SPOUSE SUPPORT, SOCIO-ECONOMIC STATUS AND ADHERENCE TO ANTI-RETROVIRAL THERAPY AMONG PATIENTS ATTENDING ART SERVICES IN BUTABIKA HOSPITAL, KAMPALA UGANDA

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A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH AND GRADUATE TRAINING IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF COUNSELLING PSYCHOLOGY OF KYAMBOGO UNIVERSITY

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DECLARATION

I, Nabulya Immaculate, affirm that this dissertation titled, "Spouse Support, Socio-economic Status and adherence to ART among Patients attending ART Services in Butabika Hospital", is my own original work, prepared and developed through my personal effort. To the best of my knowledge, it has never been presented to any other academic institution for any award.

Signed ..... Date.....

APPROVAL

This dissertation by Nabulya Immaculate, titled ''Spouse Support, Social-economic Status and Adherence to ART among patients attending ART Services in Butabika Hospital", has been submitted for examination with our approval as university supervisors.

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DEDICATION

To the Mutesaasira Family and to all HIV and AIDS patients who do their utmost to live positively.

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ABBREVIATIONS AND ACRONYMS

AIDs	Acquired Immune Deficiency Syndrome
APA	American Psychological Association
ART	Anti-Retroviral Therapy
HIV	Human immunodeficiency Virus
PLWH	People Living with HIV
SAT	Social Action Theory
UNAIDS	United Nations Program me on HIV/AIDS
CVI	Content Validity Index of instruments

ABSTRACT

This study assessed the correlation between support from the spouse and adherence to ART and how socio-economic status modified this relationship. Using a cross-sectional survey, data was collected from 268 patients on ART in Butabika hospital, being aided by a structured questionnaire. Descriptive and inferential statistics were used in analyzing the data mainly through Pearson correlation and regression analysis. It was revealed that instrumental support was strongly and significantly ($r = .65$, $P<0.01$) related to adherence to ART. A strong affirmative, and substantial relationship ($r=.64$, $P<0.01$) also existed between informational support and Adherence to ART. It further revealed that a strong positive and significant relationship existed between emotional support ($r = .62$, $P<0.01=$) and adherence to ART. Social economic status significantly modified ($\beta = .23$, $p<0.05$) the relationship between spouse support and adherence to ART. Hence, physical and financial support given by the spouse as well as love, understanding and re-assurance, plus encouragement to live positively by giving relevant information on how to use drugs enhances the resolve of HIV patients to consistently use ART and strengthens intention to stay on therapy. Social economic status enhanced fellow feeling and understanding from the spouse motivating him to provide financial and information support on positive living. Therefore, HIV and AIDS programs should empower PLWH and their spouses economically so as to increase spouse support in adherence to ART. The financial empowerment of HIV and AIDS patients could increase Adherence to the level that will enhance more positive living among PLWH. Further investigation is needed to establish the relationship between instrumental, emotional, informational support and adherence to ART plus the moderating role of socio-economic status on the relationship between spouse support and adherence to ART.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Antiretroviral Therapy (ART) stands great importance in the happiness and positive living of persons living with HIV. The therapy is also responsible for sustainably contributing to diminishing the burden that HIV poses to 17 million people globally living with HIV (UNAIDS, 2016). Evidence over time has indicated that adherence to ART is still the only reliable in increasing life expectancy levels and supporting better living for PLWHIV, there was need to examine how the key factors that are known to affect utilization of ART (Tran et al., 2016), are affecting Adherence among Patients Attending Art Services.

This introduction therefore offers the foundational perspective through the study background, conceptual, theoretical and contextual backgrounds, indicating the problem's magnitude, study guiding objectives, hypothetical constructs, study justifying statement, study implications, the scope as well as the conceptual framework.

1.1 Background to the study

The section unpacks the historical trends, theoretical debates alluding to the discussions, conceptualizing constructs that provide measurements as well as contextualization of the problem. The theoretical debate described the philosophy which guided the study, while the historical perspective examined the earlier overview of the study variables. The contextual perspective looked at information on the ground while the conceptual perspective explained the study's essential variables.

1.2.1 Historical perspective

Interest in the use and adherence to ART started in the early 1980s following the description of AIDS in 1981 as well as the move to isolate HIV in 1983 (Vella et al., 2012). In 1985, the development of a diagnostic antibody test was witnessed followed by the conduct of; *"clinical trials with direct-actingdideoxynucleoside reverse transcriptase inhibitors (NRTIs) and azido thymidine (AZT)"* that by 1987, AZT medicine presented with greater survival at 24 weeks. However, AZT treatment suffered from low levels of adherence tooted in its perceived side-effects (Vella et al., 2012). In 1987, AZT, was later presented as zidovudine (ZDV) for only patients presenting critical conditions of HIV. Other inhibitors, such as "zalcitabine (ddC), didanosine (ddI) and stavudine (d4T)," were accepted for HIV-1 infection, but adherence rates were also affected by the perceived toxicities among patients (Vella et al., 2012). With a combination of ZDV, ddC or ddI was administered, and the impact in terms of $CD4^+$ lymphocyte rise and endurance was better. Nevertheless, the rate of adherence was poor due to the fact that these drugs constrain; *"cellular DNA polymerase-α and mitochondrial polymerase-λ"* which is dose-dependent (Lenjiso et al., 2019). However, as time moved on, comparatively harmless therapy was developed with less frequently-administered doses thus increasing the levels of tolerability and safety when the cytidine analog lamivudine (3TC) was developed (Lim et al., 2021).

By 1996, drugs were developed from different classes, such as the *"non-nucleoside reverse transcriptase inhibitors (NNRTIs) and protease inhibitors,"* both having a direct effect on HIV (Mahlich et al., 2016). In 1996, Nevirapine became the first NNRTI to be approved in 1996 and it is still being used across the globe. The use of nevirapine improved resistance levels of patients although it cannot be used as a monotherapy but it is given as part of a three-drug regimen containing two nucleosides for quite effectiveness (Ekong et al., 2020). For protease

inhibitor, saquinavir was the first to be approved in 1995 as a hard gel capsule, but because it had very poor bioavailability, tolerability was compromised (Hull & Montaner, 2011). This called for a high-dose saquinavir combined with low-dose ritonavir that helped to standardize the pharmacologically improved protease inhibitor treatment recommended for contemporary protease inhibitors and this came with improved adherence (Vella et al., 2012).

Since 2001, there was introduction of ART in Africa coupled with the global drive for scaling up antiretroviral therapy across the world and mainly in the developing world. This presented one of the most prominent programs in the realm of global public health security (Schwartländer et al., 2006).

In Uganda, Antiretroviral Therapy (ART) has dominated the; *"National Program for Comprehensive HIV/AIDS Care and Support"* since 2001. For over the past two decades in Africa, there has been progress in antiretroviral therapy with new relatively safer and strong antiretroviral medicine integrated into *"NRTI, NNRTI and protease inhibitor"* and to new classes such as entry/attachment inhibitors and integrase inhibitors (Maeda et al., 2019). The studies towards the improvement of antiretroviral therapy have been supported greatly by the community of people living with HIV/AIDS (PLWHA), oriented research efforts and have influenced the accelerated regulatory approval of many new drugs. This has contributed to an increase in the rates of adherence to ART (Maeda et al., 2019).

Initiatives for making it easier for PLWHIV to meet the demands of ART have been undertaken such as; coming up with a *"single tablet, fixed-dose and once-daily combinations."* These initiatives have contributed to higher treatment adherence outcomes linked to improved adherence (Günthard et al., 2016). In contemporary context, all ART treatments are suitably stronger and tolerable (Vella et al., 2012).

Some studies have attributed the effectiveness of drugs to the dynamics nature of patient physiognomies, infection status, mutations and virus genotype. In this case, class-sparing alternatives have been adopted to simplify ART which has increased tolerability, and in turn improved adherence and cost reduction. However, now that all of this is done, major question remains on why ART adherence levels are still low (Vella et al., 2012).

1.2.2 Conceptual perspective

Conceptually, this study was based on three variables namely; Spouse Support; Socio-Economic and ART Adherence. Spouse Support was the independent variable, the moderating variable was socio-economic status, while the dependent variable was adherence to ART.

Debate to conceptualize spouse support is ongoing. Generally, spouse support is perceived as any relations linking various procedures for emotional, perceptional, and physical support extended to partners by their spouses, who may include close relatives such as parents and siblings, marital partners and close friends (Suchet&Barling, 1986). On the other hand, Kasirye (2015) defines social support as Interpersonal transactions involving diverse forms of support, provided to a patient by a close relative, friend or significant other. The above conceptualization tends toward the interpersonal Trans active interactions that embed one-dimensional support from the husband to the wife. On the other hand, spouse support is a fundamental factor in promoting better health because married people are said to be having more probability for long-term survival as compared to their unmarried counterparts (Mallory, 2012). Therefore, spouse support refers to the psychosocial and material assistance extended to a sexual partner living with HIV in their pursuit to adhere to ART.

Spouse support is measured in three dimensions, namely, instrumental support, informational support and emotional support (Mabweazara et al, 2018). According to Nakandi et al (2021),

Instrumental support is physical, tangible and logistical facilitation given by significant others, to enable the patient easily aces healthcare. It can be in the form of financial help, transportation to a health care facility, willingness to do some chores or run errands for the patient (Moosa et al, 2019). A patient who is encountering a financial stress can be given money, purchase needed drugs, food items or pay for other necessities so as to reduce negative coping strategies (Muiyuro, 2020). On the other hand, informational support is offering of advice, information, or feedback to a patient (Bukenya et al, 2019). This kind of support is done to equip the patient with the necessary information to access or utilize medication effectively (Bukenya et al, 2019). Emotional support is affiliative support where significant others give the patient positive affect, empathy or encouragement (Moosa et al ,2019). It is sometimes referred to as affection support or social interaction and it involves others making themselves available to do fun things with the patient through expression of love and affection (Salwan, 2020).

Studies (Nabunya et al, 2020, Bujenya et al, 2019) increasingly show that each of these dimensions is crucial in enabling a person meet his/her health needs through interaction with other people (Karren et al., 2010). There is also evidence to show that when significant others Proved information on the benefits of sticking treatment drugs and financial assistance to seek treatment, the likelihood of patients utilizing treatment increases. Partners, Parents and friends who are supportive and open to professional support have a significant influence on the good health and wellbeing of person living with HIV (Monteiro, 2014). Significant others can serve as an influencing factor when there is a strong bond between children and their families, parental involvement in a child's life, supportive parenting which meets financial, emotional, and clear limits and consistent enforcement of discipline. The three dimensions provide for effective communication in relationship built on high levels of intimacy and the level of satisfaction among couples. Evidence indicates that there is conflict among couples and unsupportive interactions presenting higher likelihood of adverse health outcomes that

unhappiness in marriage worsens illness, they feel more depressed, increases drinking and worsens the feeling of isolation which is not the case among people who are happily married (Mallory, 2012). Conroy, et al. (2019) observe that individuals initiating ART often select their spouses as treatment guardians to assist in providing treatment reminders, food to take with ART and others in Malawi.

Social network and social support systems are vital in form of spouse support to HIV positive patients by inspiring them to take their drugs as a way of promoting ART adherence, thus being perceived fundamentally motivating attainment of treatment efficacy. Ranging from disclosing HIV status to the partner to emotional support, spouse support is very significant in influencing the support of significant others (Oluwabusayo, et al., 2018). Despite the efforts by heath care workers to promote HIV status disclosure to one's family, women hold the fear of being left and abandoned (McKinney, et al., 2014. P.3). In this study, spouse support was perceived as a patient on ART receiving encouraging help from the partner such as physical and financial (instrumental), information on how use drugs and live positively(informational) and love, care, understanding and re-assurance (emotional).

The term socio-economic status is applied in reflecting the different aspects of social stratification, such as income, education, and occupation. The APA (2013) has argued that socio-economic status connotes the social standing mainly their social class. Socio-economic status is normally measured basing on the education levels, income levels and the type of occupation. However, the classification of people according to socio-economic status by all means come along with alienations and inequities relating to access to resources anchored on privileges, power dynamics as well as control (APA, 2013).

Therefore, socioeconomic levels affect ART adherence significantly in struggling economies like Uganda, being linked to the variations in income levels, level of education type

of occupation and adherence to ART (Peltzer & Pengpid, 2013). Economically driven dynamics mainly poverty levels, levels of unemployment and food insecurity are in most cases integrated with socially driven dynamics mainly reliance on traditional medicine, religious belief systems, level of family support, support from the partner coupled with disclosure of HIV status. These combined have through their lower and negative scores hindered adherence to ART (Moomba and VanWyk2019).

The effect of suboptimal adherence to medicine has increased morbidity and mortality coupled with potentiality of drug-resistance viral transmission as well as failure to achieve viral suppression. In another debate, such ineffectiveness is partly attributed to a combination of a number of stakeholders baring responsibilities such as patients, illnesses, relationship between patient and health workers as well as the therapy (Falagas et al, 2008). Patient-related determinants include, socio-economic status including education and the way it shapes one's financial stability and health literacy as health security resources.

On the other hand, levels of income determine one's housing, recreation happiness and general health care (Alvi, et al, 2019). Besides, the nature of one's job determines stress levels and admittance of health services including one's psychosocial wellbeing which are core drivers of adherence to medication.

Tran et al., (2016) affirms that although there are fewer inequalities regarding access and adherence to ART that some accounts allude that the poor tend to start treatment in time and stick to the treatment plans as compared to the rich while those employed are more likely to seek and receive medical attention more than the unemployed in the same way it is with the educated and the uneducated. Therefore, in this study, socioeconomic status was taken to be a social and economic position of the patient or significant other resulting from a good financial position, sufficient education, occupation and employability to enable one have good quality

of life (Saleem, 2019). Usually, a person with sufficient income and employability s able to earn enough money to support the required ART needs.

The use of ART has improved human life quality index of HIV/AIDs victims across the globe by reducing the risk posed by the morbidity linked to HIV but also the related mortality in countries that are relying on ART (Achappa et al, 2013). Therefore, AIDS presents no more as a mysterious and unmanageable protracted illness. However, for this to be achieved, ART adherence levels ought to be registered to at least 95% if optimal benefits are to be realized (Achappa et al, 2013). Adherence has been regarded as one's discipline of sticking to the treatment plan, take medications as prescribed in the right intervals with clear adherence to instructions relating to food supplements together with additional medications (Sahay et al., 2011). For long, experience reveals that adherence has proven a problematic element of chronic illness management since 2013, it was established that patients tend to register non-adherence average rates of 24.8% thus, affecting the performance of the medication (Achappa et al, 2013).

Adherence is also viewed as the consumption of medicine and following to interventions correctly according to prescription and it is assessed using different methods. In this case, adherence levels not only help in classifying the patient but also provide a basis for future management of the illness (Landovitz, 2011). Both direct biologic markers methods and body fluid assays methods can be applied to respond to case management of illness based on the possibility for self-reporting, interviewing, pill counting, pharmacy recording, computerized medication capping as well as monitoring of the viral load.

It was argued that poor adherence to ART was attributed to mobility among patients for labor or get together arrangements, stigma, getting little or interrupted ART adherence education, consumption of alcohol as well as the reliance on alternative HIV cure medicines. Besides, other accounts have pointed to the perceived side effects of ART medication, fatigue

derived from treatment, the belief that only God can cure HIV as well as food insecurity (Bukenya et al., 2019). In this study adherence was taken to be an HIV and AIDs patient actively seeking for, effectively utilizing and intention to stick to ART.

1.2.3 Theoretical perspective

Grounded in the Social Action Theory (SAT), this research is anchored on the central argument made (1991) that the social environment of an individual, self-change, and self-regulation in determining health seeking behavior. These three domains provided a basis for explaining the correlation between spouse support, socio-economic status and the levels at which patients are adhering to ART. The assumption by SAT is that social environment coupled with individual attributes, spouse-support and socio-economic status shape the processes of self-change through which individuals modify their actions from non-adherence to adherence, and this is maintained through self-regulation.

The social action theory asserts that health behavior such as adherence to ART is linked to self-changing and self-regulating behavioral into advanced actions such as problem-solving skills, self-motivation, enhancement of propagative capabilities in form of feeling empowered and as well as the socialization processes (Mukumbang et al., (2017). However, it ought to be noted that such self-change or self-regulatory processes can be based on the nature of the support from the spouse and general perception of one's socio-economic status.

When individuals have a favorable social environment in form of support from the spouse and have progressive personal attributes such as high educational, occupational and income levels, they find it very easy to adopt adherence health behavior and maintain them as compared to those with unfavorable social environment and personal attributes (Remien et al., 2006).

Empowerment denote the feeling of self-control, self-awareness as well as the ability to influence change through patient-spouses and significant others' relations that culminates into transformation for adherence to ART (Mukumbang et al., 2017).

Therefore, SAT was adopted by this study for easy examination of the association among the three variables of spouse support, socio-economic status and adherence to ART. The health behaviors that were examined were perceived as being molded by wider social-environmental structures coupled with intrinsic factor that determines that nature of behaviors change. Contextually, Ewart attributes behavioral change to one's demographic characteristics, standards of living, levels of social capital, and social structures not excluding the physical factors in the environmental.

1.2.4 Contextual perspective

It has been observed that there is a move by UNAIDS by 2030 to have eliminated HIV/AIDS which is hardly attainable without optimal adherence to ART by the 2.12m PLWIHV (Alvi, et al., 2019). With ART center establishment in various parts of the world, service-delivery points have been developed to provide free ART contributing to the control of the deadly infection into a manageable disease (Alvi, et al., 2019). However, there is need for realization of optimal adherence of at least 95% so as to sustain the benefits of ART up from the 81.3% by 2019 (Alvi, et al., 2019). This has been further explained by World Health Organization as a multidimensional portent determined by socio-economic factors that are either linked to the patient, others are linked to the clinical circumstances, others related to the nature of the therapy itself while others are linked to the healthcare system (Alvi, et al., 2019).

The African experience has presented generally lower levels of ART adherence that in less than the first two (2) years of being initiated on treatment, patients adopt non-adherence behavior as it is the case in South Africa with a range of 63% to 88% adherence levels (Moosa

et al., 2019). Prior research on test and treat patient cohorts in Africa were measured and indicated that less than 80% patients adhere in their first year after being initiated on ART (Molemans, et al., 2019). Africans in the south of Saharan desert bare the highest HIV disease burden globally with 70%which is 1.1 million people proportioning from 1.7M individuals infected globally, contributing to about two-thirds as of 2018 (Damulak et al., 2021). Still in 2018, about 770,000 AIDS-related deaths got registered globally but Africa contributed 470,000 mainly attributed to poor ART adherence (Damulak et al., 2021). By 2019, African rate of viral load suppression was only 59% which was far less from the realization of the 90-90-90 target of 2020 by the UN target of ending HIV/AIDS through testing and treatment from viral suppression (Damulak et al., 2021).

Adherence to ART in Uganda as a struggling economy is still alarming as the country is grappling with high frequency of HIV at *"7.3% among 15–49-year-old,"* (Uganda AIDS Commission, 2017). Despite the development of ART making HIV a manageable lingering illness, ART adherence is required to be at 95% for the desired outcomes to be realized (Alvi, et al., 2019). However, it has been indicated that the levels of adherence to ART in Uganda are about 66% which is still very low to register positive outcomes (Nabunya et al., 2020). The role of social support has been upheld by a number of empirical studies specifically by family members who are core in affecting the levels of sticking to medicine. The Ugandan context reveals that both cohesive and supportive families result into self-reported adherence to ART among HIV-infected patients (Damulira, et al., 2019). Besides, functional families significantly contribute high quality of life through adherence to ART (Damulira, et al., 2019). Furthermore, Nabunya et al., (2020)'s study realized that socio-economic status aspects are fundamental in a patient's adherence to ART. The was need to assess the role played by social support and social economic status in the adherence to ART among HIV patients in Ugandan context.

The study was done at Butabika National mental health referral hospital. Being a national mental health hospital with an operations history spanning from 1955, the institution has built stable psychosocial support practices that enhance social support (Kasirye, 2015). So, it was possible for respondents to easily identify them. In addition, the hospital applies social support in its mental health therapy so has experience in providing services and evaluating the quality of social support, so could readily understood the importance of the research problem and provide a favorable research environment.

Further, the hospital is an important platform for research into psychosocial issues. It serves as the psychiatric teaching hospital for various universities for certificate, diploma, undergraduate and postgraduate training, hence it is used to handling research students. The Hospital also handles a busy outpatient department with contact of about 350 clients per day in the general healthcare ward. The hospital is accommodating the largest HIV Care program in KCCA that started in 2000s following Nakimuli-Mpungu (2017) study recommendations. A large number of HIV/AIDS patients were being admitted to the facility, so provided opportunity for accessing a large sample of respondents from all walks of life. This study, therefore examined the correlation between spouse support, socio-economic status and adhering to therapy among ART clinic clients in Butabika hospital.

1.3 Statement of the Problem

Patients' devotion to undertaking antiretroviral therapy (ART) seems fundamental in HIV viral suppression, as well as improving the general welfare of infected persons through decreased likelihood of infecting their spouses who are sero-negative, declined illness and better quality of life (Damulak et al., 2021). In developed countries, optimal adherence to ART hinges on spouse support and socio-economic status (Conroy et al., 2017; Tran et al., 2016).

The government of Uganda, profit and non- profit organizations and other development partners, such as, Joint Clinical Research Centre, Mild may Uganda, The AIDS Support Organization (TASO) among others have endeavored to provide support to develop capacities in HIV/AIDS prevention and control and many others (Okware et al., 2005). In all of these initiatives, the primary intent has been to promote spouse's support and socio-economic empowerment of HIV/AIDS patients in a bid to suppress HIV and improve their well-being (Uganda AIDS Commission, 2017). Despite the various initiatives, levels of adherence to ART in Uganda are still very low, at only 66%, (Nabunya et al., 2020).

Research on antiretroviral (ART) adherence among patients with partners in Uganda, provide evidence of poor adherence rates (Vithalani & Villanueva ,2018). Barriers to adherence in this group include, structural barriers such as transportation and low social support (Nabunya et al, 2020).

However, information on aspects of spouse support and SES that were involved in enhancing or curtailing adherence was not clear. Interventions best suited to addressing the adherence needs of patients with partners had to be based on social support and SES factors that were relevant to this group (Bukenya et al, 2019). Therefore, it was imperative to examine the correlation between spouse support, socio-economic status and adhering to ART for individuals attending ART services in Butabika hospital, Uganda so as to identify aspects of spouse support and socio-economic status that were relevant in promoting adherence to ART.

1.4. Purpose of the Study

This study was aimed at exploring the correlation between instrumental, informational, emotional support, socio-economic status and adherence to ART among patients attending ART services in Butabika hospital.

1.5 Specific Objectives

The study was guided by the following objectives;

1. To examine the relationship between instrumental support and adherence to ART.
2. To establish the relationship between informational support and adherence to ART.
3. To assess the relationship between emotional support and adherence to ART.
4. To examine the moderating role of socio-economic status on the relationship between spouse support and adherence to ART.

1.6. Research Hypotheses

1. There is a significant relationship between instrumental support and adherence to ART.
2. There is a significant relationship between informational support and adherence to ART.
3. There is a significant relationship between emotional support and adherence to ART.
4. Socio-economic status significantly moderates the relationship between spouse support and adherence to ART.

1.7 Significance of the Study

Academically, the existing body of knowledge on HIV/AIDS prevention and treatment will be reinforced by the results in Ugandan context, generally and Butabika Hospital, specifically.

This will help in fixing the already existing knowledge gap in the contexts as well as resolving some of the debate contradictions that will be highlighted in the literature review.

For purposes of career growth for the researcher, the generated knowledge from the findings will be very vital in enhancing the researcher's expertise as a counselor in handling and supporting infected individuals in adhering to ART.

Besides, policy makers and development partners may utilize findings and policy courses of action from herein regarding the variables of spouse support and socio-economic status, and how they can be utilized to improve on the levels of adherence to ART.

1.8 Scope of the study

1.8.1. Content Scope

Focus was put on examining the correlation between support rendered by the spouse and one's level of adhering to ART was moderated by socio-economic status. In relation to spouse support, the researcher examined instrumental, informational and emotional aspects of support received by ART patients. As far as socio-economic status is concerned, the researcher analyzed the education, occupation and income of spouses and how it affected the support they provided to ART patients. In connection to adherence, the researcher explored the likelihood of ART patients seeking for, utilizing and sticking to ART.

1.8.2 Geographical Scope

The study focused on Butabika National Referral Hospital, The Hospital is located in Butabika, which lies in Nakawa Division, approximately 10.5 kilometers (6.5 mi), by road, east of Kampala's central business district (Google, 25 November 2020). This hospital was relevant to the study because as the second referral hospital in central Uganda and the capital city, it received a variety and large number of HIV positive married persons and hence it was possible

to get a representative sample with various SES backgrounds. In addition, Butabika hospital has a long-standing culture of using psychosocial support therapy, so could effectively support the study. Also, as a teaching Hospital, the institution is an important platform for research into psychosocial issues. so, was used to handling research students.

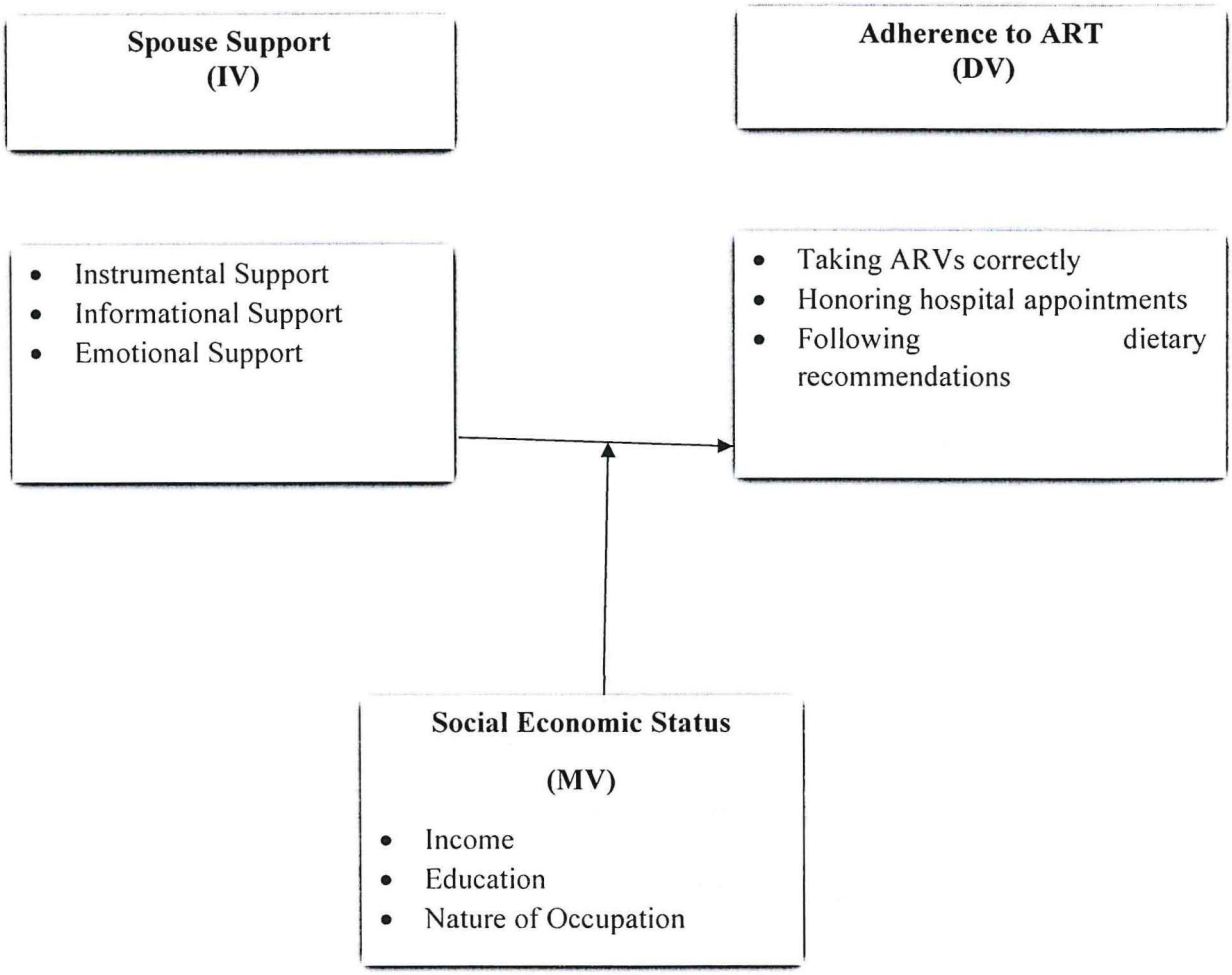
1.8.3 Time Scope

Time frame covered between 2010 and 2021 was covered by the study representing a total of 11 years. This was appropriate because in this period, we had documented information on emphasis being put on examining the outcomes of the ART services to HIV/AIDS patients due to low levels (66%) of adherence yet most of these services were free (Nabunya et al., 2020).

1.9 Conceptual framework

In Figure 1, a graphic depiction alluded the hypothetical variable interaction in the study and their relations to one another.

Figure 1: Conceptual framework of the relationship between Spouse support, Social economic status and Adherence to ART



Source: Taddese, (2021) and modified by the researcher

According to Figure 1, a patient on ART needs physical and financial (instrumental) help, information on how to effectively use drugs, maintain good health and a positive outlook on life (informational) and love, care, understanding and re-assurance (emotional) from the partner. This support can enable the patient to dynamically seek for and continue to effectively follow the recommended treatment plan, dietary guidance and protection.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0. Introduction

Chapter two dealt with both theoretical and empirical analysis of the publications by identifying the relevant body of knowledge. The review identified existing debates and the existing knowledge gaps.

2.1. Theoretical review

Theoretically, the perspective on which the current study derived explanatory concepts and assumptions were anchored is provided for in this chapter with important presumptions and limits in the current knowledge. The study anchored on the conceptualization and assumptions Social Action Theory (Ewart, 1991). The key tenets of this theory and how they relate to the study are explained next. It is hypothesized that psychological factors at individual level combined with external factors from the environment have direct effects on one's health behavior and priorities to which ART adherence isn't exceptional (van Rooyen et al., 2019). The strength of this theory is that it builds along the covariates such as age, gender, ethnicity, education and income levels. In this case, the Social Action Theory is vital in explaining influencing variables of individual health behavior from both appropriate and inappropriate perspectives. From this perspective, health behaviors linked to interaction among individual self-regulatory processes built on attitudes, internal psychological experiences mixed with external environmental conditions mainly the nature of relationship (Halfon & Forrest, 2018).

Various studies have examined components of SAT in the context of HIV sexual transmission behavior and these include Kelly et al., (1993), Leigh & Stall, (1993), Remien et al., (1995) and have provided evidence for the utility of this theory. However, with all its ability

to explain the three variables in the current study in the analyses for this study ranging from spouse support, through socio-economic status to adherence to ART, no serious study had utilized the social action theory to explain the interaction between these three variables.

Therefore, this study was based on Ewart's Social Action Theory because it provided the best account of the connection between spouse support, socioeconomic status and adherence to ART.

2.2 Empirical review

The empirical review will consider possible associations between instrumental support and one's devotion to drugs and medication (ART), informational support and ART adherence, emotional support and adherence to ART as well as the role Social status plays in the link between spouse support and adherence to ART.

2.2.1 Adherence to ART among Persons Living with HIV

After first starting treatment, Adherence to ART is the patient's continued regular participation in medical care at a health institution, as indicated by either missed appointments or timely attendance at medical visits at regularly spaced intervals (Moosa et al ,2019). Adherence can also be; a patient continuing to participate in treatment, support, and care services after diagnosis (Muiyuro,2020). Adherence to treatment includes everything from initial involvement in treatment to persistence in lifelong ART (Mabweazara et al ,2018). Measures of Adherence to treatment include the number of appointments kept or missed, the number of medical visits made at regularly scheduled intervals, and the rate of involvement with services for diagnosis, prevention, treatment, support, and care (Bujenya et al, 2019). Keeping patients in ART has been said to contribute to positive living (Muwanguzi et al., 2021).

Despite substantial declines in HIV transmission and increases in lifespan achieved over the past decade for those living with HIV, the full benefits of currently available interventions are still not completely realized by people living with HIV .In the United States (US), only 48.1% of diagnosed HIV-positive person (aged 13–24 years) achieve viral suppression (VS; <200 copies/mL at the most recent viral load test (Centers for Disease Control and Prevention, 2017) and it has been estimated that less than 6% of HIV-infected youth in the US remain virally suppressed (Zanoni & Mayer, 2018).

Reviews of antiretroviral (ART) adherence among persons aged (12–24 years) provide evidence of poor adherence rates. A 2014 meta-analysis of adherence found overall low self-reported adherence of 62.3% (Bukenya et al, 2019). Barriers to adherence included forgetting or not being motivated to take medications, low adherence self-efficacy and, psychological distress (Moosa et al (2019). Other factors included substance use, structural barriers such as transportation, low social support and HIV related stigma (Muiyuro, 2020).

In a study done in KwaZulu-Natal, South Africa, it was found that attending clinic during school hours was difficult for adolescents who attended school after identifying the factors that made it easier and more difficult for teenagers on ART. Adolescents at school tended to prefer using clinic services after school hours due to peer support and ties with the clinical team (Zanoni et al., 2019). Zanoni et al (2019) study on the barriers to sticking to treatment among youths with HIV, it was further found that the key barriers, were institutional, involving stock-out of drugs, absenteeism of healthcare workers. A range of inherent obstacles like distance to health centers, transport costs, family structural instability and parental fear of disclosure were also identified. However, the study highlighted support related factors that encourage people to remain in care, such as family members sincerity, practical support on top of care by the neighbors (Nakandi et al ,2021).

In Uganda, evidence is increasing to show that especially married persons are struggle to maintain their treatment due to family, work and relationship level impediments (Uganda AIDS Commission ,2017; Mao et al, 2019). In a family and relationship setting, the ability of person living with HIV to pursue alternatives available on ART is mainly limited by stigma (Michaelsen & Esch, 2021). In a study by Nabunya et al (2020), youths aged 19-28 years on ART, the majority faced complex challenges to care, such as getting treatment at a top-notch medical facility. However, much of the existing literature did not specifically show the role of spouse support in Adherence to ART which created a need for this study.

2.2.2 Instrumental support and adherence to ART

Instrumental support that involves direct tangible and logistical assistance meant to facilitate a patient access and utilise health care services is a significant factor in adherence to treatment (Nabunya et al, 2020). The physical and financial support by the significant others have been found to be instrumental in the wellbeing of PLWH (Moosa et al ,2019). In the context of Singapore, Mao et al (2019) revealed that patients with lack of spouse or partner support suffered from depression and registered negative performance of ART adherence over time because the major sources of Social Support include spouse / partner (Mao et al, 2019). Mao's et al (2019) work reveals that support from partners buffered adverse implications of depression on ART adherence. It was further revealed that spouse/partner support in form of tangible support such as nutrition assistance to reduce medication side effects, helping pick up refills at a pharmacy, reminding patients to take their medication, and offering transportation to medical appointments, enables PLWH to remain in ART services (Mao et al, 2019).

Adeniyi et al (2018) argues that disclosing one's HIV sero-status before their sexual partner or any kin helps in spouse support thus adherence to ART. Besides, it was highlighted by Buregyeya et al (2017) that the pursuit for maximization of the profits of enduring ART,

there is need for not only sufficient grounding of the females prior to initiating ART but also on-going support by the family and most especially the male partner engagement which is very critical.

The study by Atukunda et al., (2017) highlighted that the complexity of a social network affects medication-specific adherence because not all social support becomes useful to medicine adherence. Many patients are incapable of getting real support from their spouses who aren't good social supporters basically in poorly functioning relationships. However, in well-functioning relationships, there was trust building, thoughtful and compassionate disclosure and demystifying stigma among those recently diagnosed with HIV-positive. Spouse support in particular was mostly enabled by food security and income stability (Atukunda et al., 2017).

The major existing gap that exited on literature on Spouse care and devoting to ART was context specific information on people living with HIV was unavailable leading to unanswered questions of whether spouses had done enough to support their partners to adhere to ART.A study was needed on these issues.

2.2.3 Informational support and adherence to ART

Informational support, which is offering of advice, information, or feedback to a patient has been found to increase the likelihood of patients attending and utilizing health care (Nabunya et al, 2020). The Malawian context presents two-thirds of PLWHIV having access to ART and these normally select their spouses to support them with information in different ways such as reminding them about treatment and food before taking ART (Conroy et al., 2019). Such spouse support inform of information providence through reminding partners has made Malawian adults to attain self-identification as married and progressively adhering to ART. Besides, many people in health relationships have reported receiving support from their

partners in form of calls that energize them towards adherence. On the other hand, couples in unhealthy relationships report to be suffering from conflicts, intimate Partner Violence and adultery of which they highlighted to be obstacles to attainment of spouse support for ART adherence (Conroy et al., 2019). In addition, there are always lower levels of support in women who sought support from their spouses as compared to men and this was attributed to lack of informational supportive initiatives from their spouses to adhere to ART by refraining from alcohol (Pokhrel et al., 2018).

Encouragement and support received from spouses has been presented to be vital in quest for HIV testing, initiation on ART and ART adherence. It is indeed argued that any promising information out of the communication within marital life is the best spouse support vital in improving one's quality of life towards optimal adherence to medication (Movahed et al., 2018). It has been established that suppression of the Viral load usually got linked to family ties such as parental care, care from siblings or spouse acting as caretaker and enabling one to live or communicate with spouse at least twice a week (Nakandi et al., 2022). Therefore, such interactive and communicative possibilities translate into informational support that a PLWHIV needs to adhere to ART.

Informational support from the spouse informs of making the partner in the know of their spouses' HIV status and this has had a greater impact on the levels of ART adherence (Sohail et al., 2022). Therefore, spouse awareness of their partners being on ART is beneficial and directly linked to missed doses and others are paramount in empowering the spouse to support the partner on ART with encouraging information related to adherence to ART (Kahema, 2020).

The levels of suppressing viral load among Ugandans stood at "*59.6% and 39.3%,*" respectively which shows that there are lower levels of viral load suppression which is highly

attributed low levels of adherence to ART. This has even worsened the risk of mother to baby viral transmission as well as mother to spouse transmission (Pius et al., 2021). This has partly been attributed to lack of progressive communication between spouses that the person living with HIV lacks the general motivation to adhere to ART (Pius et al., 2021).

Besides, it has been argued that negative informational communication among spouses can affect adherence to ART in a way that whenever ART isn't understood by the male partners, female partners are driven by their male counterparts into making unsuitable choices disrupting adherence to medication. In Zimbabwe, men have refrained from participating in supporting antenatal care for their wives and this has contributed to increase in transmission of the virus from the mother to the unborn child. Implicationally, women rely on their health seeking behavior mainly when they are expectant as they move out and seek HIV education from the health Centers unlike men who perceive illnesses as feminine (Kansinjiro et al., 2019). Therefore, men are left ignorant about the need for informational support to their spouses to adhere to ART.

In this case, men need to be empowered with information about HIV care and ART adherence on which they can support their spouses from an informed point of view (Chinyandura et al., 2022). Empirical evidence denotes that HIV status disclosure before partners encourages women to register higher levels of ART adherence and this is because women usually ask for permission from their husbands to support ART adherence (DiClemente-Bosco et al., 2022).

The existing gap in the literature about interplay between informational providence and adhering to ART was basically geographical in nature that much of this literature portrayed the situation as it is elsewhere in the globe taking the European, South African, Asian, Malawian, Zambian and other contexts but very little on Uganda. Besides, this literature looked at general

spouse support with less specification on the informational dimension of spouse support. These gaps justified the need for this study.

2.2.4 Emotional support and adherence to ART

According to Nakandi et al (2021) Emotional support is affiliative support where a person gets intended opportunities to be with other individuals who have mutual interests or emotional care which includes getting help from close friends or family members, or professionals, who provide help such as assurance and understanding of personal crises. These aspects of social support are related to utilisation of SUDs treatment (Moosa et al ,2019). Different debates have come up to explain the interplay amidst emotional support from a spouse and the rate of being obedient to the ART prescription (Mabweazara et al, 2018). In Kenya, it was established that HIV disclosure to spouses seem to produce terrible experience for women's marriage that violence and accusations of infidelity and this directly affects their adherence to ART due to lack of emotional support from their male spouses. In Uganda, most of the women resort to non-disclosure to spouses due to fear of the negative emotional consequences such as general fear of being blamed, fear of domestic violence, divorce effects, fear of being abandoned and loss of financial providence thus, they hide away from enrolling and adhering to ART. For the case of Malawi and Mozambique, lack of spouse emotional support was high that women feared to disclose to their partners and spouses and was blamed for being a barrier to ART adherence.

Research has indicated that emotional support from male partners to their female spouses has been of paramount in promoting adherence levels to higher rates while attaining ART. This is attributed to fundamental fear of disclosing HIV status harmful results that result from disclosing the major obstacles to ART adherence mainly during pregnancy. Nevertheless,

HIV positive male partners who accepted to disclose their HIV status normally receive support from their spouses to adhere to ART.

Experience from DRC indicated that roughly half of the women living with HIV lack emotional support from their spouses to adhere to ART (Gichane et al., 2018). Evidence points to the perspective that most of them experience intimate partner violence, emotional abuse, physical and sexual abuse from their spouses. Therefore, physical fear coupled with psychological violence linked to HIV status disclosure makes most women refrain from the use of ART thus, missing medical engagements (Gichane et al., 2018). In Ethiopia on contrary, disclosure of HIV status to spouses resulted into gaining of psychological and fiscal support. Such emotional and financial support from spouses after disclosure have contributed to better adherence rates among women living with HIV in mainly Addis Ababa (Dessalegn et al., 2019).

In Kenya, 87.5% of the females revealed that whenever their male partners reacted positively and when they disclose their status tend to receive positive emotional support but those who negatively responded never supported them to adhere to ART. The mere fact that although some of these men would at the time of disclosure manifest tendencies of confusion, anger, express threats to quit but completely no cases of intimate partner violence, separation thus prompting the Kenyan women to develop emotional strength and felt emotionally supported to continue with their ART treatment plans (Abuogi et al., 2020). However, contrary to the previous findings, women from Kenya reported suffering from GBV, depression and experienced stigma from their spouses representing 70% following disclosure. Therefore, a combination of these emotional negative experiences makes them feel that they aren't emotionally supported by their spouses and tend to backslide from actively devoting to therapy (Onono et al., 2020).

Much of the cited literature on the linkage between psychological support from a spouse and the rate of adherence to ART clearly revealed that emotional state of any person living with HIV needed to be supported to attain freedom from fear and that can affect their adherence to ART decisions. Instances where emotional support has been extended by partners, people living with HIV have registered positive trajectory towards adherence while where emotional support hasn't been felt, adherence to ART has been at a negative trajectory. The challenge within the existing literature was that a lot of attention was placed on women as the sole receivers of emotional spouse support to adhere to ART and not both women and men. This made a more comprehensive study on this issues pertinent. Thus, this study sought an examination of the interplay between emotional support and the rate of adherence to ART among both male and female spouses.

2.2.5 The moderating role of socio-economic status in the relationship between spouse support and adherence to ART

A study by Peltzer and Pengpid (2013) finds socio-economic status shaping the link between the rate at which spouse support affects adherence to ART although not directly. It has been argued that among PLWHIV in struggling economies clearly bringing on board the influence of income levels, education levels, and nature of occupation and adhering to ART as reflected in the existing literature (Peltzer &Pengpid, 2013). However, Azmach et al. (2019) infers towards the absence of a linkage between socio-economic and demographic variables and devotion to medication due to lack of evidence. Therefore, such contradictions in the existing debates prompt the researcher to conduct this study.

Nevertheless, it was established that there are minor inequalities in ART access and adherence based on socio-economic status though with significant variation in ART results linked to socio-economic status (Tran et al., 2016). By implication, people with poverty

problems are likely to initiate treatment earlier as compared to the wealthier yet the rich normally register healthier devotion to treatment because they are easily supported by their spouses. Besides, Tran et al. (2016) argues that job nature and education levels contributed vital roles in determining ART access and adherence levels as well as outcomes of treatment. Besides, Siegfried et al. (2017) highlighted that adherence to ART was dependent on socio-economic factors more and less on the clinical factors.

In Zambia, Moomba et al (2019) argues that economic dynamics of poverty, unemployment and food insecurity coupled with social factors linked to belief in traditional medicine, religion values and belief systems, poor kinship support as well as disclosure have worked as critical barriers to adherence to ART. In this case, if one's spouse is held incapable of any of these socio-economic factors, it becomes very hard for him or her to extend the required support for the partner to adhere to ART. Therefore, initiatives for improving ART adherence that target addressing socio-economic hiccups from a broader based spectrum tend to be effective (Moomba et al., 2019).

Research suggests that initiatives aimed at addressing adherence linked to socio-economic status identified instances of stigma and reduction of physically and emotionally adverse experiences as a way of creating an environment that facilitates spouse support for partners living with HIV to adhere to ART (Armoon et al., 2021).

In the African context, economically struggling people tend to suffer the burden of HIV/AIDS due to ignorance of their partners thus registering very low rates of adherence to ART (Mabweazara et al., 2018). It has been further argued that individuals from struggling economies suffer from limited resource that would support ART adherence thus affecting ART negatively. This was coupled with societal barriers in such communities such as unemployment, stigmatization, diseases and stress caused by financial insecurity to which all

are likely to distance a spouse from extending support to a partner to devote to ART (Hampanda et al., 2020). Instances where infected people are from low socio-economic status, there is always failure to live to the prescribed routine HIV care necessities for individuals because spouses who would have rendered services of caretaker responsibilities including assisted child care, providing financial and emotional support and ensuring that there is a permanent dwelling for the family (Ncitakalo et al., 2021). All of these when not well catered for due to poor socio-economic status makes it very hard for a PLWHIV to devote to ART.

However, the reviewed literature highlighted important knowledge gaps with regard to the role that socioeconomic status plays in the linkage concerning support provided by a spouse and devotion towards ART. Some scholars believed that the variables register a significant relationship while others do not see it. Besides, within the existing literature, scanty information was available about patients receiving ART services from Butabika Hospital. This made the study pertinent so as to cover the contextual and scope gaps that existed.

CHAPTER THREE

METHODOLOGY

3.0. Introduction

Methodological chapter discusses the study design; the approach that was used; the study population; sample size and sampling techniques; methods of data collection and tools of data collection. The data analysis and presentation methods; data quality management; research procedure as well as limitations of the study are also discussed.

3.1. Research approach.

The research approach that was adopted for this study was a quantitative one. This approach assumed that reality exits and can be manipulated numerically, precisely and objectively using instruments and numbered data and can be analyzed using statistical procedures (O'Cathain, 2020). This view point enabled the researcher to use methods and procedures that inductively sought for explanation, causation and relationship among spouse support, socioeconomic status and adherence to ART

3.2. Research design

For the context of this study, a cross-sectional survey design guided the researcher because it makes it possible to quickly collect data from a range of participant groups (Creswell, 2013). Additionally, this research method permitted gathering and measuring pertinent factual information from various participants during the same study period allowing for more corroborated and effective data use (Levy, 2017). This design is relational in nature of the study hypotheses and the need to measure and analyze the magnitude and direction of relationships among the study variables (Pandey & Pandey, 2015).

3.2. Study Population and sampling

3.2.1. Target population

The target population included people with partners, close relative and friends, living with HIV and attaining ART from Butabika national referral hospital. A total of 1000 (EMR system, 2021) persons who receive ART and have spouses, made the study population. These people were selected because they had lived-experiences of how the support they receive from their spouses and socio-economic status affects their adherence to ART.

3.2.2. Sample size and Sampling techniques

Derived from 1000 patients on ART with significant others, the sample size was determined basing on the guidance of Krejcie and Morgan (1970) sample size resolution approach. A total of 278 participants were selected using simple random sampling. This strategy was used so as to give each person an opportunity to be part of the sample.

3.3. Data Collection Methods and instruments

Information was collected through the survey method. Survey techniques allowed the gathering of data from a significant number of participants who were targeted individually (Creswell, 2013).

3.3.1. Questionnaire

Data was gathered using a standardized questionnaire. This method bled the researcher to increase anonymity of participants, promoted on-the-spot data collection and generated the required information. The use of structured questions enhanced the accuracy of the data acquired by allowing the researcher to get precise information while also preventing hurried responses.

A sum of 278 questionnaires was circulated and 268 were returned fully completed and were the ones considered for data analysis. This made the actual sample to be 268 participants, leading to a return rate of 96.4. According to Levy (2017), this rate was quite good for research purposes.

3.4 Measurement of study variables

The questionnaire that measured the study aspects had four sections. Section A assessed the socio-demographic data of respondents namely: gender, marital status and age, Section B measured spouse support and the 15 items for instance; my spouse supports me in picking medicine when am not able, my spouse reminds me of the appointments with health workers, my spouse uses encouraging language to intrigue me to adhere to the treatment, based on Mallory (2012). The 15 items in Section C that measured socio-economic status such as; I earn sufficiently above UGX 6,000 a day, I attained a degree or higher degree as my highest level of education, I am Self-employed working in my business, were taken from Van Wyk and Moomba (2019). Section D measured adherence to ART using 5 items for example, I closely observe appointments with health workers, I closely follow the treatment plan as set by the health workers, were adapted from Zacapa et al (2013). Respondents' replies were scored on a five-point scale, defined along 1 denoting "strongly disagree" and 5 denoting "strongly agree".

3.5 Quality Control of Instruments

A pre-test study was done to make sure that the data collection process and instruments were based on the study's purpose and objectives. This was done to guarantee the validity and dependability of the instruments as well as the ability of the participants to answer questions in accordance with the guidelines.

3.5.1 Validity of instruments

Supervisor's opinion on the significance, phrasing, and lucidity of the instrument constructs was sought. The validity of the instruments concentrated on the questions' precision, comprehensiveness, and applicability in connection to the research constructs. The researcher made sure that the constructs for primary variables adhered to the conceptual framework of the study in terms of validating the content. The items were also validated on a scale of 1 being highly relevant, 2 being relevant, 3 being somewhat relevant, and 4 being not relevant, by the two university supervisors utilizing the content validity index (CVI). The index was computed utilizing the formula; *"Number of items declared legitimate valid/Total number of items."* The average validity index for the questionnaire was 0.82 and as indicated by Creswell and Creswell (2018), the value for this instrument was higher than 0.7 a value considered to be appropriate for research instruments.

Table 1: Content Validity Index (CVI) of instruments

Evaluator	Questionnaire for ART patients
Supervisor 1	0.84
Supervisor 2	0.79

Source: supervisors' ratings (2022)

3.5.2 Reliability of the questionnaire

The Cronbach's alpha coefficient test of reliability was utilized to establish reliability of the questionnaire. The pre-test sample was 27 and it comprised of 16 women and 11 men, Table 2 provides the findings.

Table 2: Reliability coefficients (Cronbach's alphas) for the questionnaire.

Variable	No. Of Items	Alpha (A)
Instrumental support	5	.82
Information support	5	.74
Emotional support	5	.91
Socio-economic status	5	.79
Adherence to ART	5	.72

Source: Pre-test data from the field (2022)

Tables 2 reveals that instrumental support had an Alpha coefficient of .82 that of informational support was .74, emotional support was .91, Socio- Economic Status was .79 and adherence to ART was .72. The instrument was sufficient for this study because the Alpha coefficients for all the sub scales were above 0.7, the recommended minimum for surveys by Majid (2017).

3.6 Data collection Procedure

Following permission for data collection from the directorate of postgraduate studies authorizing her to go to the field and gather data, the letter was given to the director of the hospital, who was then asked to give the researcher permission to gather data. A note outlining the overall goal of the study was included with each questionnaire. The researcher then met the interested prospective participants. In order to gain written consent, the consent form was delivered to participants before completing the questionnaires. The consent form assured them of being confidential and anonymous. The participants were met in the out patients ward and

after signing the consent forms, with the help of the health services providers they were given the instruments to complete in groups.

3.7 Data management

After collecting the instruments, each questionnaire was first coded by being given an identity number. This enabled the researcher to make sense of the data gathered. The Statistical Package for Social Sciences was then utilized in analyzing data. Preliminary data assessment was to check for any potential violations of the fundamental presumptions underlying the use of univariate, bivariate, and multivariate approaches. Tests for linearity and normality were done. Tables and graphs were applied in illustrating the data so that logical and statistical inferences would be made from the information gathered.

3.8 Data analysis and presentation

Data was analyzed at the univariate, bivariate, and multivariate levels. Frequencies, Specific means, standard deviations, were utilized in providing univariate features of the data.

In objectives 1-3, establish the link between instrumental, informational, emotional care and adhering to ART, Pearson's Product Moment Correlation Coefficient was applied in assessing the strength and direction of the association. The results were interpreted basing on Creswell (2014) as; r= 1.0, Perfect relationship, 0.7 to 0.9 High relationship, r=0.4-0.69 Moderate relationship, r=0.2-0.39 Weak relationship, r=0.01-0.19 Very weak relationship and 0=No correlation .The nature of the relationship was determeined at 0.05 and 0.01 levels of significance. In connection to objective 4, to examine the moderating role of socio-economic status on the link between spouse support and adherence to ART. Hayes process model (Hayes, 2017) was used to establish the significance of the effect.

3.9 Ethical considerations

Research ethics were followed and observed by the researcher as described below. First, respondents voluntarily participated in the research and they had the right to decline participation. Therefore, before distributing the study questionnaires to participants, the researcher sought consent, following clear understanding of the study purpose and after being assured of being confidential and anonymous. In addition, the researcher discussed the intended data collection period with participants before giving them questionnaires to complete.

Unauthorized disclosure of study findings sometimes damages the esteem and reputation of subjects. However, the researcher addressed this by restricting its accessibility to only authorized persons with need to know.

Furthermore, respondents were adequately informed about the way they were to be treated in the due course of the study, risk management and how they would benefit from the study. Respondents were allowed adequate time for reflecting on the information provided for minimization of coercion to participate in the study.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0. Introduction

Data is presented, analyzed and interpreted in this chapter. The study examined the link between spouse support, socio-economic status and adherence to ART among patients attending ART services in Butabika hospital. Specifically, the study analyzed the link between instrumental, informational, emotional support from the spouse and adherence to ART and the moderating effect of socio-economic status on adherence. The findings are based on questionnaire responses from 268 participants. The results on the demographic information characteristics of the participants are presented first, followed by descriptive results on the status of spouse support, socio-economic status and adherence to ART. Finally, inferential analyses on the study objectives are presented.

4.1 Demographic Characteristics of the Participants.

The researcher collected demographic information of participants to capture any differences and similarities in views on issues that were being investigated. Three (3) variables that were perceived to be helpful in understanding the views of participants on the issues that were being investigated are presented in table 3.

Table 3: Socio-Demographic Information of Participants (N=268)

Variable	Category	Percentages	
Gender		f	%
	Male	151	56.3
	Female	117	43.7
Marital Status	Married	136	50.7
	Single	12	4.5
	Separated	25	9.3
	Co-habiting	95	35.4
Age Category	18-28	93	34.7
	29-38	80	29.9
	39-48	22	8.2
	49-58	47	17.5
	59 and above	26	9.7

Source: Primary data from the field (2022)

4.1.1 Gender of participants

The respondents indicated their gender and it is shown in Table 3 that the majority of participants (56.3%) were male and 43.7% were female. Therefore, the information provided equally represented both genders.

4.1.2 Marital Status

Participants indicated their marital status. The results presented in table 3 reveal that the majority (50.7%) were married followed by 35.4% who were co-habiting. This implies that most of the participants were in a relationship where spouse support was expected and so provided credible information.

4.1.3 Age category of participants

When the respondents were asked about their age, Table 3 indicated a majority of (34.7%) being aged 18 to 28 years.

4.2 Status of Spouse support, Socio-economic status and Adherence to ART among ART patients in Butabika hospital

In this study, descriptive statistics were run to ascertain the status of the variables that were being investigated in consideration of the Likert scale. Frequency tables, showing the mean, standard deviation and ratings of the aspects that were used to measure each variable were calculated. Descriptive statistics of each variable were also calculated to ascertain whether data on each of the variables was appropriate for inferential analysis. The findings are summarized in the tables below.

4.2.1 Spouse support

In this study, Spouse support the independent variable was conceptualized as a patient on ART receiving encouraging help from the partner in form of instrumental, informational and emotional terms.

Table 4: Mean response, Standard deviation and ratings on Spouse support

Aspect	Mean Response	SD	Rating
Spouse supports with transport to hospital	2.77	1.29	Disagree
spouse helps with work so I rest	3.23	1.10	Disagree
spouse provides foods and drinks	3.66	.90	Agree
spouse picks medicine when not able	2.92	1.06	Disagree
I receive gifts from spouse whenever I take medicine	2.33	1.01	Disagree
I receive reminders on taking medicine from spouse	3.76	1.10	Agree
spouse reminds me of appointments with health workers	3.74	1.04	Agree
spouse informs me about benefits of adhering to medicine	3.65	1.09	Agree
spouse educates me about dangers of non-adherence	3.47	1.26	Agree
spouse reminds me of foods to eat	3.73	1.14	Agree

spouse narrates stories of hope	3.26	1.10	Disagree
spouse gives me time to share burdens	3.41	1.11	Disagree
we engage in open talk conversations with spouse about future	3.36	1.11	Disagree
Spouse is immediate counselor	3.32	1.22	Disagree
spouse uses encouraging language	3.56	1.22	Agree
Overall Score	3.34	1.12	Disagree

Key: 1=strongly disagree, 2=disagree, 3= not sure, 4= agree, 5=strongly agree

In table 4, results indicate that generally participants disagreed (*M=3 .38, SD=1.1 2*) to receiving appropriate Spouse support. For example, they disagreed to spouse supporting them with transport to hospital (*M=2.77, SD=1.29*), spouse helping them with work so they rest (*M=3.23, SD=1.10*), spouse picking medicine for them when not able (*M=2.92, SD=1.06*) and spouse narrating stories of hope to them (M=*3.26, SD=1.10*). They also disagreed that spouse gives me time to share burdens (M=*3.41, SD=1.11*), they engage in open talk conversations with spouse about future (M=*3.36, SD=1.11*) and spouse was their immediate counselor (M=*3.32, SD=1.22*).

However, they agreed to their spouses providing them with necessary food and drinks (*M=3.66, SD=.90*), reminding them on taking medicine (*m=3.76, SD=1.1*), and appointments with health workers (*M=3.74, SD=1.04*). Participants also agreed to spouse informing them about benefits of adhering to medicine (*M =3.65, SD=1.09*), educating them about dangers of non-adherence (*M =3.47, SD=1.26*), reminding them of foods to eat (*M =3.73, SD=1.14*), and

using encouraging language to motivate them to adhere to treatment (*M =3.65, SD=1.09*). Generally, spouses were more supportive in providing relevant information on how to benefit fully from health care services.

The researcher then examined the general distribution of results on Spouse support. The average index for the 15 items that measured the variable is summarized in table 5.

Table 5: Summary Statistics for Spouse support.

Descriptive	**Statistic**	**Standard error**
Mean	50.25	.73
Median	51.00	
Std. Deviation	11.93	
Variance	142.46	
Skewness	-.63	.15
Kurtosis	.19	.29
Range	47.00	
Minimum	23.00	
Maximum	70.00	

Table 5 presents results showing that the mean = 50.25 was close to the median = 51.00, though the dispersion in responses (SD =11.93) was high the Skewness (-.63) and Kurtosis (.19) indicate normality in the responses. Therefore, data on Spouse support was normally distributed and appropriate results could be obtained when subjected to linear correlation and regression.

4.2.2 Socio- economic status

Socio-economic status, the moderating variable was measured as the extent to which the employment, education and earnings of both the patient and partner enables them to support the patient's ART needs. The findings are summarized in the table 6.

Table 6: Mean response, Standard deviation and ratings on Socio-economic Status

Aspect	Mean response	SD	Rating
I am not among those who do not earn any form of income	2.86	1.33	Disagree
I am not among those who survive on help from relatives and friends	2.83	1.27	Disagree
I earn enough income to enable me meet my daily needs	2.96	1.39	Disagree
Even if I was stuck, I could get the needed financial support from my relatives	2.80	1.05	Disagree
My partner earns enough to support me financially	2.94	1.28	Disagree
I am not among those who didn't go to school at all	1.75	1.06	Disagree
I am among those who did not attain PLE or an equivalent	1.75	1.10	Disagree

I am among those who did not attain UCE or an equivalent	2.44	1.56	Disagree
I am among those who did not attain UACE or an equivalent	2.53	1.69	Disagree
I am among those who did not attain a degree or higher degree	2.59	1.63	Disagree
I am unemployed so have problems with earning enough income	2.79	1.36	Disagree
Even if I am Self-employed, don't earn enough income to support myself	2.69	1.29	Disagree
Even if I have paid employment, I don't earn enough money to meet my needs	2.00	1.32	Disagree
I am not able to earn well from whatever I do	3.22	1.25	Disagree
I thought I may have enough skills to get a job, it may not effectively sustain me	2.59	.94	Disagree
Overall score	2.58	1.3	Disagree

Key: 1=strongly disagree, 2=disagree, 3= not sure, 4= agree, 5=strongly agree

In table 6, findings reveal that generally the Socio-economic Status of participants was not bad (*M =2.58, SD=1.3*). For example, they disagreed they are not among those who do not earn any form of income (*M =2.86, SD=1.33*), not among those who survive on help from relatives and friends (*M =2.83, SD=1.27*), not among those who do not earn enough income to enable me meet daily needs (*M =2.96, SD=1.39*) and not among those who would get stuck, without the needed financial support (*M =2.8, SD=1.05*).

In connection to education attainment, they disagreed to attaining PLE as their highest education (*M =1.75, SD=1.10*), UCE being their highest education *(M =2.44, SD=1.56*) and UACE being their highest education (*M =2.53, SD=1.69*). With regard to employment, participants disagreed to being generally unemployed (*M =2.79, SD=1.35*). unemployed due to lack of skills (*M =2.59, SD=.94*) and being self-employed (*M =2.69, SD=1.29*). This implies that participants had sufficient education and earning that would enable them acquire the needed spouse support.

The researcher then examined the general distribution of results on Socio-economic Status. The average index for the 15 items that measured the variable is summarized in table 7.

Table 7: Summary Statistics for Socio-economic Status

Descriptive	Statistic	Standard error
Mean	38.80	.23
Median	39.00	
Std. Deviation	3.71	
Variance	13.79	
Skewness	.14	.15
Kurtosis	-.16	.29
Range	16.00	
Minimum	31.00	
Maximum	47.00	

The results in Table 7 show that the mean = 38.8 was close to the median = 39.0 and the dispersion in responses (SD =3.71) was also low indicating normality in the responses. Therefore, data on Socio-economic Status was normally distributed and appropriate results could be obtained when subjected to linear correlation and regression.

4.2.3 Adherence to ART

Adherence to ART, the dependent variable was measured as the extent to which patients sought for, correctly and committedly utilized ART. The findings are summarized in the table

Table 8: Mean response, Standard Deviation and ratings on Adherence to ART

Aspect	Mean response	SD	Rating
Take my pills on time	4.02	.54	Agree
Closely follow dietary recommendations	3.78	.86	Agree
I closely observe appointments with health workers	3.96	.65	Agree
I take the right dosage of medicine	4.01	.84	Agree
I closely follow the treatment plan	3.75	.85	Agree
Overall score	3.9	0.75	Agree

Key: 1=strongly disagree, 2=disagree, 3= not sure, 4= agree, 5=strongly agree

Related to Adherence to ART, the results in table 8 show that participants agreed (*M =3.9, SD=.75*), to sufficient Adherence. They agreed to taking pills on time (*M =4.02, SD=.54*), closely following dietary recommendations (*M =3.78, SD=.86*), and closely observing appointments with health workers (*M =3.96, SD=.65*). They also agreed to taking the right dosage of medicine (*M =4.01, SD=.84*) and closely following the treatment plan (*M =3.75, SD=.85*).

The researcher then examined the general distribution of results on Adherence to ART. The average index for the 5 items that measured the variable is summarized in table 9.

Table 9: Summary Statistics for Adherence to ART

Descriptive	Statistic	Standard error
Mean	19.54	.17
Median	20.00	
Std. Deviation	2.82	
Variance	7.9	
Skewness	-.66	.15
Kurtosis	.36	.29
Range	12.00	
Minimum	12.00	
Maximum	24.00	

The results in Table 9 show that the mean = 19.54 was close to the median = 20.00 and the dispersion in responses (SD =2.82) was also low indicating normality in the responses. Therefore, data on adherence to ART was normally distributed and appropriate results could be obtained when subjected to linear correlation and regression.

4.3 Relationship between Spouse support, Socio-economic status and Adherence to ART among ART patients in Butabika hospital

The relationship among Spouse support, Socio-economic status and Adherence was examined using Pearson correlation. The findings are summarized in table 10.

Table 10: Correlations between Spouse support, Socio-economic status and Adherence to ART

Variables	1	2	3	4	5	6	7	8	9
1-Instrumental	1								
2-Informational	.842**	1							
3-Emotional	.809**	.739**	1						
4-Income	ns	.123*	ns	1					
5-Education	-.219**	-.468**	ns	-.335**	1				
6-Occupation	ns	ns	ns	ns	.182**	1			
7-Spousesupport	.938**	.933**	.916**	ns	-.280**	ns			
8-Socio-economic status	ns	ns	-.130*	.503**	.518**	.570**	-.163**	1	
9-Adherence	.648**	.643**	.627**	-.338**	-.134*	Ns	.688**	.340**	1

Key; p<.01**, p<.05*, ns = not significant

The results in table 10 show that the relationship between spouse support and adherence to ART was (r=.69, p<0.01), that social economic status and adherence ART was (r=.34, p<0.01) and that between spouse support and social-economic status was (r=-.16, p<0.01). The link between instrumental support and adherence to ART (r=.65, p<0.01), that

between informational support and adherence to ART was (r=.64, p<0.01) and finally between emotional support and adherence to ART was (r=.62, p<0.01).

4.4 Objective one: The Relationship between instrumental support and Adherence to ART among ART patients in Butabika hospital

The first objective of the study was to establish the link between instrumental support and Adherence to ART among ART patients in Butabika hospital. Hypothetical constructions had been made by the researcher that a significant relationship existed between instrumental support and adherence to ART. An application of Pearson correlation coefficient aided in establishing the relationship among the variables. The findings in table 10 showed that a positive and significant relationship r *(266) =.65, P<0.01*, existed between instrumental support and Adherence to ART. Thus, the alternative hypothesis that a significant relationship existed between instrumental support and adherence to ART was retained. This implies that when a spouse helps the patient with home chores and also provides food items and transport to health facility, adherence increases. Therefore, instrumental support is important in Adherence to ART.

4.5 Objective Two: The relationship between information support and Adherence to ART among ART patients in Butabika hospital

In the second place, the study sought an establishment of the correlation between support through providing information and level of adhering to ART among ART patients in Butabika hospital. It had been posited that a significant relationship existed between informational support and adherence to ART. Pearson correlation coefficient helped in establishing the relationship among the variables. The findings in table 10 revealed that a positive and significant relationship $r\ (266) = .64,\ P<0.01$, existed between informational support and adherence to ART. The alternative hypothesis that a significant relationship existed between informational support and adherence to ART was retained. This means that a spouse reminding the patient of taking medicine, appointments with health workers and benefits of adhering to medicine increases adherence to ART. This means that informational support is a significant factor in ART adherence.

4.6 Objective Three: The relationship between emotional support and adherence to ART

From the third position among the objectives, the study sought an establishment of the correlation between emotional support and adherence to ART. Another hypothesis was linked to the existence of a significant relationship existed between emotional support and adherence to ART. Pearson correlation coefficient guided the establishment of the relationship among the variables. It is revealed in table 10 that a positive and significant relationship $r\ (266) = .62$, $P<0.01$, existed between emotional support and adherence to ART. The alternative hypothesis that a significant relationship existed between emotional support and adherence to ART was retained. This means that a spouse using kind and encouraging language increases adherence. Therefore, emotional support from a spouse is an important factor in enhancing adherence to ART.

4.7 Objective Four: Moderating Effect of Socio-economic status on the Relationship between Spouse support and Adherence to ART Adherence to ART among ART patients in Butabika hospital

The last objective of the study was to examine the moderating effect of socio-economic status on the correlation between spouse support and Adherence to ART. It had been hypothetically alluded that Socio-economic status would moderate the correlation between Spouse support and Adherence to ART. Hierarchical regression analysis was done to ascertain the moderating effect of Socio-economic status on the link between spouse support and Adherence to ART. First a causal relationship was established between the IV (spouse support) and the DV (ART adherence). Then, a causal relationship was established between both the IV and Moderator variable (SES) and the DV, to ascertain the interaction effect. Finally, the significance of interaction the effect was ascertained, considering the β value of interaction effect and its probability. A P-value less than 0.05, would confirm the existence and significance of interaction of SES on the relationship between Spouse support and Adherence.

Table 11: Hierarchical Regression analysis of predictors on Adherence to ART

Model	Effects	R^2	ΔR^2	*β*	*P-value*
Model I	Spouse support	.473	.473	.69	.000*
Model II	Spouse support * Socio-economic status	.527	.053	.23	.000*

Key; p<.01**, p<.05*

Dependent Variable: Adherence to ART

It is shown in table 11 that Spouse support (β =.69, p<0.05) had a positive and significant influence on Adherence to ART. When social economic status was entered as a moderator in the connection between spouse support and adherence to ART, it was revealed that the interaction effect was about 5 % (ΔR^2=.053) and was significant (β =.23, p<0.05). Therefore, the influence of social economic status on the connection between spouse support and adherence to ART was significant. Social economic status positively moderated the relationship and increased it to 5%. The fourth hypothesis that Socio-economic status significantly moderates the connection between spouse support and adherence to ART was retained.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the discussions, conclusions and recommendations made by this study on the association between spouse support, socio-economic status and adherence to ART among patients attending ART services in Butabika hospital. The study analyzed the association between instrumental, informational, emotional support from the spouse and adherence to ART and the moderating effect of socio-economic status on adherence. The discussion includes findings on the dependent variable and findings on the association between the independent, moderating and dependent variable. The chapter also contains the contribution of the study, its limitations and suggests areas for further research.

5.1 Discussion

5.1.1 Adherence to ART among ART patients in Butabika hospital

Adherence to ART is a social concern especially for the HIV/AIDS service providers. The findings of the study revealed that Adherence to ART among ART patients in Butabika hospital was good (M=3.9, SD=075). This finding contradicts Achappa et al. (2013) who had some time back reported that Adherence was a problem among people who had chronic diseases. This seems to suggest that the HIV and AIDS patients have over the times got the requisite information about the chronic nature of the ailment, and hence the participants reported good adherence. Participants took their pills on time, closely followed the dietary recommendations and closely observed appointments with health workers seriously. This finding agreed with Sahay et al (2011) who said that good adherence to treatment involves one following a therapeutic schedule as per the prescriptions.

Furthermore, the participants' adherence could probably be because of having been made aware of benefits of their wellbeing as a result of adherence. This is in agreement with Achappa et al (2013) who asserts that patients who have good knowledge on how to manage their illness are more likely to correctly follow the treatment protocol because they want to achieve optimal benefits. This good level of Adherence to ART among ART patients in Butabika hospital means that patients have been empowered on how to manage HIV and AIDS.

5.1.2 Instrumental support and Adherence to ART among ART patients in Butabika hospital

The first objective of the study was to establish the association between instrumental care and Adherence to ART among ART patients in Butabika hospital. Hypothetically, the researcher insinuated that a significant relationship existed between instrumental cares and adhering to ART. The findings revealed that a positive and significant relationship existed between instrumental providence and devoting to ART. This implies that when spouses actually help patients with home chores, provide food items and transport to health facility, this increases adherence to ART.

Therefore, instrumental support from spouses plays a positive role in adherence to ART. This finding concurred with Mao et al (2019) who said that good instrumental support helps patients to feel loved and appreciated hence reducing their worry about treatment. This increases their intention to continue using ART. The positive instrumental support could also have eclipsed even the negative feelings that patients had about ART. Thus, ART become more bearable despite any difficulties that it could have had. The high levels of instrumental support also meant that the significant others were very much aware of the health condition of the patients. The patients had disclosed their status so that they receive support. This agrees

with Adeniyi et al (2018) who said that disclosure of HIV to the sexual partner helps the patient to receive understanding from relatives and family which increases adherence to ART.

5.1.3 Information support and Adherence to ART among ART patients in Butabika hospital

The second objective of the study was to establish the correlation between information providence and adhering to ART among ART patients in Butabika hospital. A hypothetical construct had been stated alluding to the existence of a significant relationship existed between informational provision and devotion towards ART. The findings confirmed this assertion and showed that, a strong, significant and affirmative association existed between informational provision and one's devotion to ART. This means that spouses were willing and able to remind patients to take their medicines and go for appointments with health care workers which increased adherence. They every now and then provided relevant information on how to use drugs and live positively. These findings confirm what Atukunda et al., (2017) discovered that when a couple has been in a good relationship, their communication is likely to be good and so when they find themselves in bad times, their already good communication helps them to cope. The HIV patients attending Butabika hospital may have had good informational support because they already had a good relationship and probably communication with their partners. They had well-functioning relationships that developed relevant trust, understanding and supportive disclosure that are so crucial in Adherence to medication (Atukunda et al., 2017).

The findings further revealed that men had more informational support than women. This was a surprising finding because formerly, men had been known to be more secretive than women when it came to HIV and AIDS. This finding disagrees with Chinyandura et al (2022) who had indicated that men need more empowerment with information about HIV

care and ART adherence on which they can support their spouses from an informed point of view. Also, the fact that men had started getting and also giving more information about ART to their spouses means that men are now more likely to seek for information about positive living than it was in the past. This increases the chance of men disclosing early their HIV status to their partners and starting ART freely and early after infection.

5.1.4 The relationship between Emotional support and adherence to ART

Thirdly, the study sought an establishment of the correlation between emotional care and adhering to ART. Hypothetical constructions had alluded to a significant relationship existing between emotional cares and adhering to ART. It was revealed that a positive and significant relationship existed between emotional care and adhering to ART. This means spouses of HIV patients use kind and encouraging language while communicating with and were often re-assuring and understanding.

Therefore, spouses had become more understanding and tolerant of the HIV status of their partners. It is also an indicator that patients have started perceiving HIV as a normal ailment. This conclusion concurs with Movahed et al (2018), who said that supportive communication made patients feel better and more likely to adhere to ART. The findings also show that the interactive communication that spouses had was sometimes about positive living which according to Nakandi et al (2022) results into information that a person living with HIV needs to adhere to ART.

The findings also indicated that the communication was more collegiate, giving opportunity to HIV patients to feel free to talk about their health status. Therefore, in line with Sohail et al (2022), making the partners aware of their spouses' HIV status contributes to a better relationship among them, thus increasing the levels of ART adherence. Concurring with Kahema, 2020), it was revealed that spouse knowledge about the patient's HIV status

and health needs is paramount in empowering the spouse to support the partner on ART with encouraging information associated with adherence to ART.

5.1.5 The Moderating Effect of Socio-economic status on the Relationship between Spouse support and Adherence to ART

The last objective of the study was to examine the moderating effect of socio-economic status on the correlation between support from a spouse and one's level of devoting to ART. A hypothetical construct had been alluded to a moderate role of Socio-economic status in the correlation between support rendered by spouse and the level of adhering to ART. It was revealed that socio-economic status positively and significantly moderated (β =.23, $p<0.05$) adherence to ART. Hence socio-economic status increases spouse support as well as the possibility for patients to devote themselves to ART undertaking. This finding confirmed Peltzer and Pengpid (2013) research that indicated that education and employment do increase adherence to antiretroviral therapy in patients in low- and middle-incomes.

Therefore, as attested to by Tran et al (2016) being poor and uneducated is likely to disempower an HIV patient from adhering to ART. This means that occupation and education increase the inequality in ART access, adherence, and treatment outcomes. This was attested to by Moomba et al. (2019) that people with low social economic status are more prone to stigma and the side effect of ART due to poor nutrition. Therefore, low socio-economic status reduces access to resources, such as food, funds for transport and access to information that are needed to increase adherence.

5.2 Limitations of the study

Although this work has contributed to theory and practice, some shortcomings have to be acknowledged. First, the study was done in a mental health facility and some of the respondents could have had mental problems that may have interfered with their perception of the issues that were being investigated. This issue was not considered, since the study scope was limited to HIV patients with significant others receiving ART, instead of mental health care. Future studies may need to consider this aspect and assess the effect of mental health on adherence. Comparisons in adherence could even be done across mental health status.

Secondly, adherence to ART was assessed in general terms as one effectively utilizing ART. Future studies may need to consider the aspect support factors complicating adherence to ART.

Thirdly, only quantitative data from questionnaires was used in this study. The self-report nature of this kind of data usually raises the possibility of self-report bias. Future research may consider using mixed studies so that qualitative data can complement the limitations of quantitative data.

The fourth study limitation was that, only one study site was used and it was located in a National referral hospital, where operations are more structured and modern practices followed. This might have reduced the generalizability of this study's findings in setting other than public hospitals. In future studies may select their sample from a wide range of Health centers and other more rural-based areas of Uganda.

5.3 Conclusions

A supportive social environment in form of spouse and friend support and good education and income do make it easier for HIV and AIDS patients on ART to show and maintain health seeking behaviors such as Adherence. Hence Social support, especially from significant others is essential in increasing access to, and usage of ART. Negative treatment from family reduces the likelihood of patients seeking for ART. When significant others perceive HIV as a normal health problem, they are more likely to provide social support in form of information about effective health care, financial assistance to seek care and emotional support. This motivates the sick to seek help.

Social support from multiple sources such as family members, friends and professionals is needed by person living with HV on ART in order for them to fully benefit from treatment. It should include financial assistance, providing information and emotional support. This is when it provides help such as assurance and understanding of personal crises. Low involvement of significant other, especially marital partners in providing social support has a negative effect on adherence to treatment. Lack of support from essential others such as family members are detrimental to getting help. Close family members who are supportive are a significant influence on treatment seeking and adherence behavior of HIV patients. Supportive relationships and social economic status are empowering factors for people living with HIV who are on ART. Hence the low adherence levels to ART that prevail in Uganda could be increased with sensitization about importance of spouse support and a good social economic status in managing HIV and AIDS.

5.4 Contribution of the Study

The study has revealed that Psychosocial factors, especially the quality of support from spouses, are impacting on adherence to ART among people living with HIV who have partners.

Hence to have better outcomes, ART adherence programs should focus heavily on social support from significant others.

Quality social support from significant others is a path forward and path toward interventions that are best suited to addressing the adherence needs of HIV positive persons.

5.5 Recommendations for Action

Given the importance of social support in adherence to ART, MOH should come up with a more structure policy on social support for person on ART. It should include provision of care, love, understanding and relevant adherence information by family and friends.

There is need for empowerment programs initiated by MOH for families of persons living with HIV to learn how to provide more helpful support to those on ART. This will make it easier for patients and will increase adoption of treatment.

There is need for more community and country wide initiatives, by government and NGOs to increase the involvement of significant others and close friends as a buffer in providing the needed social support that has a significant influence in the utilization of ART.

The role played by marital partners was significant in patients; utilisation of ART. ART centres need to have structures that enables partners to be involved in determining medication and counselling for patients.

ART centres also need to provide counselling and guidance services for significant others who provide care to patients on how to give love and re-assurance to patients in order to comply with treatment. There is need for better marital communication that increases intimacy

between partners; this will increase the likelihood for the sick ones to confide in their spouses. This type of communication should be emphasized by counselors when they meet spouses of patients.

Caregivers need to be given skills on providing effective emotional support to motivate patients to use therapy and live positively.

The government should provide some monthly allowances to HIV positive persons with low social economic status to facilitate their adherence practices in case their spouses are unable.

5.6 Recommendations for Further Research

The findings of this research point to the need for further research in the following areas:

1. A study is needed to establish the role of social cultural values in maintaining spouse support among HIV positive couples.

2. Further research should be done on the appropriate model of spousal support for HIV positive couples in Uganda.

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Appendices

Appendix 1: Cover Letter for the Research Questionnaires

KYAMBOGO UNIVERSITY

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

Mobile: 0773001535/0759659851

Dear Participant,

Re: spouse support, socio-economic status and adherence to anti-retroviral therapy among patients attending art services in Butabika hospital

I am currently undertaking a master's degree at Kyambogo University. As one of the requirements of the course, students are required to conduct a study. This particular study is about "Spouse Support, Socio-Economic Status and Adherence to Anti-Retroviral Therapy among Patients Attending Art Services in Butabika Hospital''. The aim of this study is to provide information that will improve spouse-based support and adhering to ART. The information it will provide will be of great value to me in completing my research. Your responses will be strictly private and confidential. Your name will not appear on the questionnaire, so your participation will be completely anonymous. The results of this study will be summarized and sent to all interested participants. The questionnaire should take around 15 minutes to complete. I am aware that your time is valuable and I would like to thank you in advance for your support and co-operation in completing the questionnaire. If you have any queries regarding this, please do not hesitate to contact me at the above mobile number.

Yours faithfully,

.....

Nabulya Immaculate

Appendix 2: Consent Form

KYAMBOGO UNIVERSITY

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

Research Title: Spouse Support, Socio-Economic Status and Adherence to Anti-Retroviral Therapy among Patients Attending Art Services in Butabika Hospital

I fully understand that I am free to accept or decline to take part in the study; terminate participation in this study anytime without any penalties. I have granted the researcher permission to include me as a participant to this questionnaire. The permission to participate in this study is granted on the strict condition that the researcher will without exception protect my integrity and identity. I understand that the researcher will retain all rights to the publication of any data collected in the process. In case of any questions, compliments or complaints prior to, during or after this study; I am free to contact the researcher on; 0773001535. My dated signature below confirms my consent for me to be part of the study.

Name: .....

Phone: .....

Sign: .....

Date: .....

Appendix 3: Questionnaire for ART patients Receiving ART Services in Butabika Hospital

Dear participant,

I am Nabulya Immaculate, pursuing a Master of Counseling Psychology degree of Kyambogo University, and currently conducting a study, entitled, Spouse Support, Socio-economic Status and Adherence to Art among Patients Attending Art Services in Butabika Hospital. The research findings and information collected from you are solely for academic purposes, and not for any other reasons. As per informed consent rules, you ought to know that you reserve a right to either accept, or refuse to take part in this study without giving any reason. Although some of the questions that will be asked will be so sensitive, the researcher is ethical enough to being confidential and retains the sources as anonymous as possible by treating the responses in a generalized manner.

Do you agree to fill this questionnaire? Yes/No

Section A: SECTION A: DEMOGRAPHIC INFORMATION

(*For the following questions, kindly tick the option that best describes you*)

S/N	QUESTION	RESPONSE
1.	What is your sex?	1. Male 2. Female
2.	What is your current marital status?	1. Married 2. Single 3. Divorced 4. Separated 5. Cohabiting
3.	What is your age bracket?	1. 18-28 2. 29-38 3. 39-48 4. 49-58 5. 59 and above

SECTION B: SPOUSE SUPPORT

Instructions: *For the following questions, please rank your opinions on the scale of 5=strongly agree (SA), 4= agree (A), 3= Not sure (U), 2=disagree (D), and1= strongly disagree (SD).*

SN	Spouse Support received by patients attending ART services in Butabika Hospital	SA (5)	A (4)	NS (3)	D (2)	SD (1)
Section B1: Instrumental support		5	4	3	2	1
1	1	5	4	3	2	1
2	My spouse helps me with domestic work and allows me to rest	5	4	3	2	1
3	My spouse provides me with the required foods and drinks	5	4	3	2	1
4	My spouse supports me in picking medicine when am not able	5	4	3	2	1
5	I receive gifts from my spouse whenever I properly take my medicine	5	4	3	2	1
Section B2: Informational support						
1	I receive reminders about taking medicine from my spouse	5	4	3	2	1
2	My spouse reminds me of the appointments with health workers	5	4	3	2	1
3	My spouse informs me about the benefits of adhering to medicine	5	4	3	2	1

4	My spouse educates me about the dangers of non-adherence to medicine	5	4	3	2	1
5	My spouse reminds me about what foods to eat and what not to eat	5	4	3	2	1
Section B3: Emotional support						
1	My spouse narrates stories that bring hope for me	5	4	3	2	1
2	My spouse gives me time to share my burdens with him/her	5	4	3	2	1
3	We engage in an open talk conversation with my spouse about our future	5	4	3	2	1
4	My spouse is my immediate counselor whenever am depressed	5	4	3	2	1
5	My spouse uses encouraging language to intrigue me to adhere to the treatment	5	4	3	2	1

SECTION C: SOCIO-ECONOMIC STATUS

Instructions: *For the following questions, assess your or spouse's financial* position, quality of education and occupation, leading to better employability and income. *please rank your opinions on the scale of 5=strongly agree (SA), 4= agree (A), 3= Not sure (U), 2=disagree (D), and1= strongly disagree (SD).*

SN	Socioeconomic status of patients attending ART services in Butabika Hospital	SA (5)	A (4)	NS (3)	D (2)	SD (1)
Section C1: Income						
1	I am not among those who do not earn any form of income	5	4	3	2	1
2	I am not among those who survive on help from relatives and friends	5	4	3	2	1
3	I earn enough income to enable me meet my daily needs	5	4	3	2	1
4	Even if I was stuck, I could get the needed financial support from my relatives					
5	My partner earns enough to support me financially					
Section C2: Education						
1	I am not among those who didn't go to school at all	5	4	3	2	1
2	I am among those who attained PLE or an equivalent	5	4	3	2	1

3	I am among those who attained UCE or an equivalent	5	4	3	2	1
4	I am among those who attained UACE or an equivalent	5	4	3	2	1
5	I am among those who attained a degree or higher degree	5	4	3	2	1
Section C3: Nature of occupation						
1	I am not unemployed so as to have problems with earning enough income	5	4	3	2	1
2	Even if I was Self-employed, I could still earn enough income to support myself	5	4	3	2	1
3	Even if I was in paid employment, I still earn enough money to meet my needs	5	4	3	2	1
4	I can earn well from whatever I do	5	4	3	2	1
5	I have enough skills to get a job that can effectively sustain me unemployed because I lack the skills	5	4	3	2	1

SECTION D: ADHERENCE TO ART

Instructions: *For the following questions, please rank your opinions on the scale of 5=strongly agree (SA), 4= agree (A), 3= Not sure (U), 2=disagree (D), and1= strongly disagree (SD).*

SN	**Adherence to ART among patients attending ART services in Butabika Hospital**	**SA (5)**	**A (4)**	**NS (3)**	D (2)	**SD (1)**
1	I take my pills on time	5	4	3	2	1
2	I closely follow dietary recommendations made by health workers	5	4	3	2	1
3	I closely observe appointments with health workers	5	4	3	2	1
4	I take the right dosage of medicine as prescribed by the health workers	5	4	3	2	1
5	I closely follow the treatment plan as set by the health workers	5	4	3	2	1

Thank you for your time

Appendix 4: Table for determining sample size

Table for Determining Sample Size for a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	300	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size
Source: Krejcie & Morgan, 1970

Appendix 5: Introductory Letter

KYAMBOGO UNIVERSITY
P. O. BOX 1, KYAMBOGO – KAMPALA, UGANDA
TEL: 041-289902, Fax 041-220464, 222643
www.kyu.ac.ug
FACULTY OF SOCIAL SCIENCES
PSYCHOLOGY DEPARTMENT

24th May, 2022

TO THE EXECUTIVE DIRECTOR
BUTABIKA NATIONAL MENTAL
REFERRAL HOSPITAL

Dear Sir/Madam,

RE: INTRODUCTORY LETTER

This is to introduce the bearer NABULYA IMMACULATE Reg.No. 19/U/GMCP/18608/PA who is a student of Kyambogo University Department of Psychology, pursuing a Degree of Masters of Counselling Psychology Year II.

As part of the requirements for their academic award, second year students carry out a research project in their field of study. For this purpose the above student would like to collect data on research project entitled:

SPOUSE SUPPORT, SOCIO-ECONOMIC STATUS AND ADHERENCE TO ANTI-RETROVIRAL THERAPY AMONG PATIENTS ATTENDING ART SERVICES IN BUTABIKA HOSPITAL, KAMPALA UGANDA

I request that you give her/him opportunity to access the relevant information from your organisation. Any information obtained will be used for academic purposes only.

Thanking you in advance.

Yours faithfully,

Kibedi Henry, (PhD)
Ag. HEAD OF DEPARTMENT OF PSYCHOLOGY

KYU UNIVERSITY
DEPARTMENT OF PSYCHOLOGY

Appendix 6: Permission to Collect Data

TELEPHONE: DIRECT 256-414-504376
GENERAL 256-414-504338
FAX NO. 256-414-504760
E-MAIL : info@butabikahospital.go.ug
Website .: https:// www.butabikahospital.go.ug
In any correspondence on this subject,
please quote ——2/16.....

THE REPUBLIC OF UGANDA

BUTABIKA HOSPITAL
P. O. BOX 7017
KAMPALA-UGANDA.

14th December,2022.

Ms. Nabulya Immaculate.
Psychology Department,
Faculty of Social Sciences.
Kyambogo University.
KAMPALA.

RE: "SPOUSE SUPPORT SOCIO – ECONOMIC STATUS AND ADHERENCE TO ART AMONG PATIENTS ATTENDING ART SERVICES IN BUTABIKA HOSPITAL".

We have noted your request to carryout research in this hospital. You have been given institutional permission to carryout data collection a period of one year from (14th December 2022 to 13th December 2023).

Permission to carry out this research is subject to you following the research guidelines stipulated by the Research Ethics Committee/ Uganda National Council of Science and Technology.

You are requested to provide an end of study report upon completion of the study, including any publication.

MINISTRY OF HEALTH P.O. BOX 7017 14 DEC 2022 KAMPALA BUTABIKA HOSPITAL

Yours sincerely,

Dr. Benedict Akimana.
RESEARCH COORDINATOR/BUTABIKA HOSPITAL.

Mission
"To be a center of Excellence in the country, offering Super Specialized and Specialized, Mental Health Care Treatment, Training and Research".

Appendix 7: Plagiarism Report

NABULYA IMMACULATE EDITED

by Immaculate NABULYA

Submission date: 25-Sep-2024 12:57PM (UTC+0100)
Submission ID: 2220606190
File name: NABULYA_IMMACULATE_EDITED.docx (2.22M)
Word count: 19970
Character count: 111148

NABULYA IMMACULATE EDITED

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