

TITLE PAGE

**PERCEIVED STIGMATIZATION, SOCIAL SUPPORT, GENDER AND
EDUCATIONAL LEVEL ON SELF DISCLOSURE OF HIV/AIDS STATUS
AMONG PLWHA IN JOS**

BY

YAKUBU MWANTI BANJE

(BSU/PSY/PhD/10/5652)

**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, BENUE STATE
UNIVERSITY, MAKURDI IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY (PhD)
IN CLINICAL PSYCHOLOGY**

SEPTEMBER, 2016

CERTIFICATION

We certify that this thesis titled *“Perceived stigmatization, social support, gender and education on self disclosure of HIV/AIDS status among PLWHA in Jos ”* has been duly presented by **Banje Yakubu Mwanti** (BSU/PSY/PhD/10/5652) of the Department of Psychology, Faculty of Social Sciences, Benue State University, Makurdi, Nigeria and approved by the Examiners. Having met the stipulated requirements, this thesis has been accepted by the Postgraduate School.

1st Supervisor:

Head of Department

Signature:.....

Signature.....

Name: **Prof. Josiah A Shindi**

Name: **Prof. Elvis Ihaji.**

Date:.....

Date.....

2nd Supervisor

Signature.....

Name: **Prof. Elvis Ihaji**

Date:.....

.....

Dean

Postgraduate School

.....

Date

ACKNOWLEDGEMENTS

I acknowledge God Almighty, my creator and savior who represents the instrument of my success in life.

A host of personalities have contributed immensely in one way or the other towards the success of this program

My project supervisors, Professors Josiah A Shindi and Elvis Ihaji were always there to educate, guide and correct me to give the work its current doctoral outlook and taste. I must testify that I've learnt a lot from their wealth of knowledge which has built and solidified my experience in research. I now feel equipped to train students at lower levels in this regard. To my Head of department, Prof. Elvis Ihaji, your able administration has maintained the Department's prestige; you are highly acknowledged. All Lecturers in the department (especially Doctors Ronke G. Awopetu, Ucho Aoundover and Anhange Samuel) inspired me in the course of my studies and particularly their inputs during my defense were quite insightful and appreciated.

My wife, Dinatu Banjes and children-Mark, Simi, Mafeng and Weng who were always on their knees for my success are highly acknowledged. My brothers, sisters, nephews and nieces were not left behind in this prayer project. I sincerely thank them all.

My parents- Da Nyam Banje, Da Jatau Banje and Ngo Biya J Banje (all of blessed memory) and Da Mwanti Banje, I owe you a lot of gratitude for who I am today.

I acknowledge the immense contribution of the Church (LCC RIYOM) through prayers (especially at the elders' forum) for my success and God's guidance. My Pastors (Rev. Sulisma S Ali and Rev. Samson Lamak who represent an embodiment of humility were always there for me. I salute the philanthropic spirit of Mr. & Mrs. Dalyop Choji Nyap

of Riyom for always being there for me. Members of *Wunato Na Yong Vel-Riyom(WUNYV-RIYOM)* and my aunt Helen Mom and family are also highly appreciated

My colleagues and superiors in the work place (Bassa Local government and Plateau state University) were always there to inspire and motivate me to press on. Worthy of note in this regard were Mrs. Margaret Wambutda, Mrs. Martina Fom, Mr Benedict Auta, Mr. Bitrus Kuba, Mr. Daniel Kim, Professors Thomas Shut, B.N Gyang, Davou Dabi and Rauta Jat

I am indebted to Professor Davou C. Nyap(a brother and mentor), Assoc. Prof Paul S Wai, Dr Esau Mwantu, Prof. Patricia Lar, Dr. Margarate Akogun, Dr. Enoch Amabu, Mr. Theophilus Aver (Potential Dr), Matron Eunice Digin, my research assistants from College of Nursing Vom (Jos campus), my colleagues in the PhD program and NOUN students for their contributions in various ways towards the completion of this program

This acknowledgement would be incomplete without the mention of Mr. Emmanuel Ojih and Mr. Adewale Johnson who graciously analyzed the work. I pray God to guide them as they embark on a similar program. My manuscript typists-Dung Yakubu Chong, Chollom Boyi, Kangyang Musa, Mr. Amu Samuel, Niyi Elisha are heartily acknowledged and appreciated.

DEDICATION

To Almighty God who has always turned impossibilities in my life to possibilities.

TABLE OF CONTENTS

Title Page	-	-	-	-	-	-	-	-	-	i
Certification	-	-	-	-	-	-	-	-	-	ii
Acknowledgements	-	-	-	-	-	-	-	-	-	iii
Dedication	-	-	-	-	-	-	-	-	-	v
Table of Contents	-	-	-	-	-	-	-	-	-	vi
List of Tables	-	-	-	-	-	-	-	-	-	xi
Abstract	-	-	-	-	-	-	-	-	-	xi

CHAPTER ONE

1.1	Background to the study	-	-	-	-	-	-	-	-	1
1.2	Statement of problems	-	-	-	-	-	-	-	-	10
1.3	Objectives	-	-	-	-	-	-	-	-	12
1.4	Research Questions	-	-	-	-	-	-	-	-	12
1.5	Significance of the study	-	-	-	-	-	-	-	-	13
1.6	Scope of the study	-	-	-	-	-	-	-	-	13
1.7	Definition of terms	-	-	-	-	-	-	-	-	14

CHAPTER TWO: LITERATURE REVIEW

2.1	Conceptual Review	-	-	-	-	-	-	-	-	15
2.1.1	The Concept of Stigma	-	-	-	-	-	-	-	-	18
2.1.2	HIV Related Stigma	-	-	-	-	-	-	-	-	18
2.1.3	Social Support-	-	-	-	-	-	-	-	-	20
2.1.4	Perceived Social Support	-	-	-	-	-	-	-	-	20
2.1.5	Gender Concept	-	-	-	-	-	-	-	-	21
2.1.6	Self-Disclosure	-	-	-	-	-	-	-	-	23

2.2	Theoretical Review	-	-	-	-	-	-	-	24
2.2.1	Attribution Theory	-	-	-	-	-	-	-	24
2.2.2	Health Belief Model (HBM)	-	-	-	-	-	-	-	36
2.2.3	Theories of Stigmatization	-	-	-	-	-	-	-	45
2.2.4	Buffering Theory (Akert, 2007)	-	-	-	-	-	-	-	46
2.2.5	Theories of HIV Disclosure	-	-	-	-	-	-	-	47
2.3	Empirical Review	-	-	-	-	-	-	-	54
2.3.1	Stigma – related Factors	-	-	-	-	-	-	-	54
2.3.2	HIV stigma, Housing and Disclosure of Status	-	-	-	-	-	-	-	58
2.3.3	Social Support and Gender in Relation to HIV/AIDS Disclosure	-	-	-	-	-	-	-	60
2.3.4	Education and HIV/AIDS Status Disclosure	-	-	-	-	-	-	-	63
2.3.5	Antecedents of HIV/AIDS Status Disclosure-	-	-	-	-	-	-	-	65
2.3.6	Gender and Self Disclosure	-	-	-	-	-	-	-	71
2.3.7	Level of Development and Sero-status Disclosure Across States	-	-	-	-	-	-	-	72
2.3.8	Disclosure Target Preferences	-	-	-	-	-	-	-	73
2.3.9	Correlates of Self-Disclosure of HIV/AIDS Status	-	-	-	-	-	-	-	74
2.3.10	Challenges Associated with Disclosure of Status	-	-	-	-	-	-	-	76
2.3.11	Gender, Stigma and HIV status Disclosure	-	-	-	-	-	-	-	82
2.4	Summary of Literature Review	-	-	-	-	-	-	-	83
2.5	Hypothesis	-	-	-	-	-	-	-	84
CHAPTER THREE: METHOD									
3.1	Research Design	-	-	-	-	-	-	-	85
3.2	Sample Size Determination	-	-	-	-	-	-	-	85
3.3	Sampling	-	-	-	-	-	-	-	85

3.4	Participants	-	-	-	-	-	-	-	-	85
3.5	Instruments	-	-	-	-	-	-	-	-	86
3.6	Scoring	-	-	-	-	-	-	-	-	89
3.7	Procedure	-	-	-	-	-	-	-	-	89
3.8	Data Analysis	-	-	-	-	-	-	-	-	90
CHAPTER FOUR: RESULTS										
4.1	Descriptive Result	-	-	-	-	-	-	-	-	91
4.2	Inferential Results	-	-	-	-	-	-	-	-	92
CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS										
5.1	Discussion of Major Findings-	-	-	-	-	-	-	-	-	96
5.2	Summary	-	-	-	-	-	-	-	-	102
5.3	Conclusion	-	-	-	-	-	-	-	-	102
5.4	Limitations of the Study	-	-	-	-	-	-	-	-	103
5.5	Incidental Findings	-	-	-	-	-	-	-	-	104
5.6	Recommendations	-	-	-	-	-	-	-	-	105
	References	-	-	-	-	-	-	-	-	107
	Appendices	-	-	-	-	-	-	-	-	124
	The HIV stigma scale	-	-	-	-	-	-	-	-	125
	The multidimensional scale of perceived social support-	-	-	-	-	-	-	-	-	128
	Frequencies	-	-	-	-	-	-	-	-	129
	Permission for collection of data/Administer of									
	Questionnaire	-	-	-	-	-	-	-	-	134
	Ethical clearance/approval for collection of data-	-	-	-	-	-	-	-	-	135
	Re-request for permission to carry out research-	-	-	-	-	-	-	-	-	136

LIST OF TABLES

Table 2.0:	Showing self-disclosure panes between self and others	24
Table 4.0:	inter-correlation of dimensions of HIV stigmatization and perceived social support	91
Table 4.1:	T-test Summary of effect of perceived stigmatization on self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).	92
Table 4.2:	T-test Summary of effect of perceived social support on self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).	93
Table 4.3:	T-test Summary of effect of gender on self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).	94
Table 4.4:	One-way ANOVA influence education on Self-disclosure stigma among People Living with HIV and AIDS (PLWHAs)	95

ABSTRACT

This study examined the influence of perceived stigmatization, social support, gender and education on self disclosure of HIV/AIDS status among PLWHAs in Jos metropolis. It adopted a 2x2x2x4x2 factorial design. Participants, whose ages ranged from 19-65 years, comprised of 167 females and 79 males came from various educational backgrounds. Purposive sampling technique was employed in the recruitment of the study participants. The reliability coefficient of the HIV stigma scale used in the study was .96 Cronbach's alpha while the Multidimensional scale of social support had .92-.94 Cronbach's alpha. The statistical analyses used were the One-Way ANOVA, the independent t-test and regression. And Public Attitude Stigma) were negatively and significantly correlated with perceived social support ($r=-0.235$; $P<.01$; $r=-0.243$; $P<.01$ & $r=-0.215$; $P<.01$) respectively. Self-Disclosure Correlated negatively with Perceived Social Support though not significantly ($r=-0.122$, $P>.05$). Perceived stigmatization significantly influenced self-disclosure of HIV/AIDS status among People Living with HIV and AIDS, [$t(244) = -12.41$, $p<.05$]. Perceived social support had a statistically significant influence on self disclosure of HIV/AIDS status by victims; [$t(244) = 2.68$, $p<.05$]. However no significant difference was observed in self-disclosure of HIV/AIDS status between gender, [$t(244) = -1.469$, $p>.05$]. There was no significant influence of education on self-disclosure of HIV/AIDS status among PLWHAs, [$F(3,242) = 1.236$; $p>.05$]. Finally, interaction of gender, education, perceived stigmatization and social support was significant among PLWHAs, [$F(4,241)=40.404$, $p<.001$]. However, the independent influence of the predictor variables showed that only perceived stigma and perceived social support independently and significantly influenced self-disclosure ($\beta=0.610$, $t=12.144$, $p<.001$ & $\beta=-0.126$, $t=-2.491$, $p<.01$). It was therefore recommended that government and civil society groups like global fund, Ghain, APIN and PEPFAR should embark on intensive education programs and media campaigns to promote stigma reduction and sero status disclosure. The identification and referral of victims for psychosocial support and counseling was recommended as this would ease disclosure and in the long run prevent transmission of the disease.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Over the years HIV/AIDS has plagued the world with damaging consequences on human life and society. The most worrisome aspects of the disease are issues surrounding it. The latter include stigma and discrimination which are said to exist worldwide, although they manifest themselves differently across countries, communities, religious groups and individuals.

According to Olugbemi (2013), acquired Immune Deficiency Syndrome (AIDS) has reportedly killed nearly 30 million people worldwide, including an estimated 850,000 in Nigeria. This makes it one of the most destructive diseases in recorded history. Among the factors that compound the impact of HIV/ AIDS and scuttles mitigation efforts is the stigma around the disease. Stigma as an attribute is deeply discrediting and has the effect of reducing the victim from a whole and normal being to a tainted discounted one.

Since 1986 when the first case of the Acquired Immune Deficiency Syndrome (AIDS) was reported in Nigeria, the disease has grown to epidemic proportions (Nasidi, Harry, Ajose-Coker, Ademiluyi & Akinyanju, 1986). The prevalence of its causative agent- the Human Immunodeficiency Virus (HIV) was observed to be steadily rising since the early days of the epidemic from 1.8% in 1991 to 5.8% in 2001. Subsequent surveys in 2003 and 2005 revealed a slight downward trend to 5.0% and 4.4% respectively (National AIDS/STDs Control Programme (NASCP) Federal Ministry of Health, Abuja, 2005).

There is a high prevalence rate of HIV/AIDS in Plateau State for instance Plateau has been listed as one of the leading States in mother to child transmission of HIV/AIDS in

Nigeria (Onyebuchi 2014). Out of 5,021 subjects screened, 245 (4.88%) were seropositive. Local Government prevalence ranged from 0.68% in Bassa to 16.07% in Jos North. On average, LGAs in the Southern Senatorial Zone had higher rates. Most (over 80%) positive cases were younger than 40 years. Females had a significantly higher (6.85%) prevalence than males (2.72%). Age-specific prevalence was higher among females aged 25 to 29 years (2.09%). Risk factors identified for acquisition of HIV infection were previous history of STDs (6, 16.28%); men having sex with men (2, 11.76%); having multiple sexual partners (97; 10.49%); intravenous drug use (10, 7.58%); sharing of sharp objects (20, 4.82%); and history of blood transfusion (21, 3.65%). (Gomwalk, Nimzing, Mawak, Ladep, Dapep, Damshak, et al 2014). From the high rate, there is the likelihood of perceived stigmatization that will affect self-disclosure.

This research work is an attempt to assess the impact of perceived stigma, social support, sex and education on self-disclosure of HIV/AIDS status by people living with the disease in Jos metropolis.

Social stigma can result from the perception of mental illness, physical disabilities, diseases such as leprosy illegitimacy, sexual orientation, gender identity (Black & Miles 2002), skin tone, education, nationality, ethnicity, ideology, religion or lack of religion (Chandra, Deepthivarma & Manjula 2003 Chin & Kroesen 1999) or criminality.

One of the main concerns regarding disclosure of HIV status is stigmatization (Black & Miles, 2002; Derlega, Winstead, Greene, Serovich, and Elwood, 2002, 2004; Petrak, Doyle, Smith, Skinner and Hedge, 2001; Serovich, 2001; Health and Development Networks Moderation Team, 2004). Although stigma is an issue in all cultures, it becomes even more powerful in family oriented societies. HIV-related stigma is borne not only by the individual but also by the family and community. A study by Songwathana and Manderson (2001) in

Thailand showed that if the status of a PLWHA is disclosed to the community, then the entire family fears losing face. Furthermore, social networks in Thailand often treat an entire family discriminatorily because one of its members is HIV positive. In South India, one of the main reasons cited for nondisclosure is disgrace of self and family, with concerns about the future of family members (Chandra et al., 2003).

Social support refers to the various types of support or assistance/help that people receive from others and is generally classified into: emotional, instrumental (and sometimes informational) support. Emotional support refers to the things that people do that make us feel loved and cared for, that bolster our sense of self-worth for example talking over a problem, providing encouragement/positive feedback. Such support frequently takes the form of non-tangible types of assistance. By contrast, instrumental support refers to the various types of tangible help that others may provide for example help with childcare/housekeeping, provision of transportation or money. Informational support represents a third type of social support (one that is sometimes included within the instrumental support category) and refers to the help that others may offer through the provision of information. (Macarthur 2008)

Social support is the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive social network. These supportive resources can be emotional (nurturance), tangible (financial assistance), informational (advice), or companionship (sense of belonging) and intangible (personal advice). Social support can be measured as the perception that one has assistance available, the actual received assistance, or the degree to which a person is integrated in a social network. Support can come from many sources, such as family, friends, pets, neighbours,

coworkers, organizations, etc. Government-provided social support is often referred to as public aid (Wikipedia, the free encyclopedia).

Researchers have reported that disclosure of HIV status varies with regard to the types of relationships (Kalichman, DiMarco, Austin, Luke, DiFonzo, Marks, Bundek, Richardson, Ruiz, Maldonado, Mason 1992, Jeffe, Khan, Meredith, Schlesinger, Fraser, Mundy, 2000). However, there is no consistency among their results. Some of the studies suggest that PLWHA intend to disclose HIV-status to family members more than friends and coworkers for the simple reason that they(family members) would keep it confidential. Whereas, some other studies showed that the disclosure was more towards the friends (Kalichman, DiMarco, Austin, Luke, DiFonzo, Stempel, Moulton, Moss 1995.). Contrary to other countries, particularly western society, information about social support and disclosure of HIV status is limited in Iran. Also, based on the literature, the statistical models have been used a little for assessing adjusted associations between disclosure of HIV-status and related factors (Smith, Rossetto, Peterson 2008, Emler. 2006). Many PLWHAs are often reluctant to disclose their status for fear of negative reactions such as rejection, exclusion, discrimination, and even assault that ultimately result in loss of social support from their social network (Stutterheim, Shiripinda , Bos , Pryor , de Bruin , Nellen , et al2011, Fredriksson, Kanabus.2004, Vance 2006).This is the situation in Nigeria with People living with HIV/AIDS not willing to disclose their status because people do not give them social support due to discrimination.

According to Sagay, Musa, Ekwempu, Imade, Babalola, and Daniyan (2006), disclosure is an important public health goal for a number of reasons. First, disclosure may motivate sexual partners to seek testing, change behaviour and ultimately decrease transmission of HIV. Secondly, disclosure may facilitate other health behaviours that may improve management of HIV. Women who disclose their HIV status to partners may be more

likely to participate in programmes for prevention of mother to child transmission (PMTCT) than those who don't. Through disclosure of her HIV status, a woman may receive support from her family or others in her social network and may also be able to access available support services. By adequately addressing the emotional, social, and practical problems associated with her HIV positive status she may be more willing to adopt and maintain health behaviours such as cessation of breastfeeding or adherence to treatment regimens and other interventions for PMTCT. It has been well documented in Africa that women often lack the power to take independent decisions with regards to their own health care and that of their children (Guinan , Leviton 1995, Manhart , Dialmy , Ryan & Mahjour ,2000). Disclosure of HIV status is however a difficult emotional task creating opportunities for both support and rejection (Yashioka & Schustaek, 2001). Some of the barriers to disclosure of HIV status include fear of accusations of infidelity, abandonment, discrimination and violence (Medley. Garcia-Moreno, McGill & Maman). In spite of these fears and barriers, disclosure of HIV status to sexual partner has been emphasized by WHO (UNAIDS; 1997) and the centre for disease control and prevention (CDC) (Morbidity & Mortality weekly report 2002). Disclosure of HIV status to partners is associated with less anxiety and increased social support among many women (Mathews, Kuhn, Fransman, Hussey & Dikweni 1999). Additionally, HIV status disclosure may lead to improved access to HIV prevention and treatment programs, increased opportunities for risk reduction and increased opportunities to plan for the future of the family. It has been clearly documented that risk behaviours changed most dramatically among couples where both partners are aware of their HIV status. Disclosure of HIV status to partners also enables couples to make informed reproductive health choices that may ultimately lower the number of unintended pregnancies among HIV positive women(Allen, Tice, Van de Perre, Serufilira, Hudes, Nsengumuremyi, et al

1992, Allen, Serufulira, Gruber, Kegeles, Van de Perre, Carael, et al 1993). Disclosing one's human immunodeficiency virus (HIV) status helps in reducing the spread of the disease

An abundance of research has shown that men and women use different criteria for deciding to open or close their boundaries. Consequently, they tend to depend on different rules to reveal or conceal. The outcome of these rules is that women more than men tend to disclose overall (though there are situations where the reverse is also true). Women more than men also tend to talk about intimate or personal topics with each other. In addition, women prefer disclosing to same-sex friends while men prefer to disclose while engaging in some activity (Caldwell & Peplau 1982; Dindia & Allen 1992).

Men have a greater need to control their privacy (Petronio, Martin, & Littlefield 1984; Rosenfeld 1979). Men also report expecting greater negative ramifications when disclosing about life expectations (Petronio and Martin 1986). Men and women who enter into a marital relationship often have to change their personal rules to coordinate with their partners. Thus, although they still maintain the same rules around private information that is personal, once information becomes shared and defined as belonging to the couple collectively, new mutually held rules must be determined. If the couple is not able to agree on ways to mutually manage their shared boundary, conflict might erupt. Deribe et al (2008). in a study to compare rates of HIV/AIDS status disclosure among HIV infected men and women using clinical services in Ethiopia, found out that the rate of disclosure was similar between males and females contrary to reports by Anglewicza, & Chintsanya (2011) and Simbayi, Kalichman, Strelbel, Cloete, Henda, & Mqeketo (2007) in studies conducted in Malawi and South Africa respectively, which noted higher rates of disclosure to sexual partners among female participants as compared to males. Mwanga (2012) reported higher proportion of male

participants to have disclosed to their sexual partners in a study conducted among clients in Kisarawe district in Tanzania.

Education is the process of facilitating learning. Knowledge, skills, values, beliefs, and habits of a group of people are transferred to other people, through storytelling, discussion, teaching, training, or research. Education frequently takes place under the guidance of educators, but learners may also educate themselves through a process called autodidactic learning (Dewey, John, 1944). Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship. The methodology of teaching is called pedagogy.

Self-disclosure is a process of communication through which one person reveals himself or herself to another. It comprises everything an individual chooses to tell the other person about himself or herself, making him or her known. The information can be descriptive or evaluative and can include thoughts, feelings, aspirations, goals, failures, successes, fears, dreams as well as one's likes, dislikes, and preferences.(Ignatius, Emmi; Marja & Kokkonen, 2007)

According to social penetration theory, there are two dimensions to self-disclosure: breadth and depth. Both are crucial in developing a fully intimate relationship. The range of topics discussed by two individuals is the breadth of disclosure. The degree to which the information revealed is private or personal is the depth of that disclosure. It is easier for breadth to be expanded first in a relationship because of its more accessible features; it consists of outer layers of personality and everyday lives, such as occupations and preferences. Depth is more difficult to reach, given its inner location; it includes painful

memories and more unusual traits that we might try to hide from most people. This is why we reveal ourselves most thoroughly and discuss the widest range of topics with our spouses and loved ones (Tolstedt, Betsy, Joseph. Stokes 1984 Altman, & Taylor, 1973)

Self-disclosure is an important building block for intimacy; intimacy cannot be achieved without it. We expect self-disclosure to be reciprocal and appropriate. Self-disclosure can be assessed by an analysis of cost and rewards which can be further explained by social exchange theory. Most self-disclosure occurs early in relational development, but more intimate self-disclosure occurs later (wikipedia, the free encyclopedia).

India has 2.1 million people living with HIV, the third-largest population of people infected with the virus on the planet, after South Africa and Nigeria, according to the UNAIDS Gap report 2014, which provides data on the global AIDS epidemic and its treatment. Around 36% of Indian adults with the virus have access to antiretroviral treatment, the report said. In 2014, there were 810,339 patients on government-sponsored antiretroviral therapy, including children and transgender people, according to Indian government estimates. An annual report by India's National AIDS Control Organization noted that the transgender population was "emerging as a risk group with high vulnerability and high levels of HIV." In 2014, there were 1,721 transsexual and transgender patients receiving antiretroviral treatment from the Indian government.

China has 780,000 people living with HIV and 151,519 adults, about a fifth of all those infected have access to antiretroviral treatment, according to 2013 figures from the U.N. The Chinese government in a 2014 report submitted to UNAIDS, said that since 2011 it had prioritized access to antiretroviral treatments to families where at least one member was HIV-positive, in order to reduce AIDS transmission within families. "Notable results have been

achieved in this area,” the Chinese report said. By the end of 2013, the government said its efforts covered 67.2% of families exposed to the virus, up from 22% in 2010. Increased availability of low-cost antiretroviral drugs in Nigeria, which has the second-largest population of people living with HIV after South Africa, has had a significant impact on combating disease transmission and increasing the quality of life, the country’s government said in a report to UNAIDS in 2014.

South Africa is home to 6.3 million people living with HIV, according to the Gap report. Around 42% of adults with the virus have access to antiretroviral treatment, the report said. The country has one of the biggest antiretroviral programs in the world, targeted at screening 15 million people for HIV, by the end of 2015. The cost of acquiring the medicines is largely borne by the government, which spent up to \$1 billion in 2014 running its HIV and AIDS programs, according to the Lancet, a British medical journal.

Nigeria, like South Africa, has set an ambitious target of halting and reversing the spread of HIV by the end of this year. The latest U.N. figures from a 2014 report show that 3.2 million people in Nigeria are now living with HIV. Around a fifth of adults with the disease have access to antiretroviral treatment. There are 1.2 million people in the U.S. living with HIV, according to U.N. figures from 2012. Around 37% of adults with the virus in 2011 had access to antiretroviral treatment. More than half (57%) of the \$30.4 billion of the U.S. federal budget for HIV/AIDS is spent on antiretroviral treatment. But many of those infected with the disease go unnoticed because they don’t have adequate health insurance. The introduction of the 2014 Affordable Care Act will have a significant impact on those who seek antiretroviral therapy, according to the Centers for Disease Control (CDC) and Prevention based in the U.S. The new law says insurance companies can no longer

discriminate against consumers who have pre-existing conditions or because of their sexual orientation. Expanded eligibility under Medicaid and increased access to tax credits, which are also part of the legislation, will allow more Americans living with HIV access to antiretroviral drugs, according to the CDC.

The prevalence rate of the Human Immuno-deficiency Virus, which leads to the Acquired Immune Deficiency Syndrome in Plateau State, increased from 2.6 per cent in 2008 to 7.7 per cent in 2010. This represents an increase of 196.15 percent. With this development, Plateau has displaced Benue in the rate of increase, but Benue still retains the number one position in the country. While Benue has a prevalence rate of 10.6 in 2008, it increased to 12.7 in the 2010 survey (Naira Land, 2016)

1.2 **Statement of Problem**

There are so many HIV/AIDS victims in Plateau state and elsewhere in the world who are directly or indirectly experiencing problems associated with HIV/AIDS which include stigma, anxiety, depression, and hypertension, fear of spousal abandonment, community rejection, abusive and derogatory labels. According to the US Intelligence Community Assessment (ICA) which highlighted the rising HIV/AIDS problem through 2010 in five countries of strategic importance to the United States, which include Nigeria. According to ICA: “HIV/AIDS however, risky sexual behaviors are driving infection rates upward at a precipitous rate. It will be difficult for Nigeria and other endemic nations to check their epidemics by 2010 without dramatic shifts in priorities. The disease has built up significant momentum, health services are inadequate, and the cost of education and treatment programs will be overwhelming. Government leaders will have trouble maintaining a priority on

HIV/AIDS—which has been key to stemming the disease in Uganda, Thailand, and Brazil—because of other pressing issues and the lack of AIDS advocacy group”.(ICA)

Government on her part has put forward a number of measures aimed at curtailing the challenges associated with the scourge of the disease in order to ensure better control of the disease.

Although the National agency for the control of AIDS (NACA) has been carrying out activities based on its mandate, it appears the aim of setting up HIV/AIDS control centres to check the spread of the disease has not yet been fully achieved. Stigma and discrimination have continued to rise unabated. Social support to victims which will ameliorate the social stigma is not always there. Men and women are commonly seen today suspecting or pointing accusing fingers at one another for their woes. Marriages have suffered divorce or separation. Some of these predicaments could be blamed on the level of awareness of the victims as majority are ignorant of the dynamics of the disease.

Considering the sufferings that victims of HIV/AIDS go through, and the systematic variations with which the consequences of the disease are distributed across populations, HIV/AIDS control has far-reaching implications. It is indeed a concern that goes beyond the boundaries of clinical interest. It affects at some point every family and policy issues for health and social service agencies of every community. The HIV/AIDS epidemic in Nigeria is significantly ahead of that in India, China, and Russia—already advancing well beyond high-risk groups and into the general population. The official adult prevalence rate is almost 6 percent, but unofficial estimates range as high as 10 percent—which represents 4 to 6 million people Infected. Heterosexual transmission of the HIV virus is the primary mode of spread in Nigeria, and infections appear to be as numerous in rural areas as in the cities. The

reported rate of infection apparently varies significantly by region, with the lowest reported rate found generally in the predominantly Muslim northern parts of the country. Infections are most prevalent among men ages 20 through 24, but some experts caution that infection rates are rising quickly in young women (ICA, 2010). Accordingly this study sets out to examine the influence of relevant variables of perceived stigmatization, social support, gender and education on disclosure of HIV/AIDS status.

1.3 Objectives

The aim of this study is to investigate the impact of perceived stigmatization, social support, sex and education on self disclosure of HIV/AIDS status among victims in Jos metropolis. The following objectives are defined for the study

- i. To examine the influence of perceived stigmatization on self disclosure of HIV/AIDS status by PLWHA in Jos.
- ii. To determine the influence of social support on self disclosure of HIV/AIDS status by PLWHA in Jos.
- iii. To investigate the influence of gender on self disclosure of HIV/AIDS status by PLWA in Jos.
- iv. To find out the influence of education on self disclosure of HIV/AIDS status by PLWHA in Jos.

1.4 Research Questions

The following research questions are raised:

- i. What is the influence of perceived stigmatization on self disclosure of HIV/AIDS status by PLWHA in Jos ?
- ii. What is the influence of social support on self disclosure of HIV/AIDS status by PLWHA in Jos?

- iii. What is the influence of gender on self disclosure of HIV/AIDS status by PLWHA in Jos?
- iv. What is the influence of education on self disclosure of HIV/AIDS status by PLWHA in Jos?

1.5 **Significance of the Study**

The study of self disclosure of HIV/AIDS status by victims is gaining attention because the strategic preventive and therapeutic approaches of the disease stem from it mostly. Findings from this study will undoubtedly go a long way in addressing challenges that have unfortunately affected the control of HIV/AIDS by governments, civil society organizations, communities, spouses and lovers.

- 1- It is expected that the study will give government direction on legislation and enforcement of laws in connection with HIV/AIDS appreciation.
- 2- The result obtained will broaden the literature on the hypothesised variables and open new avenues of research on disclosure of HIV/AIDS status among victims.
- 3- The research will provide information that will be of major importance in the facilitation of self disclosure of HIV/AIDS by victims.

1.6 **Scope of the Study**

The scope of this study is the Jos metropolis in Plateau State Nigeria. The AIDS Prevention Initiative (APIN) centre in Jos was the setting where the bulk of the respondents was drawn. Care was taken to capture all gender, races, cultural and educational backgrounds.

1.7 Definition of Terms

Common terms used in this research may convey different meanings in different contexts. For an appreciable comprehension of terms used in the context of this study, the following definitions are necessary.

HIV: Human Immune Deficiency Virus.

AIDS: Acquired Immune Deficiency Syndrome.

HBM: Health Believe Model

Stigma: An undesirable or discrediting attribute that an individual possesses thus reducing the individuals' status in the eyes of society.

Perceived Stigmatization: An attribute, impression or understanding that an individual group or discrediting attributes associated with his/her status in the eyes of society.

Self-disclosure: This is the conscious and subconscious act of revealing more about oneself to others.

Social Support: Social support is the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive social network

Education: Education is the process of facilitating learning, Knowledge, skills, values, beliefs, and habits of a group of people that are transferred to other people, through storytelling, discussion, teaching, training, or research.

Gender: The sex of a person or organism or a whole category of people or organisms.

PLWHA: People living with HIV/AIDS

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

This chapter reviews concepts of HIV /AIDS, acute infection, clinical latency, transmission, stigma, HIV-related stigma, perception, social support, perceived social support, gender, education and self disclosure.

HIV/AIDS

Human immunodeficiency virus infection / acquired immunodeficiency syndrome (HIV/AIDS) is a disease of the human immune system caused by infection with human immunodeficiency virus (HIV) (Sepkowitz, 2001). The term HIV/AIDS represents the entire range of disease caused by the human immunodeficiency virus from early infection to late stage symptoms. During the initial infection, a person may experience a brief period of influenza-like illness. This is typically followed by a prolonged period without symptoms. As the illness progresses, it interferes more and more with the immune system, making the person much more likely to get infections, including opportunistic infections and tumors that do not usually affect people who have working immune systems (Sepkowitz , 2001).

Markowitz (2007), posited that HIV is transmitted primarily via unprotected sexual intercourse (including anal and oral sex), contaminated blood transfusions, hypodermic needles, and from mother to child during pregnancy, delivery, or breastfeeding: Some bodily fluids, such as saliva and tears, do not transmit HIV (Centers for Disease Control and Prevention, .2003). Prevention of HIV infection, primarily through safe sex and needle-exchange programs, is a key strategy to control the spread of the disease. There is no cure or vaccine; however, antiretroviral treatment can slow the course of the disease and may guarantee a near- normal life cycle.

The initial period following the contraction of HIV is called acute HIV, primary HIV or acute retroviral syndrome (Mandell et' al, 2010 & World Health Organization. 2007.). Many individuals develop an influenza-like illness or a mononucleosis-like illness 2–4 weeks post exposure while others have no significant symptoms (Marshall, 2008, Mandell et'al, 2010). Symptoms occur in 40–90% of cases and most commonly include fever, large tender lymph nodes, throat inflammation, a rash, headache, and/or sores of the mouth and genitals (World Health Organization. 2007, Mandell et' al, 2010). The rash, which occurs in 20–50% of cases, presents itself on the trunk and is maculopapular, classically (Vogel; Schwarze-Zander; Wasmuth; Spengler; Sauerbruch; Rockstroh, 2010). Some people also develop opportunistic infections at this stage (World Health Organization. 2007.). Gastrointestinal symptoms such as nausea, vomiting or diarrhea may occur, as may neurological symptoms of peripheral neuropathy or Guillain-Barre syndrome also do. The duration of the symptoms varies, but is usually one or two weeks (Mandell et' al, 2010).

According to them, due to their nonspecific character, these symptoms are not often recognized as signs of HIV infection. Even cases that do get seen by a family Doctor or a hospital are often misdiagnosed as one of the many common infectious diseases with overlapping symptoms. Thus, it is recommended that HIV be considered in people presenting an unexplained fever who may have risk factors for the infection (Mandell et' al, 2010).

The U.S. Department of Health and Human Services in 2010 reported that the initial symptoms of HIV/AIDS are followed by a stage called clinical latency, asymptomatic HIV, or chronic HIV. Without treatment, this second stage of the natural history of HIV infection can last from about three years (Evian, Clive, 2006). On average, about eight years (Elliott and Tom 2012). While typically there are few or no symptoms at first, near the end of this

stage many people experience fever, weight loss, gastrointestinal problems and muscle pains (U.S. Department of Health & Human Services, 2010). Between 50 and 70% of people also develop persistent generalized lymphadenopathy, characterized by unexplained, non-painful enlargement of more than one group of lymph nodes (other than in the groin) for over three to six months (Mandell et' al, 2010). While antiretroviral treatment reduces the risk of death and complications from the disease, these medications are expensive and have side effects. Without treatment, the average survival time after infection with HIV is estimated to be 9 to 11 years, depending on the HIV subtype (UNAIDS, WHO , 2007).

Although most HIV-1 infected individuals have a detectable viral load and in the absence of treatment will eventually progress to AIDS, a small proportion (about 5%) retain high levels of CD4⁺ T cells (T helper cells) without antiretroviral therapy for more than 5 years (Mandell,et' al, 2010, Blankson, 2010) . These individuals are classified as HIV controllers or long-term non progressors (LTNP) (Blankson, 2010). Walker (2007) is of the opinion that another group is those who also maintain a low or undetectable viral load without anti-retroviral treatment who are known as "elite controllers" or "elite suppressors". They represent approximately 1 in 300 infected persons.

HIV is transmitted by three main routes: sexual contact, exposure to infected body fluids or tissues, and from mother to child during pregnancy, delivery, or breastfeeding known as vertical transmission (Markowitz, 2007). Kripke (2007) posits that there is no risk of acquiring HIV if exposed to feces, nasal secretions, saliva, sputum, sweat, tears, urine, or vomit unless these are contaminated with blood. It is possible to be co-infected by more than one strain of HIV—a condition known as HIV super infection (van der Kuyl, Cornelissen, 2007).

Considering the concept of HIV/AIDS discussed above, no mention is made about resistance to the infection. There are instances where sex partners are sero-discordant-i.e one partner can be HIV positive and the other is negative and the challenge here is that this situation represents a breeding ground for suspicion on the part of the infected partner.

2.1.1 The concept of Stigma

Sociologist and writer Goffman(1963) defines stigma is an attribute that is deeply discrediting; a stigmatized individual is one who is not accepted and not accorded the respect and regard of his peers, who is disqualified from full social acceptance. It is related to:

- 1) The physical deformities
- 2) The blemishes of character such as alcoholism
- 3) Race, nation, social class, sexuality and religion

Looking at this concept, stigma is seen to be initiated and directed by the stigmatizer to everybody associated with the ‘problem’. This can never be possible as some stigmatized still enjoy some respect and recognition from peers, friends and families.

2.1.2 HIV-related Stigma

One area negatively impacting those living with HIV in the African American community is the stigma associated with having HIV. Stigma can take two forms: perceived or enacted (Brown, Macintyre, Trujillo ,2003).According to them, perceived (or felt) stigma occurs when there is a real or imagined fear of societal attitudes regarding a particular condition and a concern that this could result in acts of discrimination directed to individuals with that condition. Enacted (or actual) stigma, in turn, refers to “experiences of discrimination directed to individuals because of specific attributes or conditions that characterize them”(Goffmann,2013).

HIV-related stigma is closely associated with a number of negative consequences, including being labeled and stereotyped, experiencing separation from others, experiencing a loss in social status and being the recipient of actual discrimination and prejudice (Link, Phelan, 2003). Brown et' al, (2002) further argued that individuals living with HIV can be the target of such experiences from loved ones, such as family members and friends, as well as from coworkers, health care providers, employers, and others. Governmental public policies can also contribute to the stigmatization of HIV (Brown et' al, 2003).

Different conceptual or theoretical frameworks have been developed to guide the study of HIV-related stigma. These range from individualistic oriented models(Berger, Ferrans and Lashley, 2001) to those that emphasize the broader social context and unequal power relationships in which stigma finds its origins(Castro , Farmer , 2005, Parker , Aggleton , 2003). . Despite the importance of models that emphasize the effects of power differentials due to issues such as race and class on HIV-related stigma, it is nevertheless still important to examine HIV-related stigma from the perspective of an individual's perception of how this affects his/her own life.(Wikipedia, the free encyclopedia)

Differences are said to exist along racial lines in terms of perception of HIV stigma. For a community disproportionately affected by HIV, African Americans also have the additional burden of dealing with the negative effects associated with the stigma of HIV. HIV-positive African American women have been found to report a fear of societal stigma related to HIV from a variety of sources, including family members, fellow church congregants, health care professionals and the broader community (Mandell et' al, 2010). Similarly, older female African American caregivers of HIV-positive people have reported not widely disclosing the HIV diagnosis of their loved ones because of the fear of HIV-

related stigma (Sepkowitz, 2001). African Americans, in fact, are more likely to state that there is a lot of discrimination against people living with HIV in the United States today compared to Latinos and whites. (Evian & Clive 2006).

From the foregoing, I notice that stigma is seen to be associated with prejudices but that does not seem to be so as not everybody that is stigmatized that is prejudged and discriminated.

2.1.3 Social Support

Social support, by way of definition, is the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive social network. These supportive resources can be emotional (e.g., nurturance), tangible (e.g., financial assistance), informational (e.g., advice), or companionship (e.g., sense of belonging) and intangible (e.g. personal advice). Social support can be measured as the perception that one has assistance available, the actual received assistance, or the degree to which a person is integrated in a social network. Support can come from many sources, such as family, friends, pets, neighbours, coworkers, organizations, etc. Government-provided social support is often referred to as public aid (Wikipedia, the free encyclopedia).

2.1.4 Perceived Social Support

According to Pierce, Sarason and Sarason (1996), one important aspect of social resources is the social support that one perceives as being available in one's life. Perceived social support refers to the beliefs or evaluations that one has about the relationships in one's life. Several benefits have been found to be associated with perceived social support. They further claim that individuals with high levels of perceived social support describe themselves in more positive and less negative terms compared to others because of the social security

they (former group) enjoy. These positive self appraisals may in turn promote the development of more effective coping skills that can be utilized when confronting specific situations.

Another positive benefit of perceived social support is that it may allow individuals to deal more effectively with life stressors because they may believe that others will be there to help them if necessary (Pierce . et, al 1996). This sense that others are available to provide assistance can result in enhancing one's ability to cope with life challenges. In contrast with these claims, Lazarus & Folkman (1984) posit that the lack of perceived social support can have negative consequences on individuals. For example, psychological impairment among individuals facing a crisis has been found to be associated with low expectations of support from others such as family members, relatives or neighbors. Such findings highlight the importance of not only the presence of others during times of crises but also of their perceived availability for support in managing life's challenges.

In support of these findings, Lakey and Cohen (2000) echoed that these observations are consistent with social support theory which posits that social support serves to protect individuals against the negative effects of stressors by leading them to interpret stressful occasions less negatively .This theoretical perspective focuses on an individual's perception of the availability of support for a stressful situation. When working from such a theoretical framework, measures of perceived social support are utilized that ask respondents to evaluate the quality or availability of different types of support or of support from different types of individuals.

2.1.5 Gender Concept

Gender is the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Depending on the context, these characteristics may

include biological sex (i.e. the state of being male, female or intersex), sex-based social structures (including gender roles and other social roles), or gender identity (Udry and Richard,1994,Haig&David,2004; Ann-Maree & Nobelius,2004;World Health Organization,2009)

Sexologist John Money introduced the terminological distinction between biological sex and gender as a role in 1955. Before his work, it was uncommon to use the word gender to refer to anything but grammatical categories (Udry & Richard, 1994,Haig & David,2004). However, Money's meaning of the word did not become widespread until the 1970s, when feminist theory embraced the concept of a distinction between biological sex and the social construct of gender. Today, the distinction is strictly followed in some contexts, especially the social sciences (Social Science Dictionary,2012, The Sociology of gender) and documents written by the World Health Organization (WHO) (World Health Organization, 2009) However, in many other contexts, including some areas of social sciences, gender includes *sex* or replaces it (Udry & Richard,1994,Haig & David,2004). Although this change in the meaning of gender can be traced to the 1980s, a small acceleration of the process in the scientific literature was observed in 1993 when the Food and Drug Administration (FDA) started to use gender instead of *sex* (Guideline for the Study and Evaluation of Gender Differences in the Clinical Evaluation of Drugs, 1993).

In 2011, the FDA reversed its position and began using *sex* as the biological classification and *gender* as "a person's self representation as male or female, or how that person is responded to by social institutions based on the individual's gender presentation (U.S. Food and Drug Administration). In non-human animal research, gender is also commonly used to refer to the physiology of the animals (Haig and David, 2004)

Haig & David(2004); Yudkin(1978) revealed that in the English literature, the trichotomy between biological sex, psychological gender, and social sex role first appeared in a feminist paper on transsexualism in 1978. Some cultures have specific gender-related social roles that can be considered distinct from male and female, such as the hijra of India and Pakistan.

Education in its general sense is a form of learning in which the knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next through storytelling, discussion, teaching, training, and or research. Education may also include informal transmission of such information from one human being to another. Education frequently takes place under the guidance of others, but learners may also educate themselves (autodidactic learning) (Dewey, 1944) any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship. The science and art of how best to teach is called pedagogy (en.wikipedia.org/wiki/Education). Looking at this submission, Dewey (1944) could not expatiate on the drive for education nor its sustenance, promotion or demoters.

2.1.6 Self-Disclosure

Self-disclosure is a process of communication through which one person reveals himself or herself to another. It comprises everything an individual chooses to tell the other person about himself or herself, making him or her known. The information can be descriptive or evaluative and can include thoughts, feelings, aspirations, goals, failures, successes, fears, dreams as well as one's likes, dislikes, and favorites (Ignatius, Emmi, Marja and Kokkonen,2007).Ignatius et, al (2007)also put it that self–disclosure is not simply providing information to another person but sharing information with others that they would

not normally know or discover. Self –disclosure involves risk of breaking confidence on the part of the person sharing the information.

A useful way of viewing self – disclosure is the Johari window. The Johari window is a way of showing how much information you know about yourself and how much others know about you. The window contains four panes, as shown below.

Table 2.0-.Showing self-disclosure panes between self and others.

	<i>Known to self</i>	<i>Unknown to self</i>
Known to others	Open Pane Known to self and others	Blind Pane Blind to self, seen by others
Unknown to others	Hidden Pane Open to self, hidden from others	Unknown Pane Unknown to self and others

Source: Tim Bochers (1999)

2.2 Theoretical Review

This section gives detail reviews of theories of stigmatization, social support, gender, education and self disclosure

2.2.1 Attribution Theory

Attribution theory was developed in the field of social psychology in the late 1950s as a tool for explaining the processes by which "people infer the causes of behavior" (Littlejohn, 1983, p. 185), and as such, it serves to explain the ways people understand their own behavior as well as the behaviors of others (Heider, 1958). Much of the early work stemming from attribution theory centered around three broad areas:

- (1) Factors motivating the individual to obtain causally relevant information,
- (2) Factors determining what cause will be assigned to a given event, and

- (3) The consequences of making one causal attribution rather than another (Kelley, 1973).

Studies examining the first area, factors motivating the individual to obtain causally relevant information, focused on people's affiliation under varying levels of anxiety (Schachter, 1959). Schachter and his colleagues found that participants under stress wanted to associate with others experiencing the same anxious situation. This desire to affiliate was suggested to be partially due to a need to evaluate one's own feelings through comparisons with others in order to arrive at an appropriate response to the causal properties of the anxiety provoking situation. Examples of the second early branch of inquiry, determining what cause will be attributed to a certain event, include the work of Bem (1965, 1967). In his studies, a theory of self-perception is proposed as alternative interpretation of cognitive dissonance theory. Bem (1965, 1967) suggested the attitude of a person is inferred from that person's behavior in conjunction with the circumstances under which the behavior occurred. To demonstrate this relationship between the context and the individual, 50 undergraduates participated in an experiment designed "to determine how accurately people can judge another person" (Bem, 1967, p. 188). Participants were assigned to one of two conditions: payment of \$1 or payment of \$20 and then asked whether a confederate making a persuasive argument for participating in a task to another confederate was credible. Results of this study indicated that within the \$1 condition, the greater the variety and number of arguments made by the confederate about the tasks, the more favorable participants' final evaluation was of him. Within the \$20 condition, however, the greater the number and variety of arguments, the less favorable the final rating of confederate. These results are congruent with dissonance theory, in that participants paid more money were less likely to believe the confederate was credible than those paid less money, however, the length of the communication was also

measured. Analyzing short versus long communication times, a reversal in the results occurred. That is, when participants were asked to rate confederates whose persuasions lasted only briefly, those participants paid less were more likely to rate the confederate poorly. Likewise, those participants paid \$20 and who listened to the confederate for longer periods of time, were likely to rate the confederate as more credible than those who were paid \$1. Bem, therefore, suggested communication length may be one of the confounding parameters responsible for the conflicting findings and argued support for his self-perception theory. The third type of early research, in which attribution theory was associated with the consequences of making one attribution over another, focused more on the outcomes of causal attributions. For example, many studies in the area of dissonance have been concerned with identifying the perceived control an individual has over his/her own behavior after the behavior has occurred. For example, Abrams and Finesinger (1953) found that cancer victims who blamed themselves for their condition experienced more distress and used more avoidant forms of coping than those who blamed external circumstances. In the late 1960s, a shift in the use of attribution theory occurred and was applied by researchers examining motivation. These researchers suggested attribution processes seemed to instigate behaviors such as information-seeking, communication, persuasion and, therefore, it was believed this theory was useful for describing the motivational conditions necessary for these behaviors (Kelley, 1967). More recently, attribution theory has been applied to *the perception* of motivation. These applications attempt to explain how an observer infers a person's motivations from his/her actions (Bradbury & Fincham, 1990; Bulman & Wortman, 1977; Holtzworth-Munroe & Jacobson, 1985). For example, in their study of 20 distressed and 20 non-distressed couples, Holtzworth-Munroe and Jacobson (1985) found husbands in distressed relationships reported more attributional thoughts than did husbands in non distressed relationships,

however, wives in the two groups did not differ. Behaviors in distressed relationships having negative impacts elicited more attributions about the spouse personally, whereas behaviors that had positive impacts were attributed to chance.

Regardless of the emphasis or particular perspective taken, the main assumption guiding attribution theory is that people interpret behavior in terms of its causes and the interpretations are significant in determining reactions to the behavior (Kelley & Michela, 1980; Littlejohn, 1983). According to the theory, a major function of attributions is to create a more stable, predictable world for them individual by creating a sense of justification for specific behaviors or circumstances (Heider, 1958; Holtzworth-Munroe & Jacobson, 1985; Kelley, 1972). Four constructs are of primary interest when discussing attribution theory: the actor, the perceiver, antecedents to the behavior, and consequences of the behavior. Each of these constructs will be examined more closely. The actor is the individual about whom attributions are being made. This person is, in a sense, generating the behavior being evaluated. The perceiver, on the other hand, is the individual who is making the attribution, or evaluating the behavior. This person is the one responsible for interpreting the behavior of the actor, synthesizing it, and "making judgments in a systematic way about the reasons for a behavior" (Zelen, 1991, p. 1). In the perceiver's process of making attributions, antecedents (events, behaviors, or motivations that might have occurred before a given behavior) of the behavior are examined. That is, the perceiver takes inventory of factors that may have served as an impetus for the actor's particular behavior. Likewise, the perceiver also scrutinizes the consequences, or the end result(s), of the behavior. Therefore, in making attributions about the responsibility of the actor for her/his behavior, the perceiver takes into account the antecedents and the consequences of the behavior.

Intuitively, it seems plausible that the process of making attributions generalizes across individuals and circumstances. That is, people in similar circumstances make attributions in similar ways. Interestingly, in studies examining both perceived and actual behaviors, researchers have found that although people are motivated to find explanations for their experiences, the process is highly subjective and idiosyncratic (Amirkhan, 1990; Stone & Neale, 1984; Taylor, Lichtman, & Wood, 1984). For example, in studies examining the relationship between attributions of control over stressful states and coping, results have been equivocal. In one study of elderly men and women, those participants who named an uncontrollable cause (aging) for their symptoms were more likely to use passive, emotion-reducing strategies for coping and were less likely to seek medical attention than those participants who named controllable causes (diet and exercise) (Prochaska, Keller, Leventhal, & Leventhal, 1987). Other studies have linked attributions of control over a stressor's occurrence (i.e., weight gain, cancer) with active, problem-solving approaches (Baumgardner, Heppner, & Arkin, 1986). Still other researchers have found attributions of control over the stressful occurrence to be negatively related to passive, emotion-centered forms of coping but not related at all to direct, instrumental forms of coping, such as participation in exercise or smoking cessation programs (Stone & Neale, 1984). Thus, the relationship between attributions of control and coping is not fully resolved. The work of Kelley (Kelley, 1972; Kelley & Michela, 1980) may lend some continuity to these seemingly conflicting results. Kelley and Michela (1980) have outlined three types of information in making attributions that seem to cross this idiosyncratic line and are generalizable to various situations and dispositions of individuals. These three informational types are consensus, consistency, and distinctiveness information. According to Kelly and Michela (1980), consensus information is defined as behaviors in which others in the same situation would react in the same way,

and is the first information used by a perceiver in making attributions. That is, the perceiver attempts to determine if other people would react the same way in the same situation. For Kelley and Michela (1980), this speaks to the intention of the actor, as if few people would have acted as the actor did, his/her intention reveals something of his/her attitudes or personal needs. In contrast, if the perception is that many would have reacted in the same manner, the behavior is perceived to be less intentional or at least normative.

For purposes of explanation, consider the following scenario: You are walking down a street and see a car suddenly swerve and hit a tree. Attribution theorists would suggest you then would undertake some "in-head" process to attempt to figure out why the car hit the tree. If the perceiver witnessed the driver of the car swerving to miss hitting a dog in the road, it is probable that others would do the same thing given the same situation, thus, consensus would be achieved. However, if the driver swerved for no apparent reason, it is likely the perceiver would believe others would not do the same thing in a similar situation, thus, little consensus. The second category of information, consistency information, refers to the generalizability of behaviors across situations or scenarios. This type of information is used by the perceiver to compare information about the consequences of the action with whether or not other actors would react the same way in a different situation (Kelley & Michela, 1980). For example, would the driver of the car swerve and hit a tree if the animal were a cat rather than a dog? If so, the reaction (swerving) is consistent regardless of the situation.

Last, if the same behavior occurs in relation to other people or situations, Kelly and Michela (1980) have defined this as distinctiveness information. If the driver swerves to miss running over a worm and hits the tree this may be a distinctive situation. On the other hand, it is probable that most drivers would not risk wrecking their car by swerving to miss running over a worm, thus, this behavior (not swerving) would be low on distinctiveness. In other

words, if the situation is unique it is high on distinctiveness. If the situation is not unique, it is low on distinctiveness. By taking into account these three types of information, people attribute a certain behavior to either dispositional factors (a personality trait or characteristic of the actor) or situational factors (something about the target person or a particular social setting or circumstance) (Kelley & Michela, 1980). When consensus and distinctiveness are low and consistency is high, people tend to make dispositional attributions (Andrews & Brewin, 1990). Conversely, when consensus, consistency, and distinctiveness are high, people tend to make attributions to external, situational, factors (Lacobucci & McGill, 1990; Janoff-Bulman, 1979; Reynolds & West, 1989). In other words, upon observing an individual's behavior, a perceiver may look to find the cause in terms of dispositional or situational factors. Hence, the type of attribution made will determine how the perceiver reacts to the behavior.

Attribution Theory and HIV Disclosure

Disclosure of an HIV-positive diagnosis can be easily understood in terms of attribution theory as the two factors necessary for making attributions (dispositional factors and situational factors) are likely to be involved in this disclosure process. Regardless of whether it is the HIV-positive individual him/herself or a family member with the information, in the case of disclosing one's HIV-positive status, attributions regarding the potential recipient of the information in deciding whether or not to reveal the diagnosis are likely to occur. For example, dispositional factors such as, is the person likely to be supportive of the HIV-positive individual or discloser or is the potential recipient someone who the HIV-positive individual or discloser will have to take care of emotionally, might be considered. Next, how has the person responded in the past to disclosures of distressing information? Likewise, the HIV-positive individual or family member with the information

must also entertain situational constraints about the potential recipient of the information that may promote or restrict disclosure. For example, is the person physically healthy or are attributions likely to be made that the potential recipient is too ill and his/her condition may worsen if disclosure occurs?

For the purposes of this analogue study, the attributions a person makes about an HIV-positive individual, the potential recipient of the information, and various factors associated with the HIV-positive individual and his/her relationship with potential recipients of that information in determining whether or not to disclose will be examined. Theoretically, for the HIV-positive person or family members with this information to decide to disclose an individual's HIV-status to a particular person, the available information must first be considered. For example, will consensus, consistency, and distinctiveness be low or high? That is, will all potential recipients of the information react in a similar way? Will the person react like she/he did when other information was disclosed? Will the person regard this information as "news" or is this something he/she has known or suspected for awhile? After this information has been processed, attributions regarding the potential recipient's anticipated response will be made in an effort by the HIV-positive person (perceiver) to create a more predictable world for him/herself. In accordance with attribution theory, these attributions will be made on the basis of dispositional factors of the potential recipient (i.e., closeness, attitude toward persons in stigmatized groups) and situational factors (i.e., health, financial assistance).

Predictors of HIV-Disclosure

In accordance with attribution theory, factors associated with the situation and the dispositions of the actor are vital to the attribution process. That is, factors surrounding the physical environment in which a behavior occurs, as well as the traits of the individual, are of

importance in making attributions. Likewise, disclosure of personal information is also believed to be contingent upon the situation and the characteristics of those receiving the disclosure (Chelune, 1979; Deriega et al., 1993; Jourard & Lasakow, 1958). Nature of the relationship between the discloser and the potential recipient (Greene & Serovich, 1994; Pederson&Higbee, 1969).

Closely linked to the nature of the relationship between the discloser and recipient may be the sense of obligation the discloser feels to tell the recipient. That is, in this instance, the HIV-positive individual may feel required or a sense of duty to disclose his/her status to family members based on the family member's role or the shared history between the discloser and family member. This is separate from willingness which infers a voluntary action or deliberate decision whereas obligation is a requirement. For example, Kimberly and her colleagues (1995) learned one woman in their study told her mother she was HIV-positive because "she's my mother." It is also likely then that others may not disclose because the sense of obligation is not high enough. For instance, if there is a history of a strained relationship between the discloser and a particular family member, this may contribute to a lack of a sense of obligation to tell that family member. It is also plausible that there may be some dissonance between willingness to disclose and obligation to disclose. For example, if there is a history of a strained relationship between the discloser and the family member, the HIV-positive person may have little desire to disclose to the family member but may feel he or she should know based on who they are.

Conversely, the HIV-positive individual may feel little obligation to tell a family member but may be willing to do so because they do not seek anything (either tangible or emotional) from that family member. For this study, three variables regarding the situation of the HIV-positive individual are of express interest: gender, mode of contraction, and

symptoms. In addition, the gender of the participant is also of interest. Factors associated with the relationship between the HIV-positive individual (closeness, attitude, past response to disclosures, health, and financial assistance) and the potential recipient (father, mother, sister, brother) are also examined.

Gender

Several researchers have examined the relationship between gender and disclosure; however, results have been equivocal. For example, Jourard found that women disclose more than men (Jourard, 1961; Jourard & Lasakow, 1958; Jourard & Richman, 1963) and that women were more often the recipients of disclosure than men (Jourard & Lasakow, 1958; Jourard & Richman, 1963). As an explanation for these gender differences, Jourard (1971) surmised that the male sex role which "requires men to appear tough, objective, striving, achieving, unsentimental and emotionally unexpressive" (p. 35) may be why men tend to not disclose as much as women. On the contrary, however, other researchers have found no differences in the amount of disclosure by women and men (Doster & Strickland, 1971; Vondracek & Marshall, 1971) and in some cases, found men to disclose more than women (Grigsby & Weatherly, 1983; Stokes, Fuehrer, & Childs, 1980). A second issue in the relationship between gender and disclosure is to whom disclosure occurs. In general, women are more often the recipients of disclosure information than men. For example, in studies comparing the amounts of disclosure by men and women, the persons to whom each was more disclosing were different. That is, when men disclosed more, they tended to do so to strangers and acquaintances rather than intimates (Grigsby & Weatherly, 1983; Stokes et al., 1980). In these same studies, women disclosed more when the recipient of the information was known well by the discloser, such as parents (Grigsby & Weatherly, 1983; Stokes et al., 1980). Given these findings, it is plausible the potential recipient of the disclosure is an

important criterion for determining whether or not disclosure will occur. It has also been reported that disclosure tends to be along same-gendered lines when the potential recipient is familiar to the discloser. That is, disclosure by females tends to be to other females and disclosure by males tends to be to other males when the person is a parent or friend (Dindia & Allen, 1992; Stokes et al., 1980; Tardy, Hosman, & Bradac, 1981). When the person was a stranger, self-disclosure tended to be along cross gendered lines (Dindia & Allen, 1992; Stokes et al, 1980; Tardy et al., 1981), thus an interaction of these two factors (amount and recipient) seems to exist. In accordance with attribution theory, a relevant dispositional factor in making attributions may be the gender of the actor and a relevant situational factor, the gender composition of the actor/perceiver dyad. In the case of disclosing one's HIV-positive status, the gender of the one doing the disclosing and the gender of the potential recipient are likely to be important. Given disclosure tends to occur along same gendered lines when the recipient is familiar to the discloser it would seem likely disclosure by HIV positive men would occur more to their male family members (i.e., fathers, brothers). However, in the case of HIV, where stigmatizing behaviors are inextricably woven into the fabric of this disease, males infected with HIV may be more likely to disclose along cross-gendered lines because of the female sex role that endorses "emotional expression" (Jourard, 1971; Snel, Miller, Beilc, Garcia-Falconi, & Hernandez-Sanchez, 1989). Because women with HIV are typically viewed in relation to others, primarily sexual partners and children (Cohan & Atwood, 1994; Corea, 1992; Welch Cilne, McKenzie, & Glassman, 1992),

Recipients of Disclosure

To whom a person discloses is an important factor in deciding to reveal personal information (Chelune, 1979; Deriega et al, 1993; Pennebaker & Susman, 1988; Tardy et al., 1981). Further, people are expected to disclose information about themselves to family

members and friends, and these relationships are likely to suffer in the absence of disclosure (Altman & Taylor, 1973). Studies which have examined the disclosure of one's HIV-positive status suggest, "Most likely, people with HIV evaluate subjectively the potential consequence of informing a particular target person before a disclosure is made" (Marks et al, 1992b, p. 300), thus the potential recipient of information is an unimportant consideration in decisions regarding disclosure. This is in direct accordance with attribution theory in which one of the primary situational factors for making attributions is the potential recipient of those attributions (Heider, 1958; Kelley & Michela, 1980). In their examination of appropriate recipients for disclosure of HIV-information, Serovich and colleagues (1992) and Serovich and Greene (1993) suggest the couple subsystem consisting of spouses/partners or lovers were deemed the most appropriate recipients of HIV-testing information (Serovich et al., 1992; Serovich & Greene, 1993) with the nuclear family subsystem the next most appropriate subsystem for receiving HIV testing information. In addition, however, other studies reveal the disclosure of HIV status to partners and spouses have elicited little variance (Kimberly & Serovich, 1995). That is, disclosure to these persons is highly likely (Kimberly et al., 1995), therefore, the marital subsystem will not be examined in this study. Based on these findings, the nuclear family subsystem, consisting of mother, father, sister, and brother will be the focus of this study. Disclosure to each of these family members will be examined below.

Mothers and Fathers.

Patterns of self-disclosure have been researched extensively (Daluiso, 1972; Jourard & Lasakow, 1958; Komarovsky, 1974; Pederson & Higbee, 1969; Wiebe & Williams, 1972). These investigations have usually found that mothers were the recipients of disclosure by their children more often than fathers (Daluiso, 1972; Jourard & Lasakow, 1958; Komarovsky, 1974; Pederson & Higbee, 1969). An exception to this finding is the study

conducted by Wiebe and Williams (1972) of high school students. These researchers found that female students disclosed more often to their mothers, however, male students disclosed about equally to mothers and fathers (Wiebe & Williams, 1972). In the case of HIV-infection, the idea of disclosure of one's status to parents is met with a great deal of distress (Kimberly et al, 1995). Persons infected with HIV may fear rejection from their parents, withdrawal of financial and emotional support, or may not want to burden them with this information (Gard, 1990; Kimberly et al., 1995). Interestingly, studies examining disclosure patterns to specific targets have found similar results as previously discussed. Marks and colleagues (1992a) in their study of disclosure by 101 HIV-positive Hispanic men found that 26% of the men in their sample had disclosed their status to their mothers compared to 9.2% to fathers. In another sample of 77 HIV-infected men and women, disclosure to parents was common; however, the pattern of disclosure remained similar, as 82% of the individuals had disclosed their status.

2.2.2 Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS.

Core Assumptions

The HBM is based on the understanding that a person will take a health-related action (i.e., use condoms) if that person:

1. Feels that a negative health condition (i.e., HIV) can be avoided,
2. Has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using condoms will be effective at preventing HIV), and
3. Believes that he/she can successfully take a recommended health action (i.e., he/she can use condoms comfortably and with confidence).

The HBM was spelled out in terms of four constructs representing the perceived threat and net benefits: perceived *susceptibility*, perceived *severity*, perceived *benefits*, and perceived *barriers*. These concepts were proposed as accounting for people's "readiness to act." An added concept, *cues to action*, would activate that readiness and stimulate overt behavior. A recent addition to the HBM is the concept of *self-efficacy*, or one's confidence in the ability to successfully perform an action. This concept was added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviors, such as being sedentary, smoking, or overeating. An outlay of the theoretical constructs of the HBM is as follows:

Perceived severity

Perceived severity refers to the subjective assessment of the severity of a health problem and its potential consequences (Janz, Nancy K.; Marshall H. Becker 1984; Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008). The health belief model proposes that individuals who perceive a given health problem as serious are more likely to engage in behaviors to prevent the health problem from occurring (or reduce its severity). Perceived

seriousness encompasses beliefs about the disease itself (e.g., whether it is life-threatening or may cause disability or pain) as well as broader impacts of the disease on functioning in work and social roles. (Janz, Nancy K.; Marshall H. Becker 1984; Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). For instance, an individual may perceive that influenza is not medically serious, but if he or she perceives that there would be serious financial consequences as a result of being absent from work for several days, then he or she may perceive influenza to be a particularly serious condition.

Perceived susceptibility

Perceived susceptibility refers to subjective assessment of risk of developing a health problem. (Janz, Nancy K.; Marshall H. Becker 1984; Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). The health belief model predicts that individuals who perceive that they are susceptible to a particular health problem will engage in behaviors to reduce their risk of developing the health problem (Rosenstock, Irwin 1974). Individuals with low perceived susceptibility may deny that they are at risk for contracting a particular illness (Rosenstock, Irwin 1974). Others may acknowledge the possibility that they could develop the illness, but believe it is unlikely (Rosenstock, Irwin 1974). Individuals who believe they are at low risk of developing an illness are more likely to engage in unhealthy, or risky, behaviors. Individuals who perceive a high risk that they will be personally affected by a particular health problem are more likely to engage in behaviors to decrease their risk of developing the condition.

The combination of perceived severity and perceived susceptibility is referred to as perceived threat (Karen; Barbara K. Rimer; K. Viswanath, 2008). Perceived severity and perceived susceptibility to a given health condition depend on knowledge about the condition

(Rosenstock, Irwin 1974). The health belief model predicts that higher perceived threat leads to higher likelihood of engagement in health-promoting behaviors.

Perceived benefits

Health-related behaviors are also influenced by the perceived benefits of taking action (Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008) Perceived benefits refer to an individual's assessment of the value or efficacy of engaging in a health-promoting behavior to decrease risk of disease. (Janz, Nancy K.; Marshall H. Becker 1984). If an individual believes that a particular action will reduce susceptibility to a health problem or decrease its seriousness, then he or she is likely to engage in that behavior regardless of objective facts regarding the effectiveness of the action (Rosenstock, Irwin 1974). For example, individuals who believe that wearing sunscreen prevents skin cancer are more likely to wear sunscreen than individuals who believe that wearing sunscreen will not prevent the occurrence of skin cancer.

Perceived barriers

Health-related behaviors are also a function of perceived barriers to taking action (Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008) Perceived barriers refer to an individual's assessment of the obstacles to behavior change (Janz, Nancy K.; Marshall H. Becker 1984) Even if an individual perceives a health condition as threatening and believes that a particular action will effectively reduce the threat, barriers may prevent engagement in the health-promoting behavior. In other words, the perceived benefits must outweigh the perceived barriers in order for behavior change to occur (Janz, Nancy K.; Marshall H. Becker 1984; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). Perceived barriers to taking action include the perceived inconvenience, expense, danger (e.g., side effects of a medical

procedure) and discomfort (e.g., pain, emotional upset) involved in engaging in the behavior (Rosenstock, Irwin 1974). For instance, lack of access to affordable health care and the perception that a flu vaccine shot will cause significant pain may act as barriers to receiving the flu vaccine.

Modifying variables

Individual characteristics, including demographic, psychosocial, and structural variables, can affect perceptions (i.e., perceived seriousness, susceptibility, benefits, and barriers) of health-related behaviors (Rosenstock, Irwin 1974). Demographic variables include age, sex, race, ethnicity, and education; among others (Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008) Psychosocial variables include personality, social class, and peer and reference group pressure, among others (Rosenstock, Irwin 1974). Structural variables include knowledge about a given disease and prior contact with the disease, among other factors (Rosenstock, Irwin 1974). The health belief model suggests that modifying variables affect health-related behaviors indirectly by affecting perceived seriousness, susceptibility, benefits, and barriers (Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008)

Cues to action

The health belief model posits that a cue, or trigger, is necessary for prompting engagement in health-promoting behaviors (Janz, Nancy K.; Marshall H. Becker 1984; Rosenstock, Irwin 1974; Carpenter, Christopher J. 2010) Cues to action can be internal or external (Janz, Nancy K.; Marshall H. Becker 1984; Carpenter, Christopher J. (2010). Physiological cues (e.g., pain, symptoms) are an example of internal cues to action (Janz, Nancy K.; Marshall H. Becker 1984; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008)

External cues include events or information from close others (Janz, Nancy K.; Marshall H. Becker 1984) the media, (Carpenter, Christopher J. 2010) or health care providers (Janz, Nancy K.; Marshall H. Becker 1984) promoting engagement in health-related behaviors. Examples of cues to action include a reminder postcard from a dentist, the illness of a friend or family member, and product health warning labels. The intensity of cues needed to prompt action varies between individuals by perceived susceptibility, seriousness, benefits, and barriers (Rosenstock, Irwin 1974). For example, individuals who believe they are at high risk for a serious illness and who have an established relationship with a primary care doctor may be easily persuaded to get screened for the illness after seeing a public service announcement, whereas individuals who believe they are at low risk for the same illness and also do not have reliable access to health care may require more intense external cues in order to get screened.

Self-efficacy

Self-efficacy was added to the four components of the health belief model (i.e., perceived susceptibility, seriousness, benefits, and barriers) in 1988 (Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008; Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988). Self-efficacy refers to an individual's perception of his or her competence to successfully perform a behavior (Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008). Self-efficacy was added to the health belief model in an attempt to better explain individual differences in health behaviors (Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988). The model was originally developed in order to explain engagement in one-time health-related behaviors such as being screened for cancer or receiving an immunization (Rosenstock, Irwin 1974; Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988). Eventually, the health belief model was applied to more substantial, long-term behavior change such as diet modification, exercise, and smoking (Rosenstock, Irwin M.;

Strecher, Victor J.; Becker, Marshall H. 1988). Developers of the model recognized that confidence in one's ability to effect change in outcomes (i.e., self-efficacy) was a key component of health behavior change (Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008; Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988)

Empirical support

The health belief model has gained substantial empirical support since its development in the 1950s (Janz, Nancy K.; Marshall H. Becker 1984; Carpenter, Christopher J. 2010). It remains one of the most widely used and well-tested models for explaining and predicting health-related behavior (Carpenter, Christopher J. 2010). A 1984 review of 18 prospective and 28 retrospective studies suggests that the evidence for each component of the health belief model is strong (Janz, Nancy K.; Marshall H. Becker 1984). The review reports that empirical support for the health belief model is particularly notable given the diverse populations, health conditions, and health-related behaviors examined and the various study designs and assessment strategies used to evaluate the model (Janz, Nancy K.; Marshall H. Becker 1984). A more recent meta-analysis found strong support for perceived benefits and perceived barriers predicting health-related behaviors, but weak evidence for the predictive power of perceived seriousness and perceived susceptibility (Carpenter, Christopher J. 2010). The authors of the meta-analysis suggest that examination of potential moderated and mediated relationships between components of the model is warranted (Carpenter, Christopher J. 2010)

Applications

The health belief model has been used to develop effective interventions to change health-related behaviors by targeting various aspects of the model's key constructs (Carpenter, Christopher J. 2010; Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H.1988). Interventions based on the health belief model may aim to increase perceived susceptibility to and perceived seriousness of a health condition by providing education about prevalence and incidence of disease, individualized estimates of risk, and information about the consequences of disease (e.g., medical, financial, and social consequences)(Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). Interventions may also aim to alter the cost-benefit analysis of engaging in a health-promoting behavior (i.e., increasing perceived benefits and decreasing perceived barriers) by providing information about the efficacy of various behaviors to reduce risk of disease, identifying common perceived barriers, providing incentives to engage in health-promoting behaviors, and engaging social support or other resources to encourage health-promoting behaviors(Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). Furthermore, interventions based on the health belief model may provide clues to action to remind and encourage individuals to engage in health-promoting behaviors (Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008). Interventions may also aim to boost self-efficacy by providing training in specific health-promoting behaviors Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008) Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988) particularly for complex lifestyle changes (e.g., changing diet or physical activity, adhering to a complicated medication regimen) (Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. 1988). Interventions can be aimed at the individual level (i.e., working one-on-one with individuals to increase engagement in health-related behaviors) or

the societal level (e.g., through legislation, changes to the physical environment) (Stretcher, Victor J.; Irwin M. Rosenstock 1997).

Limitations

The health belief model attempts to predict health-related behaviors by accounting for individual differences in beliefs and attitudes (Janz, Nancy K.; Marshall H. Becker 1984). However, it does not account for other factors that influence health behaviors (Janz, Nancy K.; Marshall H. Becker 1984). For instance, habitual health-related behaviors (e.g., smoking, seatbelt buckling) may become relatively independent of conscious health-related decision making processes (Janz, Nancy K.; Marshall H. Becker 1984). Additionally, individuals engage in some health-related behaviors for reasons unrelated to health (e.g., exercising for aesthetic reasons) (Janz, Nancy K.; Marshall H. Becker 1984). Environmental factors outside an individual's control may prevent engagement in desired behaviors (Janz, Nancy K.; Marshall H. Becker 1984). For example, an individual living in a dangerous neighborhood may be unable to go for a jog outdoors due to safety concerns. Furthermore, the health belief model does not consider the impact of emotions on health-related behavior (Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008) Evidence suggests that fear may be a key factor in predicting health-related behavior(Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008)

The theoretical constructs that constitute the health belief model are broadly defined (Carpenter, Christopher J.2010). Furthermore, the health belief model does not specify how constructs of the model interact with one another (Carpenter, Christopher J, 2010; Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008). Therefore, different operationalizations of the theoretical constructs may not be strictly comparable across studies (Glanz, Karen;

Barbara K. Rimer; K. Viswanath 2008; Maiman, Lois A.; Marshall H. Becker; John P. Kirscht; Don P. Haefner; Robert H. Drachman (1977)

Research assessing the contribution of cues to action in predicting health-related behaviors is limited (Janz, Nancy K.; Marshall H. Becker 1984 ;Rosenstock, Irwin 1974;(Carpenter, Christopher J. 2010; Glanz, Karen; Barbara K. Rimer; K. Viswanath, 2008). Cues to action are often difficult to assess, limiting research in this area (Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). For instance, individuals may not accurately report cues that prompted behavior change (Rosenstock, Irwin 1974). Cues such as a public service announcement on television or on a billboard may be fleeting and individuals may not be aware of their significance in prompting them to engage in a health-related behavior (Rosenstock, Irwin 1974; Glanz, Karen; Barbara K. Rimer; K. Viswanath ,2008). Interpersonal influences are also particularly difficult to measure as cues (Rosenstock, Irwin 1974).

2.2.3 Theories of Stigmatization

Unitary theory of Stigmatization by Haghghat (2001): Stigmatization involves self-sheltering and self-seeking behaviour. It is a protective device for the stigmatiser and, in a good number of cases, unfair on the stigmatized, as the latter may simply be the victim of a rumour or may not be the one among the stigmatized who would cause harm. In view of the fact that different origins of stigmatization point to the individual's seeking of personal gain, can it be thought improbable that the fundamental basis of all stigmatization is the pursuit of self-interest? Can we doubt (given the fact that self-interest presents as the essence of stigmatization in all domains) that when there is no pursuit of self-interest there will be no stigmatization and as long as we pursue self-interest we have to face the consequences of our

stigmatization of others? The stigmatizer, on each occasion of avoiding the stigmatized, draws primary gain from reducing his or her anxiety and is thus powerfully reinforced. The stigmatizer also draws secondary benefits from stigmatization by avoiding possible loss, danger and victimization and by increasing his or her chances of economic survival (Haghighat 2001).

From the foregoing, the unitary theory sees stigmatization as an attempt to self upliftment, enhancement and or promotion of the stigmatizer. Personally, I see stigmatization an attempt to dissociate self from an unacceptable stimulus in the environment. For stigmatization to be a chance for economic survival is more unacceptable as no stigmatizer in history ever testified of any economic gains from stigmatizing others.

2.2.4 Buffering Theory (Akert, 2007)

According to Akert, Wilson, & Aronson (2007). Buffering hypothesis is the theory that we need social support only when we are under stress because it protects us against the damaging effects of this stress. Buffering hypothesis can help in two ways, first it can help us interpret an event as less stressful than we otherwise would, and secondly social support can help us cope. Research suggests that social support “buffers” the impact of stress on the individual and thus indirectly affects emotional well-being (Cohen and Wills, 1985). To further define social support one must include the supportive ways that different people behave in the social environment (Helgeson, 2002). The social environment involves structural and functional measures of support. Examples of structural measures can include marital status, how many friends a person has, and the frequency of interaction with friends/family. Functional measures on the other hand refer to the resources, such as emotional or physical support, that people within an individual’s social network provide (Helgeson, 2002). There are numerous classifications of support functions, which consist of

three basic functions: emotional support, instrumental support and informational support. Emotional support is having people available to listen, to care, to sympathize, and to make one feel valued and loved for (Helgeson, 2002). Instrumental support or tangible assistance, involves help with household chores, lending money, or running errands (Helgeson, 2002). Lastly, informational support, according to Helgeson, involves the provision of information or guidance.

From the foregoing, I subscribe to the fact that buffering theory provides relieve to tension that stems from stress considering the fact that no one is an island, everybody would always want to belong and be part of a system.

2.2.5 Theories of HIV Disclosure

Understanding what promotes disclosure of an HIV diagnosis to partners, friends, and family is important for a number of reasons. First, disclosure to at-risk partners permits them to play a greater role in either allowing or not allowing unsafe sexual or drug-sharing behavior to occur. Thus disclosure could be a pivotal factor in reducing the behaviors that continue the spread of HIV (Marks, Richardson, & Maldonado, 1991). Marks' et, al (1991) further opined that because disclosure is a necessary prerequisite for acquiring social support, revealing ones' serostatus becomes an important mental health factor.

Disease Progression Theory (Kalichman, 1995)

According to the disease progression theory, individuals disclose their HIV diagnosis as they become ill because when HIV progresses to AIDS they can no longer keep it a secret (Babcock, 1998; Kalichman, 1995). Disease progression often results in hospitalizations and physical deterioration, which, in some cases, mandates individuals to explain their illness (Kalichman, 1995). Holt, Court, Vedhara, Nott, Holmes & Snow(1998) further put it that not

only would hospitalization require explanation, but if death is imminent or individuals fear they will need additional assistance to manage their illness, they may disclose as a means of accessing additional needed resources. Delaying disclosure may be a way to normalize their life and protect others from pain (Babcock, 1998).

The relationship between disease progression and disclosure has been substantiated in numerous studies using various indexes of disease progression (Hays et al., 1993; Marks, Bundek, et al., 1992; Marks, Richardson, et al., 1992; Mason, Marks, Simoni, Ruiz, and Richardson, 1995). For example, Marks, Bundek, and colleagues (1992) documented in a study of Hispanic men that as overall symptom severity increased, disclosure to others increased. This trend remained consistent for both overt and less overt symptoms as well as various targets of disclosure such as parents and siblings. Using a sample of symptomatic and asymptomatic men, Hays and colleagues (1993) found asymptomatic men were less likely to disclose their HIV status to family and friends than symptomatic men. Furthermore, disease severity and time since testing for HIV have both been shown to be positively related to disclosure (Mason et al., 1995). Marks, Bundek, and their collaborators (1992) hypothesized that "illness progression heightens anxiety and need for social support, which may motivate disclosure to significant others"

Mansergh, Marks, and Simoni (1995) used both time since diagnosis and symptomology to investigate the relationship between disease progression and disclosure and found significant differences. That is, rates of disclosure were found to be higher among symptomatic than asymptomatic men and disclosure increased with time since diagnosis. These differences were significant for disclosure to mothers, fathers, sisters, brothers, and friends and have provided the most compelling evidence for the disease progression theory.

Mansergh et al., (1995) also posited that studies of disease progression and disclosure of HIV status to sexual partners, however, have failed to find this same relationship. For example, Perry and colleagues (1994) did not find a relationship between severity of physical symptoms and disclosure to sex partners among 129 HIV-positive adults. Thus, while disclosure to family may be influenced by disease progression, disclosure to sexual partners may not be.

Agreed, that while disclosure to family may be influenced by disease progression, disclosure to sexual partners may not be as there are several testimonies of certain partners preferring to die than to disclose source of infection or to take medications. Such mediating variables can be there.

Consequence theory (Thibaut & Kelly, 1959): The consequence theory of HIV disclosure suggests that the relationship between disease progression and disclosure is moderated by the consequences one anticipates resulting from the disclosure. That is, as the disease progresses, stresses accumulate which result in the need to evaluate the consequences of disclosure. Persons with HIV are likely to reveal to significant others and sexual partners once the rewards for disclosing outweigh the associated costs (Serovich, 2008).

This theory, according to Thibaut and Kelley (1959), employs core assumptions of social exchange theory. Social exchange theorists maintain that individuals avoid costly relationships and interactions and seek rewarding ones to maximize the profits in their relationships or behaviors (Thibaut et, al, 1959). More specifically, when individuals are faced with numerous choices they tend to make those which provide the most rewards with the least associated costs. Rewards are "pleasures, satisfactions, and gratifications the person enjoys" and include social, physical, psychological, or emotional dividends that satisfy or

please. Costs are things of value that are relinquished in preference for an alternative reward that is of equal or greater value or something that would be punishing or distasteful that one would otherwise avoid (Thibaut et, al, 1959).

For persons with HIV, consequences of disclosing are substantial. Sharing an HIV-positive diagnosis can provoke feelings of anxiety and threats to personal well-being. As Bolund (1990) stated when discussing cancer, "There is only one disease, AIDS that has a similar strong attribution of dread". Negative social consequences external to the HIV-positive individual, such as fear expressed by others, ostracism, and degradation may be experienced. Costs in terms of stressors within the individual's family network, such as denial, anger, guilt, and uncertainty are also associated with HIV (Frierson, Lippman, and Johnson, 1987; Herek and Glunt, 1988; Macklin, 1988). Negative emotional consequences of disclosure that have been documented include rejection, abandonment, and isolation (Lovejoy, 1990; Stulberg and Buckingham, 1988; Zuckerman and Gordon, 1988). This might be especially true if the disclosure also leads to an admission of sexual or drug-using behaviors that have not otherwise been acknowledged. In addition, these physical, social, and emotional consequences can be confounded by fear of, or actual loss of, employment, insurance, housing, medical services, child custody, and the right to education (Anderson, 1989; Herek and Glunt, 1988; Zuckerman and Gordon, 1988).

Rewards or positive consequences of disclosing can also be substantial. Disclosing an HIV diagnosis can result in the acquisition of emotional, physical, and social resources. These resources include assistance with home-related chores and errands, health and child care, housing, medical attention, and the provision of medical information. Emotional benefits include the acquisition of social support and acceptance. Furthermore, disclosing

one's sero-status frees the individual from hiding complicated medicine taking rituals from friends, family, and coworkers. Thus, indirectly, support for adhering to medical regimens is a positive consequence of disclosure. Each of these consequences may be important for the physical, emotional, and social functioning of the person.

Support for this consequence theory has begun to emerge from the work of prominent disclosure and HIV theorists. These authors contend that individuals who are HIV-positive contemplate the need for privacy and disclosure in determining whether to disclose an HIV-positive diagnosis (Derlega et al., 1993). Derlega, Lovejoy, and Winstead (1998) tested and found support for this hypothesis in a qualitative study of 42 HIV-positive individuals. They concluded that the process of reducing risks and increasing benefits of disclosure results in selectivity of disclosure. That is, HIV-positive individuals disclose to those who pose little risk while avoiding disclosing to those who could harm them.

From the foregoing, the consequence theory showcases one's readiness to accept or reject the appeal to disclose based on the merits and demerits of the disclosure.

Social Penetration Theory(Altman & Taylor, 1973): The social penetration theory proposes that, as relationships develop, interpersonal communication moves from relatively shallow, non-intimate levels to deeper, more intimate ones (Griffin, 2006). The theory was formulated by psychologists Irwin Altman and Dalmis Taylor (1973) to provide an understanding of the closeness between two individuals.

The social penetration theory states that this process occurs primarily through self-disclosure and closeness develops if the participants proceed in a gradual and orderly fashion from superficial to intimate levels of exchange as a function of both immediate and forecast

outcomes(Altman and Taylor ,1973) Altman and Taylor believe that only through opening one's self to the main route to social penetration-self-disclosure-by becoming vulnerable to another person can a close relationship develop. Vulnerability can be expressed in a variety of ways, including the giving of anything which is considered to be a personal possession, such as a dresser drawer given to a partner (Taylor and Altman, 1987). This psychological theory, as with many others, is applied in the context of interpersonal communication. It can also be defined as the process of developing deeper intimacy with another person through mutual self-disclosure and other forms of vulnerability. The Social Penetration theory is known as an objective theory, meaning that the theory is based on data drawn from experiments, and not from conclusions based on individuals' specific experiences. This theory is also guided by the assumptions that relationship development is systematic and predictable and also includes deterioration, or growing apart, besides the major four stages (Altman and Taylor, 1987).

As for the speed of self-disclosure, Altman and Taylor (1987) were convinced that the process of social penetration moves a lot faster in the beginning stages of a relationship but then it slows considerably. Those who are able to develop a long term, positive reward/ cost outcome are the same people who are able to share important matches of breadth categories. The early reward/ cost assessment have a strong impact on the relationships reactions and involvement. When you have expectancies in a relationship regarding the future it plays a major role on the outcome in the relationship.

To self-disclose, one must open up their inner feelings, this could be anything from their personal motives or desires. To self disclose could bring a relationship to a new level of intimacy.

Altman and Taylor (1973) have outlined four stages of social penetration as follows:

1. Peripheral items are exchanged more frequently and sooner than private information - When the sharp edge of the wedge has barely reached the intimate area, the thicker part has a cut path through the outer rings. The relationship is still relating at an interpersonal level.
2. Self-disclosure is reciprocal, especially in the early stages of relationship development - The theory predicts new acquaintances, when two people show roughly equal levels of openness, but does not explain why. They might also feel a sense of emotional equity, so a disclosure takes place between them.
3. Penetration is rapid at the start but slows down quickly as the tightly wrapped inner layers are reached - Instant intimacy is a myth. There are societal norms against telling too much too fast. For this, relationships fade or die easily after a separation or strain. A comfortable share of positive and negative reactions is rare. When achieved, relationships become more important to both parties, more meaningful and more enduring.
4. Depenetration is a gradual process of layer-by-layer withdrawal - A warm friendship between two people will deteriorate if they begin to close off areas of their lives that had earlier been opened. Relational retreat takes back of what has earlier been exchanged in the building of a relationship. Relationships are likely to break down not in an explosive argument but in a gradual cooling off of enjoyment and care.

From the foregoing, the theory is silent as to what type of information could be disclosed much easier or difficult. This is because there are certain information that are culture-controlled and cannot be divulged whatsoever.

2.3 Empirical Review

2.3.1 Stigma-related Factors

Olalekan , Akintunde and Olatunji (2014) assessed the perception and behavior of PLWHAs towards societal stigma and discrimination in Lagos, Nigeria. This was a qualitative, descriptive cross sectional study among PLWHAs from three of the three senatorial districts in Lagos State selected using simple random sampling. Six focus group discussions (FGDs), consisting of eight eligible respondents each were held using structured FGD guide. Collected data were analyzed using simple content analysis. About three quarter of all the discussants said life had become miserable following episodes of stigma and discrimination against their personality in public, family, health care settings and the workplace. Some had feelings of guilt and depression towards these actions. About three quarter had coped with the situation by living a low-keyed lifestyle, dissociating themselves from the public and avoiding seeking care in HIV care centers. Majority of respondents were not willing to come out to publicly discuss their positive HIV status for fear of discrimination. Discussants recommended continuous awareness campaigns about HIV to further educate the general public towards reduction of societal stigma and discrimination against PLWHAs.

This research must have been carried out in a particular setting(s).Not mentioning it or them, makes it difficult to comment on whether extraneous variables were well taken care of or not. The research lacks clarity in that aspect.

Adejumo(2011) investigated the relationship between perceived HIV stigmatization, HIV/AIDS cognition, personality and HIV self-disclosure (HSD) . The influence of age and gender on these was also examined. PLWHA (N421) in Ibadan, Nigeria participated in the cross-sectional study. A positive relationship of extraversion ($r=.738$, $df=421$, $P<.05$), HIV cognition ($r=.621$, $df=421$, $P<.05$), neuroticism ($r=.212$, $df=421$, $P<.05$) and agreeableness personality traits ($r=.155$, $df=421$, $P<.05$) with HSD was observed. A 2x2x2x2 factorial analysis showed that old females, with low perceived stigmatisation, but with good HIV cognition ($n=23$, $X =18.2$, $SD=3.8$) were most likely to disclose their status. Perceived stigmatisation, HIV cognition, and personality jointly predicted HSD ($R^{\sup 2}=.52$; $F(3,418) =7.66$ $P <.05$).It was concluded that Negative HIV cognition, perceived stigmatization, openness and conscientious personality traits are major barriers to HSD. Non disclosure remains an enormous barrier to the fight against HIV and AIDS. It was subsequently recommended that Policies and actions should therefore focus on these issues in HIV prevention, care and support.

From the foregoing, researcher could not state what personality(ies) predicted more disclosure than the other. Secondly one would tend to query the mode used to measure cognition as the study did not mention any instrument used.

Stigma represents a major challenge in the fight against HIV/AIDS. Since HIV/AIDS was first identified, the disease has been surrounded by stigma and discrimination. People who are infected, or even suspected of having HIV, have experienced emotional, physical, and structural abuse (Dlamini , Kohi, Uys , Phetlhu , Chirwa, Naidoo & Makoe . 2007)., and the fear of experiencing such stigma can become a substantial barrier for HIV testing and treatment (Pulerwitz, Michaelis, Weiss, Brown, & Mahendra, 2010). In many countries of

Africa, women are disproportionately affected, not only by the disease itself, but also by the related stigma and discrimination (Bond, Chase & Aggleton, 2002). Women who experience or fear stigma may be less likely to access health care services, and research has shown that pregnant women who anticipate HIV-related stigma are less likely to get tested for HIV (Turan, Miller, Bukusi, Sande, & Cohen, 2008). Desgrees-du-Lou et al.(2009)concluded that the result is that pregnant women may not be aware of their HIV-positive status, may not get the care that they need for their own health, may infect sexual partners, and may not receive medications to reduce the risk of perinatal transmission of HIV.

In a study, in Ethiopia, It was discovered that working conditions in health facilities shape provider attitudes and behavior and contribute to stigmatization by fostering a strong sense of workplace insecurity. Deficiencies within the health care system that were perceived to increase infection risks include inappropriate infrastructure, supply shortages, staff shortages and lack of training. Results further suggest that provider stigmatization and discrimination toward persons with HIV and AIDS may have a considerable impact on Ethiopia's public sector health services. To address the problem of stigmatization and its impact on HIV/AIDS prevention and treatment, researchers offered two sets of recommendations. Their short-term recommendations focus on performance improvement training; strengthening collaboration between health care providers, families, communities and NGOs; Perceived Stigmatization and Discrimination by Health Care Providers 10 ensuring access to medication for clients and providers; ensuring access to nutritional support; and mobilizing leadership. However, it is clear that little progress can be made in addressing HIV/AIDS in the absence of efforts to improve underlying social and structural conditions in Ethiopia (Mizhazab research centre; intrahealth international, 2005)

From the foregoing, researchers mentioned factors that fueled the persistence of stigmatization but failed in their recommendation to mention them-job insecurity, lack of logistic support in the workplace and staff shortages.

Hosseinzadeh, Hossan and Bazargan-Hejazi (2012) In a Study on Iranian – Australian immigrants living in Sydney metropolitan area majority of respondents (73.3%) perceived that HIV-infected people face a great deal of or some stigma. Participants were concerning about being stigmatized if they tested positive or were known to be HIV-positive in the future. A significant majority expressed that such concerns would affect their decision-making related to HIV testing and disclosure. Females were more likely to perceive HIV/AIDS stigma. It was concluded that if social stigma is left unaddressed individuals would be reluctant to undertake HIV or disclose their HIV status if tested positive.

Considering the above Study, Though it was revealing, it lacked the scientific approach it deserved as there were no study population ,sampling method, method of data analysis, instruments etc.

According to Monjok, Mesy and Essien (2009), after reviewing eight studies that looked at some degree of measurement of stigma and discrimination in Nigeria in an attempt to investigate the cultural context of stigma, health seeking behaviour and the role both perceived and community stigma play in HIV prevention, demonstrated that reducing stigma does increase the individual as well as community acceptance of people living the HIV/AIDS (PLWHAS), but long term studies are needed.

From the foregoing, researchers reviewed eight studies but could not mention their geographical spread to justify their result of the study. No mention was also made of the extent to which perceived and community stigma played in HIV prevention.

Pranav, Anju, Maddu, Aswathy, Prabha and Nishanth (2002) found out that more than 80% of the subjects have experienced stigma and discrimination in some fields of their life. Discrimination in the family and at work place was found to be higher than that from the community. (P. value – 0.03). This could be due to the significantly poor disclosure rate to the community (P. value – 0.000). More than 50% of the participants reported to have benefitted in better coping with stigma and discrimination by attending the rehabilitation programme. It was concluded that:

- i. Prevalence of stigma is high
- ii. More of the stigma and discrimination was from closer people like colleagues and relatives than from distant ones.
- iii. Attending rehabilitation programmes helps in better coping with stigma and discrimination.

This study was carried out in an environment that was void of the empirical requirements-setting, sampling method, population, instruments etc. So the validity of the entire exercise is queried.

2.3.2 HIV stigma, Housing and Disclosure of Status

Wolitski, Pals, Kidder, Courtenay and Holtgrave (2009) observed that homeless unstably housed PLWHAS from 3 US cities numbering 637 completed computer assisted interviews that measured demographics, self – assessed physical and mental health medical utilization, disclosure and risk behaviours. Internal and perceived external HIV stigma were assessed and combined for a total stigma score. Higher levels of stigma were experienced by women, homeless participants, those with a high sexual education or less and those more recently diagnosed with HIV.

From the foregoing, researchers mentioned the use of demographics but failed to clarify which of them and the extent to which they influenced the outcome of the study

Sullivan (2009) carried out a cross section of survey with self report to:

- i. Describe serostatus disclosure to recent sex partners among a multiethnic group of HIV infected men from hawaii.
- ii. Explore factors influencing Perceived disclosure
- iii. Examine relationship between disclosure and condom use.

The men numbering up to 93 (N=93) reported a disclosure rate of appropriately 50%with 228 Sps (sex partners). Disclosure was significantly influenced by Sp serostatus, relationship status, self efficiency for disclosure decision making and cocaine use before sex. Disclosure was not significantly associated with condom use highlighting the transmission risk reduction benefit of disclosure for these participants. HIV care givers should routinely address disclosure to Sps and offer interventions to enhance condom use.

Stigmatization and personality (openness and conscientiousness) have inverse relationship with HIV disclosure. Males are not significantly different from females in HIV Self Disclosure, but old PLWHA are more willing to disclose their HIV status than young PLWHA. It was also discovered that old females with low perceived stigmatization, but with good HIV cognition were most likely willing to disclose their HIV status followed by older males with high scores in perceived HIV stigmatization, but good in HIV cognition (Adejumo2004).Perceived stigmatization alongside old age and HIV cognition are critical in predicting HIV disclosure. Older PLWHA would be more willing to disclose their HIV status probably because of maturation, experience and reduced sexual activity (Adejumo, 2004). Perceived stigmatization has positive relationship with HIV cognition and HIV self disclosure with the latter being more related. (Olalekan 2015)

Looking at this finding, meaning is said to be given to the mystery that surrounds the positive relationship that is sometimes seen between perceived stigmatization and self disclosure of HIV/AIDS status.

2.3.3 Social Support and Gender in Relation to HIV/AIDS Disclosure

People living with HIV and AIDS (PLWHA) are assumed to have poor social support. Folasire, Akinyemi, Owoaje (2014) compared the satisfaction with perceived social support of people living with HIV and AIDS with HIV negative patients. 150 HIV positive patients were age and sex matched with 150 HIV negative patients in a cross sectional comparative study. Information on socio-demography and social support was assessed with questionnaire including multidimensional scale of perceived social support (MSPSS). Chi square test, student t-test, and linear regression analysis were done at $p = 0.05$ level of significance. Mean age of the HIV positive versus HIV negative patients was 38.1 ± 9.0 years versus 37.7 ± 9.2 years. Both groups had the lowest social support scores from family, (FA): 3.81 ± 1.08 vs 3.95 ± 0.89 , $p = 0.240$. Perceived support from friends (FR) was higher in the HIV negative group 7.41 ± 1.99 vs 5.55 ± 2.34 , $p = 0.000$ as well as perceived total support (TS), 3.94 ± 0.68 vs 3.59 ± 0.77 , $p = 0.000$. Linear regression for all the respondents revealed HIV status contributed the most and predicted TS and FR scores respectively ($\beta = -0.181$ 95% C.I = -5.843 to -0.766 , $p = 0.010$ and $\beta = -0.317$, 95% C.I, -4.260 to -1.792 , $p = 0.000$). For PLWHA group, employment contributed most to perceived TS ($\beta = -0.181$ 95% C.I -11.812 to -0.0361 , $p = 0.049$). However, in HIV negative group, TS and FR had the greatest contribution from marital status, ($\beta = -0.416$ 95% C.I -6.157 to -1.829 , $p = 0.000$) and ($\beta = -0.381$ 95% C.I -2.851 to -0.756 , $p = 0.001$). Also, the current living status ($\beta = -0.268$, 95% C.I -3.238 to -0.360 , $p = 0.015$, and $\beta = -0.241$ 95% C.I -1.48 to -0.09 , $p = 0.027$). It was concluded that all respondents had the poorest perception of support from family (FA).

Lack of employment is the most important factor identified in this group of PLWHA, responsible for the poor TS. For the HIV negative group, not being married and living outside family setting were the strongest factors for poor social support.

There was also a significant difference between the genders concerning disclosure of HIV status with the males more willing to disclose their status compared to the females ($p < 0.05$). Fear of breach of confidentiality and discrimination were the most common reasons given. (Uti, Sofola, 2007)

From the foregoing, for total support to be lowest in both negative and positive patients families is questionable. Some error of some sort must have occurred to have brought about this outcome.

In a study titled Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA Study, Bouillon, Lert, Sitta, Schmaus, Spire and Dray-Spira (2007) discovered that after disclosing, most persons living with HIV/AIDS received social and emotional support from their confidants. Discriminatory attitudes were infrequent.

In another study titled Sex, social support and self-disclosure of people living with HIV and AIDS-TASO Uganda experience by Nkayivu (2010), there was a significant positive relationship between social support and self disclosure ($r_s = .307$; $p = 0.002$). There was no significant difference between females and males in seeking social support ($p = 0.192$). Neither did the study establish a difference in self-disclosure between females and males ($p = 0.30$). There was no interaction effect between sex, social support and self disclosure ($p = 0.88$).

It was concluded that promoting self-disclosure is critical for increased access to social support, HIV prevention, care and treatment. HIV/AIDS programs should integrate awareness about the benefits of self-disclosure into prevention interventions.

Considering this outcome, self disclosure is singled out mostly as a prerequisite for social support. Other variables could do same and so need to be explored.

Maman, van Rooyen and Groves (2009) in a study, revealed that disclosure of HIV status can lead to an increase in social support and other positive psychosocial outcomes for PLWHA, but disclosure can also be associated with negative social outcomes including stigma, discrimination, and violence. The purpose of this article was to describe the HIV status disclosure narratives of PLWHA living in South Africa. Thirty in-depth interviews were conducted with 13 PLWHA (11 women, 2 men) over a three-year period. They explored disclosure narratives of the PLWHA through questions about who they chose to disclose to, how they disclosed to these individuals, and how these individuals reacted. Narratives focused on disclosure to family members and contained relatively little discussion of disclosure to sexual partners. Participants often disclosed first to one trusted family member, and news of the diagnosis remained with this person for a long period of time, prior to sharing with others. This family member helped the PLWHA cope with the news of their diagnosis and prepared them to disclose to others. Disclosure to one's partner was motivated primarily by a desire to encourage partners to test for HIV. Two participants described overtly negative reactions from a partner upon disclosure, and none of the PLWHA in this sample described very supportive relationships with their partners after disclosure. The critical role that family members played in the narratives of these PLWHA emphasizes the need for a greater focus on disclosure to families for social support in HIV counseling protocols

From the foregoing, the authors posited that disclosure can amount to positive outcome and at times to negative ones. This is true but they negligent of the fact that the environment could underlie such outcomes.

Bouillon et'al (2007) found out that determinants of disclosure to the family, friend or religious network was gender (women: aOR 2.04 [1.24–3.36])

2.3.4 Education and HIV/AIDS Status disclosure

Anyebe, Hellandendu and Gyong (2013) in a study titled Sociodemographic profile of people living with HIV/AIDS (PLWHA) in Idoma land, Benue state, North-central Nigeria: Implications for HIV/AIDS control, investigated the socio demographic attributes of PLWHA in Idoma land, Benue State [Nigeria], with a view to suggesting customized measures for HIV/AIDS control. A total of 133 PLWHA and 25 relatives of PLWHA selected from two HIV/AIDS treatment centres provided the data through a survey questionnaire. Health workers and community/group leaders similarly provided information through IDIs and FGDs on their perceptions on those mostly inflicted by HIV/AIDS. Existing hospital records of HIV screening/admissions were also used. Data collected were analyzed descriptively and thematically. Findings showed that PLWHA in Idoma land were predominantly young married farmers and females with low level of income and formal education. Many once married or unmarried PLWHA still intend to remarry or marry respectively; male PLWHA were more likely to desire remarrying. It is concluded that young female and farmers with low educational status and low income are more afflicted by HIV/AIDS. Measures to empower women and young people economically and socially are recommended, in addition to other HIV/AIDS control measures, including mass education tailored toward these more vulnerable groups

From the foregoing, the study did not state the location of the said treatment centres. From indications, such centres were in the rural area thus making the result bias and cannot warrant a generalization.

In a study titled Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA Study, Bouillon, Lert, Sitta, Schmaus, Spire, and Dray-Spira (2007), a marginally significant association was found between education and disclosure. Less educated people disclosed less often both to steady partner and to their social network

The setting, population, sample size and data analysis of this study are not stated and so could be liable to erroneous conclusions.

In a study by Amoran (2012) to determine factors associated with HIV/AIDS status to main sexual partners, findings were that the higher the level of education, the higher the disclosure rate. Issiaka, Cartoux, KyZerbo, Tiendrebéogo, Meda, Dabis, et al (2001), found that women with higher education are more likely to disclose their result to their sexual partner than women who are illiterate.

Ucho, and Anhange, (2013), in a study titled ‘Age, education, and uptake of HIV/AIDS counselling and testing among people of Achusa in Benue State Nigeria’, confirmed that increasing education is associated with HIV/AIDS counselling and testing uptake.

2.3.5 Antecedents of HIV/AIDS Status Disclosure

In a study titled 'HIV disclosure status and factors among adult HIV positive patients in a secondary health facility in North-Eastern Nigeria by Dankoli, Aliyu, Nsubuga, Nguku, Ossai, Tukur et'al (2014) with 200 respondents. Of the 198 (99%) respondents that returned their questionnaires, 159 (80.3%) were females. The mean age of respondents was 32.9years (SD \pm 9.5). Sixty percent of the respondents were married. Most (97.5%) had disclosed their HIV status and majority (36.8%) disclosed to their spouses. Sixty four percent of the respondents had treatment supporter and spouses (42.9%) were their choice of a treatment supporter. Disclosure of HIV status was found to be associated with age < 40years Adjusted Odds Ratio (AOR) 38.16; 95% Confidence Interval (CI) 2.42-602.61. Gender, employment status, educational level, duration of infection and marital status were not found to be significantly associated with disclosure of HIV status.

Even though this study sought to find the relationship between the demographics and disclosure of HIV/AIDS status, no mention was made of the analytic tool used-correlation or regression?

In a study titled 'disclosure of HIV status among HIV clinic attendees in Jamaica' by Clarke, Gibson, Barrow, James, Abel & Barton (2010) findings demonstrate 49% disclosure rate among males and 60% among females. The results further indicate that age, sexual orientation, mode of transmission and perception of family support was significantly associated with disclosure. Age and perception of family support were the factors demonstrating the most significant correlations with age being significantly associated with disclosure to partner. Perception of family support was significantly associated with disclosure to family.

From the foregoing it looks like the scope of such study was only restricted to one facility in disregard for other important avenues like outreaches in the community to meet with people who are opposed to visiting the clinic.

Makin, Forsyth, Maretha, Sikkema, Neufeld & Jeffery (2008) discovered that Individuals diagnosed with HIV often have substantial difficulty telling others that they are infected and may not disclose their status to anyone. Presently, because of efforts worldwide to decrease perinatal HIV transmission, increasing numbers of women are being tested during pregnancy that can have unique implications regarding disclosure. A woman who finds out in pregnancy that she is HIV positive has only a relatively short period of time before the birth of her child to cope with her diagnosis and yet hiding her diagnosis may put her child at risk of HIV infection, if, fearing exposure, she feels unable to take her antiretroviral prophylaxis or choose a safe method to feed her baby.

It is quite appreciative that world efforts are being made to decrease perinatal HIV/AIDS transmission. Efforts should be made to curtail such scourge among the men folk so as to make it holistic. This research failed to highlight this.

Kadowa et al (2009) in a study titled 'factors influencing disclosure of HIV positive status in Mityana district of Uganda' discovered that PLWHAs that have not initiated anti retroviral therapy (ART) for HIV in antenatal clinic and fear negative outcomes need more help in disclosure measure that empower PLWHAS to disclose such as those that lead to improved communication skills should be reinforce during ongoing counseling.

Though timely, this study is handicap in the sense that the mode employed in sourcing information is not too clear. Was it through interview, opinion polling or questionnaire?

Brou, Gerard, Djohan, Renand, Gerard, Didier, Ida, Vahnan & Anold (2008) conducted a study titled “when do HIV infected women disclose their HIV status to their male partner and why? A study of PMTCT programme, Abidjan. Their findings were that during the 2 years follow up; disclosure to the partner was reported by 96.7% of the HIV negative women compared to 46.2% of the HIV positive women. Among the HIV infected women, privileged circumstances for disclosure were just before delivery, during early weaning (at 4months to prevent HIV post natal transmission) or upon resumption of sexual activities. Formula feeding by HIV infected women increased the probability of disclosure.

From the foregoing, the study set out to find out when and why the women disclose their status to their husbands. Results only skewed towards the ‘when’ without the ‘why’ Igwegbe and Ugboaja (2014) carried out a cross sectional survey of 280 HIV positive pregnant women attending a PMTCT clinic in Nnewi, southeastern Nigeria to determine the rate, pattern, outcome, and barriers to HIV serostatus disclosure. All the women had known their status for more than three months. Two hundred and seventy two (97.1 %) of the women had disclosed their HIV status. Out of this number, 90.0% disclosed to their husbands; 23.5% to a priest/pastor and 11.4% to a close family member. The only reason for non disclosure to husbands was the fear of divorce. The partner’s reaction was supportive and understanding in all cases. Being single ($\chi^2=11.46$; $p=0.00$), low educational status ($\chi^2=7.64$; $p=0.02$), Anglican Christian denomination ($\chi^2=84$; $p=0.00$) and non membership of a support group ($\chi^2=7.66$; $p=0.00$) significantly increased the likelihood of nondisclosure. There was no significant association between age, parity, knowledge of partner’s HIV status, duration of illness and the likelihood of serostatus disclosure. They concluded that the rate of serostatus disclosure among HIV positive pregnant women in Nnewi is high and the outcome

is supportive. However, the fear of divorce should be addressed during post test counseling on serostatus disclosure

From the study, the reason for nondisclosure by the few was divorce. The study failed to mention why the majority that disclosed had to do so.

In order to advance the extent of self-disclosure of HIV sero-status in Nigeria, Ebuenyi, Ogoina, Ikuabe, Harry, Inatimi, and Chukwueke(2011) evaluated the prevalence, pattern and determinants of disclosure of HIV status amongst adult patients in a hospital in the Niger Delta.

In a three month cross sectional study undertaken in March 2012, the demographic and clinical data as well as HIV sero-status disclosure frequency and pattern were obtained using a pre-tested questionnaire from consenting HIV infected adults attending the Anti-Retroviral Therapy Clinic in the Niger Delta. Independent determinants of HIV disclosure to current sexual partner were determined using an unconditional logistic model. $P < 0.05$ was considered statistically significant. A total of 260 patients were studied out of which 184(71%) were females. Disclosure to current sexual partner was found to be 62.0% and students had the least disclosure rate. Majority of study participants preferred to disclose to family members (57%) than past sexual partner (2.5%) or friend (4.9%). Although HIV disclosure was significantly associated with male sex, living with sexual partner, partner being HIV positive; the only independent determinants of HIV disclosure were partner being on ART (OR-12.7, 95% CI 1.2-132.7) and being currently married (OR-8.8, 95% CI 2.1-36.8).

Though well carried out, the validity and reliability of the instrument used (the pre-tested questionnaire) are not mentioned. This puts the results of the study to question

The results of their study suggest low rate of HIV status disclosure among HIV infected patients in the Niger Delta. They found that receiving ART and being currently

married promoted disclosure. There is need for clinicians and policy makers to foster disclosure of HIV sero-status in Nigeria especially among HIV infected students and unmarried sexual partners.

Though well carried out, the validity and reliability of the instrument used (the pre-tested questionnaire) are not mentioned. This puts the results of the study to question. Ssali (2010) after a study pointed out that understanding the reasons for disclosure and non-disclosure and how these reasons differ by disclosure target is needed for effective prevention interventions. Using a case study design and content analysis, this study explored weather the reasons for disclosure decision differ by the nature of the relationship to the disclosure target. Semi structured interviews were conducted with 40 HIV clients in Kampala, with even stratification by gender and age. Most (95%) respondents reported disclosing to among these: 84% disclosed to family members,63% to friends,21% to work place colleagues and 18% to others and In another study by Deribe, Woldemichael, Bernard and Yakob (2009) titled disclosure experience and associated factors among HIV positive men and women clinical service users in *South West Ethiopia*, 705 people participated with 666 (94.5%) indicating that they have disclosed their status to at least one individual and 640 (90.2%) respondents disclosed their result to their current main partner. However, of those who disclosed, 91 (14.2%) had sex with their partner before telling their result to their partner. Of these sexual encounters 63 (69.2%) occurred with HIV positive, 14 (15.4%) with negative and 14 (15.4%) with unknown HIV status partners. Only 5 (38.5%) of the 13respondents who had a casual sexual partners reported disclosure to any of these partners. The study was culminated with a suggestion that HIV prevention in the country fosters positive behavioural changes. Of the 24 participants who had a spouse, 13 (54%) reported disclosing to a spouse. The most common reasons for disclosure were to receive support.

From the foregoing, it was discovered that disclosure hinged on support. One may ask what form of support? There should be clarity and a sense of direction here.

Akani and Erhabor,(2013) posited that the disclosure of HIV serostatus is a difficult emotional task creating opportunity for both support and rejection. In a study, they evaluated the rate, patterns and barriers to HIV serostatus disclosure. A pre-tested interviewer-administered questionnaire from 187 HIV infected people residing in a resource-limited setting in the Niger Delta of Nigeria was analysed. Of the 187 HIV seropositive patients studied, 144 (77.0%) had disclosed their HIV-serostatus while 43 (23.0%) had not. Results showed that the patients had disclosed their HIV-serostatus to: parents (22.3%), siblings (9.7%), pastors (27.8%), friends (6.3%), family members (10.4%) and sexual partners (23.6%) ($P = 0.004$). Females were more likely (59.7%) to disclose their HIV serostatus compared with males (40.3%) ($P = 0.003$). Mothers were twice as likely (65.6%) to be confided in compared with fathers. Barriers to HIV serostatus disclosure included fear of stigmatization, victimization, fear of confidants spreading the news of their serostatus and fear of accusation of infidelity and abandonment ($P = 0.002$). Married respondents were more likely to disclose their status. Better-educated respondents with tertiary education were more likely to disclose their HIV-serostatus. Expectation of economic, spiritual, emotional and social support was the major reason for disclosure. The ratio of disclosure to non-disclosure among patients with non-formal education was (2.6:1.0), primary education (2.3:1.0), secondary education (3.3:1.0) and tertiary education (10.0:1.0). Disclosure of HIV serostatus can foster economic social and economic support. There is need for the re-intensification of interventional measure that combines provider, patients and community education particularly in the aspect of anti-stigma campaign, partner notification and skill building to facilitate appropriate HIV serostatus disclosure.

With the revealing and striking finding of mothers being more favoured in terms of disclosure target, this should provoke the recommendation for further study in the area. This all important measure should have been advocated.

2.3.6 Gender and Self Disclosure

Among 705 participants, an equal number of men and women (94.6% men vs. 94.3% women, $p = 0.876$) indicated that they have disclosed their result to at least one individual and the majority (90.9% men vs. 90.7% women, $p = 0.906$) disclosed their result to their current main partner. It is customary to tell my partner everything was the frequently cited motivator for disclosing (36.3% men vs. 44.6% women, $p = 0.147$). Reasons for non-disclosure varied by gender: men are more tender-hearted about their partners while women are more pragmatic. The individual contextual meaning of fear of partner reaction entirely differs between men and women. Men were concerned about their partner's worry and exposure of their own unfaithfulness. Women feared physical violence and social and economic pressure in raising their children. For men, disclosure of HIV results to a sexual partner was positively associated with knowing the partner's HIV status and discussion about HIV testing prior to seeking services, while for women it was associated with knowing the partner's HIV status, advanced disease stage, attending no more than primary education, being married, and perceiving the current relation as long-lasting. It was finally concluded that there was no significant difference in the proportion of HIV status disclosure among men and women. However, the contextual barriers and motivators of disclosure varied by gender. Therefore future interventions should consider the importance of socially constructed gender roles in the efforts to increase HIV status disclosure (Deribe; Woldemichael; Bernard; Yakob .2009)

Though there was no difference between men and women in disclosure except that when contextual barriers came into play. Such barriers are not clarified by the study.

2.3.7 Level of Development and Serostatus Disclosure Across States/Ethnic Cleavages

HIV serostatus disclosure provides potential benefits to infected persons, their partners and communities (De Rosa and Marks, 1998; Pealer and Peterman, 2003). However, Medley et al, (2004) stated that the rates of serostatus disclosure are not optimistic. They maintained that in developing countries, rates of sharing HIV testing results with sexual partner among women ranged widely from 16.7% to 86% depending on time frame for disclosure and population of interest. In developed countries, low rates of self-disclosure have also been reported. For example, a study in Los Angeles reported that only 5.5% (51/926) of sexual partners during the last 12 months were informed of their risk by their HIV-infected partners (Marks et al., 1992). They concluded that Studies addressing factors associated with disclosure or non-disclosure are relevant for developing effective prevention and public health policy.

Galvan, Rimmer, and Lewis, (2008) in a study examined the relationship between perceived social support and perceived HIV stigma among HIV positive African Americans. A cross sectional convenience sample of 283 HIV positive African Americans was recruited from three social service agencies. Bivariate and Multivariate regressions were used to determine the variables predicting perceived HIV stigma. The participants were found to have a wide variety of opinions concerning perceived stigma of the three different sources of perceived social support examined (from family, friends and special person), only perceived social support from friends was found to be related to perceived HIV stigma when controlling for the presence of other relevant factors. High perceived social support from friends was

associated with less perceived HIV stigma. Other factors associated with low perceived HIV stigma including a lack of current symptoms of major depression, a longer time since HIV diagnosis.

2.3.8 Disclosure Target Preferences

Ben Nathan, Zeltzer & Melnikov (2011) carried out a descriptive and cross-sectional study to explore disclosure decisions regarding potential HIV infection by men who have sex with men (MSM). The sample consisted of 104 Israeli MSM. A questionnaire based on the theory of reasoned action was used for data determination. The questionnaire deals with beliefs, attitudes, and disclosure intentions. Results showed that only 30% of respondents intended to disclose potential HIV infection. A total of 70% of those who intended to disclose would choose to disclose the information to their brother/sister, two thirds to their mother, and only about 50% to their father. All components of the theory have an effect on MSM intentions of disclosure to others. In addition, behavioral beliefs, that is, MSM beliefs of the consequences of disclosure, were found to be the most significant predictor of behavioral intention. Research recommendations include the promotion of positive behavioral attitudes toward disclosure, leading to an increase in behavioral intentions of disclosure. Ezegwui , Nwogu-Ikojo , Enwereji and Dim (2009) carried out a study titled HIV serostatus disclosure pattern among pregnant women in Enugu, Nigeria in two medical facilities in Enugu, Nigeria, from September to November 2007 and an interviewer-administered questionnaire was used to collect data from HIV-positive pregnant women accessing PMTCT (prevention of maternal-to-child transmission) services at the two centres. Ninety-two women were interviewed: 89 (96.7%) had disclosed their status, while 3 (3.3%) had not. Of the 89 women who had disclosed, 84 (94.4%) had disclosed to partners, 82 (92.1%) to husbands, 2 (2.2%) to fiancés, 18 (20.2%) to sisters, 13 (14.6%) to mothers, 10 (11.2%) to brothers, 10 (11.2%) to

fathers and 10 (11.2%) to priests. Fifty-two (58.4%) gave emotional support as the reason for disclosure and 46 (51.7%) gave economic and financial support as reasons. Fifty-six (62.9%) reported understanding from partner as a positive outcome and 44 (49.4%) reported financial support. Forty-six (51.7%) reported no negative outcome. Serostatus disclosure rate in this study was high with most women disclosing to their partners.

From the foregoing, disclosure was more on the side of women to men. No recommendation was made in this light for a possible intervention by groups or individuals.

Salami, Fadey, Ogunmode and Desaluoo (2011) administered a 40 – item semi structured interviewer administered questionnaire to PLWHAS to determine rate of disclosure of HIV status among them in Ilorin, Nigeria. The disclosure rate was 39.5%, as many as 60.5% of the respondents had not disclosed their HIV status to anybody. The disclosure was to the spouses in 18.6% of the instances and to relatives or friends or co-workers in another 20.6% of cases. There was a significant difference the knowledge of their spouses on HIV/AIDS correlated with disclosure rate $r = 0.237$, $p=0.02$. Female sex, intact family and monogamy correlated well with high disclosure rate. It was concluded that disclosure rate is low in Ilorin and secondly female sex and monogamous marital status are positive predictors of disclosure.

Considering this outcome, female sex and monogamous marital status were seen to be the key predictors of disclosure. A strong recommendation in this regard should have been made.

2.3.9 Correlates of Self-disclosure of HIV/AIDS status

Adejumo (2008) in a study titled perceived HIV stigmatization, HIV/AIDS cognition and personality as correlates of HIV/Aids self-disclosure among people living with HIV in Ibadan Nigeria, investigated the relationship between perceived HIV stigmatization on HIV/AIDS cognition, personality and self-disclosure. The influence of age and gender on these variables was also examined. A positive relationship of extraversion, HIV cognition, and neuroticism and agreeableness personality traits with HSD was observed. A 2 x 2 x 2 x 2 factorial analysis showed that old females with low perceived stigmatization but with good HIV cognition were more likely to disclose their status. Perceived stigmatization, HIV cognition and personality jointly predicted HSD. Negative HIV cognition perceived stigmatization openness and conscientious personality traits are major barriers to HSD. They concluded that non-disclosure remains an enormous barrier to the fight against HIV and Aid non-disclosure. The study failed to make such recommendation

It then follows that intensive and aggressive campaign be carried out in order to address the problems associated with nondisclosure of status.

It was observed that clients who were attending support group meeting were more likely to disclose status than those not attending support groups. This is consistent with a study that underscore the importance of social support groups in helping clients work through the psychological issues and coping strategies surrounding disclosure(De Rosa , Marks, 1998). Higher levels of social support have been associated with increased feeling of well-being, improved health outcomes, and less depression and predisposition to high risk sexual practices (Hays, Turner & Coates, 1992). Diamond & Buskin (2000) revealed that those who disclosed their status were significantly older than those who did not disclose their status. Younger individuals are more likely not to disclose their HIV status and they have been

shown to engage in risky sexual behaviour post HIV diagnosis. According to them this will further increase the transmission of infection in the community if preventive measures are not undertaken. Further education and counseling should be targeted to those young individuals to reduce unprotected sexual relationship. It has also been observed that younger individuals are less likely to disclose due to lack of social support and subsequent seclusion, which might be reflected in the low level of, reported sexual relationship post-HIV diagnosis (O'Brien, Richardson and Alston, 2003) Respondents on highly active antiretroviral treatment (HAART) were more likely to disclose; Magnus, Peterman, Kissinger(2003)In a study found out that 269 persons disclosed their HIV status to people in the following categories: main sex partner (74.2%), casual sex partner (24.8%), immediate family member (69.8%), other relative (27.0%), or friend (26.4%). Adolescents were less likely than adults to disclose to a main partner, immediate family member, or a friend. Immuno suppressed persons were more likely than nonimmuno suppressed persons to disclose to a main partner, immediate family member, or another relative

From the foregoing, immune suppression stands out clearly as a strong indicator of disclosure. How and why this happens is unknown. The study was silent in this regard

2.3.10 Challenges Associated with Disclosure of Status

Challenges associated with the disclosure of HIV/AIDS are numerous. They range from dilemmas on legal implications, familial cohesion and so on. A number of studies have documented that rates of disclosure are generally low, although they vary substantially in different populations.

Adebiyi and Ajuwon(2015)in a study aimed at assessing the practice of HIV status disclosure, sexual behaviour and knowledge of disclosure and safe sex practices among HIV seropositive individuals attending the President's Emergency Plan for AIDS Relief (PEPFAR)

Clinic at the University College Hospital, Ibadan, systematic random sampling technique was used to select 392 HIV positive adults at the PEPFAR clinic. Data were collected using a validated interviewer-administered questionnaire containing a 12-point knowledge scale. The mean age of respondents was 35.6 ± 9.6 years. Majority (69.9%) were females and 59.4% were married. The overall mean safe sex knowledge score of the respondents was 8.3 ± 2.4 . Majority (70.9%) were aware that disclosure of HIV status to a partner before having sex could reduce HIV transmission, while 92.7% knew that consistent and correct use of condom could prevent its spread. However, only 39% of respondents had disclosed their status to all their sexual partners. More married respondents (48.5%) disclosed their status than the unmarried (27.0%) ($p < 0.05$). The proportions of female and male respondents who disclosed their status were 40.3% and 37.1% respectively. Hindrances to disclosure included fear of stigmatization (46.4%) and fear of abandonment (26.4%). Majority of respondents (75.5%) who had disclosed their status to all sexual partners practiced safe sex than those who had not disclosed (59.2%) ($p < 0.05$). Positive attitude towards the disclosure of one's serostatus to sexual partners and safe sex was exhibited by 62.8% and 58.4% of the respondents respectively. Non-usage of condom was more among the unmarried (38.6%) than the married (23.2%) ($p < 0.05$); it was also more among females (33.8%) than males (28.7%), ($p < 0.05$). High rates of non-disclosure of HIV status and unsafe sexual practices were noted. HIV/AIDS educational programmes and media campaigns should be intensified to promote the adoption of serostatus disclosure and safe sexual practices among HIV positive persons.

In a review of 17 studies from developing countries—15 from Africa—rates of disclosure 2 weeks to 4 years after diagnosis ranged from 16.7% to 86% (Medley, Garcia-Moreno, McGill, and Maman, 2004). Studies done in South Africa have also reported similarly low rates of disclosure, for example, only 36% of a rural sample of 55 women had

disclosed their status 5 months after diagnosis. Prior research has identified the many complexities that impact on disclosure to partners. Demographic variables associated with increased likelihood of disclosure to partners include younger age, lower socioeconomic status, and a lower level of education. Barriers to disclosure include factors such as fear of accusations of infidelity, abandonment, rejection, discrimination, and violence, and most of all, fear of loss of economic support from a partner. Women in longstanding relationships and those reporting trust and love as part of their relationships are more likely to disclose than women in relationships of shorter duration or women who have had multiple sexual partners. In a Tanzanian study by Maman, Mbwambo, Hogan, Kilonzo, Sweat (2001), women's fear of their partners' reactions and communication in decision-making were important in affecting disclosure. It was easier for a woman to disclose her status to her partner if he had also tested, or if there had been prior discussion of testing. The stigma associated with HIV disease also affects disclosure. Chandra, Deepthivarma, Manjula (2003) in a study involving both men and women, stigma and fear of discrimination were the main reasons for nondisclosure. Lie and Biswalo (1994) reported that in some African communities people are reported to be more fearful of the social consequences of AIDS than of the disease itself. The tension between the need to maintain control over personal information and the moral and ethical obligation to warn others of the potential for HIV-related risk is at the core of the debate about the use of criminal law to encourage disclosure or punish non-disclosure of one's HIV-positive status (Worth, Patton and Goldstein, 2008).

From the foregoing, youthful age was appreciably associated with positive HIV/AIDS status and nondisclosure. No mention was made of the intervening measures to address the negative reactions after disclosure.

Ndayala, Ondigi and Ngige (2015), after a study, asserted that new treatment regimens in HIV management have led to the rapid growth in the numbers of People living with HIV (PLWHIV). Disclosure rates among PLWHAs remains low which limits their ability to access necessary support resulting in early progression to death and increased risk of infection and low uptake of protection among sexual partners. Understanding the predictors of sero-positive disclosure to sexual partners can be a step toward devising targeted strategies aimed at promoting HIV testing and disclosure thus enhancing HIV prevention and risk reduction efforts. This study was a descriptive survey involving 232 PLWHIV drawn from HIV support groups in the area selected through non-proportionate systematic random sampling. Multiple logistic regression and Chi-square tests were used to establish the predictors and relationships of self disclosure of sero-positive status by PLWHIV to sexual partners. Data was collected using interviewer administered questionnaires, key informant interviews and Focus Group Discussions (FGDs). Quantitative data was analyzed generating descriptive and inferential statistics. Qualitative data was analyzed using content analysis with the use of verbatim quotes to highlight the respondents' voices. Study results showed that the general HIV disclosure rates were high (92.2%), but only 50.5% had disclosed to a sexual partner. Consistent disclosure to all sexual partners was low (29%) and this was mainly involved regular partners. Generally, PLWHIV had a positive perception of HIV self disclosure. Results point to high levels of anticipated stigma and discrimination from all support structures by PLWHIV. However, only 48% of PLWHIV recorded high levels of enacted stigma and discrimination. It was concluded that PLWHIV anticipated high levels of enacted stigma and discrimination from their social networks after disclosure. This acted as a barrier to HIV self disclosure. However, these fears did not translate into high levels of actual enacted stigma and discrimination. The study

recommended that initiating income generating activities for the PLWHIV, consistent training and counseling on the management of self stigma and promotion of strategies of living positively with the disease can promote effective self disclosure of sero-positive status to sexual partners.

Galletly and Dickson-Gomez (2009), Adam and Bourne (2008) revealed that Many HIV-positive individuals find it desirable to share information about their HIV status with their partners. The circumstances and timing often vary, however. Whilst some people are able to tell their sexual partners immediately, others may hold back because of concerns about potential negative consequences. According to them some HIV-positive people may be reluctant to disclose whilst trust is still developing in relatively new relationships.

Medley, Garcia-Moreno, McGill and Mamans (2004) reported that after reviewing 17 studies from peer reviewed journals and international conference abstracts, the rates of disclosure reported ranged from 16.7% to 86% with women attending free standing voluntary HIV testing and counselling clinics more likely to disclose their HIV status to their sexual partners than women who were tested in the context of their antenatal care. Barriers to disclosure identified by the women included fear of accusations of infidelity, abandonment, discrimination and violence. The low rates of HIV serostatus disclosure reported among women in antenatal settings have several implications for prevention of mother to child transmission of HIV (PMTCT).

Iliyasu, Abubakar, Musa and Aliyu (2011) Discovered that disclosures were more likely to mothers (51.9%) sisters (31.0%) brothers (11.0%) and spouses (6%) of all respondents 149 (72.6%) said they were shocked, a triad angry and sad while 29 (14.1%) reported being indifferent. A higher proportion of females 68 (59.67) were shocked, sad and angry than males 36 (39.6). Significant reductions occurred over time in the proportion of

patients that were sad, afraid and shocked. A higher proportion of mothers (67.0%) sisters (44.2%) friends of the same sex (37.1%) father (27.5) and spouse (23.7%) were perceived to be sympathetic compared to other 45 of the respondents were discriminated against. Of this, 22 (48.9) happened at home, 18(40.0%) in the workplace and the remaining 17 (37.8%) among friends.

Osinde, Kakaire and Kaye (2012) reported that out of 403 HIV positive individuals attending kabala Hospital in Uganda, disclosure of HIV serostatus to regular sexual partners was reported by 50.9%of the participants while 49.1% had chosen not to disclose their sero status. Factors independently associated with non-disclosure were marital status, current use of ARVS, having children who had died (from any cause), being sexually active in previous 6 months and the number of sexual partners during the previous 6 months ($P > 0.05$ for all associations), fear of stigma was the main reason for non-disclosure of HIV serostatus.

In a study by King, Katuntu, Lifshay, Packel, Batamwita, Nakayiwa et'al (2008),it was discovered that disclosure of HIV serostatus to sexual partners support risk reduction and facilitates access to prevention and care services for people with HIV/AIDS. TASO (the Aids support organization) clients were recruited as participants in the cross-sectioned study on transmission risk behaviour. Among 1, 092 participants, 42% were currently sexually active and 69% had disclosed their HIV serostatus to their most recent sexual partners. Multivariate logistic regression analysis showed that disclosure of HIV status was associated with being married having attended TASO for more than 2 years, increased condom use and knowledge of partner's serostatus. Positive outcomes included risk reduction behaviour, partners testing, increased care- seeking behaviour, anxiety relief, increased sexual communication and motivation to plan for the future

Ndayala, Ondigi, Ngige (2015) put it that Self disclosure of a positive HIV diagnosis has been known to have negative effects on the PLWHIV. Moreover, negative reactions following sero-status disclosure to friends and other loved ones often exacerbate feelings of distress and isolation among PLWHIV (Cheryl, et al., 2008) and this may discourage disclosure. Generally, over two thirds of the PLWHIV felt that they had ever been stigmatized and discriminated. They reported that they experienced: isolation, desertion, separation from spouse, being spoken ill of and being excommunicated by their in-laws after sero-positive disclosure. The HIV positive females were more likely to experience many forms of stigma and discrimination than their male counterparts. The selected statements used to compute enacted stigma and discrimination levels among PLWHIV showed that on overall, over half of the PLWHIV recorded low levels of enacted stigma and discrimination. The results showed that PLWHIVs' perceived level of enacted stigma and discrimination did not determine their disclosure despite being mentioned as a key determinant of HIV self disclosure in many studies (Makin et al., 2007). A slight difference in the rates of disclosure was noted; the PLWHIV who reported that they had suffered low levels were more likely to disclose than those who recorded suffering high levels of stigma and discrimination.

2.3.11 Gender, Stigma and HIV Status Disclosure

Yang, Li, . Stanton, Fang,. Lin, and Naar-King (2006) in a study, found out that increasing HIV knowledge is a focus of many HIV education and prevention efforts. While the bivariate relationship of HIV sero-status disclosure with HIV-related knowledge and stigma has been reported in the literature, little is known about the mediation effect of stigma on the relationship of HIV knowledge with HIV sero-status disclosure. Data from 4,208 rural-to-urban migrants in China were analyzed to explore this issue. Overall, 70% of respondents reported willingness to disclose their HIV status if they were HIV-positive.

Willingness to disclose was negatively associated with misconceptions about HIV transmission and stigma. Stigma mediated the relationship between misconceptions and willingness to disclose among women but not men. The mediation effect of stigma suggests that stigmatization reduction would be an important component of HIV prevention approaches. Gender inequality needs to be addressed in stigmatization reduction efforts.

The prevalence, pattern and determinants of spousal disclosure of HIV serostatus was evaluated among 166 HIV-positive pregnant women receiving antiretroviral treatment. Although 146 women (88%) disclosed their HIV serostatus, 20 women (12%) did not disclose their status to their spouse. Non-disclosure was significantly associated with nulliparous ($p=0.024$) and unmarried women ($p=0.026$). Fear, regarding spread of the information (57.8%), stigmatisation (53%) and deterioration in the relationship with the spouse (47%) were the three commonest reasons for non-disclosure. Disclosure of HIV-positive status remains a sensitive issue among infected pregnant women. Strategies to reduce the stigma associated with HIV infection, appropriate management of the information following disclosure of seropositive status by HIV-infected persons are necessary to encourage disclosure to sexual partners and ultimately prevent new HIV infections (Olagbuji, Ezeanochie, Agholor, Olagbuji, Ande and Okonofua, 2011).

From the foregoing, one would conclude that the setting of the study was not clearly stated; Besides the recommendation of proper management of information on disclosure is rather unclear as it is a relative assertion.

2.4 **Summary of Literature Review**

Many authorities have explored the subject matter of HIV/AIDS and its attendant issues. The influence of demographic and other variables on disclosure of status have equally

been researched. Of all the studies on the subject matter of disclosure, the place of culture has remained under explored. Only anecdotal reports have been published on the issue of cultural variable. Adejumo (2008) and few others reported peripherally on this aspect. This study portends to explore further the interaction of this variable and others on disclosure.

2.5 Hypotheses

The following hypotheses have been formulated based on the research questions.

- i. Perceived stigmatization will significantly influence self disclosure of HIV/AIDS status among PLWAs.
- ii. Social support will significantly influence self disclosure of HIV/AIDS status among PLWHAs.
- iii. There will be significant gender difference on self disclosure of HIV/AIDS status among PLWHAs.
- iv. Education will significantly influence self disclosure of HIV/AIDS status among PLWHAs.
- v. There will be significant interaction effects of gender, education, levels of perceived stigmatization and social support on self-disclosure of HIV/AIDS status.

CHAPTER THREE

METHOD

This chapter presents descriptions of the research design, participants, sampling technique, instruments, procedure and method of data analysis .

3.1 Research Design

The study employed the 2x2x2x4x2 factorial design to examine the influence of perceived stigmatization,(low and high), social support(low and high), gender(male and female) and education(informal, primary, secondary and tertiary schools) on self disclosure (low and high)of HIV/AIDS status by PLWHAs.

3.2 Sample Size Determination

The Taro Yamane sample size determination formula was employed to arrive at the sample size for the study .The formula states thus:

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

where n=sample size, N=population size, e=the error of sampling. So with a population size of 1018 a sample of 287 was recruited at an error level of .05.

3.3 Sampling

In order to recruit participants for the study, purposive sampling technique was employed.

3.4 Participants

From a total population of 1,018 PLWAs at JUTH APIN Center, 287 of them were sampled for the study with a mean age of 42 years.255 of them were Christians while 30 and 2 were Muslims and free thinkers respectively. At the end of the exercise 246 questionnaires were collected. Out of this, 79 of the participants were males while 167 of them were females

within the age range of 19 to 65 years. Table 4.0 shows the socio-demographic characteristics of participants. The table shows that the majority 167 (67.8%) of the participants were females, while 79 (32.2%) were males. Regarding the highest education attainment of participants, the table revealed that the majority 110 (44.9%) of the participants had tertiary educational qualification; while 16 (6.6%) had informal education, 59 (23.8%) had primary education, and 61 (24.7%) had secondary education.

Table 4.0: Socio-demographic Characteristics of Participants

	Frequency	Percentage %
Gender		
Male	79	32.2
Female	167	67.8
Total	246	100.0
Highest Educational Attainment		
Informal	16	6.6
Primary	59	23.8
Secondary	61	24.7
Tertiary	110	44.9
Total	246	100.0

3.5 Instruments

Two research instruments were used. These are

- i. HIV stigma scale (HSS)
- ii. The Multidimensional scale of perceived social support (MSPSS)

The HIV Stigma Scale: The HIV Stigma Scale was designed at the College of Nursing University of Illinois at Chicago by Berger et'al(2001). It measures perceived stigma by people living with HIV. The 40 items of the HIV stigma scale focus on experiences, feelings and opinions as to how people living with HIV feel and how they are treated. The person living with HIV responds to these items using a four point scale to indicate level of agreement or disagreement. This scale has 4 subscales.

Validity and Reliability of HIV Stigma Scale: Psychometric was performed on 318 questionnaires (19% women, 21% African – America 8% Hispanic) by Berger et'al(2001). Four factors emerged from exploratory analysis: personalized stigma, disclosure concerns, negative self-image, and concern with public attitudes towards people living with HIV. Construct validity was supported by relationships with related constructs: self - esteem, depression, social support, and social conflicts. Coefficient alphas between .90 and .93 for subscales and .96 for the 40 – item instrument provided evidence of internal consistency reliability. The HIV stigma scale was reliable and valid with a large, diverse sample of people living with HIV (Berger, Carol, Ferrans, and Lashley, 2001).

Scoring of the HIV Stigma Scale and Sub Scales: Items are scored as follows

Strongly disagree	-	1
Disagree	-	2
Agree	-	3
Strongly agree	-	4

- i. If a subject selects a response in between two options (e.g between SD and D) a numerical value midway between the two options would be used (e.g1.5).
- ii. Two items are reverse scored. Items 8 and 21.
- iii. After reversing these two items each scale of subscale score is calculated by simply adding up the raw values of the items belonging to the scale or subscale. Subscale

designations appear in small print in the far right margin of the instrument, it may be desirable to cover or delete those numbers before reproducing the instrument for administration to subjects sixteen items belong to more than one subscale, reflecting the intercorelations of the factors on which the subscales are based.

- iv. The range of possible scores depends on the number of items in the scale. For the total HIV stigma scale, scores can range from 40 to 160 (1 x 40 items to 4 x 40 items) for the personalized stigma subscale scores can range from 10 to 40. For the negative self-image subscale, scores can range from 13 to 52. For the public attitudes subscale scores can range from 20 to 80.

The Multidimensional Scale of Perceived Social Support (MSPSS): Zimet, Darlem, Zimet, and Farley (2010) developed the multidimensional scale of perceived social support (MSPSS) which has been widely used in both clinical and non-clinical samples. The MSPSS is a brief report instrument containing twelve items rated in a seven – point Likert-type scale. It is meant to measure an individual's perception of how much he or she receives outside social support and has been tested on people from different age groups and cultural backgrounds and found to be MSPSS consists of three subscales: Family, Friends and significant others. Most investigations have revealed MSPSS to be a three factor construct which demonstrates good to excellent internal consistency and test-retest reliability (with Cronbach's) alpha samples and 0.92 to 0.94 in clinical samples.

In terms of its construct validity, Standley, Beck and Zebb (1998) first raised the issue of an instructure when they found that it provides a two – factor structure in older adults suffering from generalized anxiety disorder (GAD). However due to the small size (n-50), the authors of this study were precluded from making a definitive conclusion. On the other hand, Cox, Murray and Torgrude (2003) provided confirmatory analysis endorsing the a prior

structure of the three factors model for MSPSS and the study included a sample of both students and depressed patients, contained a sufficient sample size (n=549 and n= 156 for the student and outpatient samples respectively and thus confirmed that the three factors construct provided a much better fit than the two factor model factor in both samples).

3.6 Scoring

Each item on the scale is scored 1-7. Total is sum of all 12 items with possible range for total as 7-84. The items are scored thus:

Very strongly disagree	-	1
Strongly disagree	-	2
Mildly disagree	-	3
Neutral	-	4
Mildly Agree	-	5
Strongly Agree	-	6
Very strong Agree	-	7

Algorithm

Total	=	69-84	High Acuity
Total	=	49-68	Moderate Acuity
Total	=	17-48	Low Acuity

3.7 Procedure

First of all ethical clearance from the authority vested with the powers to do so was sought. This was to facilitate the early commencement and co-operation of the targeted participants . Prior to the administration of the questionnaires consent forms were given to and signed by the respondents to indicate their willingness to participate in the research. Data were collected through administered questionnaires. The services of at least 6 research

assistants were employed. Through the assistance of the latter, completed questionnaires were collected centrally.

3.8 **Data Analysis**

The t-test and analysis of variance (ANOVA) statistical techniques were employed in the computation of the data collected. The t-test technique was used as there were two levels each of social support, perceived stigmatization and gender whose means were to be compared,

ANOVA: The one - way analysis of variance was used to determine whether there were any significant differences between the means of the independent (Unrelated) groups.

CHAPTER FOUR

RESULTS

Out of 269 questionnaires distributed, a total of 246 were collected and analyzed. The descriptive and inferential results are presented below:

4.0 **Table 4.0 Inter-correlation of dimensions of HIV stigmatization and perceived social support**

Parameters	1	2	3	4	5	6
1. Personalized stigma	1					
2. Self-disclosure stigma	0.614**	1				
3. Negative self image	0.718**	0.653**	1			
4. Public attitude stigma	0.914**	0.720**	0.769**	1		
5. Perceived social support	-0.235**	-0.122	-0.243**	-0.215**	1	
6. Perceived stigma	0.924**	0.794**	0.851**	0.956**	-0.226**	1
Mean	42.90	26.37	27.96	46.22	62.11	97.27
Standard deviation	9.47	4.19	5.41	9.02	13.35	16.36

** . Correlation is significant at the 0.01 level (2-tailed).

The table shows that the dimensions of HIV stigmatization (personalized, negative self-image and public attitude stigma) negatively and significantly correlated with perceived social support ($r=-0.235$; $p<.01$; $r=-0.243$; $p<.01$ & $r=-0.215$; $p<.01$) respectively. However, self-disclosure though negatively correlated with perceived social support, There was no significance ($r=-0.122$, $P>.05$).

Hypothesis One

Perceived stigmatization will significantly influence self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).

Table 4.1: T-test Summary of effect of perceived stigmatization (I.V) on self-disclosure(D.V) of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).

Variables	Perceived stigmatization	N	Mean	Std	t	Df	Sig	P
Self-Disclosure stigma	Low	130	23.94	3.69	-12.41	244	.000	<.05
	High	116	29.09	2.81				

Table 4.1 shows that there was significant difference in the self-disclosure stigma of the participants with low and high perceived stigmatization [$t(244) = -12.41, p < .05$]. The mean observation shows that participants with high perceived stigma showed significant higher self disclosure ($\bar{X} = 29.09$) than participants with low perceived stigma with a mean difference of 5.16. The hypothesis was therefore confirmed. This implies that at the height of perceived stigma, victims still disclose their status commensurately.

Hypothesis Two

Social support will significantly influence self-disclosure of HIV/AIDS status among PLWHAs.

Table 4.2: T-test Summary of effect of perceived social support on self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).

Variables	Social support	N	Mean	Std	t	Df	Sig	P
Self-Disclosure stigma	Low	122	27.08	3.99	2.68	244	.008	<.05
	High	124	25.67	4.27				

Table 4.2 shows that there was significant difference in the self-disclosure of the participants with low and high perceived social support [$t(244) = 2.68, p < .05$]. The mean observation shows that participants with low perceived social support showed significant higher self disclosure ($\bar{X} = 27.08$) than participants with high perceived social support with a mean difference of 1.41. The hypothesis was therefore confirmed. This implies that people who perceive high social support may not be actually enjoying the support and so cash on the notion of frustration-aggression hypothesis and increase disclosure despite the low or absent actual support.

Hypotheses Three:

There will be a significant gender difference on self-disclosure of HIV/AIDS status among PLWHAs

Table 4.3: T-test Summary of effect of gender on self-disclosure of HIV/AIDS status among People Living with HIV and AIDS (PLWHAs).

Variables	Gender	N	Mean	Std	t	Df	Sig	P
Self-Disclosure stigma	Male	80	25.84	3.72	-1.469	244	.144	>.05
	Female	166	26.63	4.38				

Table 4.3 shows that there was no significant difference in the self-disclosure stigma of the participants gender [$t(244) = -1.469, p > .05$]. The mean observation shows that male participants reported ($\bar{X} = 25.84$) self-disclosure, while their female counterpart reported ($\bar{X} = 26.63$) with a mean difference of 0.789. The hypothesis was therefore not confirmed. There were no gender differences in self disclosure of HIV status. The implication here is that gender does not matter in the choice to disclose or not to disclose HIV/AIDS status. Any gender can disclose far higher than the other depending on some personal or environmental factor(s).

Hypotheses Four:

Education will significantly influence self-disclosure of HIV/AIDS status among PLWHAs

Table 4.4. One-way ANOVA : Influence of education on Self-disclosure among People Living with HIV and AIDS (PLWHAs)

Source	Sum of Squares	df	Mean Square	F	P
Education	64.777	3	21.592	1.236	.297
Error	4228.560	242	17.473		
Corrected Total	4293.337	245			

The result in Table 4.4 shows that there was no significant influence of education on self-disclosure stigma [$F(3,242) = 1.236; p > .05$], with self-disclosure mean scores of 26.80 (informal education), 26.51 (Primary school education); 26.89 (secondary school education), and 25.70 (tertiary education). The hypothesis was not supported. The implication here is that level of education does not matter in one's choice to disclose or not to disclose his/her HIV/AIDS status. A primary school pupil can disclose far higher than a tertiary school student depending on some personal or environmental factor(s).

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This section deals with the following: a discussion of analyzed and interpreted results in chapter 4, a conclusion to the study, limitations of the study, a review of recommendations and lastly future directions

The aim of the study was to examine the influence of perceived stigmatization, perceived social support and demographic variables of gender and education on self disclosure of HIV/AIDS status by victims in Jos metropolis. The study further sought to explore the interaction between these variables in relation to the dependent variable (self disclosure). The student t-test, analysis of variance (ANOVA) and multiple regression analysis statistics were employed to test the independent and joint influence of the variables in the study. Findings are discussed below

5.1 Discussion of Major Findings

In this section, various hypotheses in the study were discussed. Hypothesis one sought to examine if there was significant influence of perceived stigmatization on self disclosure of HIV/AIDS status by victims. The result of this study confirmed this hypothesis meaning that there was a significant influence of perceived stigmatization on self disclosure of HIV/AIDS Status. By this finding, it translates that the higher the level of perceived stigmatization, the higher the predisposition to disclose the status and the reverse is true. It is possible that some of the respondents' attributes could have mediated and accounted for this finding. Similarly, in a study titled Relationship Between Psychodemographic Factors And Perceived Stigmatization Among People Living With Hiv/Aids In Ibadan, Nigeria, Olalekan(2012) observed that those who were females, young, poor on HIV cognition, but with high HIV

disclosure recorded the highest mean on perceived stigmatization..Lyimo, Stutterheim, Hospers, Teuntje, van der Ven and de Bruin(2013) put it that perceived stigma is primarily related to involuntary disclosure.Adejumo (2011) came up with a contrary finding in a study titled “Perceived HIV stigmatization, HIV/AIDS cognition and personality as correlates of HIV self-disclosure among people living with HIV in Ibadan, Nigeria” where he discovered that Perceived stigmatization represents a major barrier to HIV/AIDS status disclosure.This finding also differed with wolitski et’ al (2009) who investigated the effects of HIV stigma on health, disclosure of HIV status, and risk behavior of homeless and unstably housed persons living with HIV and found out that perceived external stigma was associated with decreased HIV disclosure to social network members, and internal stigma was associated with drug use and non-disclosure to sex partners.

Adejumo (2004) puts it that stigmatization has inverse relationship with HIV disclosure. However, a plausible explanation for this current research’s finding is that as awareness and understanding on stigmatization continue to increase due to aggressive HIV/AIDS education, disclosure continues to increase regardless of level of stigmatization. This is reflected in Kazeem (2012) where he posited that an individual's mental reasoning or perception about a specific situation is more likely to influence the individual's mental evaluation, attitude, and behaviour related to the event. This means that if an individual sees HIV infection as challenging but surmountable; with a basic understanding of the aetiology, course, treatment and prognosis of the infection, such an individual is likely to make a meaningful cost-benefit analysis of HIV disclosure. With this the individual will make sound decision based on adequate information and personal motivation to disclose HIV status irrespective of the challenges. This position is buttressed by Obermeyer, Baijal and Pegurri

(2011) who posited that ethical dilemmas resulting from competing values concerning confidentiality, influence the extent to which disclosure can be facilitated.

Hypothesis two sought to examine if perceived social support will significantly influence self disclosure of HIV/AIDS status by victims. The Hypothesis was confirmed as low perceived social support demonstrated a significant higher self disclosure of HIV/AIDS status. This is contrary with Sethosa (2005) who in a study titled “Evaluation of HIV counseling and testing, self-disclosure, social support and sexual behaviour change among a rural sample of HIV reactive patients in South Africa”, found out that Social support was significantly related to disclosure of HIV status and that when care and support were weak for infected women, they tended not to reveal their HIV status to their partners. A Similar counter to this finding was by Clarke et’al (2010) in a study where they discovered that Perception of family support was significantly associated with disclosure of status to family. In the same vein, Galvan et’ al (2008) posited that Social support theory hypothesizes that social support can serve to protect individuals against the negative effects of stressors, such as discrimination, by leading them to interpret stressful occasions less negatively. Stutterheim et’ al (2011) concurred with Galvan et’al(2008) who said social support buffers psychological distress in people with HIV. Certain attributes or experiences associated with respondents of this current study may have accounted for the study outcome.

In a study titled Relation of depression to perceived social support: results from a randomized adolescent depression prevention trial, Stice , Rohde , Gau and Ochner (2011), said that theorists posit that certain behaviors exhibited by depressed individuals (e.g., negative self-statements, dependency, reassurance seeking, inappropriate or premature disclosures, passivity, social withdrawal) reduce social support, Hypothesis three which sought to examine if there was significant influence of gender on self disclosure of

HIV/AIDS status was not confirmed. This finding tallies with Kadowa et' al (2009) who in a study on Factors influencing disclosure of HIV positive status in Mityana district of Uganda found out that there was no significant difference in self disclosure between the cases and controls in relation to gender. Similarly, Deribe et' al (2010) came up with the finding that there was no significant difference in the proportion of HIV status disclosure among men and women. However, the contextual barriers and motivators of disclosure varied by gender. Therefore it was concluded that it is important that clinicians, counselors, and health educators underscore the importance of gender-specific interventions in efforts to dispel barriers to HIV status disclosure. Dankoli, Aliyu, Nsubuga, Nguku, Ossai, Tukur et'al(2014) in a study titled HIV disclosure status and factors among adult HIV positive patients in a secondary health facility in North-Eastern Nigeria, 2011, found out that Gender, employment status, educational level, duration of infection and marital status were not found to be significantly associated with disclosure of HIV status. A plausible explanation for this finding is that as men and women in this part of the world (Jos, Nigeria) are virtually economically independent of one another, disclosure and non disclosure of Status to the other makes no difference. No party owes the other a duty to disclose his/her HIV/AIDS status. Makin et al (2007) in their study, found out that less dependence on partners was positively associated with disclosure.

In a study in Jos, Makurdi and Abuja By Ortese and Tor-Anyiin, (2008) titled "Effects of Emotional Intelligence on Marital Adjustment of Couples in Nigeria," findings revealed that emotion management has significant effect on marital adjustment of couples. Emotional sensitivity skills were found to have significant effects on marital adjustment of couples. Social relationship skills had significant effect on marital adjustment of couples. Based on the findings, it was recommended that in both premarital and marital counseling, couples should

be introduced to the competencies of Emotional intelligence and be taught emotional sensitivity skills. This is unlike other societies like in Kenya where research found that women were significantly more likely to notify their partners if they had limited resources or relied on their husband for economic support (Farquhar, Mbori-Ngacha, Bosire, Nduati, Kreiss and John 2001), suggesting that women may feel compelled to disclose to partners to ensure continuing economic support. But the evidence comparing levels of disclosure by women and men is mixed. Studies from Kenya by Katz et al. (2009) and South Africa by Olley et al(2004) found higher rates of disclosure by women, while other studies have found no significant differences, as in Ethiopia (Deribe, Woldemichael, Bernard and Yakob 2009; Deribe et al. 2008)

Hypothesis four which sought to find out if educational level had significant influence on self disclosure of HIV/AIDS status of victims was not supported. This tallies with Kadowa et'al (2009) who discovered that there was no significant difference between the cases and controls in relation to educational level in their study titled "Factors influencing disclosure of HIV positive status in Mityana district of Uganda". Dankoli, Aliyu, Nsubuga, Nguku, Ossai, Tukur et'al(2014)found out that Gender, employment status, educational level, duration of infection and marital status were not found to be significantly associated with disclosure of HIV status. A possible explanation for this scenario is that as quite a good number of the respondents(108 i.e 44%) went to tertiary schools with about 204(83%) residing in Jos, it is indicative that majority of them were exposed to the same educational environment that harmonized their learning and subsequent decision making(disclosure of HIV/AIDS inclusive). Contrary to this, Teklemariam, Minichil, and Girum (2015) revealed that educated participants were more likely to disclose their HIV status to sexual partner when compared to their counterpart. This is a true reflection of the functionalist theory which puts it that "as

students progress through college and beyond, they usually become increasingly liberal as they encounter a variety of perspectives. Thus, more educated individuals are generally more liberal, while less educated people tend toward conservatism". Yaya, Saka, Landoh, Patchali, Patassi, Aboubakari et'al (2015) in a study among PLWHAs reported that most HIV status disclosures among them were influenced mostly by level of education among others.

Hypothesis five which sought to find out if there were significant independent and joint influence of gender, education, levels of perceived stigmatization, social support on self disclosure of HIV/AIDS status was partially confirmed. Perceived stigmatization and social support had significant independent influence on self disclosure of HIV/AIDS status .A possible explanation for this is that with increased HIV/AIDS education and awareness PLWHAs tend to increase disclosure despite the hiking stigmatization. Low perceived social support which is often associated with experiences like depression tends to increase the disclosure potential as premature and inappropriate disclosures and reassurance seeking behaviors often characterize it (Depression).

Gender and education could not predict disclosure as demonstrated by Ndayala, Ondigi, Ngige (2015) whose study revealed that the association between disclosure of HIV positivity and the PLWHAs' demographic factors such as sex and level of education, was not established. An acceptable explanation for this finding is that as the respondents were more of a homogeneous population with 83% of them having tertiary education, living within the same metropolis and sharing virtually the same cultural values, one would expect no significant difference in their disclosure of HIV/AIDS status. For gender, the absence of its

significant influence on self disclosure of serostatus could be attributed to independent lifestyles that are common among couples in this part of the world.

5.2 Summary

Perceived stigmatization and social support can have an appreciable level of influence on self disclosure. Gender and educational level in this part of the country have no influence on self disclosure of HIV/AIDS status

The main findings of the study are summarized as follows:

- i. There was a significant influence of perceived stigmatization on self disclosure of HIV/AIDS status among people living with the disease
- ii. There was a significant influence of social support on self disclosure of HIV/AIDS status among victims
- iii. There was no significant influence of gender on self disclosure of HIV/AIDS status among people living with the disease
- v. There was no significant influence of education on self disclosure of HIV/AIDS status among people living with the disease

5.3 Conclusion

Due to the socially stigmatizing nature of an HIV-positive diagnosis, it is usually regarded as extremely private information, thus, persons infected with the disease may constantly negotiate their decisions regarding whether or not they should reveal their status. Since disclosure of an HIV-positive diagnosis is one of the first steps toward +prevention of the spread of this disease, understanding how these disclosure decisions are made and how these decisions may be facilitated are paramount to prevention strategies. Incorporated in these strategies, however, must be a realization that perceptions about one's self when infected, about the potential recipients of the information, and by others are likely to be made

in the wake of an HIV-positive diagnosis. These perceptions are often times based in stereotypes rather than fact. The unique nature of HIV/AIDS with its stigma of both the behaviors through which a person becomes infected and the fact that it is an untreatable terminal chronic illness, lends itself well to the study of attribution construction and management. Disclosure within the context of an HIV-positive diagnosis is not only important for the prevention of the disease, it can also be beneficial for the individual emotionally and physically. Improvements in immune system functioning (Pennebaker et al, 1988) as well as the receipt of instrumental and emotional support have been linked to disclosure (Kimberly et al, 1995). It is likely that in this process of deciding whether or not to disclose, the HIV-positive individual makes inferences about himself or herself. For example, an HIV-positive individual may disclose his status to a family member because he wants to be honest with that person regardless of that person's ability to provide support for him. It is also possible that an HIV-positive person would disclose simply because it would make her feel better about herself. Regardless of why someone chooses to disclose, its occurrence is important for the welfare of the general public as well as the already infected individual. In addition to the stresses of concealing the information from family members, one must also address the constructive aspects of HIV/AIDS infection in families. For example, the disease may draw some families closer together, may instigate the mending of broken family bonds, and may alter perceptions of individual family members as the person with HIV or the person(s) caring for him/her may be viewed as courageous, honorable, and/or resilient. By examining different family member roles and relationship

5.4 Limitations of the study

There are certain concerns that need to be borne in mind when we consider the results of this study. The homogeneity of the studied population represents a hindrance to an express

generalization of the findings. Most of the participants were indigenous inhabitants of Jos metropolis from virtually the same cultural and educational backgrounds.

The research, owing to some financial constraints, was conducted in one treatment facility. Besides, instead of recruiting not less than ten(10) research assistants, the researcher could only afford to hire six who assisted in the administration and translation of the instruments used. Because of these hitches, the research, though successful, lasted longer than necessary.

5.5 **Incidental Findings**

In the course of conducting this research on influence of perceived stigmatization, social support, gender and education on self disclosure of HIV/AIDS status by victims, the following incidental findings were discovered through my personal interaction with the clients.

1. It was discovered that quite a good number of patrons of the facility (JUTH APIN) where the research was carried out came from neighbouring states of Bauchi, Nasarawa, Benue and Kaduna. When researcher sought to find out why they had to travel long distances to Jos for treatment whereas they have the same facilities in their states, some said it was their choice to do so, some for personal reasons and others declined to respond.
2. In the course of interaction with the respondents, some vehemently claimed that their ill health was linked with some witchcraft.
3. Some female respondents claimed that despite their sero-positivity and invitations from the APIN counselors their husbands have always turned down such invitations to the health facility for test with the claim that nothing is wrong with them.

4. Despite the supposedly social proximity between husbands and wives, some spouses prefer to confide their positive status to their biological parents (especially mothers) than to their partners. Sequel to this research, the body of knowledge in this regard has received a boost in that Instead of the obvious and logical outcomes of High perceived stigmatization amounting to low self disclosure of sero status and Low perceived social support amounting to its decrease, the results proved otherwise. These outcomes, though seemingly paradoxical, call for further investigation to unravel their antecedents.

Contributions to the body of knowledge as a result of this study are:

- High perceived level of stigmatization amounted to high level self disclosure of HIV/AIDS status
- Low perceived social support resulted high self disclosure of HIV/AIDS status
- Female or male gender makes no difference in influencing HIV/AIDS status disclosure
- Educational level could not predict disclosure of HIV/AIDS status

5.6 **Recommendations**

Based on the findings of this research, the following recommendations are hereby advanced:

1. Since high level of perceived stigmatization translates to high self disclosure rate for HIV/AIDS victims, researches in this area should be intensified by all concerned in order to establish the rationale behind this relationship.
2. As low social support demonstrated a significantly high self disclosure rate of HIV/AIDS status, is a signal to the need to intensify research in this area to unravel the factor(s) behind the mystery. Ordinarily, infected women with social challenges

need to be referred for psychosocial support to improve disclosure of HIV/AIDS status and reduce transmission of the disease from mother to child pre and post-natal.

3. As demographic characteristics of gender and level of education never differed in their prediction of HIV/AIDS status disclosure, is indicative that the homogeneous nature of the study population is largely responsible. Sequel to this, further research covering more treatment centres at regional or national levels is highly recommended. When this measure is taken, the research scope is broadened and the homogeneity factor is appreciably taken care of as more cultures are captured. This all inclusive measure would further afford the researcher (government or private) an opportunity to make comparisons across cultures on the HIV/AIDS status disclosure variable.

REFERENCES

- Abrams, R.D., & Finesinger, J. (1953). Guilt reactions in patients with cancer. *Cancer*, 6, 474-482
- Adam, B. D. (2008). Effects of the criminalization of HIV transmission in Cuerrier on men reporting unprotected sex with men. *Canadian Journal of Law and Society*, 23(1-2),143-59,
- Adejumo, A. O. (2011). Perceived HIV stigmatization, HIV/AIDS cognition and personality as correlates of HIV self-disclosure among people living in Ibadan, Nigeria. *Gender & Behavior*, 9, 3854–3869.
- Adebiyi, I., Ajuwon, A.J. Sexual behaviour and serostatus disclosure among persons living with HIV in Ibadan, Nigeria. *Afr J Biomed Res*. 2015;18:69–80
- Akani, C. I. & Erhabor, O. (2006). Rate, pattern and barriers of HIV serostatus disclosure in a resource-limited setting in the Niger Delta of Nigeria. *Tropical Doctor*, vol. 36, no. 2, 87–89
- Akert, R. M., Aronson, E, & Wilson, T.D. (2007). *Social psychology*. Upper Saddle River, NJ: Prentice Hall.
- Allen, S. Tice, J. Van de Perre, P. Serufulira, A. Hudes, E.& Nsengumuremyi, F.(1992). Effects of serotesting with counseling on condom use and seroconversion among HIV serodiscordant couples in Africa.*British Medical journal*,304,1607-19.
- Allen, S. Serufulira, A. Gruber, V. Kegeles, S. Van de Perre, P. Carael,M (1993) Pregnancy and contraceptives use among urban Rwandan women after HIV testing and counseling. *American journal of public health*, 83, 705-10.
- Altman, I. & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt
- Amirkhan, J.H. (1990). Applying attribution theory to the study of stress and coping. In S. Graham & V.S. Folkes (Eds.), *Attribution theory: Applications to achievement, mental health, and interpersonal conflict* (pp. 79-102). Hillsdale. NJ: Lawrence Erlbaum Associates
- Amoran, O. E. (2012). Predictors of disclosure of sero- status to sexual partners among people living with HIV/AIDS in Ogun State, Nigeria. *Nigerian Journal of Clinical Practice*,15,385-90.
- Anderson, E. A. (1989). Implications for public policy: Towards a pro-family AIDS social policy. In Macklin, E. (ed). *AIDS and families*. Hayworth Press; Binghamton, NY. pp. 187–228

- Andrews, B., & Brewin, C.R. (1990). Attributions of blame for marital violence: A study of antecedents and consequences. *Journal of Marriage and the Family*, 52, 757-767.
- Anglewicza, P. Chintsanya, J. (2011). Disclosure of HIV status between spouses in rural Malawi. *AIDS Care* 11(8):998–1005
- Ann-Maree, N. (2004). "What is the difference between sex and gender?". Monash University. Retrieved May 10, 2012.
- Anyebe, E. E., Hellandendu, J. M., & Gyong, J. E. (2013). Socio demographic profile of people living with HIV/AIDS (PLWHA) in Idoma land, Benue state, North-central Nigeria: Implications for HIV/AIDS control. *International Journal of Sociology and Anthropology*, 5(5), 153.
- Babcock, J. H. (1998). Involving family and significant others in acute care. In: Aronstein, D. M. Thompson, B. J. (eds). *HIV and social work*. Harrington Binghamton, NY: pp. 101–108
- Baumgardner, A.H., Heppner, P.P., & Arkin, R.M. (1986). Role of causal attribution in personal problem-solving. *Journal of Personality and Social Psychology*. 50, 636-643.
- Bem, D.J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*. 74 1 R1-9nn
- Ben Natan, M. Zeltzer, I. Melnikov, K. (2011). Disclosure of HIV infection among Israeli men who have sex with men. *Journal of Transcultural Nursing*, 22(1),40-5
- Berger, B.E., Carol, E. Ferrans, F.R. & Lashley, D. (2001). Measuring stigma in people with HIV: psychometric assessment of the HIV stigma scale. *Research in Nursing and Health*, 24, 518 – 529.
- Bernstein, D. A. (2010). *Essentials of Psychology*. Cengage Learning. pp. 123 124. Retrieved from. www.douglasbernstein.com, 25 March 2011
- Bhattacharya, S(2015)HIV/AIDS:Prevalence and treatment in india and around the world, the *wallstreetjournal*.Retrievedfromwww.blogs.wsj.com/indiarealtime on 12/01/2017
- Black, B. Miles, M. S.(2002). Calculating the risks and benefits of disclosure in African American women who have HIV. *Journal of Obstetric, Gynecologic and Neonatal Nursing*,31(6),688–697.
- Blankson, J. N. (2010). Control of HIV-1 replication in elite suppressors. *Discovery medicine*, 9 (46), 261–6.
- Bolund, C. (1990). Crisis and coping: Learning to live with cancer. In: Holland J. C. Zittoun, R. (eds). Springer-Verlag; Berlin: pp 13–26

- Bond, V., Chase, E. & Aggleton, P. (2002). Stigma, HIV/AIDS and prevention of mother-to-child transmission in Zambia. *Evaluation and programme planning*, 25(4), 347-356.
- Bouillon, K; Lert, F; Schmaus, A; Spire, B; Dray-Spira, R. (2007) Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA study. *AIDS*. 21(suppl 1):S89-S94.
- Bradbury, T.N., & Fincham, F.D. (1990). Attributions in marriage: Review and critique. *Psychological Bulletin*. 107. 3-33
- Bulman, R.J., & Wortman, C.B. (1977). Attribution of blame and coping in the "real world": Severe accident victims react to their lot. *Journal of Personality and Social Psychology*. 35. 351-363
- Brou, H, Djohan, G, Becquet, R et al, When do HIV-infected women disclose their serostatus to their male partner and why? A study in a PMTCT programme, Abidjan. *PLoS Medicine*. 2007;4:e342
- .Brown, L. Macintyre, K. & Trujillo, L. (2003). Interventions to reduce HIV/AIDS stigma: What have we learned? *AIDS Education and Prevention*, 15(1), 49-69
- Cadwell, S. (1991). Twice removed: The stigma suffered by gay men with AIDS. *Smith College Studies in Social Work*. 61, 236-246.
- Caldwell, M.A. & Peplau, L.A. (1982). Sex Differences in Same-Sex Friendship. *Sex Roles*, 8(7), 721-732.
- Castro, A. & Farmer, P. (2005). Understanding and addressing AIDS-related stigma: From anthropological theory to clinical practice in Haiti. *American Journal of Public Health*, 95(1), 53-59
- Chandra, P.S. Deepthivarma, S. & Manjula, V. (2003). Disclosure of HIV infection in South India: patterns, reasons and reactions. *AIDS Care*, 15,207-215
- Chelune, G.J. (1979). Measuring openness in interpersonal communication. In G.J. Chelune (Ed.), *Self-Disclosure* (pp. 1-27). San Francisco: Jossey Bass
- Chin, D. & Kroesen, K. W. (1999) Disclosure of HIV infection among Asian/Pacific Islander American women: *Cultural stigma and support*, 5(3), 222-235
- Carpenter, Christopher J. (2010). "A meta-analysis of the effectiveness of health belief model variables in predicting behavior". *Health Communication*. 25 (8): 661-669.
- Clara, I. P. Cox, B. J. Enns, M. W. Murray, L.T. & Torgrude, L. J. (2003). Confirmatory factor analysis of the Multi-dimensional Scale of Perceived Social Support in

- clinically distressed and student samples. *Journal of Personality Assessment*, 81,265–270.
- Clarke, T.R., Gibson, R., Barrow, A., James, S., Abel, W.D. & Barton, E.N. (2010). Disclosure of HIV status among HIV clinic attendees in Jamaica. *West Indian Medical Journal* ,159(4).
- Cohen, S. & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Cohen, M. S. Hellmann, N. Levy, J. A. DeCock, K. & Lange, J. (2008). The spread, treatment, and prevention of HIV-1: evolution of a global pandemic. *The Journal of Clinical Investigation*, 118 (4): 1244–54.
- Corea, G. (1992). *The invisible epidemic: The story of women and AIDS*. New York:Harper Collins
- Counselling and HIV/AIDS. Geneva: UNAIDS; 1997. UNAIDS best practices collection.
- Dale, O. (2013). Gender theory. Retrieved from www.wordpress.com on 20th July 2016.
- Daluiso, V.E. (1972). Self-disclosure and perceptions of that self-disclosure between parents and their teenage children. Unpublished doctoral dissertation, American International University.
- Dankoli, R. S., Aliyu, A. A., Nsubuga, P., Nguku, P., Ossai, O. P. & Tukur, D. (2011). HIV disclosure status and factors among adult HIV positive patients in a secondary health facility in North-Eastern Nigeria, *Pan African Medical Journal*, 18(1), 4.
- Deribe, K., Kifle, W., Mekitie, W., Amaha, H. & Alemayehu, A. (2008) Disclosure experience and associated factors among HIV positive men and women clinic all service users in south west Ethiopia. *Biomedicalcentral public health*, 8, 81.
- Deribe, K., Woldemichael, K., Bernard, N. & Yakob, B. (2009). Gender difference in HIV status disclosure among HIV positive users. *East African Journal of Public Health* 6(3): 245-55.
- Derlega, V. J. Metts., S. Petronio, S. & Margulis, S.T. (1998) . *Self-disclosure. Social interaction*. Sage; Newbury Park, CA.
- De Rosa, C . J. & Marks, G. (1998). Preventive counseling of HIV-positive men and self-disclosure of serostatus to sex partners: New opportunities for prevention. *Health Psychology*, 17,224–231.
- Dewey, J. (1944). *Democracy and Education*. *The free press*. New York.

- Desgrees-du-Lou., A. Brou., H. Traore., A. Djohan., G. Becquet, R. & Leroy, V. (2009). From prenatal HIV testing of the mother to prevention of sexual HIV transmission within the couple. *Social Science and Medicine* 69(6):892–899.
- Diamond C, Buskin S. Continued risky behaviour in HIV-infected youth. *American Journal of Public Health*. 2000;90:115–118.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*. 112. 106-124.
- Dlamini, P.S, Kohi, T.W, Uys, L.R, Phetlhu, R.D, Chirwa, M.L., & Naidoo, J. R. (2007). Verbal and physical abuse and neglect as manifestations of HIV/AIDS stigma in five African countries *Public Health Nursing*, 24(5), 389-99.
- Doster, J. A., & Strickland, B.R. (1971). Disclosing of verbal material as a function of information requested, information about the interviewer, and interviewee differences. *Journal of Consulting and Clinical Psychology*. 37. 187-194.
- Ebuenyi, I. D, Ogoina, D. Ikuabe, P. O, Harry, T. C, Inatimi, O., & Chukwueke, O.U. (2011) Prevalence Pattern and Determinants of Disclosure of HIV Status in an Anti Retroviral Therapy Clinic in the Niger Delta Region of Nigeria. *African journal of infectious diseases*. 52(1) 55-59
- Elliott, T. (2012). *Lecture Notes: Medical Microbiology and Infection*. John Wiley & Sons.
- Emlet, C. A. (2006) comparison of HIV stigma and disclosure patterns between older and younger adults living with HIV/AIDS. *AIDS Patient Care STDS*, 20(5), 350–8.
- Erving, G. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall.
- Evian, C. (2006). *Primary HIV/AIDS care: a practical guide for primary health care personnel in a clinical and supportive setting* (Updated 4th ed.). Houghton [South Africa]: Jacana.
- Ezegwui, H. U, Nwogu-Ikojo, E.E, Enwereji, J., O & Dim, C. C (2009). Hiv Serostatus Disclosure Pattern Among Pregnant Women In Enugu, Nigeria. *Journal Of Biosocial Science*, 41, Pp 789-798.
- Farquhar, C., Mbori, Ngacha, D., Bosire, R., Nduati, R., Kreiss J., John, G. (2000). Prevalence and correlates of partner notification regarding HIV-1 in an antenatal setting in Nairobi, Kenya; Paper presented at the XIII International AIDS Conference; Durban, South Africa
- Fasoranti.T.O(2010)The Scourge of HIV/AIDS in Nigeria;Indigenous Solution, Intelligence community assessment(ICA)

- Folasire, O.F, Akinyemi, O., & Owoaje, E. (2014). Perceived Social Support among HIV Positive and HIV Negative People in Ibadan, Nigeria. *World Journal of AIDS*, 4, 15-26.
- Fredriksson, J., & Kanabus, A. (2004). HIV and AIDS stigma and discrimination. *Avert*.
- Frierson, R.L, Lippman, S. B., & Johnson, J. (1987). AIDS: Psychological stresses on the family. *Psychosomatics*. 28:65–68
- Galvan, K, Rimmer, B.K., & Lewis, F.M. (2002). *Health behavior and health education: Theory, research and practice*. Willey and Sons. San Francisco.
- Galletly, C.L., & Dickson-Gomez, J.(2009) *HIV sero-positive status disclosure to prospective sex partners and criminal laws that require it: perspectives of persons living with HIV*. *International Journal on STD/ AIDS* 20 (9): 613-618.
- Gard, L. (1990). Patient disclosure of human immunodeficiency virus (HIV) status to parents: Clinical considerations. *Professional Psychology: Research and Practice*. 21, 252-256.
- Goldstein, M.C. (2009). Gender. *Social Science Dictionary*. Retrieved from www.books.google.com.ng on May 10,2012
- Gomwalk, N.E, Nimzing, L., Mawak, J.D., Ladep, N.G., Dapep, S.B., Damshak, D.(2012) Seroepidmiology of human iminodeficiency virus (HIV) in Plateau State. *Journal of infection in developing countries*.6(12)860-869
- Gourides, D. (2014). *Sociology Mater Sociomed*, 26(3), 191-194
- Greene, K., & Serovich, J.M. (1994). Predictors of willingness to disclose HTV-positive status: The case of nuclear family members. Unpublished manuscript, Department of Communication, East Carolina University, Greenville, NC.
- Gregory, R. (1987). *Perception*.In Gregory, Zangwill(eds) pp. 598–601.
- Griffin, E. (2006). *A first look at communication theory*. (6th edition). New York: McGraw-Hill.
- Grigsby, J. P., & Weatherly, D. (1983). Gender and sex-role differences in intimacy and self-disclosure. *Psvchological Reports*. 53, 891 -897.
- Guinan, M.E., & Leviton, L. (1995). Prevention of HIV infection in women: overcoming barriers. *Journal of the American Medical Women's Associationn*, 50, 74-7.

- Gustav, T. F.(2010). *Elemente der Psychophysik*.In Helgeson, V. (2002). Social support and quality of life. 25-31.
- Hadeija, I.S. (2003). *Preventing the scourge of HIV/AIDS in Nigeria*.ABU Teaching Hospital, Zaria, Nigeria.Retrieved from www.gamji.com on 25th July 2016
- Haghighat, R. (2001). Towards a Unitary theory of stigmatization. *British Journal of Psychiatry* ,178, 207-215.
- Haig, D. (2004).The inexorable Rise of gender and the Decline of sex:Social change in academic Titles, 1945-2001. *Archives of Sexual Behavior*, 33, (2), 87–96
- Harden, V. A. (2012). *AIDS at 30: A History*. Potomac Books Inc. p. 324. ,Washington D.C
- Hays, R.B, McKusick, L., Pollack, L., Hilliard, R., Hoff, C., Coates, T.J. (1993). Disclosing HIV seropositivity to significant others. *AIDS*, 7,425–431
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons.
- Heider, F(1958)Attribution theory.Retrieved from www.12managed.com on 25-01-2017
- Helgeson, V. (2002). Social support and quality of life.*Quality of life research*, 12(1), 25-31
- Herek, G. M., & Glunt, E. K. (1988). An epidemic of stigma: Public reactions to AIDS.*American Psychologist*. 43, 886-891.
- "HIV and Its Transmission". Centers for Disease Control and Prevention . (2003). Archived from the original on February 4, 2005. Retrieved May 23, 2006.
- HIV/AIDS Concept.Retrieved from www.Wikipedia.com on 20th July, 2014 3:30pm.
- Holmes, C.B, Losina, E., Walensky, R.P, Yazdanpanah, Y., & Freedberg, K.A. (2003). "Review of human immunodeficiency virus type 1-related opportunistic infections in sub-Saharan Africa". *Clinically Infectious Disease*, 36 (5), 656–662
- Holt, R., Court, P., Vedhara ,K., Nott, K.H, Holmes J., & Snow, M.H. (1998).The role of disclosure in coping with HIV infection. *AIDS Care*, 10(1),49–60
- Holtzworth-Munroe, A., & Jacobson, N.S. (1985). Causal attributions of married couples: When do they search for causes? What do they conclude when they do? *Journal of Personality and Social Psychology*. 48. 1398-1412
- Homans, G. (1961). *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.

- Hosseinzadeh, H., Hossan, S.Z., & Bazargan, H. (2012). Perceived stigma and social risk of HIV testing and disclosure among Iranian-Australians living in Sydney metropolitan Area. *Sex Health*, 9(2):171-7.
- Idoko JA, Kanki P.Partner(2006) Disclosure of HIV status among HIV positive mothers in Northern Nigeria. *African Journal of Medical Science*:35:119-123.
- Ignatius, E., & Marja, K. (2007). "Factors contributing to verbal selfdisclosure". *Nordic Psychology*, 59, (4), 362–391.
- Igwegbe, A.O., & Ugboaja, J.O. (2014).Rate and correlates of HIV serostatus disclosure among HIV positive pregnant women in Nnewi southeastern Nigeria. *African journal of Infectious Diseases*, 8(2), 27–30
- Iliyasu, Z., Abubakar, I.S., Musa, B., & Aliyu, M.H. (2011). Post diagnosis reaction perceived stigma and sexual behavior of HIV/AIDS patients attending Aminu Kano Teaching hospital Northern Nigeria. *Nigeria Journal of medicine*, 20(1), 105-45.
- Intrahealth international(2 005)HIV/AIDS. Retrieved from www.intrahealth.org on 30th July 2016..
- Issiaka, S., Cartoux, M., Ky-Zerbo, O., Tiendrebeogo, S., Meda, N., & Dabis, F. (2001). Living with HIV: women's experience in Burkina Faso, West Africa. *AIDS Care*,3,123–8
- Janz, Nancy K.; Marshall H. Becker (1984). [*"The Health Belief Model: A Decade Later"*](#). *Health Education & Behavior*. 11 (1): 1–47.
- Janoff-Bulman, R. (1979). Characterological versus behavioral self- blame: Inquiries into depression and rape. *Journal of Personalitv and Social Psvchology*. 37, 1798-1809
- Jeff, A. (2012). Aids stigma and discrimination. *Daytona times*.East Central Florida
- Jeffe, D.B, Khan, S.R, Meredith, K. L, Schlesinger, M., Fraser, V.J., & Mundy, L. M. (2000). Disclosure of HIV status to medical providers: differences by gender, "race," and immune function. *Public Health Report*, 115(1),38-45.
- Jourard, S. M. (1961). Age and self-disclosure. *Merrill-Palmer Quarterly*, 7, 191-197
- Jourard, S. M., & Lasakow, P. (1958). Some factors in self-disclosure. *Journal of Abnormal P.sychology*. 56, 91-98.
- Jourard, S. M., & Richman, P. (1963). Disclosure output and input of college students. *Merrill-Palmer Quarterly*. 9, 141-148

- Kadowa, I., & Nuwaha, F. (2009). Factors influencing disclosure of HIV positive status in Mityana District of Uganda. *African Health Science*, 9(1), 26-33.
- Kalichman, S. C. (1995). *Understanding AIDS: A guide for mental health professionals*. American Psychological Association; Washington, DC
- Kallings, L.O. (2008). The first postmodern pandemic: 25 years of HIV/AIDS *Journal of Internal Medicine*, 263 (3) 218–43.
- Karen, S. Cook., & Erick, R. W. (2001). *Handbook of Sociological Theory* Department of Sociology, Stanford University, Stanford California 94305. In Jonathan, H. T.(ed) Academic/ Plenum Publishers, New York.
- Katz, D.A, Kiarie, J.N, John-Stewart, G.C, Richardson, B.A, John, F.N., & Farquhar, C. (2009). HIV testing men in the antenatal setting: understanding male non-disclosure. *International Journal of STD and AIDS*, 20(11),765–767.
- Kelley. H.H. (1967). Attribution theory in social psychology. In D. Levine (Ed.). Nebraska Symposium on Motivation. 1967 Lincoln, NE: University of Nebraska Press.
- Kelley, H.H. (1972). Causal schemata and the attribution process New York: General Learning Press.
- Kelley, H.H. (1973). The process of causal attribution. *American Psychologist* 107-127.
- Kelley, H.H., & Michela, J.L. (1980). Attribution theory and research. *Annual Reviews of Psychology*. 31, 457-501
- King, R., Katuntu, D., Lifshay, J., Packel, L., Batamwita, R., Nakayiwa, S., Abang, B., Bab Irye, F., Lindkwist, P., Johansson, E., Mermin, J., & Bunnell, R. (2008). Process and outcomes of HIV Serostatus disclosure to sexual partners among people living with HIV in Uganda. *Aids Behaviour*, 12 (2),232-43.
- Kim, B., France, L., Rémi, S., Annie, S., Brunopire., & Rosemary, D.(2007).Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA Study *AIDS. 1*: 89–94.
- Kimberly, J.A., Serovich, J.M., & Greene, K. (1995). Disclosure of HIV-positive status:Five women's stories. *Family Relations*. 44. 316-322.
- Komarovsky, M. (1974). Patterns of self-disclosure of male undergraduates. *Journal of Marriage and the Family*. 36, 677-686
- Kripke, C. (2007). "Antiretroviral prophylaxis for occupational exposure to HIV.". *American Family Physician*, 76 (3), 375–6

- Lacobucci, D., & McGill, A.L. (1990). Analysis of attribution data: Theory testing and effects of estimation. *Journal of Personality and Social Psychology*. 59, 426-441.
- Lakey, B., & Cohen, S. (2000). Social support theory and measurement. In: Cohen S Underwood LG, Gootlieb BH, (eds). *Social Support Measurement and Intervention*.: Oxford University Press;Oxford.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company;New York.
- Lichtenstein, B., Laska, M.K., & Clair, J.M. (2002). Chronic sorrow in the HIV-positive patient: Issues of race, gender, and social support. *AIDS Patient Care STDs*,16,27-38
- Lie, G., & Biswalo, P. (1994). Perceptions of the appropriate HIV/AIDS counselor in Arusha and Kilimanjaro regions of Tanzania: Implications for hospital counseling. *AIDS Care*,6,139–151.
- Link, B.G., & Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review Sociological*,27,363
- Littlejohn, S.W. (1983). *Theories of human communication* (2nd ed.). Belmont, C A: Wadsworth
- Lovejoy, N.C. (2001). AIDS: Impact on the gay man's homosexual and heterosexual families. *Marriage and Family Review*,14,285–316.
- Lyimo RA, Stutterheim SE, Hospers HJ, de Glee T, van der Ven A, de Bruin M: Stigma, disclosure, coping, and medication adherence among people living with HIV/AIDS in Northern Tanzania. *AIDS Patient Care STDs*. 2014, 28: 98-105.
- Macklin, E.D.(1988). AIDS: Implications for families. *Family Relations*, 37,141– 149.
- Maiman, Lois A.; Marshall H. Becker; John P. Kirscht; Don P. Haefner; Robert H. Drachman (1977). "Scales for Measuring Health Belief Model Dimensions: A Test of Predictive Value, Internal Consistency, and Relationships Among Beliefs" . *Health Education & Behavior*. 5: 215–230
- Makin, J.D., Forsyth, B.W.C., Maretha, J.V., Sikkema, K.J., Neufeld, S. & Jeffrey, B. (2008). Factors affecting disclosure in South African HIV positive women.*AID Patient Care STDs*, 22(11), 907-916.
- Maman, S., Mbwambo, J., Hogan, N.M., Kilonzo, G.P., & Sweat, M. (2001). Women's barriers to HIV-1 testing and disclosure: Challenges for HIV-1 voluntary counselling and testing. *AIDS Care*, 13,595–603

- Mandell, Bennett, and Dolan (2010). HIV/AIDS. Retrieved from [www.wikipedia](http://www.wikipedia.com) com on 16th July 2016
- Manhart, L.E., Dialmy, A., Ryan, C.A., Mahjour, J.(2000). Sexually Transmitted Diseases in Morocco: gender influences on prevention and health care seeking behaviour. *Social science and medicine* ,50, 1369-83.
- Mansergh, G., Marks, G., & Simoni, J.M. (1995). Self-disclosure of HIV infection among men who vary in time since seropositive diagnosis and symptomatic status. *AIDS*, 9,639–644
- Markowitz, S.(2007). *Environmental and occupational medicine*. In William, N. Rom., & Steven, B. (eds). Wolters Kluwer/Lippincott Williams & Wilkins. Philadelphia p. 745
- Marks, G., Richardson, J.L., & Maldonado, N. (1991). Self-disclosure of HIV infection to sexual partners. *American Journal of Public Health*, 81,1321–1322
- Mason, H.R.C., Marks, G., Simoni, J.M., Ruiz, M.S., & Richardson, J.L. (1995). Culturally sanctioned secrets? Latino men's nondisclosure of HIV infection to family, friends, and lovers. *Health Psychology*,14,6–12.
- Mathews, C., Kuhn, L., Fransman, D., Hussey, G., & Dikweni, L.(1999) Disclosure of HIV status and its consequences. *South African Medical Journal* , 89,1238.
- Medley, A., Garcia-Moreno, C., McGill, S. & Maman, s. (2004). Rates, Barriers and outcomes of HIV Serostatus disclosure among women in developing countries: implications for prevention of mother-to-child transmission programmes. *Bull World Health Organ*, 82(4), 299-307.
- Miller, L.C., Berg J.H, & Archer, R.L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*. 44, 1234-1244.
- Monjok, E., Mesy, A., & Essien, E.J. (2009). HIV/AIDS-related stigma and discrimination in Nigeria: Review of Research studies and future directions for prtoevention of strategies, *African Journal of Reproductive Health*, 13 (3): 21-35.
- Moshe, Z., & Norman, S. E.(1996).Handbook of Coping: Theory, Research, Applications. New York: John Wiley & Sons, Inc;
- Murray, E.D., Buttner, N., & Price, B.H. (2012). "Depression and Psychosis in Neurological Practice". In Bradley, W.G., Daroff, R.B., Fenichel, G.M., & Jankovic, J. *Bradley's Neurology in Clinical Practice: Expert Consult Online and Print, 6e (Bradley, Neurology in Clinical Practice e-dition 2v Set)* (6th ed.). Philadelphia, PA: Elsevier/Saunders. p. 101
- Mwanga, J.A. (2012). HIV serostatus disclosure and associated factors among people living with HIV/AIDS attending a care and treatment centre in Kisarawe District

Hospital, Tanzania. . *MPH Thesis submitted to the Muhimbili University of Health and Allied Science, Tanzania.*

- Nasidi, A., Harry, T.O., Ajose-Coker, O.O., Ademiluyi, S.A., & Akinyanju O.O.(1986) Evidence of LAV/HTLV III infection and AIDS-Related Complex in Lagos, Nigeria. *International Conferene on AIDS, Paris* (Poster no. 273), 129
- NASCP (2005)National HIV Seroprevalence Sentinel Survey. Process and Findings. Federal Ministry of Health, Abuja, Nigeria
- Ndayala, P., Ondigi, A. N., & Ngige, L. (2015). Nature and Extent of HIV Self Disclosure by Seropositive Adults in HIV Support Groups in Nairobi County, Kenya. *Research on Humanities and Social Sciences. Vol.5, No.16, 87.*
- Obermeyer, C., Baijal, P., & Pegurri, E. (2011). Facilitating HIV disclosure across diverse settings: a review. *American Journal of Public Health, 101(6),1011–1023*
- O'Brien, M. E., Richardson-Alston, G., Ayoub, M., Magnus, M., Peterman, T. A., & Kissinger, P.(2003).Prevalence and correlates of HIV serostatus disclosure. *Sexually Transmitted Disorders, 30(9),731–735*
- Ogoina, D., Ikuabe, P., Ebuenyi, I., Harry, T., Inatimi, O., & Chukwueke, O.(2015). Types and predictors of partner reactions to HIV status disclosure among HIV-infected adult Nigerians in a tertiary hospital in the Niger Delta. *African Health Science, 15(1), 10–18.*
- Olagbuji, B.N, Ezeanochie, M.C, Agholor, K.N, Olagbuji, Y.W, Ande,A.B.,& Okonofua, F.E.(2011).Spousal disclosure of HIV serostatus among women attending antenatal care in urban Nigeria. *Journal of Obstetric and Gynaecology, 31(6), 486-8.*
- Olalekan AW, Akintunde AR, Olatunji MV (2014) Perception of Societal Stigma and Discrimination Towards People Living with HIV/AIDS in Lagos, Nigeria: a Qualitative Study. *Mater Sociomed* 26: 191–194
- Olugbemi F(2013), National mirror, .Retrieved from www.nationalmirror.gov on 04-07-2016
- Olley, B.O., Seedat, S., & Stein, D.J.(2004). Self-disclosure of HIV serostatus in recently diagnosed patients with HIV in South Africa. *African Journal of Reproductive Health, 8(2):71–76.*
- Ortese, P. T., & Tor-Anyiin, S. A. (2008). Effects of emotional intelligence on marital adjustment of couples in Nigeria.*IFE Psychologia, 16 (2), 101-112.*
- Osinde, M.O., Kakaire, O. & Kaye, D.K. (2012). Factors associated with disclosure of HIV serostatus to sexual partners of patient receiving HIV care in Kabale, Uganda. *International Journal of Gynaecological Obstetrics, 118(1), 61-64.*

- Onyebuchi, C. (2014). Anambra State top other states with 8.7% Mother to Child HIV Prevalence. ThisDay Newspaper P.1 of 6th August, 2014.
- Olagbuji, B.N., Ezeanochie, M.C., Agholor, K.N., Olagbuji, Y.W., Ande, A.B., & Okonofua, F. E. (2011) Spousal disclosure of HIV serostatus among women attending antenatal care in urban Nigeria. *Journal of Obstetrics and Gynaecology*. 31(6):486-8.
- Pederson, D.M., & Higbee, K.L. (1969). Self-disclosure and relationship to the target person. *Merrill-Palmer Quarterly*. 15, 213-220.
- Pennebaker, J.W., Keicolt-Glaser, J.K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*. 56, 239-245.
- Petrak, J. A., Doyle, A.M., Smith A., Skinner, C., & Hedge B. (2001). Factors associated with self-disclosure of HIV serostatus to significant others. *British Journal of Health Psychology*, 6, (1),69-79
- Petronio, S., Martin, J., & Littlefield,R. (1984). Prerequisite conditions for self-disclosing: A gender issue.*Communication Monographs*, 51, 268-273.
- Pierce, G. R., Sarason, I. G., & Sarason, B. R. (1996). *Coping and social support*. In Zeidner, M., & Endler, N. S. (Eds.), *Handbook of coping* (pp. 434-451) New York
- Pranav, S., Anju.,Ammu, J., Aswathy, S., Prabha, M. & Nishanth. S. (2002).Perceived stigma and discrimination among people living with Pulerwitz, J., Michaelis, A., Weiss, E., Brown, L., & Mahendra, V.(2010). Reducing HIV-related stigma: lessons learned from Horizons research and programs. *Public Health Rep.*;125(2):272-81.
- Pulerwitz J, Oanh KT, Akinwolemiwa D, Ashburn K, Nyblade L. (2014) Improving hospital-based quality of care by reducing HIV-related stigma: evaluation results from vietnam. *AIDS Behaviour*
- Revised guidelines for HIV counselling, testing and referral (2009). *Morbidity and Mortality Weekly Report* , 50, RR19:
- Rist, R. (1970). Student Social Class and Teacher Expectations: The Self-fulfilling Prophecy in Ghetto Education.*Harvard Educational Review*, Vol 70, No 3, 257-301.
- Rosenfeld, L.B. (1979). Self disclosure avoidance: Why I am afraid to tell you who I am. *Communication Monographs*, 46, 63-74
- Rosenstock, Irwin (1974). ["Historical Origins of the Health Belief Model"](#). *Health Education & Behavior*. 2 (4): 328–335.

- Rosenstock, Irwin M.; Strecher, Victor J.; Becker, Marshall H. (1988). ["Social learning theory and the health belief model"](#). *Health Education & Behavior*. **15** (2): 175–183.
- Rosenthal, R, Jacobson, L (1968) *Pygmalion in the classroom:Teacher expectation and student intellectual development*.New York.Holt, Rinehart & Winston.
- Sagay AS, Musa JEkwempu CC, Imade GE, Babalola A Daniyan G, Malu N
- Salami, A.K., Fadey, A., Ogunmode, J.A. & Desaluoo (2011). Status disclosure among people living with HIV/AIDS in Illorin, Nigeria. *West African Journal of Medicine* ,30(5), 359-63.
- Schacter, D. (2011). *Psychology*. Worth Publishers.Newyork
- Schachter, S. (1959). *The psychology of affiliation*. Stanford, C A. Stanford University Press.
- Seeman, T.E, Lusignolo, T.M, Albert, M., & Berkman, L.(2001). Social relationships, social support, and patterns of cognitive aging in healthy, high functioning older adults: MacArthur studies of successful aging. *Health Psychology*. **20**:243–255.
- Sepkowitz, KA. (June 2001). "AIDS—the first 20 years". *New English Journal of Medicine*, **344** (23), 1764–72.
- Serovich, J.M., Lim, JY., Mason, T.L.(2008) A retest of two HIV disclosure theories. *Health social work*, **33** (1),23-31
- Serovich, J.M. (2005) A test of two HIV disclosure theories. *Aids Education Preview*, **13** (4), 355-364.
- Serovich, J. M., & Greene, K. (1993). Perceptions of family boundaries: The case of disclosure of HIV testing information. *Family Relations*. **42**. 193-197.
- Serovich, J. M., Greene, K., & Parrott, R. (1992). Boundaries and AIDS testing: Privacy and the family system. *Family Relations*. **41**, 104-109.
- Serovich, J. M., Humphries, S., & Kimberly, J.A. (1993, November). Pathways to disclosure of HIV-positive status. Paper presented at the annual conference of the National Council on Family Relations, Baltimore, MD.
- Serovich, J.M., & Kimberly, J.A. (in progress). Disclosure of men's HIV-positive status to family members. Unpublished manuscript. Department of Human Development & Family Relations, The Ohio State University, Columbus, OH.
- Sethosa E, Peltzer K. Evaluation of HIV counselling and testing, self-disclosure, social support and sexual behaviour change among a rural sample of HIV reactive patients in South Africa. *Curationis*. 2005;28(1):29–41

- Simbayi, L.C., Kalichman, S.C., Strebel, A., Cloete, A., Henda, N., & Mqeketo, A.(2007). Disclosure of HIV status to sex partners and sexual risk behaviours among HIV-positive men and women, Cape Town, South Africa. *Sexually Transmitted Infections*11,29–34.
- Smith, R., Rossetto, K., & Peterson, B.L.(2008). A meta-analysis of disclosure of one's HIV-positive status, stigma and social support. *AIDS Care*, 20(10):1266–75.
- Songwathana, P., & Manderson, L.(2001). Stigma and rejection: Living with AIDS in villages in southern Thailand. *Medical Anthropology*, 20:1–23.
- Ssali, S.N., Atuyambe, L., Tumwine, C., Segujja, E., Nekesa, N., & Nannungi A. (2010). Reasons for disclosure of HIV status by people living with HIV/AIDS and in HIV care in Uganda: an exploratory study. *AIDS Patient Care STDS*, 24(10),675–81.
- Stanley, M.A., Beck, J.G., & Zebb, B.J. (2013). Psychometric properties of the MSPSS in older adults. Aging and Mental scale of social support.*Journal of personality assessment*, Vol 52(1), 186-193
- Stice E, Rohde P, Gau J, et al.(2011) Relation of depression to perceived social support: Results from a randomized adolescent depression prevention trial. *Behavioural Research on Therapy*. 49,361–366
- Stokes, J., Fuehrer, A., & Childs, L. (1980). Gender differences in selfdisclosure to various target persons. *Journal of Counseling Psychology*. 27. 192-198.
- Stretcher, Victor J.; Irwin M. Rosenstock (1997). "The health belief model". In Andrew Baum. Cambridge handbook of psychology, health and medicine. Cambridge, UK: Cambridge University Press. pp. 113–117.
- Stulberg, I., & Buckingham, S.L.(1988). Parallel issues for AIDS patients, families, and others. Social Casework: *The Journal of Contemporary Social Work*, 69:355–359.
- Stutterheim, S.E., Shiripinda, I., Bos, A.E., Pryor, J.B., De Bruin, M., Nellen, J.F., Kok, G., Prins, J.M., Schaalma, H.P. (2011). HIV status disclosure among HIV-positive African and Afro Caribbean people in the Netherlands. *AIDS Care*, 23 (2), 195-205
- Sullivan, K. (2009). Male self-disclosure of HIV infection to sex partners: A Hawaii Based sample *Journal of the Association of Nurses in AIDS care* 20 (2), 442-457
- Tardy, C.H., Hosman, L.A., & Bradac, J. J. (1981). Disclosing self to friends and family: A re-examination of initial questions. *Communication quarterly*. 29, 263-268.

- Taylor, S. E., Lichtman, R. R., & Wood, J.V. (1984). Attributions, beliefs about control, and adjustment to breast cancer. *Journal of Personality and Social Psychology*. 46, 489-502.
- Teklemariam, G., Minichil, G., & Girum, S.(2015) Disclosure of HIV-positive status to sexual partner and associated factors among ART users in Mekelle Hospital. *HIV/AIDS (Auckland)*. 7: 209–214.
- Theories of education (2004)cliffsnotes.Houghton, Mifflin, Harcourt, Newyork
- Thibaut , J.W., & Kelly, H.H., (1952) *Social Psychology of groups*. New York, John Wiley and Sons.
- Tim, B. (1999). Self-Disclosure.*Allyn and Bacon.Boston, U.S.A*
- Tolstedt, B. E., Stokes, J. P.(1984). Self-disclosure, intimacy, and the depenetration process. *Journal of Personality and Social Psychology, Vol 46(1)*, 84-90
- Turan, J.M., Miller, S., Bukusi, E.A., Sande, J., & Cohen, C.R. (2008). HIV/AIDS and maternity care in Kenya: how fears of stigma and discrimination affect uptake and provision of labor and delivery services. *AIDS Care*. 20(8):938–945.
- Ucho,A., & Anhange,S.T.(2013).Age,income, education and uptake of HIV/AIDS counselling and testing among people of Achusa in Benue State Nigeria.*ContemporaryJournal of AppliedPsychology*, vol 1(1),16-28.
- Udry, J. R. (1994). "The Nature of Gender". *Demography*, 31 (4), 561–573.
- UNAIDS, WHO (2007). “2007 AIDS Epidemic updates”. Retrieved from www.oalib.com 2015-03-12.
- UNAIDS(2014) The Gap Report.Retrieved from www.unaids.org on 16th June 2016
- Uti,O. G., & Sofola, O. O. (2007). Gender Differences related to HIV/AIDS in South West Nigeria.*Nigerian Journal of Health and Biomedical Sciences*. Vol 6, No 1
- Van der Kuyl, A.C., & Cornelissen, M. (2007). "Identifying HIV-1 dual infections. *Retrovirology* 4: 67
- Vogel, M; Schwarze-Zander, C; Wasmuth, JC; Spengler, U; Sauerbruch, T; Rockstroh, JK (July 2010). The treatment of patients with HIV. *Deutsches Ärzteblatt international* 107 (28–29): 507–15;
- Vondracek, F.W., & Marshall, M.J. (1971). Self-disclosure and interpersonal trust: An exploratory study. *Psychological Reports*. 28, 235-240.
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of educational research*, 42(2), 203-215.

- Walker, B.D. (Aug–Sep 2007). Elite control of HIV Infection: implications for vaccines and treatment. *Topics in HIV medicine: a publication of the International AIDS Society, USA* 15 (4): 134–6.
- WHO (2012)"What do we mean by "sex" and "gender"?". Retrieved from www.apps.who.int 2009-09-29
- WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children.* Geneva: World Health Organization. 2007. pp. 6–16
- Wolitski, R.J., Pals, S.L., Kidder, D.P., Courtenay, Q.C. & Holtgrave (2009).The effects of HIV stigma on health disclosure of HIV status and risk behaviour of homeless and unstably housed persons living with HIV.*AIDS Behaviour.* 13(6): 1222-32.
- Worth, H., P. & Goldstein, D. (2008).The infecting order in AIDS Law.*HIV Australia*, 6 (4),
- Yang H, Li X, Stanton B, Fang X, Lin D, Naar-King S (2006). HIV-related knowledge, stigma, and willingness to disclose: A mediation analysis. *AIDS Care.* 18:717–724.
- Yashioka MR, Schustaek A. Disclosure of HIV status: cultural issues of Asian patients. *AIDS Care STDs* 2001; 15:77-82
- Yaya I, Saka B, Landoh DE, Patchali PM, Patassi AA, Aboubakari A (2015) HIV Status Disclosure to Sexual Partners, among People Living with HIV and AIDS on Antiretroviral Therapy at Sokodé Regional Hospital, Togo. *Mater Sociomed* 26(3): 191–194
- Yudkin, M. (1978). Transsexualism and women: A critical perspective. *Feminist Studies* 4 (3): 97–106.
- Zelen, S. L. (1991). Attribution theory: New models and applications, an ongoing scientific phenomenon. In S.L. Zelen (Ed.), *New models, new extensions of attribution theory* (pp. 1-3). New York, NY: Springer Verlag. 184
- Zimet, G. D. Darlem, N.W, Zimet, S.G &Farley, G.K (2010) The multidimensional scale of social support. *Journal of personality assessment*, Vol 52(1)
- Zuckerman GL, Gordon C (1988). Meeting the psychosocial and legal needs of women with AIDS and their families. *New York State Journal of Medicine.* 88:619–620

APPENDICES