DEVELOPMENT AND EFFICACY OF PSYCHO-EDUCATIONAL PACKAGE ON SELF-EFFICACY AND PSYCHOLOGICAL WELL-BEING OF INFORMAL CAREGIVERS OF PEOPLE LIVING WITH HIV/AIDS IN OYO STATE, NIGERIA

BY

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ABSTRACT

Majority of informal caregivers of People Living with HIV/AIDS (PLWHAs) in Nigeria carry out their activities with insufficient information. This, coupled with the general burden and risks of caregiving leads to poor psychological well-being and loss of confidence by many caregivers. Previous studies have focused largely on the PLWHAs and the formal caregiving with less emphasis on the improvement of the informal caregiving process using psycho-educational package. This study was, therefore, designed to develop a Psycho-educational Training Package (PeTP) for the informal caregivers as well as determine its effectiveness on their caregiving self-efficacy and psychological well-being in Oyo State, Nigeria. The moderating effects of gender and caregiving stress were also examined.

The study was anchored to Transactional Stress and Conservation of Resource theories, while the pretest-posttest and control group quasi-experimental design of 2x2x2 factorial matrix were adopted. Two approved non-governmental HIV/AIDS support and counselling centers were purposively selected in Ibadan. The Zarit Burden interview and Instrumental activities of daily living screening tools were used to select 100 out of 600 screened informal caregivers of the PLWHAs attending the centers. Those who scored high on caregiving burden but low on caregiving competence and confidence were randomly assigned into psycho-educational training (50) and control (50) groups. The developed PeTP was validated using Cronbach alpha method: HIV/AIDS facts ($r=0.89$), caregiver's roles ($r=0.70$), caregiving challenges ($r=0.75$), infections self mastery skills modeling ($r=0.73$) safety precautions ($r=0.81$) and stress reduction techniques ($r=0.87$) were rated high. Treatment lasted six weeks. Psychological Well-being ($\alpha=0.75$), Caregiving Self-efficacy ($\alpha=0.89$) and Kingston Caregiver Stress ($\alpha=0.82$) scales were used. These were complemented with 10 in-depth interview sessions with informal caregivers. Quantitative data were analysed using descriptive statistics and Analysis of covariance at 0.05 level of significance, while qualitative data were content analysed.

The mean age of informal caregivers was 33.12±6.32 years; majority were female (71.0%), mostly from monogamous families (96.0%) and not educated (49.0%). Their marital status were: widowed (31.0%), single (29.0%), divorced (20.0%) and married (20.0%). There were significant main effects of treatment on caregivers' psychological well-being ($F_{(1,97)} = 68.90$; $\eta^2=0.53$) and self-efficacy ($F_{(1,97)} = 198.74$; $\eta^2 = 0.78$). Participants in the treatment group had higher post mean scores (psychological well-being = 63.41; self-efficacy = 46.61) than those in control (psychological well-being = 45.44; self-efficacy = 32.24) group. There were significant main effects of caregiving stress on caregivers' psychological well-being ($F_{(1,97)} = 25.05$; $\eta^2 = 0.22$) and self-efficacy ($F_{(1,97} = 4.97$; $\eta^2 = 0.05$). Participants with low stress had higher post mean scores (psychological well-being = 55.75; self-efficacy = 40.11) than those with high stress (psychological well-being= 50.22; self-efficacy = 38.51). Main effect of gender, two-way, and three-way interaction effects were not significant on psychological well-being and self-efficacy. Though, caregivers encountered financial and work-family stressors, they derived great benefits from the intervention on caregiving skills and nutritional information for the PLWHAs.

Psycho-educational training package enhanced the psychological well-being and self-efficacy of informal caregivers of People Living with HIV/AIDS in Oyo State.

Caregiver-based psycho-education training should be inculcated into HIV/AIDS care services across Nigeria.

Keyword: PLWHAs' informal caregivers, Caregiving stress and self-efficacy, Psycho-educational package.

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DEDICATION

This project is dedicated to the glory of Almighty God: the Distresser and the Sublime One.

and

All family caregivers who are on call 24 hours a day for the unselfish caregiving they did without formal training, support and recognition.

CERTIFICATION

We certify that this study was carried out by BosedeAbidemi OKUNADE (Matric No :113578) in the Department of Adult Education, University of Ibadan, Ibadan under our supervision.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The Human Immune-deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDs) emerged as a life threatening infectious disease worldwide about three and half decades ago. However, advances in highly active anti retro viral therapy (HAART) has reduced the prevalence of death due to the disease.This notwithstanding, the scourge of AIDshas led to the death and morbidity of many young adults population in Africa (UNAIDS, 201I). Nigeria is the 3rd highest prevalence of the disease after South Africa and India, and it continues to increase since after the first incidence in 1986 (WHO, 2010). Despite the huge government expenditure to combat the menace of HIV/AIDs, the numbers of people living with HIV/AIDs (PLWHAs) as well as HIV/AIDs related deaths are on the increase in Nigeria (Center for Disease Control and Prevention Nigeria, 2015). The impact of this epidemic cannot be underestimated because it cuts across ethnic groups,areas of social life and economic activities.

HIV infection may be clinically silent at the onset but when HIV eventually developed to AIDs, the virus would perfectly damage the cells in the PLWHA’s brain, nervous system, intestines and the blood.This affect the way the infected thinks from the damage to the brain, cause diarrhea from the damage to the intestine, causeanemia andbleeding from the damage to the blood and numbness in the hand and the leg from the damages to the nerves (Adeyi, 2006). Cell damages in PLWHAs often results in severe impaired motor functions which brings about body weakness, consequent upon which PLWHAs may experience limitations in self -care (Asuzuand Nwangwu 2012).If PLWHAs are to overcome functional limitations and live a quality life, they will need caregiving delivery services and someone to care for them (Daini,2002).HIV/AIDs care can be defined as care for people that are not infected but at risk; a symptomatic- HIV positive individual ; infected people that present with early HIV disease; those with late HIV disease /AIDs ; and HIV/AIDs patients who are terminally ill (Maartens,1998). Care required varied for different disease stages.The care addresses medical, emotional, adherence, nursing, financial, spiritual, psychological and material needs of PLWHAs (Anyanwu and Egunyomi, 1992;Sarumi, 1996; Akinola, Sarumi, and Mojoyinola, 2000).

The progressive nature of HIV/AIDs makes PLWHAs to visit hospital frequently for the treatment of opportunistic infection from the formal caregivers. The formal caregivers are workers of the social service systems. In recent times,there has been preference for care of the PLWHAs to commence from the hospital to home-based care(WHO, 2000). In Nigeria, PLWHAs are often prematurely discharged from the hospital or not admitted at all because the health infrastructure has become basically weak and cannot cope adequately with the prolonged care required by the ever increasing number of PLWHAs (Oyo State Action Committee on AIDs (OYSACA, 2008) .

Today, it is increasingly clear that the informal caregivers play vital roles in the care of PLWHAs by offering important health advice (Finberg, et al, 2011). The parents, spouses/partners,confidants,children, grandchildren, relatives, and friends are the informal care-givers. They bath, dress, feed and administer medication to the sick (Montegomery, 1999; 2002). They provide large proportion of care needed by recipients, administered antiretroviral drug, and help them to cope with the side effects of administered drugs ((Tennstedt, 1999; Rose , Clark and Alexander, 1999; Rose, Bowman and Kresevic,2000).Governments in Africa have shifted away from hospital to home-based care to ease the burden on the already strained medical facilities in Africa (Adler, 2001, UNAIDS, 2001). When individuals received a positive HIV diagnosis, they were often sent back into their communities where their families took on caregiving duties withoutformaleducation,training, much preparations or support (Marsh,1992; Powel-Cope and Brown, 1992).

Informal caregivers are responsible for the provision of high-level activities such as financial management, transportation,communication, inter-personal relationship, shopping, decision making and so on. As the disease advances, they render help on more basic job such as dressing and eating(National Alliance for Caregiving and AARP, 2009). Caregiving is a dynamic process which involve a broad array of behavior that complement a relationship that is focused on others welfare; directing attention to others' distress rather than the caregivers own emotional state of being (Mikulineer, Phillip, Omri andRachael 2005).

The caregiving role is not always planned for and has been important in the society because several factors have necessitated it worldwide. As more people live longer lives, mankind is experiencing an increase in the number of people living with chronic ailments such as cancer, diabetes , mental illnesses,Schizophrenia ,HIV and

AIDs ; hence the increase in the need for caregivers (Beach et al , 2005; Feinberg et al, 2006.) Families constitute the bulk work force that provide the major proportion of support for the millions of people living with HIV/AIDs that are in need of help. As a result, the proportion of care-giving is skyrocking everyday (Feinberg, Wolkwitzk , Goldstein 2006 , and Feinberg and Hauser , 2012). Assistance is needed in activities of daily living (ADL) and instrumental activities of daily living (IADL). The bathing, putting on of clothes , cleaning up when defecating, moving in and out of the house are all the ADL, while the IADL are house work, grocery, shopping, and preparation of meals (Tennsted, 1999 andAla, 2001).

Most researches in the field of caregiving perceived care from the family members as a simple daily living activity. However, this perception did not capture the challenge of caregiving (Pearlin,Mullan, SempleandSkaff 1990). In addition, supervising PLWHAs and watching out for early signs of problems are serious tasks for caregiversbecause majority ofcaregivers go through the rigor of interpreting medical prescription that they did not have knowledge about (Kiecolt – Glaser, Preacher,MacCallum, Atkinson, Malarkey, and Glasser, 2003).

More so, transferring a patient from one position toanother has not captured the person who is resisting being transferred or carried while the provision of assistance with bathing has not adequatelyprojectedthe bathing of caregivers who are resisting being bathed (Tennstedt ,1999] Also, Caregivers helping with medication are faced with the hassles of medication administration especially when care recipients are placed on multiple medication administration which on most occasions are several times on daily basis in addition to injections , inhalers , eye drops , ear drops and crushed tablets(Tennstedt , 1999]. In the process of lifting the sick, the caregiver often experience sprain or strain and the care recipient can sustain injury if the caregiver is not familiar with the standard way of transferring the sick. Furthermore, being responsible for carrying out medical and nursing procedure which caregivers are not trained for such as the management of urinary catheters, skin care along the central line, measuring the body temperature, tube feeding and ventilation care stimulate the emotion of distress and anxiety in the novice routine family caregivers (Pinquartand Sorensen, 2003; 2005: 2006).These informal caregivers have empathy for their relatives who live with the HIV/AIDs epidemic. The people living with HIV experience grief, fear of looming death, discrimination, and stigmatization.

Therefore, most informal caregivers' work continues unnoticed, unrewarded and unsupported leaving majority to suffer physically and psychologically, and at the same time, the numerous benefits that informal caregivers provide are not realized at their full potential (Travis , Bethea , and Winn 2000) .

Due to poor education and training, many caregivers experience stress, isolation and pain while caringfor their patients. Due to inadequate knowledge and skills, many caregivers need to learn and master caregiving skills and procedures in order to become competent safe volunteer health care provider that can protect the care recipients from harm and at the same time guide against deterioration in their health.Also ,family caregivers need support and strength to continue to care for their sick relations (Judge, 2011). Caregiving requires a lot of time. Four out of 10 informal caregivers provide support for a period of 5 years or more. Majority of caregivers are on call all the time. Majority of family caregivers render 8 hours of care weekly (Frenny, 1996; 2001; 2002 and Olley,2008). This is a daily responsibility that is emotionally challenging.

- The patient'sbehavior which is usually characterized by screaming, yelling and threatening enhances caregiver depression. Caregiver depression yields exhaustion, anorexia, fatigue, and insomnia (Fuh , Liu , Mega and Cummings 2001). In the process, caregivers experience inconsistent sleep which may cause depression and they managed pain through pharmacologic and non-pharmacologic strategies (Van,2002) however , Caregivers who could not establish appropriate emotional distance from their care recipient usually suffer from severe burnout in addition to occupational stress (Braithwaite , 1996 : 2000).
- Burnout is a process in which day to day stresses and anxieties that are not identified and addressed are gradually accumulated and eventually developed to affect the caregivers' mental and physical health such that caregiving and caregivers' personal relationship suffer .Caregivers who experience burnout suffer from compassion fatique for a long period . During such time, their care recipients may be physically or mentally abused, neglected, treated in a detached manner or mechanical fashion (Van Dyk, 2001). Since burnout occurs gradually, the family caregivers would keep providing care service

until their well-being is negatively affected and job performance or caregiving role becomes poorly provided.

- Caregiving imposes caregiving burden. Caregiving burden refers to adverse response of caregivers to the effect of providing care on his or her social-occupational and personal activities .The status of the care recipients' cognition and mental health predicts caregivers' burden. (Huang, et al, 2012). Caregiving burden symbolizes caregiving stress .Caregiving is stress induced. Stress can manifest when caregiving demand hinder the caregiver from pursuit of other life goals. (Mckinlay, Crawford and Tennstedt 1995). Stress occurs when an individual engages in intensive mind and body activities that negatively affect his/her psychological well-being (Lazarus and Folkman (1990). Stressful situation cause fatigue and diminish the realization of goals and aspirationsof the caregiver (Pearlin,1990).

The consequences of stressed or over- burdened caregiving are many. Caregivers can become patientsthemselves by sustaining injury and caregivers may pay little or no attention to their physical and mental health. Poor caregiving can lead to pre-mature death among caregivers. The PLWHAs can quickly progress to the advanced stage of AIDs thus increasing the need for more care for PLWHAs. It can also trigger negative emotional development among caregivers thereby leading to poor self-esteem (Skaffand Pearlin, 1992).

Caregiving literature revealed that informal caregivers experience stress in their bid to care for their sick relations suffering from the ordeal of HIV /AIDs due to non-competency or lack of self - efficacy in the provision of caregiving role .Self-efficacy can be explained in terms of the quality of caregiving services provided by informal caregivers to their care recipients. Caregivers are vital element in the provision of safe care for PLWHAs. And if they are to provide the recommended home-based care and palliative care treatment for PLWHAs as recommended by the World Health Organization (2012), they need to develop self-efficacy in care delivery.

Self-efficacy is the belief, perception, judgment, and confidence of a caregiver about his or ability to implement action like caregiving and manage caregiving situation successfully (Bandura 1991; Bourgeoise, et al, 1996;Steffen, 2002). In such caregiving service delivery, caregivers manage caregiver's challenges by adopting coping strategies to manage the health of their patient.

Self-efficacy has effect on caregiving and about 90 % of PLWHAs are reported to have cases of the symptoms of the disease (Adler, 2001; Toljano, Perala, and Laukkala, 2012). Therefore, caring for family members with HIV/AIDs is a stressful task for informal caregivers, especially when confronted with their clientsbehavioral reactions (Gallicchio, Siddiqi,Langenbergand Baumgarten, 2002). To date,there is a dearth of knowledge on the family caregivers' level of self-efficacy or level of perceived burden in relation to care recipient's behavioral problems. Therefore, this study investigated the level of informal family caregiver's self-efficacy in PLWHAs care service delivery and the factors related to their care burden.

The strategies to enhance self -efficacy in positive care service provision for PLWHAs are: skills mastery, modelling, re-interpretation of feelings, positive attitude about caregiving, and persuasion (Boise et al, 2005). These four strategies have the capability to teach caregivers to manage their emotions by not stressing themselves (Schmallet al, 2000). These strategies are powerful tools to enhance perfect health and self-esteem offamily caregivers (Vitaliano, Scanlan, Zhang, Savage, Hirschs, Siegler, 2002).

In care service delivery, provision of caregiving tasks in the area of personal tasks like bathing, dressing, eating, transferring, and diapering can be daunting to some caregivers because of their deficiency in caregiving skills required in carrying out the technical work roles.Performance of these caregiving tasks on many occasions put strains on the physical and mental health of the caregivers consequent upon which caregivers experience negative health challenges of poorer sleep quality , deficits in antibodies , response to vaccination and the likes which often have negative impact on the caregivers psychological well-being(Gallanger-Thompson , 2008 , Vitaliano ,2008).In the light of this , the level of self- efficacy of informal caregivers of PLWHAs depend on their state of being otherwise termed their psychological well-being .

Psychological well-being is thephysical, mental health, the social participation and financial disposition of caregivers that enable them carry out care tasks appropriately (Rathand Harter 2006; Baiwas, 2011). The psychological well-being of caregivers has to do with a good or satisfactory state of mind of caregivers that is devoid of mental disorder or ill health in relation to caregiving service delivery. It is influenced by individual biological and psychological factors: social interactions , societal structures , resources and cultural values . Psychological well-being can also be defined as the state of wellness and stability of a person's self. It refers to the emotional state of being of caregivers (WHO, 2007, Deiner, 2009). It laid emphasis on caregivers' deep sense of wellness, vitality,enthusiasm, self-coherence,logical reasoning, competence and feeling fully functioning in care service delivery (Ryffand Carol 1989; Ryan and Deci 2001).

There are five components of psychological well-being: career, social, financial,physical and community well-being. The physical health refers to caregivers possession of robust health and strengths to get things done; Finance to cope with life; Social well-being to reflect how caregivers occupy their time or simply liking the caregiving tasks they perform every day while Community well-being explains the inter-personal relationship of caregivers with their immediate environment (Rathand Harter, 1989) . These elements of psychological well-being are universal across faith, cultures and nationalities and they account for a thriving life or life spent suffering . Research findings revealed that 66 % of family caregivers are doing well in only one aspect of the listed areas and just 7% are thriving well in all the five domains. Struggling in any of these domains damages informal caregivers' psychological well-being and wear out their life whereas those who are thriving well in all the domains experience strengthened psychological well-being and better caregiving service delivery and self-efficacy. (Marks, Lambert and Choi , 2002).

However, informal caregivers require large sum of effort, knowledge, and skills to care for PLHWAs and caregiving researches have revealed that caregivers'who is prepared to deliver care have fewer burdens. In caregiving literature, it is obvious that the physical, mental and psychological well-being of caregivers requires self-efficacy. Therefore, if effective care and safe caregiving is to be provided, caregivers need be in a state of perfect well-being physically, socially, mentally, psychologically and possess high self-efficacy skills.

In addition, if adequate caregiving services is to be provided for PLWHAs, certain needs of the caregivers must be met and addressed. However, health-professionals often fail to identify, treat and refer family caregivers to the appropriate resource centers for emotional or any other kind of support. They do not engage in promotion of healthy life styles among informal caregivers (Family Caregiving and Public Policy, 2006).Informal caregivers report high level of stress, depression and poor well-being due to inadequate knowledge and skills to administer care to patients (Pinquartand Sorensen,2003; Brehaut ,2004). Caregivers in most cases are not used to the type of care and the amount of care needed for provision. Consequently, caregivers unconsciously neglect their personal health care needs as they render help to their patients causing deterioration in the caregivers' health and well- being.

To fill the missing gap, the development of comprehensive intervention that target the needs of caregivers is helpful. Intervention strategy that focuses on psychological and educational needs of caregiving and of the caregivers themselves are very essential and beneficial (Astrol, 2012). The ways to educate caregivers are through community workshops, lecture series, discussions, support groups, psycho-educational, counseling, and technology-based interventions (Toseland and Smith, 2001). Despite the fact that caregiving literature emphasized the need to provide information for the family caregivers, studies on interventions that support the informal caregivers are insufficient and the proposed collaborative intervention models have not been developed. Besides, some caregivers do not want to use interventions as a result of challenges like costs, logistics, difficulty in identifying resources and discomfort in using resources (CzajaandRubert, 2008).

One of the major needs of informal caregivers are resources which minimize the risk associated with caring for PLWHAs. Caregiving literature therefore asserted the need to link caregivers to resource centers throughout the disease period. However, majority of family caregivers are not aware that there are resources or support services in their immediate environment that they can turn to for assistance .They are also unaware of how to access such resources. Lack of focus on caregivers is a missing link in health care of informal caregivers and so caregivers would need information, training and skill that would empower them to become competent and confident care providers that can protect their family members from harm without jeopardizing their own health. The caregiving self- efficacy and psychological well-being of caregivers can be enhanced through the use of Psycho-educational intervention and its package. Psycho-education refers to the education and psychological counsel offered to the People living with HIV/AIDs and the informal caregivers of people living with chronic ailment such as HIV/AIDs in order to alleviate their caregiving distress (Lukens and McFarlane 2004) while Psycho-educational package is the composition of carefully selected educational andpsychological counsel offered to PLWHAs as well as their informal caregivers in order to alleviate their caregiving distress.

Psycho-educational component include education, support, behavior modification, compliance to pharmacological regime, crisis intervention, training in problem solving, training in communication skill, training in nutritional issues, development of satisfying relationship, stress management, assertiveness, cognitive reframing, teaching joy and coping strategies.This intervention is a foremost psychological counsel that focuses on the needs of caregivers, recipients, and the family as a whole. It emphasized coping with stress (Dixon, 1999; March,1992). Positive outcome of psycho-educational interventionincludes decreased symptomatology and anxiety, and increased social functioning and quality of life (Voss,2002).Although, psycho-educational intervention and its package have not been used for the management of caregiving self-efficacy and psychological well-being of informal caregivers of PLWHAs, but evidence based studies have shown the effectiveness of psycho-educational strategy in the management of chronic ailments associated with mental illnesses (Ollendick , 2008;Chamblish, 2009).

The psycho-educational approach used in this study relied on past work by authors of psycho-educational strategy intervention group (Promroy ,1995 ; Rubin , Pomeroy and Gordon , 1995). Those studiesviewed the effectiveness of psycho-educational strategy group for HIV-infected women and findings haveaproved it to bebeneficial in alleviating the psychological pain associated with caring for PLWHAs (Rubin, et al, 1995;Pomeroy, 1997).The same technique was modified for informal caregivers in order to replicate similar techniques.The education component of the psycho-educational therapy is therefore rooted on the belief that PLWHAs needs correct information about the chronic ailment because of the infections that may develop as a result of HIV /AIDs. Also, women need information about the disease in order to be educated about their chances of preventing the transfer of HIV /AIDs to their new born infants.

In addition, the intervention provides a group support that help people to cope with all the characteristics which are common to PLWHAs (Biegel, et al,1991).Besides,the burden of managing the disease lies on the shoulder of the patients, and the formal and informal care providers, thus, the education intervention should cut across all who are involved in the disease management (Lehman andSteinwach, 1998). Furthermore, the intervention has elements of cognitive theory which help to reduce anxiety. This is done through giving the family caregiver assignment on ways to assist the PLWHAs. Psycho-educational treatment training for this study lasted six weeks . Each training session lasted an hour. Each of the 1 -8 hour psycho-educational therapy group sessions consisted of educational, supportive and didactic components. The educational package topics that are relevant to the HIV/AIDs informal caregivers arecarefully selected using cognitive-behavioral and task-centered techniques. Few examples of the topicsinclude;HIV/AIDs facts , caregiver's roles , caregiving challenges , infections selfmastery skills modelling , safety precautions, training skills on ADLs and IADL tasks, coping strategies, stress management techniques, information on nutrition for PLWHAs , exercises and relaxation ,location of resource centers and skills on development of self- efficacy and self-esteem of caregivers.

The caregiving activities is depending on the level of associated stress .The level of stress of each individual caregiver is a function of resilence or recovering ability of each individual caregivers . Also, care activities depend on the gender of the person (Delgado andTennstedt,, 2004).Women are noted as foremost provider of care for PLWHAs.(Tennstedt, 2009).Men used managerial approach to care for their spouse, while women are more emotional when caring for their husband; and their effort are not acknowledged by the formal caregivers (Bausch, 2007; Spaid , 2008; Pinquart, 2009; Sorensen, 2010). Since the promotion of caregiving self-efficacy, reduction of caregiving distress and enhancement of the overall caregivers well- being is the focus of this study, it is therefore assumed that an intervention such as psycho-education in addition to its training package can potentially reduce stress associated with caregiving, improve the caregiver's ability to care effectively, promote and improve caregivers' health and enhance caregivers coping ability. This research, therefore, focused on the lacuna in literature on the effect of stress on family caregivers' caregiving outcome.

Caregiving literature revealed positive outcome of psycho-educational package(Coursey,2000; Curtis, and Marsh,2000).The literature suggests that psycho-education intervention can be adapted.Therefore, psycho-educational intervention is a feasible intervention that can be employed for decreasing the levels of anxiety and distress of both the care recipients and informal caregivers of people living with any chronic ailments of which HIV/AIDs is inclusive .However ,clear evidence of its efficacy has not been fully established in sub-Sahara Africa , including Nigeria. This study, was therefore, designed to develop a Psycho-educational Training Package (PeTP) for the informal caregivers of PLWHAs as well as determine its effectiveness on their caregiving self-efficacy and psychological well-being in Oyo State, Nigeria. The moderating effects of gender and caregiving stress were also examined.

1.2 Statement of the Problem

In recent times, informal caregivers of PLWHAs in Nigeria face a unique number of challenges associated with caregiving. These include economic hardship, inadequate help, lack of in-home-caregiving skills, training,risk of infection , lack of knowledge about available resources, stress, burnout, emotional burden, lack of support due to stigma and stigmatization, feelings of loss, loss of self-esteem, low self-efficacy, and poor self-image. The exposure to these stressors put informal caregivers at an increased risk of physical and psychological health effects characterized by loss of appetite,poor sleep,depression and anxiety. These negative health outcomes lead to low self-efficacy . It also places great emotional burden that is overwhelming on informal caregivers and insufficient knowledge makes them susceptible to morbidity.

To reduce the physical and mental health burden experienced by caregivers, there is the need to provide education on caregiving to the family caregiver who mostly do not have sufficient education and training on what caregiving entails. This is with the aim of enhancing their knowledge whichenable them to perform the caregiving task(s) efficiently and effectively. Though each caregiver is provided with treatment and informal skeletal training by health professionals to be able to assist in managing the care recipient(s) at home. However, there are ample evidences of significant short-comings. Suffice it to say that there is a dearth of literature on standardized training package for the formal training of informal family caregivers. This problem necessitated this study and has led to the question: ‘Will the adoption of psycho-educational training package enhance caregiving self- efficacy and psychological well-being of informal caregivers of PLWHAs in Oyo State? Previous studies have focused largely on the PLWHAs and the formal caregiving with less emphasis on the improvement of the informal caregiving process using psycho-educational intervention. This study was therefore, designed to develop a psycho-educational training package(PeTP) for the informal caregivers as well determine its effectiveness on their caregiving self-efficacy and psychological well-being in Oyo

State,Nigeria. The moderating effects of gender and caregiving stress were also examined.

1.3 Objectives of the Study

The general objective of this study is to determine the efficacy of psycho-educational package on self-efficacy and psychological well-being of informal caregivers of people living with HIV/AIDs (PLWHAs) in Oyo State, Nigeria. However, the specific objectives are to:

i. determine the significant main effects of treatment on psychological well-being of informal caregivers of PLWHAs.
ii. determine the significant main effects of treatment on self-efficacy of informal caregivers of PLWHAs .
iii. examine the significant main effects of gender on psychological well-being of informal caregivers of PLWHAs.
iv. examine the significant main effects of gender on self-efficacy of informal caregivers of PLWHAs.
v. assess the significant main effects of caregiving stress on psychological well-being of informal caregivers of PLWHAs.
vi. assess the significant main effects of caregiving stress on self-efficacy of informal caregivers of PLWHAs .
vii. investigate the significant interaction effects of gender and caregiving stress on psychological well-being of informal caregivers of PLWHAs
viii. investigatethe significant interaction effects of gender and caregiving stress on self- efficacy of informal caregivers of PLWHAs.
ix. investigate the significant interaction effects of treatment and gender on psychological well-being of informal caregivers of PLWHAs .
x. investigate the significant interaction effects of treatment and gender on self-efficacy of informal caregivers of PLWHAs .
xi. determine the significant interaction effects of treatment , gender and caregiving stress on psychological well-being of informal caregivers of PLWHAs .
xii. determine the significant interaction effects of treatment , gender , and caregiving stress on self -efficacy of informal caregivers of PLWHAs .

1.4 Research Questions

RQ1: What is the level of self-efficacy of the informal caregivers based on their demographic characteristics?

RQ2: What is the level of psychological well-being of the informal caregivers based on their demographic characteristics?

RQ3: What is the level of caregiving stress of informal caregivers based on their psychological well-being?

RQ4: What is the level of caregiving stress of informal caregivers based on their self-efficacy?

1.5 Hypotheses

The following hypotheses were tested at 0.05 level of significance.

H_{01}: There is no significant main effect of treatment on psychological well-being of informal caregivers of PLWHAs .

H_{02}: There is no significant main effect of treatment on self- efficacy of informal caregivers of PLWHAs.

H_{03}: There is no significant main effect of gender on psychological well-being of informal caregivers of PLWHAs.

H_{04}: There is no significant main effect of gender on self-efficacy of informal caregivers of PLWHAs.

H_{05}: There is no significant main effect of caregiving stress on psychological well-being of informal caregivers of PLWHAs.

H_{06}: There is no significant main effect of caregiving stress on self-efficacy of informal caregivers of PLWHAs.

H_{07}: There is no significant interaction effect of treatment and gender on psychological well-being of informal caregivers of PLWHAs.

H_{08}: There is no significant interaction effect of treatment and gender on self-efficacy of informal caregivers of PLWHAs.

H_{09}: There is no significant interaction effect of treatment and caregiving stress on psychological well-being of informal caregivers of PLWHAs.

H_{10}: There is no significant interaction effect of treatment and caregiving stress on self-efficacy of informal caregivers of PLWHAs.

H_{11}: There is no significant interaction effect of treatment, caregiving stress and gender on psychological well-being of informal caregivers of PLWHAs.

H_{12}: There is no significant interaction effect of treatment, caregiving stress and gender on self-efficacy of informal caregivers of PLWHAs.

1.6 Significance of the study

In Nigeria, HIV/AIDs is steadily increasing the bed occupancy rate in many hospitals as a result of the growing number of PLWHAs and this has increased the staff work load ofhealth care workers.Also hospital-based care has become very expensive, and the health infrastructure has become basically weak especially in the rural areas, and cannot cope adequately with the prolonged care required by PLWHAs. (Center for Disease control and Prevention , Nigeria ,2012 This scenario calls for considering a more cost- effective , community-based alternative for caring for the PLWHAs and home-based care is the desirable alternative (WHO,2001). This study is significant in that when informal caregivers are supported adequately, it would help to relieve hospitals and professional health care personnel of the burden of caring for millions of PLWHAs.

The PLWHAs prefer home care to hospital care because they would be continually surrounded and cared for by people who they love and are familiar with therefore ,this study provided valuable information that enhanced grasping the dynamics of living with and caring for HIV/AIDs infected people at home. Stigma and isolation is constantly being experienced by PLWHAs and their informal caregivers in the hospital settings. This study is significant because being cared for at home would not only reduce the stigma and isolation associated with HIV/AIDs but would stimulate caregivers' to render adequate care that would foster adherence to treatment regime and promote quality of life for the informal caregiver and their care recipient.

This study impacted training on how caregivers could perform certain work role . Also, training in stress management was impacted .Acquisition of caregivingskills, knowledge of self- care and preventive measure would alleviate the fear of contagion and alleviate stress. This studyempowered caregivers on the resource centersto access for support.

Professionals such as clinical Psychologists, guidance counselors and social workers would benefit from the study because they would build the package into their policies and guidelines as a continuum of care in the HIV/AIDs care services across Nigeria.

Furthermore, the findings of this study would be useful to Government at all levels (local, state and federal), Non-governmental organizations, Community Based Organizations and multi-later al agencies and donors to adapt psycho-educational training package to enhance caregiving self-efficacy and psychological well-being of informal caregivers of PLWHAs in Oyo state , Nigeria.

1.7 Scope of the study

The study investigated the effects of psycho-educational package on self-efficacy and psychological well-being of informal caregivers of PLWHAs in Oyo State. The study was delimited to two approved non-governmental HIV/AIDssupport and counselling centers; The Family Health and Population Action Committee (FAHPAC) and the new Initiative for the Enhancement of Life and Health (NELAH) . The two HIV AIDs private health facility centers were purposively chosen for the study because they are reputable HIV/AIDs caregivers' support and counselling centers .High concentration of PLWHAs and their informal caregivers are accessing treatment at these centres at no cost .

The study is delimited to those family caregivers who had index score of 44 and above during the screening exercise using the Zarit Burden Interview Scale and IADLs index screening score of 43 and above . Besides the study was also restricted to informal caregivers of PLWHAs because previous studies focused largely on the PLWHAs and the formal caregiving process with less emphasis on the improvement of the informal caregiving process using psycho-educational package .

Psycho-educational package is the choice intervention for enhancing the caregiving self-efficacy and psychological well-being of informal caregivers of PLWHAs because it is the foremost psychological tool that is useful in the modification of human behavior. Psycho-educational package have proved to be useful in a wide range of clinical settings across system level as experimental training tools for care recipients and family members of People with life threatening illnesses because of its flexibility. It has effect beyond the formal and informal system to help people in the community on how to manage crisis associated with illness like HIV/AIDs .

The study was restricted to Oyo State because it was considered convenient and the population adequate to provide opportunity for comparison of the objectives and for the generalization of the research findings.

1.7 Operational Definition of Terms

The following terms are defined in simple language to avoid ambiguity

Psycho-educational package is the composition of educational and psychological counsel offered to People living with HIV/AIDs, as well as their informal caregivers in order to alleviate their caregiving distress.

Informal/Family caregiver:refers to unpaid family memberswhich include parents, spouses or partners, children, grandchildren, relatives, confidants, friends and others who provide care to individuals who have acute or chronic health condition like HIV/AIDs and need help to carry out a variety of personal tasks such as bathing, dressing, taking medications to tube feeding and ventilation care.

Caregiving: refers to array of behavior that complement the relationship which focused on others' welfare; directing attention to others' distress rather than the caregivers' emotional state of being.

Formal caregivers are volunteers or paid employees connected to the social service care system.

Self-efficacy: refers to the confidence, belief, perception or judgment that a caregiver has in his ability to organize, execute and manage caregiving tasks successfully.

Psychological well-being: is the state of wellness and stability of a person's self. It refers to the physical, mental health and the emotional state of being of informal caregivers that is characterized by pleasant emotion and devoid of negative mood which enable the caregiver to make effective contribution in the community.

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND THEORETICAL FRAMEWORK

This chapter focused on review of literature and theoretical background related to the study. The purpose is to provide a sound base, logical reasoning and rational explanation for examining the effects of psycho-educational package on the management of caregiving stress of informal caregivers of People Living with HIV/AIDs in Oyo State, Nigeria

2.1.1 The concept of caregiving

Caregiving is a health care delivery service in which persons living with chronic health conditions such as HIV/AIDs, cancer, Diabetes and so on are helped or assisted by informal caregivers until signs of increased safety, well-being and security are attained (Acton, and Kang 2001). It is a response to the need of a distressed person and its purpose is to reduce the patients suffering, provide safe haven and foster care recipient growth and development (Anhensel, Perlin, Mullan, Zarit and Whitlack, 1995). Caregiving situations embrace the age of the infected person living with HIV/AIDs, the stage of the disease, and the relationship between caregivers and the receiver of care. Each caregiving situation is peculiar. The developmental stages of each caregiving situation are influenced by the caregivers'relationship with the recipient, the cultural context and the family relationship. Caregiving delivery services can be rendered for the distressed people at the hospital or home. Caregiving service may be on a long term, short term, intermittent or sporadic basis. Caregiving encompasses a wide range of experience and situations.

Caregiving has positive effect such as rewards and satisfaction. A distressed person is helped, loads are lifted, wound bound, freedom is restored and life are renewed (Wight, LeBlanc and Aneshensel, 1998). The relationship between both partners is an advantage(Maclin,2007).Reported constraint to caregiving is the exposure of caregivers to burnout, chronic illnesses, depression, anxiety, stigma, isolation, fear of contagion, insomnia, financial difficulty, a lack of control over daily itinerary which often resulted to major sources of emotional burden. Caregiving is not a time to be perfect however balance must be maintained through courage, strength, gentleness, tender touch, sensitive interaction, identification of personal barriers, avoidance of being overwhelmed, constructive communication, goal setting, reduction of personal stress and seeking the help of a support group throughout the caregiving period since caregivers cannot alleviate the effect of a progressive illness such as HIV/AIDs of the care recipient for whom they are providing care (http://www.caregiving-solution.comcarstrell html, 2009).

Those who provide care and support services for the indisposed such as PLWHAs are called caregiver. The family caregiver or informal caregivers are subset of the primary caregivers. Family caregiver or informal caregivers are unpaid care service delivery group of people (Reinhart, 1994). The majority of primary caregivers are women whose assignment occur within the family cycle. Research documents estimate that there are 44 Million informal caregivers worldwide and they fall into the age range of 18years and above but they are not paid for the services they rendered which are valued at about $257 Billion as at two decades ago (Arno, 2006; Feinberg, 2010).

The formal caregivers are medical doctors, nurses, social worker, volunteers, spiritual counselors, NGOs and faith based organizations (FBOS)workers .The family members who are part of the secondary caregivers support the professional caregivers (Schulz, et al,1997).Generally, women constitute the bulk of informal caregivers and they undertake personal difficult tasks. However, in recent time, 40 percent of caregivers are men. Between 1984 and 1994, about halfpopulation of caregivers belong to themale gender (Arno, 2006; Feinberg, 2010). These male informal caregivers are rendering services in complex tasks such as finance management, arranging care and directing assistance with more personal care. Although professional health workers often see many of these family caregivers, in formal care centres but they do not recognize them as partners in care service provision (Brody, et al 1995).

Informal caregiver often prevent unnecessary hospital admissions, reduce the reliance on professional health workers , keep the care recipient at home longer and maintain their sound health. They play vital role in identifying and managing symptoms ofHIV/AIDs disease with little or no training (Kramer, 1997; Gautun, Werner andLucras, 2012). To administer care to PLWHAs is not an easy task and the combination of caregiving with household work has an over-bearing effect on the health of the caregivers (Mirowskyand Ross, 2003; Pinquart, 2003). That is the reason why some caregivers scream at care recipients at times or threaten to withdraw their services (Gautun, et al, 2011). Therefore, if caregivers have limited skills on how to perform caregiving role, there is the likelihood for them to harm their loved ones unconsciously.The informal caregivers need education in order to recognize the effects of drugs on their recipient.They are also expected to develop ability to manage potential problem. Although caregiving literature expected a lot of responsibilities from caregivers, it also pointed out that majority of these informal caregivers are nursing one form of illness or another, and this shows that they are also patients. Research evidence proposes intervention to support the caregivers as clients, directly reducing caregivers' distress, and increase caregivers' sense of certainty and control.

Research evidence suggest interventions for informal caregivers in order to ascertain that the care recipients receive safe and effective care as caregivers intervention has the capability to improve the caregivers knowledge and skills .Intervention package also have the strength to develop psychomotor skills in caregivers for the safe administration of medications as well as enhancing coping skills to deal with the caregivers anger and frustration, thus providing the physical and mental well-being for both the infected and the affected PLWHAs.

Caregivers of PLWHAs employ several coping strategies in caregiving provision. such include managing, experiencing or responding to the work of caring by being with their sick relation, getting out with them, maintaining balance, seeking support from both informal and formal systems, working as a team with health providers or social service providers, friends, volunteers, family members and finally engage in planning for the death of PLWHAs .

2.1.2 Importance (role) of caregiving in the treatment of HIV/AIDs disease

HIV stands for Human Immuno-deficiency Virus.HIV is a retrovirus or small organism which kills the immune system. When an individual contacted the virus, it gradually weakens the immune system and consequently exposing the body to infections (UNAIDS,2004).HIV does this by replicating or reproducing itself within the host cell.The replication of HIV is relentless;and about 10 billion vironsare produced daily. People infected with HIV remains infected and infective throughout life and the virus eventually developed to AIDs. AIDs stand for a collection of various diseases that invade human body once the immune system is destroyed by HIV. Although HIV is a virus, it cannot be contacted through coughing, sneezing or body contact but the virus can be transferred through vaginal, anal, or oral sex. Such include having contact with the infected person through unprotected sexual intercourse, transfusion of unscreened but contaminated blood, sharing of dirty and unsterilized needles and other sharp instruments. HIV infected person can transmit the virus to another person by sharing the seminal fluid,vaginal fluid ,blood and blood product ,placenta and breast milk(Maaten 1994;Ajuwon and Shokunbi,2010). Of all these routes, sexual route is the predominant route of transmissionaccounting for approximately 80% of all transmission. Transmission can occur through the sharing of needles and syringes, tattooing, body piercing and circumcision. A pregnant woman who is infected with HIV may transmit the virus before, during or immediately after delivery as well as during breastfeeding.Transfusion of a unit of HIV infected blood results in sero-conversion that is infection with HIV in virtually all the recipients of such infected blood units (Ajuwonand Shokunbi, 1996; 2003:Adewoleand Lawoyin, 2004).

The interval between infection and development of AIDs varies in individuals .With a healthy lifestyle of good nutrition and regular exercises, the period between infection with HIV and development of AIDs can be up to 10-15 years or even longer.HIV virus is a special one that has the peculiarity of multiplying itself in a large number within seconds than other types of virus hence its difficulty to conquer easily and up till now there is no cure for HIV/AIDs since there is not yet an invention of vaccine to combat the virus. Although, virus is difficult to treat with medicine, the use of anti-retroviral (ARV} drugs can slow down the progression of HIV to AIDs by decreasing the viral load in an infected person .The use of drugs is fraught with challenges as drugs must be taken for life; ARV drugs also have some serious side effects as the regimen must be strictly adhered to, if not, drug resistant strain of the virus will emerge (UNAIDS,2004). Total Abstinence from sexual intercourse with an infected person, protection with the use of condom during sexual intercourse, changing behavior and good personal hygiene like washing ones hand after visiting the rest room are ways to prevent the spread of HIV/AIDs (Arkutu, 1995; Slap, Lot, Huang, Daniyam;Zink andSuclop, 2002).

One cannot identify an HIV /AIDs infected person by mere looking at the people’s face except by undergoing HIV test. AIDsis caused by two types of viruses identified as HIV-1 and HIV-2. HIV-1 virus is found in all parts of the world but more peculiar to the western world of Europe while HIV-2 is found mostly in West Africa. Both types have similar mode of spread and can be prevented through similar ways. However, the HIV 1 type has the characteristic of developing to AIDs faster than HIV II. When HIV finds its way into human body, it attaches itself to the CD4 cells in addition to the DNACD4 cells thereby reproducing HIV and DNA.There are no medicine that can completely flush away the viruses from the body (Asuzu, 2008, Arkutu, 1992).

The first stage of HIV infection is called the window period. It occurs after a person has contacted the virus. Usually, the infected person may not know that he or she had contacted the virus until when he or she becomes ill and become subjected to laboratory test .This means that it is not possible to detect an AIDs patient from their physical appearance. This is because the signs of HIV infection does not manifest immediately.It can take years for its physical manifestation and it is at this stage that such person is said to have AIDs. A few people do notice that they have contacted the virus 1st – 4th week until after an appreciable destruction of the immune systems of the body had been completed by the virus. Clear indications of the diseasemanifest in the following ways; skin rashes,cough,white coating in the mouth,drastic reduction in weight, and profuse sweating in the night (Onuoha,2001).

The break-down of the nervous system is the first which continue with convulsion, nervous system problems, and legspain(UNAIDS/WHO (G-2000). Because these symptoms are similar to features found in other illness other than HIV, people need to carry out test to confirm the presence or otherwise of the virus. The People who are infected will test positive to HIV. After the incubation period, people that tested positive would be ill. People living with HIV/AIDs need good water and balanced diet if they are to stay healthy. PLWHAs easily get malnourished from persistent occurrence of diarrhoea (Azusuand Nwagwu, 2012).

HIVcannot be stopped when the virus hadpenetrated, infected the whole system and the DNA.Ante-retroviral drugs like(Zidovudine (AZT), DDI, DDC, nevirapine and D4T (Wilder, 2000) can slow down the pace of the virus to reproduce itself even though it cannot eradicate it completely from the body. This implies that the person would be on drugs continuously and the continuous taking of a particular drug has negative implication for is effectiveness. These drugs are costly and can cost US$ 350 per year or more. Few people with HIV can afford this. Besides, these medicines are not easily available for PLWHAs in the world (WHO, 2001;Maclin, 2007).HIV/AIDsis one of the most devastating epidemics worldwide. It has devastating effects on the physical, social, psychological and economic well-being of individuals, families and society infected and affected by the virus (Okonofua, 1992, Okeke, 2009).

The first stage of HIV is persistent swollen gland, headaches, tiredness, sore muscles and diarrhoea (Maartens, 1999). The second stage entails mouth cancer and weight loss. The third stage is continuous diarrhoea that leads to weight loss, tuberculosis and pneumonia (Maatens, 1999),while the fourth stage are wasting, confusion and mental disorder (Maartens, 1999).The care given during these period are psychological, social, emotional, nutritional,financial and physical support (Folkman, Chesney and Christopher-Richards, 1994).

2.1.3 Caregiving in the treatment of HIV/AIDs and the health status of Caregivers

Caregiving is a technical duty because it requires skills on how to manage an individual wardrobe and dress; master the types and kind of food to give to an individual at a particular time and also to provide hygiene so that the infected can look cleanands fresh (De Frias, Tuokko,andRosenberg (2005). The management of the PLWHAs entails the mastery of specialized skills because the PLWHAs may exhibit annoying characteristics (Leblanc, et al, 1997). Among HIV/AIDs patients who live at home, only less than 10% of them depend on formal caregivers (Anderson and Koickman, 2001). Caregiving requires huge amount of time and this have emotional effects on the caregiver (Ross, 2011). Even those whose are supposed to provide finance to care for HIV patients are scared of going to them to give such aid because of the fear of contacting the disease from them(Parkenham and Knickman, 2001; Fredman, 2010; Carek, 2011).

Their chronic conditions result into physical or cognitive limitations and so they need to rely on caregivers for assistance. PLWHAs are often in need of specialized care and use of medical equipment as symptoms worsen and the family caregivers are the ones that help them to engage in the use of complex medical equipment as well as arrangement of caregivingactivities including meeting up with appointment (Anderson and Knickman, 2001;Lim and Zeback, 2004;Van Ryn,2011). Though, it is stressful to manage those with HIV, yet such support goes a long way in sustaining the life of the patient (Chang, 2001).

Caregiving for individuals with extensive health challenges as it occurs with PLWHAs is disturbing (Given, 2004). The nature of HIV/AIDs disease, the caregiving demand and the lengthy period of care provision for PLWHAs imposes disruptions in task development of informal caregivers. According to Mullan (1998), informal caregivers experience a lot of challenges when PLWHAs are seriously ill. Also, informal caregivers experience interpersonal strain resulting from imbalances of their relationship with their client whenever they are confronted with issues of autonomy, independence or reciprocity because of the stigma associated with HIV/AIDs illness (Truelove, 2002). Also, the caregiver and the care recipient (PLWHAs) are vulnerable to the effect of discrimination,stigmatization, distress and shame associated with the disease (Powell-Cope and Brown, 1992).

The family caregiver often manages the physical and emotional challenges he or she experiences when administering care to PLWHAs, (Lazarus andFolkman,1984). Neugaard (2008) found a correlation between age of the caregiver and their health status. Those who are less than 55 years had 35% risk of having poor physical and mental health compared to non- caregivers in the age group. And those above 55 years old had a 3 percent decreased risk of experiencing poor health compared to individuals in the same age who were not caregivers (Neugaard, 2008). He concluded that caregivers had decline health compared to non-caregivers. This implies that caregiving negatively affect the health of the caregiver.

When a patient experiences high level of pain, the caregiver would likely experience more stress and vice versa (De Fias, 2005). The caregiver experiences anxiety, depression, fund deficiency and this affects the quality of care giving to the patient (Pearlin, 1990). In literature, role overload and role captivity are variables used to explain the quality of life of caregivers (BrabelandAdabbo, 2011).Billings (2000) shows a correlation between caregiver's attitude and health status. Schulz and Beach (1999) examined the health risk of those who are not caregivers and those who are caregivers and concluded that caregivers are more exposed to factors that causesmental stress and this could place them at risk of untimely death.

Based on a prospective cohort study of 375 caregivers and 694 non caregivers, Fredman, et al (2010) found that stress increased the risk of ill health among caregivers. Additionally, the same result was discovered by Grosswood and Ross (2011) who found that caregivers confidence increase when they receive social support from others. This conclusion was arrived at in a study that involved 103 family caregivers (Bookwala,Yee, Williams, Shaffer , and Parmelee , 2000)

2.1.4 The Effects of Caregiving on the Caregivers' Physical and Mental Health

It has been established in literature that caregiving has negative effect on the health of the care provider (Beach, 2005; Bookwala, 2006). It is on record that women spend more time with a patient than male (Burton, et al, 2007). The patient may likely exhibit symptom of blood pressure (Braithwaite ,2000). Spending little time with the patient can as well worsen the situation (Vitaliano, Young and Zhang, 2007). The functionality of PLWHAs can be attributed to the stress level of their caregivers (Levesque, et al, 2005; Mckinlayet al, 2005; Montgomery, 2009). The long duration of the HIV/AIDs stages, its progression and the long period of care for PLWHAs increase the emotional and physical demands of caregiving. Research evidence revealed that 80% of PLWHAs are infected through unprotected sexual inter-course. People believe that those who are infected get reward for their promiscuity. This erroneous assumption makes people run away from the infected. Consequent upon which the infected are discriminated against. Apart from the fact that the infected is subjected to internalized stigma, the family member of the infected are perceived as contaminated as well by the community (Uwakwe , Mansaray and Nwagwu, 2000; Ala, 2001;Onuoha, 2002; Daini, 2002; Stephen, 2005).

Stigma often limits the quality and the level of care received by PLWHAs as neighbors or even family members refuse to be close to the infected individual. Within the family, discrimination against the PLWHAs often entail ostracism, blaming, rejection and even abuse. Husbands have beaten and even abandonedtsheir wives thought to be living with HIV even though many women contacted the virus from their husbands. PLWHAs may be forced to eat alone.They may be isolated by family or community or may be dispossessed (Gillath, Shaver, Mikkulincer. Nitzberg, Erezand Van Ijzendoorn, 2005; Nyblade, 2006). Stigma may lead to disdain or rejection of both the infected and the affected in their community.

In Nigeria, there is discrimination of job to those with HIV. In some instances people believe that the high cost of caring for PLWHAs is a waste since the infected will ultimately die because the virus is incurable. More so, when hardly earned revenue that will be expended on the infected who will eventually die could make the lives of other family members difficult and miserable (Feeney and Collins, 2001). Therefore, the financial constraints of caregivers can be a great source of burden. Majority of families of informal caregiver suffer from unemployment, especially when the breadwinner of the house stopped working (Marks, 1998; Abikoye, 2009).

Research document on caregiver stress shows that caregivers with high levels of stress and overload in care service delivery in most cases experience symptoms of depression and burnout (Vitaliano, Echeverria, Yi, Phillips, Young andSiegler, 2005). An extensive body of literature underscores that caregiving in HIV/AIDs context is an exceptionally stressful experience for the entire family (Carek, Norman and Barton, 2010). Furthermore, many researchers on HIV family caregiving have focused on HIV/AIDs caregiving experiences (Brown, 2004), psychological distress (Bennet, Ross and Sunderland, 1996; Irving, Borand Catalan, 2005), depressive mood predictors (CoketteandBoccelari, 2004) the set up , arrangement and functions of AIDs caregiving relationship (Pearlin, Wardlawand Havington, 2004) and Barriers to HIV/AIDs caregiving (Brouser , Lok , Wolffersand Sebagalls , 2000 ; Maclins , 2006). Caregivers of HIV/AIDs patients report that the caregiving experience is an intense highly emotional one filled with challenges (Bookwala , Yee , Schulz , Williamson , Shaffer and Parmelee , 2000).

The issue of stigma surrounding HIV disease is another source of burden for caregivers. Community members reject the HIV positive people because of the disease sexual route of transmission.Therefore the disdain and hatred for the PLWHAs is often extended to family members, relatives and friends who provide care (Davidizar , 1992 : Floyd , David , Kemp and Squire and Wakinson , 2006). They bear the burden of keeping the secrecy surrounding the illness. Some caregivers conceal their status because of the stigmatization accredited to the disease (Turner, et al, 2005). HIV- positive parents who in addition are also family caregivers have multiple burden (Bor, 2004). They have to care for the children of the PLWHAs, the sick, and other family members in addition to helping their children cope with the disease and the possible issue of stigmatization and discrimination (Hendrick, 2010). In a situation where a child is HIV positive, the mother is likely to carry the feelings of guilt of transmitting the virus to the child and this experience can be overwhelming.Several caregiving studies have shown that family caregivers experience stress (Desimlingand Bass, 2006;Quayhagen, 2007;Campton, et al, 2007).

2.1.5 Activities for reducing Caregivers' Stress

HIV infected individuals following diagnosis, experience alienation, stigmatization and lack of social support. PLWHAs are however not the only ones who experience such alienation, their caregivers also share in their experiences. The infected person dies in isolation, but the caregivers carry this burden of isolation as well (Chappel, and Reid, 2002). To encourage support for the caregivers, a group context would be the best environment to encourage, initiate and facilitate the need for support (Yalom, 2005). As the population of PLWHAsincreases, caregiving becomes a fact of life thereby givingthe Non-Governmental Organizations(NGOs),theCommunity Based Organizations (CBOs) the opportunity to provide support in order to meet the needs of Caregivers.Other support services are realized from funds generatedfrom States through revenue .These public and private agencies provide social support, information, and instructions services to help caregivers understand their stress triggers as well as the development of coping skills (Jackson,2012).Besides,they help family caregivers' access treatment in clinics , public and private hospitals in addition to promoting open discussion on HIV/AIDs such that Caregivers' physical and mental health are not jeopardized (Jackson,2007, 2012)

For this study, the Family Health Population Action Committee (FAHPAC) and The New Initiative For The Enhacement Of Life and Health (NELAH) are the support counselling facilities used for the study. FAHPAC is a non-profit, non-political and non-governmental organization that was founded in November,1992.The organization is registered under the Corporate Affair Commissionand itsheadquarter is located at Ibadan, Oyo state, Nigeria. The organization is governed by a board of trustee ; the executive committee manages the organization and its staff is in charge of implementation of designed projects. The FAHPAC presently have projects in Nassarawa , Oyo,Edo,Osun, Imo, Ogun, Kogi, Ondo, Plateau and Niger states.

NELAH was established in the year 1996.It is based in Ibadan and it is a non-profit and non-governmental organization. The objective of the organization is to provide support for people living with HIV through counselling and Home Based Care (HBC).The organization fights against discrimination of PLWHAs through the Ambassador of Hope programme. These two non-governmental organizations are unique resource centers and foremost public intervention centers that provide care and support services for PLWHAs and their family caregivers.

2.1.6 The Concept of Psycho-Educationalpackage.

Psycho-educational therapy is a subset of health education which combines learning experiences and health adaptation behavior. This is because it helps disturbed people. As a specialized education therapy, psycho-educational intervention endeavors are directed towards the patient and their families with the aim to restore health and prevent relapse (Mason and Vazquez, 2007).

Psycho-educational therapy is an effort to understand the individual self-concept and self-esteem. It gives prominent emphasis to the study of the person's family ecology, as well as the neighborhood. In addition to the knowledge of the uniqueness of each person's nature and needs, psycho-educating an individual is a process of discovery and an intent or effort to understand that individual. In psycho-educational process, focus is placed on information from the person while not neglecting observations and formal test data, which are shared with the client in a manner appropriate for the age with the aim of discovering the threshold for conflict in the caregiver. And in so doing, becomes an ally in collaborative effort for improvement (Solomon, DraineandMannion, 1996). Family caregiver are integrated in the treatment modality so that the caregivers can understand and be better able to deal with the presented illness in order to reinforce the patient's own strength, resources and coping skills,based on the fact that the better the knowledge the individual or caregivers have of the illness, the better the affected are able to live quality life with the caregiving condition.

Psycho-educational intervention is a kind of patient and family interactions in the phase of treatment of life threatening illnesses. The intervention educates family members or caregivers about the illness and it provides emotional supports .Its programmes are focused on reducing expressed emotion in families. Psycho-educating the caregivers also contributes to de-stigmatization and diminishing barriers to treatment. The intervention has the benefit of medication compliance and effectiveness in coping with stressors. Important element in psycho-education deals with information transfer. It stimulates caregivers' awareness of the diseases, symptoms, cause, treatment and management concepts. It fosters emotional discharge and exchange of experience with others concerning the illness and it lends credence to support in the use of patient's medications of psychotherapy (talking cure). Psycho-educational intervention promotes assistance to self-help such that caregivers can assist the affected by training them in prompt recognition of certain alarm situations and steps needed to be taken in order to help the affected(Folkman 1997).When the intervention is given, family members enjoy educational training for at leastthree(3) months to aid them in managing the sick (Fahriye, Sevgi, andHamdullah, 2008). This is done on a one on one basis or focus group discussion and members are collated through networking. In addition, the intervention goes beyond the formal and informal caregivers to include a whole community (Harding, and Higginson 2003).

2.1.7 The Concept of Caregiving Self-Efficacy

Self-efficacy which was postulated by Bandura in 1986 is the perception of an individual towards performance of certain task (Steffen, 2002). Self-efficacy deals with the perception or judgment of caregivers' ability to plan, execute, manage and eventually accomplish a specific goal such as caregiving (Strauser, 1995). Self-efficacy brings about differences in how family caregivers feel, think, behave and motivate themselves in carrying out caregiving process(Bandura, 1995).

Self refers to the identity of the informal caregiver while efficacy refers to his or her strength or power to produce an effect on the caregiving process. Another term for this is productivity, effectiveness, and efficaciousness (Steffen 2002).The broad notion is the awareness of one's ability to be proficient. Cognitive, locus of control, and affective are the three major attributes of self-efficacy. Bandura (1991) belief that human behavior is a reflection of thought, purpose, and capabilities.A caregiver with high level of self-efficacy aremore likely to set higher goals and would endeavor to meet such goals. This variables enhance the prediuctive capabilities. The affective process is the belief that stress is a threat to motivation (Bandura, 1991). Another key component of self-efficacy is the perception about everyday life events (Neil, 2006). The belief that fate determines personal decisions and determines the outcome of an event, when internal locus of control is effected (Neil, 2006).

The antecedent of self-efficacy is the social experience which determines the self-efficacy status of an individual. Once behavior is cultivated, the control then depends on the environment where the Caregiver stays (Ziegler, 2006). The expectation and experience of self-efficacy explains the motivation behind the ability to carry out task. Such motivation entails the use of verbal persuasion to convince the caregiver despite the stress (Crain, 2006). The physiological cue influences ability to perform tasks, despite the fact that people have different interpretation for the cue (Ziegler, 2005; Rain, 2006).

In this study, the general standard of self-efficacy which is the caregiver's confidence of his ability to adequately care for PLWHAs is used. Family members are powerless in the face of severe burden of taking care of PLWHAs. Thus, the motivation that enhances the confidence of caregivers help them to reduce the stress they faced.

2.1.8 The Concept of Psychological Well-being

The concept of well-being can be used in different perspectives such as economics, social, psychology and all aspects impacting upon people (Bawais, 2011). Psychological Well-being means that the object is perfect. Well-being is interchangeable with utility, happiness, life satisfaction, welfare, and quality of life. Well-being is a social construct. It is closely inextricably linked to social context (Boyles, 2010). Well-being is the state of being in the society that influences an individual'sphysical and mental health, sense of satisfaction and contentment.

The hedonic and eudemonic approaches are used to understand an individual's welfare. While the hedonic approach is a subjective feelings, the eudemonic approach is the everyday life activitiesthat affects the well-being of people (Amartya, Martha and Nussbaum, 2007;Ryan and Deci, 2011). The two approaches viewed well-being in relation topersonal heterogeneities, environmental diversities, variations in social climate,differences in relational perspectives and demographics (Sen, 2009).

According to Clark and Gough (2009) what makes a person's life go well are enjoyment, freedom, happiness, being respected, knowledge, health, achieving ones creative activity, aesthetic appreciation and excelling at worthwhile activities such as caregiving. In this study, a state of psychological well-being is attained when caregivers are concerned with the welfare of fellow being and they create a comfortable and conducive situation for fellow beings who are impaired with chronic health situation such as HIV/AIDs. When engaged in such caregiving activities, fellow being is made better off such that they receive a greater balance of pleasure over pain. In the literature, the indices of psychological well-being are either positive or negative experience such as success, failure ,joy, sadness, fear , anxiety, happiness,robust health or ill health and so on (Ryan andDeci, 2011).

2.1.9 Sex and HIV/AIDs Caregiving

It is a common phenomenon to see women providing care for PLWHAs. This shows that it is likely that this role has a gender angle to it. In such situation, the family split themselves into two different groups and one group serves as the primary unit, while the other group serves as the secondary unit (Matire, Parris-Stephen and Franks, 1997). It is either of the spouses that naturally become the care provider, so when one mate is not available, any of the children can take up the caregiving role(Cicirelli et al, 1992;Mittelman, 2004).

The work of caregiving is normally perceived as woman'stask and only about 50% of men were care-givers as at 1999. Male caregivers are becoming more involved in the provision of finances and transportation to assist the recipients (Gourlayand Collete , 2000). But women handle more difficult task when it comes to caring for HIV/AIDspatients. These women also manage the income of their patients and their roles are largely determined by family members (Zarit, et al 1986).The living arrangement and the gender of the caregiver has been attributed to the level of stress they receive and caregivers who live with their recipients receive more stress than others (Merrill, 1997; Wykle 1994). But there is little empirical research to acknowledge the role that women play in caring for PLWHAs despite the high quantum of support they render (Winslow, 2009). Further, several studies have not seen the difference between the stress level of male and female gender when it comes to caring for PLWHAs (BaruschandSpaid, 2006; Kramer andKipnis, 2009).

2.1.10 Stress Level and Caregiving

Stress can limit the aspiration of a person and could lead to divorce, low performance and loss of job (Mathews and Gallo, 2011).Stress occurs when demand exceed capability with a task. That was the reason for describing stress as alarm reaction, stage of resistance and exhaustion. Upon encountering a stressor, the alarm reaction activates the quick response to the emergency with the release of stress hormones.If the reactioncontinues, the physiological reactions enter the stage of resistance and the body tries to adapt to the stressor.Exhaustion is experienced after prolonged stress has damaged the body tissues and the immune system has become weakened. Then the body becomes vulnerable to disease. The Psychological stress is a strain between the individual and the community. Primary appraisal of the stressor is achieved when an aggregate assessment is done over the outcome of the caregiving (Lazarus andFolkman, 1984).

The modifying factors of caregivers stressinclude:the characteristics of the caregiver such as age, length of caregiving ,marital history,the nature of caregiving history,the nature of care recipient , economic burden , family and social network resources status , caregivers' use of resources and coping ability .These background and contextual antecedents are stress process that influenced outcome or quality of life of caregivers(Pearlin et al , 1990)

Characteristics of the recipient (the degree of disability):The shared history between the caregiver and the person being cared for

Social factors (such as access to social networks)

Economic factors: The social economic status is the ability to access formal care employment and cultural context.

Background and contextual antecedents of stress include socio- demographic characteristics, caregiving history and caregiver network composition

The socio-economic background of the caregivers has implication on the quality of caregiving administered to HIV/AIDs patients because they influence outcome and quality of life for Caregivers (Dorfman , 1996 ; Emmanuel ,2000 ; Haley , 1998 ; Kim ;Spillers &Hall , 2012 ; Pearlin et al , 1990 ; Pinquart&Sorenson , 2003;Soto,Rich , &Watson 1996 ; Van Ryn,2011. Also, the life history of the patient must be known if they are to be cared for adequately (Pearlin et al, 1990).Caregiving literature have revealed that Caregivers with a high vulnerability to stress in addition to fewer coping resources might experience increase burden and stress.Such Caregiver's level of stress will depend on the caregiver's appraisal of his or her ability to copeand the Caregiver's perceieved level of social support. These salient points are imperative because the caregivers are highly exposed to stress and thus, they need social support to cope with the impending stress (Pearlin, 1990).

Kosloski (2001) found that people do not respond to caregiving in the same way due to their different perceptions of caregiving situations. The life experiences of one caregiver and the way he/she responds to stress differs among two caregivers. Knowledge gained from how one Caregiver experienced the role of Caregiver provided little information on how another Caregiver experienced the same caregiving role when performing similar tasks (Montgomery andKosloski, 2001). In the light of this , caregiving literature suggested that multiple approaches be used to efficiently and effectively manage stress that emanates with caregiving (Boschen, 2007, Elliot, 2010; Harding ,2003 ; Schultz &Martive,2004).

According to(Pearlin,1990),Caregiving are stressors that account for the caregiver's stress level . Stressors areactivities , conditions and circumstances that stimulatethe emotion of anxiety. Such experience threatens the people'sexistence,thwart their efforts and prevent the realization of goals and aspirations . There are Primary and Secondary Stressors. Primary Stressors are observable activities of caregiving that surface from the caregiving tasks necessary for assuming the safety and care of the care recipient (Pearlin,1999) while Secondary Stressors are caregiving stresses that arise from both the caregivers need and the care recipient needs. They are often role strains and emotional stressors that arise from old family conflicts that resurface between the caregiver and non-caregiving family members(Pearlin , 1990). Role strain might include disagreements among family members regarding the patient's level of disability or the amount and quality of attention provided by other family members. Conflicts mightarise from the lack of consideration and acknowledgement accorded to the caregiver for thecare given to the care recipient (Pearlin , 1990).At times, the caregiver may disagree with the care receiver and vice versa and this may lead to argument between both parties .This conflict may be due to the fact that the care receiver do not acknowledge the volume of stress that the care giver goes through in order to provide care for him/her. This is more evident when the care provider is a family member or the recipient do not pay the caregiver for the services he/she provides (Duxbury, 2011).

Using a cross sectional study,Duxbury (2011) explored the influence of strain on caregiving and found that caregivers who receive salary do experience frustration and anger due to the demand of the job of providing care to PLWHAs. Thecare recipient too may feel that he/she is not properly taken care of because of his/her poor health condition and financial constraint.

- **Economic Burden And Stress Level**

The role of the caregiver require some financial commitment because the household activities need to be taken care of vis-à-vis expenditure (Duxbury, 2011). But this situation is more challenging when the caregiver is not earning income to support himself or herself and the recipient as well. But the reverse is the case when the caregiver is working and earns money to take care of himself orherself and the care receiver simultaneously (Duxbury, 2011).The economic burden ofcaregiving has been a significant source of caregiver'srole strain (Pearlin , 1990). Role strain feature when there is a reduction in the household income and anincrease in patient care expenditures(Chwalisz,1992 ; Duxbury,2011).Employed caregivers who shared the same household with the care recipient experienced the highest levels of financial role strain. However, caregivers who lived near , but not with the care recipient experienced the lowest levels of financial strain (Duxbury , 2011).The financial burden of caregiving also resulted in family members selling assets , taking out loans , or taking on an additional job to supplement the needs of the care recipient (Cicirelli , 1992).Because these caregivers were concerned about not having enough income or just enough income to make ends meet , they always experience high stress level (Pinquart&Sorensen 2006).Intra-psychic strain is an aspect of role strain and a form of secondary stressor (Pearlin , 1990) . Therefore, role strains and intra-psychic stress are the results of ongoing emotional stress incurred from caregiving responsibilities (Pearlin , 1999) .The caregiver's perception of stress , burden and ability to provide care is related to the caregiver' preparedness for caregiving (Schumacher , 2008) . Preparedness is an emotional and anticipatory preparation of the caregiver's readiness to provide care. It is also the caregiver's perceived availability to take on the multiple domains of the caregiving that involves providing physical, emotional and social support while simultaneously coping with stress of caregiving.

In a sample of 87 family caregivers, preparedness was a predictor of emotional strain as well as role strain relation to caregiving. The influence of stress on caregiving has been extensively documented in the caregiving literature. (Covinsky 1994; Emmanuel; 2000; Pearlin, 1990; Pinquart& Sorensen, 2003; Zarit, 2010, Given,1993).

- **Stress Level and Age**

Among the other factors which influence the stress level that caregivers undergo is the biological age and maturity of the care-giver (Soto, 1996).It has been noted in literature that age determines the length of time that a caregiver spends with a recipient and empirical observation has shown that older people would most often face situation that will require them to employ the services of a caregiver (Soto, 1996).

In the study of 62 informal caregivers in a rural community, caregiving was more prevalent among young women; however, older women are less depressed than younger women (Butler, 2005).In like manner, Williams (2005) found a relationship between age of caregivers and outcome among a sample of 295 Black and 425 White caregivers (N=720 for individuals with dementia).

From the above, it is clear that the level of stress that a caregiver goes through is dependent on the severeness of his or her illness, age, and income level (Given, 2004). The stress of caring for the sick can cause further stress to the caregivers' family members (Given, 2004). Similarly, Haley (2003) found that high levels of negative appraisal of care among caregivers causesdiss-satisfaction.

Caregiver Burden and Stress Level.

- **Caregiving to care recipients with chronic impairment create stress**andburden physically and psychologically . The way and manner that individual caregiver perceived the caregiving experience influence the caregiver's emotional response to the demands and responsibilities of caregiving (Acton, Kang, 2001). Caregiver's poor physical health, a restriction in the caregiver's social activities, recipient complete dependence on caregivers for performance of activities of daily living as well as the intensity of caregiving responsibilities significantly correlated with caregiver's feelings of stress and burden (Lazarus &Folkman ,1984).Also , decreased cognitive functioning and increased motor symptoms in recipient with cognitive distortions had the strongest relationship to caregiver's stress. The recipient behavior, attitudes, and actions are the major factors that increase the stress level that the provider of care experiences and this situation is one of the many factors that made caregiving difficult (Del-Pino-Dasad, 2011) Caregiving literature revealed that caregiving burden is the caregiver's subjective appraisal of the experiences of caregiving (Chappel , & Kang,2002).

In a sample of 1110 informal caregivers of family members of sick people, Grabbel and Adabbo (2011) examined burden among them andfound out that caregivers who live in the same house with the person they care for are better health wise than others who do not live with their caregivers . Although Caregivers respond and cope with stress differently, information seeking, problem solving, emotional release, availability and use of social support and resources are effective in coping with the stresses of caregiving (Harding, &Higginson,2003).Gallagher et al, 2011) found that 33% of caregivers experience emotional and psychological distress when caring out caregiving tasks and suggested the provision of social support adoption of coping strategies by caregivers. Coping include the management of the stress situation , reduction of the perceived threat, and managing the stress symptoms that stem from the perceived stressful situation (Pearlin, 1981).

- **Caregiver History and Stress Level**

There is a debate that the length of period of taking care of the sick increases or decreases the volume of stress that people experience. For instance, Pearlin, (1990) opined that long period of caring for the sick implies that the caregiver would experience more stress, while Dorfan (1996) thought otherwise and his assertion was based on the sample of 80 caregivers. Many caregivers reported higher stress and burden at the beginning of their caregiving responsibilities, they reported less stress and burden over time. This made some scholars to conclude that the duration of time spent on caring for the need of the patient has no implication on the volume of stress that the caregiver experience (Dorfman, 1996).

Moreso, Kim et al, (2007) concluded based on his study of 1218 caregivers that the quantum of stress that caregivers undergo is a reflection of the family history of the sick patient. They suggested that the nature of the relationship between the care recipient and conflict with significant others within the family context had an influence on caregivers' stress. The relationship conflicts that existed between the caregiver and the care receiver before the onset of the caregiving responsibilities were related to caregivers' stress and coping skills (Kim et al, 2007).

- **Self - Efficacy and Stress Level**

In a study of 167 caregiver of people who suffer from dementia, Schulz et al (1999) associated high level of stress with depression and this in turn increases the burden associated with caregiving .However , in his study ,self-efficacy was found beneficial, even when caregiver experienced high stress.Schulz et al(1999), therefore concluded that self-efficacy had a protectiveeffect on the relationship between caregivers' burden and distress involving caregivers' psychological and emotional well-being.

In order to cope with dementia and other chronic ailments such as HIV/AIDs, Edelman; Craig & Kidman, 2000)suggested the use of caregivers' social support and caregivers' support strategies as a helping coping resource capable of reducing the effects of stress in the caregiving situation .Caregivers' coping strategies involved distractions, mental stimulation, emotional release, focus on the emotional rewards of caregiving and disengaging from stressful thoughts had beneficial effect. Caregivers' support strategies involved receiving help from family, friends and professionals who provided psychological support. All these people serve as a helping coping resources for the distressed (Gallangher, Mhaolain& Crosby,2011).

- **Social support and stress level**

Pearlin et al (1990) reiterated the fact that the role of social support in reducing the stress of caregivers cannot be over-emphasized. The social group contributesinstrumental and expressive support that were needed. Researchers suggested that social support acts as a buffer between the experience of stress and negative outcome (Caserta,1987). The social support protects people from the harm that might be caused by stress and this is linked to the potential stress reaction of the caregivers (Chappell & Reid 2002).

Use of Resources and Stress Level

Social support resources is germane to positive caregiving.

Boise et al (2005) suggested the need for enhanced-based resources for caregivers of individuals with chronic health conditions .This is because social support resources interacted with self-care in predicting change in the psychological and physical health of caregivers(Gaugler, Jarroh,Zarit et al,2003). Findings from a longitudinal study of 122 caregivers of individuals with dementia revealed that informal caregivers who reported limited social support resources and engaged in limited self-care practicesreported an increase in physical health symptoms while caregiver who reported the existence of social support resources demonstrated an improved quality of life and low stress life.(Boise, 2000). Therefore, Caregivers who fail to adapt survival strategies may be overweighed by the stress from the recipient and this will endanger his or her health. This informed the study of Schulz et al (1999) who examined the relationship between impairment of care receivers and their well-being. They found that satisfaction with social support moderated the relationship between the patient impairment and caregivers' psychological well-being (Schulz et al, 1999). When caregivers experience poor health, it is due to declining social support in all ramifications (Schulz, 1999).

- **Stress and caregiver health**

The quality of the caregiver's health was linked to primary and secondary strain, depression and dissatisfaction with life (Pinquartand Sorensen,2003).Despite the positive roles of the caregiver, their role may constitute danger to their health too. These may be in form of physical health, psychological distress, financial deficit, poor quality of life, among others. Many caregivers do not use caregiver's services that are designed to help and some normally start on a good note but later decline to use them.For example, among caregivers who started respite care support services , one third discontinued the service within the first 90 days(Montgomery &Kosloski, ,2009).These findings suggested that the services provided were not consistent with the caregiver's need and that caregivers could not benefit from the service on ground.However, no resource is efficient if it is not adequate to meet caregiver's needs.And if a service is hardly used or not utilized at all , it cannot become useful in reducing caregiver burden.

The health and well-being of informal caregivers have been a force for social change over the past three decades (Montgomery &Sorensen , 2003). In recent times ,the increased awareness for in-home care provision for family members with debilitating physical and cognitive health has declined for diseaseslike cancer and Parkinson's disease and HIV/AIDs have increased the responsibility of informal caregivers for PLWHAs and other members within the family some of whom are sick. Therefore, the physical health and psychological well-being of caregivers have been a force for socialchange (Pinquart& Sorensen,2003).Identifying caregiver stress vulnerabilities and providing appropriate interventions and resources are necessary ingredient for reducing and alleviating stress and burden in order to enhance caregiver's quality of life (Pearlin,1990).There is a gap in the literature regarding the predictors of caregiver's stress and burden and the availability of existing educational resources for reducing stress and burden , It is against this background that this study is out to adopt psycho-educational therapy and it's package in empowering the caregivers of PLWHAs to enhance their self- efficacy and psychological well-being in care service delivery.

2.1.11 Psycho-Educational strategy and Caregiving Self-efficacy

Psycho-educational strategy is a blend of educational and psychological strategies. Psycho-educational strategy is based upon individual psychology. As a psychology of the individual, psycho-educational therapy is a process of self-discovery which helps us to understand our being. Psycho-educationalstrategy focuses on fear, goals, motivation, purposes, and hopes which influence life of people. The psycho-educational therapyis an intervention which highlights empowerment, health, and collaboration which support the education of people in order to solve difficulties (Mason and Vazquez, 2007). Thepatient, along with his or her family milieu cooperates with the medical practitioners to provide treatment. This means that all family members are informal care provider.

Psycho-educational strategy was identified in the late 1970's as a didactic, skill building group treatment and people have been receiving training in the psycho-educational strategies since 1989 (Granttand Hopkin, 1989). Psycho-education is an effort to understand that individual and it places major emphasis on resolving inner conflicts of the emotionally disturbed people. It employs the learning principles to modify the disordered behavior of the psychologically disturbed individuals.Psycho-educational group are time limited. Its goal is usually to empower a homogenous group from distress by educating them about their health status. In Psycho-education, teaching is considered extended parenting and so it requires consumable skills in human relationship. Education intervention is a subset of psycho-education. It helps caregivers to get information that improve their jobs, and this is useful to the patient. This also gives support to members of a group (Acton and Kang, 2001).

Caregiver educational programmesvaries in content and it could be audio, written, and visual materials that are used on a personal notes, lectures , group discussions which are usually led by a trained expert.Support in addition to education are elements of psycho-educational package. Psycho-educational packages focuses on issues such as anger , depression, grief , loss , coping in addition to cognitive reframing (Acton and Kang, 2001). Psycho-educational packages incorporated group discussion to assist both the informal caregivers, the PLWHAs and otherparticipants who share their experiences and theyall learn from it. This focus group discussion serves as an informal educational group which gives support to the ill and their career. For example, through the discussion of a topic about HIV/AIDs disease, and the disease process, participants begin to share their experiences and strategies for coping with the challenges of caregiving. It is through the discussion of the topic that caregivers come to identify with others and form informal support groups. This educational group have been shown to effectively increase caregiver knowledge, understanding of disease processes,problem solving and coping strategies that are related to the caregiving experiences.(Turner 1988).

Psycho-educational strategy usually begins with an initial conversational interview and a sort of counseling. The content of the interview becomes part of continuing portfolio of activities. The focus of which is to relieve client stress with the sharing of mutual concerns as well as role modeling by participants and leaders. Homework, exercises, and lectures related to the specific client population are developed to create skill building using practices such as problem solving, empathy, communication skills, stress management, assertiveness training, cognitive restructuring, conflict resolution skills, development of a satisfying relationship and self – understanding exercises.Educational.

Edelman, Craig and Kidman (2000) in their comparative study of Psycho-group versus Support group for cancer patients found out that those who attended psycho-educational group experienced greater benefit than those who attended purely supportive group. Hernandez and Martinez (1995) stated that the outcome was so because psycho-educational groups applied the most credence method to reach the psychologically distressed people living with HIV/AIDs.Tolman&Molidor (1994) ; Hernandez & Martinez , (1995)& Mason and Vasquez , (2007) in their review of 54 social work study for 10 years found that psycho-educational treatment is ideally suited to reach marginalized populations. It is less stigmatizing, reduce stress .increase knowledge, create support and increase self-esteem.

Psycho-educational strategyis a social group work treatment often adopted in psychiatry, nursing, and psychology to treat mental health ailments,Cancer, HIV/AIDs, Social crimes like marital distress, divorce,physical abuse, psychological abuse, drug addiction, Gay men and lesbian women. Psychiatrist most often prescribes psycho-educational strategy for the treatment of patients. Despite its wide use for treatment, it has not been adopted for the treatment of PLWHAs, hence, its application to this study.

Caregiving self-efficacy is a proficiency of the caregivers in the provision of care for PLWHAs. The proficiency of such caregiving task enhances the patient's safety without jeopardizing the caregivers own health and safety despite the fact that caregiving demands place upon the caregiver a high risk for injury and adverse effect. According to Bandura (1991) caregiving self-efficacy can be defined as the caregiver's belief in his or her ability to achieve positive health outcome for the care recipient. The belief encompasses the amount of confidence held by the caregivers that he or she is capable to achieve specific behavior or task of caregiving. Caregiving self-efficacy has positive health outcome on the caregiver and the care recipient. It is emotionally satisfying and personally enriching for the caregivers. Caregiving self-efficacy is associated with mental health benefit to the caregiver when caregiving is not overly strenuous (Beach, 2006).

Self-efficacy beliefs enhance human effort towards achieving resilient goal and overcome obstacles which could prevent them from getting negativeemotional reactions. High self-efficacy helps create feelings of serenity in approaching difficult activities. Self-efficacy is a foundation for accomplishment of objectives. This is because unless people believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties.

In the literature, it is established that there is a relationship between psycho-education and caregiving self-efficacy and education is needed for caregiving self-efficacy. Evidence suggests that family caregivers often report feeling unprepared for their caregiving duties and this does not bring out the best of their self- efficacy (Family caregiving Public Policy, 2003). Various research works are carried out on self-efficacy and findings lend support to the view that perceived self- efficacy mediates behavioral change and behavioral improvement at different stages of treatment.

2.1.12 Psycho-education and Psychological Well-being

Psycho-education is a combination of educational and psychological strategies to help the socially and emotionally disturbed people to cope with life challenges such as ill-health. Psycho-education endeavors are directed towards the patient and their families with the aim to restore health and prevent relapse. Psycho-education places major emphasis on resolving inner conflicts of the "emotionally disturbed people". It is a theoretical treatment design couched in common-sense principles that involve the development of trust, building competence, nurturing feelings, teaching cognitive skills, using the group process and teaching joy (Hobs, 2008).

In psycho-education, a learning experience is involved and increased care-recipient compliance to a pharmacological regimen is just one of its many benefits. Besides, it often leads to a fairly stable change in the behaviors pertaining to medication compliance. Psycho-education enlightens the care recipients and their families about the different aspects of the disease (such as warning signs, symptoms, medication, adherence, resources available) and how they interact to have a bearing on the disease itself, and so psycho-education has the advantage to teach both the care recipient and the family about the behaviors conducive to the mental health of that individual with HIV/AIDs. Caregiving literature has repeatedly demonstrated that for a large number of people suffering from chronic diseases such as HIV/AIDs, diabetics and mental illness, psychotherapy which often includes psycho-education with medications produces the best outcomes (Colom, Vieta, Martinez &Bernabarre , 2003).

Psychological well-being is a satisfactory state of being of an individual or group of people and this entails calmness, contentment and satisfaction. Based on this premise, psychological well-being includes happiness, emotional well-being, personal growth, positive affect, mental health, self-esteem, vitality, life satisfaction and low levels of depression and anxiety.

2.1.13. Empirical Review

Apart from the theoretical and conceptual references, there have been a number of empirical studies that have examined the effect of some interventions on caregivers of people living with disability, the aged and people living with chronic diseases such as cancer, diabetes, dementia and mental illnesses. However, only few known studies on caregivers of people living with HIV/AIDs have been researched, and there is a lacuna on informal caregivers of PLWHAs. In addition, past research has largely focused on formal caregivers like doctors, and nurses (Dorz2003 ;Karasz , Dyscheand Selwyn 2003).On a global scale, more efforts have been directed to formal health workers and this has led to some problems(Catalan ,1996 ; Dorz,2006) . However in Oyo State , there is paucity of research on the impact of stress on self-efficacy and mental health of informal caregivers of PLWHAs . More so, studies on the dimensions of the impact of Psycho-education in the enhancement of caregiving self-efficacy and Psychological well-being of family caregivers of PLWHAs are very scanty, if they exist to the best of my knowledge. The limited research sourced on psycho- education intervention for caregivers was also mostly based abroad (Bor, 1990; Folkman, 1997;Mullan, 1998;Brouwer 2000). To fill the missing gap, the present study intend to inform intervention at the level of informal care and also impact on training programme to enhance self-efficacy and psychological well-being of informal caregivers of PLWHAs.

Interventions are numerous in caregiving literature and several interventions are assisting caregivers to develop problem-solving skills. For instance, Toseland and Blanchard, (2006) used a psychosocial intervention on coping strategies of cancer patients. The intervention was meant to help spouses to develop coping shock absorber and this was found to be effective because of the outcome. Melby(1999) in a study titledIs interpersonal therapy superior to cognitive behavioral therapy in HIV/AIDs management and AIDs related bereavement among caregivers of PLWHAs discovered that the two therapies are beneficial for the infected and the affected and they have the advantage to reduce grief reaction and psychological distress among participants in the therapies.

Patients who are newly admitted for cancer were incorporated into the psychosocial intervention by Bergner (2008). Four months after attending a psycho-education cancer education programme that addressed symptom management, psycho-social support and resource identification, the number of caregivers who reported being well informed and confident about caregiving increased.Ferrell and colleagues (2006) examined the effect of pain education on family caregivers who were providing care to elderly patients with cancer.The pain educationprogrammeincluded pain assessment , pharmacologic interventions and non-pharmacological interventions. Findings revealed that the pain education program helped to improve the caregivers’ knowledge and attitudes about how best to manage their family members pain.Arthoon and Malouff (2009) examined the effectiveness of self-efficacy intervention on adolescent with sport competition loss , Findings revealed a decline in positive affect in response to competition loss. Smeek (2009) investigated the quality of family caregivers who received home case intervention .The intervention significantly improved caregivers' quality of life at the 1st week and 4 weeks after discharge from the hospital .

Houts(2012) embarked on problem solving training therapy for family members of cancer patients on stress reduction techniques and found the outcome to be positive.McMillan and colleagues (2010) found that skills and coping training intervention with family caregivers'of hospice patients improved the caregivers' quality of life. Okeke (2009) investigated the effectiveness of Social support seeking and Self-efficacy Building strategies in enhancing well-being ofHIV/AIDscaregivers. A pretest, posttest and control group quasi-experimental design of 3×2 factorial matrix was adapted for the study. Findings revealed that both strategies were effective in enhancing the well- being of the HIV/AIDs Caregivers. Based on the effectiveness of the two strategies, it was recommended that clinical and counseling psychologists working with this category of people employ the strategies.

Raheem(2016) investigated the effect of two behavior therapies on psychological distress among non-infected Adolescents with HIV/AIDs-Infected parents in Oyo State, Nigeria. Findings revealed that Cognitive and self-control therapies were effective for the management of psychological distress among non-infected adolescents with HIV/AIDs-infected parents in Oyo State, Nigeria.

Research findings reveal that significant short-comings in thetraining for family members is scanty.Evidence revealed that some informal caregivers reluctantly execute their tasks and this can be attributed to poor skills on how to go about informal caregiving process (Family care giving and Public Policy, 2007). This has prompted many of them to abandon their responsibilities and the formal caregivers have to assume the duty in order to savage the health of the sick.If caregivers are to provide safe care that will not jeopardize their well-being, they will need education to handle the patient treatment demands.The informal caregivers want convincing information about medications, tests, treatment and resources. Schmall (2008) suggested that caregivers be involved in caregiving education treatment. As education intervention is capable of providing critical information to caregivers on how to cope with stress and increase their capabilities to manage psycho-emotional needs of caregivers. Research evidence suggest the use of psycho-education in the treatment of caregivers of PLWHAs because of its proven efficacy and universality.

Most of the studies reviewed used psycho-education intervention to alleviate caregiving burden and majority of the studies that employ psycho-education in the care of their caregivers are foreign studies and they are employed majorly in Nursing, Psychiatry and Psychology. Many studies that have been conducted in the past have failed to evaluate their psychosocial intervention (Czaja and Rubert, 2002).In the South African context , research has addressed the burden of caring and the coping strategies of volunteers and home - based care workers (Melnick , 2002 ;Van Wyk , 2002) thus leaving room for the kind of research undertaken in this thesis . All these studies identified difficulties associated with caregiving in HIV/AIDs care but to date, little attention has been paid to reducing the physical and mental health burden faced by caregivers, and there is still significant work to be done in the development and evaluation of effective clinical interventions, education and training (Zarits, 1987; Whittier, 2003). Furthermore, little effort has been exerted to reducing the mental and physical health of caregivers who were responsible for the health status of the sick.

The researcher based this research project in Oyo State .This is because the state has a high prevalence of HIV/AIDs. The first HIV case was recorded in Oyo State in 1987.The State's HIV prevalence rate rose progressively from 0.1% in 1991/92 and peaked at 4.2%in 2001 (OYSACA , 2008). Recent analysis revealed that Oyo State isone of the 21 states (20+1) that contribute to 81% of the national HIV burden and one of the 20 states (19+1) that contribute 81% of the HIV new infections in the country (NHEIA,2014). However, factors driving the epidemics in the state include infiltration of aliens from foreign neighboring countries into the state through the border towns such as Saki, Igangan,Igbeti and Igboho in addition to worsening poverty level , high incidence of risky sexual behavior , such as having multiple sex partners and early sexual debut,inadequate prevention and treatment of Sexually Transmitted Infections (STIs) .It is against this background that this study intends to adopt psycho-educational package to meet the needs of caregivers through counseling, provision of support and linkage of caregivers to resource center for social support services.

These family support services are available at the federal, state and local level for the provision of services to caregivers of PLWHAs where training are obtained to alleviate the impacts of caregiving and enhance physical and mental health change in addition to the mastery of caregiving skills. Prominent among them are the National, State and Local Action committee on AIDs (LACA, SACA and NACA), Presidential Emergency Plan on AIDs Relief (Pepfer), U S Agency for International Development (USAID), The Global HIV/AIDs Initiative (GHAIM), the Family Health and Population Action Committee (FAHPAC), the New Initiative for the Enhancement of Life and Health (NELAH), Association for Reproductive and Family Health (ARFH), HIV/AIDs Emergency Action plan (HEAP) etc. These support organizations or programmes are self-organized into N.G.Oand community Based Organizations to supplement the services of informal caregiver (Administration of Aging, 2008).

Because of the preference that the caregivers and people living with HIV/AIDs have for home-based care, there are documented evidence on the various activities carried out by community Home-based care centers and the strategies that they have implemented. Some studies have reported the activities of home- based care in Nigeria in Benue state (Olusegun, 2004), Plateau State (Agbonyitan ,2009). Other studies like Ogden,(2006), Ornery (2006), Horizon (2004),Akintola (2004), Folkman, Cooke, Boicedan, Collenceand Chesney (1994) have identified and acknowledged the valuable contributions of caregivers and suggested that working in partnership with them will support them in finding meaning in their experiences. Their meaningful involvement is expected to strengthen the NGOs and CBOs by improving providers' attitudes and understanding of issues of PLWHAs and their care providers.

Research finding reveals collaboration between the health care workers and the social support service centers of the NGOs and CBOs. Based on this premise, the study intends to explore the collaborative effect of NGOs to provide training on caregiving service delivery to caregivers of PLWHAs using psycho-educational strategies with the intent of finding out if caregivers will be able to identify people and places to whom they can turn to in the future to provide support. Can the support services provide the necessary training for caregivers of PLWHAs? What psychological tools shall be employed in the training of caregivers?Will the training enhance proficiency in caregiving self-efficacy?

Will the training enhance psychological well-being among informal caregivers?

Will female caregivers differ from their male counter parts on their level of caregiving self-efficacy and psychological well-being with their exposure to psycho-educational package from the Non-Governmental organization support service centers of the

Family Health and Population Action Committee (FAHPAC) and the NELAH? Will the stress level of the male participant expose to psycho education differ from that of the female participants?The evaluation of this finding will lead to prediction of whether the psychological tool of psycho-educational package can be used in the management of caregivers of people living with HIV/AIDs in the area of caregiving self-efficacy and emotional enhancement.

2.1.14 Appraisal of Literature Review

Caregiving has always been an important age long human affair of mankind worldwide. The demand for caregiving affect races, gender, the young and the elderly from all socio-economic, ethnic and educational background. Increased life expectancy, growth in the aging population and the ever increasing number of people living with chronic ailment such as HIV/AIDs, Cancer,Diabetes and mental ailments are some of the several factors that are increasing the demand for caregiving. Almost half of the older adults, the disabled and people infected with chronic diseases require some assistance with their routing and household affairs. HIV/AIDsis a public health pandemic worldwide. Though the resources in the health care system in Nigeria continues to decline, the prevalence of HIV has skyrocketed and the level of stigma on infected people has not diminished.Many of the people who are HIV/AIDs patients do not want to be recognized with the ailment, so they shy away from the crowd and they are largely catered for by their immediate family unit. The number of older persons, disabled, and the sick who receive social care within their household has increase in recent time. About two out of three of people in this category get help from only one unpaid caregiver. Research survey estimate there are 44million caregiver over the age of the 18 years (approximately one in every five adults). Children, the young, the old, male and female could be caregivers. 75% of caregivers are women. They emerge as primary caregivers that handle difficult intimate care tasks such as dressing, feeding, bathing and transference of PLWHAs from one place to another. (Beach, 2009).About 40% of caregivers are men and are engaged in managing finance, arranging care and they offer assistance with personal care (Beach, 2000) .

Caregiving can be highly beneficial to some caregivers when caregiving duties are rightly performed and caregiver derive positive effects which include improved mental health , increased closeness to their loved ones and a sense of satisfaction related to fulfilling caregiving duty (Beach ,2005). As some caregivers derive benefit from performance of caregiving duties others find caregiving duties difficult. To these group of family caregivers, caregiving is stressinductive and chronic stress impact negatively on caregivers' health. A variety of negative physical and mental health consequences of caregiving includepsycho-social distress , and increase in stress homones. It can also lead to risky health behaviors such as substance abuse , poor nutrition , and sedimentary lifestyles that are often associated with physical and mental health problems like immune dys-regulations , increased risk for disease , delayed wound healing and premature aging (George &Gwyther , 1986) .Other health challenges induced by stress include symptoms of depression , anxiety , inadequate time for sleep ,poor self-care and increased risk of infection (McEwen , 1998).

Caregiving roles that stimulate stress homones include the caregivers' responsibilities to supervise PLWHAs and observe for early signs of problems such as medication side effect which caregivers may not understand but are expected to be reported to the formal caregiver ,others are expectation to carry out some medical procedures on regular basis which often include measuring of body temperature , inserting catheters, giving injection and tying of adult diapers . Besides , Caregivers are expected to be able to interprete the recipient body language and at the same time speak kind words to the patient to soothe the pains and agony of the sick.

The observation of early symptomsand catering for the needs of the PLWHAs is the expected responsibility of the family caregiver . However, provision of these expertized caregiving duties are anxiety provoking for caregivers because caregivers are novice in care service provision .It is obvious from the literature that caregivers have lower sense of control over care giving situation. They are without in-home caregiver skill training. They lack knowledge to manage caregiving tasks and the emotional demands of caregiving. Caregivers are not prepared for the technical and emotional challenges of caregiving. Also , they do not know the appropriate community based organization to turn to in order to access services for emotional support - or any other kind of support. Lack of attention to caregivers and inability to provide for their caregiving needs is a serious gap in caregiving service delivery. Consequent upon which caregivers experience decrease in caregiver's sense of control and mastery of care situation.

To fill the missing gap, the literature suggests the management of caregivers with intervention as intervention has the advantage to improve the caregiver's knowledge and skills, develop psychomotor skills, impact training on the safe administration of medications and use of equipment that would facilitate mobility for the sick with ease and therefore enhance emotional and coping skills of caregivers to deal with caregivers anger and frustration.Educational intervention is perceived as helpful . But because the informal caregivers want concrete information about medications , tests , treatment and resources , it is imperative to provide such facts ina clear and concise formthrough either a literary , written formor electronic methods. Ordinarily, intervention studies in caregiving literature are typically descriptive in nature and often use small convenience samples without use of comparison groups but in an educational intervention of this nature randomized trials are needed to substantiate the role of caregivers' to enhance caregiver's skills and minimize caregiver's distress.

However , caregiving research remains descriptive and there are many gaps in caregiving literature to promote patient safety and quality care for caregivers as secondary patients and caregivers as providers to vulnerable PLWHAs . Lack of evidence based research on informal caregivers of PLWHAs is a gap which this study filled .A comprehensive and longitudinal studies of caregivers are needed to explore the complex interactions of caregiver's physical and mental health and caregiving provision relationship . Caregiving literature suggested that a longitudinal studies of caregivers be carried out. It also inform that caregivers should be lettered on self- care practices such as nutrition , exercise , sleeplessness , stress management , nursing procedures of certain caregiving work role , appropriate communication skills and coping strategies .The duration of the longitudinal research training to date for empowering caregivers' has uniform interval of 3 ,6 ,or 9 months for treatment irrespective of stage of disease of care demands.

To assess the strength of caregivers and their caregiving outcome ,there is the need to provide answers to the following questions.What do caregivers do well? What do caregivers do not do well? In what area are the care-recipient outcomes most likely to be compromised andwhat areas cause caregivers more distress?In the literature, inadequate help, lack of material assistance, lack of training of family caregivers , risks of infection, stress, burnout, exhaustion, physical illnesses, emotional burden and lack of support due to stigma and discrimination are major problems of informal caregivers of PLWHAsin Nigeria . Research evidence advocates the treatment of caregivers with interventions, education and training (Whittier, 2003). In literature ,the majority of intervention studies for caregivers have utilized a psycho-educational intervention because it has the advantage to combine information, support , psychological and counseling approach to decrease caregiver distress. Since the focus of this study is to enhance caregiving self-efficacy and psychological well-being of informal caregivers of PLWHAs, this study intends to employ the use of psycho-educational package to instill caregiving skills, knowledge and training into informal caregivers of PLWHAs for the provision of competent care ease without harming the caregivers and their care recipients.

2.2 Theoretical Framework

- Transactional Stress Theory
- Conservation of Resource Theory

2.2.1 Transactional Stress Theory

This theory is credited toLazarus and Folkman(1984).The framework is also known as cognitive relational theory.This theory perceive stress as a relational concept between individuals and their environment .This relationship is labeled 'transaction'.According to this framework ,when the demand of the environment supercedes that of an individual it is going to lead to stress .Stress is therefore seen psychologically as a relationship with the environment that the person appraises as significant for his or her well-being and in which the demands exceed or tax available coping resources (Lazarus &Folkman , 1986).There are two major concepts that are central to this theory namely 'appraisal' which is , individual evaluation of the importance of what is happening in his or environment and 'coping'(Lazarus &Folkman , 1986) which is individuals' efforts in thought and action to manage specific task demands.

This theory takes into cognizance the relevance of individual differences and therefore postulated that individuals respond to stressful situations differently. Therefore, some individuals perceive stressful situations as a benefit , an opportunity for growth , a form of development or a sort of gain while others perceived the transition as irrelevant . Those who perceived the transition as irrelevant wouldrespond to stressful situation in a neutral way. But those that perceived the situation as harmfulexperience , or distress ,incur harm , face challenges and threat of loss.

When the individuals involve preview the stress as harmful to them, it is regarded as primary appraisal (Lazarus andFolkman, 1984). The person makes a secondary appraisal or judgment regarding his or her available coping resources for managing the potential threat. People will react negatively to stress if they perceive that the harm they will incur is more than the benefit. The caregiver must recognize before assuming office that the care for a sick person in not an easy task. The stress of managing a sick person is increased because of lack of coping mechanism (Lazarus andFolkman, 1984; Pearlin et al., 1990).

The theory further explains the interaction that takes place between the caregiver and his or her client. It emphasized that the mutual relationship between both parties is due to the comparative advantages that they perceived (Vitaliano, 1991). The Zarit Burden Interview specify that individuals with little coping strength will face more stress when providing assistance to PLWHAs (Zarit et al., 1980). Caregiver stress theory has been one of the most frequently used theories in caregiving research. Therefore, the caregiver stress theory was the theoretical frame of reference for this research. The theory furtherrevealed that caregiver stress included several major components such as the background,context, primary and secondary stressors, secondary intra-psychic strains, caregiver outcome and quality of life all of which account for caregivers' experiences(Pearlin et al., 1990).

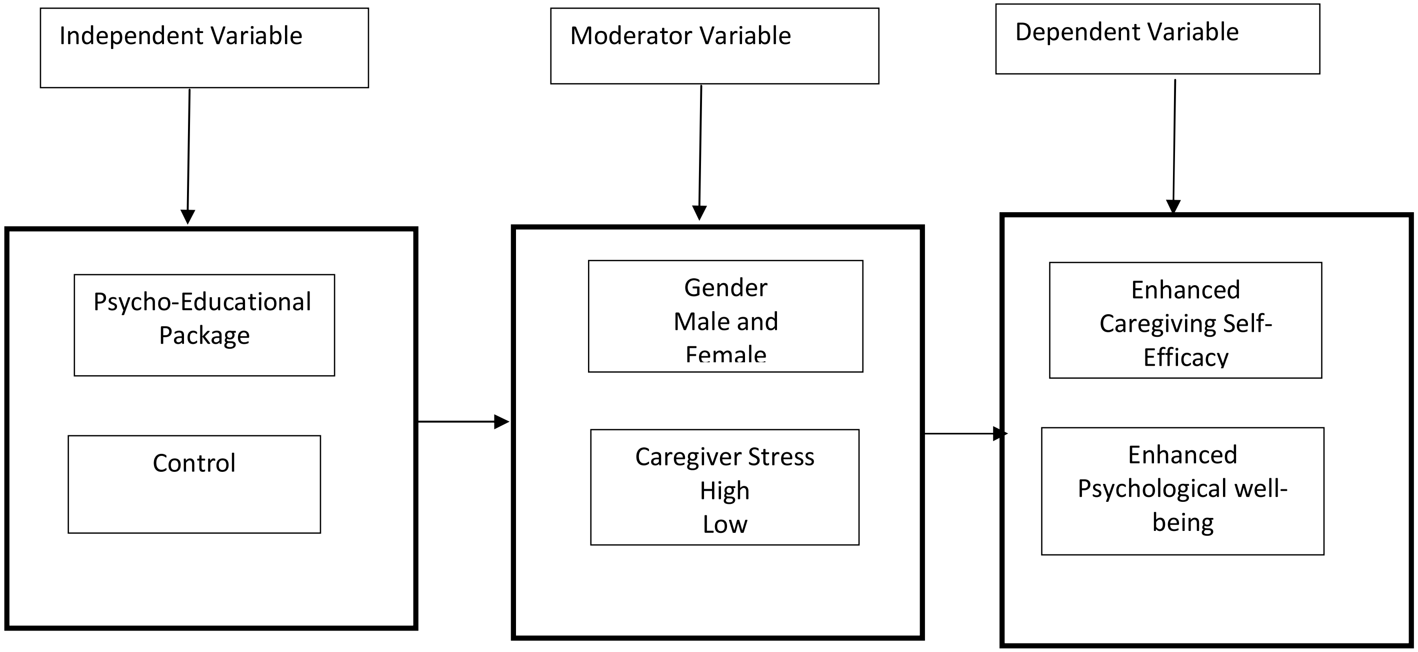
2.2.2 Conservation of Resource Theory(COR)

The second theory that is used for this work is the theory of conservation of resources otherwise labeled Resource Theory of Stress (Hobfoll, 1988,1989).The theory is concerned with resources that preserve well-being in the face of stressful encounters. According to the theory, resources identified are objects , personal characteristics , conditions or energies that are valued in their own right or that are valued because they act as conduits to the achievement or protection of valued resources (Hobfoll , 1988 , 2001).Hobfall , Freedy , Green and Solomon (1996) and Hobfall (2001) identified object resources as physical objects such as home , car, building , clothing and access to transportation.In addition , there is Condition resources that entails employment andpersonal relationships. Others included

Personal resources which includedskills or self-efficacy,and Energy resources are means that facilitate the attainment of other resources , such as money , credit or knowledge.

Ethically,people protect these resources and they derive positive psychological well-being from the attainmentandconservation of these resources. However, a threat to or a loss of these resources create emotion of distress . The theory asserted that the loss of resources is the primary source of stress and distress and that resources act to preserve and protect other resources Furthermore , in a stressful situation , individuals have an increasingly depleted resource pool to combat further stress. This depletion impairs individuals' capability of coping with further stress, and so resulting in what Hobfall (2001) called 'a loss of spiral'. Sickness or loss of sound health by PLWHAs is a loss of valuable resources and caring for these patients generate emotion of distress for the caregivers. This theory can be used in place of traditional stress model which has low capability to predict event. Also, the theory of stress appraisal strain (Lazarus and Folkman, 1984) is most often used when discussing caregivers stress levels. The COR is not concerned with factors that create stress but restricted to the resources that preserve psychological well-being alone.(Hobfoll, 2001).Hobfoll (1989, 2001)

COR principle postulated the need to acquire resources and preserve them.It emphasized the need to invest the acquired resources.This is necessary because investment of resources protect against resource loss , assist in recovery from losses and assist people to gain more resources (Hobfoll, 2001) . The theory further asserted that people must invest their resources in order to prevent the loss of resources, recover from loss of resources and gain more resources. This is because individuals with greater resources are capable of gaining more resources and those with fewer resources are susceptible to resource loss (Hobfoll, 2001).


Independent Variable
Moderator Variable
Dependent Variable
Psycho-Educational Package
Control
Gender
Male and
Female
Caregiver Stress
High
Low
Enhanced Caregiving Self-Efficacy
Enhanced Psychological well-being

2.2.3 Conceptual Framework for the Study

A concept refers to an idea or a theory while model is a framework applied to the field of study to aid the understanding of how the target behavior is to be managed in professional terms. Caregiver burden is a theoretical construct and the transactional model is suited for appraisal of the caregiver stress levels (Lazarus and Folkman, 1985). Based on cognitive theory of stress and coping mechanisms, the transaction between the caregiver and his client is determined by their imminent environment (Lazarus andFolkman, 1984).The social support is a resource to strengthen the person's ability to deal with stressors. The transactional modeldeals with the resources which help the caregiver to cope with the stress of providing care for the PLWHAs. Interventions for HIV/AIDs caregivers help people adjust primarily by enhancing their resources and eliminating stress (Legg, 2011). The study introduces treatment package which is the Psycho-educational interventions. The intervening variables are factors which, if not well controlled may affect the effect of the independent variables on the dependent variables. These factors account for internal and unobservable psychological process that in return may affect the outcome of the treatment and consequently render invalid the result of the experiment. The intervening variables cannot be controlled or measured directly even though they have an important effect upon the outcome of most studies including this present one under investigation. The intervening or moderating variables for this study are the caregiving stress level and gender and they are included in the factorial matrix.

In this study, the independent variable was manipulated to ascertain its effectiveness on the dependent or non-manipulative variables (presumed effect). Through the instruments to be used, the knowledge of how much the independent variable will have on the dependent variable will be gained. The dependent variable is the outcome and ultimate goal of the research which is enhanced Psychological well-being and caregiving self- efficacy.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The study adopted the pretest-posttest and control group quasi-experimental design of 2 x 2 x 2 factorial matrix. There was an experimental group and a control group. The experimental group consisted of participants receiving the psycho-educational training package.The purpose is to examine the efficacy of psycho-educational package on the psychological well-being and self-efficacy of informal caregivers of PLWHAs in Oyo State. The design is diagrammatically illustrated below:

O_1 X_1 O_2 (E)

O_3 O4 (C)

X1 = Psycho-educational Stress Education

E = Experimental group

O_1O_3 = Pre-treatment Measurement

O_2O_4 = Post-treatment Measurement

Table 3.1: A 2 x 2 Factorial Design for the Management of Psychological Distress and gender on Psychological well-being and caregiving self-efficacy

Treatment	Caregiving Stress	Gender	
		Male	Female
Psycho-educational Package	High		
	Low		
Control	High		
	Low		

From the above design (Table 3.1), the treatment conditions (A), that is the experimental treatment conditions of psycho-educational Stress Education (A1) and the control group (A2) form the rows. The sex (B1) factor varying at two levels; male (B1) and female (B2), and the Caregiving stress level factor varying at two levels : low and high form the columns.

3.2 Population of the Study

The population for this study consisted of all family caregivers of PLWHAs that were accessing care fromFAHPAC and NELAHS'non-governmental HIV/AIDs support and counseling centers.

3.3 Sample and Sampling Techniques.

The Family Health Population Action Committee (FAHPAC) and the New Initiative for the Enhancement of Life and Health (NELAH)are the two approved non-governmental HIV/AIDs support and counselling facilities thatwere selected from Non-governmental organizations catering for PLWHAs. They are the choice of this study because care for PLWHAs are accessed for freeand many PLWHAs patronized the centers thereby making it easy for the researcher to have access to large number ofinformal caregivers of PLWHAs for the study. Six hundredInformal caregivers of PLWHAs that accompanied their patients to these centers at a fixed date and time for each center were subjected to screening exercise.The Zarit Burden interview scale with index score of 44 and abovewas the screening tool used to determinethe level of informal caregivers' caregiving burden .And Lawson and Brody (1969) Instrumental Activities of Daily Living Scale with index score of 43 and above was the tool used to determine the family caregivers' competence in the domains of the Instrumental Activities of Daily Living(IADL). From the screening exercise, 100 out of 600 informal caregivers who scored high on caregiving burden but low on caregiving competence and confidence were randomly assigned to psycho-educational package group (50) and the control group (50) .The experimental group were hosted at FAHPAC while the control group were hosted at NELAH.

Inclusion Criteria

The participants were required to satisfy each of the following criteria before they could be allocated into the two groups: psycho-educational package (experimental) and the control group.

1. Participants should be 18 years old or above
2. should be caregivers for individuals who were experiencing chronic illness of HIV/AIDs
3. should be providing care to HIV/AIDspatients at present
4. should either be literate or non-literate who frequent the centers

5. should be identified as the care provider of the PLWHAs
6. should either be HIV+ or HIV- from any religious background, ethnicity, marital status and socio-economic background
7. should have obtained Zarit Burden Interview Index Screening score of 44 and above for caregiving burden.
8. should have obtained index screening score of 43 of the IADLS and above for low self-efficacy or competence level

Exclusion Criteria

Some informal caregivers were excluded from being assigned to the two groups for exhibiting the following characteristics:

Caregivers whose age were less than 18 years

Caregivers that obtained high index score of 70 and above in the screening exercise.

Participants that were not providing care for the chronically ill HIV/AIDs individuals as at present

Those that were receiving payment for caregiving service delivery.

Caregivers that had formal training in providing care

Caregivers whose recipient had been deceased for more than 1 years.

3.4 Instrumentation

The research instruments used in this study included:

1. In-depth Interview (IDI) for Caregivers of PLWHAs
2. Steffen Caregiver Self-efficacy (SE)
3. Psychological Well-being Scale
4. KingstonCaregiver Stress Scale (KCSS)
5. Zarit Burden Interview Measure
6. The Instrumental Activities of Daily Living scale

1. General Self-efficacy Scale

Mathias Jerusalem and Ralf Schwarzer (1979) designed the scale for the purpose of predicting self-efficacy in daily life events. The 10 items of the scale measures efforts, goals, investment, persistence, and recovery from setbacks. The four pointscale consist of 4 (Exactly true), 3 (Moderately true), 2 (Hardly true) and 1 (Not at all true). Higher score shows higher self-efficacy while lower score connotes lower self-efficacy. The cronbach alpha range from .76 to .90. It is the instrument of choice for measuring pre and post therapy outcome among individuals in different age groups including informal caregivers of chronic ailments such as HIV/AIDs. Its content validity was ascertained by expert judgement. For this instrument Mock and Erbaugh (1961), Corcorm and Fischer (1987) reported internal consistency and test re-test reliability with an alpha of .89 (Brier andRuentz, 1989).

2. Psychological Well-being Scale

Goldberg, Gater, Sartorius, Ustum, Piccinelli, Gureje and Reuter (1978) health questionnaire was used to measure psychological well-being: symptoms of social dysfunction, depression,anxiety and insomnia in order to cushion the emotional disturbances of informal care-givers. It has Better than usual (0); Sameas usual (1); Worse than usual (2); and Much worse than usual (3) four point likert scale.

Reliability coefficient, internal consistency, and test re-test reliability of the instrument were 0.78 to 0.95, 0.93, and 0.94 respectively (Jackson, 2007; Lopez-Castdo and Dominguez (2010), while expert validate the content.

3. Kingston Caregivers' Stress Scale

Hopkins and Kilik (2013) developed Kingston Caregivers'Stress Scale (KCSS) which has likert scale 1 to 5 questions designed to measure caregivers stress level. In the scale, 1 = no stress (coping fine, no problems), 2 = some stress, 3 = moderate stress, 4 = a lot of stress and 5 = extreme stress (health risk) with reliability of (a=0.85). The scale compartmentalized caregivers stress and attributed it independently to 10 questions based on family issues and financial problems. It has a Cronbach coefficient alpha of .84 - .86. Higher score indicate high stress level and lower scores indicate low stress level. Content validity was ascertained by expert judgment.

4. Zarit Burden Interview

This instrument was developed by Zarit (1980) and Bedard (2001). It is designed to measure caregiver burden that is the presence of depression, anxiety and traumatic symptoms of informal caregivers with chronic ailment such as HIV/AIDs. It is the instrument of choice for this study because it is used as a screening tool for caregivers' burden. The possible range of score is 0-78 ; and according to (Zarit1980) an index for the Zarit can be derived by dividing the sum of the values (raw scores) obtained on the 12 items by the maximum possible score of 79, and expressed as a decimal. For example, a client with a raw score of 60 has a Zarit Index of = $\frac{60}{78} = 0.76$.

High burden is seen by higher scores and vice versa and content validity was used for it validity. The recommendation of the experts favored the suitability of the instrument in screening the distressed informal caregivers of PLWHAs.

The test-retest method is applied for the reliability. This test-retest method involved administration of the instruments to (14) informal caregivers of PLWHAs (other than those that were involved in the study) on two occasions of four weeks interval. The fresh Zarit internal consistency estimate yielded a mean co-efficient of 0.52. And the cut-off point of 0.45 was reported as the boundary between relatively higher and lower functioning caregiver burden of respondents.

5. Steffen Caregiver Self-Efficacy (SE) Assessment Tool

A Self-Efficacy Assessment Tool was employed to measure caregiver perceived self-efficacy in carrying out their different care responsibilities (Romero,2011). The revised scale for caregiving self-efficacy contains CGSE OR and CGSE DB (Steffen, et al, 2002). The interview format measure consisted of approximately fifteen questions for which the caregiver was told to rate their confidence to complete various tasks by placing a mark on a continuous scale ranging from 0 to 100. The SE domains of the measure indicate strong internal consistency and moderate test-retest reliability (CGSE OR: r = .76; CGSE DB: r = .70; CGSE CU: r = .76) as well as strong convergent and divergent validity (Steffen et al., 2002). The CGSE was administered as a means of comparison against the CG-PAM. The CGSE was altered into self-report format for purposes of this study. The CGSE has not been normed for administration in self-report format; therefore reliability data for this format is not available. The reliability for this sample for the CGSE subscales was CGSE OR Cronbach's alpha = .95, CGSE DB Cronbach's alpha = .97, CGSE CU Cronbach's alpha = .92.

Biodata of the Participants

This was developed by the therapist to obtain information on the participants' socio-demographic characteristics such as center code, identification code, religious affiliation , age, sex, state of origin, local government, family type (monogamy or polygamy) family status (intact or broken), birth order (position among other children), level of education and position of caregivers among family members.

In-depth interview (IDI)

The qualitative method of In-depth interview (IDI) was usedin addition to the quantitative method to gather more accurate data. A total of 10 interview sessions5(five) for each groupwere conducted among the caregivers in the two health facilities used for the study, 5 caregivers from each of the HIV/AIDscenters were sampled. The caregivers were interviewed using a guide and tape recorder to record the responses.

Table1: Schedule for IDI sessions conducted for the study

Location	Dates	Number of sessions	Number of persons
FAHPAC	May 20 – 24, 2016	5	5
NELAH	June 4– 8, 2016	5	5

3.5 Procedure

The procedure for data collection was carried out in three phases as follows:

1. The pre-treatment phase;
2. The treatment; and
3. Post treatment evaluation Phase

Pre-treatment Phase

Permission to use the public HIV/AIDs facilities of the two non-governmental organizations was obtained through a letter from the Head of Department of Adult Education, University of Ibadan.

The ethical approval for the research was obtained from the Oyo State Ministry of Health Ethical Review Committee. Thereafter, the researcher visited the research settings and sought permission to use the HIV/AIDs facilities of the two non-governmental organizations. The Family Health and Population Action Committee

(FAHPAC) and the NELAH. After permission had been granted, the researcher met the Executive Officers (CEO) of the two organizations on different occasions at their centers. The researcher discussed the aim and gain of the intended psycho-educational training package with them. The facilitator's manual developed specifically for the study was collected by each CEO of the two NGO centers for preview prior to the treatments.

Two weeks after, the researcher was granted formal permission to carry out the study within their organizations. At the appointed date, the researcher met with the CEO, the programme officers, the Unit leaders, formal caregivers of PLWHAs and the professional health care workers working at the HIV/AIDs facility centers. The forum provided the researcher the opportunity to educate them about the study, recruit research assistants, fix date and time for the training of research assistants, as well as agree on modalities and the duration of the programme. Thereafter, negotiated for the convenient venue and suitable days of the week when the therapeutic session would hold. Having done so, the researcher was allowed to participate in the health talk given to HIV/AIDs patients as they come for treatments and follow up for three consecutive weeks prior the treatment stage. At every support meeting of the PLWHAs and the health care workers, the researcher was usually given some time to introduce herself and inform the PLWHAs about the training programmethus familiarizing herself with the PLWHAs and other health workers in the two NGOs.Thereafter, the PLWHAs were asked to identify their HIV/AIDs -Support person who is herein referred to as the patient's informal or family caregiver, write their names, their phone numbers with the head of HIV/AIDs Unit and inform their relatives about the training programme at home. They were also asked to bring them along for the next HIV/AIDs support meeting for screening exercise prior the training programme.

Some PLWHAs declined to bring their relatives because their relatives did not know about their status. Those who consented came together with their caregiver on the agreed upon date. The researcher welcomed them, established a rapport with them and brief them about the purpose of the study.Informal caregivers were screened at their different HIV/AIDs facility centers. The informal caregivers' caregiving competence, self-efficacy, strain of caregiving as well as the age of the respondents were determined through questioningand the administration of Zarit Burden Interview (Screening Scale Version) and caregiving competence scale. Of all the large number of caregivers that participated in the screening exercise only 50 participants each from the two NGO centers were selected. In all, one hundred participants were drawn for the study. The screening exercise lasted for a duration of two weeks in each of the twocenters.

Treatment

Informal caregivers that met the study eligibility were selected and the written informed consent was signed and obtained from each of them willingly. The participants were told that they could exitthe study at will and were assured that such withdrawal will not affect them in regards to benefiting from the study. The screened eligible informal caregivers after the screening exercise at FAHPAC were randomly assigned to the experimental group and the informal caregivers that were qualified after screening at the NELAH center were purposively chosen as the control group. Participants in the experimental group (FAHPAC) were informed that they would be exposed to pre-test, training programme and posttest. The training programme would be carried out once a week for six consecutive week of 60 minutes instructional period. The participants in the control group were informed that they were to meet with the therapist on two occasions that is during the pre- and post-therapy periods.

An initiation information was collected from participants in the experimental and the control groups. Thereafter, the experimental group was exposed to a psycho-educational packageprogramme.

Curriculum for treatment in the experimental Psycho-educational packagegroup.

- Introduction , Pre-treatment Briefing, General Orientation and Pretest
- Facts about HIV/AIDs
- The role of caregivers
- Challenges of caregiving
- Training on self - mastery of skills for managing infections and AIDs related conditions through modeling .
- Safety precautions for prevention of infection for caregivers, symptom management and care procedures.
- Stress reduction techniques and how to counteract burnout.

- Revision of all session objectives and conclusion of treatment objectives: revision and conclusion of treatment, post treatment testing.

The experimental group was exposed to six instructional period of 1 hour each. -0In all, the treatment lasted for six weeks .The psycho-educational training package programmewere held through interaction in a classroom. The treatment utilized participatory education techniques such as lectures, role-plays, small group, large group, discussions, brainstorming, individual assignments, exercises, persuasion, rephrasing questions and answers, positive reinforcements, verbal and non-verbal cues, openness, cheerfulness and courtesy. Relaxation exercises such as warm up physical exercise, storytelling, sharing of experiences were used intermittently as stress reduction techniques.The developed psycho-educational training package (PETP) was validated using cronbach alpha method. The validated PeTP for the eight sub-session is r= 0.94. HIV/AIDs facts (r =0.89), caregiver's roles (r = 0.70), caregiving challenges (r =0.75) , infections self mastery skills modelling (r = 0.73), safety precautions (r =0.81) and stress reduction techniques (r =0.87) were rated high.

After the experimental group had gotten full exposure to the psycho-educational package programmes , the experimental and control group were used for post-retest. The participants in the control group were only exposed to health talk on personal hygiene, stress reduction techniques, Nutrition and the likes during the treatment period.

Post-treatment Evaluation Phase

The post-test data was obtained from experimental and control groups with the use of General Self-efficacy Questionnaire, Psychological Well-being Questionnaire, Kingston caregiver Stress Scale Questionnaire. The researcher appreciated the participants for their time and all were encouraged to utilize the information gathered from the programmes to enhance their self-efficacy and psychological well-being. Finally, group photographs were taken with participants that were willing and parting gifts were equally distributed.

SPECIFIC BEHAVIOR CHANGES THAT WAS OBSERVED AFTER TREATMENT

Acquisition of caregiving skills.
Better performance of caregiving work roles.
Development of confidence in carrying out caregiving activities
Utilization of safety precautions techniques
Adoption of stress reduction techniques
Provision of palliative care for PLWHAs
Improved communication skills
Improved interpersonal relationship with client and relations.
Quality life.
Improved psychological well-being.

3.6 Ethical Considerations

1. The ethical approval and consent from the institution was obtained before embarking on field work. The researcher did not force anyone to participate and confidentiality was assured.
2. Translation of protocol to the local language: The administration of the research questionnaire was interviewer administered.
3. Beneficence to participants: At the end of each treatment session, the participants were given light refreshment and a token amount of three hundred naira (N300) each for cab fare.
4. Non-malevolence to participants: The participants were informed that the study will not pose any harm to them but will only take their time for participating.
5. Voluntariness: Those participants who were interested were selected without any coercion. Moreover, the participants were informed that they have the right to withdraw at anytime they wish.

3.7 Control of Extraneous Variables

In an attempt to control the extraneous variables such as participants' variables, therapist variables, temporal variables, method and techniques variables, and situational or environmental variables, which could affect the study,the following approaches were applied.

1. Selection of the two non-governmental HIV/AIDs support and counsellingfacilities through purposive sampling techniques
2. Selection of the participants usingZarit Burden interview scale with index score of 44 and above.
3. Selection of the participants using Instrumental Activities of Daily Living Scale of 43 and above.
4. Use of the inclusion and exclusion criteria earlier discussed in the study
5. Use of pretest-posttest and control groups, quasi-experiment design of 2x2x2 factorial matrix.
6. Use of Analysis of Covariance (ANCOVA).This helped to control any other variations that might not be easily or adequately handled by the measures taken so far.
7. Employment of highly individualised treatment format to prevent leakage of treatment protocol.

3.8 Methods of data analysis

Data collection from the bio-data questionnaire was collated and analyzed using the descriptive statistics of simple percentages and pie-charts. The data obtained for testing the twelve hypotheses were computerized and analyzed using Analysis of Covariance (ANCOVA). A 2 x 2 x 2 analysis of covariance was used to examine the possible effects of treatment group, gender and stress level on dependent variable. Where significant difference is obtained, Duncan post-hoc analysis was used to determine the source of significance and estimate the amount of variation due to each independent variable (treatment).

CHAPTER FOUR

RESULTSAND DISCUSSION OF FINDINGS

This chapter highlights the presentation of results of the study as well as the details of the outcomes of their statistical analysis. It offers explanations on how the statistical test of significance applied to each of the tested hypotheses was described and why a statement of rejection or non-rejection of each hypothesis was declared, followed by interpretations.

4.1 Demographic Information of the Respondents

The characteristics of the participants is important for the understanding of certain basic issues concerning

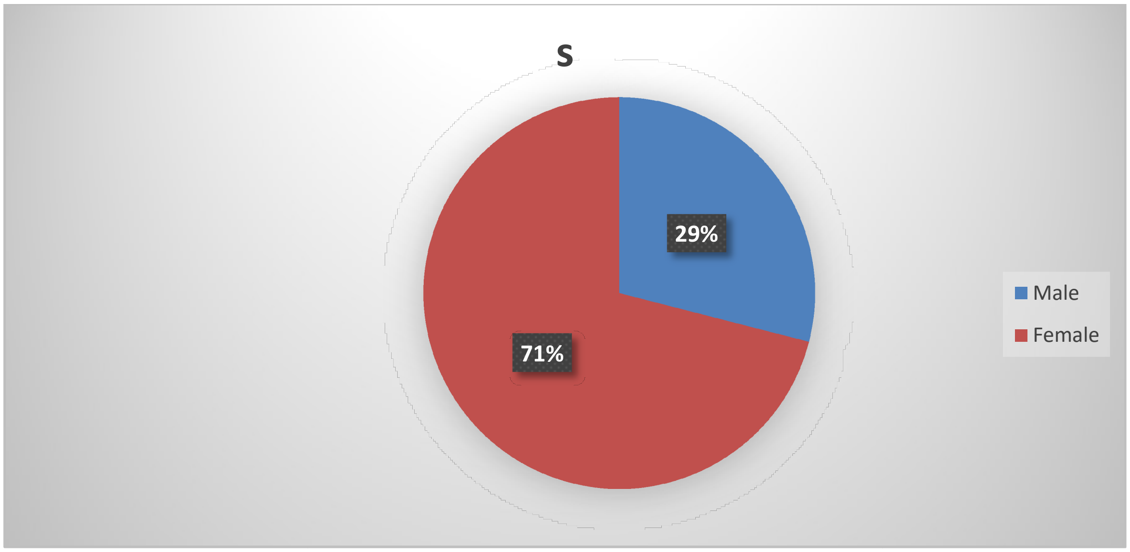


Figure 4.1: Distribution of the Participants by Sex

Fig. 4.1 showed that 71.0% of the respondents are female, while their male counterparts were 29.0%. This shows that majority of caregivers were female.

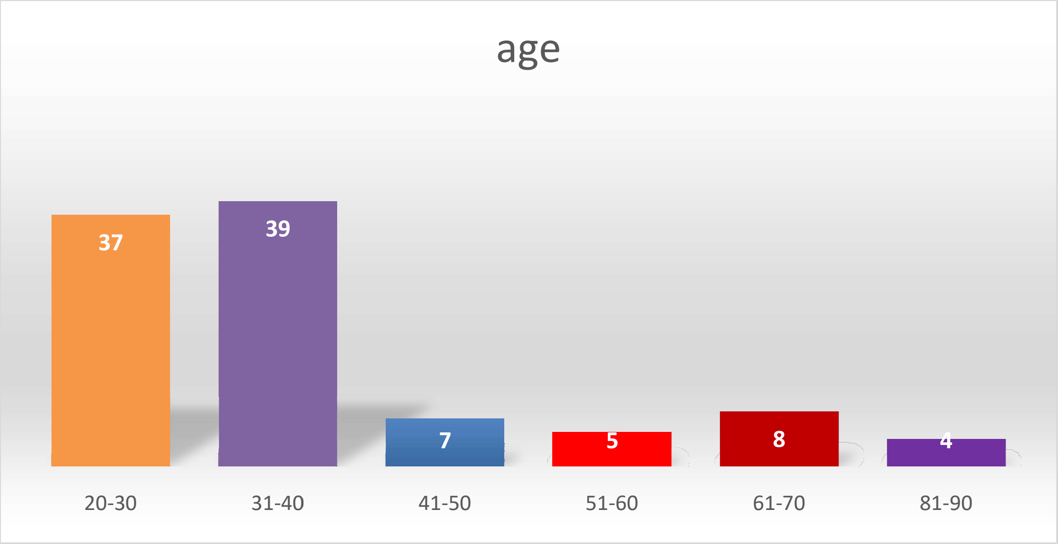


Figure 4.2: Distribution of the respondent by age

Fig. 4.2 shows that 39.0% were 31-40 years of age, 37.0% were 20-30 years , 8.0% were 61-70 years of age, 7.0% were 41-50 years of age, 5.0% were 51-60 years of age, 4.0% were 81-90 years of age. This shows that majority of caregivers were 31-40 years of age

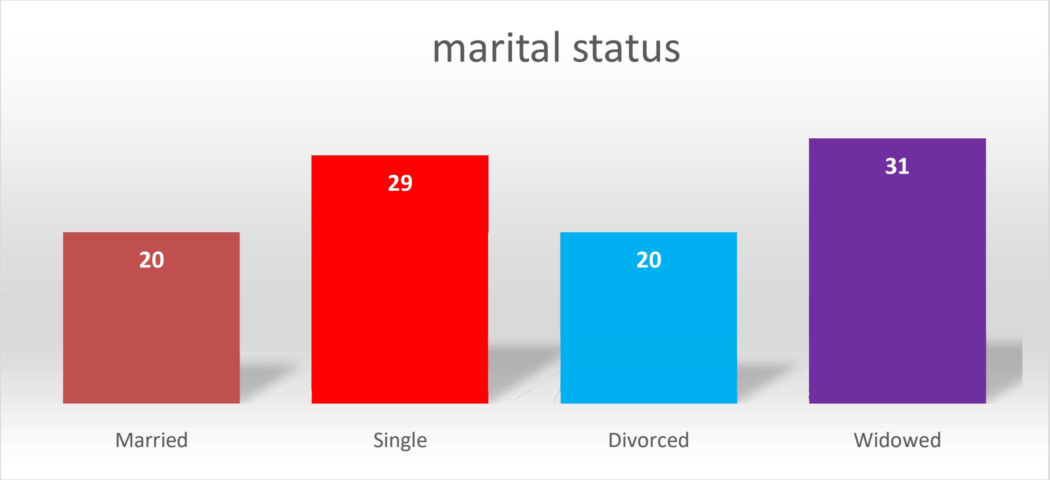


Figure 4.3: Distribution of the Participants by Marital Status

In Fig. 4.3, it is evident that 31.0% were widowed, 29.0% were single, 20.0% were married, while 20.0% were divorced. This shows that majority of caregivers were widowed.

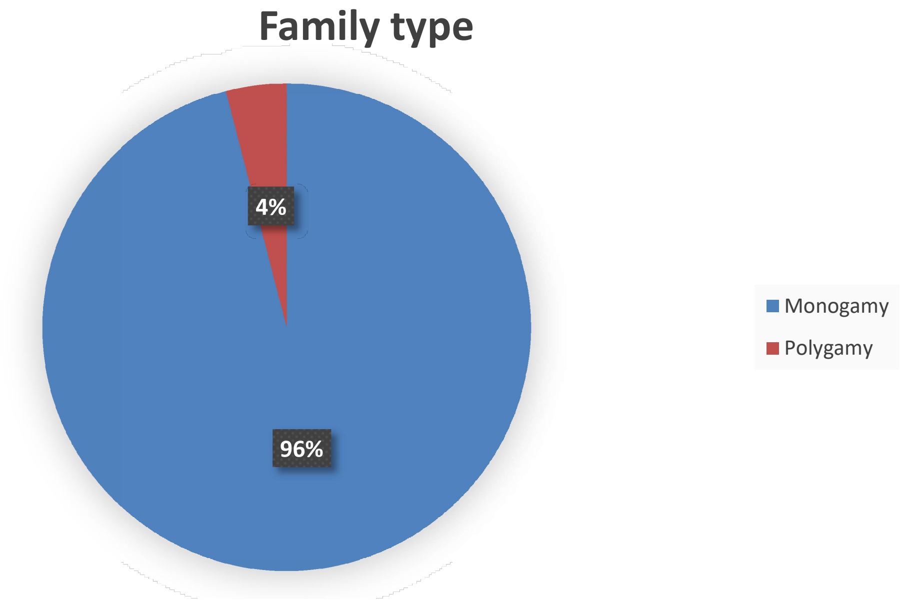


Figure 4.4: Distribution of the Participants by family type

In Fig. 4.4, it is evident that 96.0% were from monogamy family, while 4% were from polygamous family. This shows that majority of caregivers were from monogamy family.

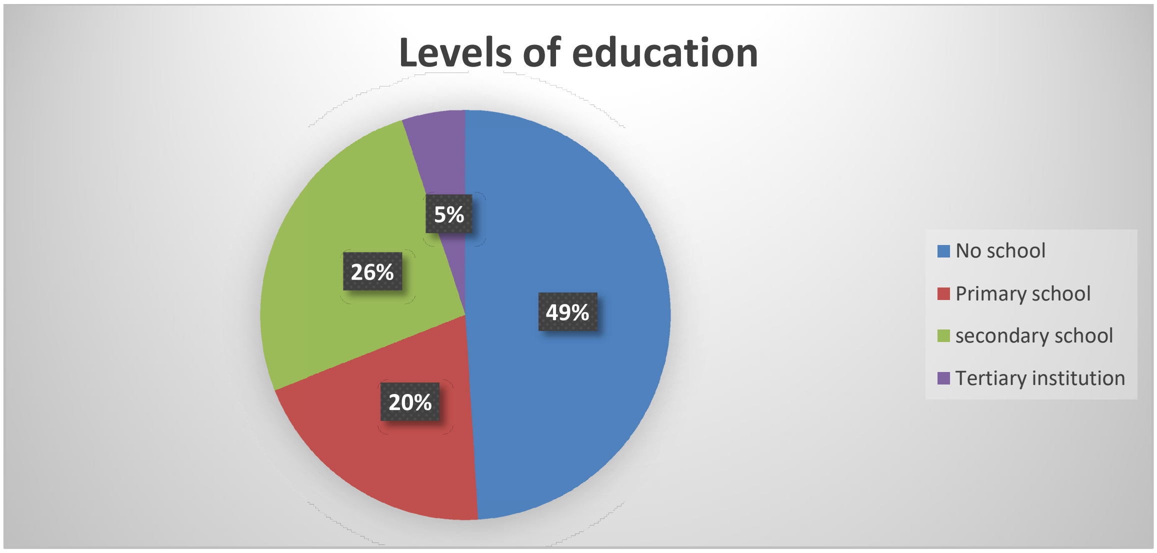


Figure 4.5: The Distribution of the respondent by levels of education

The figure above shows that 49.0% were not educated, 26% were junior secondary school certificate holder, and 20.0% were primary school certificateholder , 5% were tertiary institution certificate holder, while 10% were senior secondary school certificate holder. This shows that majority of caregivers were not educated.

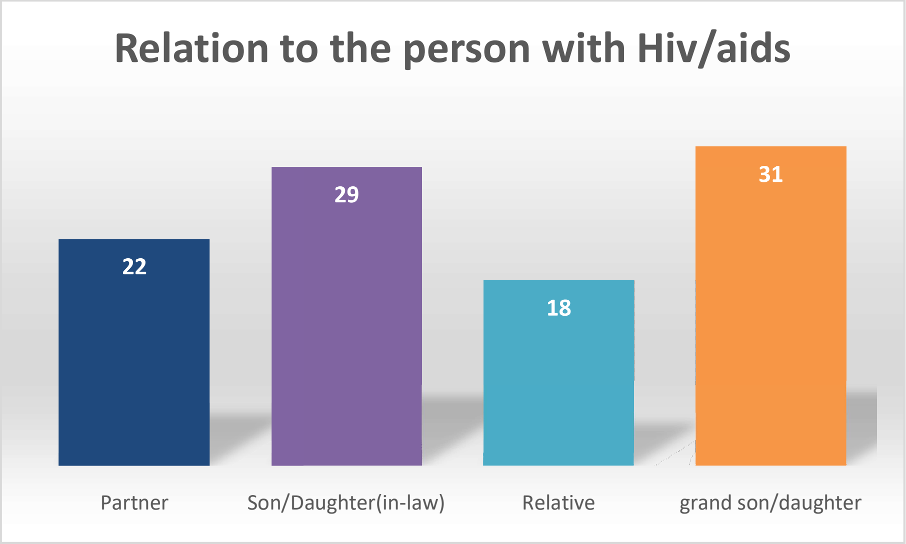


Figure 4.6: Distribution of the respondents based on theirrelationship with PLWHAs

In Fig. 4.6, it is evident that 31.0% were grandson or daughter of the person with HIV/AIDs, 29.0% were son or daughter in-law of the person with HIV/AIDs, 22.0% reported that they were partner of the person with HIV/AIDs, and, while

18.0% were relative of the person with HIV/AIDs. This shows that majority of caregivers were grandson or grand-daughter.

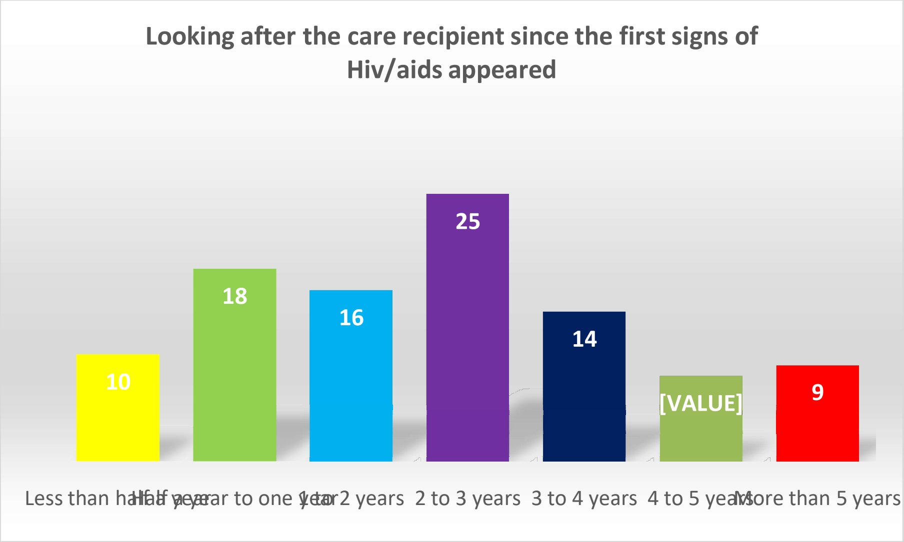


Figure 4.7: Distribution of the respondent based on Caregiving experience.

In Fig. 4.6, it is evident that The table shows that lager percentage of the respondent 25.0% reported that they have been looking after the care recipient for the past 2 to 3 years since the first signs of HIV/AIDsappeared, 18% reported that they have been looking after the care recipient half a year to one year since the first signs appeared, 16% reported that they have been looking after the patient for the past 1 to 2 year, 14% reported that they have been looking after the patient for the past 3 to 4 years, 10% reported that they have been looking after the patient half a year to one year, 9% reported that they have been looking after the patient more than 5 years, 8% reported that they have been looking after the care recipient for the past 4 to 5 years. This shows that majority of caregivers were 2 to 3 year old in care service.

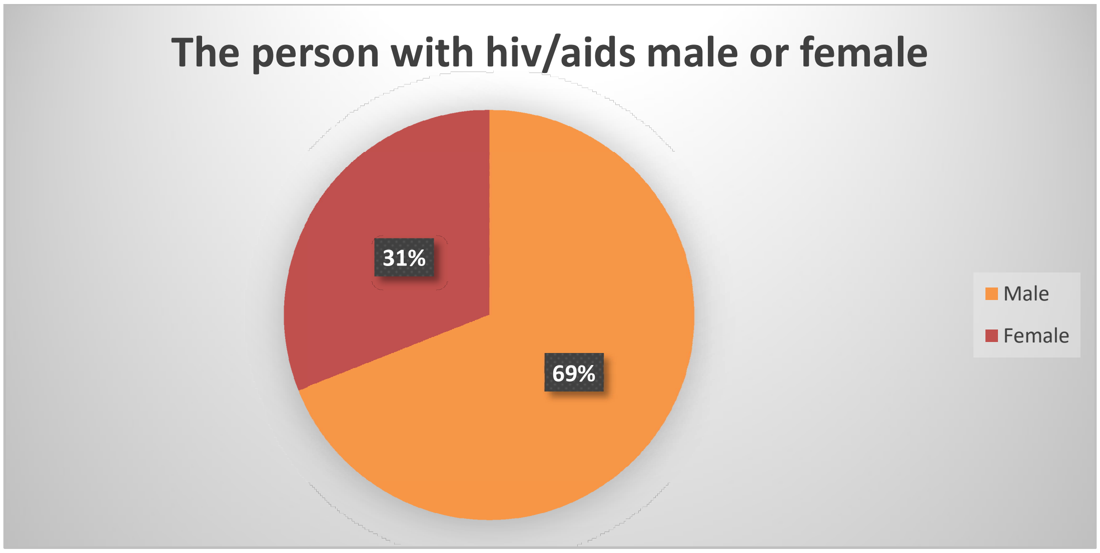


Figure 4.8: Distribution of PLWHAs(care recipient) based on gender .

Fig. 4.8 shows 69.0% of care recipient were male with HIV/AIDs, while 31.0% were female with HIV/AIDs. This shows that majority of PLWHAs were male.

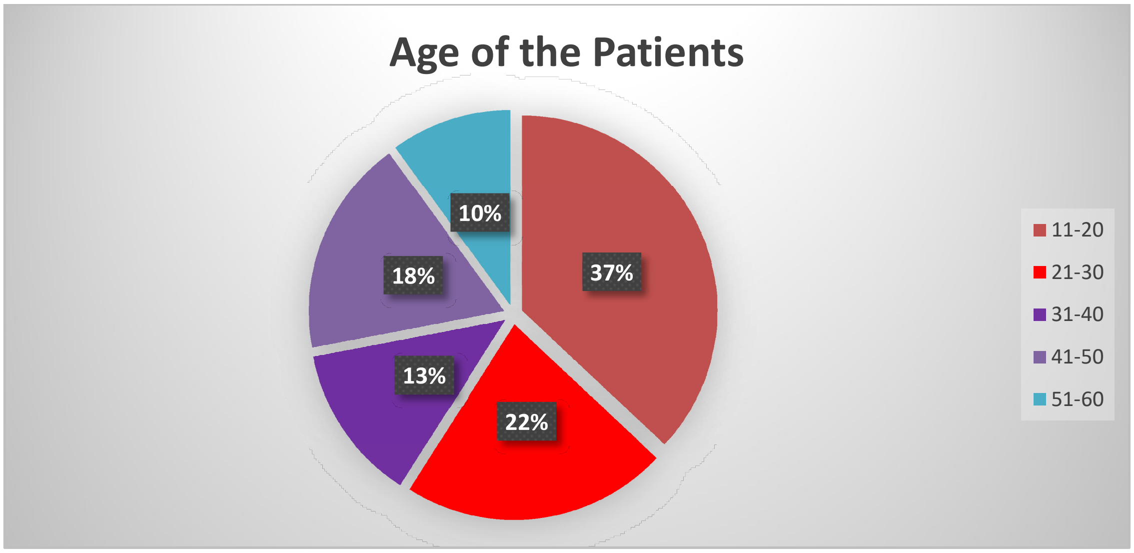


Figure 4.9: Distribution of the care recipient by age

Figure 4.9 shows that 37% were 11-20 years of age , 22% were21-31 years of age, 13% were31-40 years of age, 18% were 41-50 years of age, and 10% were 51-60 years of age. This shows that majority of caregivers were11-20 years .

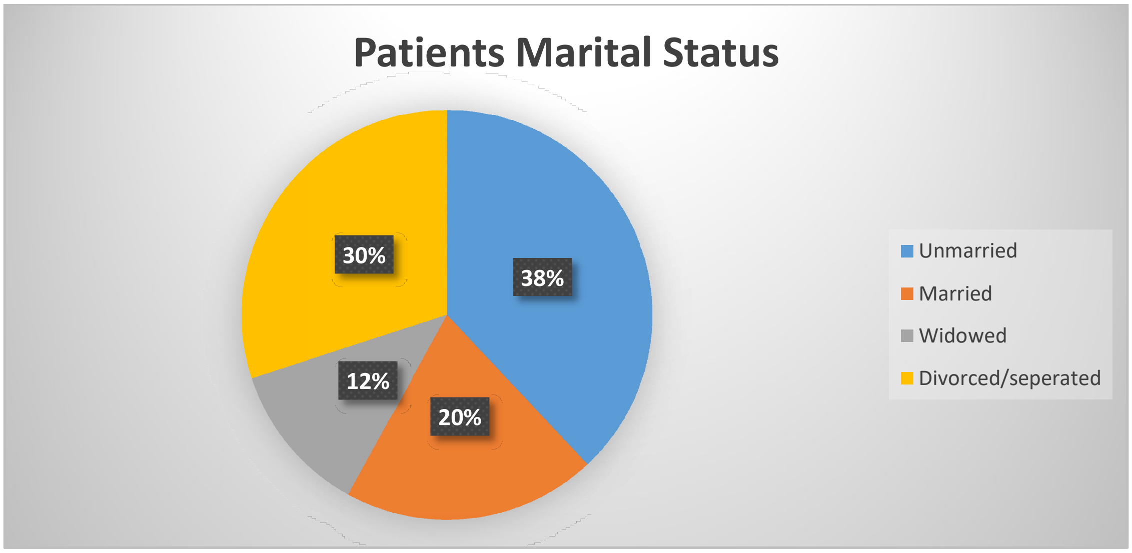


Figure 4.10: Distribution of the care recipient by marital status

Fig. 4.10 shows that 38.0% were unmarried, 30% were divorced or separated, and 20.0% were married, while 12% were widowed. This shows that majority of care-recipients (PLWHAs) were unmarried.

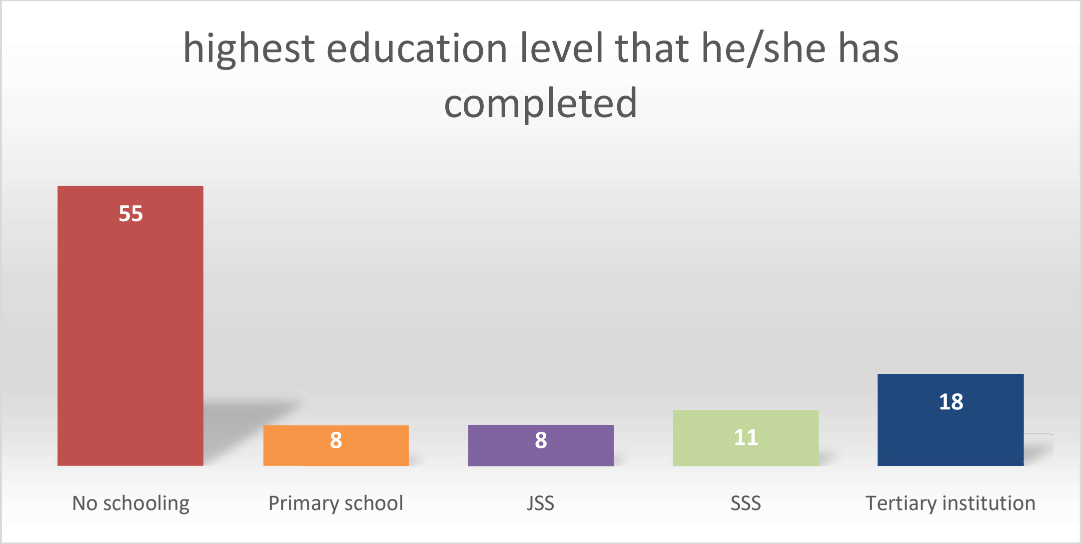


Figure 4.11: Distribution of the care recipient by highest education level that he/she (PLWHAs) has completed

Fig. 4.11 shows that 55.0% were not educated, 18.0% were tertiary institution certificate holders, and 11.0% were senior secondary school certificate holder, 8.0% were primary school certificate holder, while 8.0% were junior secondary school certificate holder. This shows that majority ofPLWHAs do not have formal education

4.2 Hypotheses testing

H_{o1}: There is no significant main effect of treatment on psychological well-being of caregivers of PLWHAs. To test this hypothesis, a 2 x 2x 2 analysis of covariance was used. The data collected from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.1 followed by a detailed discussion

Table 4.1: 2x2x2 ANCOVA showing the effect of Psycho-education on Psychological Well-being of caregivers of PLWHAs

Source	Sum of Squares	df	Mean Square	F	Sig.	Size of effect
Model	9166.697^a	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Treatment	1580.893	1	1580.893	68.902	.000	.428
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

Interpretation and Discussion

The hypothesis one in table 4.1 reveals that the effect of treatment is significant ($F_{(1,97)} = 68.90$, $p<0.001$). Therefore, there is a significant main effect of treatment on psychological well-being of caregivers of PLWHAs. To determine the severity of the mean psychological well-being of caregivers of PLWHA scores of participants in each of the groups (treatment and control group), the post hoc is shown in Table 4.2.

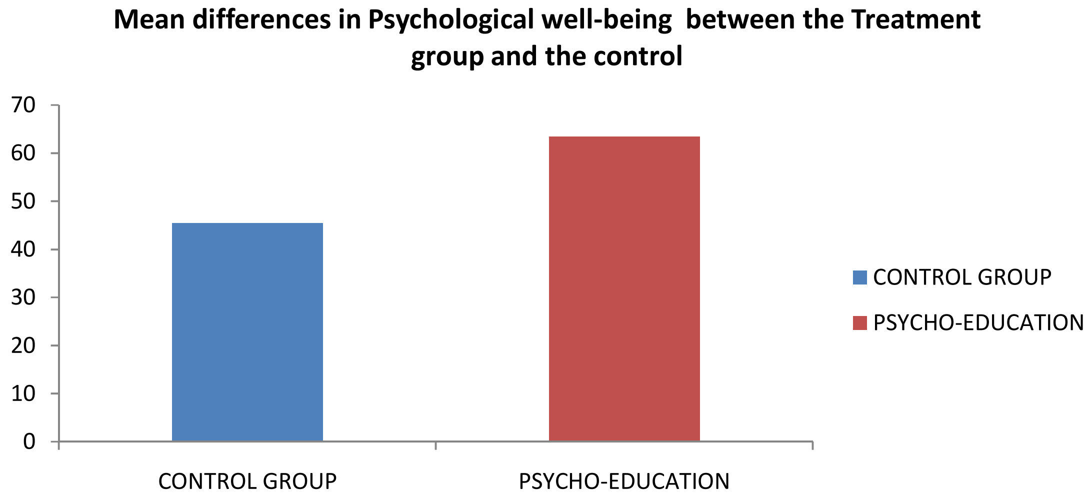
Table 4.2: LSD Post Hoc Analysis Showing Mean Differences in Psychological well-being among the treatment Groups

Treatment group	Mean	S.D	LSD	Sig.
CONTROL GROUP	45.44	1.12		
PSYCHO-EDUCATION	63.41	.93	17.96*	<.001

The covariates appearing in the model were evaluated at the following values: Pretest = Psychological well-being = 43.7400

** mean differences Significant at p<0.01

As shown on Table 4.2 the result of the post hoc analysis on the level of differences between the Psycho-education and the control group (LSD = 17.96, *p*<.01). The hypothesis was rejected. There was significant main effect of treatment on psychological well-being of caregivers of PLWHAs.


Mean differences in Psychological well-being between the Treatment group and the control

This finding support the previous finding of Okeke (2009) who investigated the effectiveness of social support and self-efficacy Building strategies in enhancing the well-being of HIV/AIDs caregivers. Apretest, posttest and control group, quasi-experimential design of 2×2 factorial matrix was adopted for the study.Findindsrevealed that both strategies improved the welfare of informal care-givers of HIV/AIDspatients. Based on the effectiveness of the two strategies, it is recommended that clinical and counseling psychologists working with this category of people employ the strategies. This was supported in one of the interview sessions.

> In the hospital, I am always scared of health care workers. They do not engage you in discussion. They only discuss with their client. I am not given an opportunity to express my fears, ask question about care challenges. But now that I have received training, I have the boldness to do some activities, I can ask questions about what to do and how to do it from the health care worker. This training opens my eyes on how to do some caregiving procedure correctly. (Female 44, caregiver of PLWHAs 2016).

The findings is also similar to a meta-analysis of 13 studies which asserted that respite interventions on care-givers reduceburden ,depression and enhance well-being (Sorensen, 2002; DellasegaandZerbe, 2002). These findings were corroborated by the in-depth interview. The respondent have this to say:

> I never knew that giving out of fruits to my client can fill his appetite and can also help him to live a healthy life. Before now, I used to feed him only on Amala, Garri and rice. Even when he doesn't want to take these foods because of its monotony, I forced him to eat it and when he refuses I starved him because I cannot think of any alternative. This training is an eye opener for me that my client can live on fruits. (IDT/ Female/55/March,2016)
>
> Another respondents revealed that:
>
> My client use to wet and mess the bed I am fed up with daily washing of a lot of pants and apparels. I am not aware that there is a diaper for adults. Now that you have informed and shown us how to tie adult diaper, I think I can afford to buyadult diaper, and tie it, this I think will relieve me of daily washing of clothing
>
> Health care workers focus attention on my client and often leave me out of their discussion. And when I ask my client about their discussion he will not answer. With this program, I am carried along about how to care for my client especially about the type of food to eat, drug adherence, the need for exercise, information about the drug and the mental state of my client.
>
> I was devastated when I learnt that my cousin was infected. Shortly after her mother's demise, I was left alone to provide care. My

> children were afraid of him. They were so scared of him so much that they used to say to him to get away from them before he gives them his disease. This was a challenge for me. Since I don't have any other place to keep him, I share his grieve, cry a lot and I go into hiding to cry severally since I don't have explanation for my children on the cause, spread symptoms and mode of transference of the disease. But with the training session, I now understood how HIV/AIDs can be contracted and spread and now we can live together without fear of infection (Female 68 care giver of PLWHAs 2016).

Psycho-education on caregiving self-efficacy of caregivers of PLWHAs

The information collected from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.14 and 4.15 followed by a detailed discussion.

Table 4.3: 2x2x2 ANCOVA showing the effect of Psycho-education on caregiving self-efficacy of caregivers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η^2
Model	5711.719[a]	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
TREATMENT	1778.543	1	1778.543	198.739	.000	.684
Error	823.321	92	8.949			
Corrected Total	6535.040	99				

Interpretation and Discussion

Table 4.3 revealed that the effect of treatment as indicated on the post-test scores of participants is significant ($F_{(1,92)}=198.74, p<0.001$). This shows that there is a significant main effect of treatment on caregiving self-efficacy of caregivers of PLWHAs. In order to determinethe magnitude of the mean caregiving self-efficacy of caregivers of PLWHAs , scores of participants in each of the groups (treatment group and control group), the post hoc shown in Table 4.15.

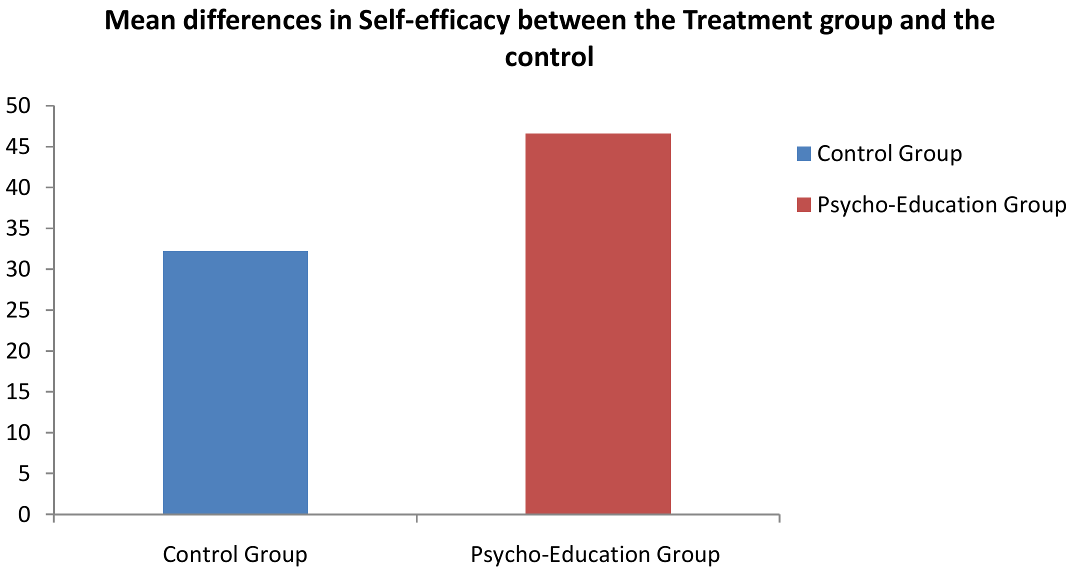
Table 4.4: LSD Post Hoc Analysis Showing Mean Differences on caregiving self-efficacy among Groups

Treatment groups	Mean	S.D	LSD	Sig.
Control Group	32.24	.626		
Psycho-Education Group	46.61	.566	14.36*	<.001

Covariates appearing in the model are evaluated at the following values: Pretest = 210.2083.

** mean differences Significant at p<0.01

As shown on Table 4.4 the result of the post hoc analysis on the level of differences between the Psycho-education and the control group (LSD = 14.36, p<.01) was significant. On the basis of this finding, null hypothesis which stated that there is no significant main effect of treatment on caregiving self-efficacy of caregivers of PLWHAs is hereby rejected.


Mean differences in Self-efficacy between the Treatment group and the control

The findings demonstrated that caregivers who received psycho-education were more confident in coping with task of caregiving for PLWHAs. This view was highlighted by Schmall (2006) who concluded that the training or education of caregiver magnifies their confidence, self-efficacy, family relationships, reduce stress and feelings of guilt. Also, it has been noted that it is beneficial to provide intervention as regard the health risk that caregivers are exposed to (Astrol, 2012). The self-efficacy cum self-esteemhave been acknowledge to reduce the stress associated with caring for the patients who suffer from HIV/AIDs (Steffen et. al, 2002). This was corroborated in the interview with one of the caregivers:

> I usually have problems relating with the names of drug and the dosage. Before this programme, I don't even know the name of the drugs let alone its efficacy. I now know the reason whymy client eat so much. I now know the generic name and how to store it in my memory **(IDI/Female, 53, Caregiver at NELAH Centre)**
>
> I just want to help her and it never occurs to me that I can contact the disease from her. When she had a cut and blood was running out from her arm. I did all I can to stop the bleeding without protection. Now, I know I must always use the glove when having body contact with blood of the infected(Female 15, caregiver of PLWHAs, 2016).
>
> I usally had thoughts of her infecting me and I used to evade her like leper now, I know what to do to get infected and what not to do so as not to be infected (Male 40, caregivers of PLWHAs, 2016)
>
> I used to overwhelm myself with care provision in the area of feeding, bathing and transference of my loved ones consequent upon which my client suffer falls and I experienced stress but now, whenever I am stressed up or overwhelmed in care provision, I always ask for assistance from a girl in the house behind us to give me a helping hand in bathing, feeding, toileting, cleaning or even cooking. I also even call for assistance in transference or carrying the care recipients into the car when I have to take him when seriously sick to the doctor or the hospital. Now, I can now use time management skills that I have been educated on in one of the sessions on adequate caregiving provision (Female 73, caregivers of PLWHAs , 2016)
>
> I don't have the belief that anti- retroviraltherapy (ARVS) can prolong the life of my clients. Neither do I believe in the use of drugs to cure opportunistic infections when these drugs are supplied, I don't also encourage my clients to take them regularly.
>
> But now, I supply ARVS and other prescribed drugs in correct dose at the right time and report negative reactions to drugs to the health professional promptly

With this action I feel relief that the medication will bring relief to my loved one (male 53, caregiver of PLWHAs , 2016)

When my relation is weak and out of control of his actions, I used to think that he is pretending and does not want to use his drugs. I usually reacted sharply by beating him and talking rudely to him. Now that I have the knowledge that the medication is responsible for my client's reaction, I now understand the cause of his actions and behavior and I now have hope about the future. (female 76, caregivers of PLWHAs, 2016).

I never believed that HIV/AIDs infection can lead to cognitive distortions.

Anytime my kin is uttering meaningless utterances or displaying some acts, I used to get annoyed with him and I usually lock him up in a room.

At times I beat him thoroughly and withhold food.However with the training I received in the sessions,Inow realized that cognitive distortions is one of the symptoms of the diseases and whenever my client display such features, I put on brave face, conceal my hurt, anger,disappointment, or anxiety and try to be in control of the situation,because Ican understand the cause of his actions and behavior.(female 56,caregiver of PLWHAs,2016)

I was at cross road when I was aware that my son was infected. I was also miserable when I learnt that his wife hadflee from him.

I was disturbed about how to provide care and I don't even know the type of care needed to be provided as I do not know the way by which people contact the disease and how to copewith the plagueconsequent upon which I become hopeless and helpless. But with the training Ihave just received, I thinkI am in control

$H_{o\,2}$: There is no significant main effect of gender,on psychological well-being of caregivers of PLWHAs.

The data collected from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained in Tables 4.16 and 4.17is followed by a detailed discussion.

Table 4.5: 2x2x2 ANCOVA showing the effect of gender on psychological well-being of caregivers of PLWHA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η2
Model	9166.697^a	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Gender	64.483	1	64.483	2.810	.097	.030
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Sig (Significance), * Significant at $p<0.05$

To test the main effect of gender on psychological well-being of caregivers of PLWHAs, the main effect of gender was not significant ($F_{(1,91)} = 2.81$, $p>0.05$), on the post-test scores of subjects on psychological well-being of caregivers of PLWHAs.

Table 4.6: LSD Post Hoc Analysis Showing Mean Differences on caregivers psychological well-being based on gender

Sex	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	51.408	1.341	48.744	54.071
Female	52.519	.703	51.123	53.916

a. Covariates appearing in the model are evaluated at the following values: Psychological well-being = 43.7400.

The mean differences show female have higher scores on psychological well-being compared to their male counterpart however this was not statistically significant.This hypothesis is thus accepted.

This finding support earlier studies which have demonstrated that gender play significant role in caregiver's well-being and caregiving outcome. This findings contrasted earlier reports which suggested that women experience depression and stress when caring for HIV patients in United States, Africa, and Thailand (Flaskerud andTabora, 1998; Lindsey, Hirschfeld, and Tlou, 2003; Songwathana, 2001; Wight et al., 2007). This finding supports the study of Akintola, (2004) and Orner, (2006) which have demonstrated that caregiving affect men more than women. This is because men are assumed to be playing double role during caregiving activities. The male gender who work in an organization gives little credence to the difficulty associated with household activities (Akintola, 2004a; Orner, 2006). Further improvement in women psychological well-being in this study may have resulted from the psycho-education given to the women which improved their caregiving skills, lessened their level of perceived stress and their caregiving activities. However, given the right informational support and necessary skills their performance becomes better overtime. It was noticed in this study that most men feel that they do not need information regarding caregiving as such they are less likely to attend psycho-educational sessions carried out in the study because caregiving is believed to the responsibility of women. This was supported from the views generated from the interview held with one of the caregivers:

> Providing care for my infected grand-children is a way of life. More so, when they are now living with me. As a petty trader I earn my living through an open shop in front of my house which affords me the opportunity to provide caregiving activities when required.

> Whenever my sister is down with opportunistic infections and was unable to eat, bath and do activities of daily living, I usually feel bad with her as I empathize with her. It does not take me time before I become sick too and suffer the same infection she was experiencing .On several occasions my system get disturbed and I often develop frequent stooling. However, with the training I have obtained, I have learnt to give out first aid and encourage her to eat, take her drugs and relax and that if the symptom persists, I convey her to the hospital for necessary treatment. Now, I have learnt to develop stable emotion and at the same time maintain emotional distance from my infected kin rather than being empathetic (female 46 caregivers of PLWHAs, 2016).
>
> Whenever my infected kin cannot move from one place to another, I usually carry him haphazardly. But with the training session, I havelearnt that there is a special skill of transference of the sick without causing body harm to the care recipient and the caregiver. (Female 63 caregiver of PLWHAs 2016).

This demonstrates that caregiving activities are much easier for the women than the male respondents as gender significantly influenced psychological well-being among the respondents in the study.

Table 4.6: 2x2x2 ANCOVA showing the effect of gender on self-efficacy of care givers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η2
Corrected model	5711.719^a	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
Gender	8.009	1	8.009	.895	.347	.010
Error	813.357	91	8.938			
Corrected Total	6535.040	99				

* Sig (Significance), * Significant at $p<0.05$

To test the main effect of gender on caregiving self-efficacy of caregivers of PLWHAs, the main effect of gender was not significant ($F_{(1,92)} = .895$, $p>0.05$), on the post-test scores of subjects on caregiving self- efficacy of caregivers of PLWHAs.

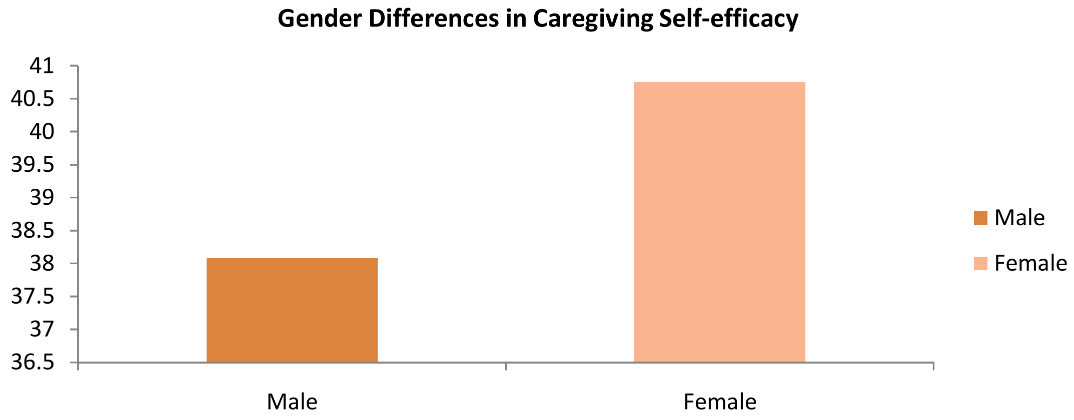
Table 4.7: LSD Post Hoc Analysis Showing Mean Differences on caregivers self-efficacy based on gender

Sex	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	38.959	.838	48.744	54.071
Female	37.788	.434	51.123	53.916

a. Covariates appearing in the model are evaluated at the following values: self- efficacy = 28.30

The mean differences show female have higher scores on psychological well-being compared to their male counterpart however this was not statistically significant. This hypothesis is thus accepted.

The mean differences shows female gender have lower scores on caregiving self-efficacy of care givers of PLWHAs compared to their males counterpart in this study. This hypothesis is thus accepted.



This finding demonstrates that gender play significant role in caregiving self-efficacy. The findings is similar to that of Van den Heuvel et al (2001) who found that self-efficacy, social support, and coping strategy positively influence the caregiver. Aneshensel et al. (1995) demonstrated that caregiver competence developed over time lessen role captivity . This finding also support the work of Akintola, (2008) who demonstrated that women who perceived themselves as competent performed better than those who perceived themselves as not capable of carrying out caregiving activities (Akintola, 2004a; Orner, 2006).

$H_{o\ 3}$: There is no significant main effect of caregiving stress on psychological well-being of caregivers of PLWHAs.

The collected data were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.8 and 4.9 followed by a detailed discussion.

Table 4.8a: 2x2x2 ANCOVA showing the effect of caregiving stress on psychological well-being of caregivers of PLWHAs

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	η2
Corrected model	9166.697^a	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Stress	120.998	1	120.998	5.274	.024	.054
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Sig (Significance), * Significant at p<0.05

The result in Table 4.8, shows that there is significant main effect of caregiving stress on psychological well-being of caregivers of PLWHAs ($F_{(1, 91} = 5.24$, $p<0.05$).Further analysis is comparing the high and with low stress on psychological well-being.

Table 4.8b: LSD Post Hoc Analysis Showing Mean Differences on caregivers psychological well-being based on distress

Caregiver stress	Mean	S.D	LSD	Sig.
Low	54.657	1.335		
High	48.187	.764	6.47*	<.001

Covariates appearing in the model are evaluated at the following values: Pretest = 43.70.
** mean differences Significant at p<0.01

Result on the mean comparison revealed that caregivers with high stress have lower psychological well-being. The hypothesis is thus rejected and the alternate hypothesis accepted.

This finding supports the studies of Hughes &Caliandro , 1996 : Kipp ,Tindyebwa , & , Karamagi , &Catalan ,1999) that have demonstrated that caregiver burden affect the psychological health of caregivers as a result of caregiving challenges such as financial constraints , social discrimination and the likes. In this study, it was alsodemonstrated that overall burden affects caregiving competence. As those that were untrained tend to have lower competence leading to their own vulnerability. Some caregivers had been infected with HIV due to poor management technique and this has magnified the psychological problems of caregivers as well as the stigma associated with the disease(Meadows, Le, Maréchal and Catalan, 1999; Wight, 2000) Studies of Joslin&Harrison ,1998 ; Lindsey et al ,2003 ; Ssengonzi , 2008) have shown that family caregivers who care for adult family members living with HIV/AIDs in addition to HIV infected children face greater burden because of their old age health challenges and care provision. The data indicated that lower psychological well-being was significantly higher among caregivers who had adult family members living with HIV in their households and were caring for HIV infected children as well. Similar results have been shown in previous studies .This was further corroborated by the view of one of the respondents interviewed;

> Provision of care at the onset was nerve breaking task;
> now, I find caregiving a normal routine and pleasurable.

To test the main effect of caregiving stresses on caregiving self-efficacy of caregivers of PLWHAs.

Table 4.9: 2x2x2 ANCOVA showing the effect of caregiving stress on self-efficacy of caregivers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η2
Corrected model	5711.719[a]	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
Stress	42.901	1	42.901	4.794	.031	.050
Error	823.321	92	8.949			
Corrected Total	6535.040	99				

* Sig (Significance), * Significant at $p<0.05$

The result on the main effect of caregiving stress on self-efficacy of caregivers of PLWHAs revealed that there was significant main effect of stresson caregiving self- efficacy of caregivers of PLWHAs ($F_{(1,97)} = 4.79$, $p<0.05$).

Table 4.9b: LSD Post Hoc Analysis Showing Mean Differences on care giving self-efficacy based on distress

Caregiver stress	Mean	S.D	LSD	Sig.
Low	40.449	.839		
High	35.801	.438	4.64*	<.001

Covariates appearing in the model are evaluated at the following values: Pretest = 28.30
** mean differences Significant at p<0.01

Further analysis is comparing the high and with low stress on caregiving self-efficacy. Mean comparison revealed that caregivers with high stress have lower caregiving self-efficacy than caregivers with high stress, however. The hypothesis is hereby rejected.

These findings support studies that have found self-efficacy as being related to decreasing levels of caregiving stress or burden. The self-efficacy theory opined that people high levels of self-efficacy for performing tasks of caregiving most often complete their tasks, showed more empathy in term of well-being, and experience reduced rates of burnout than those with low levels of self-efficacy (Bandura, 2006). Researchers in three studies found significant relationships between self-efficacy and perceived burden. Perceived burden was inversely related to self-efficacy for symptom management (Gallagher, et al., 2011) and to self-efficacy for managing thoughts related to caregiving (Montoro-Rodriguez and Gallagher-Thompson, 2009).

Ho4: There is no significant interactive influence of Treatment and gender on psychological well-being.

The data collected from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.22 and 4.23 followed by a detailed discussion.

Table 4.10: 2x2x2 ANCOVA showing theinteraction effect of Treatment and gender on psychological well-being of caregivers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	η2
Corrected model	9166.697^a	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Main Effect:						
Treatment	1580.893	1	1580.893	68.902	.000	.428
Gender	64.483	1	64.483	2.810	.097	.030
2 way interaction Effect:						
Treatment * Gender	1.895	1	1.895	.083	.774	.001
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Sig (Significance), * Significant at $p<0.05$

Hypothesis four in the study hypothesized that there is no significant interactive influence of treatment and gender on psychological well-being of caregivers of PLWHAs in the study was accepted (F (1, 92) = .08, *p*>.05).The null hypothesis is thus accepted and the alternate hypothesis rejected. This finding is in disagreement with self-efficacy theory which suggest that individuals with higher levels of self-efficacy for performing tasks of caregiving have greater levels of success in completing the tasks , lower levels of psychological and physical illness , reduced rates of burnout , and greater levels of well-being than those with low levels of self-efficacy (Bandura , 2006).

Table 4.11: 2x2x2 ANCOVA showing the effect of Treatment and gender on caregiving self- efficacy of caregivers of PLWHAs

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	η2
Corrected model	5721.683^a	8	715.210	80.019	.000	.876
Pretest	547.384	1	547.384	61.242	.000	.402
Main Effect:						
Treatment	4884.078	1	4884.078	510.412	.000	.302
Gender	89.402	1	89.402	10.002	.002	.099
2 way interaction Effect:						
Treatment * Gender	26.139	1	26.139	2.925	.091	.031
Error	813.357	91	8.938			
Corrected Total	6535.040	99				

* Sig (Significance), * Significant at $p<0.05$

Hypothesis four in the study hypothesized that there is no significant interactive influence of treatment and gender on caregiving self- efficacy of caregivers of PLWHAs in the study was confirmed (F (1, 91) = 2.93, p>.05). The null hypothesis is thus accepted. These findings contrasted studies that found that Self-efficacy correlated with caregivers' perceived burden in a number of studies (Meluzzi et al., 2011; Romero-Moreno et al., 2011). Researchers in three studies found significant relationships between self-efficacy and perceived burden. Perceived burden was inversely related to self-efficacy for symptom management and to self-efficacy for managing thoughts related to caregiving (Montoro-Rodriguez and Gallagher-Thompson, 2009 ;Gallagher et al., 2011).

Ho5: There is no significant interactive effect of treatment and caregiver stress on psychological well-being of caregivers of PLWHAs.

The information from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.11 and 4.12 followed by a detailed discussion.

Table 4.12: 2x2x2 ANCOVA showing the effect of treatment and caregiving stress on psychological wellbeing of care givers of PLWHAs

Source	Type III Sum of Squares	df	Mean Squares	F	Sig.	Size of effect
Corrected model	9166.697^a	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Main Effect:						
TREATMENT	1580.893	1	1580.893	68.902	.000	.428
Caregiving stress	120.998	1	120.998	5.274	.024	.054
2 way interaction Effect:						
TREATMENT * Caregiving stress	18.387	1	18.387	.801	.373	.009
Error	2309.365	95	24.309			
Corrected Total	11277.560	99	113.915			

* Sig (Significance), * Significant at $p<0.05$

This hypothesis investigated the interaction effect of treatment and caregiving stress on psychological well-being of caregivers of PLWHAs. The result reveals that there was no significant interaction effect of treatment and caregiving stress on psychological wellbeing of participants (F (1, 92) = **.80**, *p*>.05). The null hypothesis is thus accepted. Caregivers with high stress exposed to psycho-education scored high on psychological well-being compared to caregivers with low stress in the control groups. This suggests that caregiving stress did not moderate the effect of treatment on psychological well-being in the study. The null hypothesis is thus accepted. This suggests that caregiving stress did not moderate the effect of gender on psychological well-being of caregivers of PLWHAs in the study.

Table 4.12: 2x2x2 ANCOVA showing the effect of Treatment and caregivingstress on self-efficacy of caregivers of PLWHAs.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Size of effect
Corrected model	5711.719[a]	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
Main Effect:						
TREATMENT	1778.543	1	1778.543	198.739	.000	.684
Caregiving stress	42.901	1	42.901	4.794	.031	.050
2 way interaction Effect:						
TREATMENT * Caregiving stress	6.399	1	6.399	.715	.400	.008
Error	823.321	92	8.949			
Corrected Total	6535.040	99				

* Sig (Significance), * Significant at p<0.05

The result reveals there was significant interaction effect of treatment and caregiving stress on caregiving self- efficacy of caregivers of PLWHAs of participants (F (1, 91) = **.715**, p>.05). The null hypothesis is thus accepted. Caregivers exposed to Psycho-education with high stress scored high on caregiving self- efficacy compared to caregivers with low stress on the caregiving self- efficacy in the study. The null hypothesis is thus accepted. This suggests that caregiving stress did not moderate the effect of treatment on caregiving self- efficacy of care givers of PLWHAs in the study. This finding is in contrast to studies that found higher stress level based for females in HIV/AIDs caregiving activities.Such studies have subscribed that female caregivers become so stressed such that they are overwhelmed with caregiving burden . As such many of them also become infected with HIV and this magnify their psychological well-being(Kipp et al., 2007;Thampanichawat, 2008).

Ho6: There is no significant interactive effect of caregiving stress and gender on psychological well-being of caregivers of PLWHAs.

The data collected from the respondents on this were subjected to Analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.30 followed by a detailed discussion.

Table 4.13: 2x2x2 ANCOVA showing the effect of gender and caregivers stress on psychological well-being of care givers of PLWHAs.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Size of effect
Corrected model	9166.697[a]	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
<u>Main Effect</u>:						
Gender	64.483	1	64.483	2.810	.097	.030
Caregiving stress	120.998	1	120.998	5.274	.024	.054
<u>2 way interaction Effect:</u>						
Gender * Caregiving stress	6.281	1	6.281	.274	.602	.003
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Sig (Significance), * Significant at $p<0.05$

Hypothesis six sought to find out the interaction effect of caregiving stress and gender on psychological well-being of caregivers of PLWHAs. The result shows that there was no significant interaction effect of caregiving stress and gender dimensions on psychological well-being of caregivers of PLWHAs of the participants (F (1, 92) = 602, p>.05). This suggests that caregiving stress does moderate the effect of gender on psychological well-being of caregivers of PLWHAs in the study. The null hypothesis is thus accepted.

Table 4.14: 2x2x2 ANCOVA showing the effect of gender and caregivers stress on self-efficacy of caregivers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Size of effect
Corrected model	5711.719^a	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
Main Effect:						
Gender	8.009	1	8.009	.895	.347	.010
Caregiving stress	42.901	1	42.901	4.794	.031	.050
2 way interaction Effect:						
Gender * Caregiving stress	.297	1	.297	.033	.856	.000
Error	823.321	92	8.949			
Corrected Total	6535.040	99				

* Significant at $p<0.05$

Hypothesis six sought to find out the interaction effect of caregiving stress and gender dimensions on self-efficacy of caregivers of PLWHAs. The result shows that there is no significant interaction effect of caregiving stress and gender on self-efficacy of the participants ($F_{(1, 92)}$ = .86, *p*>.05). The null hypothesis is thus accepted. This findings is in contrast with studies which suggest that caregiver's level of education, gender, age, ethnicity, financial status, and duration of care affect caregiver'sself -concept and well-being (Pearlin et al., 1990). The findings also contrasted the findings which demonstrated that gender and context were also demonstrated to be antecedents in the stress and this have implication on the quality of life of caregivers (Emanuel et al., 2000; Given et al., 2004).

Ho7: There is no significant interactive effect of treatment, caregiving stress and gender on psychological well-being of caregivers of PLWHAs.

The data collected from the respondents on this were subjected to analysis of Covariance (ANCOVA), descriptive statistics of mean and standard deviation as well as graphical representation. Results obtained are presented in Tables 4.33 followed by a detailed discussion.

Table 4.15: 2x2x2 ANCOVA showing the effect of treatment, gender and caregiving stress on psychological well-being of caregivers of PLWHAs

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Size of effect
Corrected model	9166.697[a]	7	1309.528	57.075	.000	.813
Pretest	35.601	1	35.601	1.552	.216	.017
Main Effect:						
Treatment	1580.893	1	1580.893	68.902	.000	.428
Gender	64.483	1	64.483	2.810	.097	.030
Caregiving stress	120.998	1	120.998	5.274	.024	.054
3 way interaction Effect:						
Treatment*Gender * Caregiving stress	**39.068**	**1**	**39.068**	**2.371**	**.089**	**.010**
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Sig (Significance), * Significant at $p<0.05$

The Hypothesis investigated the interaction-effect-of-treatment, caregiving stress and gender on psychological well-being. The result demonstrates that there was no significant interaction effect of treatment, caregiving stress and gender dimensions on psychological well-being of caregivers of PLWHAs(F (1, 92) = 2.37, p>.05). This suggests that caregiving stress combined with gender did not moderate psychological well-being of caregivers of PLWHAs in the study. The null hypothesis is thus accepted.

Table 4.16: 2x2x2 ANCOVA showing the effect of Psycho-education, gender and caregiving stress on self-efficacy of caregivers of PLWHAs

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Size of effect
Corrected model	5711.719[a]	7	815.960	91.177	.000	.874
Pretest	536.581	1	536.581	59.959	.000	.395
<u>Main Effect</u>:						
Treatment	1778.543	1	1778.543	198.739	.000	.684
Gender	8.009	1	8.009	.895	.347	.010
Caregiving stress	42.901	1	42.901	4.794	.031	.050
<u>3 way interaction Effect:</u>						
Treatment*Gender * Caregiving stress	.000	1	.000	.000	.999	.000
Error	2110.863	92	22.944			
Corrected Total	11277.560	99				

* Significant at p<0.05

The Hypothesis investigated the interaction effect of treatment, caregiving stress and gender on caregiving self- efficacy of caregivers of PLWHAs. The result demonstrates that there was no significant interaction effect of treatment, caregiving stress and gender dimensions on caregiving self- efficacy of caregivers of PLWHAs (F (1, 92) = 0.00, p>.05). This suggests that caregiving stress combined with gender moderate caregiving self-efficacy of caregivers of PLWHAs in the study. The null hypothesis is thus accepted. This finding disagrees with Huang et al. (2013) who found out that patients' with higher self-efficacy are more likely to achieve their objectives in term of task but this contrast the work of Steffen et al, (2002) who asserted that Self-efficacy and self-esteem have a high correlation in many HIV/AIDs research studies.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, states the conclusion in line with the focus and findings of the study and recommends appropriate lines of action required from the various stakeholders.

5.1 Summary

Majority of informal caregivers of People Living with HIV/AIDs (PLWHAs) in Nigeria carry out their activities with insufficient information. This, coupled with the general burden and risks of caregiving leads to poor psychological well-being and loss of confidence by many caregivers. Previous studies have focused largely on the PLWHAs and the formal caregiving with less emphasis on the improvement of the informal caregiving process using psycho-educational package. This study was, therefore, designed to develop a Psycho-educational Training Package (PeTP) for the informal caregivers as well as determine its effectiveness on their caregiving self-efficacy and psychological well-being in Oyo State, Nigeria. The moderating effects of gender and caregiving stress were also examined.

The study was anchored to Transactional Stress and Conservation of Resource theories, while the pretest-posttest and control group quasi-experimental design of 2x2x2 factorial matrix were adopted. Two approved non-governmental HIV/AIDs support and counselling centers were purposively selected in Ibadan. The Zarit Burden interview and Instrumental activities of daily living screening tools were used to select 100 out of 600 screened informal caregivers of the PLWHAs attending the centers. Those who scored high on caregiving burden but low on caregiving competence and confidence were randomly assigned into psycho-educational training (50) and control (50) groups. The developed PeTP was validated using Cronbach alpha method:.Treatment lasted six weeks. Psychological Well-being , Caregiving Self-efficacy and Kingston Caregiver Stress scales were used. These were complemented with 10 in-depth interview sessions with informal caregivers. Quantitative data were analysed using descriptive statistics and Analysis of covariance at 0.05 level of significance, while qualitative data were content analysed.

Findings revealed the following :

1. There were significant main effect of treatment on caregiver' psychological well-being and self-efficacy .
2. More specifically, the participants exposed to psycho-education training package managed their psychological distress better than those in the control group.
3. Gender did not independently influence psychological well-being and caregiving self- efficacy of cassssregivers of PLWHAs.
4. Caregiving stress did not independently influence psychological well-beingand caregiving self- efficacy of caregiversof PLWHAs.
5. Participants with low stress had higher post mean scores on psychological well-being and self-efficacy than those with high stress.
6. Participants with high stress had lower post mean scores on psychological well-being and self-efficacy than those with low stress
7. There were no significant interactive influence of treatment and gender on psychological well-beingand caregiving self-efficacy of participants.
8. There were no significant interactive influence of the treatment and caregiving stress on the psychological well-being and self-efficacyof caregivers of PLWHAs.
9. There were no significant interactive influence of caregiving stress and gender on psychological well-being and caregiving self-efficacyof caregivers of PLWHAs.
10. There were no significant interactive influence of treatment, caregiving stress and gender on psychological well-being andcaregiving self-efficacyof caregivers of PLWHAs.

5.2 Conclusion

There was a high rate of caregiving stress amongst caregivers of PLWHAs. Consequent upon which caregivers experience psychological distress. These caregivers need assistance to augment their sense of self-esteem, in order to boost their caregiving self-efficacy and psychological well-being. To achieve this feat, healthcare professionals need more partnership with informal caregivers if their practices is to be effective.

This new relationship or caregiver support will teach caregivers onhow to provide safe care for care recipients. The approach will also help caregivers become more confident and competent safe care provider .

From the results of the present study, it is quite obvious that psycho-education package is an effect intervention for the enhancement of self-efficacy and psychological well-being of informal caregivers of PLWHAs. And since the 3-way interaction effect of treatment, gender and stress level was not significant, then it suggests the suitability of the therapy for both sexes (male and female) and the caregiving stress levels (high and low). The findings help to strengthen or lend support to the previous empirical research that had extended psycho-educational therapy.

5.3 Contributions to knowledge

This work expands the frontier of discussion regarding the psychological well-being and self-efficacy of informal caregivers of PLWHAs with deficit in education and in home caregiving skills and training. Literature is deplete with knowledge, skills, and intervention on the health status and psychological well-being of informal caregivers. Most of the studies conducted on this aspect were mainly conducted in foreign countries. This study therefore, serves as a basis for further research into the area of locally applicable interventions for the management of stress of informal caregivers of PLWHAs.

This study revealed that the family is the first contact with the patient, and thus, psycho-education should be targeted at them because they understand the belief, temperament, and deficiency of the patient.More specifically, this study revealed that psycho-education strategy has significant effect in enhancing the self-efficacy and the psychological well-being of informal caregivers. The discovery explained how the therapy employed several different treatment components that addressed the HIV/AIDs related caregivers' stressors and stress responses occurring in cognitive, affective, behavioral and social realms. Psycho-education also addressed the emotional needs of caregivers by teaching self-care and copingskills .

Again, since the 3-way interaction effect of treatment, gender and stress level was not significant, then it suggests the suitability of the behavior therapy for informal caregivers of PLWHAs regardless of sex (male or female) and caregiving stress level (high or low).

This study therefore recommended psycho-education strategy as an efficient strategy to reduce the stress experienced by caregivers of PLWHAs. The finding from this research would assist organizations and health-care practitioners to integrate this intervention which reduce stress among caregivers. This intervention contributes to the body of knowledge for policy formulation and training on the HIV/AIDs care services across Nigeria .

5.4 Recommendations

This study recommends that a stress based intervention package of this naturebe organized for informal caregivers of PLWHAs. The thesis results substantiate that psycho-education can alleviate the distress and poor psychological well-being of HIV/AIDsinformal caregivers. Thus,Counseling Caregivers or providing education is of great importance to a successful caregiving experience of PLWHAs. Information gained from psycho-educational packagewill put the caregiver in a better position to cope with stressors. During medical appointment, caregivers should be given listening ear to express their experiences during care and the best ways to manage stress should be suggested to them. This coping strategy improves the lives of caregivers psychologically and physically. The role of the informal caregivers should be included in the national and international policies regarding HIV/AIDs management.

The concern of the informal caregivers should be embedded in policies and the difficulty associated with caregiving should be considered too. In doing this, the family unit should be regarded as indispensable.

5.5 Limitation of the study

The study had certain limitations. The first limitation of this study is that only two centers were used in the study. As such a generalization of the findings to the generality of stress in Oyo state is limited. This study was constraint by the familiar pattern of secrecy. The decision to disclose the HIV/AIDs status of family members is a most difficult choice faced by HIV/AIDs informal caregivers because of fear of rejection and stigmatization. This experience affected the number of participants used in this study which in turn may limit the generalization of the result.

The study was further constrained by financial resources available to the researcher. The financial implication of maintaining the highly individualized treatment format was enormous. However, this did not affect the results of the study.

5.6 Suggestions for further study

It is imperative to understand the interaction of caregiversmental health and the physical health through longitudinal studies.

Health promotion of professional caregivers should be examined . In addition, the nutrition and physical activities of HIV/AIDs patients should be explored .

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APPENDIX I

UNIVERSITY OF IBADAN, IBADAN, NIGERIA
DEPARTMENT OF ADULT EDUCATION

IN-DEPTH INTERVIEW OF INFORMALCAREGIVERS OF PLWHAs

Interview Guide

Non-governmental HIV/AIDs facility code ( ) ( )

Detail of informal caregiver

Pseudo Name:

Age

Sex

Marital status

Occupation

Age of the PLWHAs that you are caring for

What is your relationship to the person with HIV/AIDs?

For how long have you been caring for the person?

If you can still remember, when you first heard about the news of this infection, how did you feel or react to the news then ?

For how long did you have this kind of feeling and how did you relate with the care recipient during that period?

From the time you heard up till today how did you deal with your feelings to come to the stage that you are at currently?

Do other members of the family know what the care recipient is suffering from and did you care to inform them. If not why?

How did they react when they first heard this?

How did you deal with the way your family members and neighbors react towards you as well as the person you are caring for?

What activities do you help with?

What demands are made upon your by the care recipient in terms of physical care.

Emotional support , Social support , Economic support and Religious support

Do you have any source of help and from whom are you receiving this help?

How do they assist you?

Do you find this helpful towards your emotional as well as physical feeling?

If you were to suggest or ask for any form of help, what would that be and why?

Have you ever had fears of being infected especially when the person is bleeding or vomiting and how do you deal with it?

How does his or her situation affect your affair and how do you deal with that?

APPENDIX I

UNIVERSITY OF IBADAN, IBADAN, NIGERIA
DEPARTMENT OF ADULT EDUCATION

THE CAREGIVING SELF- EFFICACY SCALE (CSES)

SECTION A

Socio- Demographic Data

Instructions: kindly supply all the necessary information about yourself in the spaces provided below:

Name: [ ]

Sex: [ ]

Position in the family: [ ]

Age: [ ]

Religion: [ ]

State of origin: [ ]

Local Government: [ ]

Marital status: married [ ] single [ ] divorced [ ] widow [ ]

Type of family: monogamy [ ] polygamy [ ]

Level of Education: Junior Secondary School Certificate [ ] Senior School Certificate [ ] NCE [ ] Diploma [ ] OND [ ] HND [ ] first degree [ ] masters degree [ ] PHD [ ]

SECTION B

Instructions: Read each statement carefully and indicate how you feel about each statement

Please circle the option that is most appropriate to you

1= Not at the true

2 = Hardly true

3 = Moderately true

4 = Exactly true

S/N	STATEMENT	1	2	3	4
1	I can always manage to solve difficult problems if I try hard enough				
2	If someone oppose me, I can find the means and ways to get what I want				
3	It is easy for me to stick to my aims and accomplish my goals				
4	I am confident that I could deal effectively with unexpected events				
5	Thanks to my resourcefulness, I know how to handle unforeseen situations				
6	I can solve most problems if I invest the necessary effort				
7	I can remain calm when facing difficulties because I can rely on my coping abilities				
8	When I am confronted with a problem, I can usually find several solutions				
9	If I am in trouble, I can usually think of a solution				
10	I can usually handle whatever comes my way				

APPENDIX III

PSYCHOLOGICAL WELL-BEING SCALE

Instructions: Please, answer ALL the following questions by ticking the answer which you think apply or nearly apply to you.

Less than usual = 1

Not more than usual =2

Rather more than usual = 3

Much more than usual =4

S/N	**STATEMENT**	**1**	**2**	**3**	**4**
A1	Feeling perfectly well and in good health				
2	Feeling run down and out of sorts				
3	Feeling in a need of good tonic?				
4	Feeling that you are ill?				
5	Getting any pain in your heads?				
6	Getting a feeling of up-tightness or pressure in your head?				
B1	I lost much sleep over worry				
2	Had difficulty in staying asleep once you are off?				
3	Feel constantly under strain?				
4	Getting edgy and bad tempered?				
5	Getting scared or panicky for no good reason?				
6	Found everything getting on top of you?				
7	Feeling nervous and strung up all the time?				
C1	Managing to keep yourself busy and occupied?				
2	Thinking longer over the things you do?				
3	Feeling of the ways you are doing things well?				
4	Being satisfied with the way you've carried on tasks?				
5	Feeling that you were playing a useful part in things?				
6	Feeling capable of making decision about things?				
7	Being able to enjoy normal day to day activities?				
D1	Been managing to keep yourself busy and occupied?				
2	Feeling that life is entirely hopeless?				
3	Feeling that life isn't worth living?				
4	Thought of the possibility that you might make away with yourself?				
5	Found at times that you could do nothing because your nerves were too bad?				
6	Found yourself wishing you were dead and away from it all?				
7	Found that the idea of taking your own life kept coming into your mind?				

APPENDIX IV

THE STRESS SCALE

Indicate the extent of the stress or frustration you feel surrounding certain aspects of caregiving.

Feeling NO Stress = 1

Some Stress =2

Moderate Stress=3

A lot of Stress =4

Extreme Stress =5

S/N	**STATEMENT**	**1**	**2**	**3**	**4**	**5**
1	Are you having feelings of being overwhelmed, over worked, and or overburdened?					
2	Has there been a change in your relationship with your spouse or relative?					
3	Have you noticed any changes in your social life?					
4	Are you having any conflicts with your previous daily commitments					
5	Do you have feelings of being confined or trapped by the responsibilities or demands of caregiving					
6	Do you ever have feelings related to a lack of confidence in your ability to provide care?					
7	Do you have concerns regarding the future care needs of your spouse/relative?					
8	Are you having any conflicts within your family over care decisions?					
9	Are you having any conflicts within your family over the amount of support you are receiving in providing care?					
10	Are you having any financial difficulties associated with caregiving					

APPENDIX V

CURRICULUM ON PSYCHO-EDUCATIONAL TREATMENT PACKAGE (PeTP)

Introduction

The objectives of this treatment is to enhance caregiving self-efficacy and psychological well-being of caregivers through a caregiver support group therapy of psycho-education to help meet their self-efficacy needs for the duration of the treatment based on Yalom (1975, 1995), curative factors of group therapy, part of which was based on Bandura's social cognitive theory as follows:

1. Inform and educate the informal caregivers about skills in HIV/AIDS caregiving
2. Model the particular tasks appropriate to achieving these skills.
3. Support and persuade the caregiver of his or her effectiveness
4. Emphasize the importance of the caregiver's health and encourage him or her to call for help when needed.

Based on these objectives, below are guidelines that the treatment shall follow to build caregiving self-efficacy and psychological well-being strategies.

Acronym List

AIDS:	Acquired Immune Deficiency Syndrome
HIV:	Human Immunodeficiency Virus
PLWHAS:	People Living with HIV/AIDs
PeTP:	Psycho-education Treatment Package
HBC:	Home Based Care
VCT:	Voluntary Counseling and Testing
ORS:	Oral Dehydration Solution
ART:	Anti – Retroviral Therapy

HIV/AIDs INFORMAL CAREGIVERS TRAINING INFORMED CONSENT FORM AS RESEARCH PARTICIPANT

I………………….have been fully informed about the training programme and I consent to participate to learn skills of caregiving for my relative(s) living with HIV/AIDs.

I understand that: (a) My participation is voluntary and that I can withdraw from the study anytime I feel uncomfortable.

(b) The interview will be conducted with respect for my privacy

(c) The interview will be audio-recorded for analysis purposes but at no point in the transaction will I be identified

(d) The information obtained will be used for research purposes only.

(e) All information obtained will be kept secured by the researcher at all times

I agree/do not agree to participate within the study.

Signature/thump print of Participant

_______________________Date______________

Signature/thump print of Witness

_______________________Date______________

APPENDIX VI

CURRICULUM ON PSYCHO-EDUCATIONAL TREATMENT PACKAGE (PeTP)

SESSION 1:

Activity: Introduction, Pre-treatment Briefing, General Orientation and Pretest

Duration: 1 hour

Objectives:

- By the end of this session, the participants should be able to:
- Identify each other and share information about themselves
- Mention ground rules for the training
- List the goals and objectives of the training
- Compare the objectives of the training with personal expectations
- Undertake a pre-testing.

Materials

- Biros / pencils, snacks, camera.

Methodology

- Trainer presentation
- Group discussion
- Brainstorming

Activity:

The trainer would:

- Ensure that participants are well seated
- Introduce herself
- Welcome participants to the training
- Allow participants to introduce themselves and share some information about themselves with others.
- Distribute pretest
- Group discussion

Content

- Reason for the training and benefit participants stand to gain:
- Right knowledge, skills, attitude and support in home-caregiving
- Continuum of care-prevention, care and support, Voluntary counseling and testing (VCT). Medicate care, Anti-retroviral treatment, medical management and arrangements for death .
- Confidentiality of the training
- Do's and don'ts during the training
- Information packages and gifts for participants
- Relaxation, sharing of experiences and distribution of snacks.

EVALUATION

- Give three reasons for having this training.
- What benefit do you stand to gain for participating in this training programme?
- In what way does this training apply to you?

SESSION 2:

TOPIC: HIV/AIDS FACTS

Duration: 1 hour

Objectives: By the end of this session, the participants should be able to:

- Define the terms HIV and AIDs
- Differentiate between HIV and AIDs
- List ways by which HIV is not spread.
- Describe 4 ways that people can become infected with HIV/AIDs
- State signs and symptoms of HIV/AIDs.
- Explain how to prevent the spread of HIV/AIDs.

MATERIAL NEEDED: - Chalk, chalkboard Posters / handbills on HIV/AIDs, videos (Trapped or lost Dreams produced by ARFH)

METHODOLOGY: -

- Trainer presentation
- Brainstorming and Group discussion

ACTIVITY: -

Group discussion and trainer presentation

- Let participants explain what they know about HIV/AIDs.
- Allow them to make a differentiation between HIV and AIDs
- Correct or add to the provided information
- List and explain the three stages of HIV/AIDs(i.e. Window period, HIV via testing and AIDs.

CONTENT

- Full meaning of HIV/AIDs and the Immune Deficiency Syndrome
- The phases of HIV ;Window period , HIV + and AIDs , ways by which AIDs is spread and not spread
- Signs and symptoms of HIV/AIDs
- Ways **by** which people can become infected with HIV/AIDs
- Ways to prevent HIV and control AIDs
- Relaxation, sharing of experiences and distribution of snacks.

EVALUATION:

- What is HIV/AIDs?
- What is the difference between HIV and AIDs?
- State 4 signs and symptoms of HIV/AIDs
- Describe 4 ways by which one can become infected with HIV/AIDs
- Describe 6 ways that HIV/AIDsis not spread.
- Explain how to prevent the spread of HIV/AIDs.

SESSION 3

TOPIC: The role of caregivers

Duration: 1 hour

Objectives: By the end of the session, participants should be able to:

- State the roles of caregivers
- Mention the positive and negative effect of caregiving outcome on the caregiver.
- State the causes of improper care delivery.
- List the unmet needs of caregivers
- Find out whether psycho-educational package can reduce caregiver's burden, distress as well as enhance caregiving self-efficacy.

Materials Needed: Display chart, video recorder, chalkboard, marker, camera and snacks

Methodology: Teaching, dialogue, Brainstorming and Group discussion.

Activity:

Group discussion and trainer presentation

Participants to share experiences on caregiving in relation to positive and negative caregiving outcome.

Discuss the negative caregiving outcome and its relationship with caregiver's physical and mental health.

Content:

- Role of caregivers
- Improper care and caregiving burden
- Causes of improper care delivery service
- Consequences of negative and positive caregiving outcome
- Needs of caregiver for proper care delivery
- Relaxation, sharing of experiences and distribution of snacks.

EVALUATION:

- Mention 5 duties of a caregiver
- List 3 negative effect of improper care delivery service.
- Mention 3 benefit of proper care service delivery

  What are the causes of improper care delivery?
- State the unmet needs of caregivers
- Where can caregivers locate support
- List four types of support caregivers can obtain
- List the benefits that can be derived from NGOs.

SESSION 4:

Topic: **CHALLENGES OF CAREGIVING**

Duration :1hr

Objective:By the end of the session , the participants should be able to :

Mention the names of the drug his /her client is placed on

Differentiate between Ante-retroviral drugs and other drugs used for the treatment of opportunistic infection.

Give reasons for client adherence to medical procedure.

Explain the need for identification of side effect of drugs on PLWHAs

Identification of limit of care and when to call for help at resource center.

Relevance of finance and family conflict to quality life.

Issue of stigmatization and discrimination to positive care.

Relevance of food , fruit and food to medication .

Methodology on skills of IADL and ADLS .

Trainer presentation:

Brainstorming , Role playand Group discussion

Training materials :Charts , chalkboard and marker

CONTENT:

Knowledge / training on skills :feeding , lifting , transfer , bathing and communication

Medication (Ante-retroviral andother drugs)

Medication procedures, Symptoms and management

Side effects of drug

Finance and quality caregiving .

Family conflict and quality care.

Food, fruit and medication.

Stigma and discrimination.

Stigma and Discrimination reduction techniques.

Skills of IADLssand ADL

- ❖ Linking caregivers to resources.
- ❖ Relaxation, sharing of experiences and distribution of snacks.

EVALUATION: -

- Mention 5 challenges of informal Caregivers
- Explain how the challenges can be overcome

- Where can Caregivers access help ?
- Give a major reason why HIV/AIDs is increasing at an alarming rate in Nigeria

  Define stigma and discrimination
- Differentiate between stigma and discrimination
- What is the effect of stigma and discrimination on the care recipient?
- How can Caregivers counteract the effects of Stigmatization and discrimination
- Explain the importance of drugs,food and fruit to HIV/AIDs care .
-

SESSION : 5

Topic: TRAINING ON SELF - MASTERY OF SKILLS FOR MANAGING INFECTIONS AND AIDs RELATED CONDITIONS THROUGH MODELING .

OBJECTIVES:

At the end of the session, the participants should be able to:

- Share their experiences of HIV/AIDs Caregiving with others.
- Benefit from others experiences
- Explain/demonstrate practical skill in preventing/management of opportunistic infections.
- Demonstrateon : the use of a thermometer.
- Prepare oral dehydration solution (ORS) .
- State general guidelines on giving of support to relatives in taking medications .
- State guidelines on giving of support to PLWHAs on bathing , transfer , Lifting , feeding and communication .

Training Methodology

Trainer presentation; Brainstorming, Group Discussion, Demonstration and Role play.

Content:

- **Common infection** and AIDs – related condition.
- **Home**- based care kit-items and their uses.
- **P**ractical skills in managing common infections and AIDs related conditions.

Preparation of oral dehydration solution (ORS)

Demonstration on: the use of a thermometer.

Demonstration on the tying of Adults diapers.

General guidelines on the giving of support to a relatives in taking medications.

Watching out for medication side effect.

EVALUATION

- What is opportunistic infection?
- Mention five opportunistic infections?
- What are ARVS and ART ?
- Mention the name of the antiretroviral your client is currently on.
- Why is it important for you to know the name of your client's drug?
- Explain why it is important for PLWHAs to adhere to their drugs ?
- Explain the home care plan for your HIV+ relative having diarrhea or fever
- What is the importance of diapers to PLWHAs that is experiencing frequent stooling ?
- Eplain why you must wear hand gloves when caring for PLWHAs who is passing frequent stool.
- When is it necessary to take your HIV + relative having diarrhea or fever to the hospital How can you tell using the thermometer when the fever is very high ?

SESSION 6:

Topic: SAFETY PRECAUSIONS FOR PREVENTION OF INFECTION FOR CAREGIVERS, SYMPTOM MANAGEMENT AND CARE PROCEDURES.

OBJECTIVES:

By the end of the session, Participants should be able to:

1. Identify and demonstrate ways to prevent general infections and pressure sores.
2. Say and demonstrate ways to handle body fluids to prevent HIV infection.
3. Describe and demonstrate how to assist PLWHAs with their personal hygiene.
4. Provide physical therapy to PLWHAs.
5. Provide end of life care and support to relatives living with HIV/AIDs.

TRAINING METHODOLOGY:

Trainee presentation, Group Discussion and Brainstorming role play/Demonstration and Question and Answer.

CONTENT

Guidelines for HIV/AIDs prevention as a caregiver.

Guidelines for accidental exposure to blood and body fluids.

Symptoms Management and Care.

Relaxation, sharing of experiences and distribution of snacks.

EVALUATION

1. Mention the major tasks of the family caregivers on symptom management?
2. Describe how to clean your relative who is weak.
3. How will you care for your relative who is running stool?
4. What safety precaution will you take as you care for your relative who is passing frequent stool?
5. How can you protect yourself from contacting HIV virus in the process of caring for your relative who is HIV +.
6. What type of behavior is important when nursing or caring for your HIV + relative?

SESSION: 7

TOPIC:STRESS : STRESS REDUCTION TECHNIQUES AND HOW TO COUNTERACT BURNOUT

Objectives:

By the end of the session, participants should be able to:

define Stress and Burnout.

Mention the features of Stress and Burnout

Explain the consequences of Stress on the physical and mental health of caregivers and their relatives living with HIV/AIDs.

Master Stress reduction techniques :

1. Monitor of feelings and behavior.
2. Understanding of emotions and behavior.
3. Control or replace negative emotions and actions.
4. Belief in one's ability to take control.

Training Methodology

Trainers Presentation

Practical Demonstration

Group Discussion

Brainstorming, Role Play

CONTENT

Definition of Stress and Burnout.

Causes of Stress

Effects of Stress on Caregiver's physical and mental health.

Stress and burnout reduction techniques :

- Self-regulation of Emotions and Behaviors
- Self-observation and Monitoring
- Judgment and Standards
- Self – response
- Dealing with Negative Emotions using the Stop and Think Self-monitoring technique (SSTOPP) when in negative mood:

S – Stop what you are doing

S – Step back into your mind

T – Think about what emotions one is feeling

O – Observe what is causing it

P – Put a stop to the negative feelings consciously by replacing them using distractions or positive thoughts.

P – Plan what to do next to improve one’s moods or feelings e. g. phoning a friend,

taking a walk, praying, singing or listening to music or watching of programmes on the Television.

Relaxation: sharing of experiences and distribution of snacks.

EVALUATION

1. **What is Stress and burnout?**
2. **What are the causes of Stress and burnout?**
3. **List the negative effect of stress and burnout on the Caregivers and their clients.**
4. **What can you do to avoid burnout and Stress?**
5. **Explain self-regulation of behavior.**
6. What is negative emotion?
7. Why are negative emotions bad?
8. Mention 5 ways by which you can control your emotion.
9. Assess your caregiving work and value it as meaningful, productive and worthwhile or otherwise.
10. How would you assess the level of care you have been offering your relative previously?
11. Are you in a better position to provide quality care to your HIV + relative now than before?
12. Are you more confident in care service delivery now than before?
13. Are you in control of caregiving service delivery now than previously?
14. Is your level of caregiving mastery high or low now?

SESSION 8:

TOPIC: REVISION OF ALL SESSION OBJECTIVES AND CONCLUSION OF TREATMENT

OBJECTIVES: REVISION AND CONCLUSION OF TREATMENT, POST TREATMENT TESTING.

ACTIVITY:

POST TREATMENT TESTING

- Revision of knowledge and skills learnt
- Appreciation of all participants
- The participants requested caregivers to freely express their views about the treatments and how they hadfared ; whether they had benefited or not from the treatment .
- The researcher were encouraged to continue to put all they had learnt into practices .
- The researcher provided assuarance of her availability for follow up to participants
- A posttest was carried out with supervision and assistance given to participants
- Packages and gifts as promised were distributed to participants.
- Participants are encouraged to make use of skills and knowledge acquired in their caregiving task.
- Participants werebade farewell.

Control Group

The control group had no treatment.

The pretest and post-test were administered on them.

Thereafter , they were given a mini treatment on health education of 1to 2 hours after the post-test.

This was followed by refrehments .

Packages (gift items) were given out at the end of treatment including transport fares to and from the venue .

Participants were then bade farewell.


[redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

Figure 1: Screening section at FAHPAC Figure 1: The researcher at FAHPAC center


[redacted] [redacted] [redacted] [redacted] [redacted] [redacted]

Figure 2: Group picture with caregivers of PLWHA at FAHPAC

Figure 3: Group picture with caregivers of PLWHA at FAHPAC

Figure 4: During a session at FAHPAC

Figure 5: During a session with caregivers of PLWHA at FAHPAC

Figure 6: The researcher distributing snacks to caregivers during session at FAHPAC

Figure 7: Parting gift with caregivers of PLWHA at FAHPAC

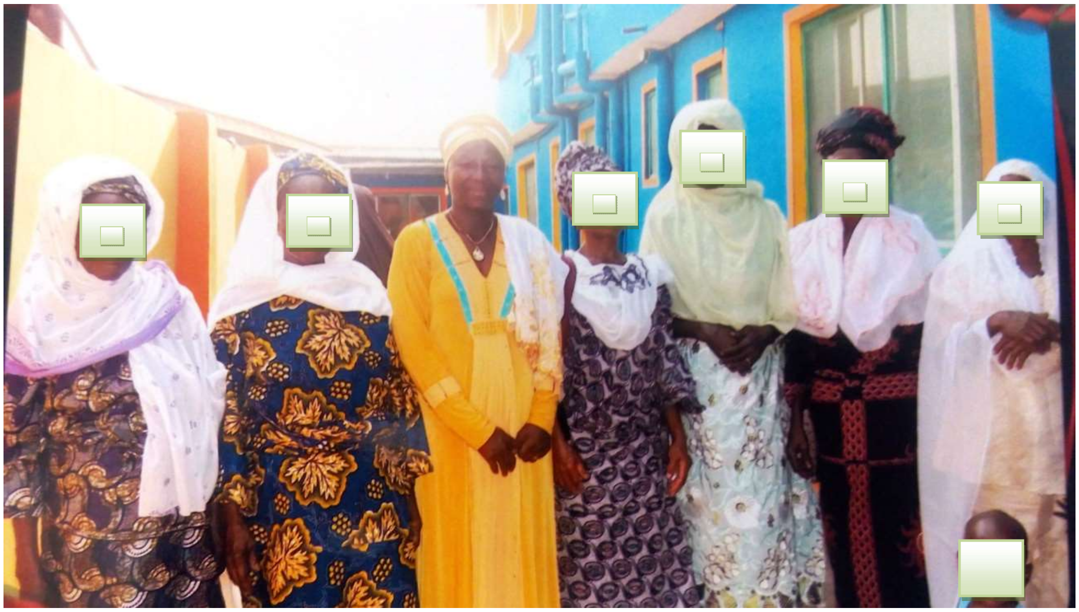


Figure 8: Farewell photograph with caregivers of PLWHA at FAHPAC

Figure 9: The researcher with assistants at FAHPAC center

Figure 10: During the screening exercise with caregivers of PLWHA at FAHPAC

Figure 11: During focus group discussion at NELAH center

Figure 12: The researcher with a research Assistant and caregivers of PLWHA at NELAH center during one of the interview sessions

Figure 13: Researcher and some caregivers at one of the interview session at the NELAH center

Figure 14: With a caregivers and a research assistant at an interview session at NELAH center

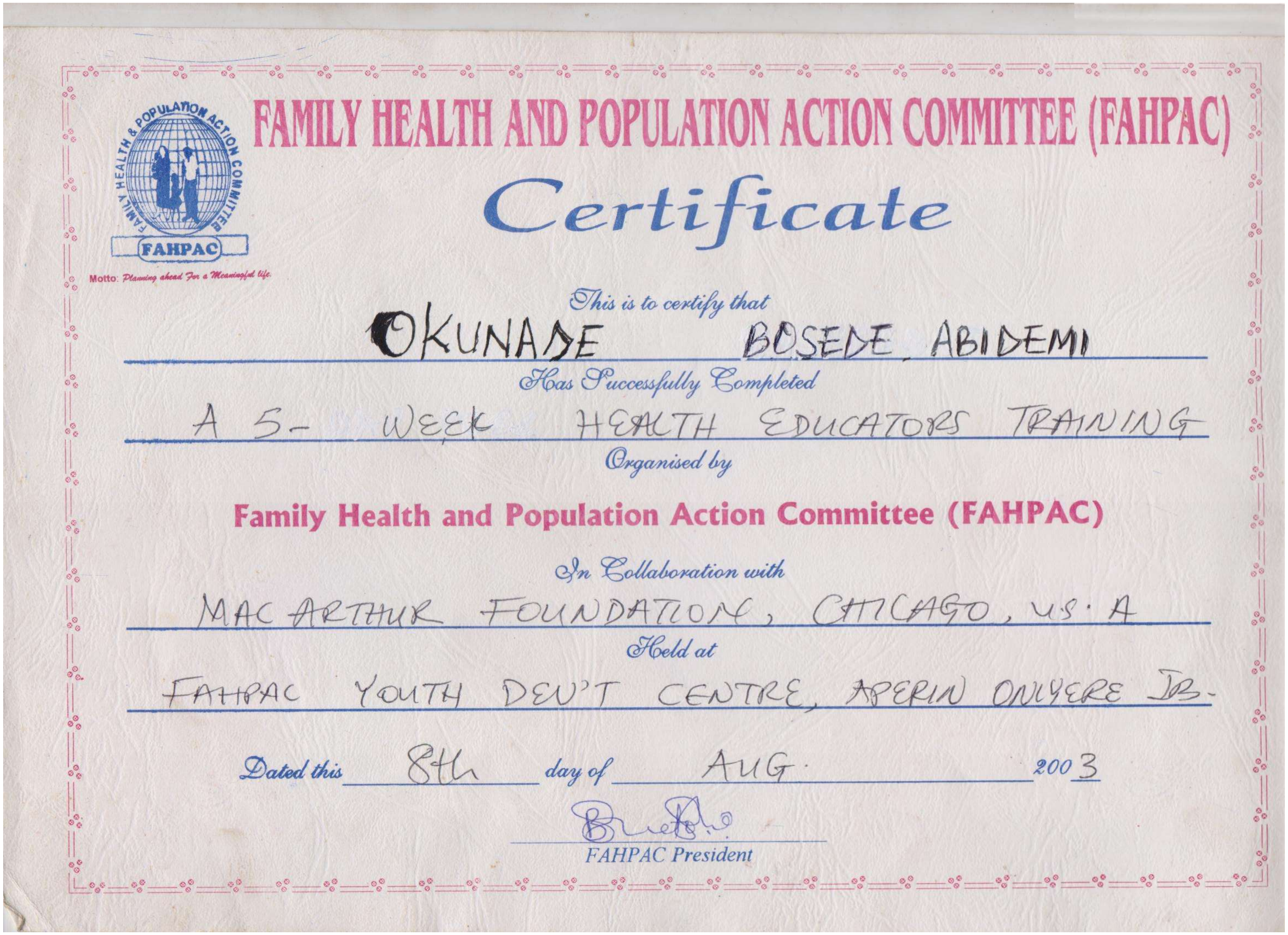
Figure 15: The researcher with caregivers of PLWHAS at one of the screening sessions at NELAH center

Figure 16: During a session at NELAH

Figure 17: With caregivers and research assistants at an interview session at NELAH center

Figure 18: The researcher and two research assistants at one of the sessions at NELAH

Figure 19: During screening period with caregivers of PLWHAS at FAHPAC center



FAMILY HEALTH AND POPULATION ACTION COMMITTEE (FAHPAC)

Motto: *Planning ahead For a Meaningful life.*

Certificate

This is to certify that

OKUNADE BOSEDE ABIDEMI

Has Successfully Completed

A 5- WEEK HEALTH EDUCATORS TRAINING

Organised by

Family Health and Population Action Committee (FAHPAC)

In Collaboration with

MAC ARTHUR FOUNDATION, CHICAGO, U.S.A

Held at

FAHPAC YOUTH DEV'T CENTRE, APERIN ONIYERE IB.

Dated this 8th *day of* AUG. 2003

FAHPAC President

TELEGRAMS................ **TELEPHONE................**

MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No. ....
All communications should be addressed to
the Honorable Commissioner quoting
Our Ref. No. AD 13/ 479/070

May, 2016

The Principal Investigator,
Department of Adult Education,
Faculty of Education,
University of Ibadan,
Ibadan.

Attention: Bosede Abidemi

ETHICAL APPROVAL FOR THE IMPLEMENTATION
OF YOUR RESEARCH PROPOSAL IN OYO STATE

This is to acknowledge that your Research Proposal titled: "Effect of Psycho-educational Strategy on Caregiving Self-efficacy and Psychological Well-being among Caregivers of People Living with HIV/AIDS in Oyo State" has been reviewed by the Oyo state Review Ethical Committees.

2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.

3. Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this, the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

4. Wishing you all the best.

(Dr) Abbas Gbolahan
Director, Planning, Research & Statistics
Secretary, Oyo State, Research Ethical Review Committee

FAMILY HEALTH & POPULATION ACTION COMMITTEE

Motto: Planning Ahead for a Meaningful Life

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Behind Omoyeni Pry School,
Adesola, Orita-Aperin,
Ibadan, Oyo State,
Nigeria.

Date: 20th June; 2016.

[illegible] ____________________,
____________________,
____________________,

Dear Sir/Ma,

TO WHOM IT MAY CONCERN.

This is to notify that Mrs. Okunade, Bosede Abidemi was permitted to work with Caregivers of our People Living with HIV/AIDS for her field work from the first week of November 2015, to the last week of April 2016.

She worked together with our staff for assistance in the selection, planning of the relatives and Co-ordination during the periods.

Thanks.

Yours faithfully,

Mr. G. Omotosho – Director of Program, FAHPAC.

NEW INITIATIVE FOR THE ENHANCEMENT
OF LIFE AND HEALTH (NELAH)

...Helping People Live Well

Dear Sir/Ma

TO WHOM IT MAY CONCERN

This is to notify that Mrs. OKUNADE, Bosede Abidemi was permitted to use relatives of our patients living with HIV/AIDS for her field work from the first week of May to the last week of September 2016.

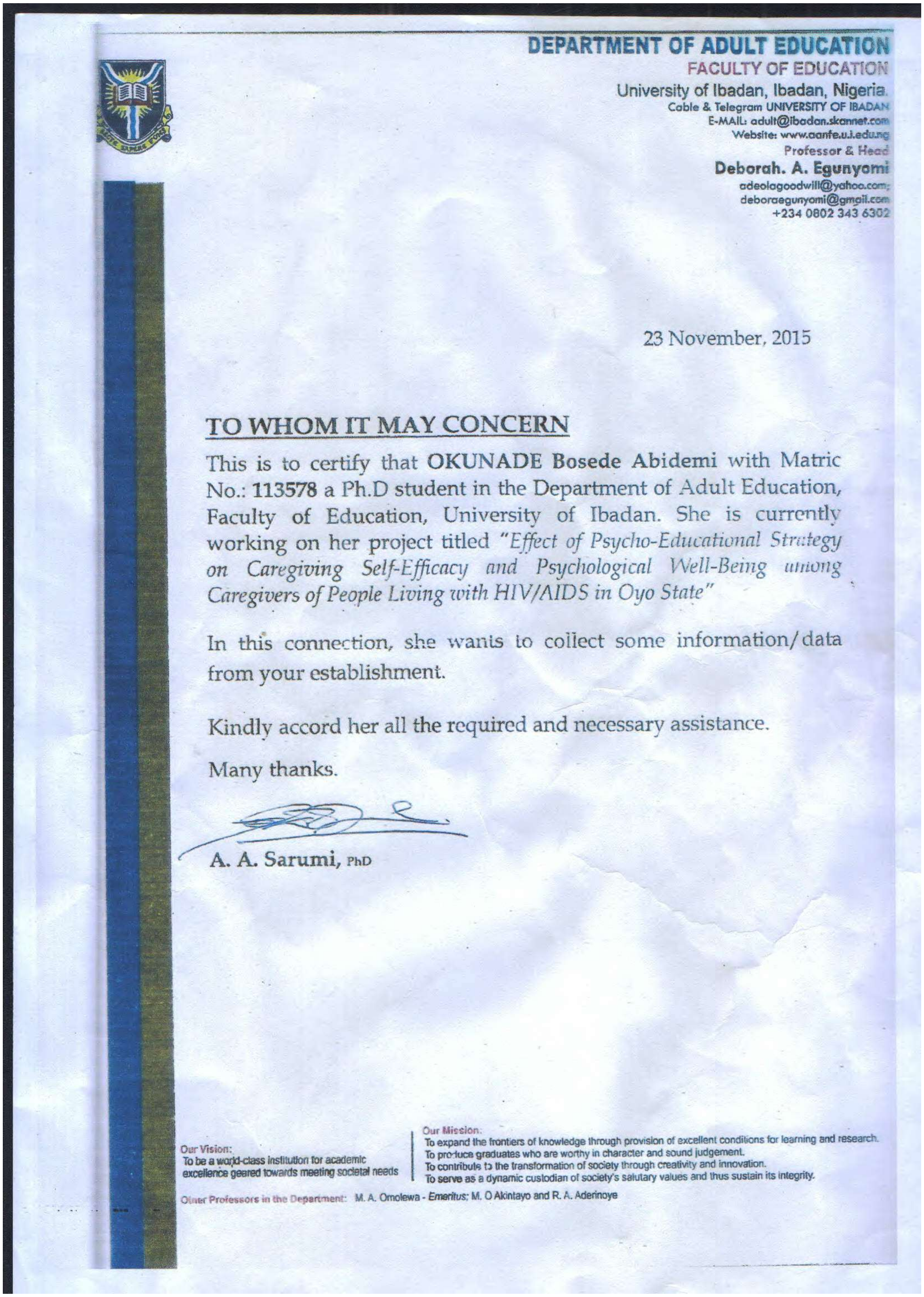
She worked together with our staff for assistance in the selection, phoning of the relatives during the training periods.

Thanks.

Yours faithfully,

Prof. Soyinka Femi

Block B House 17, Temidire Housing Estate, Behind Former SDP Secretariat, Old Ife Road
P. O. Box 15063, Agodi, Ibadan. Tel: 08038296736
E-mail: nelakasora@yahoo.com; femisoyinka@yahoo.com; www.nelah.org



DEPARTMENT OF ADULT EDUCATION
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Professor & Head
Deborah. A. Egunyomi
adeolagoodwill@yahoo.com;
deboraegunyomi@gmail.com
+234 0802 343 6302

23 November, 2015

TO WHOM IT MAY CONCERN

This is to certify that **OKUNADE Bosede Abidemi** with Matric No.: **113578** a Ph.D student in the Department of Adult Education, Faculty of Education, University of Ibadan. She is currently working on her project titled *"Effect of Psycho-Educational Strategy on Caregiving Self-Efficacy and Psychological Well-Being among Caregivers of People Living with HIV/AIDS in Oyo State"*

In this connection, she wants to collect some information/data from your establishment.

Kindly accord her all the required and necessary assistance.

Many thanks.

A. A. Sarumi, PhD

Our Vision:
To be a world-class institution for academic excellence geared towards meeting societal needs

Our Mission:
To expand the frontiers of knowledge through provision of excellent conditions for learning and research.
To produce graduates who are worthy in character and sound judgement.
To contribute to the transformation of society through creativity and innovation.
To serve as a dynamic custodian of society's salutary values and thus sustain its integrity.

Other Professors in the Department: M. A. Omolewa - *Emeritus;* M. O Akintayo and R. A. Aderinoye