poor	Moderate	Good	Very good	
Rating of ART program	Very easy to adhere	0	0	1	2	5	8
	Easy to adhere	0	0	1	11	12	24
	Moderately easy to adhere	0	0	3	13	3	19
	Difficult to adhere	0	0	6	2	4	12
	Very difficult to adhere	1	1	0	0	0	2
Missing							1
Total		1	1	11	28	24	66

Table 4. 34: Perceived ease of ART program and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.406[a]	16	.000
Likelihood Ratio	37.144	16	.002
Linear-by-Linear Association	15.948	1	.000
N of Valid Cases	66		

4.7 Patient–healthcare Provider Relationship

The respondents were asked to describe the empathy of their healthcare provider. Majority of the respondents (60%) indicated that their healthcare provider was compassionate while 27.7% described their healthcare provider as very compassionate. Only 10.8% and 1.5% of the respondents indicated that their healthcare providers were moderately compassionate and less compassionate respectively. Table 4.35 shows these results.

Table 4. 35: Empathy of Healthcare Provider

	Frequency	Percent

Less compassionate	1	1.5
Moderately compassionate	7	10.8
Compassionate	39	60.0
Very compassionate	18	27.7
Missing	1	
Total	66	100.0

Pearson chi-square test in tables 4.36 and 4.37 show a statistically significant association between empathy of healthcare providers and adherence to ART program (23.191, df=12, p=.026). Respondents who described their healthcare providers as compassionate or very compassionate were more likely to have better adherence to ART program than those who described their healthcare providers as moderately compassionate or less compassionate. James (not real name) another key informant added that compassionate healthcare providers boost the self regard of HIV positive patients.

Table 4. 36: Empathy of healthcare provider and Adherence

		Rating on adherence to ART					Total
		Very poor	Poor	Moderate	Good	Very good	
Empathy of healthcare provider	Less compassionate	0	0	1	0	0	1
	Moderately compassionate	1	0	0	5	1	7
	Compassionate	0	1	9	17	12	39
	Very compassionate	0	0	1	6	11	18
Missing							1
Total		1	1	11	28	24	66

Table 4. 37: Empathy of healthcare provider and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.191[a]	12	.026
Likelihood Ratio	19.579	12	.075
Linear-by-Linear Association	8.152	1	.004
N of Valid Cases	66		

The researcher asked respondents to describe their communication with the healthcare providers. The results in table 4.38 show that 47.7% and 41.5% of the respondents described communication with healthcare provider as very good and good respectively. Only 10.8% of the respondents described communication with their healthcare provider as moderate.

Table 4. 38: Communication with healthcare provider

	Frequency	Percent

Very good	31	47.7
Good	27	41.5
Moderate	7	10.8
Missing	1	
Total	66	100.0

Results of Pearson chi-square test in tables 4.39 and 4.40 show that there is a statistically significant association between nature of communication with healthcare provider and adherence to ART program (21.655, df=8, p=.006). Respondents who have good communication with their healthcare provider are more likely to have a better adherence to ART program than those with moderate or bad communication with their healthcare provider. These results are in line with observations made by Patrick that if patient-healthcare provider relationship is good, the patients adhere well to treatment as they easily share the challenges experienced such as side effects and are assured and encouraged by healthcare providers all will be well. Florence (not real name) observed that the communication techniques and information discrimination skills of the healthcare worker will impart either positively or negatively to adherence by the patient.

Table 4. 39: Communication with healthcare provider and Adherence

		Communication with healthcare provider			Total
		Moderate	Good	Very good	
Rating on adherence to ART	Very poor	1	0	0	1
	Poor	0	1	0	1
	Moderate	2	7	2	11
	Good	3	14	11	28
	Very good	1	5	18	24
Missing					1
Total		7	27	31	65

Table 4. 40: Communication with healthcare provider and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.655[a]	8	.006
Likelihood Ratio	18.816	8	.016
Linear-by-Linear Association	13.575	1	.000
N of Valid Cases	66		

The respondents were asked to describe healthcare providers' know-how. Table 4.41 shows that 47.7% and 46.2% of the respondents described healthcare providers' know-how as good and very good respectively. Only 6.2% of the respondents described healthcare providers' know-how as moderate.

Table 4. 41: Healthcare provider's know-how

	Frequency	Percent
Moderate	4	6.2
Good	31	47.7
Very good	30	46.2
Missing	1	
Total	66	100.0

Pearson chi-square test results in tables 4.42 and 4.43 have shown that there is a statistically significant association between healthcare providers' know-how as perceived by respondents and adherence to ART program (44.817, df=8, p=.000). Respondents who perceived their healthcare provider's know-how as good or very good were more likely to have a good adherence to ART program than those who perceived their healthcare provider's know-how as moderate or poor.

Table 4. 42: Healthcare providers' know-how and Adherence

		Healthcare provider's know-how			Total
		Moderate	Good	Very good	
Rating on adherence to ART	Very poor	1	0	0	1
	Poor	0	1	0	1
	Moderate	2	8	1	11
	Good	1	19	8	28
	Very good	0	3	21	24
Missing					1
Total		4	31	30	66

Table 4. 43: Healthcare providers' know-how and Adherence Chi-Square Tests Results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	44.817[a]	8	.000
Likelihood Ratio	38.362	8	.000
Linear-by-Linear Association	27.412	1	.000
N of Valid Cases	66		

The results on patient-healthcare provider relationship confirm observations by Cheung et al. (2012) that the relationship cultivated between a patient and a healthcare provider plays a role in determining patient oriented healthcare outcomes.

4.8 Adherence to ART Program

Respondents were asked to rate their adherence to ART program. The results in table 4.44 show that 43.1% and 36.9% of the respondents rated their adherence to ART program as good and very good respectively. However, 1.5% of the respondents rated their adherence to ART program

as poor and very poor each. Only 16.9% of the respondents rated their adherence to ART program as moderate. The key informants rated adherence to ART program as good or moderately good. Damaris (not real name) described adherence to ART program as "moderately good" while James (not real name) observed that the adherence is good for the married women more so for the ones who have disclosed their status to partners.

Table 4. 44: Adherence to ART Program

	Frequency	Percent
Very poor	1	1.5
Poor	1	1.5
Moderate	11	16.9
Good	28	43.1
Very good	24	36.9
Missing	1	
Total	66	100.0

The respondents were asked to indicate the number of missed doses for one week, two weeks and four weeks. The results in table 4.45 show that adherence to ART program as measured by number of missed doses for one week was 73.6% and for two weeks was 67.9% while adherence to ART program for four weeks was 35.8%.

Table 4. 45: Adherence to ART Program as measured by number of Missed Doses

Missed doses / Weeks	0		1		2		3		4		5		7		Total	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
One week	39	73.6%	8	15.1%	3	5.7%	3	5.7%	0	0%	0	0%	0	0%	53	100%
Two weeks	36	67.9%	9	17.0%	5	9.4%	2	3.8%	0	0%	0	0%	1	1.5%	53	100%
Four weeks	19	35.8%	14	26.4%	8	15.1%	5	9.4%	4	7.5%	3	5.7%	0	0%	53	100%

The findings of this study show that confirm findings by Reda and Biadgilign (2012) that the challenges to ART adherence include factors related to patients and their families, socioeconomic factors, medication, and healthcare systems. Despite good adherence and program-related findings, antiretroviral treatment is challenged by a range of hierarchical and interrelated factors hence there is substantial room for improvement of ART programs in sub-Sahara African countries.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of study findings conclusions and recommendations as per objectives of the study. The objectives of this study were to establish the extent to which disclosure of HIV status influences the treatment of HIV/AIDS among married women in Kenya; to determine the influence of stigma on the adherence of HIV treatment among married women in Kenya; to assess the influence of ease of drug regimen on the treatment of HIV/AIDS among married women in Kenya; and to establish the influence of patient-health-care provider relationships on treatment of HIV/AIDS among married women in Kenya.

5.2 Summary of the Findings

Objective 1: To establish the extent to which disclosure of HIV status influences the treatment of HIV/AIDS among married women in Kenya.

This study established that majority of married women living with HIV in Baba Dogo (57.6%) were not accompanied by their spouses for HIV screening during pregnancy. Majority of married women living with HIV in Baba Dogo informed spouse their HIV status (84.6%). The study found that there is a statistically significant association between informing spouse HIV status and adherence to ART program (22.996, df=4, p=.000). Majority of married women living with HIV in Baba Dogo have a treatment buddy (72.7%). The study established that there is a statistically significant association between having a treatment buddy and adherence to ART program (16.913, df=4, p=.002). Majority of married women living with HIV in Baba Dogo have their spouse as treatment buddy (79.2%).

Objective 2: To determine the influence of stigma on the treatment of HIV/AIDS among married women in Kenya.

The study revealed that majority of married women living with HIV in Baba Dogo have not experienced prejudice based on their HIV status (71.2%). Majority of married women living with HIV in Baba Dogo have high self esteem even after knowing their HIV status (56.1%). The study found that there is a statistically significant association between self esteem after knowing

HIV status and adherence to ART program (25.120, df=8, p=.001). Majority of married women living with HIV in Baba Dogo indicated that society's attitude towards people living with HIV is positive (53%). The study established that there is a statistically significant association between society's attitude towards people living with HIV and adherence to ART program (19.470, df=8, p=.013). The study shows that majority of married women living with HIV in Baba Dogo are concerned about society's attitude towards people living with HIV (81.5%).

Objective 3: To assess the influence of ease of drug regimen on the treatment of HIV/AIDS among married women in Kenya.

This study found that ARVs side effects affected married women living with HIV in Baba Dogo daily life to a little extent (36.5%) or did not affect their daily life at all (27%). The study revealed that there is a statistically significant association between the extent ARVs side effects affected married women living with HIV in Baba Dogo daily life and adherence to ART program (77.386, df=16, p=.000). Majority of married women living with HIV in Baba Dogo do not experience problems in dietary requirements of ART program (81.5%). The study found that there is a statistically significant association between problems experienced in dietary requirements of ART and adherence to ART program (10.040, df=4, p=.040). Majority of married women living with HIV in Baba Dogo indicated that ART program is easy (36.9%) or moderately easy (29.2%) to adhere. The study established that there is a statistically significant association between perceived ease of ART program by the respondents and adherence to ART program (85.406, df=16, p=.000).

Objective 4: To establish the influence of patient-health-care provider relationships on treatment of HIV/AIDS among married women in Kenya.

This study revealed that majority of married women living with HIV in Baba Dogo described their healthcare provider as either compassionate (60%) or very compassionate (27.7%). The study has shown a statistically significant association between empathy of healthcare providers and adherence to ART program (23.191, df=12, p=.026). Majority of married women living with HIV in Baba described communication with healthcare provider as very good (47.7%) or good (41.5%). The study revealed that there is a statistically significant association between nature of communication with healthcare provider and adherence to ART program (21.655, df=8, p=.006). The study found that majority of married women living with HIV in Baba Dogo described

healthcare providers' know-how as good (47.7%) or very good (46.2%). The study also revealed that there is a statistically significant association between healthcare providers' know-how as perceived by married women living with HIV in Baba Dogo and adherence to ART program (44.817, df=8, p=.000).

The study found that majority of married women living with HIV in Baba Dogo rated their adherence to ART program as good (43.1%) or very good (36.9%). Adherence to ART program by married women living with HIV in Baba Dogo as measured by number of missed doses for one week was found to be 73.6% and for two weeks was 67.9% while adherence to ART program for four weeks was 35.8%.

5.3 Conclusions

This study concluded that married women living with HIV should be encouraged to inform spouse their HIV status and have a treatment buddy as these have been shown to promote adherence to ART program. Being accompanied by spouse or not among married women living with HIV does not have an impact on adherence to ART program.

This study concluded that stigma has reduced as majority of married women living with HIV in Baba Dogo have not experienced prejudice based on their HIV status. Reduced stigma has led to high self esteem even after knowing their HIV status among married women living with HIV. The fact that married women living with HIV in Baba Dogo have termed society's attitude towards people living with HIV as positive serves to show reduced stigma. This study concluded that high self esteem encourages adherence to ART program hence those who regarded themselves highly were more likely to have a good adherence to ART than those who had a low regard of themselves.

This study concluded that ARVs side effects affected married women living with HIV in Baba Dogo daily life either to a little extent or not at all. This is encouraging since the study established a statistically significant association between the extent ARVs side effects affects people living with HIV and adherence to ART program. This study concluded that ART program is easy or moderately easy to adhere. This is important because the study have established a statistically significant association between perceived ease of ART program by the respondents and adherence to ART program.

This study concluded that healthcare providers at Baba Dogo health centre have empathy as they were described by married women living with HIV in Baba Dogo as either compassionate or very compassionate. This is critical to adherence to ART program as this study has shown a statistically significant association between empathy of healthcare providers and adherence to ART program. The same apply to communication between patients and healthcare providers as well as perceived healthcare providers' know-how by the patients.

The study concluded that adherence as measured by self report matched adherence measured using missed doses for one and two weeks but differed with that for four weeks. This could be attributed to recall bias among the studied population.

5.4 Recommendations

This study recommends that married women living with HIV should be encouraged to inform spouse their HIV status and have a treatment buddy to enhance adherence to ART program. Although stigma has reduced, the government through the Ministry of Health and other stakeholders should sustain efforts to ensure it does not recur as it can negatively affect adherence to ART program. Ease of drug regimen has encouraged adherence to ART program hence manufacturers and researchers should put more efforts towards even easier drug regimen. Patient-healthcare provider relationship should be positive as it can affect adherence to ART. Healthcare providers should be compassionate and ensure good communication with their patients. The healthcare providers should also be knowledgeable as the perception of patients on their know-how can affect adherence to ART.

5.5 Suggestions for Further Research

1. This study suggests that further research should be done to investigate whether adherence vary by disclosure of HIV status to close family members and friends or to the public.

2. Further research should be carried out to find out factors that have contributed to reduced stigma.

3. Further research should be done to establish elements of patient-healthcare provider that have greatest impact on adherence to ART.

4. HIV/AIDS drugs manufacturers and other stakeholders to carry out more research to make drug regimen easier to adhere as this will result in higher adherence to ART.

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APPENDICES

Appendix I: Questionnaire for Married Women Living with HIV in Baba Dogo PHDA

Instructions

Kindly tick or write where appropriate in the spaces provided.

Section A: Demographic Characteristics

1. Kindly indicate your age ……..

2. What is your highest level of education?

   No education [ ]

   Primary education [ ]

   Secondary education [ ]

   Tertiary education [ ]

3. What is your occupation?

   Housewife [ ]

   Business [ ]

   Formal employment [ ]

Section B: Disclosure of status

4. Did your spouse accompany you for HIV screening?

   Yes [ ] No [ ]

5. If no above, why?

   ……

   ……

6. Did you inform your spouse about your HIV status?

   Yes [ ] No [ ]

7. If no above, why?

……

……

8. Do you have a treatment buddy?

Yes [ ] No [ ]

9. If yes above, who?

Spouse [ ]

Sibling [ ]

Parent [ ]

Friend [ ]

Section C: Stigma

10. Have you experienced discrimination based on your HIV status?

Yes [ ] No [ ]

11. If yes above, explain?

……

……

12. How do you regard yourself after knowing your HIV status?

High regard [ ]

Moderate regard [ ]

Low regard [ ]

13. What is the society's attitude towards people living with HIV?

Positive [ ]

Negative [ ]

Not sure [ ]

14. Does the society's attitude towards people living with HIV described above concern you?

Yes [ ] No [ ]

Section D: Ease of Drug Regimen

15. To what extent have side effects of ARVs affected your daily life?

Not at all [ ]

Little extent [ ]

Moderate extent [ ]

Great extent [ ]

Very great extent [ ]

16. Have you experienced problems sticking to the dietary requirements of ART?

Yes [ ] No [ ]

17. If yes above, explain how?

……

……

18. How would you rate the HIV treatment program?

Very easy to adhere [ ]

Easy to adhere [ ]

Moderately easy to adhere [ ]

Difficult to adhere [ ]

Very difficult to adhere [ ]

Section E: Patient–health-care provider relationship

19. How would you describe the empathy of your healthcare provider?

Not compassionate [ ]

Less compassionate [ ]

Moderately compassionate [ ]

Compassionate [ ]

Very compassionate [ ]

20. How would you describe communication with your healthcare provider?

Very poor [ ]

Poor [ ]

Moderate [ ]

Good [ ]

Very good [ ]

21. How would you rate your healthcare provider's know-how?

Very poor [ ]

Poor [ ]

Moderate [ ]

Good [ ]

Very good [ ]

Section F: Adherence to ART

22. How would you rate your adherence to ART?

Very poor [ ]

Poor [ ]

Moderate [ ]

Good [ ]

Very good [ ]

23. How many doses of medication have you missed in the last:

One week ……..

Two weeks ……..

Four weeks ……..

Appendix II: Interview Schedule

The researcher will be guided by the following questions in face-to-face interviews with the project managers or staff:

1. How would you describe adherence to ART among the married women in PHDA project?

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2. Do you think disclosure of status has affected adherence to ART among the married women in PHDA project? If yes, how? If no, why?

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3. What is the role played by stigma in adherence to ART among the married women in PHDA project?

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4. Do you think ease of drug regimen has influence on adherence to ART among the married women in PHDA project? If yes, how? If no, why?

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……
……

5. Does patient–health-care provider relationship affect adherence to ART among the married women in PHDA project? If yes, how? If no, why?

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……