EFFECTS OF COGNITIVE RESTRUCTURING AND SOCIAL SUPPORT TECHNIQUES IN MANAGING DEPRESSION AMONG HIV/AIDS INFECTED WOMEN IN KADUNA STATE, NIGERIA

BY

Hadiza Mohammed BELLO
B.Ed, Home Economics, (ABU, ZARIA; 1998)
M.ED PSYCHOLOGY (ABU, ZARIA; 2008)
Ph.D/EDU/6646/2010-2011
P16EDPC9381

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, NIGEIRA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DOCTOR OF PHILOSOPHY DEGREE IN EDUCATIONAL PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY,
ZARIA

MAY, 2018

DECLARATION

I hereby declare that the work in this Thesis entitled: Effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna State, Nigeria was carried out by me under the supervision of Prof. E.F. Adeniyi, Dr. Aisha I. Mohammed and Prof. Khadija Mahmoud in Department of Educational Psychology and counselling. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma in this or any institution.

_____ _____

Hadiza Mohammed BELLO Date

CERTIFICATION

This thesis entitled: Effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna State, Nigeria: by Hadiza Mohammed BELLO has been submitted for the award of Ph.D. in Educational Psychology.

Prof. E. F. Adeniyi
Chairperson, supervisor committee _____
Date & Signature

Dr. Aisha I. Mohammed
Member, Supervisor Committee _____
Date & Signature

Prof. Khadija Mahmoud
Member, Supervisor Committee _____
Date & Signature

Dr. Aisha I. Mohammed
Head of Dept. Educational Psychology & Counselling. _____
Date & Signature

Prof. S.Z. Abubakar
Dean School of Post Graduate Studies _____
Date & Signature

DEDICATION

With heavy heart I wish to dedicate this thesis to my late husband Dr. Muhammad Bello for his love and unflinching support, may the Almighty Allah grant him the highest rank of Jannah, aljannatulFirdaus.

ACKNOWLEDGEMENTS

All praises is to Allah, the Lord of the universe, for giving me life, good health and the will and making it possible for bringing me to this level of academic achievement.

The researcher is sincerely grateful for the love, understanding and for the kind assistance of my valuable supervisor, Prof. E.F. Adeniyi. The researcher thank you especially for your kindness, advice and contributions that make this work a reality, may the Almighty reward you abundantly and may your household be blessed, the researcher sincerely appreciate the time you gave for your guidance, phone calls and for your useful suggestions and ideas towards this academic pursuit.

The researcher appreciates the support, encouragement, and contributions of my second supervisor, Dr. Aisha I. Mohammed towards the success of this work, may the Almighty reward you abundantly. The researcher is sincerely grateful and appreciative to my third supervisor Prof. Khadijah Mahmoud, for the advice, inspiration, close supervision, and the time you gave for meetings, phone calls, useful criticisms and suggestions, may the Almighty Allah bless you abundantly, the researcher sincerely appreciate the internal supervisors, Prof. (Mrs) Raliya Mohammed Bello, Prof. M. A. Suleiman and Prof. Mustapha Abdullahi for their encouragement, assistance and contributions, the researcher sincerely thank you all. The researcher sincerely appreciates. Dr.TukurHadiza for your love, support and contribution, may the Almighty bless your household. The researcher appreciatesDr.UmaruYunusa words cannot express my deepest appreciation for your critical assessment of this work. Other lecturers in the department, Prof. Musa Balarabe, prof. Dominic Oliagba, Late Dr. J. O Bawa, Prof. SaniSambo, Ass. Lecturer Mr. L. K Maude and all the academic staff and non-academic staff of the department for their

contributions at various phases of the researchers study in the department. Special thanks to Dr.UmmaAbdulwahab for her initial assistance and contributions.

The researcher appreciates the contribution of Mrs. Mariam Mohammed for her kind assistance during the pilot study at Yusuf Dantsoho memorial hospital at Tudun-wada Kaduna. Chairman Ethical Committee on Research Kaduna State Ministry of Health Dr.Jatau, the secretary Ethical Committee Barr Tuma for her assistance, Mrs. Linda personal assistance to the Honourable Commissioner Kaduna State Ministry of Health and her colleagues, The researcher really appreciate your assistance. To all the subjects who participated in the treatment group of this research, very big thank you and The researcher pray the Almighty bless you and give you the will power to manage your condition.

To my employer The researcher wish to say many thanks. The researcher sincerely appreciate Dr Dantani my former Dean and Head of department, my provost Dr.AngoLadan, and colleagues, Theophilos, Mohammed, Zarah and every one in my department, for their encouragement and support.

To my priceless, jewel of immeasurable value, my children, Hasiya, Abdulmajeed, Nana Yusra, and Ahmad thanks for your love and prayers. To my beloved husband, Late Dr Muhammad Bello, the researcher appreciate your love, support ,and contributions to this work, may Allah in his infinite mercies have mercy on your soul and grant you rest and may AljannahFirddaus be your abode. The researcher also appreciates my sisters, brothers, nieces, nephews, in-laws and friends for their prayer and kindness.

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LIST OF ABBREVIATIONS

AIDS-	Acquired immune deficiency syndrome
CES-D-	Chronic depression symptoms.
DSM-IV-TR-	Diagnostic and statistical manual of mental disorders-IV
HIV-	Human immune deficiency virus
M.T.C.T-	Mother to child Transmission
MOS-SSS-	Medical outcomes survey social support survey
PSOM-	Positive state of mind

OPERATIONAL DEFINITION OF TERMS

The following are operational definition of terms of the variables under study**:**

Cognitive Restructuring Technique: This is a treatment technique that exposes participants to the root causes of their psychological problems and how to deal effectively with them.

Depression : This refers to feeling of sadness, hopelessness and worthlessness which can reach painful and overwhelming proportions. If the feeling becomes more intense and prolonged, they can become ruinous to HIV/AIDS infected women and make them unable to live a normal life.

Social Support Technique: Is a psychological treatment intervention that provides training and skills for positive interactions in order to gain encouragement, guidance, and financial or physical aid from family, friends, health personnel.

Managing Depression: This refers to reducing depression after treatment have been given.

Abstract

The study examined effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna state, Nigeria. Nine objectives, nine research questions were raised and nine corresponding research hypotheses were formulated. Quasi-experimental research design was employed using pre-test and post-test design. The Sample size comprised of forty (40) women with HIV/AIDS, who are registered and assessing care in government health centre in Kaduna state, Nigeria. The Beck depression inventory was the research instrument adopted for identifying subjects with moderate level of depression selected for the study. The study had two experimental groups that were exposed to cognitive restructuring and social support techniques. Hypotheses formulated for the study were statistically analysed using paired-sample t-test for hypotheses 1, 2, 4 and 7: independent sample t-test for hypothesis 3, and analysis of variance (ANOVA) for hypotheses 5, 6, 8 and 9. Results showed that four (4) of the hypotheses were rejected, while five (5) of them were retained, Result shows that,there is significant difference between pre-test and post-test in managing depression among HIV/AIDS infected women based on cognitive restructuring technique with (t=13.679, p=.000), there is significant difference between pre-test and post-test in managing depression among HIV/AIDS infected women based on social support technique with (t=16.123, p=.000), there is no significant differential effects of cognitive restructuring and social support techniques in managing depression of HIV/AIDS infected women with (t=-1.608, p=0,074). Income level and marital status did not influence the effectiveness of cognitive restructuring technique in the management of depression among HIV/AIDS infected women (t=.707,p=0.062, f=1.190,p=.003 respectively).but in the case of educational levels there is significant difference which has influence in the effectiveness of cognitive restructuring technique in the management of depression among HIV/AIDS infected women (f=6.501, p=.004). Also, income level and marital status did not influence the effectiveness of social support technique in the management of depression among HIV/AIDS infected women (t=.371, p=0.072, f=.143, p=.192 respectively). For educational levels, there is significant difference as such it influenced the effectiveness of social support technique in the management of depression among HIV/AIDS infected women (f=5.02, p=.013). The result of the study indicated that both cognitive restructuring and social support techniques had effect in managing depression of infected women irrespective of their income and marital status, but on the aspect of the educational levels of the infected women, the treatment was more effective for those with secondary education. The researcher made recommendations on the basis of results of the study with respect to using cognitive restructuring and social support techniques by counselling psychologists in schools and hospitals in order to help HIV/AIDS infected women cope with the disease, and both treatments can also be used in schools to manage students and staff with depression problem.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

With the evolution of HIV, researchers have been increasingly interested and concerned with how people living with HIV/AIDS have psychologically adjusted to this chronic health condition and what the rates of depression are in this population. Depression is quite common in the medically ill and may exceed that of the general population in those with active medical problems (Baba&Omotara, 2001) Estimates of the prevalence of major depressive disorders in people living with HIV/AIDS vary widely in the literature. Reported prevalence rates have ranged from 1.9% to 35% in clinical samples and from 30% to 60% in community samples. The lifetime prevalence of depression in people living with HIV/AIDS has been estimated at 20 to 45%. (Benedict, 2004)It is estimated that60% of people living with HIV in Ontario, Canada, may suffer from depression. US studies have reported gender differences in prevalence with approximately 30 to 40% of HIV-positive men and 40 to 60% of HIV-positive women experiencing significant depression. Most people infected with HIV are not depressed most of the time and their resilience is as noteworthy as their psychopathology. The signs and symptoms of depression are similar in HIV-positive and HIV-negative individuals, but HIV-positive individuals may more frequently have sleep and appetite disturbances. Depression may also contribute to non-adherence of anti-retroviral therapy although there is not yet prospective evidence that treatment of depression improves medication adherence among people with self-reported or documented medication non- adherence.

There are possible confounding factors that complicate measuring depression in HIV-positive people. Many symptoms of HIV are similar to somatic symptoms of

depression, for example, fatigue, diminished appetite and sleep, physical complaints and weight loss, which could inflate depression rates in symptomatic HIV-positive individuals and increase the vulnerability of many depression rating scales.

Depression can contribute to poor physical health andthis creates the need to put in place psychological and counselling interventions to help women withproblem cope with depression symptoms. This assertion is in line with the observation made by Nienwenhuis, Odukogbe, Theobald, and Liu (2009:7) who studied the impact of HIV/AIDS on infected men and women in Kwara State of Nigeria and found that HIV/AIDS had more psychological effects on women with HIV/AIDS than their male counterparts.Consequently, "psychological support services should be made availableto women with HIV/AIDS and that the available resources should not be used tosubsidize HIV/AIDS treatment but should focus on the prevention of HIV/AIDS and psychological support." Thus, there is an urgent need for psychological intervention using psychological treatment/counselling services to help women with HIV/AIDS problem deal with the distress relating to HIV/AIDS.

The effect of Cognitive Restructuring and Social Support Techniques on Depressionmay be related to the personal characteristics of women with HIV/AIDS and this therefore, requires investigation. Psychological intervention and counselling may be described as an interpersonal process based on theoretical framework and techniques in order to bring aboutchange in participants in a skilful and systematic way. Psychological and counselling interventions in the context of HIV/AIDS involves educating participants about effective ways of reducingdepression of HIV/AIDS women as well as information given.People wanted information for various reasons. Theseincluded wanting to

understand more about their condition and treatment options, where to go for treatment, what they were putting their bodies through and what their chances of success were. People gathered information from a variety of sources clinics, support groups, books, leaflets, television and radio. Their information needs often changed as treatment progressed for example weighing up options when deciding whether to continue or stop treatment.

Psychological and counselling interventions are a potent approach for managing depression. In this study cognitive restructuring and social supportpsychological and counselling techniques are the twotreatment interventions that wereused to investigate into effectiveness ofpsychological and counselling services to assist women with HIV/AIDS problem in managingdepression. Cognitive restructuring wasoriginally developed by Ellis (1991). It is a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts. There are many methods used in cognitive restructuring, which usually involve identifying and labelling distorted thoughts, Socratic questioning, thought recording, identifying cognitive errors, examining the evidence(pro-con analysis or cost-benefit analysis), understanding idiosyncratic meaning/semantic techniques, reattribution, guided imagery and listing rational alternatives (Huppert, 2009).

Social support is a psychological and counselling technique that helps individuals to generatesolution(s) to a problem or problems. It is particularly useful when a participants/individual wants to break out of an established pattern of thinking and decision making, so that suchparticipants/individual can develop new ways of looking at things, foster and enhance communicationskill. Social support psychological and counselling technique helps participants to overcome issues that can make groupproblem

solving a sterile and unsatisfactory process. Social support is often used in a genericsense to describe groups who generate ideas. For example, Moran, Talbot and Benson (2001)defined social support as “a group process in which group members collectively contribute their ‘ideas in a creative atmosphere” Although the term has come into popular use, facilitators shouldknow its precise meaning and history. Social support combines a relaxed, informal approach toproblem-solving with lateral thinking. It asks that people come up with ideas and thoughts thatcan at first seem to be a bit crazy. The main concept in social support is that some of the ideasgenerated can be crafted into original, creative solutions to the problem that an individual tryingto solve, while others can spark still more ideas.The treatment strategy (cognitive restructuring and social support techniques) will be adopted to be effective in assisting HIV/AIDs persons to acquire desirable skills in restructuring their negative thinking and also acquire social skills and experience reduction in depression. The treatment conditions intend to be effective and superior conditions in assisting HIV/AIDs infected persons that will participate in the study. Different psychological treatments such as skills training, role play, and problem solving etc. combine with the treatment techniques will be used to successfully reduce depression in HIV/AIDs infected persons by improving their cognitive thinking and social skills to be more positive in their thinking, interact more, better accepted, adjust to their situations and be happier and live a better life.

1.2 Statement of the Problem

Depression is a problem for HIV/AIDS Infected Women in Kaduna State of Nigeria. Women infected with HIV/AIDs suffer emotional problems which include depression, rejection, loneliness, fear to mention a few when diagnosed with the disease. Depression may increase when social support is lacking by family members, friends and

health workers, consequently, some of the women may discontinue accessing care and even interact less, not because of diminished interest in a bit to cope with the disease, but because they feel psychologically unable to continue. In Nigeria, psychological treatment interventions is not a regular feature of medical practice. Medical doctors/personnel only offer bio-medical treatment to HIV/AIDs women, but their psychological/emotional needs are not addressed. This form of health care is not consistent with the World Health Organisation's (2002) definition of health which states that health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Therefore, the mental (psychological) and social needs of infected women should be addressed in the health care system in the country. Moreover, there is lack of psychological treatment interventions for women experiencing depression due to HIV/AIDs in Kaduna State. Depression can affect the physical health and social relationships of infected women and this can put another burden on family members and even the health care system.

Social support system in this study suggests that some spouses of infected women, their children and relatives treat them with love, respect and utmost care, unlike what some infected women have come up to state in the news media that they were rejected and sent packing from their homes because of their HIV status. Experience from the print media also indicate that most health workers treat them with disdain, which is one of the reasons why they hardly visit the hospitals. Unfortunately, infected women risk dying early as a result of ignorance and are not likely to observe that the disease is progressing. The situation is even worse when such women become pregnant. Therefore, social support system for the infected women involves evaluating certain indices for

maintaining good health and coping with the disease. These include care giver support, health promotion/prevention of illness (nutritional care, hygiene and sanitation, prevention of opportunistic infections) and early diagnosis/treatment.

From preliminary investigation in some Health Care Centres offering treatment and care for HIV/AIDs infected women, through personal observation and interview, most women were seen wearing glooming faces and looking sad and restless because of their negative thoughts and feelings towards their situation and most women usually come to the hospital alone without their spouses or children accompanying them which shows the lack of social support to the victims and this may be as a result of the fact that they want to avoid the stigma associated with the HIV/AIDs pandemic inthe society. Another problem of the respondents is the attitudes of the medical personnel to the health condition of women living with HIV/AIDS. In view of the foregoing, this study examined the effects of cognitive restructuring and social support technique inmanaging depression among HIV/AIDS infected women in Kaduna State.

1.3 Objectives of Study

The objectives of the study are as follows:

i. To examine the differences between pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique.

ii. To examine the differences between pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to social support technique.

iii. To find out the differential effects of cognitive restructuring and Social Support in managing depression among HIV infected women.

iv. To examine the differences in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on levels ofIncome.

v. To examine the differences in mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on their levels of marital status.

vi. To examine the differences in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on their educational levels.

vii. To examine the differences in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on levels of Income.

viii. To examine the differences in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their ievels of marital status.

ix. To examine the differences in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their educational level.

1.4 Research Questions

This study answered to the following research questions

i. What is the difference in the pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique?

ii. What is the difference in the pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to social support technique?

iii. What is the differential effects of cognitive restructuring and social support techniques in managingdepression among HIV infected women?

iv. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring based on theirlevels of income?

v. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on their levels ofmarital status?

vi. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring based on educational Level of HIV infected women?

vii. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique among HIV/AIDs infected women based on theirlevels of Income?

viii. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their levels ofmarital status?

ix. What is the difference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their educational level?

1.5 Research Hypotheses

The following null hypotheses were statistically tested in relation to the research topic.

i. There is no significant difference in the pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique.

ii. There is no significant difference in the pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to social support technique.

iii. There is no significant differential effects of cognitive restructuring and social support techniques in managing depression among HIV infected women.

iv. There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on levels of income.

v. There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on their levels of marital status.

vi. There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique based on their educational levels.

vii. There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on levels of Income.

viii. There is no significantdifference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their levels of marital status.

ix. There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to social support technique based on their educational levels.

1.6 Basic Assumptions

The basic assumptions underlying the study were:

(i) That cognitive restructuring technique may have effect in managing depression among women with HIV/AIDS.

(ii) That social support technique may be effective in managing depression among women with HIV/AIDS.

(iii) That cognitive restructuring may be more effective than social support technique in managing depression among women with HIV/AIDS

(iv) That cognitive restructuring technique may have effect in managing depression based on level of income of HIV/AIDS infected women.

(v) That cognitive restructuring technique may have effect in managing depression based on level marital status of HIV/AIDS infected women.

(vi) That cognitive restructuring technique may have effect in managing depression based on educational level of HIV/AIDS infected women.

(vii) That social support technique may have effect in managing depression based on level of income of HIV/AIDS infected women.

(viii) That social support technique may have effect in managing depression based on marital status of HIV/AIDS infected women.

(ix) That social support technique may have effect in managing depression based on educational level of HIV/AIDS infected women.

1.7 Significance of the Study

It is expected that the results and recommendations of the research would be useful to caregivers, counselling psychologists, teachers, health personnel, HIV/AIDs Infected Women, families affected by HIV/AIDs, members of the community, educators curriculum planners and researchers.

Significant of this study is that women infected with HIV/AIDs are not aware that counselling psychologists can help them manage their emotional behaviour by the use of behaviour/psychological interventions like behaviour therapies. Therefore, it is hoped that the findings of this study would help HIV infected women seek and access psychological interventions and would also learn skills from the study after reading the research work, this may assist them to manage depression.

This study will help teachers and lecturers of primary, secondary and tertiary levels of education in schools employ the techniques to help students battling with depression which could be as a result of HIV/AIDS infection or otherwise manage problems associated with depression.

This study will assist the health personnel learn skills in helping to manage the depression among infected women and to be aware that psychologists has a role to play in the affair of HIV/AIDs infected women. The result of this research will serve as an additional basis to look into the possibility of introducing psychological treatment and

counselling interventions into medical practice in the area of depression for HIV/AIDs infected women. Also, treatment plans that will be provided in this research may assist health personnel to provide psychological and counselling interventions to women to enable them manage depression associated with HIV/AIDs. The findings could enable curriculum planners see the need to include psychological and counselling interventions in the medical curricular in Nigeria when they get access to the result of the study.

It is hoped that the study would be of great importance to counselling psychologists in utilizing cognitive restructuring and social support techniques in reducing depression and also extending their expertise and services to health care facilities in intervening in areas of managing behaviours of HIV/AIDs Infected Women. For instance, the treatment packages could be a great resource when providing psychological and counselling interventions whether on individuals or group basis. Psychological interventions goes beyond the purview of education, it encompasses all aspects of human life.

This study would be useful to families affected by HIV/AIDs learn skills that would bring about positive behaviour change which would encourage them to render social support to their families infected with HIV/AIDs. It is expected that the outcome of this study would also benefit the community at large in awakening them in their responsibilities of providing support to infected women in their communities by learning skills from this study that will enable them provide love and support to the infected women in the community, Kaduna state and Nigeria at large.

The result of this study would bring to the limelight the treatment strategies for depression even among students and staff in Educational Institutions. It is expected that

,the outcome of this study would also provide useful data for researchers, students, health workers and caregivers and also enrich the literature of counselling psychologists in terms of behaviour modification strategies and to generate for further research.

1.8 Scope and Delimitations

The scope of this study was Effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDs infected women in Kaduna State. Two (2) selected Government Health Centres were used forthe study are: - DrGwamnaAwanGeneral Hospital in Makera in Kaduna South and BarauDikkoTeachingHospital in Kaduna Central. The variables under study are effectiveness in the use of cognitive restructuring and social support techniques in managing depression among HIV/AIDs infected women. This is because it has been consistently observed that this is the major emotional problem experienced by most women with HIV/AIDs problem.

This study was delimited to only women infected with HIV/AIDs that are registered in the two (2) selected health centres in Kaduna State. Hence, women with HIV/AIDs problem who are receiving HIV/AIDs treatment in private and federal health institutions were excluded from this study. Other HIV/AIDS patients such as HIV/AIDS infected men and children were also excluded in the study. Data of the study was generated through the administration of self-reporting inventories.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter deals with the conceptual, theoretical and empirical literature concerning the study, under listed topics are reviewed.

Conceptual Framework

Concept of HIV/AIDS

Concept of Depression

Depression and HIV/AIDS

Psychological Treatment Procedure for Depression

Concept of Cognitive Restructuring Technique

Concept of Social Support Technique

Social Support and HIV/AIDS

Social Support and Depression

Theoretical Framework

Beck and Ellis's Cognitive Restructuring Theory

Carl Roger's Humanistic Theory

Ottmanns & Emery Biological Theory of Depression

Davis and Moore's Social Stratification Theory

Cohen's Social Support Theory

Empirical Review

Summary

2.2 Concept, Meaning and Nature of HIV/AIDS.

HIV/AIDs are two different acronyms describing two relatedconcepts. There are different illnesses caused by viruses which may not be HIV. These include, among others, cold (catarrh), measles,hepatitis A, B, and C, Chicken pox, polio and so on. Thehuman immunodeficiency virus that causes AIDS is a type of virus calledretrourus. It is very tiny to see with the naked eyes except with thehelp of an instrument called microscope. Garland (2003) posits that HIV is so small that it could be 230,000 viruses at the point of a pen or on a full stop at the end of a sentence.

Origin of HIV/AIDS

The origin of HIV/AIDS is not known, but scientists have proposed theories about the origin of HIV/AIDS but none has yet been proven. Haan (2004) states that the earliest known case of HIV was from a blood sample collected in 1959 from a man in Kinshasa, Democratic Republic of Congo. Genetic analysis of this blood sample suggested that HIV-1 may have stemmed from a single virus in the late 1940s or early 1950s. Haan (2004) went on to state that the virus existed in the United States by the mid-to late 1970. Doctors in Los Angeles and New York reported illnesses of Pneumonia, Cancer and others among people with healthy immune system. In 1982, AIDS was used by health officials to describe the occurrence of such opportunistic infections as Kaposis sarcoma and pneumocysticcarnnii (pneumonia) in previously healthy people. That was the year the formal tracking (surveillance) of AIDS cases began in the United States of America.

However, scholars claimed that the ultimate source of HIV/AIDS was the Sub-Saharan African continent. It is said that this region continues to be deeply ravaged by the

disease. Bankole and Singh(2004) confirmed the above statement and added that the SubSaharan African has been more devastated by the HIV/AIDS epidemic than any world region. Garland (2003) presented explanation of the HIV/AIDS acronym thus:

H - **Stands for Human:-**the Virus is only found in humans, it is not found in animals or insects.

I - **Stands for Immunodeficiency:-** this means, the virus reduces the immune system. White blood cells in the blood are part of the immune system. They are the soldiers that attack germs that enter the body.

V - **Stands for Virus:** means they are the smallest of all micro-organisms and hundreds of times smaller than a bacterium or malaria parasite.

The Acquired Immune Deficiency Syndrome (AIDS is the final stage of the disease. It continues in the human body till death. It can be explained thus:

A - **Stands for Acquired:** this indicates that its victims did notinherit it.

I&D- **Stand for Immune Deficiency respectively;** this shows that its victims have a common characteristic of a breakdown in theirbody immunity.

S - **Stands for syndrome-**covers the case of rare but ravaging diseases that take defences.

Raen (2004) on the other hand states that the disease is a syndrome because it consists of several signs and symptoms. Both mean the same as the signs and symptoms are as a result of the different kinds of diseases that attacks the body.

HIV is said to attack the body defences (white blood cells) especially the type called CD4 cells, they are like the coordinators of the immune system where they serve as eyes and ears or rather telephone of the body's army. Garland (2003) states that the HIV virus attaches itself to the cell and later penetrates into it. Having entered the CD4 cell, it

quickly multiplies by using the cells' own production "factories" to make copies of itself, and eventually kills the CD4ce11s. The CD4 working in the body of a healthy person is supposed to be between 650 and 1250. When a person's count dropsbelow 200, the person is said to have AIDS, but when the count drops to about 35O, doctors usually prescribe some anti-retroviral drug therapy. When the CD4 cells are destroyed, the whole immune system does not work in harmony, this allows many different infections to enter the body and destroy it.

Ahmadu (2007) states that there are two genetically and immunologically distinct human deficiency viruses, which have been discovered as causing HIV/AIDS disease. These are HIV - 1 and HIV - 2 which remains the dominant virus associated with AIDS in West Africa. An increasing number of different strains of both HIV - 1 and HIV - 2 are identified by molecular virology and by phenotype in cells culture. This increase is due to minor differences in the molecular structure of the virus.

Ahmadu (2007) adds that HIV is capable of altering its antigens composition or its structure to avoid immune destruction and so continues to weaken the infected person's immunity. Therefore, HIV virus is cunning, crafty and deceiving, even to the body's immune system.

Raen(2004) described the HIV/AIDS virus as a gang of robbers which attack the human system. The virus has so many strategies that it adopts, that makes it widespread when it enters the body, it starts fighting the white blood cells (lymphocytes: CI)4 or T4) which normally protects the body against diseases or germs. The infected person can look and feel very well for many years. It can take 5 to 10 years or even longer and during that period of silence, the infected person can easily infect other people without knowing.

Ahmadu (2007), HIV is a virus that attacks the body's Immune system and leaves the body unprotected from other infections. We all have a defensive mechanism in our body, which fights off infections and diseases. It is called the Immune System. The virus HIV slowly damages this vitals defensive mechanism against diseases and eventually destroys it. By killing or damaging cells of the body's Immune System HIV progressively destroys the body's ability to fights infections and certain cancers. HIV acts by gradually destroying the Immune System of the infected person. It may take several years for HIV to damage the immune system so much so that a person becomes ill. After about 5 to 10 years (although much earlier in a minority of cases) the immune system becomes so weak or deficient - that it cannot fight off infections as it used to. During these years a person with HIV may look and feel well, and may not even know that they are infected with the virus.

Ahmadu (2007) further explained that, AIDS applies to the most advanced stages of HIV infection. It is a collection of the most common illness which characteristically affects people with HIV: most of these conditions are opportunistic infections, which rarely cause harm in healthy people. In people with AIDS, these infections are often severe and sometimes fatal because the immune system is so ravaged by HIV that the body cannot fight off certain bacteria and viruses.

2.2.1 Causes of HIV/AIDS

AIDS is a deadly disease caused by a virus. The virus infects the human body and causes serious damage to the body's immune system by destroying the defensive mechanism of the body (cells), which can fight against other diseases. Once it has destroyed most of the defence cells of the body, the body no longer fights other infections

like tuberculosis, hepatitis, diarrhoea, and other cancer. The victim is vulnerable .to any form of minor disease and therefore the person develops full blown AIDS or successive illness and dies.

The spread of HIV/AIDS in Nigeria has been attributed to a number of social economic and cultural factors, often acting together in a mutually reinforcing manner across many communities. The main factors include the social-cultural norms and values around sex, sexuality and gender relations, poverty and economic need. Inadequate knowledge and awareness about the infection in early years and a focus on individual risk rather than response have all contributed to continuing spread of the epidemic (Action AIDS Nigeria: 2005

Awake (2004), poverty is one of the driving factors of causes of HIV/AIDS. The extreme high level of poverty in Nigeria coupled with the lack of education and skills for livelihood have forced many girls and women to use sex as coping strategy. This he said, was worsened by the socialization and gender dimension that reduce the self-worth of a lot of these women involved. Poverty on the other hand also forces families to give their underage daughters in marriage for the same reasons. Many women and girls in Nigeria are forced into transactional sexual relations in exchange for money and other favours, such as employment, job retention, promotion at work, social and academic support at school, etc. This puts the poor at risk in as much as it exposes those with access to disposable income or favours to offer.

Ahmadu (2007), reported, the causes of HIV/AIDS as a crises of gender inequality, with women less able than men to exercise control over their bodies and lives.

Nearly universal, cultural expectations have encouraged men to have multiple partners, while women are expected to abstain or be faithful to one partner.

2.2.2 Spread of HIV/AIDS

The HIV/AIDS virus can be transmitted or spread from oneperson to the other through the following ways: First having sex,(i.e. penetrative sexual contact through vaginal, oral or nasal) with an infected person: In Nigeria, about 85% of AIDS infection is through sexual intercourse with infected person (NERDC, 1995).

Momoh (2004) added that sexual intercourse is the primary way of contracting HIV/AIDS because it involves the exchange of bodily fluid. Odey (2004) supports the above assertion emphasizing that sex is the major mode of transmission of HIV/AIDS. This is therefore, a signal indicating to people that they should learn to keep only one sex partner. But if they must have sex with an irregular partner, condom should be used though the church, especially Catholic Church highly forbids the use of condom.

The next mode of spread of HIV/AIDS is through getting in contact with HIV infected blood and blood product as semen, vaginal secretion, etc, through blood transfusion, the use of unsterilized needle, knives, blades, syringe etc. This is another major way of spreading HIV/AIDS. Daudu (2005) and Raen (2004) assert that direct contact with blood infected by the virus through blood transfusion or through infected needles, razors, and instruments used for ear piercing, circumcision, barbing, traditional birth attendants,blood covenants and scarification (tribal marks) and careless handling of patients by health workers. All are contributing factors of HIV/AIDS transmission.

Mother to child is another major way by which HIV is transmitted. Raen (2004) and the Aba (2003) stated that Women with HIV/AIDS can transmit it to their babies

while in the womb or during birth, though there is limited risk of infection through breast feeding. For these reason, breast feeding is recommended because the risk of death through diarrhoea from bottle feeding is still greater. On the issue of mother to child infection, Garland and Haan (2003) added that it accounts for about 10% of total HIV infections which is approximately 3 out of every 10 children born to an infected mother.

Okpe (2005) stated that the risk of mother to child transmission (M.T.C.T) of HIV varied from one country to another. But it is generally, thought to be between 15 and 45%. An HIV infected mother in a developing country faces a higher (25-45%) risk of giving birth to a child who is infected. The author also added that prolonged breast feeding adds a risk of 15% or more depending on duration and other factors that scientist are still trying to find out. However, the danger of mother to child transmission is less when HIV positive womenexclusively breast feed for the first six months, But the risk is higher with mixed feeding and complications developing from poor breast feeding techniques, example, mastitis, cracked and blood nipples. The risk also increases the more when the mother becomes infected with HIV while breast feeding as the viral load in the initial stage of infection is very high. Based on current available figures, Okpe (2005) concludes that without treatment, HIV positive women have an estimated 70% chances of giving birth to a healthy child. This means that up to 1/3 of children born to HIV positive women may be infected with HIV by implication. It means that infected breast feeding mothers should be encouraged to exclusively breast feed their babies for the first 6 months after whichthey can stop.

2.2.3 Symptoms of HIV/AIDS

Usually, early infection of HIV/AIDS is not, noticeable immediately.. In most cases, a few months or years(6 months to 12 years) is the incubation period. The period of AIDS in an individual depends on condition of the defence mechanism (body cell) of theperson. There are two categories of AIDS symptoms, minor and major.

Minor signs - these include:

1. Cough for more than one month.
2. Shortness of breadth
3. Itching rash
4. Swollen glands at two or more sites, e.g. in the area under the arm- groin.
5. Thrush in the mouth andthroat.
6. Thick white coating on the tongue or throat.
7. Tiredness even when the person has done no work
8. Consistent headache.

Major Signs

1. Weight loss - there will be a progressive weight loss for more than10% of body weight.
2. Fever unexp1ained or recurrent fever or night sweats for more than one month.
3. Diarrhoea - on a continuous or intermittent form for more than one month.

However, a person is diagnosed as having AIDS if he or she has one major signs plus two minor signs.

2.2.4 Prevention of HIV/AIDS

According to Awake (2004), there is no confirmed medical cure for HIV/AIDS. At the moment, thedrug called ANTIRETROVIRAL are on production to fight this deadly disease (AIDS). But these drugs (ANTI-RETROVIRAL) only stops the virus from multiplying but no drug, to date is able to permanently destroy the virus inside the human body. The effective preventive measures against HIV/AIDS are as follows:

1. Total abstinence from sexual intercourse with casual partners.
2. Being faithful to one's sex partner by maintaining single partner.
3. Avoid pre-marital sex.
4. Insist on using a new sterilized sharp object as needle and syringe during injection, immunization and circumcision as well as blades and clippers with anyone to avoid blood contact.
5. Avoid contact with infected blood and blood products and receive only screened blood for HIV/AIDS before transfusion if you are sick and where necessary.
6. Use condom of approved quality. This becomes a necessity if one cannot avoid sex (intercourse) especially with strangers or if one has more than one sex partner.
7. By avoiding behaviours that are likely to put one at risk of infection e.g. drug taking, being drunk and cult membership.

2.2.5 Predisposing Factors of HIV/AIDS

The key drivers of the HIV epidemic in Nigeria includes: low personal risk, perception, multiple sexual partnerships, transactional sex, inefficient services for sexually transmitted infection (STIs), and inadequate access to an poor quality of health care services, entrenched gender inequalities, chronic poverty, and stubborn persistence

of HIV/AIDS related stigma and discrimination also significantly contribute to the continuing spread of the infection. (NACA; 2001 – 2010).

Furthermore, NACA (2008) in contributing to literature, explains that, the most at risk populations for HIV/Infection include female sex workers, intravenous drug users, men who have sex with men, long distance drivers, and members of uniformed services. That the result of the mode of HIV-transmission analysis in Nigeria showed that about 62% of new infections occur among persons perceived as practicing "low risk sex" in the general population. Including married sexual partners, while the rest 38% are attributable to female sex workers, intravenous drug users, men having sex with men who constitute about 3.5 percent of the adult population.

i. **Sexual Contact**

In Nigeria, according to Onah (2013); Federal Republic of Nigeria (2012), over 80 percent of HIV infect is as a result of heterosexual sex. Linda (2014) asserted that sexual transmission is by far the most common mode of transmission globally. Heterosexual transmission is the primary mode of acquiring HIV in Nigeria as in other developing countries (Walker et al., 2004). In most of Africans and Caribbeans, a large percentage of HIV infection occurs through sexual transmission (UNAIDS, 2010). The probability of a person being infected via sexual intercourse depends on likelihood of unprotected sex with an infected partner. This corroborates the assertion of Federal Ministry of Health (2006) that unprotected sexual intercourse with a partner who is HIV positive (through anal, vaginal and direct contact with HIV-infected body fluids such as semen and vaginal secretion) is a potential source of HIV/AIDS transmission.

The risk of HIV/AIDS transmission from anal intercourse is especially high in both heterosexual and homosexual individuals (Boil, Baggaley, Wang, Masse, White, Hayes & Alary, 2009; Beyrer, BAral, van Griensven, Goodreau, Chariyalertsak, Wirtz&Brookmeyer, 2012). It has been documented that the risk of HIV transmission from oral sex is relatively low, however a few cases have been reported (kiragu,J.W, 2000). In addition, risks of transmission increases in the presence of many sexually transmitted diseases and genital ulcers, but genital ulcers appear to increase the risk approximately five folds (Kehinde&Lawoyin, 2005; Baron,R.A. 2009). The result of the study of Armorlu, Imosemu and Odunukwe (2004) in the gynaecological clinic of Lagos State University Teaching Hospital shows HIV prevalence of 12.9 percent among women with vaginal discharge. Also, out of 700 clients examined in one sexually transmitted clinic in Lagos, 21.5 percent were confirmed to be suffering from sexually transmitted infections; and among them, 15.8 percent were HIV positive (Otuonye, 2002).

Women especially young girls are more likely than men to become infected following heterosexual intercourse (Federal Ministry of Health, 2006; UNAIDS, 2012). In 2011, an estimated 1.7 million women were living with HIV and the prevalence rate was 3.0 percent among young women aged 15-24 years. Factors accounting for this include lack of information about sexual health and HIV; biological, socio-economic and cultural reasons; low level of condom use; high level of sexually transmitted diseases and gender inequality among women (Federal Republic of Nigeria, 2012).

ii. **Blood-to-Blood Transmission**

HIV transmission through unsafe blood accounts for the second largest source of HIV infection in Nigeria (Egesie&Egesie, 2011; Federal Republic of Nigeria, 2012). Blood-to-blood transmission of HIV/AIDs can occur through the following means; transfusion with HIV-infected blood, direct contact with HIV-infected blood, re-use and sharing of unsterilized skin piercing objects and sharps (for example, needles, razor blades, surgical blades and lancets) and needle-stick injury (Federal Ministry of Health, 2005). Shehu & Kinta (2011) affirmed that equipment used for tattooing, facial marking or circumcision can transmit HIV if not properly sterilized. In a bid to help the situation in Nigeria, Federal Ministry of Health has responded by enacting the law that requires hospitals to use only blood from the National Blood Transfusion Service (NBTS) which has far more advanced blood screening technology (Federal Republic of Nigeria, 2012).

The findings of the Durosimi, Mabayoje and Akinola (2003) in Ile Ife between 1993 and 200o show that 6.7 percent of the blood units donated to the blood banks by 16,080 individuals were positive for HIV. Similarly, in Plateau State, out of 2,067 and 3,016 blood units donated by individuals, 29.9 percent and 23.2 percent respectively were HIV positive (Durosimi et al., 2003). Recently, WHO/UNAIDS/UNICEF (2013) claimed that the number of people developing AIDS as a result of receiving infected blood has declined dramatically.

iii. **Vertical Transmission**

HIV can be transmitted from mother-to-child (vertical transmission) during pregnancy, delivery, across the placenta and after birth through

breastfeeding (Coutsoudis, Kwaan& Thomson, 2010; Shehu& Kinta, 2011). According to Oyo State Ministry of Health (2003), vertical transmission is an overwhelming source of HIV infection among young children contributing about ninety percent of the total disease burden. This is corroborated by Owoaje, Omidokun and Ige (2012); Abajobir and Zeleke (2013) that over 90 percent of the paediatric HIV/AIDS occurred through mother-to-child transmission. As revealed by Coutsoudis et al. (2010), in the absence of treatment, the risk of HIV transmission before or during birth is around 20 to 30 percent among those who are breastfeeding.

World Health Organisation (2004) established that Mother-To-Child-Transmission (MTCT) accounts for the majority of HIV infections among children in developing countries. O'Donovan, Ariyoshi, Milligan, Ota, Yamuah, Sarge-Njie and Whittle (2002) were of the opinion that all women should be screened for HIV before delivery and during an initial prenatal care visit so that potent combination antiretroviral treatment can be given to women who are HIV infected. However, approximately 40 percent of the mothers of the estimated HIV infected infants born in the year 2000 were not screened for HIV infection before delivery (Oyo State Ministry of Health, 2003). In Nigeria, a small proportion of about 18 percent of pregnant women with HIV/AIDS access antiretroviral therapy to protect their children (UNAIDS, 2012).

However, the following ways cannot lead to HIV transmission. These include, shaking hands, hugging, touching an infected person, or casual kissing, sleeping on the same bed or eating together cannot transmit HIV/AIDS. In

addition, working in the same office, attending the same school and class, sharing cutleries (knives, forks, spoons), cloths and sharing the same toilet as well as swimming together in the same swimming pool do not spread H1V.

2.3 Depression

Depression is a major public health issue worldwide (Fristad, 2006).

Projections of the Global Burden of Disease (GBD) suggest that depression will account for 10% of the total disease burden in high-income countries by 2030. The psychosocial vulnerability model of hostility posits that hostile individuals, given their oppositional attitudes and behaviours, are more likely to have increased interpersonal conflicts, lower social support, more stressful life events and higher likelihood of depression (Hardeep, Rohtash, and Bindu, 2009). Research suggests that stressful life-events (SL-E)may be independent risk factors (Kendler, 1999) for depression with several studies showing SL-E to be associated with an increased risk of both the onset (Hermberg, & Stanley, 2000)and recurrence of depression. Another well-established factor in the aetiology of depression is social support. According to the "stress-buffering" hypothesis (Decker, 2006), social support may protect from the negative effects of stressors such as SL-E, hence protecting against depression. Indeed, a large body of evidence has shown that a low level of social support predicts future depression and recovery from depressive episodes (Brown, Nesse, Vinokur, & Smith, 2003). argued that cynical hostility, a personality trait characterized by general cynicism and interpersonal mistrust, may increase the risk of depressive disorders because hostility is related to both SL-E and social support (Hankin, & Abramson, 2001). However, there is little research on the predictive value of hostility for depressive disorders using large scale prospective

samples. A small scale cross-sectional study (Hammen.2009) conducted among undergraduate students found cynical hostility to be strongly associated with depressive mood. Another study (Hendricks, & Hendricks,2000) examining the longitudinal effects of hostility on depressive tendencies among 1413 men and women found cynical hostility to be related to an increase in depressive tendencies after 5 years. Depressive moodmay reinforce hostile feelings and behaviours toward others (Hammen, 2009), or influence the assessment of cynical hostility (Kendler, 2006); a longer time lag between assessment of hostility and the measurement of depression would allow the examination of whether the influence of cynical hostility on depressive mood persists over time.

2.3.1 Symptoms of Depression

Most people know what it is like to experience a wave of sadness, in time,perhaps just in matter of hours or days, the feeling subsides. Clinical depression ishowever far more serious as the depressed individual experiences the ups anddowns, twists and turns of his feelings as if on a runaway train without a clear sense of how or when, or even if life can ever get off. In analysing different case studies of episodes of depression, Oltmanns&. Emery, (2007) explain that many of the most important Symptoms and signs of depression can be divided into four general areas namely; emotional symptoms, cognitive symptoms, somatic symptoms, and behavioural symptoms. Episodes of major depression and mania typically involve all four kinds of symptoms.

Emotional symptoms of depression according to Oltmanns and Emery, (op.cit.) include such negative emotions as sadness, anxiety, fear and anger. These reactions may last only a few moments at a time. Emotional symptoms also calleddysphoric (unpleasant) mood is the most common and obvious symptom ofdepression. Most people

who are depressed described themselves as feeling utterlygloomy, dejected or despondent. The severity of such a depressed mood can reachpainful and overwhelming proportions. As these feelings become more intenseand prolonged, they can become ruinous. Oltmanns and Emery, (op. cit.) mentionhowever, that it may not be clear when the person's experience crosses theunmarked boundary between being productive and energetic to being out of control self-destructive. In bipolar mood disorders for example, periods of elated mood tend to alternate with phases of depression. In any case, emotional symptomsof depression, as noted by Oltmanns and Emery, (op. cit.), could serve a useful purpose in our lives, particularly in our relationships with other people. Emotional reactions serve as signals to other people about our current feelings and needs. They also coordinate our responses to changes in the immediate environment.

Hockenbury and Hockenbury (2002) equally agree that emotionally, the depressed individual feels an overwhelming sadness. Even if surrounded by close friends and loving family members, the depressed person feels alone and disconnected from others. The authors list the emotional symptoms of depression to include feelings of sadness, hopelessness, helplessness, guilt, emptiness or worthlessness; feeling emotionally disconnected from others and turning away from other people.

Cognitive symptoms which are the central concern of this study involve changes in the thinking pattern of the depressed. Such cognitive symptoms, according to psychologists (e.g. Piaget, 1990; Oltmanns& Emery, 2007; DSMIVTR, 2000; Owojaiye, 2000) include inability to concentrate, pay sustainedattention, difficulty in making simple decisions, easy distraction, feelings ofhopelessness, worthlessness and guilt (self-blame), feelings of low self-esteem, delusions and hal1ucinations, suicidal thoughts, inability to

think and rememberconstructively (memory impairment) or cognitive slowness. Depressed peoplethink about the negative side of themselves, their immediate environment and what lies ahead and not the positive.

In cognitive terms, depressed people experience self-destructive thoughts and impulses. They see themselves as failures, unworthy creatures, unlucky and less important in society. They tend to find no meaning in life and feel convincing that it is better not being alive. These negative thoughts may lead to suicide attempts (Beck, 1985). Similarly, Hockenbury and Hockenbury, (2002) give a list of cognitive symptoms of depression to include difficulty thinking, concentrating and remembering; global negativity and pessimism; suicidal thoughts or preoccupation with death.

Somatic Symptoms or physicalSymptoms of depression are related to basic physiological or bodily functions. They include fatigue, aches and pains, and serious changes in appetite and sleep patterns. Some people who are clinically depressed often report feeling tired all the time. The simplest tasks which they had previously taken for granted seem to require an overwhelming effort. For instance, such routines such as taking a shower, brushing the teeth, getting dressed in the morning etc. become heavy tasks (Beck, 1976).

Sleeping problem is also a common somatic Symptom of depression, particularly trouble getting to sleep. Beck (1976) mentions that this disturbance frequently goes hand in glove with cognitive difficulties. Worried about their problems and challenges and unable to relax, depressed people will toss and turn for hours in bed before falling asleep. Some depressed people report having difficulty staying asleep throughout the night, and they awaketwo or more hoursbefore the usual time. Beck notes that early morning

waking is often associatedwith particularly severe depression. A less common somatic symptom is for a depressed person to spend more time sleeping than usual.

In the midst of a manic episode, a person is likely to experience a drastic reduction in the need for sleep. According to Beck (1976), some depressed peoplereport that reduced sleep is one of the earliest signs of the onset of manic episode. Although depressed people typically feel exhausted when they cannot sleep, a person in a manic episode will probably be bursting with energy in spite of the lack of rest. Furthermore, depressed people frequently experience a change in appetite. Although some people may eat more than usual, other reduce the amount they eat, while some may eat next to nothing. Food just does not taste good any more. Depressed people can also lose a lot of weight even when they are not dieting.

In discussing somatic symptoms of depression, Oltmanns and Emery (2007) point out that people who are severely depressed commonly lose their interest invarious types of activities that are otherwise sources of pleasure and fulfilment.One common example is a loss of sexual desire. Depressed people are less likely to initiate sexual activity, and they are less likely to enjoy sex if their partners can persuade them to participate. Various ill-defined somatic complaints can alsoaccompany mood disorders. Some depressed people complain of frequent headaches and muscular aches and pains. These concerns, Oltmanns and Emery note, may develop into a preoccupation with bodily Emotionsand fear of disease.

In a similar vein, Hockenbury and Hockenbury (2002) list the somatic (physical) symptoms of depression to include changes in appetite resulting in significant weight loss or gain; insomnia (early morning awakening or oversleeping); vague but chronic aches

and pains; diminished sexual interest; loss of physical and mental energy; global feelings of anxiety; restlessness and fidgety activity.

Behavioural symptoms pertain to the changes in the things that depressed people do and the rate at which they do them. The depressed individualsexperience psychomotor retardation which refers to several features of behaviourthat may accompany the onset of serious depression. Oltmanns and Emery (2007) note that the most obvious behavioural Symptoms of depression is slowedmovement. Depressed people may talk and walk as if they are in slow motion. Others become completely immobile and may stop speaking altogether. Some depressed people pause for very extended periods, perhaps several minutes, before answering a question.

Behaviourally, Hockenbury and Hockenbury (2002) explain that the depressed person's feelings are reflected in dejected and spiritless facial expressions. Crying spells may occur for no apparent reason. Speech, movementsand gestures seem awkward and slower than usual.The authors list the behavioural symptoms of depression to include dejected facial expression; makes less eyecontact, eyes downcast; smiles less often; slowed movement, speech and gestures; tearfulness or spontaneous episodes of crying; loss of interest or pleasure in usual activities including sex; withdrawal from social activities.

In order not to confuse depression with sadness, important considerations were given by Oltmanns and Emery (2007) to distinguish clinical depression from normal sadness as follows:

i) The mood change is pervasive across situations and persistent overtime. The person's mood does not improve, even temporarily, when he or she engages in activities that are usually experienced as pleasant.

ii) The mood change may occur in the absence of any precipitating events, or it may be completely out of proportion to the person'scircumstances.

iii) The depressed mood is accompanied by impaired ability to function unusual social and occupational roles. Even simple activities become overwhelmingly difficult.

iv) The change in mood is accompanied by a cluster of additional signs and symptoms including cognitive, somatic, and behavioural features.

v) The nature or quality of the mood change may be different from thatassociated with normal sadness. It may feel ''strange'' like being engulfed by black cloud or sunk in a dark hole.

Baron (1998) explains that the, persons suffering from depression experience truly profound unhappiness, and they experience much of the time.

Second, that persons experiencing depression report that (they have lost interest in the usual pleasures of life, sex, sports, hobbies— all fail to provide the enjoyment the)' did at other times. Third, that persons suffering from depression experience major loss of energy; everything becomes an effort and feelings of exhaustion are common. The onset of depression can occur at any point in the life span, but a substantial majority of cases emerge before age 40. Depression occurs in kitchen as well as adolescents and adults. According to Akiskal (2000) cited in Weilen (2008), depressive episodes can vary greatly in length, but they typically last 3 to 12 months.

Furthermore, Baron (1998) notes that additional symptoms of depression may include loss of appetite, disturbances of sleep, and difficulties in thinking. Depressed persons find that they cannot think, concentrate, or remember. They have recurrent thoughts of death, and feelings of worthlessness or excessive guilt. Many depressed people are irritable. Their anger may either be directed at themselves or at others, and frequently at both. Even when they are cheerful, depressed people, especially those in manic episode are easily provoked to anger. They become extremely argumentative and abusive, particularly when people challenge their statue. He explains that depressed people often have feelings of disappointment, despair and sadness. Although sadness is a universal experience, profound depression is not.

Depression is a common disorder. Two out of every three depressed patients report feeling anxious (Rivas-Vasquez,Saffa-Biller,and Rivz , 2004). The authors explain that people who are depressed are sometimes apprehensive, fearing that matters will become worse than they already are or that others may discover their inadequacy. They sometimes report that they are, chronically tensed and unable to relax. Many depressed people however suffer from some clinical problems that are not typically considered symptoms of depression. Within the field psychopathology, the simultaneous manifestation of a mood disorder and other syndromes is referred to as co-morbidity suggesting that the person exhibits symptoms of more than one underlying disorder.

Hammen (2009) notes that depression is heterogeneous in its manifestations and clinical course, and more than likely, there are multiple etiological pathways and possible different forms of the disorder. A common element however, is that depression is usually framed within a diathesis-stress perspective: Stressful life events and chronically stressful

I circumstances are typically the triggers of depression. However, most youngsters experience stressors and do not become depressed. Thus much of research in the field attempts to identify three broad realms of diatheses: cognitive vulnerabi1ities that adversely affect the ways in which negative events are construed with respect to personal meaning and self-worth; biological vulnerabilities such as the neuro-endocrine, hormonal and genetic mechanisms by which stress responses result in depressive reactions; and the personal and interpersonal characteristics that modify the nature and adequacy of resources for coping with adversity.

In contributing to literature, Nesse (2000) sees depression as a mood disorder characterized by deep sadness and despair. Nesse explains that since these feelings are sometimes an appropriate and normal reaction to tragedy, someone is considered clinically depressed only if the episode arises without a discernable cause and lasts for two or more weeks. In agreement with Baron (1998), Nesse (2000) explains that in addition to the effects on mood, symptoms of depression include (1) diminished pleasure or interest in food, sex, social banter, and other joys; (2) intense feelings of worthlessness, guilt, aid self-blame; (3) restlessness and agitation, marked by difficulty sleeping, concentrating on work, and making decisions; (4) fatigue, slowness, and lack of energy (in extreme cases, there is such a paralysis of the will that the person has to be pushed out of bed washed, dressed and fed by others); and (5) recurring thoughts of suicide and death. There seems to be an absence of purpose, direction or concern, a lack of energy or vitality and a general sense of nihilism. Rush and Beck (2000) assert that the depressed-prone people tend to (1) blame their setback on personal inadequacies without considering circumstantial explanations, (2) focus selectively on negative events while

ignoring positive events, (3) make unduly pessimistic projections about the future, and (4) draw negative conclusions about their worth as a person based on insignificant events. For instance, imagine that an adult learner got a low grade on a minor quiz in class. If he made the kinds of errors in thinking as just described, he might blame the grade on his woeful stupidity, dismiss comments from a classmate that it was an unfair test, gloomily predict that he will surly flunk the course, and conclude that he is not a genuine adult education material.

2.3.2 Types of Depression

There are two basic types of depression: bipolar and unipolar.

(1) **Bipolar Depression:**People with bipolar depression experience emotional extreme at both ends of the mood continuum, going through periods of both depression and mania (excitement and elation). The mood swings in bipolar depression can be patterned in many ways.

(2) **Unipolar Depression:** People with unipolar depression experience emotional extremes at just one end of' the mood Continuum as they are troubled only by periodic bouts of depression.

The Diagnostic and Statistical Manual of Mental Disorders-IV (2000) approach to classifying mood disorders recognizes several subtypes of depression,placing special emphasis on the distinction between unipolar and bipolar depression. Under unipolar, there are two types of depression namely; Majordepression and Dysthymia. Under bipolar, there are bipolar I (manic depression), bipolar II (hypomanic depression).

Major depressive disorder, according to Kassin (2001) is a disorder where people show persistent feelings of sadness and despair and loss in interest in major sources of

pleasure. Negative emotions are at the heart form the heart of thedepressive syndrome, but many other symptoms may also appear. People who suffer major depression and are in a state of mental pain and anguish either commit suicide or try to commit suicide. They experience reduced appetite and insomnia. Anxiety, irritability, and brooding are commonly observed among suchindividuals. Besides, self-esteem tends to sink as the depressed person begins to feel worthless. In the United States for instance, about 75 percent of suicides are committed by people who are depressed. In fact, thesingle best predictor of suicide potential is a sense of hopelessness (Kassin, 2001).

In one study in the United States, more than 2,000 psychiatric outpatients were tested and followed for up to seven years. Of the 17 who went on to commit suicide, 16 had initially got high scores on a "hopelessness scale" (Beck et al., 1990 in Kassin, 2001). In a survey of college students who had attempted suicide, the other factors most frequently cited were loneliness, major depression, problems with lovers or parents, feelings of helplessness, grades, and money (Kassin, 2001). When people are severely depressed, friends and relatives do try to cheer them upand offer a sympathetic ear, a shoulder to lean on, and advice. However, these efforts usually fail and the depression persists. The suffering person is filled with complaints, regrets, and expressions of self-pity which makes social interactionunpleasant. Studies have shown that people who suffer major depression avoid eyecontact, speak softly, are slow to respond, wear sad or blank facial expressions, and negative in their demean or - a pattern of behaviour that is seen as rude, detached, and nonresponsive (Fried lander, Philip, & Morrison,2001).

Symptoms listed in Diagnostic and Statistical Manual of Mental Disorders,Fourth Edition, Text Revision (DSM-IV-TR) for major depressive episode includes:

i) Depressed mood most of the day, nearly every day, as indicated either by subjective report (for example, feels sad or empty) or observation made by others (for example, appear tearful). In children andadolescent, it can be irritable mood.

ii) Markedly diminished interest or pleasure in all or almost all activitiesmost of the day, nearly all day.

iii) Significant weight loss when not dieting or weight gain (for example a change of more than 5 percent of body weight in a month), ordecrease or increase in appetite nearly every day.

iv) Insomnia or hypersomnia nearly every day.

v) Psychomotor agitation or retardation nearly every day (observable by others).

vi) Fatigue or loss of energy nearly every day.

vii) Feelings of worthlessness or excessive or inappropriate guilt nearlyevery day (not merely self-reproach or guilt about being sick).

viii) Diminished ability to think or concentrate or indecisiveness nearly

ix) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan or a suicidal attempt or a specific plan for committing suicide.

Dysthyrnia differs from major depression in terms of both severity and duration. Dysthyinia represents a chronic mild depression condition that has been present for many years. In order to fulfil DSM-IV-TR criteria for this disorder, the person must, over a period of at least two years, exhibit a depressed mood for most of the day on more days than not. Two or more of the following symptoms must also be present:

i) Poor appetite or overeating.

ii) Insomnia or hypersomnia.

iii) Low energy or fatigue.

iv) Lowself-esteem.

v) Poor concentration or difficulty making decisions.

vi) Feelings of hopelessness.

These symptoms must not be absent for more than two months at a time during the two-year period. If at any time during the initial two years the person met criteria for major depression episode, the diagnosis would be major depression rather than dysthyrnia. Asin the case of major depressive disorder, the presence of a manic episode would rule out a diagnosis of dysthymia. It is noteworthy that the distinction between major depressive disorder and dysthyrnia is somewhat artificial because both set of symptoms are frequently seen in the same person (Oltmanns& Emery, 2007). These authors note that in such cases, rather than thinking of them as separate disorders, it is more appropriate to consider them as two aspectsof the same disorder which waxes andwanes over time. Some experts have argued that chronic depression is a single, broadly conceived disorder that can be expressed in many different combinations of symptoms over time (Oltmanns& Emery, 2007).

Bipolar disorders produce wild fluctuations that range from manic (a euphoric, overactive state) to depressed (a state of hopelessness and apathy). Thebipolar-disorder patients alternate uncontrollably between the two extremes, in cycles that last from a few days to several months. One week, they are flying ashigh as a kite, bursting with energy and optimism. The next week, they have sunk to the depths of despair. The mood

disorder must be severe enough to interfere with occupational or social functioning. A person who has experienced at least onemanic episode would be assigned a diagnosis of bipolar 1 disorder. Oltmanns& Emery (2007) note that the vast majority of patients with this disorder haveepisodes of major depression in addition to manic episodes. Some patients experience episodes of increased energy that are not sufficiently severe to qualify as full-blown mania. These episodes are called hypomania.

A person who has experienced at least one major depressive episode, at leastone hypomanic episode, and no full-blown manic episodes would be assigned adiagnosis of bipolar II disorder. In a bipolar disorder, a patient is troubled by a cycling mood swings, usually severe highs (mania) and lows (depression). The mood swings are sometimes dramatic and rapid, but usually are more gradual when in the depressed stage; aperson can have any or all of the symptoms of a depressive disorder. When in the manic stage, the individual may be over active, over talkative and have a great deal of energy (Beck, 2004). Mania affects thinking, judgment and social behaviour, sometimes in ways that cause serious problems and embarrassment. A person in manic phase may feel elated, full of grand schemes that might range from unwise business decisions to romantic sprees. People in an advanced stage of mania also harbour delusions (false beliefs) of grandeur. They make promises they cannot keep, buy things they cannot afford, start new sexual relationships, and drag others into risky money-making schemes that are bound to fail.

Bipolar disorder is thought to be 1ess common than other depressive disorders. Perhaps, that is why people conclude that bipolar disorder is worth having. However, Kassin (2001) cautions that as the disorder progresses, mania accelerates out of control, and “high” becomes “too high.” The person becomes easily distracted, moves from one

project to another, stays awake at night and is extremely sensitive to stimulation. It has been said that to .the manic person, agentle breeze feels like a slap on the face and the dropping of a pin sounds like a clanging noise. Socially, the charm and wit give way to behaviour that embarrasses others. Kassin (2001) laments that fitting the stereotype of the "raving maniac",the person becomes loud, fast-talking, frenzied, and explosive. Even mild criticismmay trigger anger and hostility.

The DSM-IV-TR criteria for bipolar depression include:

1) Inflated self-esteem and grandiosity.

ii) Decreased need for sleep - for example, feels rested after only 3 hours of sleep.

iii) More talkative than usual, or pressure to keep talking.

iv) Fight of ideas or subjective experience that thoughts are racing.

v) Distractibility - that is attention too easily drawn unimportant or irrelevant external stimuli.

vi) Increase in goal directed activity either socially, or at work or school, or sexually or psychomotor agitation.

vii) Excessive engagement in pleasurable activities that have a high potential for painful consequences - for example, the person engages in unrestrained buying sprees, sexual indiscretions, or foolish business investments.

2.3.3 Depression and HIV

According to Odunsi (2005). The Acquired Immunodeficiency Syndrome (AIDS) is the most dreadful epidemic that mankind has ever witnessed. Depression is a common psychiatric illness characterised by low mood, decreased interest, and inertia along with a plethora of other negative and cognitive symptoms. Depression is a frequent consequence

of trying to cope with chronic illness. Depression in HIV positive women are associated with impaired adherence to antiretroviral therapy (ART), higher HIV plasma.

Furthermore, HIV positive women face violent domestic attacks, financial constraints, rejection by family, spouses and community, compromised health care seeking, childcare problems, emotional and mental health problems. These has generated anxiety and fear among HIV-positive women, ultimately leading to depression. Depression impairs immune function thereby altering course of HIV infection.

Depression is a prevalent and interfering, yet potentially treatable illness commonly comorbid with HIV/AIDS. In HIV, symptoms and diagnoses of depression have been associated with poor adherence to antiretroviral medication regimens and to accelerated disease progression. Because of the high frequency of depression comorbid with HIV, and the association of depression with important self-care behaviors in this study, identification of efficacious treatments for depression has the potential to improve both overall quality of life and, potentially, health outcomes.

Studies on the course of HIV suggest that anywhere from 20 to 37% of infected individuals may also have diagnosable depression, rates that appear to be higher than the general population estimates. In a more recent study of 129 people living with HIV/AIDS, approximately one-third, scored 14 or higher (≥ mild to moderate depression) on the Beck Depression Inventory (BDI)and 27% met criteria for a current mood disorder. Williams and colleagues found that depression was widespread (54.2%) in a sample of individuals living with HIV even after controlling for demographic characteristics. Furthermore, a recent meta-analysis of data from 10 studies examining the prevalence of depression among HIV-infected individuals revealed a 2-fold increase

in rates of depression compared with HIV infected individuals. The current estimates may represent an underestimation as there is evidence that depression may be under diagnosed in the context of HIV medical care.

Various factors may contribute to heightened depression in HIV infected individuals HIV including the effects of HIV on the brain, stigma, occupational disability, isolation, body image changes, bereavement, and debilitation. The elevated rates of depression among those living with HIV may also be partially attributable to stressors (i.e. constant remainder of illness, daily stress, and interference) that accompany maintaining a strict HIV treatment regimen.

Thus, recognizing and treating depression is important because of its association with poor self-care and worse health outcomes in those with HIV. Although earlier studies in HIV failed to find an effect for depression and HIV symptoms, a subsequent meta-analysis found that depressive symptoms were directly related to symptoms of HIV infection. Additionally, studies conducted over longer time have found significant relationships between depressive symptoms and HIV disease progression.(Beck,1999)

Depression has been shown to be associated with declines in CD4 + cell counts over time. Depression also predicts accelerated decline of CD4+cell numbers and significant increases in HIV viral load over 2 years when controlling for the effects of antiretroviral medication. Finally, there is evidence from various cohorts that depression predicts worse survival rates in individuals with HIV. These health-related findings offer some insight into studies that have also shown depressed individuals with HIV use significantly more health care and related services (Williams, 2013)

The negative impact of depression on the course of HIV may manifest in maladaptive self-care behaviours. Indeed, depression has been shown to be associated with sexual risk taking, substance abuse, and poor treatment adherence. Importantly, poor adherence is associated with poor medical outcome as measured by viral load or CD4+cell count. Poor adherence can also result in the development of viral mutations, which can lead to drug resistance.

Individuals with HIV present with different types of stressors and various medical complications that could potentially account for the high rates of depression. Development and Implementations of treatments that specifically target depression have the potential to improve overall quality of life and health outcomes in those with HIV.

For example, relief from depression could potentially increase medication adherence (Friendlander, 2001, Morrison, 2001), which would in turn affect illness severity and progression. The impact of depression on the course of HIV has initiated the application of specific psychosocial; and pharmacologic treatments targeting individuals with HIV and comorbid depression.

2.3.4 Causative Factors of Depression

According to Ashfield (2010), many factors contribute to depression. These include:

i) Family history of depression.

ii) Hormonal Changes (in women and men).

iii) Emotional stress (e.g. bereavement, job loss, relationship breakdown).

iv) Medicines (e.g. some cancer and heart medicines).

v) Personality i.e. the type of Person one is and how one responds to life events.

vi) Social support - whether one has sufficient supportive people around one. People isolated on farms or station properties may lack important social support.

vii) Life changes - major life changes such .as the birth of a baby may increase the risk of developing depression. Ashfield (2010) notes that during the pre- and postnatal period, women (and men) are at greater risk of developing depression and anxiety. Left untreated, the impact of these conditions on the mother and her children may have a greater risk of cognitive, emotional and behavioural difficulties. Untreated prenatal depression (PND) can also impact on family relationships and infant attachment. Studies have indicated that the partners of women with PND may also be at greater risk of depression.

viii) Medical conditions such as thyroid and other hormone problems, or battling with a chronic or terminal illness. Ashfield indicates that there are strong links between depression and chronic illness.

With reference to medical conditions and depression, Ashfield (2010) clarifies the links between depression and chronic illness, noting that depression is common - one in five women and one in eight men will experience depression atsome time in their lives. The author explains thatfor people who live with chronicphysical illness, this figure is even higher. That 28 percent of people with a chronic physical condition also have mental disorder. Having a chronic physical illness puts a person at greater risk of developing depression. The symptoms of chronic physical illness as well as some of the treatment can result in major lifestyle changes which may cause severe disruptions to a person’s work, social life and create financial difficulties.

Depression also creates the likelihood of developing a chronic physical illness, particularly cardiovascular (heart) disease or stroke. For people with chronic physical illness, depression makes recovery more difficult. It can make Itharder for people to find the energy to eat healthily, exercise or take medication regularly. Having a chronic physical illness can also make it seem like an effort to connect the family members and friends. This can make the person with the illnessfeel isolated and make it harder for him/her to recover from depression.

In their own contribution, Oltmanns and Emery (2007) explain that there arebiological and hormonal causes of depression in women. These include premenstrual problems, pregnancy and infertility, postpartum depression,peri-menopause and menopause, and health problems. In premenstrual problems, the authors argue that hormonal fluctuations during the menstrual cycle can causethe familiar symptoms of premenstrual syndrome (PMS) such as bloating, irritability, fatigue and emotional reactivity. For many women PMS is mild. But for some women, symptoms are severe enough to disrupt their lives and a diagnosis of premenstrual dysphonic disorder (PM DI)) is made.

In relation to pregnancy and infertility, the many hormonal changes that occur during pregnancy can contribute to depression, particularly in women already at high risk. Other issues relating to pregnancy Such as miscarriage, unwanted pregnancy, and infertility can also play a role in depression depression-women. In postpartum depression, many new mothers experience the “baby blues.” This is a normal reaction that tends to subside within weeks. However, some women experience severe, lasting depression. This condition is known as postpartum depression. Postpartum depression is believed to be

influenced, at least in part, by hormonal fluctuations. In perimenopause and menopause, women may be at increased risk for depression during perimenopause, the stage leading to menopause when reproductive hormones rapidly fluctuate. Women with past histories of depression arc at increased risk of depression during menopause as well.

In a similar view with Ashfield (2010), Oltmanns and Emery (2007) note that health problems also contribute to depression. Chronic illness, injury, or disability can lead to depression in women as can crash dieting or quitting smoking. Oltmanns and Emery further explain the psychological causes of depression in women to include the following:

i) Focusing on, and rehashing negative feelings. Women are more likely to ruminate when they are depressed. This includes crying to relieve emotional tension, trying to figure out why they are depressed and talking to their friends about their depression. However, rumination has been found to maintain depression and even make ii worse. Men on the other hand tend to distract themselves when they are depressed. Unlike rumination, distraction can reduce depression.

ii) Overwhelming stress at work, school or home. Some studies have shown that women are more likely than men to develop depression from stress. Furthermore, the female physiological response to stress is different. Women produce more stress hormones than men do, and the female sex hormone progesterone prevents the stress hormone system from turning itself off as it does in men.

ii) Body image issues. The gender difference in depression begins in adolescence. The emergence of sex differences during puberty plays a role. Some researchers

point to body dissatisfaction, which increases in girls during the sexual development of puberty.

2.3.5 Psychological Treatment Procedure for Depression

According to Carlsm, &Heth (2010), psychotherapy and biological therapies have proven to be beneficial to many of those who suffer from depression. Psychotherapy is based on psychological principles. Psychotherapy, regardless of the theoretical perspective of the treatment provider is generally aimed at changing pattern of thought or behaviour some of the techniques of treatment of depression are:

Psychodynamic Therapy is a form of treatment procedure that focuses on insight. Sigmund Freud believed that mental disorders such as depression are caused by prior experiences. Treatment under psychodynamic therapy was based on uncovering unconscious feelings and drives that are believed to have given rise to maladaptive thoughts and behaviours. Specific techniques under psychodynamic therapy are; use of free association allows the participants to say whatever comes to his/her mind, use of dream analysis techniques allows the therapist to interpret the hidden meaning of dreams. The general goals of psychodynamic are to increase the participants' awareness of that unconscious process as and how they affect his / her daily functioning.

Another approach to treatment of depression is humanistic therapies humanistic therapist focus on the whole person. The goal of humanistic therapy is to treat the person as a whole. One of the best known humanistic therapies is participantscentred therapy developed by Carl Rogers. The therapy encourages people to fulfil their individual potentials for personal growth through greater self-understanding. A key ingredient of participantscentred therapy is a safe and comforting setting for participants to access their

true feeling. Therapists strive to be emphatic and assign unconditional positive regard to participants; as well as helping participants to focus on his / her subjective experiences.

Behavioural therapy is another treatment options in treating depression. Techniques of treatment under behavioural therapy focus individual behaviour pattern. The basic premise is that behaviour is learned, and therefore can be unlearned in therapy using the principle of classical and operant conditioning.

Social - skills training are another techniques under behavioural therapy. This is another effective way to elicit desirable behaviour. Other forms of techniques used in behavioural therapy are modelling, interpersonal therapy and systematic desensitization.

Cognitive restructuring techniques is another form of therapy in the treatment of depression. Cognitive therapy is based on the theory that distorted thoughts can produce maladaptive behaviours and emotions. Modifying these thoughts patterns via specific treatment strategies should eliminate the maladaptive behaviour and emotions. A numberof approaches to cognitive therapy have been proposed. Beck, a leader of cognitive therapy advocates cognitive restructuring. Cognitive restructuring technique allows therapist to help participants recognize maladaptive thought patterns, and replace them with ways of viewing the world that are more in tune with reality. Ellis, is another major thinker in cognitive behavioural therapy introduced rational emotive therapy in which therapist act as teachers to explain and to demonstrate more adaptive ways cognitive behaviour therapy and rational emotive therapy, maladaptive behaviour is assumed to result from individual belief systems and way of thinking rather than from objective conditions.

2.4 Cognitive Restructuring

The term cognitive restructuring technique was pioneered by Aaron Beck and Albert Ellis, among others (Ellis, 2000). Cognitive restructuring is sometimes used synonymously with reframing, re-appraisal, re-labelling and attitude adjustment (Baron, &Kalsher,2005). This is the process of learning to identify and challenge irrational or maladaptive thoughts using strategies such as logical disputation. Various types of therapy utilize the process of cognitive restructuring, such as cognitive behavioural therapy and rational emotive therapy (Bernstein, & Nash, 2005).

Cognitive restructuring, in laymen term, is the process of learning to replace ones current negative thoughts with better and more beneficial thoughts. It is the process of learning a better way of speaking to one's self. Rush, Show,&Khatomi(2005) define cognitive restructuring as a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts, such as all or nothing thinking (splitting), magical thinking and emotional reasoning, which are commonly associated with many mental health disorders. Similarly, Baron etal (2005) described cognitive restructuring as a means of changing a perception from negative interpretation to a neutral or positive one, making it less stressful

Hammerli,Enoj, and Barth (2009) identified four steps involved in cognitive restructuring and six types of automatic thoughts. The four steps include:

I. Identification of problematic cognitions known as "automatic thoughts" which are dysfunctional or negative views of the self, world, or future.

2. Identification of the cognitive distortions in the automatic thoughts.

3. Rational disputation of automatic thoughts with the Socratic dialogue.

4. Development of a rational rebuttal to the automatic thoughts.

The six types of automatic thoughts are:

1. Self-evaluated thoughts.
2. Thoughts about the evaluations of others.
3. Evaluative thoughts about the other person with whom they are interacting.
4. Thoughts about coping strategies and behavioural plans.
5. Thoughts of avoidance.
6. Any other thoughts that were not categorized.

The purpose of cognitive restructuring is to widen one's conscious perspective aid thus allow room for a change in perception. Conclusively, cognitive restructuring helps participants consider any maladaptive patterns in their thinking-feeling-behaviour cycles. The participants goals is to rethink these patterns and consider more adaptive alternatives that will work better for him or her. Ultimately, the goal is to have the women recognize that sometimes their thoughts lead to feelings and actions whichare destructive. The shifting in thinking if successful can help the women to minimize or reduce level of depression symptoms.(Corey, 2008).

One major strategy that is usually adopted by researchers is counselling psychologycognitive restructuring. According to Cornwall (2007) cognitive restructuring was propounded byAlbert Ellis to modify participants' disturbed emotions and behaviours by disputing the behaviour directly creates stress in them. Cognitive restructuring technique is based on the assumptionan individual tends to think, feel, and acts simultaneously, thus any intervention directed at these behavioural elements affects the other two. In order to block the self-defeating or negative beliefs, which are reinforced by a process of self-indoctrination. The use of cognitive restructuring involves

use of active and directive method such as teaching, suggestion. Persuasion, homework and assignments that involve explanations on direction on howto overcome participants concern.

The basic foundation of cognitive restructuring is contained in the ABCD paradigm developed by Ellis. Ellis (1991) noted that rational emotive therapy and other cognitive restructuring procedures are effective in modifying participants behaviours and attitudes and in assisting participants to overcome self-defeating concerns. "Cognitive restructuring," is an example of psychological & counselling techniques which help to promote more accurate and useful thinking. It is very helpful in treating depression, anxiety, and other undesirable behaviour problems.

Cognitive restructuring means changing a perception from a negative interpretation to a neutral or positive one, making it less stressful. This process is also called reappraisal, relabeling, reframing, and attitude adjustment. Chou, (2004) posit that cognitive restructuring originates from cognitive behaviour therapy holds that most of human emotions and behaviours are the result of what we think or believe about ourselves, other people, and the world. These cognitions shape how we interpret and evaluate what happens to us, influence how we feel about it, and provide a guide to how we should respond. Unfortunately, sometimes our interpretations, evaluations, and underlying beliefs thoughts contain distortions, errors, or biases, or are not very useful or helpful. This results in unnecessary suffering and often causes us to react in ways that are not in our best interest.

Cognitive restructuring is a set of techniques for becoming more aware of our thoughts and for modifying them when they are distorted or are not useful. This approach

does not involve distorting reality in a positive direction or attempting to believe the unbelievable. Rather, it uses reason and evidence to replace distorted thought patterns with more accurate, believable, and functional ones.

Ellis (1967), one of the pioneers of cognitive behaviour therapy, illustrated how our emotions and behaviors are often the result of what we think or believe with his "ABC model. 'In the model, "A" stands for the event or situation that triggers a cognitive, emotional, and behavioural reaction. "B' stands for our underlying beliefs about ourselves, other people, and the world and the resulting interpretations and evaluations we make of the event or situation. "C" stands for the consequence of our interpretations and evaluations which can include both an emotional reaction and a behavioural response aimed at remedying cognitive distortions.

The term "cognitive distortion" refers to errors in thinking or patterns of thought that are biased in some way. They may include: (A) interpretations that are not very accurate and which selectively filter the available evidence, (B) evaluations that are harsh and unfair, and/or (C) expectations for one-self and for others that are rigid and unreasonable. The more a person's thinking is characterized by these distortions, the more they are likely to experience disturbing emotions and to engage in maladaptive behaviour. A number of common patterns of cognitivedistortions have been identified, including:

i. **All-or-nothing Thinking:** Looking at things in absolute, black-and-white categories, instead of on a continuum. For example, if something is less than perfect, one sees it as a total failure.

ii. **OverGeneralization:** Viewing a negative event as a part of a never-ending pattern of negativity while ignoring evidence to the contrary. You can often tell if you're over generalizing if you use words such as never, always, all, every, none, no one, nobody, or everyone.

iii. **Mental Filter:** Focusing on a single negative detail and dwelling it on it exclusively until one's vision of reality becomes darkened.

iv. Magnification or minimization (e.g., magnifying the negative and minimizing the positive): Exaggerating the importance of one's problems and shortcomings. A formof this is called "catastrophizing" in which one tells oneself that an undesirablesituation is unbearable, when it is really just uncomfortable or inconvenient.

v. Discounting the positive Telling one that one's positive experiences, deeds orpersonal qualities don't count in order to maintain a negative belief about oneself, ordoing this to someone else.

vi. **Mind Reading:** Concluding what someone is thinking without any evidence, not considering other possibilities, and making no effort to check it out.

vii. **Fortune Telling:** Anticipating that things will turn out badly, and feeling convinced that the prediction is an already established fact. It often involves: (A) overestimating the probability of danger, (B) exaggerating the severity of the consequences should the feared event occur, and (C) underestimating one's ability to cope should the event occur. B and C are also examples of catastrophizing.

viii. **Emotional Reasoning:** Assuming that one's negative emotions necessarily reflect the way things really are (e.g., "Because I feel it, it must be true.""I feel stupid, therefore I am stupid").

ix. **Rigid rules (perfectionism).** Having a precise, fixed idea of how oneself or others should behave, and overestimating how bad it is when these expectations are not met. Often phrased as "should' or "must" statements.

x. **Unfair Judgments:** Holding oneself personally responsible for events that aren't (oraren't entirely) under one's control, or blaming other people and overlooking ways inwhich one might have also contributed to the problem.

xi. **Name-calling:** Putting an extremely negative and emotionally-loaded label on oneself or others. It is an extreme form of magnification and minimization, and also represents a gross overgeneralization.

2.4.1 The Origin and Function of Cognitive Distortions

According to Ellis (2000) people become more prone to cognitive distortions when under stress, because under pressure some individuals are apt to take more "cognitive shortcuts" resulting in less accurate and more extreme interpretations and reactions. Cognitive distortions can also serve the function of trying to protect us from harm. For example, when a depressed or anxious person thinks, "I cannot do it," it justifies inaction and protects the person from possible failure. This strategy is ultimately self-limiting and defeating, and keeps people stuck in old patterns that do not work very well.

Bernstein and Nash (2005) reported that cognitive distortions otherwise referred to as exaggerated and irrational thoughts, were believed to perpetuate psychological disorders, and that the process of learning to refute these distortions is called cognitive restructuring. Cognitive therapy consists of testing participants' assumptions and identifying how participant's unquestioned thoughts are distorted, unrealistic and

unhelpful. Once these thoughts have been challenged, the participants feelings about the subject matter of those thoughts can be more readily changed during cognitive restructuring psychological counselling session.

2.4.2 The Process of Cognitive Restructuring

Cognitive restructuring refers to the -process of replacing cognitive distortions with thoughts that are more accurate and useful. Cognitive restructuring has four basic steps:

1. Awareness or identifying the thoughts or beliefs that are influencing the disturbing emotion
2. Reappraisal of the situation
3. Adoption and substitution
4. Evaluating them for their accuracy and usefulness using logic and evidence, and if warranted, modifying or replacing the thoughts with ones that are more accurate and useful.

In cognitive restructuring, the therapist guides the participants through the process of becoming more aware of what they are telling themselves and helps them to evaluate, and when appropriate, to modify their own thinking. In essence, the therapist teaches the participants a process that will help them distinguish distorted thinking from more accurate and useful thinking. This is best done as a collaborative process in which the participants is assisted in taking the lead as much as possible. The therapist refrains from assuming that the participants thoughts are distorted and instead attempts to guide the participants with questions that encourage the participants to make their own discoveries. Participants are also encouraged to engage in this process on their own during their time

between sessions by using a written format known as cognitive restructuring worksheet as shown in appendix iii.

2.5 Social Support

Social support is a concept recognizing that people exist to varying degrees in networksthrough which they can receive and give aid, and in which they engage in interactions (Luszceynska, Sarkar, & Noll, 2007). Although definitions of social support vary in the literature, most include both tangible components, such as, financial assistance and physical aid, and intangible components, such as, encouragement and guidance (Lyyra,&Heikkinen, and 2006). Different types of social support have been discussed in the literature, for example, informational, instrumental, and emotional (Bolger, Zuckerman, & Kessler, 2000). Social support can be obtained from family, friends, co-workers, spiritual advisors, health care personnel, or members of one's community or neighbourhood. Several studies have demonstrated that social support is associated with improved outcomes and improved survival in several chronic illnesses, including cancer and end-stage renal disease (Bisschop, Kriegsman, Beekman,andDeeg, 2004; Patel, Petersen, & Kimmel, 2005). Themechanism by which social support exerts its salutary effects are unknown, but practical aid in achieving compliance, better access to health care, improved psychosocial and nutritional status and immune function, and decreased levels of stress may all play key roles (Decker, 2006). Little is known, however, regarding the exact mechanism through which social support has an effect on health outcomes.

Social support has been implicated in the mediation of stressful life events, recovery from illness, and increased program adherence (Jackson, 2006). House,

Landis,and Umberson (2004) described a model explaining the positive effect of social support. Their model includes two key components of social support: esteem-enhancing appraisals and stress- related interpersonal transactions. The esteem-enhancing facet of social support refers to a generalized appraisal, which makes individuals believe that they are cared for and valued and that others are available to them in times of need. The body of literature on social support suggests that the esteem-enhancing component of social support is more important for health maintenance than the more practical, stress-related component.

One survey used to measure social support is the Medical Outcomes Survey Social Support Survey (MOS-SSS; Onuigbe&Osafu, 1999), which is a psychometrically tested, multi -dimensional, self-administered survey that was developed for patients in the Medical Outcomes Study, a two-year study of people with chronic conditions (Tarlov, Ware, Greenfield, Nelson, Perrin &Zubkoff, 1999). The MOS-SSS is brief to administer, but is comprehensive enough to measure a wide range of support that might be utilized when individuals are chronically ill (Onuigbe&Osafu 1999). The MOS-SSS focuses on what Onuigbeetal (1999) agree to be the most important dimensions of social support, that is, the perceivedavailability of functional support rather than structural components.

Perceived social support has received much attention recently (Slatter&Wiggins, 2005). Studies have found that perceived social support is associated with adjustment to and coping with HIV diagnosis (UNAIDS, 2006)Chukwesi (2002). Some research has linked social support with HIV disease progression. Chukwesi (2002) investigated the relationship between depression and progression to AIDS in the Coping in Health and Illness Project. They found that men above the median on social support had a 40%

higher probability of being free of AIDS compared with those below the median. Although depressive symptoms were related to increased risk of AIDS, only stress and social support remained significant in the mode) when the three psychological variables were considered together. Similarly, Palella,Friend-du preez,Ramlagan and Anderson (2010) measured Human immune deficiency virus disease progression, defined as advance in symptoms, decline in CD4 cell count, and mortality, in 414 HIV-positive men as part of a longitudinal cohort study at the HIV Neurobehavioral Research Centre. Findings from the study indicated asymptomatic participants were significantly less depressed than others, and they had larger social support networks than those with symptoms related to HIV disease progression. Neither advance in CD4 count nor AIDS diagnosis were related to any psychosocial factors (Decker, 2004). High depression scores predicted shorter time till death, although when an adapted version of the Hamilton Depression Rating Scale was used omitting somatic symptoms, this relationship failed to be significant. Informational support as measured by the Social Support Questionnaire (Diamatteo, 2004) played a more significant role in those experiencing HIV symptoms at baseline, as it was able to predict time to mortality when depression and social network size were controlled for.

Barnette, Tony, Gabriel, andRugalema(2001) cross-sectionally assessed psychosocial factors, social network and social support, in relation to measures of immunefunctioning in HIV-positive gay men. A low score on two social network indices, social participation and adequacy of social participation, was statistically significantly associated with a low CD4 lymphocyte count. Social support may be an important contributing factor in the relationship between depressive symptomatology and HIV

disease progression, a phenomenon that warrants further investigation. It is also an important resource that can enable people living with HIV/AIDS to live with their illness (Gupta, Dauda, Packel, Rutherford, Leiter, andPhaladze, 2010).

Women's health is one of the most fundamental issues in national development even as the quality of their lives depends on the resources available, access to health facilities as well as the social support they receive from by their families, friends and others. This idea is corroborated by Njodi, Bwala and Olaitan (2005) who noted that the quality of the existence of the infected would imply slowing down the progression of the disease, minimizing pain and stigmatization. Thus, social support system for women living with HIV/AIDS becomes imperative due to the cultural upbringing of the Africans where each person in the family is his brother's keeper. For instance, supporting women who are living with the disease helps to prolong their lives, especially emotional support, which will go a long way in cushioning the effect of the disease. Social support system is a term used to mean physical and emotional comfort given to people by family, friends, co-workers and others (Oladoja, Adedoyin&Adekun 2008). It is believed that such support patterns have a positive impact on women. Thus, feeling loved and supported by family members and friends is more beneficial to women but not men; and that it is a deep human need to be loved and cared for (New York Reuters Health, 2005; Kendler, 2005). It was revealed that HIV thrives mostly among the poor, illiterate, unemployed and the socially disadvantaged in terms of access to healthcare (Ezedum, 1999; Adetunji, 2000). A disproportionate number of those infected with HIV were noted to be found among members of some families, cultures, social groups, age and resources (Adetunji, 2009). Although the construct of social support was first conceptualized by social

scientists in the late 1970s (Kendler, 2005), the definition of the concept varies widely among researchers and their study context (Cutrona& Russell, 1990). Social support is generally defined as "the perception or experience that one is loved and cared for by others, esteemed and valued, and part of a social network of mutual assistance and obligations" (Cantor, 2007). Conceptualizations of social support have also focused on the source of support, which can vary from family, spouse, friend, co-workers, doctor, and community ties/affiliations.

Social support can be thought of as a meta-construct with multiple dimensions, which makes measurement of the concept complex (Kemp, 1995). Critiques in the literature on social support have pointed to the use of heterogeneous methods and metrics as a hindrance in understanding the true effects of social support on varying outcomes (Kendler, 2005). Those that have studies social support have used varying techniques to measure the concept, often collecting data on one or more of the following dimensions: 1) the nature of what was provided; 2) the source(s) of support; 3) whether social support was actually received (objective) or simply perceived (subjective) to be available; and 4) whether there was an explicit or implicit expectation of reciprocity of support. Even with these limitations, we can still draw firm conclusions from this body of literature.

Linking Social Support to Health Outcomes in High-Income Countries

> "Social relationships, or the relative lack thereof, constitute a major risk factor for health — rivalling the effect of well-established health risk factors, such as cigarette smoking, blood pressure, blood lipids, obesity and physical activity" (House, 1988)

The vast majority of research on social support has been conducted in Western Europe and North America, with a focus on disease management, physical and mental health, and responses to stress. This research provides evidence that social support is

associated with a decreased risk of mental and physical illness, as well as mortality and it positively affects cardiovascular, endocrine, and immune functioning (Seeman, 2000). It can also affect the way people cope with stress (Jackson, 2006), their adherence to medication, and their quality of life. For example, Strine and colleagues analysed data from a state-based surveillance system that collected data on social support, health-related quality of life, and health behaviours and discovered that those who reported lower levels of social support had increased obesity, physical inactivity, alcohol consumption, and a higher prevalence of smoking. Although the exact means by which social support contributes to health and the factors that influence this relationship are not yet entirely understood (Wellmen& Worthy, 1990), these findings indicate that social support can affect and encourage engagement in positive health behaviours. Patient adherence may mediate the relationship between social support and health (Dunbar-Jacob &Schienk, 2001). Indeed, support from friends and family can promote patient adherence, as it buffers the stress associated with the illness, encourages optimism, reduces depression, and improves healthful behaviours (Wright, Clipp, & George, 1998). In a recent meta-analysis, identified 122 studies published between 1948 and 2001 that correlated social support with patient medication adherence across multiple medical conditions. The study found that patients were over two times more likely to adhere if they had greater levels of social support; social support also had a greater effect on adherence for patients that took more than one medication. Additionally, this investigation revealed that adherence was strongly and consistently associated with functional support (i.e., instrumental and emotional support) as compared to structural support (i.e., living arrangements and relationship status).

However, not all studies on social support demonstrate benefits. Wills and Terdy (1989) found that some social relationships might actually encourage their partners partaking in unhealthy behaviours such as drinking alcohol smoking, and drug use among adolescent. Additional findings from Thoits (2000) suggest the actual receipt of social support can enhance stress recent studies have also documented the benefits of providing support on health and wellbeing.

The influence of social support on positive health outcomes may also differ by gender and culture. In the United States, researchers have documented differences between men and women when receiving support. In a meta-analysis examining gender differences in relation to coping with stress, women were more likely to seek and use support to handle the stressors they encounter, as compared to men. Furthermore, in an experimental study that had couples conduct stressful tasks alone and with their partners found that the presence of the wife buffered men's stress response when completing tasks, but the presence of the husband increased stress for women when completing tasks (Vnger, & Powell, 2001). Since gender roles differ across cultures, it is difficult to ascertain whether these findings would be similar in LMIC.

Terdy (1989) suggests social support may be experienced differently across cultures and is an area in need of further study. Given that much of the research on social support has been conducted in Western cultures, which tend to value independence (Markus &Kitayama, 1991) and many other cultures (Asian, Southern European, and Latin) value interdependence, it is importance to understand how and whether the protective factors associated with social support differ across cultures. In this review, we

will examine and summarize the literature on social support in low and middle-income countries, with an emphasis on HIV/AIDS.

2.5.1 Social Support and HIV/AIDS

The roots of the concepts of social support are found in nineteenth century sociologists such as Dimatteo(2004), who established the link between diminishing social ties and an increase in suicide. As a concept, it has evolved over time starting with the term "social ties" as used by Dimatted, 2004.

Cantor, 2007, describes a social system as others who (1) help people to mobilize their psychological resources in order to deal with emotional problems (linking, loving and empathy); (2) information (about the environment), (3) instrumental aid (provide an individual with money, material, skills, and advice in order to help them to deal with particularly stressful situations that they are exposed to).

Social support has come to possess different dimensions and is expressed indifferent forms and different ways. The source of social support can come in the form of emotional support from family, friends, and peers. It can also emanate from social interactions in the community including professionals and even from interaction with the environment.

Haan(2004) examined hope fostering strategies on PLWHA which were defined as those sources that assist to install, support or restore hope in some way. Further strategies were categorized into seven categories: (1) interpersonal connectedness: mainly focuses on love from family and friends, i.e., meaningful relationships, being loved and giving love, (2) spiritual base focusing on spiritual practice as a source of hope, belief in God and family, belief helps to overcome the suffering; (3) attainable aim direct to

setting goals and maintaining independence, goals are further divided into attainable and unattainable; (4) affirmation of worth; focusing on positive relationships within professional careers, helping relationships regarding illness and being treated with courtesy and respect; (5) light heartedness; focusing on friendship with others who are suffering from a same cause, laughing as an inner resource; (6) personal attribute; focusing on determination and being a fighter; (7) uplifting memories; focusing on recalling uplifting moments acting as a hope fostering strategy.

Another study, on HIV suggested that social support is an important component of effectively dealing with HIV and AIDS. The experience of social support is less just after diagnosis of HIV, and potential sources for fostering hope are (1) receiving support; (2) engaging in meaningful life experiences; (3) perceiving options; (4) receiving treatment; and maintaining quality of life.

One of the studies on PLWHA identified four major ways that hope was maintained; by miracles, religions, involvement in work or vocations, and support of family and friends. Specific ways of being in relationships with others include dealing with one's family, renegotiating the friendship group, helping others with HIV and developing a relationship with a higher power, and in this case, social support act as the functional component of relationship such as emotional and tangible assistance. A study on HIV infected terminally ill persons indicates that there were significant differences in the level of hope according to diagnosis, and social support can help PLWHA to deal with the HIV diagnosis and acts as an internal resource for helping individuals living with HIV to experience increased well-being.

One of the studies on women with HIV showed a significant positive relationship between hope and coping, hope and managing illness, and between hope and spiritual activities. A significant negative relationship was observed between hope, and inability to cope and stigma was associated with less social support (Banette, 2001).

Promoting hope and acceptance of HIV status enables PLWHA to develop a positive therapeutic relationship with medication, which in turn promotes adherence to treatment. Treatment adherence was related to active participation in social networks. Facilitating hope appears to be an important therapeutic goal in working with newly diagnosed HIV positive individuals, and social support was connected to longer life for PLWHA.

There are two sourced of social support that have been discussed in previous studies. The first relates to family and friends, and the second to community based support, government agencies, and the health care industry. The non-family support mostly comes from nurses or nursing practice, and it is connected with the concepts of nursing, caring, and helping, peer counselors and health workers are important to provide referral information (as informational support) for livelihood to receive counseling and medical treatment in the process of fostering hope. The support from friends and family is valuable to counter stigma.

2.5.2 Social Support and Quality of Life in HIV

Quality of life is defined as a “fighting spirit” associated with longer life expectancies for individuals with HIV /AIDS. Social support of PLWHA was significantly correlated with health related quality of life. Research on PLWHA indicates that a supportive social environment, particularly friends and family acceptance, was

significantly associated with quality of life. Alienation, rejection, and isolation can threaten hope and wellbeing of PLWHA (Skevington,S.M,2010).

Taking care of physical, psychological, and social relationship was important for maintaining health-related quality of life and social support of PLWHA. One of the studies suggested that social support is significantly associated with health-related quality of life, with the exception of physical functioning and bodily pain aspects. A low level of social support causes a worsening of physical functioning. Another study suggested that psychological functioning and physical symptoms were associated with a higher level of social support. Furthermore, the type of social support influences the level of quality of life, as the level of emotional support decreases physical distress, mental distress, activity limitation, depressive symptoms, anxiety symptoms, insufficient sleep, and pain, the tangible or functional support seems to be more relevant to PLWHA. Social support from peers was critical for psychological functioning of PLWHA in many circumstances. However, in periods of crisis, family support becomes a more important determent of psychological functioning.

Quality of life relates both to adequacy of material circumstances and to personal feelings about these circumstances, and it includes "overall subjective feelings of well-being that are closely related to morale, happiness and satisfaction" (Rusr, T. 2005).

In the context of this study, the researcher refers to family relationship as the close association, affinity or bond that exists within the family tree or pedigree. It extends to co-residents and in-laws. Virtually in all cultures, family members play significant roles in providing care and support for the sick. In some instances, family members play a good role in the health promotion of their relatives. The study of Muoghalu and Jegede

(2010) shows that cultural practices like cultural obligations to the sick, affinity to blood relations, collective ownership of children and strong mental bond enhanced cares and supports for HIV positive people within the family settings.

Family support is important to HIV/AIDS patients because they will find it easy to cope with depression from outside, withstand various challenges, boost self-esteem and become easy to adhere to treatment (Taddeo, Egedy&Frappiers, 2008; Murray, Semrau, McCauley, Thea, Scott, Mwiya, Kankasa& Bass, 2009). Family may be dynamic in two ways to depression in HIV/AIDS. Some family members provide unconditional psychological and material supports to HIV positive members while some reject family members for their seropositive HIV status (Liamputtong, 2013).

The report of the study of Valle and Levy (2009) among the intravenous drug users living with HIV uncovered a relationship between disclosure and reconciliation with family members, which leads to greater social supports. Delaney, Serovich and Lim (2008) found that mothers who disclosed their seropositive HIV status to their children received hugs and comfort from them. In the study of Babalola and Babalola (2013) carried out in Ibadan, Oyo State, 84 percent of their female respondents agreed to take care of their HIV infected relations. Situation whereby families take care of their HIV positive relations are not the same. As reported by Mandana, Sima, Eesa and Minoo (2015), within the family, HIV/AIDS patients face isolation, separation, loneliness, hopelessness, rejection and home-leave.

There is possibility of family members of HIV/AIDS patients to experience HIV-related discrimination. In several parts of Nigeria, Alubo, Zwandor, Jolayemi and Omudu (2002) affirmed that when one member of a family becomes HIV positive, the whole

family is nicknamed and likely to be called an AIDS family. The researcher opined that nearly all family members will avoid close association and interaction with such a sick family member so as to protect their images in the societies they found themselves. In an attempt to do that, the seropositive member of the family will be isolated, neglected and probably denied of their family rights. Therefore, having one HIV positive member in the family was considered dreadful due to the risk of transmission of the virus and its associated depression (Li, Zunyou, Sheng, Manhong, Eli & Yao, 2008).

HIV/AIDS presents many challenges to family members who are assumed to be responsible for the care of HIV positive people (Ilebani&Fabusaro, 2011). Despite the fact that family can be a valuable resource for HIV/AIDS patients in the treatment process, they can also be a source of stress too (Wacharasin&Homchampa, 2008). Visser, Makin and Lehobye (2006) affirmed that not all families offer the needed supports and encouragements to a person living with HIV/AIDS. Rather, they turn their backs on their sick loved ones and contribute to depression. In some instances, some community members viewed HIV/AIDS as a disease that affects immoral people and the victims must be punished; therefore, they were being neglected (Muoghalu&Jegede, 2010). As upheld by Hossain and Kippax (2011), HIV positive people are often turned away by their partners, family members and relatives. For instance, some young women living with HIV/AIDS were prohibited by their mothers from cooking meals for the family members due to stigmatization (Okoror, Airhihenbuwa, Zungu, Makofani, Brown &Iwelunmor, 2007).

The deplorable nature of AIDS is not something that many families will embrace but to segregate the individual infected from the ordinary people in order to avoid others

from being infected too (Keba, 2011). Keba (2011) added that in India, in the 1980s, it was reported that AIDS patients were considered outcast from families and some were given places like separate huts to sleep in and were prevented from coming in contact with anyone. The study of Sangowawa and Owoaje (2012) conducted among youths with HIV/AIDS in Ibadan, Nigeria shows that upon the disclosure of their HIV positive status, 25 percent were sent out of their matrimonial homes by their husbands, 25 percent were abandoned by their spouses and 12.5 percent had experienced broken relationships. As a global study illustrated, 35 percent of people living with HIV/AIDS interviewed cited being worried about losing family and friends for the disclosure of their status (AIDS Treatment Life International Survey, 2010). In the study of Johnson (2012), half of the respondents living with HIV/AIDS reported to have suffered discrimination from their spouses.

In some communities, family members isolate relatives having HIV/AIDS to minimize social contacts. In order to avoid discrimination emanating from family members, HIV/AIDS patients in the study of Joglekar, Paranjape, Jain, Rahane, Potdar, Reddy and Sahay (2011); Sharma, Khadga, Dhungana and Chitrakar (2013) expressed that they wish not to take their antiretroviral drugs in front of anybody including family members.

Sometimes, family members may refuse the food cooked by or dispose the utensils already used by HIV/AIDS patients. In fact, some were not allowed to interact with babies or children in the family (Bogart et al., 2008; Liamputtong, 2013). Similarly, the result of the study conducted by Corona, Beckett, Cogwill, Elliott, Murphy, Zhou and Schuster (2006) shows that 11 percent of children of parents living with HIV/AIDS

worried about being infected. Many HIV positive women reported that they were abandoned by their family members and blamed by their in-lays for bringing in HIV/AIDS into homes (Human Sciences Research Council, 2008). In a presentation given at the 2004 Bangkok XV International AIDS Conference, a female living with HIV/AIDS from South Africa poignantly highlighted issues of violence and abuse among others in her relationship with her partner, following disclosure of her positive HIV status which resulted to her being depressed (Mthembu, 2004).

The field experience of the researcher shows that in an attempt to protect the family name, image and identity, some families do hide members of their family living with HIV/AIDS from accessing treatment, care and services from support groups. in South Africa, Campbell, Foulis, Maimane and Sibiya (2005) revealed that some community health workers were turned away by families who had HIV/AIDS patients because they did not want them to know that they have such sick person in their families. Udom (2004) reported the case of a mother living with HIV/AIDS nursing an 8-month old baby who was evicted by her husband when he learnt that she was HIV positive.

In the report of the interview conducted within the family settings by the Centre for Policy Alternatives (2005), the following discriminatory behaviour against HIV positive people which resulted to depression were highlighted thus: desertion by spouse; parental refusal; threatening; assault; harassment; ridicule and excommunication. These social reactions may be premised upon the assertion of Kaiser Family Foundation (2006) in which half of their participants held incorrect assumption that casual contact such as sharing of a glass of water would lead to HIV infection.

2.5.3 Social Support and Depression

Many studies have investigated the relationship between depression and one's social context, including personality style, past psychiatric history, connectedness with community and perceived social support. There is increasing evidence that a strong degree of perceived social support and connectedness may mediate depressive symptomatology. Mills, Nachega, Bangsberg, Singh, Rachlis, & Cooper. (2006) measured the seven-day prevalence of depression in 2,678 men who have sex with men as part of the Urban Men's Health Study. This study used a household-based probability sample surveyed across four major American cities, consisting of predominantly HIV-negative individuals (n1545). Seventeen percent of men were classified as depressed according to the CES-D scale, whereas 12% were classified as distressed. These rates were 17.2% higher than those found in adult U.S. men in general (Mills, 2006). Depression was associated with feelings of alienation from the community, lack of a domestic partner, and being HIV-positive, although HIV status was no longer significant when demographic characteristics, developmental history, substance use, sexual behaviour, and current social context were controlled for in logistic regression (Mills, 2006).

Specifically related to HIV, there has been increased attention paid to the social environment of people living with HIV as it is believed that the quality of social relationships may be particularly important for successful psychological adaptation to an HIV diagnosis. Posse, &Baltnssen, (2009) sought to explore the relationship betweendimensions of social support and psychological and functional well-being in HIV-positive menand women in different age strata. Subjective and instrumental support,

social interaction, behavioural health service utilization, and psychological well-being (i.e., positive effect and depressive symptomatology), and physical functioning were assessed in a cross-sectional design. Despite endorsing greater medical co-morbidity, older adults reported significantly lower depressive symptomatology and greater positive effects were less likely to report seeing a behavioural health specialist than their younger counterparts. Older adults also reported higher subjective support, which in turn was associated with lower depressive symptomatology, greater positive effect, and non-utilization of behavioural health services.

Stevington, Norweg, &Standage, (2010) examined relationships between HIV-related stigma, social support and depression in a sample of 340 HIVpositive African American women living in rural areas of the South-eastern United States. Three aspects of social support, including availability of different types of support, sources of support and satisfaction with support, and two aspects of HIV-related stigma, perceived stigma and internalized stigma, were measured using a cross-sectional design. The authors proposed a mediation model whereby stigma mediates the relationship between social support and depression. Perceived availability of support ($p < .000$ 1), sources of support (p=.O3), satisfaction with support (p=.003), perceived stigma ($p < .000$ 1), and internalized stigma ($p < .000$ 1) were all significantly negatively correlated with depressive symptoms (Stevington, 2010). Social support variables were negatively correlated and stigma variables were positively correlated with depression. HIV-related perceived stigma and internalized stigma were found to mediate the relationship between sources of available social support and depression. Similar to the studies cited above (Stevington, 2010), a significant body of literature has drawn a link between social

support and depression whereby changes in emotional support from friends and family as well as practical and informational dimensions of social support are negatively correlated withand strongly predictive of depressive symptomatology (Collins, Holma, Fremon , & Patel, 2006).

Although unsupportive social interactions have demonstrated strong relations withpsychological adjustment to illness, little research has been directed at the differential effects of unsupportive interactions from different relationship sources, such as, family, friends, or a lover/spouse. Seeman, (2000) examined whether the source of unsupportive social interactions had direct and interactive relations with depressive symptoms among 146 ethnically diverse women living with HIV/AIDS. After controlling for numerous demographic characteristics (race/ethnicity, disease stage, household income, education, age and physical symptoms), unsupportive social interactions from family were found to have a main effect predicting more depressive symptoms. Furthermore, a significant interaction was identified between unsupportive interactions from a lover/spouse and from friends, such that high levels of unsupportive interactions from either or both sources predicted high levels of depressive symptoms. Thus, the experience of unsupportive relationships with a lover/spouse or friends, was shown to have detrimental effects on the psychological adjustment of women with HIV/AIDS. Helgeson, (2003) conducted similar research with a sample of 508 gay men, 50% of whom were HIV-positive. Satisfaction with social support, including emotional ($r = -.367$, $p<001$), practical ($r= -.284$, $p<.00l$) and informational ($r -.329$,$p<.00l$), was inversely correlated with depression. Men who were more satisfied with the social support they received were less likely to show depressive symptomatology at one year

later. Multiple regression analysis indicated a symptom by informational support interaction. Experiencing more HIVsymptoms was associated with greater depression among gay men with low informationalsupport(Helgeson, 2003).

Numerous studies have linked social support to better medication adherence among illness groups, but few have examined potential mechanisms for this relationship. Goudge, &Ngoma, (2011) examined relationships between social support, depression, positive states of mind (PSOM), and medication adherence among an ethnically-adverse sample of HIV-positive men who have sex with men (n=61) and women (n=29) on highly active antiretroviral therapy. Depression and PSOM were evaluated as potential mediators of the relationship between support and adherence. Cross-sectional data showed that greater social support and PSOM related to better adherence whereas higher depression scores related to non-adherence (Goudge, &Ngoma, 2011). Perceived quality of social support, as measured by the Social Provisions Scale (Horwitz, 2001), was also associated with less depressive symptomatology and higher levels of PSOM. PSOM partially mediated the relationship between, social support and adherence, which highlights PSOM as a potential important mechanism through which social support is related to better HIV medication adherence (Goudge, &Ngoma,2011)

In order to further understand how social support impacts depression in the context of HIV/AIDS, some research has investigated potential factors linking these two constructs. Using multiple regression, Krause, (2001) simultaneously examined the joint effects of coping, conflictual interactions, and social support on positive and negative mood among 300 HIV positive participants (70% male; 71% white). This study demonstrated that perceived support had significant correlations with positive mood (r

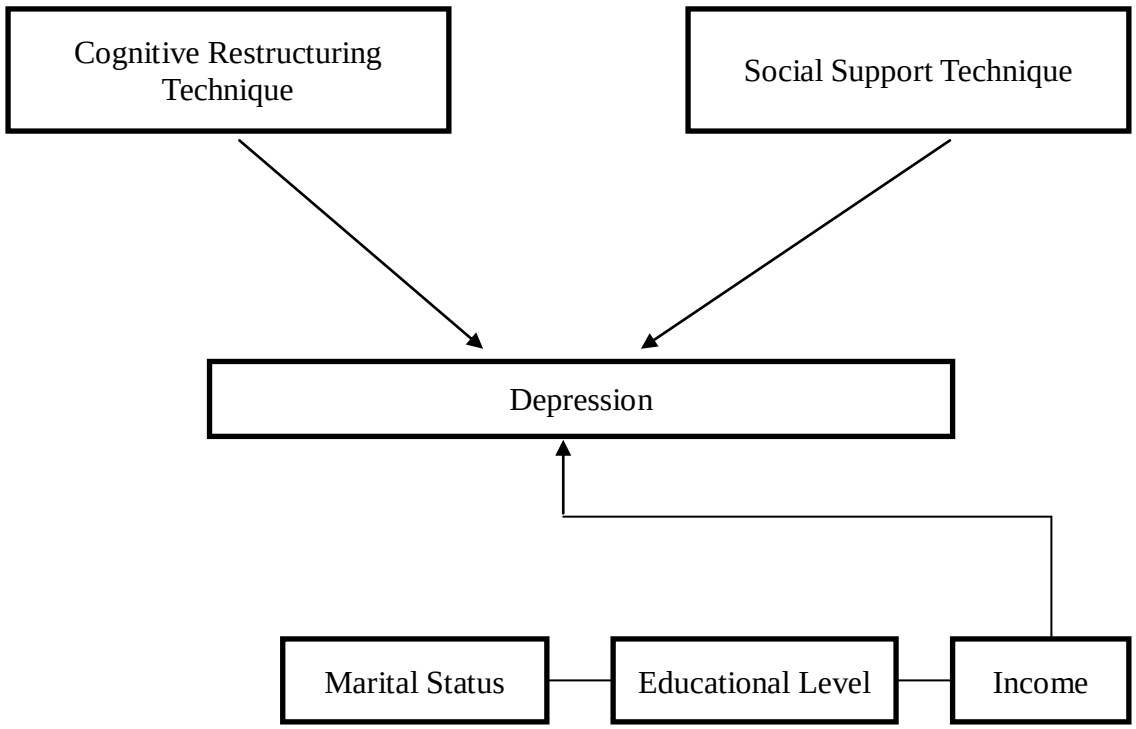
0.374) and with negative mood (r = -0.276), but it had relatively weak and non-significant effects on mood when coping and other social relationship variables were controlled for. In addition, optimism had significant direct effects on both positive and negative mood. Factor analyses showed that perceived social support and conflictual social interactions formed separate factors and were not strongly related. Compared to perceived social support, social conflict was more strongly related to coping behaviours,especially to social isolation, anger, and wishful thinking. Conflictual social interactions were more strongly related to negative mood than was perceived social support. One explanation offered for the weak relationship of perceived support with coping and mood was that the perceived support scale used in Chappell, (2000) contained a high proportion of items reflecting tangible support, while prior studies have emphasized emotional support. Fleishman argued the need for further research to specify the manner in which support and coping combined to influence psychological outcomes.

Research conducted by Cohen, & Wills, (1998) supports the hypothesis that coping with HIV infection is a complex phenomenon involving multiple and interacting variables. The purpose of their study was to evaluate the association of coping, particularly the fighting-spirit-hopelessness dimension, with psychological stress symptoms, social support and personality variables in HIV-positive men and women. The study indicated that people who were adjusting well to their HIV-positive status tended to have a higher level of fighting spirit and a lower degree of hopelessness compared to those not adjusting well to their HIV-positive status. A coping style based on incapacity to face and confront HIV infection was associated with symptoms of psychological stress, repression of anger, external locus of control, and low social support in those not

adjusting well to living with HIV. These individuals exhibited lower fighting spirit and social support, and higher hopelessness, fatalistic attitude, anxious preoccupation and expression of sadness. These results demonstrate that one's orientation or attitude may significantly impact psychological adjustment to stress or challenging situations, for example, adjustment to HIV infection.

Chen, & Silverstein,(2000) further illustrated this hypothesis by examining the relative importance of general individual orientations, for example, sense of self-worth, or self-esteem, and personal control over one's environment, or mastery, with regard to physiological distress among women living with HIV/AIDS.

2.6 Conceptual Framework



Source: Designed by the researcher.

The chart above was designed by the researcher in order to show the variables under study. Cognitive restructuring and social support techniques were the psychological/counseling treatment interventions that were used for the study. The purpose was to find out the effects of the two techniques (cognitive restructuring and social support techniques) on Depression among HIV/AIDS Infected Women in Kaduna State. The two treatments are the independent variables, while the dependent variable is the moderate level of depression that was selected for the study. The study also determined the extent to which marital status, Educational level and income had influence on their level of depression.

2.7 Theoretical Framework

In order to treat and prevent depression, however, one must first understand where it comes from and what factors serve to maintain it. This hasresulted in the emergence of various theories of depression. Some of these are discussed as follows:

In analysing the intricacies of depression, Beck, (1976) believes that a Psychologicalmechanism that plays a key role in depression is negative views about oneself. According to Beck, individuals suffering from depression oftenpossess negative conceptions of their own traits, abilities, and behaviours. They have habitual thinking errors that underlie their disorder. Depressed-prone people tend to (1 blame their setbacks on personal inadequacieswithout considering circumstantial explanations, (2) focus selectively on negativeevents while ignoring positive events, (3) make unduly pessimistic projectionsabout the future and (4) draw negative conclusions about their worth as a person based on insignificant.

Beck notes that the depressed—prone individuals lend to be highly sensitive to criticism from others and are often very concerned about disapproval from them. Because they are more likely to notice and remember negative information, their feelings of worthlessness strengthen, and when they are exposed to various stressor (e.g. the breakup of a romantic relationship, a failure at work), theirthinking becomes distorted in important events in a negative light for instance, they interpret a complement from a friend as insincere, or someone's being late for an appointment as a sign off rejection.

Beck (1999) as cited in Colony, (1982), developed a therapy for depression that shares with: Ellis's therapy, an emphasis on the participants beliefs,interpretations, and perceptions. Beck's cognitive therapy, however, focuses moreon faulty logic than on the beliefs themselves. The negative beliefs are seen are conclusions based on faulty logic. A depressed person concludes based on faultylogic. A depressed person concludes that he or she is "deprived, frustrated, humiliated, rejected or punished. Beck views the cognitions of the depressedindividual in terms of a cognitive triad: a negative view of the self ("1 am worthless"), of the outside world ("The world makes impossible demands on me"), and of the future ("Things are never going to get better").

2.7.1 Beck and Ellis's Cognitive Restructuring Theory

Cognitive restructuring was pioneered by psychologists Aaron Beck and Albert Ellis in the 1960s. Cognitive restructuring technique is one of the major orientations of psychotherapy (Eschenroeder, 2005) and represents a unique category of psychological intervention because it derives from cognitive and behavioural psychological models of human behaviour that include for instance, theories of normal and abnormal development, and theories of emotion and psychopathology. Cognitive Behavioural

Therapy (CRT) combines cognitive and behavioural therapies, and involves changing the way you think (cognitive) and how you respond to thoughts (behaviour).

The cognitive restructuring theory asserts that humans are directly responsible for generating their own negative emotions and that these self-created negative emotions, over time, lead to dysfunctions, such as stress, depression, anxiety, and even social awkwardness. When utilizing cognitive restructuring in cognitive behavioural therapy (CRT), it is combined with psycho-education, monitoring, in vivo experience, imaginable exposure, and behavioural activation and homework assignments to achieve remission (Hewitt, 2009).

CRT focuses on the 'here and now' instead of focusing on the cause of the issue, and breaks overwhelming problems into smaller parts to make them easier to deal with. These smaller parts can be described as thoughts, emotions, physical feelings and actions. Each of these has the ability to affect the other, for instance, the way you think about things can affect how you feel emotionally and physically, and ultimately how you behave.

CRT is based on the principle that individuals learn unhelpful ways of thinking and behaving over a long period of time. However, identifying these thoughts and how they can be problematic to feelings and behaviours can enable individuals to challenge negative ways of thinking, leading to positive feelings and behavioural changes. It is possible for the therapy to take place on a one-to-one basis, with family members or as a group depending on the issue and how the individual feels most comfortable.

The cognitive component in the cognitive-behavioural psychotherapies refer to how people think about and create meaning about situations, symptoms and events in

their lives and develop beliefs about themselves, others and the world. Cognitive therapy uses techniques to help people become more aware of how they reason, and the kind of automatic thoughts that spring to mind and give meaning to things. Cognitive interventions use a style of questioning to probe for peoples' meanings and use this to stimulate alternative viewpoints or ideas. This method is Called .guided discovery, and involves exploring and reflecting on the style of reasoning and thinking, and possibilities of thinking differently and more helpfully. On the basis of these alternatives people carry out behavioural experiments to test out the accuracy of these alternatives, and thus adopt new ways of perceiving and acting. The overall intention is to move away from more extreme and unhelpful ways of seeing things to more helpful and balanced conclusions.

CRT can be useful for dealing with issues such as: anger, anxiety, depression, drug or alcohol problems, eating disorders, obsessive-compulsive disorder, phobias, post-traumatic stress disorder, sexual and relationship problems (Dweck, 2000). The emphasis on cognitive or behavioural aspects of therapy can vary depending on the issue at hand. For example, the emphasis may be more towards cognitive therapy when treating depression and the emphasis may be more towards behaviour therapy when treating obsessive compulsive disorder.

CRT is a practical therapy, hence it is likely to work best when used in treating a specific issue per time as it focuses on particular problems and how to overcome them. CRT sessions may consist of a number of activities, including: Coping skills, Assessments, Relaxation, Challenging certain thoughts, Thought stopping, Homework projects, and Training in communication (Gleitman, 2011).

2.7.2 Carl Roger's Humanistic Theory

The Humanistic theory is a psychological perspective which rose to prominence in the mid-2Oth century in response to the psychoanalytic theory of Sigmund Freud and the behaviourism of Skinner. The theory is sometimes referred to as a "third force," as distinct from the two more traditional approaches of psychoanalytic and behaviourism. This theory emphasizes on an individual's inherent drive towards self-actualization and creativity (Ormrod, 1999). The theory acknowledges that an individual's mind is strongly influenced by on-going determining forces in both their unconscious and conscious world around them, specifically the society in which they live. The focus of the humanistic perspective is on the self, and this view argues that individuals are free to choose their own behaviour, rather than reacting to environmental stimuli and reinforcers. Here, issues dealing with self-esteem, self- fulfilment, and needs are paramount.

Carl Rogers as a major spokesman in humanistic psychology rejected the deterministic nature of both psychoanalysis and behaviourism and maintained that people behave as observed because of the way they perceive their situation. "As no one else can know how we perceive, we are the best experts on ourselves (Rogers, 1959, 1969;. Carl Rogers (1959) believed that humans have one basic motive, that is the tendency to self-actualize (that is to fulfil one's potential and achieve the highest level of 'human-being'). Like a flower that will grow to its full potential if the conditions are right, but which is constrained by its environment, so people will flourish and reach their potentials if their environment is good enough.

Rogers sees people as basically good or healthy or at the very least, not bad or ill. In other words, he sees mental health as the normal progression of life, and he sees

mental illness, criminality, antisocial behaviours and other human problems, as distortions of that natural tendency. The entire theory is built on a single -force of life which he called—the actualizing tendency. It can be defined as the built-in motivation that is present in every life-form to develop its potentials to the fullest extent possible. Rogers believed that all creatures strive to make the very best of their existence and are not just concerned with survival (Rogers, 1951 & Gladding, 1988).

Human problem is as a result of negative socialization, conditioned positive regards (Children accepted by parents when .good' & rejected when bad development of view: ought to be good', have to be good'; lose of touch with our true nature that is, real self' & actualizing tendency; aid development of an ideal self: whom we feel we should be).

Rogers described the self as a social product, developing out of interpersonal relationships and striving for consistency while the concept of actualizing tendency implies that there is an internal, biological force to develop one's capacities and talents to the fullest. The ideal self and real self-involve understanding the issues that arise from having an idea of what you wish you were as a person, and having that which does not match with whom you actually are as a person (incongruence). The ideal self is what a person believes that he should be, as well as imbibing what their core values should be. The real self is what is actually played out in life (Gladding, 1988& Corey, 1990.

The problem of depression can be seen as a product of the inability of the ideal and real selves to be at congruence and also as a result of negative environment (orsocialization) that an individual is exposed to. For a person to "grow', there is the need for an enabling environment that should provide them with genuineness (openness and

self-disclosure), acceptance (being seen with unconditional positive regard), and empathy (being listened to and understood). Without these, relationships and healthy personalities will not develop as they should, just as a tree will not grow without sunlight and water (McLeod, 2007). In the humanistic and reflective theory of Carl Rogers (1963), he suggested that people should use therapeutic skills of empathy to understand a one's needs and feelings. People should employ empathy to understand a one's needs and or feelings and reflect back on what they are feeling in order to help them grow in awareness and understanding.

2.7.3 Oltmannsand Emery Biological Theory of Depression

Biologica1 factors are influential in the regulation of mood. The theory maintains that genetic factors arc somehow involved in unipolar and bipolar disorders i.e. hormonal abnormalities are regularly associated with depression and that depression is associated with abnormalities in the activation of the specific regions of the brain (Oltmanns& Emery, 2007). According to these theorists, the depression that triggers suicide runs in families. This means that mood disorders are more common among the biological relatives of people who are depressed than they are among the general population. First degree relatives (siblings, parents, and children) of patients with mood disorders should be more vulnerable to the disorder because they share 50 percent of their genes with an affected individual.

Several twin studies of mood disorder have reported higher concordance rates among monozygotic (MZ) than among dizygotic (DZ) twins (Bici-ut ci al., MeGuffin et al., 2003 in Oltmanns& Emery, 2007). Research evidence shows thatif one fraternal twin suffers a major depression, there is a 20 percent chance that atsome point, the other will

too. Yet the rate for identical twins is closer to 50 percent. This comparison that shows a genetic linkage to depression (Tsuang&Faraone, 1990; Kendler, 1993; McGuffin, 2006). One classic study used national twin and psychiatric registers in Denmark to identify 11 0 pairs of same—sex twinsin which at least one member was diagnosed of having a mood disorder. The concordance rates for bipolar disorders in MZ and DY. twins were .69 and 19respectively. For unipolar disorders, concordance rates for MYandDZtwins were54 and 24 respectively. The fact that the concordance rates were significantly higher for MZ than for DZ indicates that genetic factors are involved in the transmission of both bipolar and unipolar mood disorders. Similar patterns of MY and DZ concordance have been reported subsequently from twin studies of mood disorder conducted in Sweden (Oltmanns& Emery, 2007) and in England (McGuffin, Katz, Watkins, &Rulherlbrd, 1996 in Oltmanns&Emery, 2007).

Twin studies also point to the fact that environmental factors influence the expression of a genetically determined vulnerability to depression. The best evidence for the influence of non-genetic factors is the concordance rates in MZ twins, which consistently fall short of 100 percent. If genes were the only factor, MZ twins would always be concordant. These findings suggest two compatible conclusions: (1) There is a genetic basis of depression, but (2) environmental factors also play a prominent role.

In all likelihood, genes influence mood disorders by acting on neurotransmitters; the biochemical that relay impulses from one neuron to another. In the 1950s, doctors noticed that drugs used to treat blood pressure and tuberculosis often had dramatic side effects on a patient's mood, sometimescausing depression, at other times euphoria.

Researchers then found that the samedrugs also increase the supply of norepineprine and scrotoning, neurotransmittersthat(regulate moods and emotions).

2.7.4 Davis and Moore'sSocial Stratification Theory

The Davis and Moore theory of social stratification clearly and simply outlined the functional view of social stratification as necessary to meet the needs of complex social systems. In other words, from a perspective that considers society as something like an organism, the theory argued that the organism has needs that must be met if it is to remain healthy. Social stratification is considered a mechanism that ensures that the need is met.

Social stratification is the relatively fixed, hierarchical arrangements in a given society by which groups have different access to resources, power, and perceived social worth. According to Haralambos& Holborn (2000), social stratification is a particular form of social inequality, referring to the presence of distinct social groups which are ranked one above the other in terms of factors such as prestige and wealth. Social Stratification has three major dimensions which are: Power, Wealth, and Prestige. The particular value system of a culture determines how power, wealth and prestige do interact to determine the placement of a person in the stratum.

Power - is the ability to control resources in one's own interest (that is the ability of people or groups to achieve their goals despite opposition from others).

Wealth - is the accumulation of material resources or access to the means of producing these resources (wealth includes property such as buildings, lands, farms, houses, factories and as well as other assets - Economic Situation).

Prestige - is the Social honour or respect (e.g. the regard which a person or status position is regarded by others).

The two major types of stratification systems are caste and class. In a class system social position is largely achieved, although it is also partly determined by the class into which a person is born (ascribed). People may move between social classes which form a continuum from bottom to top. Social classes are characterized by different lifestyles and life chances.

Achieved status is a social position that a person chooses or achieves on his or her own (this is an open- system which anyone can go into) while Ascribed Status is a social position that a person is born into (this is a closed system). In a caste system, social position is largely ascribed. Boundaries between castes are sharply defined and marriages are within the caste.

Social learningtheory put up the technique of social support whereby persons with wrongbehavioural pattern(s) will be exposed to new behavioural patterns which will be aided by demonstrations and role play by the therapy (Davidson & John, 1994). Social learning theory was based on and it simply promotes acting out behaviour to learn and refine old behavioural patterns. That is, rehearsing new and good behaviour to correct old and bad behaviours that are caused by wrong models or vicarious reinforcement.

Martins, Carlsm, &Bustist, (2007) opine that social stratification is based on four basic principles: Social stratification is a trait of society, not simply a reflection of individual differences; Social stratification carries over from generation to generation; Social stratification is universal but variable; and Social stratification involves not just inequality but beliefs as well. Western societies organized stratification into three main

layers: upper class, middle class and lower class. Each of these classes can be sub-grouped into smaller classes (e.g. occupation, level of education, property ownership among others) and this pattern is what obtains in the Nigerian society.

2.7.5 **Cohen's Social Support Theory**

This theory is based on the idea that social support, along with other factors (i.e. socio-economic status, mental health, stress, and personality), has a significant impact on health. (Cohen & Wills, 1985) Emotional support is that which gives a person a feeling of being loved and cared for, thereby enhancing feelings of self-worth. Informational support provides feedback and assistance in problem solving by offering written or verbal information. Tangible or instrumental support is direct assistance provided to a person (Cohen, 1988).

Social support is defined as the "social resources that persons perceive to be available or that are actually provided to them by non-professionals in the context of both formal support groups and informal helping relations". Concerning health behaviours, there is debate as to which type of support is more influential. Cohen and Wills (1985) found perceived social support to be more significant in relation to health behaviours than actual social support. Their rationale for this is that if the resources of support are not perceived by an individual, they cannot be utilized. Cohen's theory is supported by a number of studies that found perceived social support was more influential than actual social support in health and well-being.

2.8 **Review ofEmpirical Studies**

In a randomized controlledtrial et al (as cited in Ali, Ali, Azam and Khuwaja, 2010) found significant improvement in women with HIV/AIDS who were suffering

from anxiety and depression after eight weekly counselling sessions based on cognitive behavioural therapy by minimally health workers had substantially reduced the rate of depression in HIV/AIDS depressed women compared with those receiving routine care. Ali et al (2010) conducted a similar study with HIV/AIDS infected women and observed that after 4 and 8 weeks there was a significant effect in the mean scores on anxiety and depression between the intervention and control group at post-test. This implies that the counselled group fared better than the control group. However, no significant differences were found for variables such as age, level of education and marital status utilizing cognitive restructuring in a study to reduce depression, anxiety and stress among HIV/AIDS infected women, Mosalanejad, Koolae and Jamali (2012) discovered that there was significant reduction in the psychological distress (i.e. stress, anxiety and depression) of participants in the experiment group when their pre-and post-counselling mean scores were compared. It was also found that at pre-test, there were no significant differences between the mean scores on stress, anxiety and depression of the experimental and control groups. Similarly, when their (experimental and control groups) post-test means scores on the same psychological variables were compared, no significant differences were found.

Cognitive restructuring, says the American Psychological Association, means "changing the way you think" (Shobola, 2011; Yahaya, 2006, Salman, 2011). Studies revealed that cognitive restructuring has been found to be very effective in the treatment of all forms of antisocial behaviours. Aderantiand Hassan (2011) report that cognitive restructuring is effective in the treatment of rebelliousness and disorderliness while Obalowo (2004) established its effectiveness in treating stealing.Findings from

Aderantiand Hassan (2011) show that cognitive restructuring is more effective on females than on males' rebelliousness and also effective on the rebelliousness of inmates from medium socio-economic backgrounds than the inmates from both low and high socio-economic backgrounds. According to Aderanti and Hassan (2011), the effectiveness of cognitive restructuring in treating rebelliousness is not a surprise, because cognitive factors play an important and well documented role in delinquent behaviour since the way people think has a controlling effect on their actions.

Cognitive restructuring is effective in the treatment of anger (a major construct in conduct disorder). It was exposed to high- anger drivers and it helped to keep them calm and collected. Also, cognitive restructuring has shown great beneficence in the pre-release preparations of criminals, reducing recidivism and depressed persons.

Benedict (2004) compared depression rates of 429 gay and bisexual men divided into three groups: asymptomatic HIV-positive men (n 156), symptomatic HIV-positive men (n = 156), and a comparison group of HIV-negative men (n 117). Item analysis between the groups found no significant differences in most of the items addressing depressed affect. Among the items addressing physical symptoms directly associated with HIV, for example, appetite, body weight and nausea, and those addressing items indirectly associated with HIV illness, there were significant differences between groups, the greatest being between symptomatic HIV-positive men and HIV-negative controls.

The Beck Depression Inventory (BDI; Beck, 1961) and the Center for Epidemiologic Studies Depression Scale. Principal component factor analysis of depression symptoms on the two depression scales was conducted to isolate somatic depression items from non-somatic depression items. When individuals were retested

using the “cognitive affective” scales of the measures, that is, the somatic items were excluded, only 14% of individuals were considered depressed using the BDI and 21% were categorized as depressed on the CES-D. There was very little concordance between the measures (50%).

Although the rate of depressive illness and symptoms are high in people living with HIV/AIDS, the causes of depression are not clear. Social, psychological and biological factors have all been suggested as possible causes. As stated by Iwere, ,(2000) it remains to be determined “whether depression puts HIV infected persons at greater risk for disease progression, or whether changes in disease may be associated with increased risk of depression.” Populations at highest risk for HIV infection such as men who have sex with men and people who use injection drugs, have a high prevalence of primary or pre-existing mood disorders. Thus, elevated rates of depression observed after HIV infection may reflect new episodes of pre-existing disorders rather than new-onset depression

Ezedum, (1999) used meta-analytic techniques to demonstrate that HIV infection is associated with a greater risk for major depressive disorder. The frequency of major depressive disorder was nearly two times higher in HIV-positive individuals than in HIV-negative individuals (OR=1.99, 95% CI 1.32-3.00). In the meta-analysis conducted by Collin, Holma ,Freeman and Patel (2006), rates of depression were not related to HIV disease stage. Kemp, (1995) review concurs with this stating that in cross-sectional studies, immunologic and virologic markers of HIV progression are not systematically related to rates of depression. In a cohort of 120 Brazilian women living with HIV infection, however, Adetunji, (2009) found that the prevalence of major depressive

episodes as measured by the SCID, DSM-IV (American Psychiatric Association, 2000), Hamilton Depression Scale (Hamilton, 1960) and the Beck Depression Inventory (Beck et al., 1961) was high at 25.8%, and women with AIDS-related symptoms were more often depressed than were those who had never presented such symptoms (p=0.002). Adetunji(2009) assessed 82 HIV-positive men who have sex with men from the Coping in Health and Illness Project on measures of depression and social support. Men below the median on depressive symptoms as measured by a modified version of the Hamilton Depression Rating Scale (Hamilton, 1960) had a 39% higher probability of being free of AIDS compared with those above the median at the time of measurement. A trend was observed of depression influencing AIDS progression, although this trend was not statistically significant.

Some large cohort studies have found an association between chronic depression and mortality while others have found depression to be unrelated to HIV disease progression leavings significant equipoise in the literature. The Women's Interagency HIV Study followed 1716 urban women, 40% of whom reported a history of substance use, over a 7-year period measuring depression with the CES-D. About one third of participants reported depressive symptoms CES-D scores16 at 75% or more of their visits, and nearly half did so at their last study visit. Chronic depressive symptoms predicted mortality. Thirteen percent died from AIDS-related causes, compared with 6% or 7% of women with minimal or intermittent depressive symptoms, respectively.

Nwachukwu (2007) linked depressive symptoms as measured by the CES-D to CD4 lymphocyte, a measure of immune functioning, decline in a longitudinal, multi-centre AIDS cohort study of 330 gay and bisexual men with HIV. At baseline, 19.7% of

the men were identified as depressed and 16.1% were identified as affectively depressed. For these groups, CD4 lymphocytes declined 38%, and 34% faster than non-depressed participants, respectively. However in the analysis, early AIDS diagnosis and mortality appeared to be related to depression, differences were not significant.

UNAIDS (2006) also investigated depression and AIDS progression in 1809 gay and bisexual men as part of the eight-year multi-centre AIDS cohort study (MACS). At baseline, 21.3% of participants were found to be depressed (CES-D score over 16), and those reporting HIV symptoms and having a lower CD4 count were more likely to be depressed UNAIDS (2006). The survival curve indicated that within 36 to 48 months, a higher proportion of those who were not depressed remained AIDS free, but this was not significant. Depression was found to be unrelated to a number of HIV health outcomes, including time until AIDS diagnosis, time until death, and CD4 count over the course of the study.

This study employed the use of psychological treatment and counselling interventions such as cognitive restructuring and social support technique in managing depression among HIV/AIDS infected women.

2.9 Summary of Literature Review

In the chapter, the researcher reviewed literature on conceptual framework, theoretical and empirical literature concerning the study. In the foregoing literature on the effect of cognitive restructuring and social support techniques on depressive symptoms among HIV/AIDS infected women in Kaduna State, attempts were made to review the concept of depression, its types, causes and theories. The concept of HIV/AIDS, causes and prevention were also reviewed as well as social support and cognitive restructuring

treatment packages thatwill be utilised for the study. The research also investigated the effectiveness of specific psychological and counselling techniques in helping women with HIV/AIDS challenges to manage psychological distress (depression) associated with the disease. In this study, the researcher adopted research instrument designed by Aaron Beck, that is Beck Depression Inventory, to measure the effectiveness of selected psychological and counselling techniquesin managing depressionassociated with HIV/AIDS. The present research will investigatethe psychological and counselling techniques in assisting women to cope with challenges that come with HIV/AIDS rather than merely studying relationship between depression associated with HIV/AIDS. The present study goes beyond investigating mere coping style or methods of suppressing depression symptoms, but seeks to provide insight into ways of managing such challenges so as to assist women infected with HIV/AIDS and is depressed to live a well-adjusted life.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter presents information on research design, the population, sample and sampling technique. Other issues discussed include a description of the research instruments that was used for the identification of depression among HIV/AIDS women, procedures for data collection and analysis.

3.2 Research Design

The research design for this study was quasi-experimental, involving pre-test, post-test design. Radhakrishna (2002) asserts that the quasi- experimental design involves the manipulation of one or more independent variables but there is no random assignment to conditions. Therefore, women with HIV/AIDS were notrandomly assigned but purposively selected to experimental groups. The graphic representation of quasi-experimental design is as follows.

Figure 1: Pre- test, Post-test Design

$G_1O_1 \longrightarrow X \longrightarrow O_2$

$G_2\ O^3 \longrightarrow X \longrightarrow O_4$

Where G_1 = Experimental group (Cognitive Restructuring)

G_2 = Experimental group (social support)

O_1= Pre-test (Cognitive Restructuring)

X = Treatment

O_2 = Post- test (Cognitive Restructuring)

O_3 = Pre-test (social support)

O_4= Post- test (social support)

The researcherassigned subjects for the study into two groups for treatment. The treatment groups was made up of cognitive restructuring and social support. The subjects were pre-tested using the BDI to identify those with moderate depression, both treatments were given and subjects were again post-tested with same BDI to in find out if the treatments had effect in managing their depression.

3.3 Control of Extraneous Variables

In order to isolate the effect of the independent variable on the dependent variable, studies must rule out alternative explanations. The term extraneous variable is used to refer to any other factor that might compound the treatment effect on the dependent variable. The present study therefore, utilized the following ways to control extraneous variables.

i. Interaction effect

This refers to the interaction of the treatment subject among of themselves, to control this variable, the treatment groups were divided into different hospital clinic days;the women with HIV/AIDS that were enlisted in the study from BarauDikkoTeaching Hospital and DrGwamnaAwan general hospital were divided into Tuesday's clinic consultation and Thursday's clinic consultation.

Women with HIV/AIDS schedule for Tuesday's clinic consultation went through cognitive restructuring technique, while Thursday's clinic consultation were exposed to social support technique.

ii. Absenteeism

Absenteeism refers to the situation when any members of treatment group refused to show up for the treatment programmes. This was over come by giving

home assignment to subject after each treatment session. The researcher gave highlight of what is to be learnt in subsequent treatmentsession, which served as motivation in anticipation of the nexttreatment session.

iii. Instrumentation Bias

This refers to any change in the research instrument that may affect subject scores after different administration of the instrument. The items in every section of the, questionnaire were constructed by the original developer (Aaron Beck) to includesocially desirable, alternatives/or options for which subjects responded to.

iv. Selection Bias

To control the bias that is likely to result from differential selection of subjects into experimental groups, the researcherbased the selection of subject on pre-test scores only for the subjects to be qualified to participate in the research experiment.

v. Language Effect

Both literate and illiterate women with HIV/AIDS were selected for the study. In the case of the literate women, the researcher adopted one of the widely used self-reportinventory ondepression by Aaron Beck. Language effect of the instrument has been taken care of by the original developer of the instrument , while research assistance were used to assist women that are illiterate in interpreting the instrument in the language they understood thisenabled them answer to the questions contain in the instrument.

3.4 Population

The population of the study consists of all women with HIV/AIDS receiving treatment in the government health institutions (hospitals)inKaduna State. The estimated population of women with HIV/AIDS that were experiencing depression was 350 in Kaduna State. **(**National Bureau of Statistics (NBC) Statistical Report on Women and Men in Nigeria @dailypost.ng ;.2015).

3.5 Samples and Sampling Techniques

The sample size of the study was40women with HIV/AIDS. Each of the twogroups had20 members. Radhakrishna (2002) asserts that better results are achieved in smaller groups and that there will be effective concentration and understanding of the treatment procedures by group members. Two Government Health Institutions was selected using simple random sampling. The subjects for the study (40 womenwith HIV/AIDS, was selected using purposive sampling. Thus, women with HIV/AIDSwho obtained average scores on depression was purposively selected for the study.

Women with HIV/AIDSfrom the two selected hospitals wereoffered treatment(20 for cognitive restructuring technique and 20 for social support technique). The selection of infected women with depression was done using Beck Depression which was completed by the women with HIV/AIDS. The scores obtainedby the women with HIV/AIDs onthe two pre-test and post-treatmentwas used todeterminedepression among women with HIV/AIDS. The higher the score of subjects on the self-reporting scales, the higher the level of depression of the women with HIV/AIDS.

Criteria for Selecting Subjects for Treatment

Subjects whose scores on BDI fell within the range of 21-30 were enlisted for this research (BDI Inventory, 2012, see Appendix B for the instrument).

350 women with HIV/AIDS were selected out of 9,466 HIV/AIDS infected women from the 2 health centres. The 350 were pre-tested and analysed for identification with depression. 40 with depression was drawn from the identified group for the study

Table 3.5.1: Showing population of HIV/AIDs patients in the two (2) selected Health Centres in Kaduna State.

S/No	Health Centre	Total No. of HIV/AIDs Persons	No. of Women with HIV/AIDs	No. of Women with Depression	No. of Infected Women that participated in the study
1.	Barau Dikko Teaching Hospital	8,188	6,364	155	20
2.	Dr GwamnaAwan General Hospital	4,422	3,102	195	20
	Cumulative Total	12,610	9,466	350	40

Source: Register of HIV/AIDs Infected Persons Accessing Treatment in the two (2) Health Centre from 2^{nd} – 9^{th} sept.,2016.

3.6 Instrumentation

To collect data for the study, the researcher adopted of Beck Depression Inventory (2012). The Beck Depression Inventory (BDI) is a 21 item test. It is one of the most widely used scales for assessing intensity of depression and each of its items describes a specific behaviour manifestation of depression. Beck Depression Inventory Scale was used to assess moderate Depression in this study.

The classification of depression scores is as follows:

Total score	Levels of Depression
1-10	These ups and downs are considered
11-16	Mild mood disturbance
17-20	Borderline clinical depression
21-30	Moderate depression
31-40	Severe depression
Over 40	Extreme depression

Source :BDI Inventory, 2012.

The researcher selected subjects who obtained scores between 21 and 30 on BDI inventory for the research. Therefore, patients whose scores can be described as 'without depression' and 'severe depression' were not legible to participate in the study. Those without depression do not require psychological treatment, while those with severe depression are for the psychiatrist, at the social welfare units of the hospitals (See appendix A for the instrument).

3.6.1 Validity of the Instrument

The validity of the BDI instrument is of high content validity for all items in the instruments have been proven toassess depression. The instrument was developed and used based on recommendation of America Psychiatrists Association (2013) have reported both high content and construct validity of the instruments.

The instrument was presented to the researcher's supervisors and four(4) experts in the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria for face and content validity. They suggested the researcher adopt the instrument as it is since it is a standard instrument any alteration may affect the result.

3.6.2 Reliability of the Instrument

A pilot study was carried out to ensure the reliability of the instrument for this study. To achieve this, the Beck Depression Inventory(BDI) was subjected to a test-retest exercise. The data collected was subjected to computer analysis using the statistical package for social sciences (SPSS) for the results.

The instrument was administered to 40 women respondents fromYusuf Dantsoho General Hospital Kaduna that was not used for the study but shared similar characteristics in all respects. Reliability coefficient method was used to test the reliability of the instrument. The reliability coefficient method was analysed using PPMC test retest which yielded a reliability coefficient of 0.89 (see appendix C for the print out of the test reliability of the instrument).

According to Spiegel (1992), Stevens (1986) and Olayiwola(2010), an instrument is considered reliable if it lies between 0 and 1, and that the closer the calculated reliability coefficient is to zero, the less reliable is the instrument, and the closer the calculated reliability coefficient is to 1, the more reliable is the instrument. This therefore confirms the reliability of the data collection instrument used as fit for the main work.

3.7 Procedure for Data Collection

The researcher obtained a letter of introduction from the Department of EducationalPsychology and Counselling of the Ahmadu Bello University, Zaria that enabled theresearcher receive approval for the data collection from the management of the selected hospitalsselected in clustered for fair representation inKaduna state.BarauDikkoGeneralHospital,and Dr GwamnaAwan General Hospital before the

commencement of the experimental study. The instruments was administered and retrieved on the same day.

Training of Assistants:

The researcher seeks the help of trained research assistance from the centres to help in administering the instrument to the respondents. The purpose was to reduce difficulties normally experienced by researchers during administration of instrument and data collection. The researcher established rapport with the women before administering the instrument to them. The research assistance were the health personneland their union members in the centres. The research assistance was briefed and was given short period of orientation on how to help interpret or translate the instrument to the illiterate respondents before embarking or commencing the experiment. The researcher was present and also participated in the translation of the instrument.

Treatment Procedure

There werethree phases of treatment, they were pre-treatment phase, treatment phase and post-treatment. When women with HIV/AIDS for the study were identified, the women were grouped for treatment. In order to reduce the interaction of the various groups of treatment phase were divided into three categories.

(i) **Pre- Treatment Phase**

This formed the introductory stage that is meeting of the researcher with the women with HIV/AIDS. During the introductory session, the researcher seek the consent of the women by asking them to sign consent form to express their willingness to voluntarily participant in the study. The research then administeredthe research instrument to both literate and illiterate respondents with

the assistance of the research assistance, especially in the translation of the instrument to the illiterate respondents which enabled the researcher to obtain their pre-test data.

(ii) **Treatment Phase**

The participants were given treatment in cognitive restructuring and treatment package using methods like coping skills, assessments, relaxation, challenging certain thoughts, thought stopping, Homework, projects. While treatment was given in social support package using training in communication skills on how to gain social support from family members, friends and so on, homework, assessment, and projects.

The First treatment group (women assessing treatment on Tuesdays) went through cognitive restructuring technique, while the second treatment group (those assessing treatment Thursdays)l received social support technique as psychological treatment. Each of the two treatment groups were exposed to (8) weeks of psychological treatment intervention.

(iii) **Post Treatment Phase**

This is the final phase of the psychological intervention. After 8 weeks of psychological intervention, the BDI instrument was re-administered to the two groups with the view to collecting post-test data to determine the effectiveness of psychological treatment intervention in helping women with HIV/AIDS manage depression associated with the disease (See appendix A) for the detailed package of the treatment.

3.8 Procedure for Data Analysis

This study made use of statistical tools to analyse and interpret the data collected. Descriptive statistics such as frequency count, percentages, mean scores and standard deviation was used in analysing demographic data of the subjects to ascertain their personal characteristics and for answering the research questions. For the purpose of hypotheses testing, the following statistical tools were employed. Paired samples t-test was employed in testing hypotheses 1,2,4 and 7. This is to ascertain differences between pre and post test scores this is so because both the samples are in the same group.

Hypothesis 3 was tested withindependent sample t-test because the samples are from different groups and also in order to compare the effects of the experimental groups.

Hypotheses5,6,8 and 9 was tested with Analysis of Variance (ANOVA). This is to ascertain differences among more than two variables.

All null hypotheses were tested at 0.05 level of confidence of (95%). Best (2002a)suggested that in educational circles, the 5%percent (.0.05) level of significance is often used as a standard for rejection or retentions.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with analyses of data collected from the field. Descriptive and inferential statistics were used to test null hypotheses. They are mean, standard deviation, t-test and Analysis of Variance. The hypotheses were tested at 0.05 level of significance.

4.2 Demographic Data

Table 4.1 Educational Level of the Respondents

EDU LEVEL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PRIMARY	4	11.4	11.4	11.4
	SECONDARY	18	51.4	51.4	62.9
	TERTIARY	13	37.1	37.1	100.0
	Total	35	100.0	100.0	

Table 4.1 above shows that 4 of the respondents which represents 11.4% were primary school leavers, those who had secondary education were 18 which stands for 51.4% and those with tertiary education were 35 which constitutes 37% respectively.

Table 4.2 Income level of the respondents

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		0	0	0	0
	MIDDLE INCOME	13	37.1	37.1	100.0
	LOW INCOME	22	62.9	62.9	100.0
	Total	35	100.0	100.0	

Table 4.2 shows that none of the respondents were from high socioeconomic background, 13 of the respondents standing for 37.1% were from middle income level while Low income level were 22 which represents 62.9%

Table 4.3 Marital Status of the Respondents

MARITAL SATUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MARRIED	25	71.4	71.4	71.4
	SINGLE	3	8.6	8.6	80.0
	DIVORCED	6	17.1	17.1	97.1
	WIDOWED	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

Table 4.3 shows 25 of the respondents representing 71.4% were married, single were 3 which representing 8.6%, 6 of the respondents standing for 17.1% were divorced and finally, 1 of the respondents standing for 2.9% were widowed.

Table 4.4 levels of depression of Respondents

Levels of depression	**No.**	**Percent**
SEVERE	199	57
MODERATE	69	20
LOW	82	23
Total	350	100

4.3 Hypotheses Testing

Nine hypotheses were formulated in this research and were tested at 0.05 level of significance.

Hypothesis 1: There is no significant difference between pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring technique. Result of analysis is presented in Table 4.5

Table 4.5 Paired sample t-test comparing pre-test and post-treatment level of depression based on cognitive restructuring technique.

Variable	N	Mean	Df	MD	t-test	p-value
Pre-test	20	37.3428	18	17.3715	13.679	.000
Post-treatment	20	19.9714				

Table 4.5: The result shows there is significant difference between pre-test and post- test level of depression among HIV\AIDS infected women based on cognitive restructuring technique with (t=13.679, p = .000). Their mean scores on depression are 37.3428 for pre-test and 19.9714 for post-treatment among HIV/AIDs infected women treated with cognitive restructuring technique. This shows that the treatment (cognitive restructuring) has effect in managing depression among HIV/AIDS infected women. Thus, the null hypothesis that says there is no significant difference between pre-testand post-test mean scores of cognitive restructuring in managing depression among HIV/AIDS infected women is hereby rejected.

Hypothesis 2: There is no significant difference between pre-test and post-test mean scores of depression among HIV/AIDS infected women exposed to social support technique. Result of analysis is presented in Table 4.6

Table 4.6 Paired sample t-test comparing pre-test and post-treatment levels of depression based on social support technique.

Variable	N	Mean	Df	MD	t-test	p-value
Pre-test	20	29.3478	18	15.1644	16.128	.000
Post-treatment	20	14.1834				

Table 4.6: The result shows that there is significant difference between pre-test and post-test level of depression among HIV\AIDS infected women based on social support technique with (t=16.128, p = .000). Their mean scores on depression are 29.3478 and 14.1834. This implies that social support has effect in managing depression among HIV/AIDs infected women.

Thus, the null hypothesis that says there is no significant difference between pre-test and post-test mean scores of social support technique in managing depression among HIV/AIDS infected women in Kaduna state is hereby rejected.

Hypothesis 3: There is no significant differential effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna state. Result of analysis is presented in Table 4.7.

Table 4.7 Independent Sample t-test comparing the effect of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna state. This is because the samples are from different groups.

Variable	**N**	**Mean**	**df**	**MD**	**t-test**	**p-value**
Cognitive restructuring	20	25.00	18	-4.909	-1.603	0.074
Social support	20	29.90				

Table 4.7: Result shows there is no significant differential effects of cognitive restructuring and social support technique of depression among HIV\AIDS infected women with (t = -1.603, p =0 .074).The mean score for cognitive restructuring technique is 25.00 and mean for social support technique is 29.90. This means that bothcognitive restructuring and social support techniques were effective in managing depression among HIV/AIDS infected women.

Thus, the null hypothesis that says, there is no significant differential effect of cognitive restructuring and social support techniques in managing depression among HIV/AIDs infected women in Kaduna State is hereby retained.

Hypothesis 4: There is no significant difference in the mean scores of depression among HIV\AIDS infected women exposed to cognitive restructuring technique based on levels of income. Result of analysis is presented in Table 4.8.

Table 4.8 t- test of post-treatment levels of depression based on levels of income of HIV/AIDS infected women exposed to cognitive restructuring.t-test was used in order to ascertain difference of the two levels of income.

Variable	**N**	**Mean**	**Df**	**MD**	**t**	**p-value**
INCOME						
Middle income	13	39.7	31	3.86	.707	0.062
Low income	22	35.9				

Table 4.8 shows that, there is no significant difference of depression between middle income and low income HIV/AIDS infected women with (t=.707,p=0.062). Mean score of 39.7 for Middle income and 35.9 for Low income. Thus, the null hypothesis that says there is no significant difference in the mean scores of cognitive restructuring technique in managing depression based on levels of income of HIV/AIDS infected women is thereby retained**.**

Hypothesis 5: There is no significant difference in the mean scores of depression among HIV\AIDS infected women exposed to cognitive restructuring techniquebased on their levels ofmarital status. Result of analysis is presented in Table 4.9.

Table 4.9ANOVA test of post-treatment levels of depression based on marital status of HIV/AIDS infected women exposed tocognitive restructuring

Variable	**N**	**Mean**	**SD**	**Df**	**F**	**p-value**
Married	25	35.04	15.75	2	1.190	.330
Single	3	36.66	16.74			
Divorced	6	43.66	12.73			
Widowed	1	59.00	15.49			

Table 4.9: Results shows that, there is no significant difference of depression based on marital status of HIV\AIDS infected women treated with cognitive restructuring technique with ($f = 1.190$, $p = .330$). The mean for married women is 35.04, 36.66 for single women, 43.66 for divorced and 59.00 for widowed respectively. Thus, the mean difference that exists among the married, single, divorced and widowed is not significant. Therefore, irrespective of marital status, the post treatment of cognitive restructuring is having the same effect. Thus, the null hypothesis that says thereno significant difference in the mean scores of cognitive restructuring technique in managing depression based on marital status of HIV/AIDS womenis thereby retained.

Hypothesis 6: There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to cognitive restructuring based on their educational level**.**Result of analysis is presented in Table 4.10

Table 4.10. ANOVA test of post-treatment level of depression based on educational level of HIV/AIDS exposed tocognitive restructuring. This is to ascertain differences among more than two variables,

Variable	**N**	**Mean**	**SD**	**Df**	**F**	**p-value**
Primary	4	55.50	6.65	2	6.501	.004
Secondary	18	30.50	11.71			
Tertiary	13	41.21	16.67			

Table 4.10: Result above shows there is significant difference of depression based on educational levels of HIV\AIDS infected women treated with cognitive restructuring technique with (f = 6.501, p = .004). The mean for primary school education is 55.50, 30.50 for secondary education and 41.21 for tertiary education. This could be observed from the mean difference between primary, secondary and tertiary level respectively as confirmed by the p-value of .004. For a detailed comparison of the difference that exists among the level of education, post Hoc test was run result is as shown below:

Post Hoc Test comparing different educational levels exposed tocognitive restructuring

Multiple Comparisons

Dependent Variable: DEPRESSION

LSD

		Mean Difference			95% Confidence Interval	
(I) EDU level	(J) EDU level	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Primary	Secondary	25.00000*	7.44435	.002	9.8364	40.1636
	Tertiary	14.26923	7.70024	.073	-1.4156	29.9541
Secondary	Primary	-25.00000*	7.44435	.002	-40.1636	-9.8364
	Tertiary	-10.73077*	4.90179	.036	-20.7154	-.7462
Tertiary	Primary	-14.26923	7.70024	.073	-29.9541	1.4156
	Secondary	10.73077*	4.90179	.036	.7462	20.7154

*. The mean difference is significant at the 0.05 level.

From the post Hoc multiple comparisons, primary and secondary HIV/AIDS infected women significantly differ in their depression level with mean of 55.50 for primary school education and mean of 30.50 for those with secondary school education confirmed by p=.002, also secondary and tertiary there is significant difference in their depression level with p= .036. On the whole, it indicates that the treatment is more effective for those women with secondary education with the least mean of 30.50 followed by tertiary with the mean of 41.21, then finally the result shows that the treatment is less effective for primary school leavers HIV/ AIDS infected women. The negative signs in the post Hoc Multiple Comparisons is as a result of the mean differences, subtracting the upper values from the lower value will give a negative sign. Thus, the hypothesis that says There is no significant difference in the mean scores of cognitive restructuring technique in managing depression based on educational level of HIV/ AIDS infected women is hereby by rejected.

Hypothesis 7: There is no significant difference in the mean scores of depression among HIV\AIDS infected women exposed to social support techniquebased on levels of income. Result of analysis is presented in Table 4.11.

Table 4.11 t- test of post-treatment levels of depression based onlevel of income of HIV/AIDS infected women exposed to social support technique. T-test was used in order to ascertain differences between two variables.

Variable	**N**	**Mean**	**Df**	**MD**	**T**	**p**
Income						
Middle	13	20.61	31	4.19	.371	0.072
Low	22	16.42				

Table 4.11:Result from the table above shows that, there is no significant difference of depression between middle and low income HIV\AIDS infected women treated with social support technique with($t = .707$, $p = 0.072$). Themean of 19.59 for low income and 20.61 for middle income.

This means irrespective of level of income of HIV/AIDS women, social support technique has equal effect. Thus, the null hypothesis that says there is no significant difference in the mean scores of social support technique in managing depression based on level of income among HIV/ AIDS infected women isthereby retained**.**

Hypothesis 8: There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to social support techniquebased on their levels of marital status. Result of analysis is presented in Table 4.12.

Table 4.12.ANOVA test of post-treatment level of depression based on marital status of HIV/AIDS women exposed to social support technique.

Variable	**N**	**Mean**	**SD**	**Df**	**f**	**p-value**
Married	25	18.52	7.92	3	.143	.192
Single	3	19.66	8.08			
Divorced	6	24.33	5.24			
Widowed	1	31.00	7.79			

Table 4.12: Results shows that, there is no significant difference of depression based on the marital status of HIV\AIDS infected women treated with social support technique with (f = .143, p = .192). The mean is 18.52 for married women, 19.66 for single women, 24.33 for divorced and 31.00 for widowed respectively.

Although, the means for marital status are different but the difference is not significant as confirmed by the p-value of .192. This means irrespective of marital status, the post treatment of social support techniquehas equal effect. Thus, the hypothesis that says there is no significant difference in the mean scores of social support technique in managing depressionbased on marital status of HIV/AIDS infected women hereby retained.

Hypothesis 9: There is no significant difference in the mean scores of depression among HIV/AIDS infected women exposed to social support techniquebased on their educational level. Result of analysis is presented in Table 4.13.

Table 4.13.ANOVA test of post-treatment levels of depression based on educational level exposed to social support technique.

Variable	**N**	**Mean**	**SD**	**Df**	**F**	**p-value**
Primary	4	28.75	3.30	2	5.02	.013
Secondary	18	17.00	5.85	1		
Tertiary	13	21.38	8.93			

Table 4.13: Result shows that, there is significant difference of depression based on educational levels of HIV\AIDS infected women treated with social support technique with (f = 5.02, p = .013). Their mean is 28.75 for those with primary education, 17.00 for secondary and 21.38 for tertiary education. This could be observed from the mean difference between primary, secondary and tertiary level respectively as confirmed by the p-value of .013. For a detailed comparison of the difference that exists among the level of education, post Hoc test was run below:

Table 4.14: Post Hoc Test comparing different educational levels exposed to social support technique.

Multiple Comparisons

Dependent Variable:

LSD

		Mean			95% Confidence Interval	
(I) EDU Level	(J) EDU Level	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Primary	Secondary	11.75000*	3.87411	.005	3.8587	19.6413
	Tertiary	7.36538	4.00728	.075	-.7972	15.5280
Secondary	Primary	-11.75000*	3.87411	.005	-19.6413	-3.8587
	Tertiary	-4.38462	2.55094	.095	-9.5807	.8115
Tertiary	Primary	-7.36538	4.00728	.075	-15.5280	.7972
	Secondary	4.38462	2.55094	.095	-.8115	9.5807

*. The mean difference is significant at the 0.05 level.

From the post Hoc multiple comparisons, significant difference exist in the depression level of primary and secondary HIV/AIDS infected women with mean of 28.75 for primary school leavers and mean of 17.00 for those with secondary school education confirmed by p=.005, also secondary and tertiary significantly differ in their depression level with p= .095. The result equally portrays that the treatment is more effective for secondary school level with the least mean of depression of 17.00, followed by those who attended tertiary institution with the mean of 21.38, while the technique is less effective for primary school leavers infected with HIV/AIDS. Thus, the hypothesis that says there is no significant difference in the mean scores of social supporttechnique in managing depression based on educational level of HIV/ AIDS infected women is hereby by rejected.

4.4 Summary of Findings

Based on the hypotheses formulated and tested, the following were the finding of the study. The study reveals that:

1. Cognitive restructuring technique had effect on depression among HIV/AIDS infected women in Kaduna State (t= 13.679, p= .000).
2. Social support techniquehad effect on depression among HIV/AIDS infected women in Kaduna state (t= 16.128, p=.000).
3. Cognitive restructuring and social support techniques had differential effects on depression among HIV/AIDS infected women(t= -1.603, p=0.074).
4. Cognitive restructuring technique had effect on depression among middle and low income HIV/AIDS infected women(t=.707, p =0.062).
5. Cognitive restructuring technique had effect on depression among HIV/AIDS infected women of different marital status (f=1.190, p=.330).
6. Cognitive restructuring technique had no effect on depression based on educational level of HIV/AIDS(f=6.501, p= .004). The result shows that the treatment is more effective for those with secondary school education.
7. The research reveals that social support technique had effect on depression between middle and low incomeHIV/AIDS infected women (t= .371, p = 0.072).

8. Social support technique had effect on depression among HIV/AIDS infected women of different marital status(f=.143, p=.192).

9. Social support technique had no effect on depression based on educational level of HIV/AIDS infected women (f=5.02, p=.013) with the treatment more effective for those with secondary school education.

4.5 Discussions of Finsdings

Cognitive restructuring and depression:

This study found that there isthere is significant difference between pre-test and post-treatment level of depression among HIV/AIDS infected women exposed to cognitive restructuring technique. This study corroborates with Shobola (2011),Yahaya(2006) and Salman(2011). Studies revealed that cognitive restructuring has been found to be very effective in the treatment of all forms of antisocial behaviors. Aderanti& Hassan (2011) report that cognitive restructuring is effective in the treatment of rebelliousness and disorderliness while Obalowo (2004) established its effectiveness in treating stealing.

It also corroborates with Hassan (2011) Cognitive restructuring is effective in the treatment of anger (a major construct in conduct disorder). It was exposed to high- anger drivers and it helped to keep them calm and collected. Also, cognitive restructuring has shown great beneficence in the pre-release preparations of criminals, reducing recidivism and depressed persons. The purpose is to widen one's conscious perspective thus allows room for a change in perception.

Social Support and Depression:

The study also found there is significant difference between pre-test and post-treatment level of depression among HIV/AIDS infected women exposed social support. This study corroborates with researches that provide evidence that social support is associated with a decreased risk of mental and physical illness, as well as mortality (Seeman, 2000), and suggests that it positively affects cardiovascular, endocrine, and immune functioning (Seeman, 1996). It can also affect the way people cope with stress (Jackson, 2006), their adherence to medication, and their quality of life. For example, Strine and colleagues analyzed data from a state-based surveillance system that collected data on social support, health-related quality of life, and health behaviors and discovered that those who reported lower levels of social support had increased obesity, physical inactivity, alcohol consumption, and a higher prevalence of smoking. Although the exact means by which social support contributes to health and the factors that influence this relationship are not yet entirely understood (Wellmen and Worthy, 1990), these findings indicate that social support technique can affect and encourage engagement in positive health behaviors. Patient adherence may mediate the relationship between social support and health (Dunbar-Jacob &Schienk, 2001). Indeed, support from friends and family can promote patient adherence, as it buffers the stress associated with the illness, encourages optimism, reduces depression, and improves healthful behaviors (Wright, Clipp, & George,1998). In a recent meta-analysis, identified 122 studies published between 1948 and 2001 that correlated social support with patient medication adherence across multiple medical conditions. The study found that patients were over two times more likely to adhere if they had greater levels of social support; social support also had a greater effect

on adherence for patients that took more than one medication. Additionally, this investigation revealed that adherence was strongly and consistently associated with functional support (i.e., instrumental and emotional support) as compared to structural support (i.e., living arrangements and relationship status).

Cognitive Restructuring and Social Support:

The study found that there is no significant difference in the post treatment levels of depression among HIV/AIDS infected women exposed to cognitive restructuring and social support. An analogy could be drawn from the above two findings on cognitive restructuring and social support which both show significant effect on reducing depression level among HIV/AIDS infected women.

Cognitive Restructuring and Income Level of Depressed Individuals:

This study shows that there is no significant difference in the post treatment level of depression between low income and middle income HIV/AIDS infected women exposed with cognitive restructuring. The study corroborates with findings from Aderanti& Hassan (2011) show that cognitive restructuring and social support is effective on rebelliousness and also effective on the rebelliousness of inmates from all socio-economic backgrounds.

Cognitive Restructuring andMarital Status of Depressed Individuals:

This study shows that there is no significant difference in the post treatment level of depression on marital status of HIV/AIDS women exposed to cognitive restructuring. This study is supported by Aderanti and Hassan (2011), who found that the effectiveness of cognitive restructuring in treating depression irrespective of marital status because cognitive factors play an important and well documented role in delinquent behaviour.

Cognitive Restructuring and Educational Level of Depressed Individuals:

The result of the study shows there is significant difference in the post treatment level of depression based on educational level exposed tocognitive restructuring with the technique more effective for those women with secondary school education. The possible reason why the technique (cognitive restructuring) is more effective for those women with secondary school education is that those with primary education have low level of education and exposure to adopt to the technique effectively for adjustment in their depression. While those with tertiary education are well informed about the dangers and negative effect of the disease, thus perceiving it as a threat to their wellbeing and realizing their goals in life. This has caused the technique not to be more effective on them compared to those with secondary education who have moderate education level. In their own case, they employed the technique and derive the best out of it. Hence, their depression is within tolerable limit. This finding could be supported by drawing analogy from the study by Nwachukwu (2007) linked depressive symptoms as measured by the CES-D to CD4 lymphocyte, a measure of immune functioning, decline in a longitudinal, multi-centre AIDS cohort study of 330 gay and bisexual men with HIV. At baseline, 19.7% of the men were identified as depressed and 16.1% were identified as affectively depressed. For these groups, CD4 lymphocytes declined 38%, and 34% faster than non-depressed participants, respectively. However in the analysis, early AIDS diagnosis and mortality appeared to be related to depression, differences were significant based on educational level.

Social Support and Levels of Incomeof Depressed Individuals:

This research reveals that there is no significant difference in the post treatment level between low income and middle income HIV/AIDS infected women exposed to

social support with the mean of 19.59 for low income and 20.61for middle income, f= ratio= .138 and p-value = .713. This finding may be supported by drawing analogy from the study of Aderanti and Hassan (2011) show that cognitive restructuring and social support is effective on rebelliousness and also effective on the rebelliousness of inmates from all socio-economic backgrounds.

Social Support andMarital Statusof Depressed Individuals:

The study shows that there is no significant difference in the post treatment level of depressionon marital status of HIV/AIDS women exposed to social support with mean of 18.52 for married women, 19.66 for single women, 24.33 for divorced and 31.00 for widowed respectively with p=.192. The study is supported by Aderanti and Hassan (2011), who found that the effectiveness of social support in treating depression irrespective of marital status because cognitive factors play an important and well documented role in delinquent behaviour.

Social Support and Educational Level of Depressed Individuals:

The study reveals that there is significant difference in the post treatment level of depression based on educational level exposed to social support with p=.013.The possible reason why social support is more effective for those women with secondary school education is that those with primary education have low level of education and exposure to adopt the technique effectively for adjustment in their depression. While those with tertiary education are well informed about the dangers and negative effect of the disease, thus perceiving it as a threat to their wellbeing and in realizing their goals in life. This has caused the technique not to be more effective on them compared to those with secondary education who have moderate education level. In their own case, they employed the

technique and derive the best out of it. Hence, their depression is within tolerable limit.This finding could be supported by drawing analogy from the study by Nwachukwu (2007) linked depressive symptoms as measured by the CES-D to CD4 lymphocyte, a measure of immune functioning, decline in a longitudinal, multi-centre AIDS cohort study of 330 gay and bisexual men with HIV. At baseline, 19.7% of the men were identified as depressed and 16.1% were identified as affectively depressed. For these groups, CD4 lymphocytes declined 38%, and 34% faster than non-depressed participants, respectively. However in the analysis, early AIDS diagnosis and mortality appeared to be related to depression, differences were significant based on educational level.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter five represents the summary of the entire research work, the conclusion drawn from the study, recommendations made, as well as suggestions for further study are also presented.

5.2 Summary the Study

This study investigated effects of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women in Kaduna State.

The study was borne out of the observation and from available literatures that women infected with HIV/AIDS do suffer depression which is a psychological problem and which can be managed by the use of psychological/counselling interventions among which are cognitive restructuring and social support techniques. This study was guided by nine objectives which were transformed into research questions, hypotheses and basic assumptions to guide the study.

In chapter two, literature was reviewed based on the major variables of the study which includes concepts of HIV/AIDS, cognitive restructuring, social support, depression, depressive behaviour among others. Theoretical frame work was also reviewed which includes Beck cognitive theory of depression, cognitive restructuring techniques, humanistic theory, biological theory of depression and social stratification. Finally the chapter dealt with empirical studies and summary of literature review.

Chapter three of the research deals with research design which was quasi-experimental, involving pre-test, post-test. The population of the study consists of all women with HIV/AIDS receiving treatment in the government health institutions (hospitals) in Kaduna State and the estimated population of women with HIV/AIDS that were experiencing depression was 350 in Kaduna State. The sample size of the study was 40women with HIV/AIDS. Each of the twogroups had 20 members. Women with HIV/AIDS from two of the selected hospitals wereoffered treatment(20 for cognitive restructuring technique and 20 for social support technique). The selection of women living with HIV/AIDS with depression was done using Beck Depression which was filled by the women with HIV/AIDS.

In chapter four of the research, inferential statisticswere used to test the formulated hypotheses. They are t-test and ANOVA. The research has the following findings:

1- The study reveals that there is significant difference between pre-test and post-test mean scores of cognitive restructuring in managing depression among HIV/AIDS infected women in Kaduna state.

2- The study reveals that there is significant difference between pre-test and post-test mean scores of social support in managing depression among HIV/AIDS infected women in Kaduna state.

3- The study reveals that there is no significant differential effect of cognitive restructuring and social support techniques in managing depression among HIV/AIDS infected women.

4- This study shows that there is no significant difference in the mean scores of cognitive restructuring technique in managing depression between low income and middle income HIV/AIDS infected women.

5- The research reveals that there is no significant difference in the mean scores of cognitive restructuring technique in managing depression based on marital status of HIV/AIDS infected women exposed to social support technique.

6- The result of the study shows there is significant difference in the mean scores of cognitive restructuring technique in managing depression based on educational level of HIV/AIDS infected women.

7- The research reveals that there is no significant difference in the mean scores of social support technique in managing depression among HIV/AIDS infected women with different levels of income.

8- The study shows that there is no significant difference in the mean scores of social support technique in managing depression based on marital status of HIV/AIDS infected women.

9- The study reveals that there is significant difference in the mean scores of social support technique in managing depression based on educational level of HIV/AIDS infected women.

5.3 Contribution of the study to knowledge.

The study has contributed to the body of existing knowledge in the following ways:

1. The study shows that Cognitive restructuring technique is effective in managing depression among HIV/AIDS infected women in Kaduna state.

2. The study shows that Social support technique is effective in managingdepression among HIV/AIDS infected women in Kaduna State.
3. In comparing the two techniques, both cognitive restructuring and social support techniques are equally effective in managing depression among HIV/AIDS infected women.in Kaduna State.
4. The study shows that cognitive restructuring technique is equally effective in the treatment of depression among HIV/AIDS infected women of different income levels.
5. The study shows that depressed women with HIV/AIDS of different marital status can benefit equally from cognitive restructuring technique.
6. Comparing educational levels of HIV/AIDS infected women, cognitive restructuring technique is more effective with those with secondary education.
7. The study shows that social support technique is equally effective in the treatment of depression among HIV/AIDS infected women of different income levels.
8. The study shows that depressed women with HIV/AIDS of different marital status can benefit equally from social support technique.
9. Comparing educational level of HIV/AIDS infected women, social support technique is more effective for those with secondary education.

5.4 Conclusion

Based on the findings of this research, it was concluded that women infected with HIV/AIDS suffer depression and that psychological interventions is needed to help reduce their feeling of depression. Cognitive Restructuring and Social Support

Techniquesthat can assist in managing depression among HIV/AIDS infected women. It was also concluded that, there is significant difference ofcognitive restructuring technique between pre-test and post treatment levels of depression among HIV/AIDS infected women. There is significant effect between pre-test and post-treatment level of depression among HIV/AIDS infected women exposed to social support technique. The study also concluded that there is no significant differential effect in the post treatment levels of depression among HIV/AIDS infected women exposed to cognitive restructuring and social support techniques, also there is no significant difference in the post treatment levels of depression between low income and middle income HIV/AIDS infected women exposed with cognitive restructuring technique. This study further concluded that there is no significant difference in the post treatment levels of depression on marital status of HIV/AIDS women exposed to cognitive restructuringtechnique. The result of the study concludes that there is significant difference in the post treatment level of depression based on educational level exposed to cognitive restructuring technique.The research equally concluded that there is no significant difference in the post treatment levels of depression between low income and middle income HIV/AIDS infected women exposed to social support technique. The study concluded that there is no significant difference in the post treatment levels of depression on marital status of HIV/AIDS women exposed to social support technique. Finally, the study concluded that there is significant difference in the post treatment levels of depression based on educational level of HIV/AIDS infected women exposed to social support technique.

5.5 Recommendations

The following recommendations were made based on the findings and conclusions of this study. Based on the findings, the researcher recommended that:

1- Counselling psychologists in hospitals should employ cognitive restructuring technique and social support techniques in reducing depression among HIV/AIDS infected women.

2- Counsellors, Psychologists and Teachers in schools should employ the techniques when need be in managing depression among students and even staff, for they are found to be effective in managing depression of HIV/AIDS infected women.

3- Counsellors and psychologists should employ either or both techniques when need be, for they are found to be effective in managing depression level of HIV/AIDS infected women.

4- Psychologists and counsellors should employ cognitive restructuring technique and social support techniques irrespective of female patients' levels of income and marital status.

5- In employing cognitive restructuring and social support technique, Psychologists and counsellors should put into consideration theeducational level of patient as it is found more effective for those with secondary school education. Moreover, the techniques should be replicated by other researchers on patients with primary and tertiary levels of education in other geographical locations so as to help them minimize their depression problems.

6- Also, health personnel should be trained by Psychologists and counsellors on the useof cognitive restructuring and social support techniques in managing depression and as a result improve the wellbeing of HIV/AIDS infected women.

5.6 Educational Implication

The study was carried out with subjects with different educational levels, However, considering the fact that students may not always reveal their HIV/AIDs status, the researcher traced them to hospitals and applied the cognitive restructuring and social support techniques and found them effective in managing depression. This is proven because the demographic information of the HIV/AIDs infected women indicated that they might still be students of primary, secondary and tertiary institutions. Thus, educational psychologists, counsellors and teachers should employ the techniques in schools to help students battling with depression which could be as a result of HIV/AIDs infection. This could be achieved if students are identified as having depression during teaching and learning process, teachers can fish them out and apply the treatments for better adjustment and finding meaning in life. HIV\AIDS is found everywhere even in schools, there are HIV/AIDS testing /counselling centers in schools called use friendly centers , where students are encouraged to visit for HIV/AIDS testing /counselling.By and large, the techniques can be used in school setting with students of all levels of education as such the techniques can be included in the school curriculum as part of teaching / learning experience, because the techniques can also be used by teachers in schools not necessarily by professionals.

5.7 Suggestions for Further Studies

This study has enhanced expertise as more experience has been acquired. Based on the results of the study, the following areas of research are suggested:

1. The present study focused on HIV/AIDS infected women, similar studies could focus on other HIV/AIDS patients such as HIV/AIDS infected men and HIV/AIDS infected children.
2. Efficacy of cognitive restructuring and social support in management of depression among HIV/AIDS infected women in private and Federal health centres.
3. Efficacy of cognitive restructuring and social support in management of pre-retirement anxiety among secondary school teachers.
4. Efficacy of cognitive and social support techniques in managing depression among students and staffs in higher institution of learning.
5. Efficacy of cognitive restructuring and social support in management of depression among Diabetic patients.
6. Efficacy of cognitive restructuring and social support in management of pre-retirement anxiety among university lectures.
7. Efficacy of cognitive restructuring and social support in management of stress and anxiety among Police officers.
8. The study is limited to three Government health centres in Kaduna State . It is important to replicate this empirical study for a larger population. Similar studies could be carried out in other Local Government Areas in the State or other States.

REFERENCES

Aba, L. E. (2008). *Concept of Sexuality*, paper presented at the Workshops on Secondary Level Sensitization and Consultative Forum on Education Sector to HIV/AIDs and Adolescents Education, Makurdi, Benue State.

Aderanti, R. A., & Hassan, T. (2011).Differential Effectiveness of Cognitive Restructuring and Self-Management in the Treatment of Adolescents. *The Romanian Journal of Psychology, Psychotherapy and Neuroscience.*

Adetunji, T. (2009).Trends in Under-5 Mortality Rates and the HIV Epidemic. *Bulletin of the World Health*, 78 (10,1200-1206.

Ahmadu, T. (2007).*"Prevalence of Tuberculosis in Immuno Suspected Patients with HIV Virus Infection"* B.Sc. Project. Ahmadu Bello University, Zaria, Nigeria.

American Psychiatric Association (2013).*Diagnostic and Statistical Manual of Mental Disorders* (Fifth ed.). Arlington, V.A: American Psychiatric Publishing. P. 659.ISBN 978-0-89042-55-8.

Ashfield, J. (2010). Taking Care of Yourself and Your Family. *A Resource Book for Mental Health*. Australia: Peacock Publications.

Awake (2004).*When Will AIDs End?* November, 22, 2004(22).

Baba, M. M. & Omotara, B. A. (2001).The Source and Effect of Information on AIDs among Adolescents. *Journal of Health Education and Sport Science*, Vol. 5, 86-90.

Bankole, A. & Singh, S. (2004). *Risk and Protection Youth and HIV/AIDs in Sub-Saharan African*, New York: The Alan Gudmacher Institute.

Barnette, Tony and Gabriel, Regulema (2001). HIV/AIDs, A Critical health Development Issue. In: *The Unfinished Agenda. (Eds)*Per Pinstrup Andeson and RajulPandya – Lorch. International Food Policy Research institute, Washington, DC pp: 43-47.

Baron, R. A. &Kalsher, M. J. (1998).*Psychology from Science to Practice, U.S.A. Pearson Education.*Inc.

Baron, R.A. (2009). Psychology from Science to Practice U.S.A. Pearson Education. Inc.

Beck, A. T. (1976).*Depression: Causes and Treatment.* Philadelphia: University of Pennsylvania Press.

Beck, A. T. (1999).*Cognitive Therapy for Depression.* New York: Guilford.

Beck, A. T. (2004).*Cognitive Therapy and Cognitive Disorders.* New York: International University Press.

Benedict, H. T. (2004). *HIV/AIDs Perceptions on Partners Disclosure to Test the Counsellor*. 20 Vol. 1, 34 – 37.

Bernstein, D. A. & Nash, P. W. (2005).*Essentials of Psychology*. USA Hanghton Mifflin Company.

Bolger, N., Zuckerman, A., & Kessler, R. C. (2000).Invisible Support and Adjustment to Stress.*Journal of Personality and Social Psychology,* 79, 953 – 961.

Brown, S. L., Nesse, R. M., Vinokur, A. D., & Smith, D. M. (2003). Providing Social Support May be More Beneficial than Receiving it: Results from a Prospective Study of Mortality. *Psychological Science,* 14, 320 – 327.

Calson, N. R. &Heth, C. D. (2010).*Psychology, the Science of Behaviour*. Toronto: Pearson Canada Inc.

Cantor, M. H. (2007). Strain Among Caregivers: A Study of Experience in the United States. *The Gerantologist*23 (6), 597 – 604.

Chappell, N. L. (2000). Social Support and the Receipt of Home Care Services. *Gerontologist,* 25, 47 – 99.

Chen, X., & Silverstein, M. (2000).Intergenerational Social Support and the Psychological Well-being of Older Parents in China. *Research on Aging,* 22, 43 – 65.

Chou, K. L. (2004). Childlessness and Psychological Well-being in Chinese Older Adult. *International Journal of geriatric Psychiatry* 19 (449).

Chuckwesi, C. O. (2002). HIV/AIDs Crisis and the Impact on Children in the Developing Countries: The Case of Nigeria: *Nigerian Journal of Rural Sociology,* 4(1): 145 – 15.

Civil Society & Network of People Living with HIV/AIDs in Nigeria (2014).*Gossip Boyz*/Published on Tuesday, 02 December, 2014 www.gossipboz.com.ng (2014).

Cohen, S., & Wills, T. (1998). Stress, Social Support, and the Buffering Hypotheses. *Psychological Bulletin,* 98, 310 – 357.

Collins, P. Y., Holma, A. R., Freeman, M. C., & Patel, V. (2006). What is the Relevance of Mental Health to HIV/AIDs Care and Treatment Programs in Developing Countries? *A Systematic Review.* AIDs, 20(12), 1571 – 1582.

Colony, R. R. (1982).*Mapping the Mind.* Berkeley, CA: University of California Press.

Corey, G. (1990). *Theory and Practice of Counselling and Psychotherapy* (3rded.) Monterey, Ca: Brooks/Cole.

Corey, G. (2008). *Theory and Practice of Group Counselling* (7thed) California: Thomson Brooks/Cole.

Cornwall, A. (2007). *Taking Chances, Making Choices: The Tactical Dimensions of "Reproductive Strategies"* in South Western Nigeria Medical Anthropology 26: 239.

Cutrona, C. E., & Russell, D. (1990). Type of Social Support and Specific Stress: Toward a Theory of Optimal Matching. In Sarason, I. G., Sarason, B. R., & Pierce, G. R. (Eds), Social Support: An Interactional View, 319 – 366. New York: Wiley Cohen, S., & McKay, G. (1984). Social Support, Stress and the Buffering Hypotheses: A Theoretical Analysis. In Baum, A., Singer, J. E., & Taylor, S. E. (Eds).*Handbook of Psychology and Health C4)* Hillsdale, NJ: Lawrence Erlbaum.

Daudu, M. (2005).*Contemporary Ethical Issues in Christian Perspective.* Zaria: Adex Ventures.

Davidson, Gerald C. and John M. Neale.(1994). *Abnormal Psychology.* (6thed.) New York, NY: John Wiley and Sons.

Decker, C. L. (2006). Social Support and Adolescent Cancer Survivors: A Review of the Literature. *Psycho-oncology* 23(2), 207 – 218.

Dimatteo, M. R. (2004). Social Support and Patient Adherence to Medical Treatment: A Meta-analysis. *Health Psychology* 23(2), 207 – 218.

Doka, J. R. (2006). Coping with Life Threatening Illness: A Task *Model Journal of Death and Dying.*

Dunkel – Schetter, C., &Benneth, T. L. (1990).Differentiating the Cognitive and Behavioural Aspects of Social Support. In Sarason, B. R., Sarason, I. G., & Pierce, G. R. (Eds), *Social Support: An Interactional View.* New York: Wiley.

Dweck, P. (2000). The Emotional Stroop Task and Psychopathology.*Psychological Bulletin,* 120, pp. 3 – 24.

Eddy, J. (2006). Conduct Disorders: The Latest Assessment and Treatment Strategies (4th edition) Kansas City, MO: Compact Clinicals.

Ellis, A. (1960). *Reason and Emotion in Psychotherapy.* New York: Lyle Stuart.

Ellis, A. (1991). Cognitive Impairments Associated with Formal Thought Disorder in people with Anxiety. *Journal of Abnormal Psychology,* 111, pp. 211 – 224.

Ellis, A. (2000). *Can Ratimal Emotive Behaviour Therapy (REBT) be Effectively Used with people who have devout beliefs in God and Religion?* Professional Psychology: Research and Practice, 31(1), Feb 2000, pp. 29 -33.

Eschenroeder, A. N. (2005). *Psychoparmacology* in D. Kimble & A. M. Colman (eds.) Biological, Aspects of Behaviour. London: Longman.

Ezedum, C. E. (1999). *Heterosexual Behaviour Patterns of STDs/AIDs Intervention Programme among Students in*Anambra State Secondary Schools. PHD Thesis, University of Nigeria, Nsukka.

Friendlander, R. A., Philips, A. & Morrison, R. (2001).Pharcotherapy for Chronic Depression.*Psychiatric Clinic of North Africa.* 19pp. 121 – 132.

Fristad, M. A. (2006). *Psycho – Educational Treatment for School Aged Children with Bipolar Disorder.* Development Psychopathy 18(4).

Garland, C. J. (2003). Aids is Real and is in Our Church. Bukur ACTS.

Gladding, S. (1988).*Counseling: A Comprehensive Profession.* USA Merrill Publishing Company.

Gleitman, H. (2011). *Basic Psychology.* New York: Norton and Company Inc.

Gupta, R. Dandu, M., Packel, L. Rutherford, G., Leiter, K., Phaladze, N. & Weiser, S. D. (2010). *Depression and HIV in Botswana: A Population-based Study on Gender-Specific Socio-economic and Behavioural Correlates.*PLOS One, 5(12), e14252.

Haan, R. M. (2004). *AIDs, Finding Hope and Compassion.*Michigan Grand Rapids.

Hammen, C. (2009). Adolescent Depression: Stressful Interpersonal Contexts and Risk of Recurrence. *Association for Psychological Science.* Vol. 18 No. 4, pp. 200 – 204.

Hammerli, K., Znoj, H. & Barth, J. (2009). The Efficacy of Psychological Interventions for Infertile Patients: A Meta-analysis Examining Mental Health and Pregnancy Rate. *Human Reproduction Update.*

Hammerli, K., Znoj, H. & Barth, J. (2009). The Efficacy of Psychological Interventions for Infertile Patients: A Meta-analysis Examining Mental Health and Pregnancy Rate. *Human Reproduction Update* 15(3), 279 – 295.

Hankin, B. L. & Abramson, L. Y. (2001). Development of Gender Differences in Depression: An Elaborated Cognitive Vulnerability-transactional Stress Theory. *Psychological Bulletin,* 127, 773 – 796.

Hardeep, L. J. Rohtash, S. and Bindu, S. (2009). Psychological Distress, Coping and Subjective Well-being among Infertile Women.*Journal of the Indian Academy of Applied Psychology* 35(2) 329 – 336.

Havingurst, R. J. and Nengarten, B. L. (2000).*Society and Education.*Printed in U.S.A. Allyn and Bacon Inc.

Helgeson, V. S. (2003). Social Support and Quality of Life.*Quality of Life Research,* 12(Suppl (1), 25 – 31.

Hendricks, J. & Hendricks, C. D. (2000). Ageing and Mass Society: *Myths and Realities.* Cambridge: Winthrop Publishers.

Henig – Marantz, R. (2012). *Anxiety*, the Ney York, Times Magazine (August).

Hewitt, J. P. (2009). *Oxford Handbook of Positive Psychology.*Oxford University Press.

Hockenbury, D. H. &Hockenbury, S. E. (2002). *Psychology*. USA: Catherine Woods Publishing Co.

Horn, D. (1998).*The AIDs Finding Hope and Compassion.*Michigan Grand Rapids.

Horwitz, A. V. (2001). Sons and Daughters as Caregivers to Older Parents: Differences in Role Performance and consequences. *The Gerontologist, 25, 612 – 617.*

House, J. S., Landis, K. R., &Umberson, D. (2004).*Social Relationships and Health Science,* 241, 540 – 545.

Isaac, O. O. &Olabode, O. K. (2006). Perception and Attitude Toward Unprotected Sex among Students of Kwara State College of Education. *Journal of health, Physical Education and Recreation* Vol. 5, 50 – 54.

Isife, B. I., Nnodim, A. U. &Opusunju, C. S. (2010). Effect of Survival Strategies on the Longevity of HIV/AIDs Patients in Rivers State, Southern Nigeria *International Journal of Social Science,* 2(1), pp. 105 – 109.

Ivey, A. E. (1990). *Counselling and Psychotherapy Skills, Theories and Practice.* Englewood Cliffs: Prentice- Hall.

Iwere, N. (2000). *Community – Level Interventions on HIV/AIDs from a Gender Perspective: The Role of Leaders. Paper Presented at Conference on Gender and HIV/AIDs: Leadership Roles in Social Mobilization.* Report of the UNFPA Organized Break-out Panel. African Development Forum held in Addis Ababa, Ethiopia, 3rd – 7th December, pp. 25 – 30.

Jackson, T. (2006).Relationship between Perceived Close Social Support and Health Practices within Community Samples of American Woman and Men.*Journal of Psychology,* 140(3), 229 – 246.

Kassin, S. (2001).*Psychology*. (3rded.) USA: Prentice – Hall Inc.

Kemp, C. (1995). *Terminal Illness:* A Guide to Nursing Care. Philadelphia: J. B. Lippincott.

Kendler, K. S. (2006). The Life Time History of Major Depression in Women: Reliability of Diagnosis and Heritability. *Archives of General Psychiatry,* 50, 863 – 870.

Kindler, K. S. (2005). Social Support may Stave Off Depression in Women. *American Journal of Psychiatry.*

Kiragu, J. W. (2000). *Leadership Challenges in Strengthening National Legal Instruments and Frameworks to Address the Consequences of HIV/AIDs from a Gender Perspective.*Report of the UNFPA Organized Break-out Panel. African Development Forum, held in Addis Ababa, Ethiopia. pp 4 – 24.

Krause, N. (2001). Social Support. In Binstok, R. H. & George, L. L. (Eds.) *Handbook of Aging and the Social Sciences,* 272 – 294. San Diego, CA: Academic Press.

Luszczynska, A., Sarkar, Y., & Knoll, N. (2007).Received Social Support, Self-efficacy, and Finding Benefits in Disease as Predictors of Physical Functioning and Adherence to Antiretroviral Therapy.*Patient Education and Counselling,* 66(1), 37 – 42.

Lyyra, T. M. &Heikkinen, R. L. (2006).Perceived Social Support and Mortality in Older People.*The Journals of Gerontology,* 61B(3): S147 – S152.

Markur, H. R. &Kitayama, S. (1991). Culture and the Self: Implication for Cognition, Emotion, and Motivation. *Psychological Review, 98, 224 – 253.*

Martins, G. N., Carlson, N. R., &Buskist, W. (2007).*Psychology*. (3rdEd.) England: Pearson.

McGuffin, P. (1996). A Hospital-based Twin Register of Heritability of DSM –IV Unipolar Depression. *Archives of General Psychiatry, 53, 129 – 136.*

McLeod, S. (2007). Carl Rogers, Retrieved 17th June, 2013 from http://www.simplepsychology.org/car/-rogers.html.

Mills, E., J., Nachega, J. B., Bangberg, D. R., Singh, S. (2006). *Adherence to HAART: A Systematic Review of Developed and Developing Nation Patient- reported Barriers and Facilitators.* PLOS Medicine, 3 3438.

Momoh, S. O. (2004). *Teachers Knowledge and Attitudes Towards HIV/AIDs Infection.*The Counsellor. 20 Vol. 1, 86 – 90.

Moran, Talbot and Benson (2001). Social Support and Adherence to Antiretroviral Therapy. Patient Education and Counselling 67(2), 44-46.

Nesse, R. M. (2000). Proximate and Evolutionary Studies of Anxiety, Stress and Depression: Synergy at the Interface. *Neuroscience and Behavioural* Reviews.23, pp.895 – 903.

New York Reuters Health 2005.*American Journal of Psychology.*

Nienwenhuis, Odukogbe, Theobald, and Liu (2009:7). *A Description of Psychosocial/Psycho Educational Intervention for Persons with HIV/AIDs,* 23(4) Online.

Njodi, I. A., D. W. Bwala, & O. L. Olaitan (2005). Home-based Approach for Managing the Woman Affected by HIV/AIDs: Implications for Health Education and Promotion. *Ilorin Journal of Health, Physical Education and Recreation, 4, pp*. 1 – 5.

Nwachukwu, D. N. (2007).*The Teacher Counsellor: Enhancing Millennium Teaching – Learning Processes.*University of Calabar Press.

Odey, J. E. (2004).The Role of the Family in Sex and Sexuality Education.*The Journal of Family Development.* Vol. 1, 77 – 85.

Oladoja, M. A., Adedoyin and Adeokun, O. A. (2008).Training Needs of Fishers Folk on Fishing Technologies.*Journal of Food, Agriculture and Environment Science and Technology* 6(1) WFL Publisher, Helsink, Finland.

Olayiwola, A.O. (2010). Procedures in Educational Research, Nigeria: HANJAM Publications, http:/www.hrdc_drhc.gc.ca/arb/Retrieved August 14 2012.

Oltmansns, T. F. & Emery, R. E. (2007).*Abnormal Psychology.*(5th Ed.) New Jessey: Pearson Education Inc.

Onuigbe, I. E. and Osafu, O. (1999).Sexual Behaviour and Perception of AIDs among Adolescent Girls in Benin City, Nigeria.*African Journal of Reproductive Health* 3(11): 39 – 44.

Onwigbe, J. E. (1999). *Human Learning (3rd Ed).* Upper Saddle River, NJ: Prentice – Hall.

Palella, K., Friend-du Preez, N., Ramlagan, S., & Anderson, J. (2010).Antiretroviral Treatment Adherence among HIV Patients in Kwazulu – Natal, South Africa.BMC *Public Health*, 10, 111.

Piaget, J. (1990). Intellectual Evolution from Adolescence to Adulthood.*Human Development,* 15, 1 – 21.

Posse, M., &Baltussen, R. (2009).Barriers to Access to Antiretroviral Treatment in Mozambique, as Perceived by Patients and Health Workers in Urban and Rural Settings.*AIDs Patient Care and STDs,* 23(10), 867 – 875.

Radhakrishna, R. B. (2002). *Tips for Developing and Testing Questionnaire/Instrument retrieved* March 3rd 2012 from brr.100@psu.edu.

Raen, K. (2004). *Where is the Good Samaritan?*A Challenge to Fight HIV/AIDs.Lagos Bible Society of Nigeria.

Rivas – Vazquez, R. A., Saffa-Biller, D., Riuz, I. (2004). Current Issues in Anxiety and Depression: Cumorbid, Mixed, and Subthreshold Disorders. *Professional Psychology: Research and Practice,* 35, pp 74 – 83.

Robert, A. B. Nyla, R. B. &Donn, B. (2009).*Social Psychology* (12th Ed). USA: Person Education Inc.

Rogers, C. (1959). *A Theory of Therapy, Personality and Interpersonal Relationship or Developed in Client.Centred Framework.*In S. Koch (Ed). Psychology: A Study of a Science. Vol. 3: Formulations of the Person and the Social Context. New York: McGraw Hill.

Rogers, C. (1969). *Freedom to Learn:* A View of what Education Might Become (1sted). Columbus, Ohio: ChorherMerill.

Rush, T., Shaw, M., &Khatom (2005). *Psychoanalysis and Behaviour Therapy: Toward an Integration.* New York: Basic Books.

Salman, M. F., Esere, M. O., Omotosho, J. A., Abdullahi, O. E., (2011). *Effect of two Psychological Techniques in Improving Academic Performance of Secondary School Students in Mathematics.IfePsychologia* 19(1) 270 – 279.

Seeman, T. E. (2000). Health Promoting Effects of Friends and Family on Health Outcomes in Older Adults.*American Journal of Health Promotion,* 14(6), 362 – 370.

Shobola, A. A. (2011). The Study of the Effects of Cognitive Restructuring on Cigarette Smoking Delinquent of Undergraduate Students.*Ife Psychologia* 16(1), 187 – 197.

Skevington, S. M., Nerweg, S., &Standage, M. (2010). *Predicting Quality of Life for People Living with HIV: International Evidence from Seven Cultures.* AIDS Care, 22 (5), 614 – 622.

Slatter, R. and Wiggins, S. (2005). *Responding to HIV/AIDs in Agriculture and Related Activities in Natural Resource Perspectives.* Overseas Development Institute (ODI) Paper No. 98.

Spiegel (1992). *Synthesizing Evaluation, Perspectives, Practices & Evidences, Proceedings of the American Evaluation Association:* 92 Extension Evaluations Topical Interest Group, Seattle WA, 27-37.

Stevens, J. (1986). *Applied Multivariate Statistics for the Social Sciences:* Hillsdale: NJ: Eribaum.

Tardy, C. H. (1989). Social Support Measurement, *American Journal of Community Psychology,* 13(2), 187 – 203.

Tarlov,W.G,Nelson, P and Zubkoff, N. (1999S). Psychotherapy New York: Worth Publishers C. Psychology 7th Edition New YORK: Retrieved 31st August, 2011.

Thoits, P. A. (2000). Stress, Coping, and Social Support Processes: Where are we/what next? *Journal of Health and Social Behaviour,* 36, 53 – 79.

Tsuang, M. T. &Faraone, S. V. (1999). *The Genetics of Mood Disorders.* Baltimore, MD: John Hopkins University Press.

Turner, R. J. (2006). Social Support as a Contingency in Psychological Well-being.*Journal of Health and Social Behaviour,* 22:357 – 367.

UNAIDS (2006).*Keeping the Promise:* An Agenda for Action on Women and AIDs. Geneva: UNAIDS.

Unger, D. G., & Powell, D. R. (2001). *Supporting Families Under Stress:* The Role of Social Networks. Family Relations, 29(4), 566 – 574.

Wale, O. (2015).*National Bureau of Statistics (NBC)* statistical report on women and men in Nigeria@dailypost.ng.

Wellman, B., &Wortley, S. (1990). Different Strokes from Different Folks: Community Ties and Social Support. *American Journal of Sociology,* 96, 558 – 588.

WHO/FAO (2002).*Living well with HIV/AIDs.*A Manual on Nutritional Care and Support for People Living with HIV/AIDs. Rome: Food and Agricultural Organization.

Wright, L. K., Clipp, E. C., & George, L. (1998).*Consequences of Caregivers Stress.*Medicine, Exercise, Nutrition and Health, 2, 181 – 195.

Yahaya, L. A. (2006). The Effects of Cognitive Restructuring on the Attitudes of Secondary School Students in Illorin towards HIV/AIDs Patients.*Illorin Journal of Sociology,* 2(1), 104 – 117.

Appendix 'A'

Construction of Treatment Modules

The entire treatment program made up of cognitive restructuring and social support techniques, (see appendix xii). The researcher designed the following specific treatment modules for each of the psychological/counselling techniques. Essentially, each module contains:

i. Introduction/review of previous session

General outline of the treatment session/program are as follows:

ii. Specific behavioural objectives to be achieved at the end of each treatment session in a particular module:

iii. Specific activities outlined for each session such as: homework/assignment for subject: and summary of each treatment session.

The following four basic steps were followed;

1. Creating awareness among subjects in identifying the thoughts or beliefs that are influencing the disturbing emotion;
2. Re-appraisal of situation;
3. Adoption and substitution of new thinking pattern;
4. Evaluating substitution/option for their accuracy and usefulness of Psychological/ counselling using logic and evidence. And when warranted, subjects were assisted to modified or replaced the disturbing thoughts with ones that are more accurate and useful.

Experimental Group I: Cognit1ve Restructuring Treatment Sessions

Week One:

Session One

Objectives:

i) Self Introduction by both the researcher and the participants/subject;

ii) Explaining to the participants the mission of the researcher;

iii) Establishing a relationship with the participants/subjects

Step I: The researcher introduces self to the participants/subjects

Step II: The researcher introduces to the participants what relationship she is about to enter, which is therapist/subjects relationship.

Step III: The researcher explains to the participants the therapist's responsibilities while the therapy sessions last:

Step IV: The researcher also explains to the participants her own responsibilities;

Step V: The researcher then emphasizes the importance of developing a collaborative relationship for the success of the therapy process.

Step VI: The researcher then asks the participants to respond to these points by accepting the commencement of the process or otherwise;

Step VII: The researcher then requests the participant to ask any questions on what has been discussed in the session.

Step VIII: The session will come to an end by rewarding participants with a token reinforcement.

Week Two:

Session Two

Objectives:

i) Properly understand what depression is;

ii) Introduce to the participants/subjects what technique can do to change behaviour;

iii) Introduce to the participants, the concept of cognitive restructuring as a technique.

Step I: The researcher welcomes the participants to the second session of the counselling process;

Step II: Introduction of the main objectives of the session;

Step III: The researcher then explains to the participants what cognitive restructuring is and how it can be used to minimize their depression symptoms.

Step IV: The goals of the whole therapy relationship will then be set collectively between the researcher and the participants/subjects.

Step VI: The researcher gives the participants homework which will form part of the next session.

Week Three:

Session Three

Objectives:

i) To identify the negative automatic thoughts of the participants;

ii) To monitor the negative automatic thoughts of the participants.

Step I: The researcher welcomes the participants to the session;

Step II: The researcher gives the participants a very warm reception for them to feel at home and be relaxed for the collaborative session to commence;

Step III: The researcher then reminds the participants about the homework given to them the previous session. Then asked to mention their negative thoughts.

Step IV: The researcher will then pick the thoughts one by one and request the participants to explain what they mean and how they feel.

Step V: The researcher listens and expresses his emphatic feelings while the participants explains their feelings about their thoughts.

Step VI: While expressing their emphatic feeling, the researcher will explain what the therapy can do to help provide an environment for collaborative efforts between her and the participants to change the unwanted behaviour.

Step VII: The researcher then closes the session by giving the participants some homework of attaching these negative thoughts with the behaviours they cause them to exhibit.

Week Four:

Session Four

Objectives:

i) To understand how automatic thoughts can trigger unwanted behaviour;

ii) Explain the process of attaching behaviour to automatic thoughts.

Step I: Welcomes the participants to another session of the therapy process

Step II: Explains the process of automatic thought formation to the participants.

Step III: Discuss a few of the participants automatic thoughts and how they started.

Step IV: Discuss how the automatic thoughts affect their behaviour towards high- stakes tests.

Step V: Discuss with examples how automatic thoughts can cause unwanted behaviour.

Step VI: Ask for any questions from the participants on what has been discussed in the session.

Step VII: Ask the participants to list the behaviours that each of the automatic thoughts they listed causes them to exhibit. This will be given as homework.

Week Five:

Session Five

Objectives:

i) Challenge the distorted thoughts identified in the previous sessions.

ii) Guide the participants to positively think of better alternatives their challenged distorted thoughts.

Step I: As usual, the researcher welcomes the participants into another session of the therapy.

Step II: The researcher leads the participants in recapitulating on the previous sessions and the success so far achieved.

Step III: Having discussed the negative thoughts in previous sessions. The researcher now defines what a normal and positive thinking is, as against a distorted thought.

Step IV: The researcher with the cooperation of the participants then begins to challenge the distorted thoughts presented by the participants by picking each thought and exposing its faults.

Step V: The researcher hen guides the participants in selecting substitute positive thoughts. In this session four out of the fifteen negative thoughts will be exposed and substituted with more realistic thoughts.

Step VI: The researcher then clearly offers her support to the participants appreciating the kind of collaborative sessions they have had.

Step VII: The participants would then be asked if they have any observations to make on the progress so far made.

Step VIII: The session then ends with an assignment for the participants to think deeply on the substitution of the negative thoughts with more realistic ones, and report back in the next session how such substitution has affected their feelings and behaviour towards anything that has to do with depression.

Week Six:

Session Six

Objectives:

i) To continue to challenge the distorted and unrealistic thoughts identified in the previous sessions.

ii) Also continue to guide the participants to positively think of better alternatives to their challenged distorted thoughts.

Step I: As usual, the researcher welcomes the participants into another session of the therapy.

Step II: The researcher leads the participants in recapitulating on the previous sessions and the success so far achieved.

Step III: Having discussed the negative thoughts in previous sessions, the researcher now defines what a normal and positive thinking is, as against a distorted thought.

Step IV: The researcher, with the cooperation of the participants, then continues to challenge the distorted thoughts presented by the participants, by picking each thought and exposing its faults.

Step V: The researcher then guides the participants in selecting substitute positive thoughts. In this session, four out of the fifteen negative thoughts will be exposed and substituted with more realistic thoughts.

Step VI: The researcher then clearly offers her support to the participants appreciating the kind of collaborative sessions they have had.

Step VII: The participants would then be asked if they have any observations to make on the progress so far made.

Step VIII: The session then ends with an assignment for the participants to think deeply on the substitution of the negative thoughts with more realistic ones, and report back in the next session how such substitution has affected their feelings and behaviour towards examinations.

Week Seven:

Session Seven

Objectives:

i) To continue to challenge the distorted and unrealistic thoughts identified in the previous sessions.

ii) Also continue to guide the participants to positively think of better alternatives to their challenged distorted thoughts.

Step I: As usual, the researcher welcomes the participants into another session of the therapy.

Step II: The researcher leads the participants in recapitulating on the previous sessions and the success so far achieved.

Step III: Having discussed the negative thoughts in previous sessions, the researcher now defines what a normal and positive thinking is, as against a distorted thought.

Step IV: The researcher, with the cooperation of the participants, then continues to challenge the distorted thoughts presented by the participants, by picking each thought and exposing its faults.

Step V: The researcher then guides the participants in selecting substitute positive thoughts. In this session, four out of the fifteen negative thoughts will be exposed and substituted with more realistic thoughts.

Step VI: The researcher then clearly offers her support to the participants appreciating the kind of collaborative sessions they have had.

Step VII: The participants would then be asked if they have any observations to make on the progress so far made.

Step VIII: The session then ends with an assignment for the participants to think deeply on the substitution of the negative thoughts with more realistic ones, and report back in the next session how such substitution has affected their feelings and behaviour towards anything that has to do with depression.

Week Eight:

Session Eight

Objectives:

i) To round off the therapy relationship.

ii) To ascertain the effects of the therapy process carried out in the last seven sessions.

iii) To discuss other relevant issues not discussed in the previous sessions.

iv) To administer the post-test on the student.

Step I: The researcher warmly welcomes the participants into the final session of the therapy.

Step II: The researcher appreciates the collaborative efforts they had throughout the weeks of the treatment process.

Step III: The participants will be requested to express what resulted from the substitution of their distorted thoughts with more realistic thoughts.

Step IV: Discuss some general aspects of depression and the treatment process which is about to be concluded.

Step V: The participants will be told to get ready for another test which will be the concluding part of the treatment process.

Experimental Group 2: Social Support Treatment Sessions

Social support is a set of technique associated with health outcomes for people who lack support or who feel isolated or estranged from others. It focuses on interventions, including network restructuring for individuals with untapped relationship resources development or "grafting" of new tips for those with accessible supportive relationships, and use of support groups for emotional and instrumental assistance to those suffering similar illnesses. Behaviourally- based interventions, such as supportive communication techniques to spouses and cognitive restructuring of attitudes about social interaction also will be utilized.

Treatment Package

The treatment technique includes procedures aimed at facilitating the development of satisfying and supportive social relationship for the participant with low perceived emotional support.

Week One:

Session One: General orientation to the programme

Objective:

The researcher set to achieve the following objectives

a. Familiarize participants with the entire treatment services

b. To create an atmosphere for discussion sessions.

Step I: Introduction of selves by both the women and the researcher thereby establishing a researcher relationship with the women.

Step II: The researcher then explains what social support is and how it can be used to minimize depression.

Step III: The goal of the whole treatment session will be collectively between the researcher and the women.

Step IV: The researcher and participants will deliberate on the problems facing the participants in their social environment.

Step V: The researcher and participant's role play some of the negative problem faced in the social environment and comparing with their reasons for the said problems.

Assignment: List other negative behaviours facing HIV/AIDS infected women in the social environment.

Week Two:

Session two: Social Outreach and network development

Objective:

To describe procedures aimed at facilitating the development of satisfying and supportive social relationship for the participant with low perceived emotional support.

Step I: The researcher gives the participants a very warm reception for them to feel at home and be relaxed for the collaborative session to commence.

Step II: The researcher then reminds the participants about the homework given to them the previous session. They are then asked to mention some of the negative behaviours facing HIV/AIDS in their social environment.

Step III: The researcher picks the negative behaviour one by one and requests the participants to explain how she feels about the behaviour.

Step IV: By way of feedback, the researcher listened and expressed emphatic feelings while the participants also explains their feelings about the problem facing them.

Step V: While expressing his emphatic feeling, the researcher explained what the therapy can do to help provide an environment for collaborative efforts between him and the participants to change the unwanted behaviour.

Assignment: What are some of the ways of combating some of these negative behaviours?

This session will end with appreciation and encouragement of participants to attend the next session

Week Three:

Session three: Social support uses and preferences

Objectives: To discuss some of the baseline assessment that can be used to prompt the participant about what has led to this subjective sense of low support (e.g. what is missing? What could they gain? What would support them?) and the potential people who could provide this.

Step I: The researcher welcomes the participants to another treatment session.

Step II: The researcher would give the participants a very warm reception for them to feel at home and be relaxed for the collaborative session to commence.

Step III: The researcher then reminds the participants about the homework given to them the previous session.

Step IV: Base on the homework and answers given the researcher would commence the collaborative session with some additional questions to use as prompt for discussion as-

a. What would support be for you?

b. What kind of things do people do for you and what things would you like people to do for you that they don't currently do?

c. What kinds of activities do you think would bring enjoyment to your life (things you never did but often think about doing)? Where might you find other people already engaged in these activities or who might be interested in doing them with you? How might you find out?

d. What kinds of activities do you think would bring enjoyment to your life? How often do you get to do these things? Who does them with you? What activities you once did brought you enjoyment or pleasure? Do you think they would bring you enjoyment again if you were to do them? Who did you do them with? Why did it stop? Who else might you do them with? How might you find out?

Week Four:

Session four: Cognitive management

Objectives: To identify and modify underlying cognitive distortions, unworkable rules and attributions, and or social depression that interferes with the development and maintenance of a satisfying and supportive social network.

Step I: The researcher kick-start the session by welcoming participants into another treatment session.

Step II: Review of the last session will be done questions drawn from the last session will be provided for the collaborative session.

Step III: Good and bad behaviours towards people living with HIV/AIDS will be highlighted.

Step IV: The researcher role-playing a supportive behaviour for them or the possible cost of asking for, or accepting, social support may play a paramount role in their feeling unsupported.

This session will end with the participants being appreciated and encouraged to attend the next session.

Week Five:

Session five: Overcoming negative behaviours of people through the principle of social support

Objectives: To empower participants with strategies of social support such as self-awareness, self-regulation, self-reconstruction of thoughts, self-statement, self-monitoring to combat negative behaviour.

Step I: As usual, the researcher welcomed the participants into another session of the therapy

Step II: The researcher leads participants in recapitulating in the previous sessions and success achieved so far.

Step III: The researcher with the co-operation of the participants then begins to challenge distorted thoughts presented by the participants by picking each thought and exposing its fault.

Step IV: The researcher then guides the participants in demonstrating self-reconstruction that is negative behaviour will be exposed and substituted with more realistic thoughts.

Step V: The researcher then offered his support to the participants appreciating the kind of collaborative session they have had.

Step VI: The participants asked if they have any observation to make on the progress made so far.

The session will end with appreciation and encouragement & participant to attend the next session.

Week Six:

Session six: Continue therapeutic intervention and giving criticism.

Objectives: To practice giving and receiving compliments with particular people from your family, friends and community.

Step I: The researcher will start the session by praising the participants for the high level of co-operation that they have exhibited so far.

Step II: The previous session will be reviewed and observations will be deliberated upon.

Step III: Both the researcher and participants will continue demonstrating examples of destructive/aggressive criticism and constructive/assertive criticism.

Step IV: Asking the participant or example of undesirable actions on the part of others.

Step V: The researcher and participants to prompt, model, and role play effective giving of criticism within the context of a problem that the participant is having at that particular time.

Step VI: In the process of role playing, observer will be asked to make suggestions on verbal and non-verbal behaviours that would be apparent.

This session will end with appreciation of the participants as well as giving them homework.

Assignment: Write out your goals for the week and tick as is attained.

Week Seven:

Session seven: General evaluation of social support/assertiveness skills

Objectives:

a. To provide a pleasant reinforcement or reward for performing a desirable behaviour

b. Recognizing your rights in your interactions with others, rather than according to what someone else experts or demands, solely because they want you to.

Step I: A welcome address by the researcher kick-start the session the session.

Step II: The researcher has the participants generate examples of interactions with others (or desired interactions)

Step III: The participants asked to explain and role-play those in the various interpersonal styles, have the participant project likely outcomes of the various approaches and pay particular attention to requests and the declining and/or renegotiation of requests.

Step IV: Participants will be encouraged to ask questions, make comments and share personal experiences learnt so far in all the previous sessions.

The session would come to an end by rewarding participants with a token reinforcement.

Week Eight:

Session Eight: Wrap up and re-administration of instrument (that is Beck Depression inventory (BDI))

Step I: The researcher appreciates the participants for their dedication and co-operation from the beginning of the social support skill training.

Step II: Again participants will be reminded and encouraged to practice the learnt behaviour. This is in order to experience a total victory over the plague of negative behaviours.

Step III: Revision and re-administration of instrument.

Appendix 'B'

(Appendix Sample Questionnaire)

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING.AHMADU BELLO UNIVERSITY, ZARIA.

Dear Respondents;

The purpose of this questionnaire is to investigate the depression symptoms commonly associated with HIV/AIDS and to determine the effectiveness of cognitive restructuring and social support techniques in reducing such behavioural problem. Whatever information given will be treated as confidential and will be used for research purpose only.

Socio-demographic information.

Instruction! Please tick (√) the responses that best describe your opinions (your name need not to appear in any part of the questionnaire).

1. Marital status.
   - Married ( )
   - Single ( )
   - Divorced ( )
   - Widowed ( )
2. Educational Level
   - None ( )
   - Primary ( )
   - Secondary ( )
   - Tertiary ( )
3. Income
   - Low income ( )
   - Middle Income ( )
   - High Income ( )

BECK DEPRESSION INVENTORY (BDI)

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

S/N	Beck Depression Inventory (BDI)	0 Never	1 Rarely	2 Some Times	3 Always
1.	Sadness 0. I do not feel sad; 1. I feel sad much of the time. 2. I am sad all the time. 3. I am so sad or unhappy that I cannot stand it.				
2.	Pessimism 0. I am not discouraged about my future. I. I feel more discouraged about my future than I used to be. 2. I do not expect things to work out for me. 3. I feel my future is hopeless and will only get worse.				

3.	Past Failure 0.I do not feel like a failure. 1.I have failed more than 1 should have. 2.1 As I look back, I see a lot of failures. 3.I feel I am total failure as a person.				
4.	Loss of Pleasure 0. 1 get as much pleasure as I ever did from the things I enjoy. 1. I don't enjoy things as much as 1 used to. 2. 1 get very little pleasure from the things 1 used to enjoy. 3. 1 cannot get any pleasure from the things I used to enjoy.				
5.	Guilty Feelings 0. I do not feel particularly guilty. 1. I feel guilty over many things I have done or should have done. 2. I feel quite guilty most of the time. 3. I feel guilty all of the time.				

6.	Punishment Feelings 0. 1 do not feel I am being punished. 1. I feel l may be punished. 2. 1 expect to be punished. 3. I feet I am being punished.				
7.	Self – Dislike 0. 1 feel the same about myself as ever. I. I have lost confidence in myself. 2. 1 am disappointed in myself. 3. I dislike myself.				
8.	Self – Criticalness 0. I do not criticize or blame myself more than usual. 1. I am more critical of myself than I used to be. 2. I criticize myself for all. of my faults. 3. I blame myself for everything bad that happens.				
9.	Suicidal Thoughts or Wishes 0. I don't have any thoughts of killing myself. 1. I have thoughts of killing myself, but I				

	would not carry them out 2. I would like to kill myself- 3. 1 would kill myself if I had the chance.				
10.	Crying 0. I do not cry any more than I used to. 1. I cry more than l used to. 2. 1 cry over every little thing. 3. I feel like crying, but l can't.				
11.	Agitation 0. I am no more restless or wound up than usual. 1. I feel more restless or wound up than usual. 2. I am so restless or agitated that it's hard to stay still. 3. I am so restless or agitated that I have to keep moving or doing something.				
12.	Loss of interest 0. I have not lost interest in other people or activities. 1. I am less interested in other people or things than before. 2. I have lost most of my interest in other				

	people or things. 3. It is hard to get interested in anything.				
13.	Indecisiveness 0. I make decisions about as well as ever. 1. I find it more difficult to make decisions than usual. 2. I have much greater difficulty in making decisions than I used to. 3. I have trouble making any decisions,3. I blame myself for everything bad that happens.				
14.	Worthlessness 0. I do not feel I am worthless. 1. I don't consider myself as worthwhile and useful as 1 used to. 2. I feel more worthless as compared to other people. 3. I feel utterly worthless.				
15.	Loss of Energy 0. I have as much energy as ever. 1. I have less energy than I used to have. 2. I don't have enough energy to do very much.				

	3. I don't have enough energy to do anything.				
16.	Changes In Sleeping Pattern 0. I have not experienced any change in my sleeping pattern. Ia) I sleep somewhat more than usual. lb) I sleep somewhat less than usual. 2a) I sleep a lot more than usual. a 2b) 1 sleep a lot less than usual. 3a) I sleep most of the day. 3b) I wake up 1-2 hours early and cannot get back to sleep.				
17.	Irritability 0. I am no more irritable than usual. 1. I am more irritable than usual. 2. 1 am much more irritable than usual. 3. I am irritable all the time.				
18.	Changes In Appetite 0. 1 have not experienced any change in my appetite. la) My appetite is somewhat less than usual. 1b) My appetite is somewhat greater than usual 2a) My appetite is much less than before.				

	2b) My appetite is much greater than usual. 3a) I have no appetite at all. 3b) I crave food all the time				
19.	Concentration Difficulty 0. I can concentrate as well as ever. I. I cannot concentrate as well as usual 2. 1t's hard to keep my mind on anything for very long. 3. I find I cannot concentrate on anything.				
20.	Tiredness or Fatigue 0. I am no more tired or fatigued than usual. 1. I get more tired or fatigued more easily than usual. 2. I am too tired or fatigued to do a lot of the things I used to do. 3. I am too tired or fatigued to do most of the things 1 used to do.				
21.	Loss of Interest in Sex 0. I have not noticed any recent change in my interest in sex. 1. I am less interested in sex than I used to be. 2. I am much less interested in sex now. 3. I have lost interest in sex completely.				

APPENDIX 'C'

Effects of Cognitive Restructuring and Social Support Techniques on Depression Symptoms among HIV/AIDS Infected Women in Kaduna State

Pre-test and post-test reliability using PPMC

Appendix B: Raw scores of the two sets of tests for determining the coefficient of reliability of the test instrument

S/NO	X	Y	X^2	Y^2	XY
1	30	25	900	625	750
2	32	27	1024	729	864
3	12	12	144	144	144
4	35	30	1225	900	1050
5	25	16	625	256	400
6	40	35	1600	1225	1400
7	23	18	529	324	414
8	40	35	1600	1225	1400
9	50	45	2500	2025	2250
10	40	35	1600	1225	1400
11	40	35	1600	1225	1400
12	52	47	2704	2209	2444
13	35	30	1225	900	1050
14	32	27	1024	729	864
15	25	20	625	400	500
16	32	27	1024	729	864
17	25	20	625	400	500
18	15	10	225	100	150

19	45	40	2025	1600	1800
20	52	47	2704	2209	2444
21	30	25	900	625	750
22	40	35	1600	1225	1400
23	25	25	625	625	625
24	30	30	900	900	900
25	35	35	1225	1225	1225
26	30	30	900	900	900
27	32	32	1024	1024	1024
28	12	12	144	144	144
29 30	35	49	1225	2401	1715
31	25	25	625	625	625
32	40	39	1600	1521	1560
33	23	23	529	529	529
34	40	40	1600	1600	1600
35	50	50	2500	2500	2500
36	40	40	1600	1600	1600
37	40	42	1600	1764	1680
38	52	52	2704	2704	2704
39	35	35	1225	1225	1225
40	32	32	1024	1024	1024
N=40	∑**X**=1351	∑**Y**=1261	∑**X2**=49703	∑**Y2**=44181	∑**XY 46543**

40 Note: x and y are first and second tests scores for HIV/AIDs infected women

(Statistics for Finding Reliability)

Pearson Product Moment Correlation computed for the Reliability index for the instrument used in the pilot study of the research.

The formula for Pearson Product Moment Correlation is given below:

$$R = \frac{N(\sum xy) - \sum (x) \sum Y}{((N(X^2) - (NY^2)-(Y)^2)}$$

N=Number of respondents

X is test scores at pre test

Y is test scores at post test

$\sum x$ is scores at pre-test is summed

$\sum y$ is scores at Post test is summed

$\sum x^2$ is scores at pre-test is squared and summed

$\sum Y^2$ is scores at post test is squared and summed

$(\sum x)^2$ is scores at pre-test is summed and squared

$(\sum Y)^2$ is scores at post test is summed and squared

Where:

$\sum \mathbf{X}$=1351 $\sum \mathbf{Y}$=1261 $\sum \mathbf{X2}$=49703 $\sum \mathbf{Y2}$=44181 $\sum \mathbf{XY}$- **46543**

N=40

Pearson Product Moment Correlation formula is:

$$r = \frac{N(\sum xy) - \sum (x) \sum Y}{((N(\sum X^2) - (N*\sum Y^2)-(\sum Y)^2}$$

Substituting in the formula

$$= \frac{40*46543 - 1351*1261}{40*(49703)^2 - 40*44181-(1261)^2}$$

=.892

r=.89

APPENDIX 'D'

BIO DATA

EDU LEVEL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PRIMARY	4	11.4	11.4	11.4
	SECONDARY	18	51.4	51.4	62.9
	TERTIARY	13	37.1	37.1	100.0
	Total	35	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LOW INCOME	22	62.9	62.9	62.9
	MIDDLE INCOME	13	37.1	37.1	100.0
	Total	35	100.0	100.0	

MARITAL SATUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MARRIED	25	71.4	71.4	71.4
	SINGLE	3	8.6	8.6	80.0
	DIVORCED	6	17.1	17.1	97.1
	WIDOWED	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

HYPOTHESES 1

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE-TEST	37.3428	20	.511	.106
	POST-TREATMENT	19.97145	20	7.59551	1.58377

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean Difference	Std. Deviation	Std. Error Mean	Lower	Upper			
PRE-TEST - POST-TREATMENT	17.37135	7.44253	1.55188	-29.08796	-22.65117	-16.670	22	.000

HYPOTHESES 2

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE-TEST	29.3478	20	.311	.0106
	POST-TREATMENT	14.1834	20	8.43551	2.58377

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean Difference	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	PRE-TEST - POST-TREATMENT	15.1644	5.34653	.335188	-29.08796	-22.65117	-16.670	22	.000

HYPOTHESES 3

Group Statistics

	GROUP1TREAT	N	Mean	Std. Deviation	Std. Error Mean
DEPRESSION	CONITIVE RESTRUCTURING	20	25.0000	5.29150	1.52753
	SOCIAL SUPPORT	20	29.9091	9.07143	2.73514

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
DEPRESSION	Equal variances assumed	7.007	.124	-1.603	21	.124	-4.90909	3.06324	-11.27945	1.46127
	Equal variances not assumed			-1.567	15.812	BBBBBBBX.137	-4.90909	3.13278	-11.55670	1.73852

HYPOTHESES 4

ANOVA

DEPRESSION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	121.760	1	121.760	.500	.485
Within Groups	8040.126	33	243.640		
Total	8161.886	34			

HYPOTHESES 5

Descriptives

DEPRESSION

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
MARRIED	25	35.0400	15.74135	3.14827	28.5423	41.5377	16.00	62.00
SINGLE	3	36.6667	16.74316	9.66667	-4.9256	78.2590	27.00	56.00
DIVORCED	6	43.6667	12.73839	5.20043	30.2985	57.0348	34.00	61.00
WIDOWED	1	59.0000	.	.	.	.	59.00	59.00
Total	35	37.3429	15.49372	2.61892	32.0206	42.6651	16.00	62.00

ANOVA

DEPRESSION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	842.926	3	280.975	1.190	.330
Within Groups	7318.960	31	236.095		
Total	8161.886	34			

HYPOTHESES 6

Descriptive

DEPRESSION

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PRIMARY	4	55.5000	6.65833	3.32916	44.9051	66.0949	46.00	61.00
SECONDARY	18	30.5000	11.71349	2.76090	24.6750	36.3250	19.00	59.00
TERTIARY	13	41.2308	16.67910	4.62595	31.1517	51.3098	16.00	62.00
Total	35	37.3429	15.49372	2.61892	32.0206	42.6651	16.00	62.00

ANOVA

DEPRESSION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2358.078	2	1179.039	6.501	.004
Within Groups	5803.808	32	181.369		
Total	8161.886	34			

Multiple Comparisons

Dependent Variable: depression2

LSD

(I) EDU LEVEL	(J) EDU LEVEL	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PRIMARY	SECONDARY	11.75000*	3.87411	.005	3.8587	19.6413
	TERTIARY	7.36538	4.00728	.075	-.7972	15.5280
SECONDARY	PRIMARY	-11.75000*	3.87411	.005	-19.6413	-3.8587
	TERTIARY	-4.38462	2.55094	.095	-9.5807	.8115
TERTIARY	PRIMARY	-7.36538	4.00728	.075	-15.5280	.7972
	SECONDARY	4.38462	2.55094	.095	-.8115	9.5807

*. The mean difference is significant at the 0.05 level.

HYPOTHESES 7

Descriptive

depression2

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LOW INCOME	22	19.5909	7.52557	1.60446	16.2543	22.9276	10.00	31.00
MIDDLE INCOME	13	20.6154	8.50038	2.35758	15.4787	25.7521	7.00	32.00
Total	35	19.9714	7.79323	1.31730	17.2944	22.6485	7.00	32.00

ANOVA

depression2

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.576	1	8.576	.138	.713
Within Groups	2056.395	33	62.315		
Total	2064.971	34			

HYPOTHESES 8

Descriptive

depression2

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
MARRIED	25	18.5200	7.92738	1.58548	15.2477	21.7923	7.00	32.00
SINGLE	3	19.6667	8.08290	4.66667	-.4124	39.7457	15.00	29.00
DIVORCED	6	24.3333	5.24087	2.13957	18.8334	29.8333	20.00	31.00
WIDOWED	1	31.0000	.	.	.	.	31.00	31.00
Total	35	19.9714	7.79323	1.31730	17.2944	22.6485	7.00	32.00

ANOVA

depression2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	288.731	3	96.244	1.680	.192
Within Groups	1776.240	31	57.298		
Total	2064.971	34			

HYPOTHESES 9

ANOVA

depression2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	493.145	2	246.572	5.020	.013
Within Groups	1571.827	32	49.120		
Total	2064.971	34			

Multiple Comparisons

Dependent Variable: DEPRESSION

LSD

(I) EDU LEVEL	(J) EDU LEVEL	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PRIMARY	SECONDARY	25.00000*	7.44435	.002	9.8364	40.1636
	TERTIARY	14.26923	7.70024	.073	-1.4156	29.9541
SECONDARY	PRIMARY	-25.00000*	7.44435	.002	-40.1636	-9.8364
	TERTIARY	-10.73077*	4.90179	.036	-20.7154	-.7462
TERTIARY	PRIMARY	-14.26923	7.70024	.073	-29.9541	1.4156
	SECONDARY	10.73077*	4.90179	.036	.7462	20.7154

*. The mean difference is significant at the 0.05 level.