PSYCHOEDUCATION TRAINING AND INTERPERSONAL THERAPY IN THE MANAGEMENT OF DEPRESSIVE SYMPTOMS IN MENOPAUSAL RURAL FARMERS IN IBADAN LESS CITY, NIGERIA

BY

ABIODUN MORENIKE TOKEDE

MATRIC NO: 70804

A Ph. D THESIS SUBMITTED TO THE DEPARTMENT OF COUNSELLING AND HUMAN DEVELOPMENT STUDIES,

FACULTY OF EDUCATION, UNIVERSITY OF IBADAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY

February, 2022

CERTIFICATION

This is to certify that this research work was conducted by TOKEDE, Abiodun Morenike, in the Department of Counselling and Human Development Studies, Faculty of Education, University of Ibadan, Ibadan.

.....

Supervisor

Prof. Ajibola O. Falaye

Department of Counselling and Human Development Studies,

Faculty of Education, University of Ibadan, Nigeria

DEDICATION

I dedicate this doctoral thesis to God, the Almighty for giving me the awesome opportunity to fulfill my lofty goal and to my biological father, Late Pa Alfred Olatunbosun Ibikunle, who was a major drive to me in the pursuit of this programme

ACKNOWLEDGEMENTS

My deepest praise and adoration go to God, the Father, Son and Holy Spirit, my creator, keeper and provider. He is the one, who covered my head in the days of battle, my glory and the lifter of my head, in the days of discouragement and despair, my hope at every stance of hopelessness. Through HIM, I have run through a troop and leaped over a wall. Oh, that I have ten thousand tongues to appreciate HIM for who HE is and all HE has done! All glory be to HIS name forever.

I use this opportunity to doff my hat for my academic mother, mentor, an erudite scholar per excellence a seasoned developmental psychologist, counsellor and my Ph.D. supervisor, Prof. Ajibola Omolola Falaye. You are a woman with a heart of gold, genuinely concerned for me and all your students, always encouraging, guarding, tutoring and praying for me and ever ready to pardon my misdemeanour. I have benefited so much from your wealth of experience in the few years of being under your tutelage. I am proud of you, ma and count myself fortunate to be your mentee, you are the best. My prayer is that you will rise from the top to the very top in good health, prosperity and longevity in Jesus name. I will not forget in a hurry, the effort of Late Prof. J O. Osiki in gearing me towards enrolling for the Ph.D. programme and also in encouraging me from time to time to forge ahead, the Lord keep and bless the family, he left behind. I also acknowledge the roles of the former Head of Department, Counselling and Human Development Studies, Faculty of Education, University of Ibadan, Prof. Chioma Asuzu, towards the smooth running of my programme. May God reward her accordingly.

I appreciate the current Head of Department, Prof. A. O, Aremu all my lecturers in the department of Counselling and Human Development Studies for all their contributions in producing fine and remarkable scholars. My sincere gratitude goes to Prof. CBU Uwakwe, my supervisor at my undergraduate level, Prof. T. A. Salami, my supervisor at master's level, Prof. D. A. Adeyemo, Prof. A. Hammed, Prof. A. E. Awoyemi and Prof. R. A. Animasaun. In addition, I am very grateful to the Ph.D. coordinator, Dr. D. A Oluwole for your relentless effort towards the

successful completion of my programme and that of many others. You were indeed undoubtedly dependable, prompt, completely sold out towards the success of all students and highly empathic, I pray for God's favour, for you all the way, sir. I am also grateful to those who painstakingly sharpened my professional teeth in person of Late Dr. Afusat Busari, Dr. M. O. Ogundokun, Dr. A. M. Jimoh, Dr. J. O. Fehintola, Dr. Adetola Adeyemi, Dr. A. A. Owodunni, Dr. Ndidi Mercy Ofole, Late Dr. B. Okpara and Dr. K. Odedokun. My unalloyed acknowledgement goes to Dr. Adebunmi O. Oyekola. who was of help to me, she was an inspiration to me, whenever she anchored our presentations in Developmental Psychology. Her scholarly contributions and use of appropriate psychological terms have furnished my psychological dictions. I owe much appreciation to Dr. A. K. Taiwo, Sub-Dean (P.G.) Faculty of Education, whose support towards me cannot be quantified.

My appreciation also goes to Dr. A. Tella and Dr. Rose Appah, for their immense contribution towards my project, the God that I serve shall reward you both. I quite acknowledge the efforts of the non-teaching staff of the Department of Guidance and Counselling towards the smooth running of my programme. I appreciate these friends of mine and colleagues for being there for me, when I need them Dr. Lekan Oduola and Mr. Ahmad Olaitan. God bless you both. I specially appreciate my colleague and brother in Christ, Dr. S. Ogundoyin, you are an encouragement to me. I remember telling you at a point, that I was already confused and wanted to run away from the programme, but you painstakingly looked at my thesis then and told me, I was in track. Your remark brought so much hope to me. You were always there to shed light any time there was darkness. The Lord shall stand by you always in Jesus name. I also acknowledge all the scholars whose works were consulted and cited in this thesis.

My profound gratitude goes to my heartthrob and caring husband Apostle David Tunji Tokede. You were with me through thick and thin, supporting me spiritually, financially and morally. The ministry committed to your hands shall continually grow in leaps and bounds, God will neither leave nor forsake you and you will forever soar high in Jesus name. I love you beyond measures. I would be a terrible

ingrate, if I fail to acknowledge my biological mother, Mrs. Grace Olubunmi Ibikunle, a mother in a million, ready to spend and be spent for her children, I love you mum, you will reap the fruit of your labour here on earth and in heaven above.

In like manner, I sincerely appreciate my siblings, Mr Bolawale Ibikunle, Mr Olanrewaju Ibikunle, Mr Taiwo Ibikunle and Mrs Kehinde Macaulay. My appreciation also goes to my adorable biological children, Sijuade Tokede, Atilade Tokede and Ademide Tokede. I also sincerely appreciate all my spiritual children in the Churchill City Chapel International. You are the best family anyone can have and you shall be forever lifted in Jesus name. Specially, I am expressing my gratitude to my co-labourers in the vine yard, Pst. Mrs. Adetoun Akeju, Pst Jumoke Israel, Dcn. Danjuma Adedeji, Pst. Sewanu Adejokun and Pst. Tope Ibikunle, my dearest cousin. You are blessed in Jesus name.

Finally, I acknowledge all the participants in this study, without their support this research work would have been an ordinary mirage.

Thank you and God bless you all

Abiodun Morenike Tokede

ABSTRACT

Depressive symptoms characterised by a mild and non-clinical mental health disorder, is detrimental to the well-being of human beings. Reports have shown that menopausal rural farmers in Ibadan less city exhibited bothersome level of depressive symptoms. Previous scholarly works on depressive symptoms have centred on their prevalence and causes among women, with little attention and interventions, to using Psychoeducation Training (PET) and Interpersonal Therapy (IPT). This study, therefore, was designed to determine the effect of PET and IPT in the management of depressive symptoms among menopausal rural farmers in Ibadan less city. The moderating effects of self-esteem and life events were also examined.

The study was anchored to Integrated Helplessness/Hopelessness Theory, while the pretest posttest control group quasi experimental design with a 3x2x2 factorial matrix was adopted. The multistage sampling procedure was adopted. Three local government areas (Ido, Akinyele and Ona-ara) in Ibadan, from the existing six, were randomly selected. Three rural areas (Ajobo, Alabata and Butubutu) were purposively selected based on the prevalence of menopausal depressive symptoms. The instruments used were a self-developed Life events scale (α = .71), Rosenberg Self-Esteem (α = .71) and Beck Depression (α = .95) inventories. Participants who scored 10-20 on Fann Patient Health Questionnaire-9 Depression Screening tool were selected. The participants were randomly assigned to PET (17), IPT (16) and control (15) groups. The intervention lasted 10 weeks. Data were analysed using Analysis of covariance and Scheffe posthoc test at 0.05 level of significance.

The participants' age was 48.3 ± 3.56 years, and 45% were married. There was a significant main effect of treatment in the management of depressive symptoms in menopausal rural farmers ($F_{(2;}$ 45) = 92.66, partial η^2 = 0.98). The participants in IPT had the lowest mean score on depressive symptoms (9.63) followed by those in PET (16.88), and those in the control (34.27) groups. Self-esteem had a significant main effect on in depressive symptoms ($F_{(2; 45)}$ = 5.69, partial η^2 = 0.28). Participants with high self-esteem (16.50) benefited more than did their counterparts with low self-esteem (22.59). There was no significant main effect of life events in the management of depressive symptoms. There was significant interaction effect of treatment and self-esteem on depressive symptoms ($F_{(2; 45)}$ = 6.70, partial η^2 = 0.47). The two-way interaction effects of treatment and life events and self-esteem and life events were not significant. The three-way interaction effect was not significant

Psychoeducation training and Interpersonal therapy were effective in managing depressive symptoms, but Interpersonal therapy was more effective in managing depressive symptoms among menopausal rural farmers in Ibadan less city. Developmental, counselling and clinical psychologists should adopt these interventions for managing depressive symptoms among menopausal rural farmers.

Keywords: Psychoeducation training, Interpersonal therapy, Depressive symptoms, Menopausal rural farmers

Word count: 446

Table of Contents

Title Page		i
Certification		ii
Dedication		iii
Acknowledgements		iv
Abstract		vi
List of Table of content		viii
List of Figures		vii
CHAPTER ONE: INTRODUCTION		**1**
1.1 Background to the Study		1
1.2 Statement of the Problem		6
1.3 Purpose of the Study		7
1.4 Hypotheses		8
1.5 Significance of the Study		8
1.6 Scope of the Study		10
1.7 Operational Definition of Terms		10
CHAPTER TWO: LITERATURE REVIEW		12
2.1	Theoretical Review	12
2.1.1	Concept of Depressive Symptoms	12
2.1.2	Concept of Menopause	17
2.1.3	Depressive Symptoms in Menopause	21
2.1.4	Irritability and Mood Instability in Depression	25
2.1.5	Feelings of Sadness. Loss of Interest, Sleep, Cognition and suicidal ideation in Menopausal Depressive Symptom	28
2.1.6	Psychoeducation Training	34
2.1.7	Goals of Psycho-education Training	38
2.1.8	Basic Needs in Psychoeducation Training	39
2.1.9	Interpersonal Therapy	40
2.10	The Nature of Interpersonal Therapy	43
2.11	Life events	45
2.12	Self-Esteem	50

2.2 Theoretical Framework 54
2.2.1 Integrated Helplessness or Helplessness Theory 54
2.2.2 Life event Theory 57
2.2.3 Theory of Self-Esteem 58
2.3 Empirical Review 60
2.3.1 Psychoeducation and Depressive Symptoms in Menopausal Women 60
2.3.2 Interpersonal Therapy and Depressive Symptoms in Menopausal Women 64
2.3.3 Life- Events and Depressive Symptoms in Menopausal Women 67
2.3.4 Self-Esteem and Depressive Symptoms in Menopausal Women 71
2.4 Conceptual Model for the Study 74
CHAPTER THREE: METHODOLOGY 76
3.1 Research Design 76
3.2 Population of the Study 78
3.3 Sample and Sampling Technique 78
3.4 Inclusion Criteria 78
3.5 Instrumentation 79
3.6 Procedure 82
3.7 Summary of Treatment Package 83
3.8 Control of Extravenous Variables 87
3.9 Data Analysis 87
CHAPTER FOUR: RESULTS AND DISCUSSION 89
4.1 Descriptive analysis of Results 89
4.2 Results 95
4.3 Discussion of Findings 117
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION 124
5.1 Summary of Findings 132
5.2 Conclusion 134
5.3 Implication 134
5.4 Contribution to Knowledge 135

5.5 Recommendations 136
5.6 Limitations to the Study 137
5.7 Suggestions for Further Research 138
REFERENCES **139**
Appendix 1: Treatment Package 165
Appendix II: Screening Instruments 190
Appendix III: Instruments 194
Appendix IV: Pilot Testing Reliability Result 204
Appendix V: Approval for the Study 211
Appendix VI: Field Pictures 218

LIST OF TABLES **Pages**

3.1: Factorial Matrix Table for the Study 77

4.1: Socio-demographic Variables of Respondents 89

4.2: Selected Sample Size of the female farmers Population 92

4.3: Summary of 3x3x2 Analysis of Covariance (ANCOVA) Post-Test DepressiveSymptoms' Management among Menopausal Rural Farmers 96

4.4: Pretest and Post test Mean and Standard Deviation (Depress (Depressive Symptoms) 99

4.5. Significant Difference in the Treatment Groups 101

4.6: Mean and Standard Deviation (Self-esteem) 103

4.7: Significant Differences in the Self-esteem Levels 105

4.8: Mean and Standard Deviation (Life Events) 108

4.9: Significant Difference in the Life events Levels 110

4.10: Effect of Treatment and Self-Esteem on Depressive Symptoms Symptoms 113

4.11: Effect of Treatment and Self-Esteem on Depressive Symptoms Symptoms 115

LIST OF FIGURES **Pages**

2.1: Conceptual Model for the Study 75

4.2: The percentage of Depressive Symptoms among Menopausal RuralFarmers in the Three Local Government Areas 94

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Every stage of a person's life has its major challenges, whether physiological or psychological, the midlife stage for a woman is not exempted. Many older females have experienced major life events that can cause periods of brain damage as a result of multiple debilitating effects due to several demanding roles women are saddled with, such as being wives, mothers, and breadwinners and so on. Women around this age can report signs of depression, stress, confusion, anxiety and feelings of well-being that are significantly reduced because it is a new developmental milestone and also the time around low fertility or end of the menstrual cycle. Causes for challenges in middle-aged women are polygamy, loss of identity, children absconding from home, having to care for the kids, husband as well as other members of the family (Thomas, Mitchel and Woods 2018).

Menopause is one of the kinds of mid-life challenges that can easily be overcome or lead a woman into depression depending on her level of understanding and readiness. According to Peacock and Ketvertis, (2021) it is a lasting shutdown of the monthly flow leading to the loss of the growth of ovarian follicle and thought to occur when 12-month-old cells were lost in a row. It is a routine occurrence and for some women, an inconsequential portion of an individual's life. However, the time of transition in menopause is a period of biological vulnerability with obvious physiological, intellectual and bodily symptoms for some women. Most women know that menstrual cycles will stop one day, but a significant number of women may not know the symptoms associated with menopause. Depression, anxiety and

confusion begin when symptoms appear in women. Women may think that these symptoms are evil or even voodoo attacks (Ibraheem, Oyewole and Olaseha, 2015). The condition worsens as these symptoms usually precede the stop of the menstrual flow, so sufferers do not readily report symptoms with menopause. It has also been noted that mothers who ought to have been the pivot source of genetic health repertoire of knowledge for the girls have incomplete knowledge of the reproductive health issues (Uwakwe, Ajufo, Nwagwu and Falaye, 2000) and therefore the information provided is faulty. Among the stages in menopause, the perimenopause or menopausal transition is the period that is characterised by onset of menstruation circle irregularity and changes in reproductive hormones (Delamater, Santoro, 2018). In general, this period often signifies a time of high concern for cognitive decline that lead to poor life quality (Mosconi, 2017). Therefore, it is paramount to be informed of the probable link of reproductive and risk factors for the increase of depression and to control the prevalence of symptoms of depression in women as women move through the different stages of ageing in reproduction.

Depressive symptoms that often leads to major depression is one of the commonest mental health issues worldwide, with an estimated 3.8% of the population affected, including 5.0% among adults and 5.7% among adults older than 60 years (Institute of Health Metrics and Evaluation. Global Health Data Exchange (GHDx, 2019). Approximately 280 million people in the world have depression (GHDx, 2019). Depression is much more likely to be diagnosed in highly developed countries, whose more robust health care infrastructures are far better equipped to identify and treat mental illnesses but the true rates are likely much higher, especially in less developed countries, of which Nigeria is inclusive (World Population Review, 2021). A major problem to mental health in Nigeria is that there are no true statistics. As in 2017, The World Health Organisation (WHO) in its Global Health message reported that the number has increased to 7,079,815. On daily basis, people do feel depressed when they feel uncomfortable, hopeless, down, sad or blue. However, the manifestation of emotional distress is not the same as being in a blue, unlike a situation where affected persons cannot maintain psychological stability or homeostasis (Scholten, 2013). If the problems continue for two weeks or more, lead to considerable suffering, as well as interfere

with the daily activities and pleasure of everyday life, one may be diagnosed as having a major depression and there may be need for the psychological intervention.

Depressive symptoms can be defined as a mild non-clinical mental health illness, which when ignored due to its mildness at the onset can lead to depression- a grave ailment affecting every area of the person's life. This psychological problem involves excessive level of sadness that often interferes with the normal daily living activities of the victims (WHO, 2017). Depression is a significant public health problem, and at a prevalence rate of 3.9%, **7** million Nigerians currently suffer from it (WHO, 2017). Several studies conducted among different populations have however reported a much higher prevalence in women. Among men, the prevalence of depression was 5.4% and 9.3% among women in World Population Review (2016). Also it was found to be prevalent in the rural areas than in the urban areas (16.64% vs 13.3%), (Ekwueme, Chukwueneke, Ekwueme, Ndu, Idoko and Nwobi, 2018). Vulnerability to depression is increased across the menopause transition and in the early years after the final menstrual period (Bromberger and Epperson, 2019.)

Agriculture has always been a stressful profession, as many factors affecting agriculture remain largely beyond the control of producers. Also farmers are one of the groups that have been reported to have poor mental health worldwide, which suggests that structural factors in agriculture may play a role in their psychological wellbeing (Rosmann, 2015). In various countries, a variety of mental health outcomes including depression, anxiety, and psychological morbidity are all higher among farmers compared to non-farmers (Yazd, Wheeler, and Zuo, 2019). Frybarger and Thao (2019) found that increased symptoms of depression in female farmers were associated with worsening economies, heavy workloads and low financial rewards. These practices are particularly stressful for menopausal farmers. For long hours, these menopausal farmers are less likely to engage in social interactions, as most women farmers are engaged not only in agriculture but also in the processing and sales of agricultural produce to maximize profit and reduce exploitation. In this way, the physiological and economic situation, as well as the working conditions of the menopausal peasants, makes them susceptible to depressive symptoms. Farmers grow food but do not have access to it, sometimes they work about 80 hours a week, but cannot afford primary healthcare facilities, let alone pay to visit a therapist or mental health clinic (Jones-Bitton,

Best, MacTavish, Fleming and Hoy, 2019). Perimenopausal farmers who experience negative life events such as loss of a partner, child, divorce, illness, having too many children, infertility, financial difficulties, and challenges in care are at risk of depressive symptoms and depression (Booth, Connell, Lawrence, Chalmers, Joice, and Becker, 2015). The impact of the traumatic life event (TLE) as a significant risk factor for depression in clinical and community settings has been confirmed by meta-analyses and systematic reviews (Estrada-Martínez, Caldwell, Bauermeister, and Zimmerman, 2012) Menopausal transition has been related to a number of health impairments and variability of symptoms that women experience as a result of hormone changes. These, in turn, can affect self-esteem and life satisfaction (Jenczura, Czajkowska., Skrzypulec-Frankel., Skrzypulec-Plinta and Drozdzol-Cop A. 2018). Reduced self-esteem may put menopausal women at higher risk of negative outcomes of menopause and result in depressive symptoms (Dąbrowska-Galas* and Dąbrowska, 2021)

Various interventions, such as Mind-Based Cognitive Therapy, Problem-Solving Therapy, Self-Help Therapy, Psychoeducation Training, Interpersonal Therapy, and Speech Therapy have been used to prevent or control mental disorders. Of all these interventions, this study used both Psychoeducation Training (PT) and Interpersonal Therapy (IT). PT is an economically effective intervention that emphasizes stress-relieving strategies such as goal setting, agreeable goal attainment, reliability and communication skills. All these help suppress the development of depressive symptoms, depression or anxiety (Terasa Younker and Heidi, 2021). PT has been found to be effective in treating depressive symptoms, depression, loss, despair, suicide, anxiety and substance abuse in students in Kenya (Muriungi and Ndetei, 2013). It has also been effectively used to target the community and at the same time affects individuals at risk of suicide (Henrion, Courtet, Arpon-Brand, Lafrancesca, Lacourt, Jaussent, Guillaume, Olie and Ducasse, 2020). However, PT has not been used for the management of depressive symptoms in farmers going through menopause transition. In addition, rural menopausal farmers need a controlled case study focused on the effectiveness of psychoeducation interventions to reduce depressive symptoms. In this regard, this study aims to use PT.

Interpersonal Therapy (IT) is less time consuming, interpersonal, psychodynamic informative therapy that brings about symptoms relief, as well as improves the functionality of

interpersonal relationships of the clients (Cuijpers, Donkers, Weissman, Ravitz and Cristea, 2016). IT relates to the interpersonal context, the factors that prevent, discourage, and promote patient distress. Within the IT, interpersonal relationships are at the center of therapeutic focus as a way to improve relationships that bother on interpersonal therapeutic engagement with patients or to modify expectations about interpersonal relationships. IT was efficient in managing major depressive disorder in adult outpatients (Hees, Rotters, Ellermann and Evers, 2013). However, in these past cases, IT has not been used in the treatment of depression in menopausal rural farmers. In view of this, this study intends to use IT to manage depressive symptoms in menopausal rural farmers.

The prevalence of depressive symptoms amongst menopausal women with low standard of living and stressful life conditions is on the increase (Onya and Otorkpa, 2018). There is also the increased tendency of many more women joining this age range at risk in the nearest future. In many cases, when depressive symptoms are not well managed and degenerate into depression, it remains a lifelong disease and a psychological problem that can endanger lives, destroy interpersonal relationships, promote drug abuse and hinder productivity. A number of drugs, referred to as antidepressants that provide temporary relief but also nauseous and sedative effects on users are used to treat this illness. These drugs are not within the reach of a menopausal rural farmer because of its cost, the unavailability of mental health practitioners cum inadequate facilities in the immediate environ. Hence, the need for an alternative therapy that can help address this challenge. Psychotherapy, which has not been commonly, used in treating depressive symptoms and depression in Nigeria(Taiwo, Atilola, Ani and Ola, 2020) remains the only potent and cost-efficient therapy available for managing depressive symptoms and depression in menopausal rural farmers. That is why this study seeks to manage depressive symptoms in menopausal rural farmers using psychoeducation training and interpersonal therapy which are both psychological and counselling interventions to ascertain their efficacy in the management of depressive symptoms among menopausal rural farmers in Ibadan.

1.2 Statement of the Problem

The bothersome physiological symptoms of menopause and the common practice of engaging in long hours of monotonous tasks under harsh conditions as farmers, without opportunity for leave or vacation predisposes the menopausal rural farmers to depressive symptoms. This situation accompanied with a low standard of living and inaccessibility to mental health facility also makes them more vulnerable to depressive symptoms.

Depressive symptoms defined as a mild mental health illness can readily degenerate to depression, when not managed. It is a major and the most alarming issue in mental health but also a psychological issue that has received little attention from the health system in Nigeria. The illness is major and might received little attention because there is somewhat difficulty in the process of diagnosing and identifying it, especially among menopausal rural farmers, leading to a wrong conclusion that it is non-existent among the group. Late diagnosis result into giving time for the illness to eat deep. The prevalence of 3.9 per cent of the entire population; makes Nigeria, the country with the highest number of depressed people in Africa (WHO, 2017). The prevalence of depressive symptoms has been found to be higher among individuals who are farmers in rural areas compared to non-farmers (Kanamori, Hanazato, Kondo, Stickley and Kondo, 2021). The menopausal rural farmers being a female experiencing many physiological challenges are expected to likely have more challenges since depression has been found to be prevalent in females, age 40-59 than in males (Prat and Brody 2017)

Depressive symptoms impair victim's psychological well-being and health. It also has adverse effect on victim's interpersonal relationships causing marital distress- a major negative life event in women that can generate many more complications like unhealthy parenting, violence on spouse or significant others, irritability, mood instability, neuroticism, other psychological and health issues (WHO, 2017). When high level of depressive symptoms sets in, sufferers are at greater cardiovascular risk and poorer cognitive function which further impair health and productivity. The height of depression is when the women begin to suffer from hallucinations and hear strange voices which can lead to insanity or delusion and finally suicide. This claims about a million people's lives annually (WHO, 2017).

Most Nigerian studies on depressive symptoms and depression are on prevalence and evaluation (Ibrahim *et al*., 2012; Busari, 2012). It is good to know the prevalence and evaluate depressive symptoms and depression but more importantly is to manage them with psychological interventions especially in rural farmers, who hardly utilise mental health facility to ensure stability and productivity amongst the group. Since menopausal rural farmers hardly utilise mental health facilities, it is expected that using two psychological interventions in managing depressive symptoms among menopausal rural farmers in Ibadan less city, will achieve positive effect on their psychological well-being

1.3 Purpose of the Study

The main purpose of the study was to investigate the effects of psychoeducation training and interpersonal therapy on depressive symptoms in menopausal rural farmers in Ibadan, less city, Nigeria.

The specific purposes of this study were to:

- examine the main effects of treatment on depressive symptoms in menopausal rural farmers.
- determine the significant main effect of self-esteem in the management of depressive symptoms in menopausal rural farmers.
- investigate the significant main effect of life events in the management of depressive symptoms in menopausal rural farmers.
- ascertain the significant interaction effect of treatment and self-esteem on the management of depressive symptoms in menopausal rural farmers.
- examine the significant interaction effect of treatment and life events on the management of depressive symptoms in menopausal rural farmers.
- determine the significant interaction effect of self-esteem and life events on the management of depressive symptoms in menopausal rural farmers.
- investigate the significant three-way interaction effect of treatment, self-esteem and life events on the management of depressive symptoms in menopausal rural farmers.

1.4 Hypotheses

The following 7 null hypotheses were raised and tested at 0.05 level of significance

Ho1. There is no significant main effect of the treatments (interpersonal therapy and psychoeducation training) on depressive symptoms management among menopausal rural farmers.

Ho2. There is no significant main effect of self- esteem in the management of depressive symptoms among menopausal rural farmers.

Ho3. There is no significant main effect of life events in the management of depressive symptoms among menopausal rural farmers.

Ho4. There is no significant interaction effect of treatment and self-esteem in the management of depressive symptoms among menopausal rural farmers

Ho5. There is no significant interaction effect of treatment and life events in the management of depressive symptoms among menopausal rural farmers.

Ho6. There is no significant effect of self-esteem and life events in the management of depressive symptoms among menopausal rural farm

Ho7. There will be no significant interaction effect of treatment, self-esteem and life events in the management of depressive menopausal rural farmers.

1.6 Significance of the Study

The usefulness of this study to various beneficiaries is enumerated as follow:

The management of depressive symptoms in menopausal rural farmers is beneficial to rural menopausal farmers, in educating selves about personal mental health issues. This is a potent way for the menopausal rural farmers suffering from depressive symptoms to understand the basics of depressive symptoms and learn various means of coping with it so that the sufferers can take the steps required for self-assistance. Also, it helps participants to become more

educated about the new developmental milestone attained or at the verge of attaining, its physiological and psychological challenges and how to cope effectively with these challenges without it hampering productivity, relationship and general psychological well-being.

The management of depressive symptoms in menopausal rural farmers promotes good interpersonal relationships of the menopausal rural farmers with the family members, employers, employees, co-workers or significant others around. The outcome of the study enlightens the menopausal rural farmers on the benefits of seeking psychological treatment when the prodromal symptom of depression, depressive symptoms begins to manifest

This outcome of this study is of utmost importance to developmental psychologists, who are concerned with providing efficient and potent services that would help patients adjust to stress and stressors as they reach new developmental milestones in their various human life span stages, so as to prevent depressive symptoms.

The self-assertive technique used in the study corroborates the counselling psychologists' tools of service delivery in the early diagnosis of depressive symptoms in menopausal rural farmers.

Likewise, the result of the two experimental groups promotes psychologists and counsellors' understanding of therapies that could be more effective in managing depressive symptoms in menopausal rural farmers.

The use and outcome of the two treatment packages, when administered on menopausal rural farmers with depressive symptoms also guide in carrying out enlightenment programmes for researchers, including the medical practitioners on the roles of the therapies in helping the menopausal rural farmers through psychological predicaments.

Finally, the result of the screening instrument and the outcome of the study after the management of depressive symptoms in menopausal rural farmers enlighten the government and policy makers on the need to give proper consideration to the psychological health of menopausal rural farmers. This is to foster farming and agriculture in the state, as the

menopausal age 40 -55 years is still a productive age for female farmers, if the menopausal rural farmers are medically and psychologically balanced. The outcome of the study also enlightens the government on the awareness of the incidence of depressive symptoms and the need to establish standard psychotherapy sessions even in the rural areas.

1.7 Scope of the Study

The research was restricted to studying psychoeducation and interpersonal therapy in the reduction of depressive symptoms of menopausal rural farmers. The study compass captured only menopausal rural farmers from three (3) local governments in Ibadan less city, with significant depressive symptoms after being screened with the depression scale. In addition, only self-esteem and life events are the moderating variables that were used. Finally, each of the intervention programmes lasted for 10 weeks (sessions).

1.8 Operational Definition of Terms

As used in this study, these words are conceptualized as follow:

Menopausal Depressive symptoms: It is a mild and non-clinical mental health disorder in menopausal rural farmers that is characterized by any four (4) or more of the eight (8) symptoms; mood instability, irritability, feelings of sadness, tiredness or restlessness, loss or excessive interest for sex, food or initially pleasurable activities, change in sleep pattern, loss of concentration and energy, disappointment in oneself and sometimes suicidal bout for a period of more than two (2) weeks around menopausal period.

Menopausal rural farmers: These are uneducated midlife rural female farmers, who are already experiencing changes and irregularity in their endocrine and menstrual cycle, but 12 months of amenorrhea has not yet occurred.

Psychoeducation training: It is a group education offered to menopausal rural farmers with depressive symptoms to help them have a better understanding of their human life span stage, the tendency of associated symptoms, and also manage to cope with the menopausal depressive symptoms, prevent relapse and contribute to their own health and welfare.

Interpersonal therapy: Interpersonal therapy (IPT) is a brief, highly structured, manualised, time limited and present-focused therapy that centers on resolving interpersonal problems in order to decrease depressive symptoms among menopausal rural farmers.

Life events: It is conceptualized as different happenings in the lives of menopausal rural farmers before or during menopausal transition that may be positive or negative and may enhance or hinder their psychological well-being

Self-esteem: This refers to how the menopausal rural farmers perceive themselves in relation to their menopausal status

CHAPTER TWO

LITERATURE REVIEW

This chapter makes an extensive review of related literature that is germane to the study. The review of literature is categorized into two, theoretical and empirical review.

2. 1. Theoretical Background

2.1.1 Concept of Depressive Symptoms

The notion of depressive symptoms is from Late Latin word ‘depressare’ and classic Latin definers ‘deprimere’. Deprimere means to press down; 'De' is translated below, 'in advance', and translated into print. Basically, the term seems to be called a feeling of gravity, depression, sad, blue, or being low (Torres, 2020). Depressive symptoms can be defined as mild, non-clinical mental illness characterized by any four (4) out of the eight (8) symptoms; Emotional instability, nervousness, sadness, fatigue or anxiety, sex, food or loss of excitement, excessive interest, sleep patterns, loss of concentration and energy, despair and sometimes suicidal bout manifesting for more than two (2) weeks. It is one of the most common mental disorders and can be described as mild depression. Depressive symptoms are important for examining for depression in the population and in clinical situations. Depressive symptoms are highly associated with the clinical diagnosis of depression but are not equivalent.

The depressive symptoms may seem mild and may appear as what will go on its own but when left unmanaged, however it can be result to full blown depression. The World Health Organization (2017) said that depression does not only concern saddening feeling, it is a real disease affecting the brain. Grief can be easily eliminated, but depression is a severe health

state that entails suitable management and counseling. Mental disorders are common in both urban and rural settings, with debilitating annual effect on the population. The prevalence of mental disorders is higher in rural than urban areas, due to poverty, inadequate mental health facilities and low standard of living associated with living in rural areas (18.4% urban versus 28.4% rura) (Amoran and Lawoyin, 2007). Legg and Coelho (2020) noted that depressive symptoms degenerating to depression does not just concern lying on the bed and crying or wailing without engaging in things that are worthwhile. According to them, an individual can show a functional depressive symptoms or depression, in which the person can go to work, school, socialize and seem good, but then not ok. Victims of functional depressive symptoms or depression often nurse the idea or end up in suicide without people having the slightest inkling. Usman, Adelaja and Olowopejo (2017) reported from the Nigerian Vanguard that on Sunday 19 March, a 35year old successful medical doctor jumped into the lagoon and committed suicide in Lagos; the cause of which was discovered to be as a result of depression from some negative life events. Similarly, Onozure (2017) of the Nigerian Vanguard reported on April 25 that court ordered psychiatrist test for a businesswoman, aged 51, who was rescued from committing suicide by jumping into the lagoon on March 24, 2017. The court fined the woman five hundred thousand naira (N500, 000). The woman was suffering from depression, due to an unpaid loan. So many suicidal acts committed in Nigeria have been traced to depression (Lawal, 2018).

It is sad that people who have depressive symptoms and depression have to get ready to face two major challenges that often accompny depressive state. One is to face depressive symptoms and depression that are painful and difficult to manage, and the second challenge is somewhat more difficult, which has to do with facing misunderstanding that other people do have about depressive symptoms and depression. The misunderstandings are sometimes insulting, confusing and often makes it useless to get the symptoms under control. So many times there is the assumption that only the lunatics on the streets are mad but the recent incidents in the country prove this wrong as depressive symptoms and depression which leads to demonstration of mental illness comes in the form of tenacious unhappiness, fear, hopeless feeling, sleep disorder, eating disorder, inability to rest, energy decrease, sexual interest loss, tiredness and concentration difficulty and suicidal ideation and (WHO, 2017).

Many mentally distressed people are said to be suffering from spiritual attacks, so victims often have too long sessions of prayers and vigils on mountains or some other religious houses which in some cases could worsen the situation than improve it (Ugo, 2016).

Depressive symptoms can manifest as low mood and indifferent attitude towards an individual's thinking, behavior, feelings and well-being (Jonathan-Hill, 2014). It is more frequent in women compared to men across age groups until late life as reported by Salk, Hyde, and Abramson (2017) that 21% prevalence was discovered among women, while 12% was discovered in men. In general, women are very likely to have tales when depressed, this includes calls to relieve emotional tension, trying to figure out what the depressive symptoms is and talking to friends about depressive symptoms, rumination and this may likely make it as worse off. Unlike rumination, distraction can reduce depressive symptoms and depression. This may account for a smaller prevalence of depressive symptoms and depression in men, when considered in contrast with women (Cook, Mostazir and Watkins, 2019). In an individual's life circle, there are many health challenges and disorder one could develop or contract, but especially in recent years, depressive symptoms leading to depression have become prevalent (Santomauro, 2021). For these reasons, worldwide, disability has been noted as one of the resultant effects of depression, especially when considering the loss (human and capital loses) that had been accrued through years. Besides, depression has not just been viewed as a global issue among women, it has also been known to be one of the main burdens of women across countries and nations (Albert, 2015). Some of the known severe clinical conditions that are identified by Albert (2015) are cardiovascular problems, diabetes, cancer, arthritis, overweight and asthma. Despite not being a communicable disease, depressive disorder is a major health challenge in countries that are regarded as low-income countries like Nigeria, with very low GDP percentage and low budgetary allocation to health services (WHO, 2017).

Depressive symptoms often begin at an early age; it demotes the functioning of humans and are often recurring (World Health Organization, 2017). It is connected with internal thinking and has been discovered to regulate internal judgments and sleeping disorders (Riemann, Krone, Wulff, and Nissen, 2019). According to Íncera-Fernández, Gámez-Guadix and

Moreno-Guillén (2021) individuals who are depressed are more susceptible to use drugs and engage in dangerous sexual behavior. Particularly in Nigeria, symptoms of depression among students and workers are likely to be affected by alcohol dependence, abuse and drug use.

Although work is globally necessary for the individual's cognitive or psychological health, there are times when certain habits make work uncomfortable. Signs of depression have been reported among the working class, also reported in Nigeria (Obi, Aniebue, Okonkwo, Okeke and Ugwunna, 2014), and its aftermaths are very serious for the workers and their employers (Obi *et al*., 2014). Often, stress at work and stress associated with other life problems can lead to severe depression. Some of the symptoms of depression are denial and helplessness, because no employee wants to be treated as traumatized or depressed. Other symptoms of this disorder include fatigue, irritability, poor judgment, somatic problems, loss of appetite for daily activities, and thoughts of suicide (Oginni, Oloniyi, Ibigbami, Ugo, Amiola, Ogunbanjo, Esan, Adelola, Darapole, Ebuka and Mapayi, 2021).

Agriculture is always a daunting task because many of the changes that affect agricultural production are beyond the control of the farmer (Rosmann, 2016). Depression can manifest as a physical and emotional response to anything that causes physical, emotional or financial abuse to growth or survival. In recent decades, fewer careers have changed dramatically than what is being experienced in farming and agricultural related careers (Torske, 2017). Nonetheless the environmental and political changes, similar trends can be observed in developed countries and the needs and concerns faced by farmers in a rapidly changing sector (Food and Agricultural Organisation (FAO), 2012). Although depression and depressive symptoms are not recognized as occupational diseases, it is associated with 48% of productive time spent in stressed workers (Bianchi and Schonefeld, 2020). Work stress stimuli, peculiar to farmers like physical and family structure, agricultural economy, administrative policy making group, and other farm-related uncertainties, may be exacerbated by recent structural and economic changes in agriculture (Jones-Bitton, Best, MacTavish, Fleming and Hoy, 2019). These stress stimuli may have negative effects on mental health. Studies on mental health comparisons between farmers and non farmers showed that mental health illness is significantly higher among farmers than non-farmers (Hounsome, Edwards, Hounsome, Edward-Jones, 2012). Psychiatric disorders usually

contribute to suicide and farmers are at increased risk for suicide than people in other professions (Kennedy, Maple, McKay and Bromby, 2014).

Financial pressures, combined with family farm bonds that confuse the demarcation between business and personal life, create a peculiar source of stress for farmers and farm families ((McIntosh *et al.* 2016). If left untreated, these stressors can lead to physical pain, depressive symptoms, depression, drug addiction, and suicide ((McIntosh *et al.* 2016). Farmers are more than five times more likely to kill themselves than the general population and are more likely to report drug use (McIntosh *et al.* 2016; Bush and Lipari, 2015). Anxiety and depressive symptoms increase the average risk of injury and impairment from the previous average (Pengpid and Peltzer 2020), and stress can bring about other causes of death in rural areas, including heart disease, chronic respiratory disease, and coronary artery disease (Moy, Garcia, Bastian, Rossen, Ingram, Faul, Massetti, Thomas, Hong, Yoon and Lademarco, 2017). Researchers have identified agriculture as more stressful than most other jobs (Pengpid and Peltzer 2020). Agriculture is a professional field that requires many professional risks. Losing one's job can also mean losing one's home. Although many farmers have many careers, these skills may not be common in other business practices and education. Farmers often dwell on the lines between where they work with family members and family roles. Through these relationships, additional supports are provided, but can however result into more psychological problems when family members are in conflicts about their personal interests and opportunities.

Another research on anxiety and depression in farmer workers and all other occupations conducted in Canada shows that farmers experience depressive symptoms than other occupations (Jones-Bitton *et al*., 2019). Farmers are one of the groups that have been reported to have poor mental health worldwide, which suggests that structural factors in agriculture may play a role in their psychological wellbeing (Kanamori, Hanazato, Kondo, Stickley and Kondo, N. 2021). In various countries, a variety of mental health outcomes including depression, anxiety, and psychological morbidity are all higher among farmers compared to non-farmers (Yazd, Wheeler and Zuo, 2019). Despite the prevalence of depressive symptoms among farmers, only a few numbers of farmers seek help for mental health in comparison to all other occupations (Brew, Inder and Kelly, 2016). Although

"mental health problems" include a broader term in addition to anxiety symptoms, these findings support existing literature that farmers do not seek help for mental health problems (Brew *et al*., 2016.). As per seeking help for physical illness, more farmers have sought medical advice than for mental health. Although in the study, many farmers suffer from chronic illness, for the past 12 months, only a few numbers of them visited a doctor, compared to all other occupation groups. In addition, farmers' utilisation of mental health facilities is poor (Brew *et al*., 2016.).

The strength and forms of emotions that are considered as indicators of menopausal signs are different from person to person. Essentially it is based on the level of sexual hormones (including therapy on hormonal replacement) and the psychological and social status of women (Hajesmaeel-Gohari, Shafiel and Bahaadinbeigy, 2021). Women are twice as probable to be depressed than men and 10 to 25% of women experience depression throughout their lifetime (Lim, Tam, Ho, Zhang and Ho, 2018). Natural phenomena such as pregnancy, menopause, menarche, and childbirth can increase the vulnerability of women to depression (Freeman, 2015).

2.1.2. Menopause

Menopause is a stage of development and a normal aspect of life of a woman. These two Greek terminologies "memos" and "pauses" form the root words from which menopause was created from. It literarily means the period of individual stops, which means a form of reproductive aging. The ovarian ageing has been conceptualized as when follicular activity in a woman ceased in a gradual procedure till it attains total cessation (i.e no more menstrual cycle) (Llankoon, Samarasinghe and Elgan, 2021). When there is a relative stoppage of menstruation because of loss of follicular development, a woman is said to be menopausal (Refael, Mandanpour, Masoumi and Parsa, 2022). 12 circles of menstruation are thought to have occurred when this happens. Usually, menopause is a normal course in the body; although, it could likely be the consequence of further factors, like chemotherapy or iatrogenic insult (Spears, Lopes and Stefansdottir, 2019). In addition, during the period of menopause, two hormones (progesterone and estrogen) that are indispensable for reproductive aging will not be produced any further (Coney, 2021). To be specific, it has

been shown that the reduction and consequence of estrogen production causes various symptoms that have different effects on each woman during menopause. These include warmth feeling which could be noticed around the chest, sweats in the night, nausea, dryness of vagina, menstration becomes lopsided, instability of mood, diarrhea, convulsions, congestion, reduced stamina and swelling (Hoffman, Schorge, Halvorson, Bradshaw, and Cunningham, 2012). These symptoms are normal, but it can disappear when a woman has reached a state of menopause, because all the hormones present in the body have gained a new balance. Menopause is a gradual process, usually occurring for years in women aged 45-55 years.

It is important to know that this is not a disease and should be viewed as a natural transition from the time, when women grow up. It marks the beginning of a decline in the fertility of the female owing to the decrease in the number of ovarian follicles produced. Though traditionally, women in Nigerian often avoid sexual intercourse (Ibraheem, Oyewale and Olaseha, 2015), this could be partially attributed to certain circumstances such as dyspareunia and libido loss; but it is also greatly affected based on cultural beliefs. Some uneducated women from the countryside have the belief that physiological, fertility is ruined, along side other conditions such as copulation. Other local beliefs include the idea of menstruation cleansing the woman body, and in the absence of it, if sexual intimacy occurs; the dirt often cause illness in the body in the form of bloated tummy (Ibraheem *et al*., 2015). The alteration in the potential to reproduce is a straight consequence of the decrease in hormone production in the ovaries, causing physical appearances that adversely affect life quality of adult females in the menopausal period (Coney, 2021).

According to Refael *et al*., (2022) the menopause phase can be subdivided into three periods; pre-menopause, perimenopause and post-menopause. The Pre-menopause is the period before menopause. It is the years of reproduction before the last menstrual cycle. Perimenopause is the immediate time around menopause, often goes with longer cycles, severe and protracted hemorrhage. Menopausal transition or perimenopause is the period that is marked by the setting in of menstration irregularity and the last menstrual period. These menstrual irregularities are caused by a decrease in ovarian follicle function and occur within 12 consecutive months of amenorrhea (lack of menstruation). This period is characterized by

dwindling hormones that are responsible for reproduction (Freeman, 2015) and the following could denote this period: increased level of menstrual flow or occurrence of abnormalities in menstruation (massive flow cum series of amenorrhea), fertility impairment, hot flashes and sleeplessness (Freeman, 2015). Of course, these indications may occur four (4) years before menstruation ceases. In menopause transition, levels of estrogen decrease with invariable increments in intensities of follicle stimulating hormone (FSH) and luteinizing hormone (LH).

The menopause transition has long been recognized as a significant time in women's lives during which the risk of mental health concerns increases. For many years, it was theorized that this increased risk was due to women's grief over the loss of their fertility (Gordon, Nowakowski and Gurvich, 2022) or that depressive mood was triggered by the "empty nest syndrome" as adult offspring moved away from the family home (Gordon *et al.,* 2022); however, these outdated theories have since been dispelled and abandoned. A biopsychosocial model has replaced these theories that emphasise the key role of hormonal changes during the menopause transition and the direct impact these changes have on the brain (Gordon *et al.,* 2022) as well as the role they play in triggering bothersome menopausal symptoms such as hot flashes, sleep disturbances, vaginal dryness, and cognitive complaints, in turn negatively impacting quality of life. (Gordon *et al.,* 2022). As earlier stated, the Peri-menopausal is a stage of life that is prone to a greater susceptibility for depressive symptoms, with the tendency of risk of increasing from early to late perimenopause, and reducing towards post-menopause (Bromberg and Epperson, 2018)

Post-menopause is the stage of life wherein a woman does not record or experience for a successive twelve months the monthly flow. This usually happen to women that are of average age of 51 years. According to Perlman, Kulak, Goldsmith, and Weiss (2018), the production of progesterone and estrogen in a woman's body would gradually begin to decline which would eventually result in complete cessation of the period. In terms of the hormonal changes that occur, the earliest ones involve an increase in follicle stimulating hormone (FSH), as well as a resultant yearly increment of luteinizing hormone (LH). Studies have ascribed this proliferation in menopause of FSH to a diminished creation of inhibin B, a dimeric glycoprotein that suppresses FSH (Gordon and Sander, 2021). Specifically, during

both the follicular and luteal phases of the menstrual cycle, this compound was found to fall, which causes an increase in FSH levels and is therefore considered an early display of reproductive aging (Coney, 2021). In general, these imbalances of hormones that result from the perpetual stoppage of function of ovarian lead to significant changes in the monthly menstrual bleeding in the course of peri-menopausal age (Hoffman *et al*., 2012).

Acting like a lipophilic hormone, Estrogen, which has now diminished in a menopausal woman is found to often help in promoting features such as development of breast and hair growth pattern of woman and known secondary sexual characteristics. Thus not only does it play a relevant function in the system of reproduction of a female, it does encourage a number of valuable effects in different parts of the body (Gordon, Girdler, Meltzer-Brody, Stika, Thurston and Clark, 2015). In fact, the estrogen hormone surges the manufacture of required proteins such as sex hormone-binding globulin, upholds suitable balance of fluid in the body by permitting water and salt storage and encourages coagulation. This also enables a satisfactory lipid profile via intensification in high density lipoprotein (HDL) and diminution in low density lipoprotein (LDL) (Velarde, 2013). The process of synthesizing estrogen is stemmed from production of the anterior pituitary gland, which often gets inhibited by FSH; and all of these take place in granulosa cells. The enzyme aromatase is precisely responsible for the ovarian estrogen which is basically produced from androgens conversion (Zhao, Zhou, Shangguan, and Bulun, 2016).

In general, premised on the transition to menopause, clearly, a large number of variations in hormones and chemicals do occur in the body of women. It was estimated that as at 2015, there are already 130 million older women in Nigeria, which requires a significant amount of care (Mishra and Mishra, 2015). El Khoudary, FAHA, Crawford, Avis, Brooks, Thurston, Karvonen-Gutierrez, Waetjen and Matthews (2019) in their SWAN study on menopausal transition and and midlife aging on overall health and well-being, discovered that at perimenopause or menopausal transition (MT) is a major health milestone for women with influences that goes far beyond fertility. In addition to the symptoms that accompany menopause, concomitant biological, psychological, behavioral, and social changes shape women's midlife and future health. About 80% of SWAN women complained of vasomotor symptoms (VMS), referred to as hot flashes and night sweats. Similarly the study,

revealed that VMS manifesting for longer period of time is more common in black women, and they were most disturbed by their VMS

Symptoms of menopausal transition, although well adapted to by some women, can be especially problematic in others. Aside the VMS, other psychosomatic and psychological symptoms of women in menopause transition in Nigeria, include nervousness, depression, irritability, insomnia, dizziness (Oloyede and Obajimi, 2018). These symptoms are often jointly categorzed when there is uncertainty of causal relationship of oestrogen and the observed menopausal syndromes. It is also known that a significant number of women do not get enough sleep in their midlife and that sleep problems are common in menopause.

2.1.3. Depressive Symptoms during Menopause

Globally, the total number of people with depression is more than 300 million, and the incidence rate is 70 % greater in women (Depression and Other Common Mental Disorders Global Health Estimates, 2019). Symptoms of depression are rampant in all population; however, the perimenopause is considered to be a time of increased risk for the development of depressive symptoms and major depressive episodes (Stute , Spyropoulou, Karageorgiou , Cano , Bitzer , Ceausu, Chedraui, Durmusoglu, Risto Erkkola, Dimitrios, Goulis, Hirschberg, Kiesel , Lopes , Pines , Rees , Trotsenburg, Zervas and Lambrinoudaki, 2019). The link between major depressive disorders and the status of menopause is a significant public health concern. The increase in the rate of depression correlates with hormonal changes in women, suggesting that female hormonal fluctuations may be a trigger for depression (Onya and Otorkpa, 2018).

Vasomotor symptoms (hot flashes or night sweats) are the most commonly reported menopausal symptoms in all races and ethnicities (Oloyede and Obajimi, 2018). Using a model of multivariate, Bromberger and Epperson (2018) discovered that compared with women at pre-menopausal stage, women transitioning to menopause have over one percent chance of having and reporting symptoms of depression. Bromberger and Epperson (2018) also documented an augmented chance that a woman has higher depression and its symptoms at the stage of menopause and postmenopausal compared with those at years preceeding

menopause, following monitoring for a number of covariates. Overall, these studies suggest that a meaningful number of women at middle-age will indicate symptoms of depression at various times in the course of menopause, but this menopausal stage is just one of the constructs related to determining depression and its symptoms among this population.

Depressive symptoms are usually assessed using a self-reporting mood scale. In a contrast study with a standard psychiatric interview, no relationship was discovered between first-degree depressive disorders and menopause. The factors likely to predict major depressive disorder in the first event include lower role function because of anxiety disorder history, life events that are stressful, as well as physical health challenges (Oginni, Oloniyi, Ibigbami, Ugo, Amiola, Ogunbanjo, Esan, Adelola, Darapole, Ebuka and Mapayi, 2021). Diagnosis of major depressive disorder entails the identification of distinguishing indicators and depressive cognitions with the related disability or variation in daily functioning. Assessing middle-aged depression in menopausal women is problematic, since numerous symptoms included in the diagnostic criteria are common. In some cases, sleep disturbances and fatigue may simply result from menopause and do not indicate depression (Baker, Lampio, Saaresranta, Polokantola, 2018). Consequently, the tools of diagnosis used in certain studies, particularly the self-reporting mood scale, might drive up the pathology of women in menopausal evolution, specifically if used on just an occasion, where a single high score is only transient could replicate distress.

Although not previously reported, the incidence of depressive symptoms and depression is increasing (Wang, Wu, Lai, Long, Zhang, LI, Zhu, Chen, Zhong, Liu, Wang and Lin, 2017) Menopausal women have menopausal symptoms (such excessive sweating, dryness of vagina and painful sex) connected with depressive symptoms (Refeai *et al*, 2022). Symptoms of major depressive disorder (MDD) in primary care patients are relatively nonspecific somatic symptoms that make the identification and diagnosis of MDD difficult (Soichiro and Tzung, 2013). This is especially important throughout the menopausal life of women, as the physical symptoms associated with menopausal transitions are the initial complaint or can overshadow emotional or cognitive complaints. Although the signs of depressive symptoms in menopausal transition and subsequent periods are different from those of women before menopause, there is no specific diagnosis of perimenopause MDD. MDD occurring during

perimenopause should be examined and diagnosed using the same criteria as in other patients.

Approximately 85% of menopausal women, especially at the perimenopause account for at least one of the symptoms of menopause, including depressive symptoms, depression, nerves symptoms or sleep disorders (Ali, Ahmed and Small 2020). Many scholars are in agreement with problems associated with menopause (Lin, Hsiao and Liu, 2012). In many cases, traumatic stress disorder preceeds depression among women in the menopausal transition (Ali *et al.*, 2020). Estrogen deprivation during menopausal transition is predicted to cause different illnesses that are relatedly connected with symptoms of depression (Bhatt and Hategen, 2019).

The depression suffered by females during the perimenopause and the loss may be dissimilar to that of pre-menopausal females. Both the presentation of the disease and the indicators can be different. For instance, in adult females before menopause, depressive signs regularly indicate or aggravate hormonal changes during menstruation (Gordon, Peltier, Grummisch and Tottenham, 2019). In women in menopausal transition, hormonal changes are not necessarily limited to the post ovulation phase, so the symptoms cannot withstand the predicted cycling system. Function in term of cognition among older women could be said to be related to symptoms of depression, primarily cognitive decline. Social roles and expectations can also contribute to the development of depressive symptoms in women. Women with certain types of stressful life events are at higher risk of depressive symptoms in perimenopause. Such stresses include lack of social support, unemployment, surgical menopause and ill health (Refeai *et al*, 2022). Some common symptoms for both depressive and menopausal symptoms include low energy, poor concentration, sleep problems, weight changes, and decreased libido (Bhatt and Hategen, 2019). In women who believe that these symptoms are a natural part of aging, depressive symptoms and depression can become undiagnosed and untreated. In older women, untreated depressive symptoms can lead to major depression, which can increase the risk of developing other serious medical conditions such as heart attack, bone mineral loss and increased risk of fracture.

Depression symptoms can vary dramatically at different stages of perimenopause (Bromberger and Epperson, 2018). Menopause transition can also affect the degree of difficulty associated with illness (Bromberger and Epperson, 2018). Women who experience surgical section have a higher degree of depression than those who experience normal menopause (Dalal and Agarwal, 2015). In addition to compressed hormone changes, psychological responses may also play a major role which has to do with the patient's consent. Age, gender, status on social strata, place of work, family support, causes of surgery, as well as body parts are important to the identity of the affected person, all of which can cause serious mental damage.

Psychiatric issues like depression, sleeplessness, nervousness, specific worry, excessive fears, psycho-somatic disorders, as well as psychosocial problems have been reported after hysterectomy (removal of the uterus) and/or oophorectomy (removal of the ovaries) (Lin, Chou, Chang, Lin and Wan, 2020). In addition, hysterectomy and / or oophorectomy were higher in a trial of adult females applying to a medical centre that specializes in treatment of psychiatric depression (Lin *et al*., 2020). Although most women transit to menopause without major mental disorders, many women report depressive symptoms, stress, anxiety and reduced well-being throughout the menopause period due to hormone fluctuations, life stress, and sleep problem, night sweats and discomfort with body image, infertility and aging. Women who want a child but cannot have a child may find a period of menopause especially sad or anxious. Serious depression should never be considered a normal occurrence, and women who suffer from it at any given moment should be treated as if they were suffering from any other medical condition.The response of women to perimenopause or menopausal transition cannot be said to be similar because of diverse psycho-demographic and socio-economic underpinnings. Traditions, education and socio-economic indicators should be considered in this regard.

African women have a high prevalence of menopausal symptoms with depression (Makara-Studzinska, Krys-Noszczyk and Jakiel, 2014). The incidence rate of depression, as well as its signs in women going through menopausal transition is higher and this often occurs more among women that are in rural areas and those having difficult life events (Ibraheem *et al*., 2015). Educational attainment, ethnicity, stressful life events, status of the partner, status on

socioeconomic strata are among other factors that can initiate and influence depression, as well as the occurrence and clinical course of major depressive disorders among women (Assari, 2020). Because depression is often a lifetime illness and is associated with severe arterial conditions among women during menopause, further studies could be considered so as to avoid long-term adverse effects and increase on early diagnosis of depression during menopause.There is very limited research on female farmers' mental health, but there are certain substantiations that farmers, especially female farmers, suffer more psychological distress than their male counterparts (Freeman 2015).

Anxiety about tomorrow and its consequences and the need to be reassured of it are major and crucial experiences of women during the transition to menopause. Women who have just started experiencing and are gradually undergoing menopausal symptoms and changes are worried about the future and persistence of their symptoms (Refeai *et al*, 2022). These women, especially the rural with little knowledge of reproductive health as a result of low educational status usually think of menopause as a sign of loss of youth, and virility, and as a pointer to reaching the end of life and the beginning of aging and loss of ability, and this produces unhappiness and anxiety in them (Refeai *et al*, 2022), this invariably leads to depressive symptoms in menopause (Refeai *et al*, 2022). Hakimi, Nazarpour, Ramezani, Tehrani, Simbar, Zaiery (2018) asserted that the most common physical symptoms experienced by menopausal women are musculoskeletal problems and the most common psychological symptoms are mood swings and irritability.

2.1.4. Irritability and Mood Instability in Depression

Depressive symptoms degenerate into depression; and it is a public health condition with an almost estimated lifetime prevalence in patients (Kessler and Bromet, 2013). It is a major cause of potential active days lost to disability (Mrazek, Hornberger, Altar and Degtiar, 2014) and it is as debilitating as arthritis, diabetes and cardiovascular disease. The cost of subsyndromal symptoms is likely to exceed the cost of a formally diagnosed major depression (American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-5, 2013). It is a concern that the incidence of suicide, which is the most tragic end result of depression, has not reduced over the years. Although it was previously

thought that suicide was not common with blacks, it is appaling that it has become a somewhat prevailing incident in Nigeria, because many people, young and old, men and women, educated and illiterate willingly put an end their own lives (Abdullahi, Ibrahim, Akor and Jimoh, 2018). There is a clear need for a better understanding of the depression and the symptoms used in its evaluation.

Mood instability (MI) is one of the most common psychological problems in menopause transition (Refeai *et al*, 2022), suggesting that MI may be important in diagnosing depressive symptoms and depression. Women in perimenopause, a stage gradually leading to menopause stage, will notice insufficient stability of their emotions, which is one of the main causes of mood instability and may result in depression. In fact, 50% of all women suffer from mood hypersensitivity (NIH, 2014). This symptom is initially experienced very subtly and then tends to be more permanent and more severe, which can lead to relationship problems and impediments in everyday interactions (Elmer and Stadtfeld, 2020).

The DSM-V and ICD-10 reports of severe depression list irritability in their descriptions, but do not include it in the list of diagnostic symptoms. Irritability is associated with heightened severity, a lower quality of life and a history of suicide attempts, which in itself is a criterion for depression (Orri, Perret, Tureck and Geoffroy, 2018).. Irritability is often revealed in many depressed people. It has been defined as a feeling characterized by reduced temperament control, often leading to verbal or behavioral aggression. This can be a normal emotional response to conditions such as stress, puberty, menopause or anxiety. It can also be defined as susceptibility to anger, intimidation or impatience. It is characterized by a state of physical and mental tension that can escalate suddenly and quickly and that can lead to reduced temperature control, increased or excessive sensitivity to external stimuli, and irreversible verbal or behavioral outbursts, even explosive aggressiveness (Vidal-Ribas, Brotman, Valdivieso, Leibenluft and Stringaris and Steiner 2016). In the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (Cherry, 2021), there are subtypes of irritability: aggression, fretfulness, hostility, violence, anger, and other violent behaviour. It is of two types; in an outer direction when it is expressed to others and an inner direction when it is directed towards self.

While irritability should be differentiated from more violent forms of aggressive and offensive behavior, milder and more serious types of irritability (such as tantrums) can be on a continuum (Vidas-Ribas *et al*., 2016). In children, irritability is the most prevalent indicator of depression (Vidas-Ribas *et al.,* 2016) and is one of the indicative norms. Usually, in a sample of depressed patient communities, about half of patients with lifelong unipolar depression will also become irritated during their worst episode (Jha, Minhajuddin, South, Rush and Trivedi 2019). Irritability in depression can also be chronic and persist for a long time, for example when it is caused by serious diseases and conditions, including hyperthyroidism, mental disorders, Alzheimer's disease or brain tumor (NIH, 2014). However, irritability, especially persistent irritability, can also be a symptom of several mild to serious illnesses, disturbances and conditions.

In menopausal women, the climacteric and hot flashes keep women awake and sweat can cause the individual to change her bedding, have insomnia, which can degenerate into fatigue. All these lead to irritable depressive symptoms. It is the basic mood grumble for up to 70% of women during perimenopause, a phenomenon that has been observed in all cultures (El Khoudary *et al*., 2019). Some women may experience an increased frequency and intensity of mental health problems during this time. As estrogen and progesterone production begins to decline, irritable depressive symptoms may develop because chronically high stress levels and poor diet can enhance the effects of various estrogen and progesterone levels. These can often be managed by lifestyle changes, such as ways to learn to relax and reduce stress.

Some studies focus on the subtype of depression known by the manifestation of fits of anger, invariably, being considered as inability to adequately regulate irritability (Jha *et al*., 2019). In the study, a high percentage of depressed outpatients have had one or more tantrums in recent months. Compared to depressed patients without tantrums, these patients had higher levels of higher cholesterol, somatization, anxiety, hostility, multiaxis psychopathology, an upsurged chance of cardiac disorders, as well as being of younger age (Jha *et al*., 2019). Depressed patients with irritability often report more annoyance, loneliness and anxiety with daily problems and more previous suicidal attempts than non-irritating depressed patients (Jha *et al*., 2019). It has been suggested that irritability may also be a hallmark of

unrecognized bipolar (spectral) disorder. To what extent irritability predicts the development of bipolar disorder during a major depressive episode has not yet been investigated. However, other features of bipolar disorder, such as age, onset of suicide, family history, relapse, and atypical depression are no longer found in people with irritable depression. Many patients with a primary diagnosis of unipolar depression also have a high degree of irritability (Jha *et al*., 2019). Another study found that the prevalence of tantrum in patients with depression was only slightly lower (Jha *et al*., 2019).

The position of women who attained menopause at an early age and the women's relationship with menopausal symptoms, according to Erbil (2017) revealed that a negative predisposition of an individual before menopause promotes the frequency of psychological symptoms, while an assesment of cognition and attitude of women towards menopause suggests that women are more likely to have depression associated with menopause than with heart disease. Irritability, together with MI, can lead to long-term interpersonal and adaptive difficulties that can lead to depression (Balbuena, Bowen, Baetz and Marhawa 2016).

2.1.5. Feelings of Sadness, Loss of Interest, Sleep, Cognition and Suicidal Ideas in Menopausal Depressive symptoms

Other DSM or ICD diagnoses include depression, sadness, loss of interest in past activities, loss of cognitive function, thoughts of suicide, and feelings of hopelessness (World Mental Health Day, 2012). Ghazanfarpour, Khadivzadeh and Babakhanian (2016) asserted that there is inverse association between the menopause rating scale and the sexual function. The more the psychological and issues having to do with excretion and reproductive organs of menopausal signs, the worse the sexual function in all areas of CSFQ. Ghazanfarpour *et al*., 2016 in middle-aged women reported that sexual function of women, as assessed by the index of female sexual function, was contrariwise related to depressive symptoms but confused with status of the excretory and reproductive organs. In addition, sexual function was in reverse associated with partner sexual function and psychological assessment of a woman for life quality in menopause and was positively related to pre-menopausal status.

There have been many confounded results with sexual desire, with some finding that menopausal and postmenopausal women are less interested in sex and have less sexual desires than pre-menopausal women, others have found no difference (Nazarpour, Simbar and Tehrani, 2016). During the period of transition in menopause, Nazarpour *et al* (2016) reported that there is an increase in pain experienced as a result of sexual intercourse, while during progression and transition from late-menopausal to post-menopause. Johnson (2021) reported a downward slide in libido (sexual thoughts or fantasies in last month), but not from early to late menopause. With endocrine markers playing a role in menopausal transition, many biopsychiatric factors can play a role in sexual desire when women experience depressive symptoms during menopause (Maturitas, 2012). Four categories are identified and enumerated as follows:

• specific factors for menopausal transition, such as endocrine markers and symptoms (including hot flames, irritability, depressed mood, vaginal dryness);

• Psychosocial factors, especially social roles and responsibilities (marital status, parents, work among others), emotional well-being of partners, well-being, self-esteem, history of sexual violence, perceived life stress.

• Health behaviors such as substance use (tobacco, alcohol and illegal substances), unhealthy foods, sedentary lifestyles.

• Somatic diseases and / or mental disorders, drug use, etc.

Regarding the effect of depressive symptoms on a woman's sexual function, the data were combined. Some authors have reported the direct impact of depressive symptoms / disorders on sexual dysfunction, even in inactive patients, while others have reported the opposite (Nazarpour *et al* (2016)). According to Fabre and Smith (2012) postmenopausal women enrolled in the study were found to have CSFQ-like results in patients with schizophrenia or bipolar disorder. Fabre and Smith (2012) showed that the presence of major depressive disorder does not increase the prevalence of DSM-IV sexual dysfunction (hypoactive sexual desire disorder 17.7%, sexual obesity disorder 3.4%, irritability in women 5.8%) and Female orgasmic disorder (7.7%), but this had a negative effect on women's perception of sexual

function (Derogatis Inventory Sexual Function [DISF] score). Therefore, a significant negative association was found between the Hamilton depression score and the DISF score. That is, the more the depression in women, the lesser their sexual function.

The association of hot flashes with distressed sleep, mostly during the first half of the night, has been discovered in numerous studies conducted among menopausal women (El Khoudary *et al.,* 2019). Whether sleep precedes a negative mood, such as a depressive symptom, or vice versa, sleep disorders associated with depressive symptoms appear intuitively likely and have indeed been reported in several studies (Baker, de Zambotti, Colrain and Bei, 2018), although the nature of the association is not fully understood. Sleep would predict a bad mood the next day, not exactly the same time period, which means that the residual effects of the vasomotor symptoms that one like may occur primarily through a mechanism, different from sleep disorders. Therefore, although the authors affirmed that the hypothesis may be true partially; this is not the whole story, because the control of sleep disorders does not exclude the prognostic benefit of vasomotor symptoms, which are consistent with the effects of the symptoms not determined by sleep (Baker *et al., 2018*). In the SWAN initial cross-sectional survey, late perimenopausal women reported insomnia than the premenopausal women, the occurrence of VMS, inconsequential. Postmenopausal women taking hormone therapy also reported similar rates of sleep difficulties in comparison to premenopausal women in the SWAN study. A longitudinal analysis of the first 7 years of SWAN showed a similar pattern of Menopausal transition for self-reported sleep disturbance, defined as trouble falling asleep, waking up several times, and waking up earlier than planned at least three nights weekly in the last 2 weeks, with several exceptions. Early perimenopause was also associated with more sleep disturbance and hormone therapy use did not protect postmenopausal women from sleep disturbance. Frequent reporting of VMS, estrogen hormone decline, and FSH rise were also associated with sleep difficulties (El Khoudary *et al*., 2019). Waking up several times at night showed the most pronounced association with menopause stage (El Khoudary *et al*., 2019).

Scholars have the idea that sleep disorders are mediated, there are as well as intertwined symptoms of vasomotor and problems that are related to mood. Invariably, the vasomotor symptoms may disrupt sleep disorders and bring undesirable emotions (El Khoudary *et al*.,

2019). Despite the fact that the physiology of VMS is not fully understood, reproductive hormones likely play an integral role. In serum samples from the full SWAN cohort and urine samples from the DHS, lower E2 (or estrone conjugates in the case of urine samples) and higher FSH levels were associated with VMS reporting, particularly in the setting of non-ELA cycles.[29] Variants in genes that encode for estrogen receptor alpha and enzymes involved in synthesis and conversion of estrogens predicted greater likelihood of VMS. Up to 80% of SWAN women reported VMS, defined as hot flashes and night sweats occurring during the past 2 weeks, at some point during the Menopausal transition, with the highest reporting occurring during the transition from early to late perimenopause. In contrast to long-held beliefs that VMS last only a few years, frequent VMS persisted for a median of 7.4 years, with even longer durations for some women (El Khoudary *et al*., 2019). In the SWAN study analyses examining individual trajectories of VMS over the Menopausal transition (MT) found four trajectories, with women falling into approximately equal proportions across four groups. An early onset group of women had VMS early in the transition that continued after the Final Menstrual Period (FMP), but then declined. A later onset group had VMS peaking at the FMP and continuing, though declining, into their postmenopausal years. A third group had few or no VMS throughout the MT, and a fourth group of women, referred to as the "super flashers," started VMS well before their FMP that continued well into the postmenopause. These findings provide insight into different patterns of VMS experienced by women.

The SWAN's diverse cohort by El Khoudary *et al*., 2019, also provided additional insight into racial/ethnic differences in VMS. Black women had the highest prevalence and longest duration of VMS, and were most bothered by their VMS. Asian women had the lowest VMS prevalence, whereas Hispanic and White women fell between the Black and Asian groups. According to the SWAN study women in lower socioeconomic positions were more likely to have VMS, independent of race/ethnicity. Several other demographic and psychological factors were associated with VMS. Less education, smoking, greater depressive symptoms, greater anxiety, and more symptom sensitivity were all significantly related to greater subsequent reporting of VMS. Depressed mood and anxiety were also associated with

greater perceived bother of VMS, independent of VMS frequency. Women with a history of childhood abuse or neglect were more likely to report VMS over the MT.

The SWAN study threw some light and helped resolve a complex relation between VMS and body weight/fat accumulation. In SWAN, higher fat accumulation was a risk factor for VMS early in the transition (El Khoudary *et al*., 2019) but this relation reversed after women became postmenopausal, with greater fat accumulation associated with lower VMS. A similar reversal by menopause stage was noted between VMS and adipokines or inflammatory substances released by body fat (El Khoudary *et al*., 2019)

Estrogens are known to play key functions in the neurobiology of reasoning. In addition, mental disorders / symptoms and variation in the brain are related to reduced mild reasoning ability and are likely to affect postmenopausal women aged 65 years (Russell, Jones and Newhouse, 2019). Even though there is sparce and insufficient studies carried out about the association between reasoning ability and perimenopause, verbal episodic memory and task recall, speed processing and verbal criticism have also been investigated. Interesting oral reminder, as work in this area may present a risk to poor emotional well-being in the future. Decreased verbal memory in old age is normal, with many women in the postmenstrual period (Russell *et al*., 2019).Researches from a longitudinal community cohort found significant difference in performance of tasks related to verbal memory in women in early, pre-menopause menopausal transition and postmenopause (Epperson, Sammel and Freeman, 2013). Also in the SWAN study, approximately 60% of midlife women report problems with memory during the MT, yet studies of measured cognitive performance during the transition are rare. The SWAN protocol included in-person serial tests of cognitive processing speed, verbal episodic memory, and working memory in order to verify the cognitive functioning at midlife. SWAN's earlier, 4-year longitudinal analysis of the association between the MT and cognitive functioning showed a *temporary* decline in both processing rapidness and verbal periodical reasoning in the menopause transition; the decline resolved in postmenopause. The adverse MT effect was slippery, manifest as *the* absence of *a* learning effect, meaning that cognitive test scores *did* not get better with repeated administrations. Improvement with repeated testing is normative in this age range. But even in MT, test scores did not reduce—they simply did not get better during this MT stage. It is important to

acknowledge the difference between not getting better and an actual decline, which was observed in a later analysis

It can be inferred that symptoms associated with the MT, specifically VMS, depressive symptoms, anxiety, and sleep disorders, would contribute to the cognitive problems noticeable in perimenopause, however a subsequent, 6-year, longitudinal analysis from SWAN evaluating a direct relation between these four MT symptoms and cognitive functioning did not uphold this research. There was no relationship between cognitive functioning and either VMS or insomnia, but women with depressive symptoms scored lower in the domain of cognitive functioning rapidness and menopausal women with more anxiety symptoms had terrible verbal periodic reasoning. When all four symptoms were added to the models of MT stage and reasoning, the adverse effect of late perimenopause on cognitive functionig was unchanged, establishing the fact that the company of these symptoms does not account for the perimenopause learning power reduction. As the SWAN cohort aged and continued to undergo serial waves of cognitive tests, age-related cognitive decline (also known as cognitive aging) studies have been undertaken. Age-related cognitive decline is a decline in cognitive performance that can be a normal part of aging. There is debate about whether age-related cognitive decline starts in midlife. To circumvent the practice effects related to the initial two testing occasions, age-related cognitive decline evaluation started at the third cognitive assessment; starting after practice effects have abated, one can observe an actual *decline* in cognitive performance (if present).

On the whole, in the SWAN study, cognitive functioning rapidness and verbal periodic reasoning reduced with time, adjusted for MT stage, MT symptoms, diabetes, race/ethnicity, education, and attrition, consistent with age-related cognitive decline. To consider whether the menopause, apart from chronological aging, influenced cognitive decline, an alternate analysis strategy was used, gauging cognitive performance as a function of time before and after the FMP. The decline in cognitive processing speed and verbal memory per year of chronological age was almost identical to the average, between-women difference in cognitive processing speed by age at time of FMP, giving credence to the research that the reductions in cognitive functioning are not solely related to menopause, but rather, are a

function of chronological aging. However the chronological aging also begins at midlife, which is the period of menopausal transition

Suicidal rate and terrorist attacks in Nigeria are extremely high. According to Obinna in the Vanguard newspaper of May 30, 2017, doctors requires a high index of suspicious symptoms of depressive symptom and depression in patients, as about 3 percent of Nigerians are involved in suicide. This percentage makes Nigeria the 10^{th} nation in Africa when it comes to suicide. People, men and women, boys and the elderly have committed suicide in various ways, with some claiming the lives of others as they attempted suicide. Depressed people commit suicide more often than others. Suicides are more common in men than women, although many women experience depressive symptoms more than men. However, women have more suicidal bouts and are more likely to seek suicide. The report from Lund University in Sweden, Stanford University and the Centers for Disease Control and Prevention and National Center for Injury revealed that men commit suicide three times more than women in Sweden. Prevention and Control affirmed that suicidal rate in the US among men is almost four times more than that of women (Nauert, 2015). However, women have higher rates of suicide ideation and attempts. The difference has been explained by the fact that men opted for more effective methods to commit suicide than women, resulting to more suicide in men than women (Langhinrichsen-Rohling, 2015). According to this study, unlike men that will want to hide their feelings, women are more open to share and discuss their feelings when depressed. Culturally speaking, women are indoctrinated (based on societal stereotype) to freely express their emotions; this is in contrast to men that are expected to be strong, even when being faced with serious form of adversity and challenges that could make them to be depressed. Such socio-cultural teaching could also be considered as one of the factors that result into the noticed disparity between men and women.

2.1.6 PsychoEducation Training

Training in psychoeducation focused on the most effective integration of the strength of those affected by the skills identified in scientific treatment of the identified ailments. It is an effective mode of therapy for persons with mental illness and found to be productive in clinical and community settings (Sarkhel, Singh and Arora, 2020). Psycho-education is a

cost-effective interventional approach that emphasizes teaching stress-coping strategies such as goal setting, skills teaching, satisfactory goal achievement, assertiveness and communication skills.(Muriungi and Ndetei 2013). Hence it is a counseling or intervention therapy aimed at helping individuals with one or more challenges in any area of life. It encourages you to learn more about the problem or challenge and develop new life skills for prevention, growth or remedy. Compared to most counselling or therapeutic groups, psychoeducational groups are more structured, more specific and focused on leaders, creating self-confidence and improvement. Motlova, Balon, Beresin, Brenner, Coverdale, Guerrero, Louie and Roberts (2017) potray psycho-educational training as a humanistic approach to changing patterns of behavior, ideals, interpretation of events, and the perception of the lives of maladjusted people to adapt to the environment (e.g workplace, home, etc.). Inadequate behavior is perceived as a bad attempt by a person to meet the requirements of the environment. Adequate behavior is developed by assisting the individual to identify the need for change and then assisting the person to make healthier decisions. Essentially and often in practice, the therapist helps the client to better understand herself (and others), the futility of the current standard of behavior, and the need to accept alternative responses (Motlova *et al*., 2017).

Motlova *et al*. (2017) suggest that psychoeducational practices and operations take into account emotional and psychological influences and consequences. When a practitioner is involved in a behavioral change process, the practitioner must consider the psychological and emotional state of the client and actively engage with the person in developing the best actions. According to psychoeducators, behavioral change not only comes from manipulating environmental variables (such as a behavioral analysis model), but also from better developments. Understand yourself and others and practice new ways of responding. The client learns new ways of reacting and refrains from using previously unsuitable actions. It is generally understood that psychoeducation refers to education offered by people with mental illness. More generally, it is also referred to as an essential ingredient in any psychotherapeutic program and at any doctor visit. Psychological stress causes education about status or condition. The author of one of the definitions refers to diseases to point out that a person can obtain psychoeducation for physical and mental health states: for example,

breast cancer. Cancer often causes a great deal of psychological stress to victims, so psychoeducation is useful as a way to combat stress.

According to Motlova *et al*. (2017) in a broader sense, psychoeducation refers to education provided to people that are experiencing some forms of disorders that are emotional in nature. The reason for the psycho-educational approach is that with a clear knowledge of the mental state and self-confidence of individual strengths, community resources and copying capabilities, the individual is better empowered to solve the issues and contribute to personal emotional well-being. The basic principles of psychoeducation play a role in emotional and behavioral change. With a good knowledge of the causative factors and consequences of the problem, it extends individual thinking and interpretation of the problem, and this improvement definitely affects the emotions and behavior of the individual. As a result, improved awareness of causes and effects lead to improved self-sufficiency (a person who believes he / she is able to handle the situation), and increased self-esteem. This emphasises the aspect of an individual having more or better self-control. This means that the individual does not feel helpless about the situation and is more in control of self (Motlova *et al*., 2017).

Educating people about personal mental health issues can be an effective way to learn facts and learn effective coping strategies to take the necessary steps to help themselves. Psycho-pedagogy contains everything that teaches people mental issues. Mental health cannot be defined as the absence of problems, but as knowledge of what can reasonably be expected of others and yourself, as well as knowledge of what to do when problems occur. Psychoeducation is defined as the education of people with mental health problems in professional areas that serve the goals of care and rehabilitation. It contains cognitive, behavioral and supportive therapeutic elements. Education is a gradual process, and the expected results of psycho-pedagogy are part of continuity and support themselves. Therefore, psychologically growing approaches are designed to increase knowledge and understanding of diseases and treatments. Psychoeducation can be offered to patients, family members, or both. Psychoeductive models come from the combination of developmental, cognitive and educational-psychological theories. In the classroom, emphasis is placed on behavioral management theories and methods that a therapist can use to manage and change

problematic behavior. Clinical psycho-educational approaches aim to improve social behaviors, to teach individuals with problem-based social and emotional coping skills.

Psychoeducation has consequently been proved to enhance self-referral to healthcare providers by increasing recognition of symptom, as well as stigma reduction (Murungi *et al*., 2013). A person's ability to comprehend the consequences of psychostressors as risk factors can assist in reducing the incidence of these conditions in patients or the general population, and those with suitable stress management approaches may encounter potential psychostressors before they become chronic (Murungi *et al*., 2013). With reference to psychoeducation as psychological interventions for mood disorders, Rabelo, Cruz, Ferreira, Viana and Barbosa, 2021 state that they can be divided into expert and simple. Psychoeducation belongs to the second category: It is a simple therapy that focuses on diseases that have a preventive effect from all major mood disorders (Rabelo *et al*., 2021). Other authors argue that psychoeducation is not a treatment in itself, but - at least in a clinical setting - the first step in the entire treatment plan (Sarkhel *et al*., 2020). In psychoeducation, clients acquire practical and positive emotional and behavioral skills to advance their adjustment to life, to control their emotions and self-confidence. The psychological and pedagogical approach underscore the significance of education in bringing about change in unhealthy or negative emotional and behavioral patterns. Psychoeducation occurs in a variety of situations and can be performed by several professionals, each with a different weight. It can be implemented individually depending on groups, parents or families, or it can be set up, for example, for caregivers, teachers and friends. Proponents of psycho-pedagogy are convinced that psycho-pedagogy is aimed at all those suffering from mental illness or stress and that they have a right to be informed about their disorders. Regardless of one's state of mind or emotion, one should receive psycho-pedagogy if necessary.

It’s known that group psychology training is less demanding for some clients than face-to-face meetings with their psychologist. Other team members often ask really embarrassing status questions, so customers can often get a great deal of the information they need without asking. In addition, customers can benefit from the experiences of others and share their personal experiences. The feeling that you are not alone and that you have group support is

the key to creating a group as a positive experience that reduces stress and stigma, increases motivation to cope with illness / disorder, and improve self-reliance.

2.1.7. Goals of Psycho-Education Training

However, in essence, there are four broad goals that focus on most psycho-intellectual activities.

• Deliver information (when clients learn about symptoms, issues and treatment topics)

• Emotional sharing (a goal that acts as a client who encourages regular sessions or exchanges with others about their experiences and concerns)

• Supporting a remedy like any other treatment, as the professional relationship between the professional and the patient / patient will reduce regulatory and regulatory concerns.

• Helpful assistance (which involves training in areas such as correctly identifying the nature of the problem and knowing what to do with it).

A special educator stated that idea of psycho-education training is that when clients are provided with a clear understanding of their condition and personal-knowledge about their strength, resources, and social skills, such clients are more comfortable to deal with challenges, thereby contributing to emotional well-being of individuals (Motlova *et al*., 2017). Doctors are trained as teachers of life skills. It is not necessary to read the study. Instead, using learning tools such as hands books, worksheets, role-playing, role-playing, test-taking and mini-courses, mentors are in a unique position to teach the ways to bring about the needed change. Biological skills do not tell us what to do, they give strategies they have not learned in school or in the world. This collaborative approach enables participants to access the tools of behavior change, and helps clients experience the relationship-building cycle. In addition to being 'done', the provider can offer clients great opportunities to experience and test new behaviors, attitudes and skills. Entertainment can be broken only by means of different modes and powerful defenses. As Confucius says: 'Teach me, I will forget, show me, I will remember, get me involved and I will comprehend'.

Trainers offer self-help tasks rather than homework, which can be negatively linked after years of study. Self-help indicators assist clients become better resilient and responsive to participant's growth and well-being. Symptoms for self-help have changed from 'what' to 'how'. The important point is that learning is a contributing factor to emotional and behavioral change. By better comprehension of the causative factors and consequences of the problem, it enables the mind-set to expand the client's knowledge and interpretation. Understanding is also the concern and behavior of the participant. The more the client progresses in the behaviors the better the self-efficacy. Self-efficacy results to higher self-esteem: it is easy for many to be physically or mentally ill because of low of self-esteem (Sowislo and Orth, 2013).

2.1.8 Basic Needs in Psycho-Education Training

The following are some conditions for fulfilling the ideal environment for a psychosocial program to grow healthy.

• Open door policy. Regarding the frequency of patient appointments with the treatment of psychologists, the open-door policy allows for less organized appointments, but full flexibility for the availability of scheduled visits or callouts when the patient is suspected of a new episode. In fact, it would be brutal to train a patient in an early discovery without providing the patient with an early intervention source. Psychoeducation stimulates the patient to take an active stance in treating the disorder and therefore must have an active and flexible attitude as the physician.

• Team effort. Psychology makes more sense in settings where multidisciplinary team efforts are available. First, it increases one's overall availability to the therapeutic team. Second, because every suggested intervention - that is, checking the list of early warning signs, modifying a prescription, controlling your sleeping habits, or a fixed serum level of urgency to stabilize the mood - will be relevant to a professional on the team.

The therapeutic relationships are premised on trust instead of authority. This means that the therapist should be open to agreeing on a number of treatment issues with the educated psycho-educated patient. As a result, psychoactivation avoids a potential pathogenic model

of the connection between a healing psychologist and an inactive patient. Instead, it provides appropriate therapeutic connections based on collaboration, information, and trust. The patient knows that the therapist knows and the physician knows that the patient has sufficient strength and confidence, resulting in improved therapeutic relationships.

2.1.9 Interpersonal Therapy

Interpersonal therapy (IPT) is a manual and time-based psychotherapy approach in an interpersonal context that brings about symptoms relief, as well as improves the functionality of interpersonal relationships of the clients (Cuijpers, Donkers, Weissman, Ravitz and Cristea, 2016). This technique is intended to solve current interpersonal issues, rather than past issues (Weissman, Markowitz and Klerman, 2018). Since the late 1970s, American psychiatry has turned its attention to evidence-based medicine, especially randomized controlled trials. It turned out that the traditional clinical gathering was that most interventions for depressive symptoms and depression worked. The rise of antidepressants and their apparent efficacy in treating depressive symptoms and depression had to be compared to established psychotherapy. The duration of treatment with therapy control is determined by the research design, rather than withdrawing from any evidence base.

The development of IT has been studied in many research protocols for so many years. It has proven to be an effective treatment for depression and has been modified to treat other mental disorders. Studies have shown that IT is effective in the acute treatment of depression and may be effective in the prevention of new depressive disorders and in preventing relapse **(**Jidong, Husain, Roche, Lourie, Ike, Murshed, Park, Karik, Dagona, Pwajoke, Gumber, Francis, Nyam and Nwakom, 2021; Jakobsen, Hansen and Simonsen, 2012**).** IT may also be effective in the treatment of eating disorders and anxiety disorders and has shown promising effects in some other mental health disorders (Cuijpers, Donker, Weissman, Ravitz And Cristea, 2016). Since then, numerous randomized controlled trials have shown that IT is indeed effective in the treatment of depression may be more effective than other psychotherapies for depression, it prevents relapse after successful treatment of depression (Barth, Munder, Gerger, Nuesch, Trelle, Znoj, Juni and Cuijpers, 2014), it may also prevent the onset of major depressive disorders in those with subthreshold depression, and be

effective in specific target groups, such as younger adults and adults in mid-life (**V**an Zoonen, Buntrock and Ebert, 2014.), and patients with a somatic disorder (Gois, Dias and Carmo, 2014).

IT focuses on the four problem areas (stressful life events) of grief, interpersonal disputes, life transitions, or social isolation or deficits that are associated with the onset, exacerbation, or perpetuation of current symptoms, while helping patients to connect with social supports and to improve the quality of their relationships (Ravitz and Watson, 2014). Researchers and clinicians started to use IT for other mental health problems, including eating disorders, substance use disorders, anxiety disorders, and several others, since it was found effective the management of depression (Badger, Segrin, Hepworthet, 2013; Guynn, 2017). Like many serendipitous findings in science, IT has been found to be relatively effective with medication, and Aaron Beck's position as a trusted candidate for research into active treatment of depressive symptoms and depression, along with Cognitive Behavioral Therapy (CBT). Ravitz and Watson, 2014 argued that depressive symptoms or depression affect constant communication and interpersonal relationships, while it also affects the patient's marriage, family, work, and community activities. Therefore, the development of IT did not follow a conventional approach to practice.

It is mainly used as short-term therapy and maintenance therapy for patients with recurrent depression. Rajhans, Hans, Kumar and Chadda (2020) demonstrated the effectiveness of IT as a maintenance treatment and outlined some contributing factors. The underlying belief in interpersonal therapy is that psychological disturbances (such as depressive symptoms and depression) are a response to the difficulties individuals have with others. The resulting traits can also affect the excellence of these interfaces, causing a cycle. One important idea behind IT is that it is theorized that psychological symptoms can improve on dysthymic disorder, when an individual develop capacity to relate better effectively with people around (Markowitz, 2015). The benefits of IT have also been explored and as a combination of drugs for bipolar disorder. Frank, Maggi, Minnati and Benvenuti, (2009) formulated the IT section on behavioral and social rhythm therapy, thus providing interpersonal social rhythm therapy (IPSRT) for bipolar disorder.

IT can be single or group. For the IT team, patients prepared for group practice by discussing guidelines for the effectiveness of group therapy. The purpose of this training was to meet with a therapist to increase consistency, reduce early discomfort and provide inspiration from pre-treatment sessions. Like individual IPTs, problems in the IT group also fall into one or more of the four problems: bereavement, role disputes, life transitions, and disputes in interpersonal relationships. In collaboration with the patient for the second time, up to three specific goals have been created for the problem area. The decision to incorporate this level of developmental goals into IT format is based on the difficulty of keeping an individual's attention on the form of therapy and the complexity of the relationship. In group sessions, the symptoms of depression are always identified with the identified problem areas and the target of groups.

The individual model of the group generally uses the group for supportive, challenging, and motivational behaviors. Further discussion of symptoms is not recommended until after a full review of symptoms in the second session. Group environment is used to promote and explore behaviours and affective responses in personal relationships. Problems with negative relationships between members are solved by problem-solving approaches rather than using psychological interpretations. They are used to enhance current understanding of past relationships, including origins. The emphasis is on changing existing relationships and social and social contexts in the current context. Matching IT to a group format is a major challenge to make sure people have constant attention. The structure of the first four meetings ensures that all members have not only the issues that need to be discussed, but also the views of the other members. This consensus helps to develop the workplace from the beginning and encourages faster collaboration within the team as many members share issues that need to be resolved. It also helps team leaders regularly review their goals to focus on preventable issues. Moreover, the epic of the session involves the goal assessment, as well as discussion on individual personal development.

The onus of IT is structured on strategic dual principles:

• Depressive symptoms are not mental disorders, not the fault of people, or disability; ultimately, it is a treatable condition. It means explaining the problem and justifying the patient from guilt.

• Suitable for weather and living conditions. It is based on human and psychological research and stress theory.

The IT creates a practical link between patient feelings and life events that begin or result from depressive symptoms.

2.10 The nature of interpersonal therapy

Interpersonal therapy is a limited treatment that takes place in three phases: the first phase, the intermediate phase, and the final phase. The first phase requires that the designated physician identify the diagnosis (MDD) and its contents. To diagnose primary stress, follow a physician or DSM-IV (American Psychiatric Association. Diagnostic and Statistical Manual of Mental Illness, 1994) or follow the ICD-10 method and measure weight changes such as the Hamilton Depression Scale or Beck I - Depression Inventory to treat the problem as a disease, not a peculiar fault. The therapist chooses a number of collaborative actions, studying the characteristics of the patient's relationship, being able to be close and specifially to assess the current relationship. The focus on treatment comes from the latter: an important person may die (complex deprivation), there may be conflict with an important factor (the role of conflict), or the patient may undergo significant life changes; the lack of access to all of this is a human error, an uncertain duration that shows the absence of an existing life hapening.

The therapist associates the main diagnosis to the relational focus, hinting the client of the diagnosis of his or her depressive disorder, which is curable and not the patient’s fault. According to the client, stress relates to current events. For example, she stopped eating and suffered the terrible loss of her mother's death. This is called complex deprivation, which happen to be the most prevalent of all. The therapy advises both the therapist and the client to

hold the next 10 sessions to assist the client in their care. If the client is able to solve this problem, it will not only improve his life, but his condition will improve. This design describes the entire treatment (Rajhans, Hans, Kumar and Chadda 2020). The relationship between emotions and life events is real, not causal. There is no argument that this results into depressive disorder. Taking care of the patient's approval on the focus, the treatment moves to the intermediate level. Other aspects of the start-up phase include giving the patient an 'unwell character', to play which is a transient state, being aware of the fact that depression interferes with the patient's functioning and focuses on treatment parameters such as time constraints and waiting for treatment hinging on relational aspects.

At the intermediate level of treatment, the physician uses specific techniques to address those areas where focus can be difficult. This may include appropriate grief for complex deprivation, conflict resolution in the role, helping the patient to overcome the loss of his old role, and accepting a new situation or alleviating solitude for relational inadequacy. Regardless, therapy can help the patient's ability to declare his needs and desires in the workplace, to recognise anger as a normal signal and use it efficiently, to stimulate and encourage active speech and action. Positive social risk is also part of IT. In recent sessions, the doctor reminds the patient that the discontinuation is imminent; helping the patient feel confident and independent by reviewing his or her success during treatment, noting that the final treatment is self-explanatory and has positive symptoms. Since IPT is known as a cure for MDD, and there are multiple patients, physicians and patients may decide to complete treatment as planned and then to re-contract for ongoing treatment, perhaps of less intensive aspect to more serious aspect of the ailment.

The position of the IPT therapist is relaxed and supportive. The goal is to be the ally of the patient. It also aims at limiting the patient's immediate action pressure. Formalities are not given, but the purpose of solving the focus problems of interpersonal problems is to consider general tasks. The treatment focuses on the participants' external environment, and not the therapy itself. The weekly class plan focuses on the participants' real life, not the office. At the session between the therapist and the patient, what happened the previous week was reviewed. When a participant successfully exits the interstate, the therapist behaves like a motivator and encourager who strengthens healthy interpersonal skills, but when the outcome

is negative, the therapist offers empathy to help the participant analyse the situation, what wass wrong, supplies the participant with new ideas for better interpersonal relationship and acts them out with the participant to use in a real life siuation. The patient then tries them out. Given the impact of this emphasis on interpersonal interaction, it is not surprising that depressed patients with IT have learned new interpersonal skills that patients with medication have not experienced (Weissman, Markowitz and Klerman, 2018). According to therapists, events surrounding interpersonal relationships do not cause depression, but depression occurs within relationships, and it affects people's relationships and the role people play in those relationships. When dealing with communication issues, interpersonal depression therapy focuses on how symptoms are related to people's relationships, including family and companions.

2.11 Life Events

Life events can be seen as independent or dependent (Zavos, Jayaweera, Harber-Aschan and Dalton, 2021). Independent life events are for reasons beyond your control - for example, a hurricane that takes you home or away from work (Zavos *et al.,* 2021). Dependent life events are events for which you are a part (Zavos *et al.,* 2021). In general, they are more likely to cause symptoms than independent life events. One can easily overcome independent life events by communicating the negative effect on external factors, thus removing personal responsibility, making it easier to spread the negative result internally and not to internalize it (Zavos *et al.,* 2021). Negative (for example, death of a parent, or that of a close friend) or enjoyable (such as owning a car, working part-time) are stressful changes in life that are sudden and might significantly affect the mental health of a person at risk of developing depressive symptoms (Kettlewell, Moris, Cobb-Clark, CAripps and Glozier, 2020). Stressful events are classified according to their impact on life or changes in their attitudes to health or relationships (Sokratous, Merkouris and Karanikola, 2013).

Most literature findings indicate that life-related stress is significantly causally related to episodes of major depression (Asari and Lankarani, 2016). In addition, the majority of studies investigating the association of life stress to depressive episodes include occasional, explicit events and content of some duration, negative or unwanted. The correlation between

life stress and depression has also been documented in relation to stress and chronic agents (Asari and Lankarani, 2016) and life threatening and prior adverse events. In addition, longer life stress with depression, relapsed depression and depressive symptoms are deeply associated with life events (Asari and Lankarani, 2016). With high levels of risk, such as the death of a spouse or the loss of significant employment, significant life events have consistently been identified before depression develops (Keyes, Ba, Galea, Mc Laughlin, Koenen and Shear, 2014).

Studies have also shown that offensive events like divorce, social support, and marital satisfaction can also be linked to depression in both men and women (Kendler and Gardner, 2014). Men and women can also be different in some types of stress. For example, while men are more likely to suffer from depression following work-related stress, divorce, and separation, women are more likely to be affected by other SLEs, such as conflict, serious illness or death in close social networks, relational attributes such as love and family relationships, childcare and parenting (Kleinman, 2004). Men and women also differ from stress and negative statistics, affecting the contribution of SLE to the risk of schizophrenia (Michl, McLaughlin, Shepherd, and NolenHoeksema, 2013). An important part of developing emotional problems in a social context is how one can handle stressful situations. This is often referred to as coping strategy and it helps one to deal with problems and not be overwhelmed. People are often discouraged when it comes to having problems with friends, especially women. People with depression reported significantly higher hopelessness, lower self-esteem, and lower coping skills than those without depression. The inability to withstand stress can result in fewer and lesser coping techniques.

It is possible to hypothesize that the effects of SLE on major depressive disorder (MDD) may be different across populations (Ghafoori, Barragan and Palinkas, 2013). Competition may change the association between SLE and depression at each and every point. Despite high levels of exposure to SLE, black people have a lower proportion of depressive disorders, a phenomenon known as white contrast (Assari, Burgard, and Zivin, 2015). Thus, competition changes the way stress relates to the risk of depression. It has been shown that older black men may be more likely to adopt coping strategies, including positive reviews and positive expectations and hopes. While Black women may be more inclined to respect religion,

struggle, avoidance, care, social support, and emotional expression. Such race, with gender differences in coping and recognition after stress affects resilience and stress reactions. Stressful marriage has also been identified as one of the prominent social factors responsible for depression. When a marriage fails, it becomes stressful, often leading to depression among women and causing men to drown. Stressful marriages are the leading cause of depressive symptoms among women (Wessman 2001).

During menopause women experience different physical, psychological and social changes, hormone levels change as estrogen levels decrease, FSH and LH levels increase, and there are also decreases in levels of prolactin, thyroid and parathyroid hormone. These changes can cause vasomotor symptoms, night sweats, hot flushes, muscular and skeletal problems, cardiovascular system diseases, breast and skin atrophy, and senile vaginitis (Erbil, 2017)
Together with all the changes associated with menopause, many middle-aged women are often occupied with other adverse life events or challenges. These include physical disease affecting them or their husband, the death of their spouse or parents, caring for ill family members, marital difficulties, and grown children leaving home. In fact, the departure of children into leading their own independent lives may trigger depression in women (Erbil, 2017). The ability to cope with all the changes during menopause is influenced by socio demographic variables, education status, income, work situation and social relations (Erbil, 2017)
Women with positive attitudes towards menopause had a more positive body image and they experienced lower depressive symptoms. A previous study of women in developed countries by Berger noted that women's attitudes towards menopause were negative because of the loss of sexuality and attractiveness (Erbil, 2017). Menopause status in a society seems to have an impact on women's attitudes towards this life change (Erbil, 2017). Postmenopausal and older women consistently expressed more positive feelings about menopause than younger women in their forties- perimnopausal (Erbil, 2017).

Depression was positively correlated with life-event stresses and climacteric physiological symptoms and was negatively correlated with a woman's attitude towards menopause and self-concept. (Erbil, 2017) The potential effect of stress on menopause symptoms is of importance to understand: midlife is often a highly stressful time for women, with many

major life events coinciding with one another, such as parental death, children leaving home, and divorce (Arnot, Emmott, and Mace, 2021). Further, going through menopause can itself be a stressful event, as it marks a transition to a new phase of life, with many women reporting a sense of loss accompanying the end of their fertility (Arnot *et al.*, 2021)

Research has also highlighted the role of psychosocial factors or events such as changes in relationships with children, marital status, and other life events in amplifying the negative mental health impacts of ovarian hormone fluctuation. (Gordon *et al*., 2015), essentially pointing to a stress-diathesis model in which individuals exposed to psychosocial stressors are most vulnerable to experiencing mental illness in response to perimenopausal hormonal fluctuation. In line with this theory, mounting research suggests that, despite the importance of hormonal triggers, behavioral interventions are also effective in the prevention and treatment of perimenopausal mental health concerns as well as reducing the distress related to menopausal symptoms (Maki , Kornstein, Joffe, Bromberger, Freeman, Athappilly, 2019; Gordon *et al*., 2021; Meers, Dawson , Nowakowski, 2022). High levels of stress and anxiety like unpleasant life events are capable of exacerbating the symptoms of menopause and depression (Afshar *et al*., 2015). Nigeria which found a significant association between marital status, age, educational level and depression prevalence in women (Salihu and Udofia, 2016 ; Shittu *et al*., 2014). Women are more likely to have a diagnosis of major depression in the menopausal transition compared with premenopausal women (Soares, 2013: Bashar *et al*., 2017. Women, who had negative attitudes about menopause, lamented the inability to conceive children, the loss of their physical strength, the loss of feminine attractiveness, and changes in their bodies as well as their marital relationship, suffer from more depressive symptoms. Furthermore, losses in menopausal women's sexual life is related to negative perceptions of women in menopause (Erbil, 2017))

The higher prevalence of depression in post-menopausal women may also be influenced by factors like; losing the role of being a mother, husband's death, negative attitudes toward menopause, and long term menopause. Depression was also more prevalent in the female sex, amongst married people, and people with low socioeconomic status (Onya and Otorkpa 2018). Salihu and Udofia, 2016 further discovered in their research that a depressed person was more likely to be over 40 years, female, married, having low level of education and

suffering from a chronic medical condition. Lack of formal education could lead to having very stressful jobs with poorer remuneration, thereby contributing to psychological stress that could trigger off depression (Onya and Otorkpa 2018).The prevalence of depression in another study population was significantly associated with a lack of formal education among respondents (Awunor, Ntaji, Edafiadhe, Erhabor, Eferakorho, Ijirigho, Owe, Adu, Enaohwo, Umukoro and Ose-Efetie, 2018)

Many women going through the menopausal transition experience vasomotor symptoms (VMS), and research has shown that there is a large amount of variation in their frequency and severity (El *Khoudary et al.*, 2019). Many lifestyle factors have been found to co-vary with VMS, including the level of social support received by the woman, and how stressed she is (Arnot, Emmott and Mace, 2021). Stress is well documented to worsen menopause symptoms, and there is some evidence that support eases them; however, there is little research into whether support is an effective buffer against the negative effects of stress on VMS (Arnot *et al*., 2021).Stress–depression link is a key to most depression (Hammen 2015), and yet many approaches to depression do not measure actual environmental stress—or even perceptions of stress—or conceptually and concretely map out how the processing of a negative experience turns into a set of negative emotions, cognitions, behaviors, and bodily symptoms and how the findings that are observed reflect depression rather than just stress reactions. Experience of a stressful event, with little or no amount of social support, was included in the best fitting model; with the degree to which the woman was upset by the life stressor having the largest effect on menopause symptoms. Here, women who said they were currently upset by a stressful event experienced 21% more VMS than women who had experienced no life stressor. This research highlights that availability of social support may impact the menopausal transition positively

In the findings of Zhou and Chen (2017), cognitive style in the hopelessness theory of depression affects inferences about the causes and consequences of life events and their implications for the self. Negative cognitive style is defined as making negative attributions or reasoning about causes, one's self-worth, and the future consequences of Negative life events (NLEs) (Zhou and Chen, 2017). Enhancing cognitive style is defined as making positive attributions or reasoning about causes, one's self-worth, and the future consequences

of Positive life events (PLEs) (Zhou and Chen, 2017). The risk of suffering from depression increases when individuals with a negative cognitive style experience NLEs (Zhou and Chen, 2017). The possibility of remission of or recovery from depression increases when individuals with an enhancing cognitive style experience PLEs (Zhou and Chen, 2017). Negative cognitive bias increases the frequency and intensity of negative emotion, which in turn, affects depressive symptoms. Ambiguous information with respect to life events implies a mixed affective experience. So, based on research on cognitive biases and hopelessness depression, it can be inferred that affective experience is an underlying mechanism that influences the longitudinal link between life events and depression. If Neutral life events (NeuLEs) are separated from NLEs and PLEs, this will make the affective experience of NLEs and PLEs clearer, and NLEs and PLEs will affect the development of depression more directly. Individuals who have NeuLEs (which involve mixed affective experience) and focus on the negative components of the NeuLEs (individuals with negative cognitive style) will have a higher risk of depression according to the cognitive vulnerability-stress model of HD. On the other hand, individuals who focus on the positive components of NeuLEs (individuals with an enhancing cognitive style) will have a greater possibility of remission of the depression, according to the recovery model of HD. In other words, cognitive style will have a moderating effect on the relationship between NeuLEs and depression because of the ambiguous affective experience of NeuLEs (Zhou and Chen, 2017). NLEs are robust risk factors for depression and PLEs are associated with reduced risk for depression or the remission of depressive symptoms (Zhou and Chen, 2017).

2.12 Self-Esteem

Self-esteem is a person's self-confidence, self value and self respet which greatly influences the well-being of the individual (Duru and Balkis, 2014). It is a concept that reflects the emotional assessment of an individual’s worth. Self-esteem encompasses a person's self-confidence (for example, the ability to feel) and emotional states such as victory, frustration, pride and shame (Duru and Balkis, 2014). It is also the good or negative self evaluation. Researchers believe that self-esteem is of particular importance to socio-psychological

structures, which is a key element in such outcomes as learning outcomes and happiness (Yagual, 2015). It also affects certain outcomes such as familiarity, behavior, and satisfaction. Self-esteem can be used to some extent (for example, to thinking that one is a good writer and being happy with self) or to the world (for example, when one thinks one is bad and feeling bad about self). Psychologists often view self-esteem as a sign of identity (self-esteem), but short-term changes (state self-esteem) continue. Words used interchangeably with self-esteem are self-admiration, self-confidence and pridefulness. Self-esteem is a form of self-regard, a form of approval or dissatisfaction. It shows that people consider themselves competent, important, successful and worthy. High self-esteem has been shown to be important for life transition, but low self-esteem leads to poor social adaptation (Hickman, Bartholomae and McKenry, 2000). While low self-esteem has been linked to a number of risks for mental health (Sowislo and Orth, 2013), high self-esteem has been shown to have a protective role, helping people to cope with potential risks, such as negative feedback, setbacks, or other sorts of failures

In menopause, self-esteem is the menopausal woman's decision and attitude towards menopause. Menopausal transition has been related to a number of health impairments and variability of symptoms women experience as a result of hormone changes (Jenczura, Czajkowska, Skrzypulec-Frankel, Skrzypulec-Plinta, Drozdzol-Cop, 2018). These, in turn, can affect self-esteem and life satisfaction (Dabrowska and Dabrowska, 2021). Women with a higher severity of vasomotor symptoms and experiencing stress, report lower self-esteem and also the severity of psychological symptoms was found to decrease the self-esteem of menopausal women (Dabrowska and Dabrowska, 2021). Włodarczyk and Dolińska-Zygmunt (2017) showed that women with high intensity of psychological, vasomotor and somatic menopausal symptoms had lower self-esteem. Lower self-esteem is identified as one of the most common negative symptoms during this menopause transition (Dabrowska and Dabrowska, 2021). Self-esteem is an essential component of well-being, an important factor of emotional and social adjustment, and is defined as an individual belief that one is a "good enough" and valuable person (Sowislo and Orth, 2013. People with lower levels of self-esteem appear to be more susceptible to negative effects such as anxiety, lack of satisfaction, lower body esteem and depression (Mangweth-Matzek., Hoek, Rupp, Kemmler, Pope and

Kinzl, 2013). Reduced self-esteem may put menopausal women at higher risk for negative outcomes of menopause and result in a more unpleasant and stressful menopausal experience (Quiroga, Larroy and Gonzalez-Castro, 2017).

Body image is a person's perception of their physical self and the thoughts and feelings, positive, negative, or both, which result from that perception (Cash and Smolak, 20112). The menopausal transition is also related to weight gain and increases in central adiposity (Dabrowska and Dabrowska, 2021). Additionally, menopausal women often have a negative body image, which in turn correlates with low self-esteem while high self-esteem helps with coping with the transition through the menopause (Dabrowska and Dabrowska, 2021). Body image is correlated with menopausal symptoms of women during menopause. Therefore, it seems that interventions aimed at relieving the annoying symptoms of menopause can help to improve their body image. Also, body image could be influenced by some socio-demographic factors which should be considered in menopause health promotion programs (Nazarpour, Simbar, Majd, Torkamani, Andarvar and Rahnemael, 2021). There is evidence to suggest that women's interpretation of their menopausal experiences relates to their attitude towards menopause and body image. For example, women with a negative attitude towards menopausal physical changes, like weight gain, think that the physical changes in menopause makes them less sexually desirable (Séjourné, Got, Solans, Raynal, 2018). A negative attitude towards menopause is associated with body dissatisfaction, self-objectification, appearance-related aging anxiety, and lower perceived attractiveness during the menopausal transition (Rubenstein and Foster, 2013).

A study on 350 women in menopause showed that 74.4% of them feel losing attractiveness after menopause (Hakimi, Nazarpour, Ramezani Tehrani, Simbar, Zaiery, 2017). Therefore, menopausal symptoms are associated with a negative attitude about attractiveness, low self-esteem, and body image (Pearce, Thøgersen-Ntoumani, Duda, 2014). This study Dabrowska and Dabrowska (2021) showed a negative correlation between the numbers of children with lower limbs body image. It seems that the high number of children associate with a high number of vaginal deliveries may lead to a negative lower body image. The study of Dabrowska and Dabrowska (2021) also showed that married women have lower scores of body image comparing to single/widow/separated women. It was reported that married women are more unsatisfied with their bodies comparing to single women (Garrusi and

Baneshi, 2017). Menopausal symptoms can have influence on body image of women in menopause. Postmenopausal women's education, employment, income, and housing ownership are positively correlated with body image. These factors are the indexes of women's empowerment and so women empowerment can improve body image and self-esteem. In addition, women who were satisfied with their physical appearance experienced fewer troublesome symptoms, and there was a significant association between fewer menopausal symptoms and high self-esteem (Grogan, 2016). A negative attitude towards the menopausal transition and high levels of concern about body image may be due to women perceiving the relationship between the menopausal transition and aging as synonymous, and the feeling of being invisible and less sexually attractive. The results of this study are consistent with the literature. In middle age, when women lose their reproductive ability, their body esteem tends to decline.

Research shows that poor body image is common among middle-aged women (Olchowska-Kotala (2017)) and that there is a direct relationship between quality of life and body satisfaction at this stage of life. In a study conducted by Olchowska-Kotala (2017) body esteem in midlife women was predicted by body mass index (BMI), optimism, self-esteem, and menopausal symptoms. Although BMI was the main predictor of body esteem in middle-aged women, global self-esteem was more strongly related to feelings about appearance and physical condition than feelings about body size. Séjourné, Got, Solans, Raynal (2018) observed that dissatisfaction with body image was significantly higher in the perimenopausal sample compared with its premenopausal counterpart. In addition, the level of body image esteem in the postmenopausal sample was close to the premenopausal level, even though there was no statistically significant difference of the scores of body image dissatisfaction between the postmenopausal and the perimenopausal samples. This suggests that body image dissatisfaction reaches a maximum during the perimenopausal phase, before returning to a level nearly identical between the premenopausal and the postmenopausal phases

Self-esteem is not considered as a fixed one-spot construct, rather than a construct that is operating on a continuum, which could range from low to high; which is often indicated by attributes such as self-doubt, anger suppression, self-criticism, social isolation and shame (Duru and Balkis, 2014). Depression is one of the issues of mental conditions that have to do

with low self-esteem includes (Duru and Balkis, 2014), presumably among women that are in peri-menopausal stage in various villages and farm settlement. Self-esteem protects people from feelings of inferiority when they are new and maintains a good balance between norms and perceptions. So, self-esteem triggers the reaction to negative reactions, such as depression and irritability, when a person is dealing with a traumatic event or event such as the one that happens at the transitioning phase of menopause.

2.2 Theoretical Framework

2.2.1 Integrated Helplessness/Hopelessness Theory

This theory of depressive symptoms is a fusion of both these modified notions of learned helplessness (Abramson, Seligman and Teasdale, 1978) and the concept of hopelessness Abramson, Metalsky, and Alloy, 1989). According to Liu, Kleiman and Cheek (2015) the development of depressive symptoms could be theorized that stressful developmental milestone interacts with vulnerability in cognition of an individual; and thus, render an individual helpless and/or hopeless. It is this state of helplessness and/or hopelessness that bring about depressive symptoms. The onset of stressful events or change, such as peri-menopausal issues could link and/or impair the cognitive capacity of a woman, thereby making such woman to develop depressive symptoms.

One theory of psychological vulnerability is the idea of depressive symptoms. Mental vulnerability is called patterns of negative thoughts and wrong information processing. In individuals who develop this weakness in the presence of negative life events, they contribute to the development of depressive symptoms (Liu *et al*., 2015). The view was suggested by people with intellectual disabilities (loss, failure, and useless belief systems). There is a greater chance of developing signs and symptoms of depression after life's adverse events than people without mental disorders. When activated, these misconceptions lead to misinterpretations of events that lead to an overly optimistic view of themselves, the world, and the future, and thus lead to the development of depressive symptoms (Liu *et al*., 2015)

In their review of the helplessness/ hopelessness theory of Abramson *et al*., 1989, Liu *et al*., (2015) suggests that depression is caused by internal, stable and global symptoms of negative

events and unstable external attributes and attributes. Besides, negative life events, current problems, and coping skills are associated with depression. Negative social perceptions when we compare ourselves negatively are associated with depression. Self-esteem emerges as a flexible mind as it serves as a barrier to depression, otherwise it would be expected that the contents of the mind and cognitive processes would be suppressed. Milgron, Hirshler, Reece, Holt and Gemmill (2019) pointed to the fact that if one fails to receive the needed support in any of the tasking developmental milestone, one is predicted to exhibit symptoms of depression.

Abramson, Alloy, Hankin and Haeffel (2002) suggested combining depression based on hopelessness theory with approval/withdrawal theory of Davidson (1994) of depression. Liu, *et al*., (2015) in reviewing hopelessness theory of Abramson *et al*. (2002) emphasizes the importance of cognitive processes in the fields of biology, care, and treatment of depression. According to this view, people have depression that is associated with depression that causes depression. In particular, according to the concept of expectation, people become weakened as they often produce interpretations of future traumatic events and negative consequences. Development of depressive symptomss that has to do with hopelessness is a bye-product of negative interpretations of bio-environmental changes and events which itself is proximal and sufficient in triggering hopelessness and depression consequentially. This is suggested to be a theoretically derived subtype of depression characterized by symptoms like inadequate energy, apathy, stunted initiation of feedbacks and sad affect). These findings provide strong support for the concept of despair and highlight the important role that cognition plays in stress formation ((Liu *et al*., 2015)).

In the sense of depression based on this theory (Abramson *et al*. 1989), people with global traits are more negative and predict worse outcomes for those who begin to become depressed than others developing depression. Future and postmodern perspectives suggest that people with negative thinking styles may be depressed ((Liu, *et al*., 2015)). Abramson *et al*., (2002) have suggested the combination of depression and depressive model into evidence that depressed mood represents cognitive, affective, and behavioral. The system looks empty. From this point of view, cognitive decline and decreased activity on the left are the

most common or common aspects of postpartum depression (or, for example, depression) (Nusslock, Shackman, Harmon-Jones, Alloy, Coan and Abramson, 2011).

Overtly, in the explanation of depressive symptoms using the reviewed hopelessness theory (Liu *et al*., 2015), people develop a stable, global symptoms, negative personality traits, at the occurrence of adverse events are prone to have depression than people who do not display bad reasoning. Evidences based on various scholarly opinions of psychologists suggest that people who manifest sadistic habits tend to be more aggressive and prone to depression (Abramson *et al*., 2002). Abramson *et al*., (2002) suggest the combination of hopelessness theory and the withdrawal archetype of depression, stating that despair, the anticipation, victims with negative reasoning are susceptible may potray the reasoning, feelings and open actions of a nonfunctioning network. From the viewpoint of this assertion, following real or perceived negative events, there could be an upsurge in the expected response (e.g. depression) (Nusslock *et al.*, 2011). Although, for a negative events behavioural reaction, such as depression, it needs to be emphasised that the level of severity could account for difference in depressive symptoms and how prolonged these symptoms could go.

From a cognitive perspective, when sensitive people experience stressful events, they create negative statements about the future and about self-esteem. These demonstrations lead to frustration in pursuing present and future goals, and interrupt activities that focus on symptoms of activity and depression. In this context, intellectual weakness is associated with life stress to predict impaired target behavior and increased symptoms of apathy or stress (Lukasiki, Waris, Soveri, Lehtonen and Laine, 2019). Scholars have made effort to test the theoretical propositions made by Abramson *et al*., with results showing that this theoretical framework is valid in establishing issues around the concepts of depression. Researchers have tried to revalidate the scientific hypothesis developed by Abramson *et al*; (1989) while such scholarly efforts have confirmed the major propositions made by Abramson on the development of depressive symptoms (Abramson *et al*., 2002). For example, Lukasiki *et al*. (2019) found that cognitive impairment from hypothesis testing experiments is associated with stress to predict change in target behavior. And more importantly, the link between vulnerability-stress and goal-directed behavior is mediated by frustration. There are also

many other instances where the key elements of this theoretical framework had been confirmed.

In summary, the relationship between negative inferential styles, negative life events, and depression changes notably once the individual's cognitive style becomes trait-like in nature. Building on the reformulated helplessness theory, the hopelessness theory reduced the prominence of causal attributions, instead characterizing negative inferential styles as involving three forms of inferential tendencies in response to a negative event: (1) inferring stable and global causes (rather than unstable and specific causes) for the event, (2) inferring negative consequences of the event, and (3) inferring negative self-characteristics. a negative favorite style also works when there are negative events in life. Therefore, people tend to create unhealthy lifestyles in the presence of adverse events in life that lead to depression.

2.2.2 Life Events Theory

Following a careful and comprehensive review of some critical life events (about 43), after examination of Life-Change-Units (LCUs), Holmes and Rahe (1967) developed this theory of life event. They hypothesized that the average number of adaptive measures needed to cope with an event would be a useful indicator of the severity of the incident. Based on the opinion of Roohafza, Ramezani, Sadeghi, Shahnam, Zolfagari and Sarafzadegan (2011) in their review of Holmes and Rahe (1967) theory of life evens, is another important point in the stress-based perspective. In this model, stress is interpreted as an impact, life event, or predisposition that can cause normal and / or psychological reactions that may increase a person's risk for the disease. From a motivational perspective that is based on motivation, this approach is considered, with a greater focus on stressors. Every important episode should have its own needs, whether they are physical, social role or function, which forces human resources to react or respond to stress. The research question confirms the link between stressors and outcomes, including disease. The disease is expected to depend on the magnitude of human change in life.

Rahe proposed a linear correlation between change in total life and biological/physical illnesses such that a threshold value of life-change intensity may exist which once exceeded

could suggests pathogenicity for the LCU total in direct correlation to its magnitude. A linear relationship is assumed between life-change score and onset as well as severity of illness. It proposed that the higher the life changes or adaptive requirement, the higer the susceptibility or dropping of resistance to illnesses; and the higher the illness that one will experience. This proposition is further expounded into the proposition that disease occurrence and behavioural maladaptation (e.g. depression) of an individual is patently premised on negative life-change events, as such events are capable of emiting defense mechanism that could be faulty, illogical and portray helplessness.

According to Roohafza *et al*., (2011) in their review of theory of life events of Holmes (1978), there are 43 life events or lifestyle changes that can cause stress. According to this theory, both positive and negative life events are stressful. Based on this theory, stress occurs when a situation requires more resources than is available. This theory agrees with the view that the occurrence of certain events in life can have an impact on the physical and mental health of the individual. His research aims to formulate specific life events that cause stress. According to this theory, stress seems to be dependent on the individual's incidents since the incident brings behavior and adaptive responses. According to this theory, stress is derived from the experience of life, which in turn affects and changes a person's life. This reflects the negative pressure that can hurt the journey of daily life.

Today, research continues in this line of thought, but it is often flooded with a number of shortcomings. One of the primary disadvantages is the use of mean weights for events, ignoring that a different individual may have a completely different perception of the same type of event. In addition, studies often rely retroactively on previous challenges that cannot be mentioned or distorted as a result of defense mechanisms. Furthermore, adaptations and changes in social media are often not sufficiently examined. The degree to emphasize the objective nature of stress in contrast to one's self-representation is still under discussion.

2.2.3 Identity Theory of Self-esteem

In 2002, Cast and Burke proposed identity theory of self-esteem. According to the theory, personality traits can give a theoretical framework for combining different concepts of self-

expression. As the authors point out, self-evaluation is the essence and necessity of self-evaluation that includes both the individual and the group. Determination of identity checks builds on the value of one's dignity and confidence that comes with holding it. Self-assessment, conducted through self-assessment, avoids the misconception that occurs during care and allows continuity and overcoming in internal structures during disruption and change. The desire for self-esteem, a part created by self-determination, ultimately disrupts the group by inspiring people to form and maintain a defining relationship. Self-esteem has two components, competence and importance (Gecas, 1982; Gecas and Schwalbe, 1983; cited in Cast *et al*., 2002). Higher skill level (self-efficacy) refers to the number of people who consider themselves competent and effective. Measuring importance (self-esteem) means that people feel important (Cast and Burke, 2002). This article introduces the concept of self-esteem, which consists of three conceptualizations (outcome, self-help, and cache) in the form of associations or comparative order of personality traits. Although conceptualizations are correlated, the relationship between different perceptions of self-doubt is uncertain.

According to the concept of personality, a large number of individuals self-disclose the various areas of a person in a larger social environment. The sense of a person's place or position is also impactful on the self-esteem of a person. Identity occurs when personal pronouns are associated. Therefore, once people have identified and verified their name, they simultaneously create and redefine the characteristics of the original relationship. This concern is based on the interpersonal dimension rather than the cultural dimension, which traditionally defines the cultural dimension of relational identity. Cost and Burke (2002) have found that personality tests increase self-worth and importance and enhance self-esteem. When individuals are able to create group identity by changing or manipulating meaning in the context of their specific meaning, confidence can be enhanced by this effective action. Examining the identity of the group in the individual’s group also creates confidence because group identity means acceptance and approbation. Alternatively, the lack of group self-monitoring is an inconvenience of individual groups and is not allowed. It is also recommended that self-assessment be a form of prevention. If people cannot prove their identity, self-esteem is a successful attempt at self-care from the need for boxing or self-care

(when self-control is compromised), thereby preventing insecure recognition. Although the situation is protected and protects from danger, respect is imposed or diminished. Self-assessment is like 'power. Like any other tool, self-confidence can be restored, but it loses its usefulness. Here, the self-assessment tank is filled with successful tests and used after the self-evaluation process. Like everything else, respect is very strong, but it also responds to social change. If these changes result in satisfaction problems, cooling down the energy will reduce the chances of self-esteem.

Finally, theories suggest that people seek to maintain or enhance their level of confidence by designing structures or an associated opportunity for self-esteem (Swan, 1990). People are looking for opportunities (and groups that give them) to review their identity and avoid problematic situations and self-evaluation (and groups) that might entice it. These attempts are helpful when it comes to maintenance and management of self-esteem. It could be viewed as construct that has to do with self-motivation, organization and giving direction for behaviour. These efforts are quite useful for maintenance of individual and group or collective self-esteem.

2.3 Empirical Review

2.3.1Psycho-Education Training and Depression in Women

A study conducted by Murungi (2013) effort was made to examine whether psyho-education sessions for some individuals could be effective on depressive symptoms. The outcome variable was measure using severity, suicidal ideation, hopelessnesss, substance abuse risk and anxiety. The study was conducted at Kenya and samples selected from different parts of Kenya. After sampling the participants, the experimental group had one thousand, one hundred and eighty-one (N=1181), while the control group consist of one thousand, nine hundred and twenty-six (N=1926) participants. Well validated self-administered questionnaires were the instruments of data collection for this study. A total of 16-hour sessions on psychoeducation were organized for the participants in experimental group. After 6 months of treatment, the experimental group and control group were statistically significantly different. Psychoeducation was effective in reducing depressive symptoms of

the participants. In another qualitative study randomized controlled trial (RCT) carried out among British South Asian women on depression and how a culturally adapted intervention could be efficacious in treatment of this ailment. In order to access the opinions of the participants, the researcher obtained data from seventeen women (N=17) using in-depth interviews (IDI) method. The main focus of the interview was to accumulate information on how acceptable, feasible and useful this intervention. The result of the IDI revealed that participants considered this intervention as feasible, acceptable and effective in treatment of depression and stress; and thus, increase the attitude, behaviour and self-confidence of the participants.

In a study in Ibadan, Oyo state Nigeria, Busari (2015) examined how mindfulness–based cognitive therapy (MBCT) could be impactful on depression of outpatients. The study has a total sample of 32 male and female participants, with average age of 18 years. Beck Scale for Suicide Ideation (BSS) was the screening instrument used, while Beck Depression Inventory–II (BDI–II) served as outcome instrument. Pre-Post experimental design was employed in this study. Analysis of covariance (ANCOVA) was used to analyse the data collected from the participants; and this analysis was to test the four hypotheses raised at 0.05 levels of significance. Before and after the treatment, the researcher measured the depressive symptoms of the participants. Based on the self-report of the participants, depressive symptoms of participants decreased significantly from severe to mild level after the therapeutic sessions. However, no such decrease was observed in the control group. As for this population, MBCT was efficacious in reduction of depressive symptoms of outpatients.

Moreover, Casanas, Catalan and Casas (2012), using a randomized controlled trial (RCT), recruited two hundred and forty-six (246) participants which were physicians that had been attending to patients with depressive symptoms for over twenty years across Barcelonan primary health care centres. The researcher administered a twelve-week psycho-educational programme to the experimental group consisting of 119 participants, but control group received no treatment as usual. The patients being taken care of included 85 patients who had mild depression while the remaining had moderate depression. The posttest score was obtained immediately after the program and a follow up measure (9 months) after the program. A statistically difference was discovered between experimental and control groups

at both posttest and follow up phases. The psycho-education group improved significantly at short and long term.

Scholars have conducted meta-analysis on the efficacy of psychoeducation as regards depression and related constructs; and one of such study was done on distress by Donker, Griffiths, Cuijpers and Christensen (2014). The researcher concentrated on its effect on depressive symptoms, anxiety and psychological distress. The researcher searched and selected nine thousand and ten abstracts, which also included four hundred and thirty-six previous meta-analyses that had been conducted. However, the researcher considered 32 papers as being eligible for inclusion as set out by inclusion criteria. Targeting depressive symptoms and psychological distress, five journals met the criteria of inclusion. The reviewers could not find any randomized controlled trials (RCT) for anxiety. In order to obtain relevant references, the researchers included nine systematic meta-analyses reviews. On the basis of this screening, 15 full text journals were selected for more evaluation. However, in the final analysis, none was included. The researchers discovered a Cohen's d or standardized mean difference in the effect size of treatment which was significant between the experimental and control groups in the posttest phase. To get the effect size, mathematical calculation of subtraction of post-test average score of the experimental group from the average score of the control group. This was then divided by the standard deviation which was pooled from the two groups. Accordingly, the researcher pegged effect sizes of 0.8 as large, 0.5 as moderate and 0.2 as small. At 0.05 levels of significance, psychoeducation was able to account for a significant difference in expression of depressive symptoms of the participants; as psychoeducation led to significant reduction in depressive symptoms, mental challenges and other ailments measured. Sizes of effects from all dependent constructs for the journals were between 0.07 (not significant) to 0.61 (significant).

Psychoeducation program had also been found to be effective in the management of depression of suicidal out patients who attempted suicide in the previous year in a control randomised study by Henrion, Courtet, Arpon-Brand, Lafrancesca, Lacourt, Jaussent, Guillaume, Olie and Ducasse (2020). The 10-week psychoeducational programme was administered on 10 patients in the PEPSUI group on scientific information on suicidal

behavior from depressive symptoms, while the 10-weeks relaxation programme in a naturalistic setting was administered on the 8 patients in the control group. Participants in each group finished an interview on their general impressions about the therapy process and views on suicide. Interviews were coded using inductive and deductive analysis. Both groups reported acquisition of stress management skills and distress tolerance. However the PEPSUI group had deeper implications for daily living through effective positioning towards internal events as a result of mindfulness-derived practices.

In another study by Onuoha, Obi-Nwosu, Nnorom and Aigbiremhon (2021) in which participants are Twenty-four (33.3% males and 66.7% females) HIV and Diabetes patients of a hospital in Ogidi; 54% were diabetic patients while 45.7% were HIV patients. Ages of participants were between 18 years to 60 years with a mean age of (38.7) and standard deviation of (10.3); The design of the study was pretest, posttest. Beck Depression Inventory was used to collect data while Independent T test was used to analyse data. The result showed that ill patients who received psychoeducation showed significantly lower depressive symptoms compared to those in the control group at t (22) =-8.53, sig (.001), $p<.05$ levels of significant

Green, Donegan, Frey, Fedorkow, Key, Streiner and McCabe (2019) in evaluating the effectiveness of cognitive behavioral therapy for depressive menopausal symptoms (CBT-Meno) which is a combination of psychoeducation and cognitive behavioural strategies for vasomotor and depressive symptoms, anxiety, sleep difficulties, and sexual concerns was used in comparison with a waitlist condition (no active intervention). The randomized controlled trial was conducted with 71 perimenopausal or postmenopausal women who were seeking treatment for menopausal depressive symptoms. At baseline, 12 weeks postbaseline, and 3 months post-treatment, blind assessments were conducted. Scores on the Hot Flash Related Daily Interference Scale (HFRDIS) and Beck Depression Inventory (BDI-II) were regarded as primary outcomes while scores assessing vasomotor and sexual concerns on the Greene Climacteric Scale (GCS-vm, GCS-sex), the Montgomery-Åsberg Depression Rating Scale (MADRS), Hamilton Anxiety Rating Scale (HAM-A), Pittsburgh Sleep Quality Index (PSQI), and the Female Sexual Function Index (FSFI) were taken as econdary outcomes. There were significant statistical improvements in CBT-Meno compared with

waitlist in depressive symptoms (BDI-II; $P = 0.001$, $\eta^2_P = 0.15$) and other physiological disturbances.

2.3.2 Interpersonal therapy and Depression in Women

A comprehensive meta-analysis of all randomized trials examining the effects of IT for all mental health problems was conducted by Cuijipers, Donker, Weissman, Ravitz and Cristea (2016). The study conducted searches in PubMed, PsycInfo, Embase, and Cochrane were conducted to identify all trials examining IT for any mental health problem. There were 11,434 participants in the 90 studies IT for acute-phase depression had moderate-to-large effects compared with control groups (g=0.60; 95% CI=0.45–0.75). No significant difference was found with other therapies (differential g=0.06) and pharmacotherapy (g=–0.13). IT in subthreshold depression significantly prevented the onset of major depression, and maintenance IT significantly reduced relapse. IPT also had significant effects on eating disorders. In anxiety disorders, IT had large effects compared with control groups. From evidence, IT was not found to be less effective than CBT. In conclusionIT is effective in the treatment of depression and also effective in the prevention of new depressive disorders and in preventing relapse.

An empirical study conducted by Ikuburuji, Makinde and Olusakin (2022) assessed and managed proneness to suicide some individuals in Lagos state. The study adopted the Quasi-experimental pretest, post-test control group design. Multi-stage sampling procedure was used to select a sample size of 66 individuals comprising of thirty one (31) males and thirty five (35) females. The instruments used to obtain data for the study were Life Attitude Scale Short Form (LAS-SF), Beck Depression Inventory (BDI) and Modified Scale for Suicide Ideation (MSSI). At 0.05 levels of significance, the pretest and post test scores were analysed using Analysis of Covariance (ANCOVA). The study showed that Interpersonal Therapy and Dialectical Behaviour Therapy significantly reduced depression among the individuals both male and female that were prone to suicide. Suicide Ideation reduced significantly among the group exposed to the Interpersonal Therapy and Dialectical Behaviour Therapy than the control group

Bass, Neugebauer, Clougherty, Verdeli, Wickramaratne, Ndogoni, Speelman, Weissman and Bolton (2018) in a randomised controlled trial compared group interpersonal therapy for depressive symptoms to treatment as usual among rural Ugandans. A follow-up study of trial participants was conducted in which the primary outcomes were depression diagnosis, depressive symptoms and functional impairment. At 6 months, depression symptom and functional impairment scores respectively 14.0 points (95% CI 12.2–15.8; $P < 0.0001$) and 5.0 points (95% CI 3.6–6.4; $P < 0.0001$) for participants receiving the group interpersonal psychotherapy were lower than the control group. Similarly, depressive symptoms among those in the treatment arm (11.7%) was significantly lower than those in the control arm (54.9%) ($P <0.0001$). Participation in a 16-week group interpersonal therapy intervention showed a continuous substantial mental health benefit 6 months after completing the formal intervention.

Summary of findings and assessment of the certainty of the evidence

For a reanalysis of the effectiveness of interpersonal therapy in reduction of depressive symptoms, Spinelli, Endicot, Goetz, Segre (2016) found no significant difference between interpersonal therapy for depression (IT) and a parenting education program (PEP) control condition for the treatment of prenatal depression in a randomised, single blind controlled clinical trial. 75 of the 110 study participants were women with moderate depressive symptoms. **T**he longitudinal analysis did not reveal a significant interaction of treatment group and visit (ie, treatment response variation), but then the IT group had significantly lower depression ratings than the PEP group at week 8 (respectively, P = .008 and P = .046); these scores remained low but lost significance versus those for the PEP group at week 12 due to attrition and smaller sample size. Post hoc analysis showed significant illness improvement and less illness severity for the IT group at weeks 8 (P = .007 and P = .003, respectively) and 12 (P = .003 and P = .012, respectively), whereas the PEP group remained relatively unchanged during the study. The results of this reanalysis revealed that among women with moderate levels of depression severity, IT is markedly more effective than PEP.

In another study conducted by Jidong, Husain, Roche, Lourie, Ike, Murshed, Park, Karik, Dagona, Pwajoke, Gumber, Francis, Nyam and Nwakom (2021), on a systematic review of

psychological interventions for maternal depression among African and Caribbean women. The review strategy was formulated using the PICo (Population, phenomenon of Interest, and Context) framework with Boolean operators (either or not) to ensure rigour in the use of search terms. Five databases were searched for published articles between 2000 and July 2020. 13 studies met the inclusion criteria, and the relevant data extracted were synthesised and thematically analysed. Analysis of data included studies produced four themes, including promoting parenting confidence and care for self; efficient mother–child interpersonal relationship; culturally appropriate maternal care; and internet-based care for depression. Among African and Carribean women, culturally- adapted psychological interventions was recommended. Considering the low-income and economically disadvantaged situation of the depressed women in this minority group, a practical approach was integrated with the enhanced interpersonal therapy (IT) intervention to cater for basic and to enhance access to sustainable social services which were some of thr crucial parts of the intervention. Findings from the Enhanced IT intervention reveal its efficiency in reducing depression, and enhancing social performance.

A study by Umoh and Iruloh (2021) examined the effects of Interpersonal Therapy and Acceptance and Commitment Therapy in reducing mental health disorder among participants (both male and female) in Rivers State. The quasi-experimental design was adopted for the study. A sample of 60 participants was drawn using purposive sampling technique. A-24 item standardized instrument on fear and avoidance titled Liebowitz Social Anxiety Scale (LSAS) was used to elicit information on social interaction from the participants. Using the Cronbach alpha, the reliability of the instrument was established at a coefficient of .867 and .890 for the 2 subscales. Data obtained was analysed using mean, standard deviation and paired t-test. Result from the study showed that both psychotherapeutic techniques effectively mental disorder in participants.

In a study by Pigeon (2009) where depression was the outcome variable and the effects of Interpersonal therapy for depression was used, whereby a cohort of sexual abused women were the participants. The researcher used insomnia subscale (Hamilton Rating Scale) to measure depression. A total of 106 sexually abused women were sampled for the study. The study involved childhood sexual abuse (CSA) and recurring depression. It contained a pilot

(n=36) which is uncontrolled. This was subsequently randomized into a controlled trial (n=90) which were exposed to treatment on IPT; but this was compared to the treatment as usual group. According to the data submitted by the participants and monitored by the researcher, it was seen that there was reduction of depression. Insomnia was endorsed by 95 women (90%) on the clinical interview that was structured using DSM IV at baseline. Conclusively, participants in the treatment group, regardless of ailment (either depression or insomnia) significantly affirmed that IT was effective than the treatment as usual.

In another study involving women with depressive symptoms as a result of childhood abuse histories which was conducted by Duberstein, (2018), an adapted trauma version of interpersonal therapy (IT) was used in treatment program. The researcher compared the effectiveness of Clinical therapy (CT) to IT. CT was delivered by clinicians based on their choices. One hundred and sixty-two women, representing 54% were selected. The participants with a depressive episode categorized as major (MDE) with sexual abuse history before 18 years were randomly assigned to IT or CT. The treatment group on IT received 16 sessions, while the other group also received 16 sessions of clinical therapy. To determine the efficacy of the treatments, the researcher used indicators such as remission of depression, improved depression and symptoms of post-traumatic stress disorder and improvement in social health. The measures were taken twice (8 months and 20 months). The analysis of effect was done with the use of weighted genelarised estimating equations. Basically, treatment using IT proved to be effective in reducing depression, posttraumatic stress, social health, depressive remission, following the completion of 16 session treatment. At 8 months' point and 20 months' point, the result of the study revealed that IT and CP produced similar enhancements in depression and its remission. With similar results for depression, there is greater chance that IPT could be a better treatment that can bring about the needed enhancement in the management of depression.

2.3.3 Life Events and Depression in Women

Assari (2015) examined the impact of stressful life event on the depressive episodes among different tribal groups. In order to obtain result for the study, the researcher obtained National Survey of American Life (NSAL) data from the one gathered in 2003. The data consisted of

five thousand and eight black and eight hundred and ninety-one non-Hispanic white participants. After the analysis of the data, the result revealed that stressful life event was significantly related to depressive episodes for both black and white respondents. SLE did significantly interact with tribe or race in determining depressive episodes, but not for women. In another study by Moazen, Zadeh, and Assari (2016), it was discovered that although psychological distress could predict significantly the level of major depressive disorder (MDD) in colour and non-colour people, such level of significance diminishes and even disappear over time. According to these authors, 15 years could be enough to eradicate the level of depressive symptoms observed as a result of life events, especially among people of colour. The authors (Moazen-Zadeh and Assari, 2016) summarized that in the future, especially among black residents, psychological measures of depressive symptoms could be subjective and unable to have better accurate accounts of MDD.

In a longitudinal study comprehensively conducted by Overbeek, Vermulst, Graaf, Have, Engels and Scholte (2010) and aimed at establishing evidence that positive life events influenced mood disorders of adults. The study specifically collated data on life-course that are considered erratic in 1997 and 1999 which means 2 waves, among four thousand, seven hundred and ninety-six participants. These participants were from ages 18 to 64 years. Data on the prospective-epidemiological study, code named "NEMESIS" was used. NEMESIS contains a national adult data on life events and DSM-III-R. The result of the data analysed revealed that life event, either positive or negative, determines the prevalence of attributes such as depression; with path analysis of the data showing that negative event predicted depression, mood disorder, irritability and many other negative attributes when considered longitudinally. The researcher confirmed from the analysis that the impact of negative life events on these negative psychological health issues could only be mediated or mitigated by positive live events; nonetheless, the individual will still have prevalence of depression, irritability and mood disorder. Moreover, the researcher affirmed that even certain positive life event that is not well-handled will subsequently lead to negative psychological outcomes, such as depressive symptoms, especially in the context of life course that is highly erratic in patterns.

Another study which was aimed at investigating life events as it correlates with depression of adolescents was conducted by Yue, Dajun, Yinghao and Tianqiang (2015) in some countries. The study was actually a meta-analysis involving seventy-one samples that are independent. Besides this, the researcher also explored the inter-correlation among variables employed in the studies selected for meta-analysis. Following the use of fixed effect model, it was reported that life events significantly associated with the depression rate of the adolescents that participated in the study. Moreover, the observed correlation between life event and depression was significantly mediated by cultural background, life event type and gender of the adolescents. Based on the result revealed by the researchers, gender difference was significantly obvious as female had more experience of depression as a result of life events. Adolescents in western countries do not experience depression as a result of life events unlike the adolescent participants in non-western country such as China. In terms of life event type, the scholars discovered that critical events of life do not influence depression when compared with trivial life issues of the adolescents across the countries. Moreover, the researcher could not ascertain the influence of ways measuring or instrumentation on relationship between life events and depression of the participants used in the studies. Subsequently, the scholars concluded that depression is a major outcome of life events; but this could be mediated by type of life-event, cultural background, gender, as well as non-implication of measurement of daily events on depression of adolescents.

In another related study on depression that came from hopeless decision that emanate from life events. This study was conducted by (Zhou, 2017) with the specific examination of affective experience of university undergraduates' life events. The association that this life event consequential affective influence has in relation to hopelessness depression was thoroughly examined within the context of university undergraduates. In carrying out the study, three hundred and one student participants were asked to report their life experiences, affective influences of such events and depression over a period of twelve weeks. Firstly, after the data analysis, the researcher could notice that there is an inherent link between the independent and dependent variables. Specifically, there was promotion of negative affective influenced depression by life events that are reported negative, whereas, the level of affective influenced depression by positive life events was significantly reduced to the barest

minimum. When considered together, cognitive style, affective influence and hopelessness mingled with neutral life-events to determine depression of the undergraduate students. The researcher submitted that this study corroborates application and implication of hopelessness theory of depression.

According to the finding of a seventy- one sampled independent studies conducted using meta-analytical method by Li, Dajun, Yinghao and Hu (2016) to assess the relationship between depression and life events of adolescent shows that life events are correlated with depression positively. In another meta-analytical examination of twenty-five studies on how negative life events influence depression in elderly persons by Kraaji, Arensmann and Spinhoven (2002), it was revealed that almost all negative life events seemed to have substantial affiliation with depression. In an empirical study conducted by Ouyang, Gui, Cai, Yin, Mao, Huang, Zeng and Wang (2021) on a study of the adverse life events, subjective well-being and depression of 1,096 female individuals. In the study, the mediating role of depression in the association between adverse life events and the female partiipants, as well as the perceived social support were included. The results revealed that depression mediated the association between stressful life event and subjective well-being. The result presented a link between depression and negative life events of the female individuals, though it was an indirect link.

In another empirical study by Sokratous, Merkouris and Karanikola, 2013 on prevalence of depressive symptoms and its relationship with the self-reported adverse life events among some individuals in Cyprus, a descriptive correlational design with cross sectional comparison was used. The CES-D and LESS instruments were used to measure depression and life events respectively among 1,500 participants. The findings revealed that there was significant difference between the severity of life events and depressive symptoms, especially among the female gender. The conclusion is that the severe the negative life event, the worse the depressive symptoms in the participants. An empirical study conducted by Horacek, Rozehnalova, Rosslerova and Ales (2010) on the depression and treatment response development viz-a-viz the influence of life events that are stressful in higher age population. In the study, the researcher collated data from 3184 participants. From the study it was

discovered that the patients recorded less stressful life events related with symptoms of depression.

The empirical study carried out by Silva, Loureiro and Cardoso (2015) between 2004 and 2014 on the impact of life events revolving around the sociodemographic and economic factors of individuals on the mental health of the individuals. There was PubMed literature search to find studies carried out from 2004 and 2014 on the impact of sociodemographic and economic factors on the mental health of the individuals. The studies altogether were 150. The most common sociodemographic factors revolving around life situations and events like low income, not living with a partner, lack of social support, female gender, low level of education, low income, low socioeconomic status, unemployment, financial strain, and perceived discrimination were found to be significant on depression and its management

.

2.3.4 Self-Esteem and Depression in women

The empirical study of Enike, Anazonwu, Okafor and Ugwuja (2021) on social support, self-esteem, and religiosity as predictors of Depression, used a purposive sampling and a survey design to select 450 individuals. Relevant inventories were used to collect data from participants on self-esteem, depression, social support and religion. At the end of the study, a positive and significant relationship was found between self-esteem and depression. In conclusion, self-esteem was found to help in depression control ($r=.896;p<0.05$)Furthermore, in an objective comparism, in various situations and circumstances, lesser self-esteem is responsible for prevalent level of depression, unlike high self-esteem (Roy and Baumeister, 2016). Even when its mediating effect is either directly or indirectly measured, there is avalanche of evidence which emphasises the fact that the role of self-esteem in depression remains consistent and present among various samples. Human happiness to a significant extent is a function of level of self-esteem. While this assertion is maintained in many empirical studies, that happiness is a function of self-esteem, the causative impact has not been fully established in studies. Likewise, on the effect of stress on happiness and depression, various studies have supported the fact that higher level of self-esteem is a buffer.

Whereas, many studies have suggested that this conclusion may not be true after all because low self-esteem could be useful and indeed lead to having happiness in good time. In a nutshell, the majority of studies that confirmed the influence of self-esteem on happiness and its depression reduction capacity, also noted that human behaviour is complex and multiple; and hence, there could be variation, which would not be significant at the end, especially when issues such as delinquency and crimes, as well as prevention and rehabilitation are factored in the study.

The results from a longitudinal research, conducted by Orth, Robins, Widaman and Conger (2014) investigated the association of poor self-esteem with depression in six hundred and seventy-four participants. In the wave 1, participants were members of families that are of Mexican origin whose kid is attending public school or catholic sponsored schools. Such a kid must be one with functioning status with support from being vulnerable of lesser self-esteem. Such lesser self-esteem was discovered to be factor that makes such children at risk of developing depression. The study was established that this lesser self-esteem could be responsible for the academic incompetence noted in the study, rather than peer relation and physical appearance. In the same vein, the scholars affirmed that global-domain self-esteem, which focused on general examination of one's worth, should be critically focused because the study confirmed it to be more influential that the domain-specific self-esteem which fragments components of self-esteem as a unified construct. Besides, honesty by trustworthiness model of domain-specific self-esteem is the only aspect that could be said to be an explanatory factor of the construct even when male and female participants were either relatively or jointly examined and compared; the same result can also be seen in adolescents in the cross country study, as well as various puberty status levels. Furthermore, when certain factors (such as stress events, social support, victimization and parental depression) are modeled into the theorization, self-esteem also had significant interactive effects on the dependent variable as reported by the participants. Based on the finding of the study, honesty- trustworthiness was related to self-esteem, being a domain-specific construct.

In another study conducted by Schone, Tandler and Stiensmeier (2015) to examine the correlation between contingent self-esteem (CSE) and self-reported depressive symptoms (DS). a study sample comprising of one thousand eight hundred and eighty-eight (1888) male

and nine hundred and forty-two (942) female German participants from 26 locations. The research instrument being a questionnaire was dully filled by the participants. The respondents were made to fill the questionnaire without any influence, especially from their families. After the data analysis, the researchers discovered that as hypothesised self-esteem significantly served as risk factor for the development of depressive symptoms of the respondents. The study further showed that unlike participants with high self-esteem, people with lower self-esteem are psychologically prone to developing depression at a faster rate.

A longitudinal study carried out by Mu, Luo, Reiger, Trautwein and Robert (2019) on the connection, when neuroticism is controlled for, in-between depression and self-esteem, with a sample size of the pooled data set 2512 of which 64% were females. The result shows that self-esteem had a significant connection with depression. Self-esteem was found in predicting depressive symptoms. In the study of Maxwell (1992) among some selected troubled individuals on hostility, self-esteem and depression. Over the space of 10 weeks, 27 participants were using hostility, depression and self-esteem inventory. The study discovered that self-esteem moderated depression as participants with greater depression have less self-esteem and greater hostility.

An empirical study was carried out by Eberi, Winkler, Pawelczack, Trobitz, Rinck, Becker and Lindenmeyer, (2018) examined self-esteem in forecasting the sequence of therapy in patients with depression among some German participants. Participants were nine males and twenty-two females receiving CBT for depressive disorders in a clinic located in some areas of Germany for 4 months, self- esteem was found to predict depression at all stages. The result showed an inverse relationship between self-esteem and depression. This means that lower depression could be traced to higher self-esteem; and vice versa. The conclusion is that the higher the self-esteem, the lower the depression. Also considering an empirical finding by Farmer and Kashdan (2014) on instability of self-esteem and affection in the daily lives of people with generalized Social Anxiety Disorder (SAD) and depression, the researcher collected data over a period of two weeks from forty depressed and anxious adults and thirty-nine healthy that served as the control. Thee participants provided reports of their affect and self-esteem each day. Those with SAD and depression demonstrated negative affect and depression than the healthy control.

Also in a longitudinal study that was carried out among 201 sampled participants as regards the development of depression, Hennksen, Ranoyen and Stenseng (2017) considered the role of self-esteem. The data for the study is from the sampled participants. The base line study self-esteem and depression were investigated by means of self-report. Analyses showed that high self-esteem at baseline predicted less symptoms of depression. This result highlights the relevance of global self-esteem in the treatment of emotional problems

2.4 Conceptual Model for the Study

In this study, a conceptual model is developed around the interventions with a view of improving depressive symptoms among menopausal rural farmers in Ibadan less city, Nigeria. Psychoeducation training and interpersonal therapy are the two interventions packages to be used in the study. These packages are referred to as the independent variables because they are the variables that were manipulated by the researcher in order to determine their effects on the dependent variable which is depressive symptoms in menopausal rural farmers.

The intervening variables are of two types, the first order variable and the second order variable, the primary and the secondary intervening variables. The first order (primary) intervening variables is the organismic factor that is associated internally with the menopausal rural farmers, include self-esteem and age. The second order (secondary) intervening variable are the in-organismic factor which are external, this include the life events and socio-economic status, having external influences over the menopausal rural farmers.

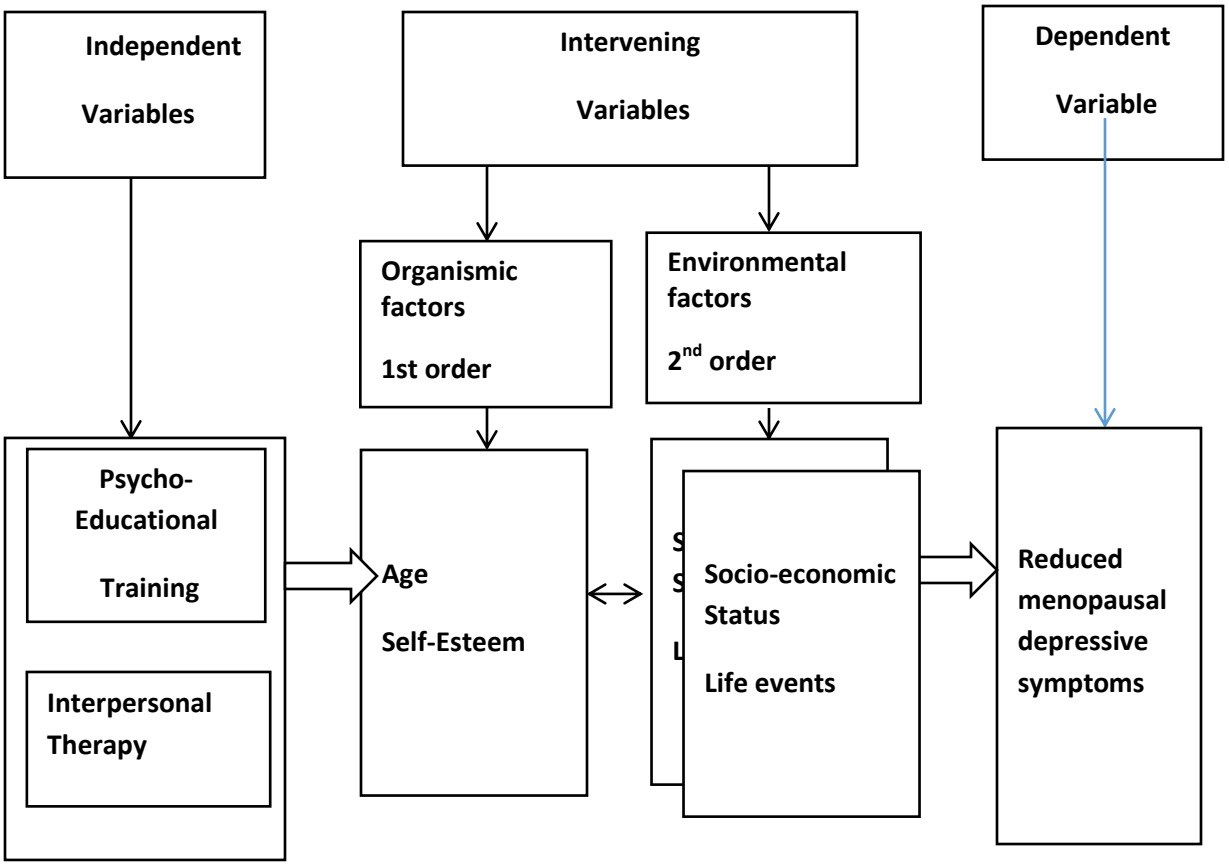


Figure 2.1: Conceptual Model for the Study

CHAPTER THREE

METHODOLOGY

This chapter was about the methodology and technique employed in order to carry out this study scientifically. It focuses on how the study was executed. It covers the following sub-heading: research design, the study area, population of the study, the sample and sampling techniques, the inclusion criteria, the instruments, the procedure for administration and the method of data analysis.

3.1 Research Design

This study is a pretest-posttest, control group quasi experimental design with a 3x2x2 factorial matrix. The column consists of two experimental groups: psychoeducational training (PT) and interpersonal therapy (IT) and the control group denoted by A1, A2 and A3 respectively. The two experimental groups were subjected to therapeutic sessions while the control group was not subjected to any form of treatment. The columns accommodated the moderating variables (life events and self-esteem). Life events vary at two levels; favourable (positive) and unfavourable (negative) while self-esteem varies at two levels low and high. The design is presented in Table 3.1

Table 3.1: Factorial Matrix Table for the Study

Treatments	Life Events				**TOTAL**
	Favourable (B1)		Unfavourable (B2)		
	Self-Esteem				
	H.S.E (C1)	L.S.E (C3)	H.S.E (C1)	L.S.E (C3)	
PT (A1)	6	5	5	1	n = 17
IT (A2)	3	5	4	4	n = 16
CG (A3)	4	5	3	3	n = 15

KEY:

PT-Psychoeducation Training

IT-Interpersonal Therapy

CG-Control Group

FLF- Favourable Life Events / Positive Life Events

ULF-Unfavourable Life Events / Negative Life Events

HSE-High Self-Esteem

LSE-Low Self-Esteem

3.2 Population of the Study

The population of this study consists of peri-menopausal rural farmers in three selected rural communities; Ido, Akinyele and Ona-ara Local Government Areas of Ibadan. The ages of the respondents are between 40 and 55 years. They are into poultry farming, planting of crops, processing and sales of farm produce and processed products.

3.3 Sample and Sampling Techniques

The multi-stage sampling procedure was adopted for the study.

At stage one; the simple random sampling technique was used to select three Local Government Areas – LGAs (Ido, Ona-ara and Akinyele LGAs) out of the existing six LGAs in Ibadan less city.

At stage two, the purposive sampling technique was used to select three LGAs, based on the availability of established female farmers' groups.

At stage three, the settlements with established female farmers' groups and the female farmers in each selected LGAs (Alabata – 64, Ajobo – 72, Butubutu – 82) respectively were purposively selected. Note that each settlement has only one established female farmers' group in each selected lGA.

At stage four, the perimenopausal farmers as identified by the irregularity of their monthly menstrual flow (Alabata – 32, Ajobo – 37, Butubutu – 42) were purposively selected.

At stage five, the perimenopausal farmers were screened with the Patient's Health Inventory ($\alpha = .772$) for depressive symptoms and those who scored 10 – 20 reference point were selected and randomly assigned to Psychoeducation, PT (17), Interpersonal therapy, IT (16) and control (15) groups respectively.

3.5 Inclusion Criteria

Inclusion criteria for this study are:

1. Individuals were identified as female rural farmer, age range 40-55 years

2. The rural farmers were peri-menopausal i.e. experiencing irregularity in the pattern of their monthly cycle (menstruation) but the seizure of the monthly cycle, was not up to twelve months (12) months at a stretch.

3. The irregularity or seizure of their monthly cycle was not due to surgery.

4. The peri-menopausal rural farmer scored within the range of 10-20 on the Patient Health Questionnaire (PHQ-9).

5. The individuals were able to respond to Yoruba or English language and showed readiness to participate in the study

3.6 Instrumentation

The Patient Health Questionnaire (PHQ-9) by Fann (2005) was used for screening. Thereafter the under listed validated instruments were used for data collection.

1. Beck Depression Inventory-II (1988)
2. Life Event Questionnaire for female farmers by the researcher (2017).
3. Rosenberg Self-Esteem (Rosenberg, 1965).

The Patient Health Questionnaire (PHQ-9)

This was adapted to screen the participants for depressive symptoms. The Patient Health Questionnaire(PHQ-9) by Fann (2005) is a self-report measure that asks if the subject had been bothered by the following problems in the past two (2) weeks: (a) *little pleasure or interest in doing things*, (b) *feeling down, depressed, or hopeless*, (c) *sleeping too little or too much*; and so on. The symptoms measured were to be rated by the respondents on how frequent the symptoms are observed on a scale of one (not at all) to four (nearly every day). All the dichotomous items like item 2, 3, 5 and 8 were split into two, making 13 items altogether. Scores were based on the sum of the 13-item scores. Kroenke, Spitzer, Williams (2001) recommended that a series of 5–9, 10–14, 15–19 and ≥20 will be used to classify the

participants as mild, moderate, moderately severe and severe in depression, respectively. The instrument was translated into Yoruba language and pilot tested with 15 menopausal rural farmers at Idowu oko in Akinyele LGA. The reliability index of the test is 0.772 cronbach alpha.

The instrument has four sections: Section A is bio-data information of the participants, section B is Depressive Symptom questionnaire, section C is Life Events Scale and Section D Self-Esteem Scale. The experts in the department of linguistic and African languages of the University of Ibadan did the Yoruba language translated version of the instrument, before pilot testing and revalidation. No existing translation of this instrument into this language was known to the researcher when this study was conducted.

Section A: Research designed demographic questionnaire to obtain bio-data information of the participants.

Section B: Depression Scale

To ascertain the depressive symptoms of the participants in pretest and posttest stages, the researcher made use of BDI-II, which is a self-report instrument. Twenty-one items are on this measure of depression. The symptoms were to be rated based on the participant's experience in the last two weeks preceding the administration of the test. Items on the scale include statements: "*I am sad all the time"; "I feel my future is hopeless and will only get worse"; and so on.* When administered on student and patients' samples, Beck, Steer, and Brown (1988) confirmed that the scale has sufficient internal consistency. As suggested in the manual published by the developers, a normal score is between 1-10; a "Mild Mood Disturbance" score is 11-16; a "Borderline Clinical Depression" is 17-20; a "Moderate Depression" is between 21-30; a score of 31-40 is named "Severe Depression" while "extreme Depression" represents scores above 40. All participants of this study scored above 21 which indicate that they are at least reasonably depressed prior to the beginning of the treatment programme. The researcher had earlier received the translated inventory into Yoruba language by the experts in the department of linguistic and African languages of the University of Ibadan and undertaken the re-validation of the instrument by pilot–testing it on

another group of menopausal rural farmers, among the various others who attended Agro-farming system workshop in the Forestry Research Institute of Nigeria (FRIN), Jericho, Ibadan. A revalidation process and a reliability index of 0.95 was obtained for the scale using the test–retest technique.

Section C: Life Events Scale

In measuring the life events of the menopausal rural farmers, the researcher developed the Life Event Questionnaire (LEQ) by conducting a focus group discussion with menopausal rural farmers, from three (3) areas, in Ibadan, namely; Ibusogboro, four (4), Oluyole LGA Onigambari, six (6), Oluyole LGA and Jankata, Iddo LGA six (6) making a total of sixteen (16) menopausal rural farmers. Fifty (50) items ranging from health to emotional to physiological to family and to job related issues were generated. The researcher pilot tested the questionnaire on twenty (20) menopausal rural female farmers, different from those who participated in the FGD. The researcher finally came up with 27-items yielding a reliability index of 0 .71. Since life events are diverse and vary so much, at the end of the questionnaire a space was provided to mention any other life event not included in the questionnaire. On the Life event scale respondents marked the life events or changes which have occurred during the past years and with the impact of the event on a 5-point scale, ranging from: Not applicable, Less effect, Some effect, moderate effect and Great effect. Items on the scale include statements like *major personal illness and injury, poor sales of farm products, erratic climate change, death of spouse, major land disputes, menopause, problems of insecurity* and so on. FGD provided a deeper understanding of the series of major life events that are stressful to menopausal rural farmers and really contributed to depressive symptoms. Also, it guarded against closed-ended questions that might have limited the feedback that could have been gained from the menopausal rural farmers in terms of their life events. It also gave the researcher the ability to capture deeper information more economically than individual interviews.

Section D: Self-Esteem Scale

To assess the Self-Esteem of the menopausal rural farmers, the self-esteem scale constructed by Rosenberg (1965) was adapted. The original scale consists of ten (10) items with items answered on a 4-point scale from strongly agree to strongly disagree. The scale consists of five (5) positive items *like' I am satisfied with myself', 'I take a positive attitude towards myself,' 'I do feel comfortable even when I am opposed* 'and five (5) negative items like: *At times, I think I am no good at all; etc*. The instrument was adapted for the study, the researcher included four (4) other items needed and expunged item eight (8) of the original scale because it was not found reliable after the pilot test. The adapted scale consists of thirteen (13) items. Four (4) items included are: My life has been worthwhile, I have feelings about my attitude towards others, I often ensure my ideas must be accepted by others, I do feel comfortable, even when I am opposed. The scale was pilot tested amongst twenty menopausal rural farmers, among the various others who attended Agro-farming system workshop in the Forestry Research Institute of Nigeria (FRIN), Jericho, Ibadan. The reliability index is 0.71

3.7 Procedure

The researcher obtained introduction letter from the department to the local authority to gain approval. Upon, receiving ethical approval from the Department of Social Sciences, University of Ibadan and approvals from the local heads, the researcher trained research assistants (a number of Masters' degree students of Guidance and Counselling department, University of Ibadan). The training the research assistants received was about the filling procedures of the questionnaire that was involved and how to administer the questionnaire on the participants to elicit response. The screening instrument was administered on the participants with the help of the research assistants, who guided the menopausal rural farmers in filling the screening instrument. The research assistants gave instructions on where to thumb print, while the researcher went through the questions and also guided in filling questionnaires before and after the treatment package for depression. The researcher began by asking each participant what language participants will prefer to use. Based on the

responses, the researcher proceeded to the informed consent and the instrument with the participants in the language the participants best understood, which is the Yoruba language.

Thereafter there were training sessions respectively with the participants. The study was carried out in four phases: Pre-sessional and orientation stage, Pretest stage, Treatment stage and Posttest stage. The pre-sessional activities include the screening, recruitment and assignment of participants to the two (2) experimental groups and 1 control group. Also, the researcher intimated the participants with the study. The pretest stage is the stage when the researcher administered the instruments which are depression scale, self-esteem scale and life events scale before the treatment. Treatment stage is the stage when the participants (only those in the two (2) experimental groups) were exposed to the ten (10) therapeutic sessions. Participants in group 1 were exposed to ten (10) sessions of psychoeducation training and those in group two were exposed to ten (10) therapeutic sessions of interpersonal therapy. The posttest stage is the stage when the participants were exposed to the same instrument that was given at the pretest stage after the successful completion of the therapeutic sessions. Adequate arrangements were made in organizing a suitable venue for the training sessions of the menopausal rural farmers. The researcher made provisions for incentives in forms of light refreshment, gift items, transport fare and remunerations for punctual and regular participants throughout the sessions to motivate the participants for consistency and cooperation. Each experimental group received ten (10) training sessions on either psychoeducation training or interpersonal therapy each as outlined. The time allotted to each session was one (1) hour per week. The control group did not receive any type of treatment but was exposed to three (3) sessions of thirty minutes each on Importance of Tree Planting

3.8 Summary of Treatment Packages

Experimental Group 1: Psychoeducation Training

The goal of Psychoeducation Training is to improve knowledge and coping skills in participants, enabling the participants to work more effectively to address the challenges of living with depressive symptoms in this developmental human life-span stage.

Session One: General orientation and administration of instrument to obtain pretest scores

Session Two: Elucidating on the concept, menopause - symptoms and causes

Session Three: Briefing on the symptoms and causes of depression in menopause

Session Four: Discussion on problem solving skills training and communication skills training

Session Five: Explanation on self-assertive skills training.

Session Six: Experimentation of the above listed trainings in the fourth and fifth sessions.

Session Seven: Discussion on diet and nutrition

Session Eight: Explaining and taking practical classes on physical exercises and relaxation therapy

Session Nine: Role play by participants

Session Ten: Revision of all activities in the previous session and administration of instrument for post treatment measures.

Experimental Group 2: Interpersonal Therapy

The participants in this experimental group were exposed to IT. This therapy (IT) was administered to these participants in order to assist in improving skills that have to do with interpersonal and intrapersonal communication. This therapy could help promote the network of social support and realistic expectations to deal with the depressive symptoms and to weather interpersonal storms. The immediate goals of treatment are rapid management of depressive symptoms, as well as social adjustment improvement. The long-term objective was to help menopausal rural farmers having depressive symptoms to make the needed adjustments.

Initial Stage: Sessions 1, 2, 3 & 4

Session One: General orientation and pretest scores instrument administration

Session Two: Educating the participants about, menopausal depressive symptoms

Session Three: Having participants accept their depressive symptoms and legitimize the need for intervention

Session Four: Making suggestion that participants still work and socialize as much as possible. That menopausal depressive symptom is a real condition, not weakness, but that while it is being worked on, the partiipants need to stay active and not cave in or withdraw.

Middle Stage-Session-5-8

Focusing on the four areas of interpersonal problems proposed by Klerman, select one and work it through, with each area serving as a possible back up: This is the "meat" of IT

1. Interpersonal Role Disputes

2. Role Transitions

3. Grief

4. Role deficits

Session Five: Identification or clarification of the interpersonal problem areas of the participants. Note that all participants are assumed to be having problems with role transition i.e. menopausal transition

Session Six: Division of participants into three groups and briefings on problem areas to discuss and how it affects the psychological wellness of the participants, resulting to depressive symptoms so as to foster participant's cooperative learning and communicative skills.

Session Seven: Fostering interpersonal skills and need for mutual respect where negative relational themes are noticed.

Session Eight: Rendering assertive skills training to patients through role play.

Final Stage: Sessions 9-10

Session Nine: Pulling together what was learned, cheering participants for improved interpersonal skills and offering sympathy for poor interpersonal skills demonstrated by participants, preparing for termination and understanding that upsurge of symptoms is normal and does not mean that the menopausal depressive symptoms is necessarily recurring. Reassurance is necessary.

Session Ten: Revision of all activities in the previous sessions and administration of instrument for post treatment measures

Control Group

Session 1

Topic: Administration of Pretest Instrument

Session 2

Topic: Giving a talk on the importance of Tree Planting.

Session 3

Topic: Administration of posttest instrument on the 8th week.

3.9 Ethical Consideration

To ensure that the study adheres to the professional and legal obligations, ethical approval was obtained from the University of Ibadan Ethical Review Committee (ERC) before the commencement of the study

Confidentiality of Data

In order to maintain confidentiality of participant's information in terms of responses supplied, participants remained anonymous. Names were not attached to any of the responses participants supplied.

Voluntariness

At any point in the study, the participants were given the freedom to withdraw from the study, if they feel like.

3.10 Control of Extraneous Variables

Extraneous Variables are those factors or constructs that may influence or interfere with the outcome of the experimental study apart from the intervention programme. To guard against this possible influence of these constructs, the following steps were taken by the researcher which includes: appropriate randomization of participants into groups (two interventions and one control groups), inclusion criteria adherence, and the 3x2x2 factorial matrix design was effectively used, as well as accurate usage of the Analysis of Covariance (ANCOVA) statistical tool.

3.11 Method of Data Analysis

Data was analysed using Analysis of Covariance (ANCOVA) because of the involvement of Pretest and Posttest. To test hypothesis 1, ANCOVA was adopted to analyse the post-test scores of the participants on their level of depressive symptoms using the pre-test scores as covariate to ascertain if the post experimental differences are statistically significant. The Scheffe post-hoc analysis was further employed to know the significant differences in the treatment groups and control. For hypothesis 2, the ANCOVA was used to test the main effect of the moderating variable (self-esteem) on the dependent variable (depressive symptoms of menopausal rural farmers). The self-esteem scale consists of ten (13) items with items answered on a 4-point scale from strongly agree to strongly disagree. The negative items were on point 1to 4 marks, while positive items ranged from 4 to 1 mark. The highest obtainable is 52 and lowest is 13. A mean score from 34 and below is high self-

esteem while 35 and above signifies low self-esteem. Hypothesis 3 utilised ANCOVA to ascertain the significant main effect of the moderating variable (life events) on the dependent variable (depressive symptoms) of menopausal rural farmers. The life event scale contains 27 items on a 4-point scale from less effect to great effect; the mark assigned to each item is 1 to 4 respectively, when the even is applicable. The highest mark attainable is 96, while the lowest score is from 27 below, since some items might be non-applicable. The mean score for negative life event is 38 and above, while 37 and below represents positive life events. For hypothesis 4 the ANCOVA was used to test the significant interaction effect of treatment (independent variables-IT and PT) and the moderating variable (self-esteem) on the dependent variable (depressive symptoms of menopausal rural farmers). Hypothesis 5 made use of the ANCOVA to ascertain the significant interaction effect of treatment (independent variables-IT and PT) and the moderating variable (life events) on the dependent variable (depressive symptoms) of menopausal rural farmers. For hypothesis 6, the ANCOVA was used to determine the significant effect of the moderating variables (self-esteem and life events) on the dependent variable (depressive symptoms of menopausal rural farmers). Hypothesis 7 employed the ANCOVA to ascertain the significant interaction effect of treatment (independent variables-IT and PT) and the moderating variables (self-esteem and life events) on the dependent variable (depressive symptoms) of menopausal rural farmers. Descriptive statistics like simple percentage and chart were used to analyse the information that was collected on the bio-data of the menopausal rural farmers.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the results obtained in the study, discussing the result of the study in two parts. The first part presents the descriptive analysis, while the second part is done based on the pretest analysis and the posttest analysis of the seven hypotheses formulated for the study.

The descriptive analysis of the result;

Table 4.1: Socio demographic characteristics of Respondents

Variables	Freq. (%)	Variables	Freq. (%)
LGA		**Marital Status**	
Ido	17 (35.42)	Single	5 (10.4)
Akinyele	16 (33.33)	Married	22 (45.8)
Ona-Ara	15 (31.25)	Separated	12 (25.0)
Age		Widow	9 (18.8)
40	1 (2.1)	**No. of Children**	
41	5 (10.4)	1	7 (14.6)
42	8 (16.4)	2	7 (14.6)
43	3 (6.3)	3	6 (12.5)
44	5 (10.4)	4	10 (20.8)
45	3 (6.3)	5	7 (14.6)
46	4 (8.3)	6	8 (16.7)
47	5 (10.4)	7	2 (4.2)
48	8 (16.7)	8	1 (2.1)
49	5 (10.4)	**Crops Planted**	
50	1 (2.1)	Legumes and Cereals	3 (6.3)
Marriage Type		Tubers	10 (20.8)
No Marriage	5 (10.4)	Vegetables	15 (31)
Monogamy	10 (33.3)	Processing	4 (8.3)
Polygamy	33 (56.3)	Spices and Berries	16 (33.3)

Table 4.1 indicates that 35.42% of the respondents, which represents the first treatment group (Psychoeducation training), are from Ido local government area, while Akinyele local government ranked second in number (Interpersonal therapy) with 33.33% of respondents and the control group Ona-ara has the least percentage of respondents with 31.25%. The implication is that the number of respondents, who participated in the study from the local government areas are not equal but the disparity is minimal (17 from Ido LGA, 16 from Akinyele and 18 from Ona-ara). The age range of the respondents is between 40 and 50 years. Age 48 has the highest frequency of 16.7%, followed by ages 41, 44, 47 and 49 with 10.40% each. Both age 40 and 50 have the least with 2.1% each. The implication is that most of the respondents that are peri-menopausal among the female farmers are between ages 44 and 49 years. 45% of the respondents are married, 25% are separated, 18.3% are widowed and 10.4% are single. The largest percentage are married, this is not surprising because the peri-menopausal age is an advanced age, in which a woman has attained the marriageable age. This is followed by those who are separated from their spouses, whether legally or not, this is an indication that a failed marriage can be an indicator of depressive symptoms in women.

A high percentage of the respondents 47.9% have no formal education, 31.3% have primary education, 16.70% have secondary education, while just 4.2% have NCE. By implication, the majority are non-literates, this shows that farming is a job that can be practiced easily without formal education. Regarding respondents' marriage type, 56.3% are into polygamy, 33.3% are into monogamy, while 10.4% do not have any form of marriage. This implies that the rural farmers' husbands married more than one wife. This may be a life event leading to depression or vice versa. Polygamy itself may have impact on self-esteem, which has an inverse relationship with depressive symptoms. In like manner, not having entered into any form of matrimony at the age of 40 can be really bothersome to a rural menopausal farmer leading to depressive symptoms. On information regarding the number of children of respondents 20.8% of the respondents have four (4) children, 16.7% have six (6) children, 14.6% have 1 child, 2 and 5 children respectively. The least percentage (2.1) has 8 children.

33.3% of respondents are involved in panting spices and berries like tomatoes, pepper and onions, 31.3% plant vegetables like all kinds of leafy green vegetables, cucumbers, carrots, cabbage etc., 20.3% plant tubers like cassava, potatoes and yam, 8.3% are involved in processing of farm products like soya bean milk, pap, palm oil processing, while 6.3% respondents plant legumes and cereals like maize, beans, soya etc.

Table 4.2: Selected Sample Size of the female farmers Population

Selected Settlements with Female Farmers' Groups in LGA	Total number of menopausal rural farmers	No of menopausal women with depressive symptoms	% of menopausal farmers with depressive symptoms
Group 1 Ajobo	37	25	71.85
Group 2 Alabata	32	23	67.57
Control Butubutu	42	37	88.09
Total	111	85	100

Table 4.2 presents the results of the Patient Health Inventory (PHI) screening instrument for depressive symptoms in the three rural local government areas. In Alabata, Ajobo and Butubutu there are 32, 37 and 42 menopausal rural farmers in the female farmers' groups respectively. With the administration of the PHI as screening instrument, 23, 25 and 37 menopausal rural farmers in Alabata, Ajobo and Butubutu respectively scored high for depressive symptoms (reference point 10-20) representing 71.85%, 67.57% and 88.09% repectively. The result shows that depressive symptoms, as a mental disorder is common in menopausal farmers in each of the rural area, hence, the need for interventions to reduce the depressive symptoms.

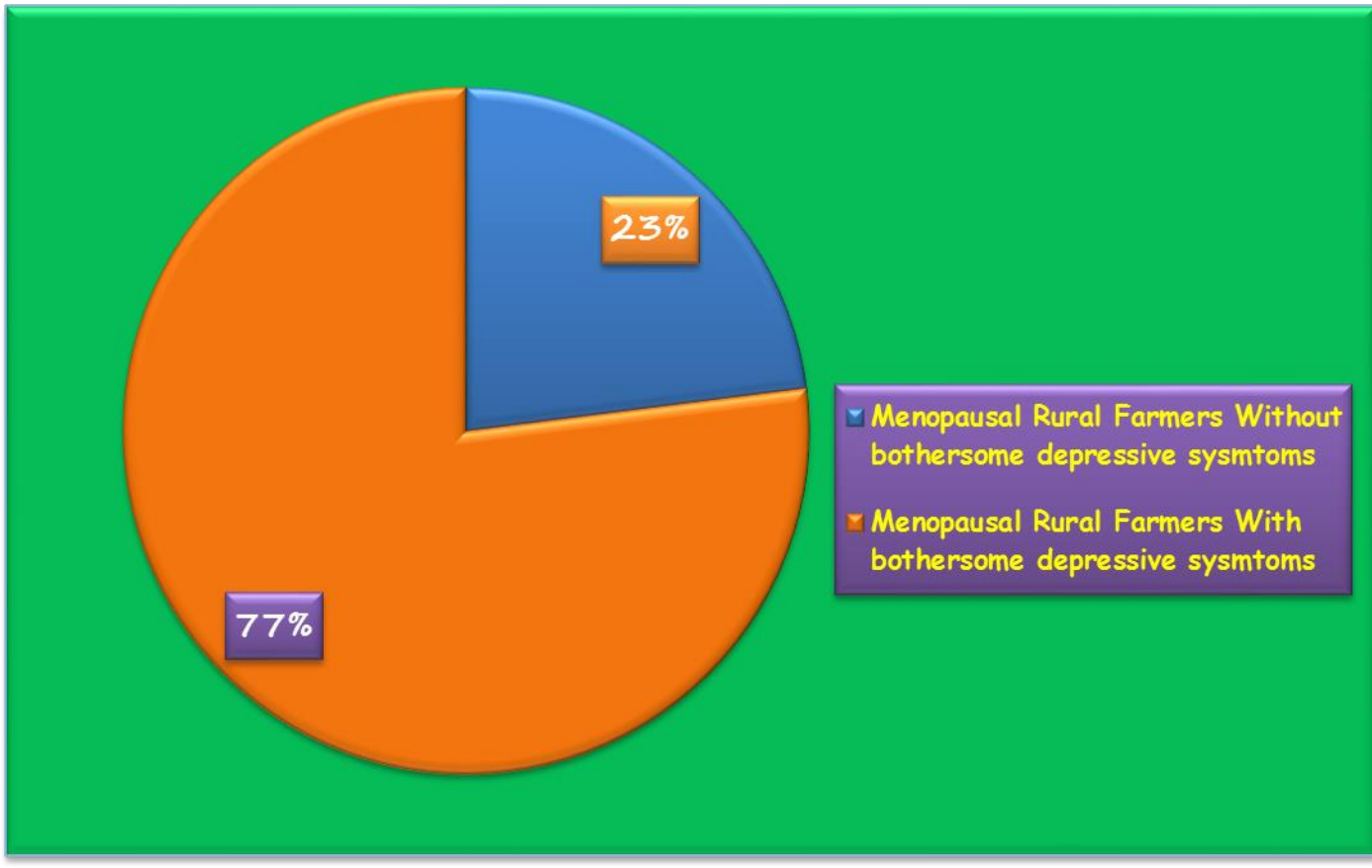


Fig 4.1: A chart showing the percentage of depressive symptoms among menopausal rural farmers in the three selected LGAS as screened by the PHI

Fig 4.1 presents the result of the percentage of farmers with menopausal depressive symptoms in the three LGA, all together, which is 76.58%. This shows that depressive symptoms is relatively high among menopausal farmers in the selected rural areas

4.2 Results

Results are presented hypothesis by hypothesis

Hypothesis One: There is no significant main effect of the treatments (psycho-education and interpersonal therapy) in the management of depressive symptoms in menopausal rural farmers.

To test this hypothesis, Analysis of Covariance (ANCOVA) was adopted to analyse the post-test scores of the participants on their level of depressive symptoms using the pre-test scores as covariate to ascertain if the post experimental differences are statistically significant.

Table 4.3: Summary of 3x3x2 Analysis of Covariance (ANCOVA) Post-Test Depressive Symptoms' Management among Menopausal Rural Farmers

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5798.376[a]	17	341.081	196.388	.000	.991
Intercept	40.557	1	40.557	23.352	.000	.438
Pre-Depressive Symptoms	323.280	1	323.280	186.138	.000	.861
Trtgrp	3208.385	2	1604.193	923.662	.000	.984
ESTEEM	19.777	2	9.888	5.694	.008	.275
LIFE EVENT	.213	1	.213	.123	.729	.004
trtgrp * ESTEEM	46.559	4	11.640	6.702	.001	.472
trtgrp * EVENT	2.076	2	1.038	.598	.556	.038
ESTEEM * EVENT	.315	2	.157	.091	.914	.006
trtgrp * ESTEEM * EVENT	5.933	3	1.978	1.139	.349	.102
Error	52.103	30	1.737			
Total	24851.000	48				
Corrected Total	5850.479	47				

R Squared = .991 (Adjusted R Squared = .986)

The result of hypothesis 1 confirms that there is a significant main effect of treatment in the depressive symptoms' management of participants; hence the null hypothesis was rejected ($F_{2, 30} = 923.66$, $p < 0.05$, $\eta^2 = 0.984$), the treatment accounted for 98% improvement in the depressive symptoms. It establishes the fact that there is statistical significant difference in the mean scores of the depressive symptoms of participants that were exposed to Psychoeducation Training (PT) and Interpersonal Therapy (IT) (9.6250) when compared to the Control Group. Hence hypothesis one was rejected. It was therefore concluded that there is a significant main effect of treatments in the depressive symptoms of the participants. This implies that PT and IT are both effective in the management of depressive symptoms of participants.

To clarify the differences further, table 4.4 presents the mean scores of the depressive symptoms of the participants in the two experimental groups and the control group at the pretest stage, before the interventions and the posttest stage after the interventions.

At the pretest stage, though there is no statistical difference in the mean of the three groups, group one has the highest mean of 35.4118, followed by the control group of 35.200 and finally group 2 with the mean of 35.0625. At the posttest stage, the mean score of group 1(PT) is 16.88. Group 2 (IT) mean score is 13.00, while that of the control is 23.60. The result shows that group 2 (IT) has the lowest mean sore, which implies that the participants in group 2 experienced the highest reduction in their depressive symptoms as compared to the other groups. This was followed by the reduction in the mean score of group 1(PT), revealing that the PT is also an effective intervention in the reduction of depressive symptoms in the participants. Though very minute, there is also a reduction in the mean of the depressive symptoms of the control group. The change was probably because the participants were engaged in some form of interpersonal relationships in the course of their engagement with the researcher and the other participants in the period of learning about the importance of tree planting. This assumption may futher give credence to the assertion of interpersonal therapist that depressive symptoms develop when there is a problem with interpersonal relationships and not vice versal.

Table 4.4: Pretest and Posttest Means and Standard Deviation (Depressive Symptoms)

Pretest	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	35.4118	3.92203
Group 11(IT)	16	35.0625	5.09207
Control(CG)	15	35.2000	3.6367
Posttest	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	16.88	3.82
Group 11(IT)	16	13.00	6.00
Control(CG)	15	23.60	13.93

To further provide information in the reduction of depressive symptoms of the participants in the three groups (PT, IT and Control), the Scheffe post-hoc analysis was conducted and result presented in table 4.5.

Table 4.5 indicates that there exists significant difference between the mean scores of the participants in PT, (16.8824). IT (9.6250) and those in the Control group (34.2667). The IT had the highest potency of reducing depressive symptoms of participants than PT. This can be explained in terms of the effectiveness of each of the training programme. Moreover, based on their uniqueness, these training programmes are expected to produce varying degree of effectiveness in reducing depressive symptoms.

For more analysis, according to table 4.5

(i) There was statistical significant difference between the post-hoc test mean scores in the management of depressive symptoms of participants in PT and IT groups. The participants in the IT (Mean = 9.625) benefited better than those in the PT (Mean = 16.88)

(ii) There was significant difference in the post-hoc test mean scores in depressive symptoms' management of menopausal rural farmers exposed to IT and control group. The participants in IT (Mean = 9.625) managed the depressive symptoms significantly better than those in the PET (Mean =16.88) and control group (Mean = 34.267).

(iii) There was no significant difference in the post-hoc test mean scores in the depressive symptoms management of the participants exposed to PT and control group. However, in the PT (Mean = 16.88), the management of depressive symptoms of menopausal rural farmers is significantly better than those in the control group (Mean = 34.267).

This implies that there is significant difference between the mean score of participants in IT, PT and those in the control group. It revealed that IT and PT are more effective than control group, and also pointed out that the IT had the greatest potency in depression management of menopausal rural farmers than PET.

Table 4.5: Significant Differences in the Depressive Symptoms in the Treatment Groups

Trtgrp	N	1	2	3
IT	16	9.6250		
PT	17		16.8824	
Control	15			34.2667
Sig.		1.000	1.000	1.000

Subset for alpha = 0.05

Hypothesis 2: There is no significant main effect of self-esteem in the management of depressive symptoms of participants.

The finding of hypothesis showed there is a significant main effect of self-esteem in the management of depressive symptoms of participants ($F_{2, 30} = 5.694$, $p < 0.05$, $\eta^2 = 0.275$) as shown in Table 4.3. It also showed that it accounted for 27.5% change, hence hypothesis was rejected.

Furthermore, table 4.6 presents the self-esteem of participants in the three groups (the two experimental groups and the control) at the pretest stage.

Table 4.6: Mean and Standard Deviation scores for the participants' Self-Esteem

	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	17.784	4.03933
Group 11 (IT)	16	18.8750	2.70493
Control (CG)	15	18.4667	2.55976

.

The mean scores of self-esteem (high or low) for group 1, 2 and control are 17.7840, 18.8750 and 18.4667, respectively. Though there is no stastistical significant difference in the mean scores, group 2 (IT) has the highest mean of 18. 8750, while the group 1 (PT) has the least of 17.7840

To further justify the significant difference, table 4.7 shows the difference in the mean scores of low and high self-esteem in each of the three groups.

Table 4.7: Significant Differences in the Self-esteem Levels

GROUP	N	$\overline{x}$	SD	T
PT Group 1/ Ido/Ajobo				
LSE	10	48.14	5.81	6.205
HSE	7	33.60	3.89	
ITGroup2/ Akinyele/ Alabata				
LSE	11	22.200	1.095	6.193
HSE	5	17.363	1.567	
CONTROL/Ona-Ara/Butubutu				
LSE	10	21.400	0.894	5.554
HSE	5	17.000	1.633	

Table 4.7 revealed that the higher the self- esteem of participants, the lower the depressive symptoms and vice versa. This signifies an inverse relationship between self-esteem and depressive symptoms. According to the mean scores on the table, those with high self-esteem across the groups had lower depressive symptoms as compared to those with low self-seteem, who experienced higher depressive symptoms. The mean scores are 33.600 for HSE as against 48.140 of LSE, 17.363 for HSE as against 22.200 of LSE and 17.000 for HSE as against 21.400 of LSE in groups 1, 2 and control respectively. Though mean scores are not statistically significant, LSE predicted higher depressive symptoms in participants than HSE.

Hypothesis Three: There is no significant main effect of life events in the management of depressive symptoms in menopausal rural farmers.

The result of hypothesis 3 showed that there is no significant main effect of life event in the management of depressive symptoms of participants ($F_{1, 30} = 0.123$, $p > 0.05$, $\eta^2 = 0.004$) as shown in Table 4.3, hence the null hypothesus was accepted.

The table 4.8 further presents the life events which is the second moderating variable in the study for the participants across the three groups (the two experimental groups and the control).

Table 4.8: Mean and Standard Deviation (Life Events)

	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	39.5882	8.69669
Group 11(IT)	16	41.4375	8.23932
Control (CG)	15	39.2667	6.28452

The mean scores of life events (positive or negative) for group 1, 2 and control are 39.5882, 41.4375 and 39.2667, respectively. Though there is no stastistical significant difference in the mean scores, group 2 has the highest mean of 41.4375, while the control has the least of 39.2667.

To further clarify the result, table 4.9 shows the difference in the mean scores of negative and positive life events in each of the three groups. It established that though not statistically significant, participants who experienced favourable life events (LE) manifested lower depressive symptoms in comparison to those who experienced adverse or unfvourable life events across the groups.

Table 4.9: Significant Differences in the Life Events Levels

GROUP	N	$\bar{x}$	SD	T
PT Group 1/ Ido/Ajobo				
Favourable/Positive L E	11	15.000	0.894	12.510
Unfavourable/Negative L E	6	22.833	1.772	
ITGroup2/ Akinyele/ Alabata				
Favourable/Positive LE	7	36.143	3.388	4.558
Unfavourable/Negative LE	9	45.556	4.558	
CONTROL/Ona-Ara/Butubutu				
Favourable/Positive LE	9	35.000	3.969	6.95
Unfavourable/Negative LE	6	45.667	1.882	

According to the mean scores on the table, those with favourable/ positive life events across the groups had lower depressive symptoms as compared to those with unfavourable/ negative life events, who experienced higher depressive symptoms. The mean scores are 15.00 for positive LE as against 22.833 of negative LE, 36.143 for positive LE as against 45.556 of negative LE and 35.00 for positive LE as against 45.667 of negative LE in groups 1, 2 and control respectively. Though mean scores are not statistically significant, unfavourable LE predicted higher depressive symptoms in participants.

Hypothesis Four: There is no significant interaction effect of treatment and self-esteem in the management of depressive symptoms in menopausal rural farmers.

According to the result of hypothesis 4, there is significant interaction effect of treatment and self-esteem in the management of depressive symptoms of participants ($F_{4, 30} = 6.702$, $p < 0.05$, $\eta^2 = 0.472$). Self-esteem accounted for 47.2% change in the depressive symptoms of participants, therefore the null hypothesis was rejected. This means that self-esteem has significantly moderated depressive symptoms of the menopausal farmers.

To further clarify where the difference lies, table 4.10 displays the mean of the interaction effect of treatment and self-esteem in the management of depressive symptoms for participants.

Table 4.10: Effect of Treatment and Self-Esteem on Depressive Symptoms

	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	16.81	0.43
Group 11 (IT)	16	13.76	0.76
Control (CG)	15	34.56	0.61

The men of the interaction effect of treatment and self-esteem among the PT participants is 16.81. The mean for the interaction in IT is 13.76, while that of the control is 34.56. IT has the lowest mean of interaction effect of treatment and self-esteem in the management of depressive symptoms (13.76) followed by PT group (16.81). The implication is that the interaction of the treatment among the IT participants produced the most effective result, lower depressive symptoms..

Hypothesis Five: There is no significant interaction effect of treatment and life events in the management of depressive symptoms in menopausal rural farmers.

The outcome of hypothesis 5 is that there is no significant interaction effect of treatment and life events in the management of depressive symptoms in participants ($F_{2, 30} = 0.598$, $p > 0.05$, $\eta^2 = 0.038$). Hence the null hypothesis was accepted. This simply means that life event did not significantly moderate depressive symptoms in the menopausal rural farmers.

Furthermore table 4.11 displays the means of the interaction effect of life events and treatment on depressive symptoms across the three groups.

Table 4.11: Effect of Treatment and Life Events on Depressive Symptoms

	N	Mean ($\bar{x}$)	SD
Group 1(PT)	17	16.68	0.56
Group 11 (IT)	16	10.38	0.65
Control (CG)	15	34.17	046

For the participants in PT, the mean is 16.68, for IT, it is 10.38 and for the Control group, it is 34.17. Though the interaction effect of treatment and life events is not significant on depressive symptoms as presented in table 4.3, the participants in the IT group has the lowest mean score of 10.38.

Hypothesis Six: There is no significant effect of self-esteem and life-events in the management of depressive symptoms in menopausal rural farmers.

The findings of hypothesis 6 established that there is no significant effect of self-esteem and life events in the management of depression in participants ($F_{2, 30} = 0.091$, $p > 0.05$, $\eta^2 = 0.006$). Therefore, the null hypothesis was accepted. This means that the interaction of self-esteem and life event has no significant effect in managing depressive symptoms in menopausal rural farmers and also that self-esteem did not moderate the effect of life events on depressive symptoms

Hypothesis Seven: There is no significant interaction effect of treatment, self-esteem and life events in the management of depressive symptoms in menopausal rural farmers.

The result of hypothesis 7 shows that there is no significant interaction effect of treatment, self-esteem and life events in the management of depressive symptoms of participants ($F_{3, 30} = 1.139$, $p > 0.05$, $\eta^2 = 0.102$). Therefore the null hypothesis was accepted. This simply means that there is no 3-way significant effect of life events and self-esteem of depressive symptoms in the menopausal rural farmers in the course of the treatment. Also that self-esteem and life events could not significantly moderate thr rffect of treatments on depressive symptoms of participants.

4.1 Discussion of Findings

The discussions of the results were made hypothesis by hypothesis. Effort was equally made to explain the findings within the context of available relevant literature.

The first hypothesis which says that there will be no significant main effect of the treatments (psycho-education and interpersonal therapy) in the management of depressive symptoms in menopausal rural farmers was rejected. In testing this hypothesis, Analysis of Covariance (ANCOVA) was adopted to analyse the post-test scores of the participants on their level of depressive symptoms using the pre-test scores as covariate to ascertain if the post experimental differences are statistically significant. Both therapies Psychoeducation (PT) and Interpersonal Therapy (IT) were found to be effective in managing depressive symptoms in participants. The Scheffe post-hoc analysis conducted indicated that there exists a significant difference between the mean scores of the participants in PT (16.8824), IT (9.6250) and those in the Control group (34.2667). The IT had the highest potency of reducing depressive symptoms of participants than PT. This can be explained in terms of the effectiveness of each of the training programme. This is expected because based on their uniqueness these training programmes are expected to produce varying degree of effectiveness in reducing depressive symptoms.

The result of this hypothesis corroborates the findings of a study, conducted by Barth, *et al*., (2012) which sampled 198 studies, including 15,118 depressed adult patients, while the moderating variables were also examined. Some of the therapies used were interpersonal, behaviour activation, cognitive behaviour, problem solving, psychodynamic, social skill and supportive counselling. Control was deferral of treatment by wait listing. Through meta-analysis all the seven therapies, mentioned above were found to be effective than the waitlist but the therapy that was based on interpersonal procedure was found to be the most effective among the seven therapeutic packages, giving credence to the result of this study that interpersonal therapy is more effective. As observed, the results of the meta-analysis study from a comparative efficacy of the seven therapeutic interventions for participants with depression is an indication that therapeutic intervention is effective and thus testifies to the

fact that depressive symptoms in menopausal women can be managed and reduced through the effective use of these therapeutic packages. However of all the therapeutic interventions, IT was more effective probably because according to the therapists, it is evident that when problems or challenges are present within the context of deficit or poor interpersonal relationship, depression is significantly inevitable in such situations. The scholars emphasied that depression could not be said to be caused by the surrounding event in relationship that involve people but by deficit in interpersonal relationships. Therefore, therapy that is interpersonal based could help facilitate means of addressing depressive symptoms, more than other therapies. Besides, minding the fact that the women being considered as the population of interest in this current study, because of their workload might be lacking in qualitative relationship that could provide the needed support in addressing depressive symptoms that is associated with peri-menopausal stage, this therapy might be of benefit than other therapies. This empirically based assertion has been verified in this study. In line with the outcome in table 4.3, IT was more effective as it focused more intensely on relationship which is the therapeutic core of depressive symptoms and depression

The result of the hypothesis also gave credence to the research of Mahan, Swan and Macfie (2018) that administered a combination of treatments (interpersonal and mindfulness therapy) on an anxious and depressed woman for 18 sessions. After 1month follow-up, evaluation revealed sustained reduction in anxiety and depression after baseline readings. The implication is that interpersonal therapy when used alone or in combination with other intervention will reduce depressive symptoms and other mental health issues in individuals, as it takes care of issues revolving around the interpersonal life of the depressed individual. Hence, it is concluded that depression does not lead to interpersonal problems, but individuals have depression, when interpersonal life can not be maintained.

In this present study, Psychoeducation also proved to be effective, as it is a type of therapy which equips participants with information about their depressive symptoms and also provides a form of support system to participants. The purpose for this training was to give individuals experiencing depressive symptoms the needed support and insight into the understanding of their predicament and develop the appropriate skills necessary to manage it, adequately. This training exposed the participants to understand their developmental stage

and the problems associated with it and how it often degenerates into depression, when not well managed. Participants were trained on problem solving skills, right diets, and different forms of physical exercises that could reduce the depressive symptoms of clients. Though it is a therapist based approach, participants get the opportunity to ask questions on anything bothering their minds, even if when it seems embarrassing, hence relieving them of stress and worries. However, though psychoeducation training was effective, it was not as effective as interpersonal therapy, probably because it does not focus fully on interpersonal relationships of participants, which is the core of depressive symptoms, according to experts in the field of interpersonal therapy.

To further provide information in the depressive symptoms' management of the menopausal rural farmers between the two levels of self-esteem (low and high), it is good to ascertain the direction of the differences and determine the magnitude of the mean scores of the participants in each of the self-esteem level in the three different groups. Thus, the Scheffe post-hoc analysis was calculated and presented in Table 4.4.

The second hypothesis which states that there is no significant main effect of self-esteem in the management of depressive symptoms of participants was rejected. It was rejected because the finding of hypothesis showed there is a significant main effect of self-esteem in the management of depressive symptoms of participants. Factors that constitute high self-esteem are satisfaction with self (appropriate body image, menopausal transition, and self-love), adequate perceived self-achievements, self-assertiveness, perceived possession of adequate talents and natural endowments, being healthy and having stable relationship. While those that constitute low self-esteem are dissatisfaction with self, poor health, hopelessness, needing approval of others to approve self, unhealthy rivalry and comparison, lack of assertiveness and poor perception on self-achievements

The result of this hypothesis is in alliance with a longitudinal study carried out by Mu, Luo, Reiger, Trautwein and Robert (2019) on how depression could be related to self-esteem, especially when the neuroticism is controlled in a sample size of the pooled data set 2512 of which 64% were females. The result shows that there is a relationship between depression

and self-esteem. Self-esteem was found to always predict depression. Hence high self-esteem brings about a reduction in depressive symptoms.

The result of the findings of Martisen, Rasmussen and Neumer (2021) also buttressed the result of this hypothesis. In the study 795 individuals, with self reported anxiety and depressive symptoms were put in a treatment and control groups, for 10 weeks using cluster randomized design. Individuals with improved self-esteem and quality of life reported lower depressive symptoms. The implication is that reduced self-esteem heightens depressive symptoms and depression. The result of the hypothesis is in tandem with another study by Orth. and Robins (2013), they review current findings assessing the reliability of theoretical models on the association between self-esteem and depressive symptoms. Put together, the findings provide support for the vulnerability model, which states that low self-esteem leads to depression and showed that self-esteem has a long-term effect on depressive symptoms

The finding of this hypothesis is also in alliance with the findings of Enike, Anazonwu Okafor and Ugwuja (2021) on social support, self- esteem, and religiosity as predictors of Depression, a positive and significant relationship self-esteem was found to help in depression control ($r=.896;p<0.05$). All these studies accede to the potency of self- esteem in the management of depressive symptoms of clients. Furthermore those identified with high self-esteem according to the hypothesis of this study are those who were satisfied in themselves, had positive body image, never perturbed by the changes in their menstrual cycle, owing to the fact that they have enough number of children, already and see themselves as of age to enter into the menopausal stage. Those with high esteem also have self-love, never waiting for the approval of significant people around them to approve of their looks or image, while those with low self-esteem have poor body image and discontent with the fact that they are experiencing hormonal ageing probably because they have not had up to the number of children they desire to have or they see themselves as unappealing to their husbands who now take interest in younger women. This is in line with the study of Righetti and Visserman, 2017 which shows that women with low self-esteem need a lot of appreciation and reassurance from their husbands and people around them so as not to fall into emotional distress and depression. Those who have low self-esteem manifested more

depressive symptoms in the 3 groups (2 experimental groups and control group) than their counterparts with high self-esteem in each of the groups as shown in table 4.7

There was significant difference in the post-hoc test mean scores in the management of depressive symptoms in menopausal rural farmers with High Self-esteem (HSE) and Low self-esteem (LSE) level. The participants in HSE (Mean = 16.50) managed the depressive symptoms significantly better than those with the LSE (Mean = 22.59), as shown in table 4.7. This implies that there is significant difference between the mean score of participants in HSE and LSE levels, while HSE benefitted more than LSE level participants. The researcher also observed that participants with HSE benefitted mostly in the treatment packages of depressive symptoms' management of menopausal rural farmers than those with LSE.

Abrahamson (1989) in his theory of helplessness and hopelessness portrays high self-esteem, as an emerging flexible mind, serving as a barrier to depression. Self-esteem is a person's self-confidence, self value and self respet which greatly influences the well-being of the individual, it encompasses a person's self-confidence (for example, the ability to feel) and emotional states such as victory, frustration, pride and shame (Duru and Balkis, 2014). It is a concept that reflects the emotional assessment of an individual's worth. It is your decision and your attitude. Self-esteem is the good or negative self evaluation Also, according to Yagual (2015) self-esteem is of particular importance to socio-psychological structures which is a key element in such outcomes as positive mental health and happiness. High self-esteem is important for life transition, while low self-esteeem leads to poor social and psychological adaptation. Duru and Balkis (2014) listed depression as one of the issues of mental health conditions that has to do with low self-esteem, presumably amongst women, especially peri-menopausal women. Hence participants who manifest so much dissatisfaction about self (having low self-esteem) did not benefit as much as those who had high self-esteem. It can therefore be said that according to the result of this hypothesis there is a significant main effect of self-esteem on depression, also that both theoretical and empirical findings support the fact that high self-esteem enhances mental health and reduces depression in participants

The third hypothesis which stated that there is no significant main effect of life events in the management of depressive symptoms in menopausal rural farmers was accepted. The null hypothesus was accepted because the result of hypothesis 3 showed that there is no significant main effect of life events in the management of depressive symptoms of participants. Factors that constitute negative/ adverse/ stressful life events are death of a spouse, child or loved ones, suffering from a physical injury, erratic climate change, miscarriage, abortion, entering menopause without having up to the desired number of children (2 or less), divorce/separation, poor sales of farm products, polygamy, having too many dependants, low standard of living and suffering from physical ailments. While those that constitute positive, favourable/unstressful life events are being married, having monogamous family, having the desired number of children before perimenopause, experiencing no loss, having a stable family, financial adequacy

The result of this hypothesis is in opposition to the finding of a meta-analysis of 71 independent samples performed by Li, Dajun, Yinghao and Hu (2016) to assess the relationship between life events and depression in some individuals, the finding shows that life events are positively correlated with depression.

Also the result of this hypothesis negates the result of another meta-analysis of 25 studies on the relationship of negative life events and depression in elderly persons by Kraaji, Arensmann and Spinhoven (2002) in which almost all negative life events appeared to have significant relationship with depression. The outcome of this hypothesis refutes the findings of Ouyang, Gui, Cai, Yin, Mao, Huang, Zeng and Wang (2021) that carried out a study on the adverse life events, subjective well-being and depression of 1,096 female individuals. The results also revealed that depression mediated the association between stressful life event and subjective well-being. The result presented a link between depression and negative life events of the female individuals, though it was an indirect link. The result of another study by Sokratous, Merkouris and Karanikola (2013) on prevalence of depressive symptoms and its relationship with the self-reported adverse life events among some individuals in Cyprus revealed that there was significant difference between severity of life events and depressive symptoms, especially among the female gender. The more severe the negative life events, the worse the depressive symptoms

Arnot, Emmott and Mace (2021) in their empirical study of relationship betweenlife events and menopausal depressive symptoms among perimenopausal women, discovered that, women who said they were recently disturbed by a stressful event experienced 21% more vasomotor symptoms than women who never experienced life stressor. This research stressed that social factors may impact a relationship between stressful life events and menopausal depressive symptoms. The result showed that stressful life events are related to incessant menopausal depressive symptoms. The result of the hypothesis of this present study might have been not statistically significant like that of the above stated past findings, however, menopausal rural farmers who experienced negative life events like death of husband (becoming a widow), loss of a child or loved ones manifested more depressive symptoms more than those with less adverse life events in the three groups (2 experimental groups and the control) as shown in table 4.9. This is in line with the study of Guo, Ge, Mei, Wang and Li (2021), in which the loss of a spouse is one of the most painful and stressful events faced by women as well as an avoidable role transition (Stroebe, Schut, Boerner, 2017). It is often a strong negative life event for a surviving spouse to shoulder the grief of losing a partner who provides support and companionship (Isherwood, King and Luszcz, 2017). This may have further adverse consequences on the victim's mental and physical health (Jadhav and Weir, 2018). Though in some studies widowhood alone may not lead to depression, it might be accompanied with isolation or lack of support system before it fully leads to depression (Burns, Browning, Kendig, 2015). At the perimenopausal stage at which the chance of having more children is reduced, the loss of a child may also represent a strong adverse life event, which brings about increase in depressive symptoms in menopausal rural farmers. Though the prevalence of depression was higher among perimenopausal rural farmers with negative LE in comparison to those with positive LE, this difference was not statistically significant. The plausible explanation for the above findings may be as a result of the respondents' divergent life events, which may not be as recent enough to produce significant effects on the lives of the respondents and also because of the limited sample size of the exclusive sample population, menopausal rural farmers. Furthermore, according to the theory of Holmes (1978), both positive and negative life events are stressful. Based on this theory, stress occurs when a situation requires more resources than is available. This theory agrees with the view that the occurrence of certain events in life can have an impact on the physical

and mental health of the individual, leading to depression. Shapero, Black, Liu, Klugman, Bender, Abrahmson and Alloy (2014) in a multiwave study (N=281, 68% female) affirmed that there is a strong link between depressive symptoms and the onset of stressful life events or being confronted with dependent stressors which can be physiological challenges of perimenopause. Also negative life events and current problems and lack of coping skills are linked to depression.

Roohafza, Ramezani, Sadeghi, Shahnam, Zolfagari and Sarafzadegan (2011) in their review of Holmes and Rahe (1967) theory of life evens, following a careful and comprehensive review of some critical life events (about 43), after examination of Life-Change-Units. In the theory, they hypothesized that the average number of adaptive measures needed to cope with an event would be a useful indicator of the severity of the incident. Therefore, people tend to create unhealthy lifestyles in the presence of adverse events in life that lead to depression. Also a life event is considered adverse when a situation requires more resources than is available. From the result of the hypothesis there is no main effect of life events on the management of depressive symptoms in participants. So the initial conception that negative life events have statistical significance all the time on the management of depressive symptoms is refuted. This is probably because of the low cognitive abilities of the perimenopausal farmers to attribute strong negative interpretations to the negative life events or that the menopausal women overreported the life events to gain sympathy from others or probably that the life events are not recent enough according to Liu, Kleiman and Cheek (2015) in their review of the theory of hopelessness and helplessness by Abrahamson *et al*., 1989. Hence there is no main effect of the life events on the management of depressive symptoms in the participants. From the outcome of the hypothesis, it is therefore inferred that negative thoughts, wrong information processing and the recency of the life events are stronger predictors of depressive symptoms and depression than the seemingly adverse or negative life events. A negative inferential style often occurs when there are negative events in life. Therefore, people tend to create unhealthy lifestyles in the presence of adverse life events leading to depression.

The fourth hypothesis which states that there is no significant interaction effect of treatment and self-esteem in the management of depressive symptoms in menopausal rural farmers was

rejected. The null hypothesis was rejected because according to the result of hypothesis 4, there is significant interaction effect of treatment and self-esteem in the management of depressive symptoms of participants. This means that self-esteem has significantly moderated depressive symptoms of the menopausal farmers.

The result of this hypothesis supports a study on self-esteem in forecasting the sequence of therapy in patients with depression among some German participants (Eberi, *et al*., 2018). The result showed an inverse relationship between self-esteem and depression. This means that lower depression could be traced to higher self-esteem; and vice versa. It also corroborates another study of the role of self-esteem in the development of depression (Hennksen, Ranoyen and Stenseng, 2017). In the longitudinal study, data were obtained from a sample of 201 individuals. In the base line study self-esteem and depression were measured by means of self-report. Analyses showed that high self-esteem at baseline predicted fewer symptoms of depression. This result highlights the relevance of global self-esteem in the treatment of emotional problems. The result of the findings of Martisen, Rasmussen and Neumer (2021) also buttressed the result of this hypothesis. In the study 795 individuals from 36 institutions, with self reported anxiety and depressive symptoms were put in a CBT treatment and control groups, for 10 weeks using cluster randomized design. Individuals who were in the CBT group experienced improved self-esteem and quality of life, and then reported lower depressive symptoms. The implication is that CBT enhanced self-esteem thereby reducing depressive symptoms and depression.

The study result is also in tandem with the study of Hilbert, Goerigk, Padberg, Nadjiri, Ubleis, Jobst, Dewald-Kaufmann, Falkai, Buhner, Naumann and Sarubin (2019) that treated depressive symptoms using CBT, to improve self-esteem in 147 in-patient psychiatric patients. After 5 weeks of therapy, there was a reduction in depressive symptoms, especially in patients with more improved self-esteem. The menopausal women with low self-esteem, that have the beliefs that they are low achievers, that they do not possess natural endownments and talents and are less assertive are involved with self-criticism, social isolation associated with the ban, resentment and shame, which also have negative effect on their social relationship. Poor social relationship or interpersonal relationship often promotes depression and frustrates mental wellness. Some of the physiological changes that

accompany perimenopause, itself produce the picture of poor body image and feelings of dissatisfaction in some menopausal women, leading to depressive symptoms. The menopausal rural farmers in the treatment group with high self-esteem, those who believed that they are achievers, naturally endowed and talented and self-assertive are less involved with self-criticism and had better interpersonal relationships, responded better to treatments. It is vivid that the result of this recent hypothesis is consistent with the stated past findings, reinforcing the fact that any therapy that boost self-esteem will bring about reduction in the depressive symptoms of victims. Hence attention must be given to enhancing self-esteem, so that it can be positive and reduce depression in the menopausal rural farmer

The fifth hypothesis that states that there is no significant interaction effect of treatment and life events in the management of depressive symptoms in menopausal rural farmers was accepted. The null hypothesis was accepted because the outcome of hypothesis 5 shows that treatment and life events did not have any significant interaction effect in the management of depressive symptoms of participants. This simply means that life event did not significantly moderate depressive symptoms in the menopausal rural farmers.

The study gives credence to a study conducted by Horacek, Rozehnalova, Rosslerova and Ales (2010) on tbe influence of stressful life events on development of depression and treatment response in the population of higher age. N=3184, the patients recorded less stressful life events associated with depressive symptom. The implies that life event has no significance on the treatment of depressive symptoms The result of this finding does not support previous empirical research of Sherbourne, Edelen, Zhoo and Bird (2008) where in one thousand three hundred participants were enrolled to unravel how psychotherapy could lead to qualitative improvement for treatment of depression that has to significantly do with the life events, as well has having major influence on psychological well-being of these participants. The enrolled patients with symptoms of depression, with sufficient data at any of 4 data points' baselines were subjected to quality improvement interventions to examine if 6-12 months programmes for reduction in depression that is caused by life events that are negative. It was discovered that the therapy in addition to improving psychological well-being reduced stressful life events. The findings of this recent study is contrary to the outcome of Zhou and Chen (2017) which examined the relationship of life events on

depression in 301 participants for 12-weeks. Adverse life event was found to enhance the development of depressive symptoms, in depression therapy.

Though the result of this hypothesis shows that there is no significant interaction effect of treatment and life-events in the management of depressive symptoms in menopausal rural farmers However there is an indication that there are still differences between those who experienced negative life events and their counterparts who never experienced negative life events across the groups in the management of depressive symptoms. Those who experienced negative life events associated with low standard of living as a result of having too many dependants (5 children or more) had their depressive symptoms less managed than those who have positive life events (having lesser dependants). This is supported by a study carried out by Silva, Loureiro and Cardoso (2015) between 2004 and 2014 on the impact of sociodemographic and economic individual on mental health of individuals. Factors like low income, not living with a partner, lack of social support, female gender, low level of education, low income, low socioeconomic status, unemployment, financial strain, and perceived discrimination were found to be significant on depression and its management. Menopausal rural farmers who had suffered divorce or separation also manifested high depressive symptoms and demonstrated less management of depressive symptoms than their counterpart who are in one form of marriage than the other because divorce is a stressful life event as a result of stigmatization that divorcee suffer. Another stressful life event leading to manifestation of high depressive symptoms in the menopausal farmers was the issue of polygamy. The result of this hypothesis is also in contradiction to the study on prevalence and pattern of Depression among women who had a life event of Polygamous and Monogamous Family Settings in Rural Areas of Sokoto State, Nigeria (Adamu, Oche, Abel, Garba and Zubairu, 2021). Those married into marriages of monogamous settings had slightly higher prevalence and lower management of depressive symptoms than those in polygamous settings. However, the same study in Turkey is in alliance with the result of this hypothesis, as it reports higher prevalence and lower management of depressive symptoms in polygamous settings than monogamous.

The possible reason why life event could not moderate the treatment on the depressive symptoms of the menopausal rural farmers could be that the effect of life events of the

women has been exaggerated, over reported or the life events are not recent enough to still have effects on the participants. Since the population of respondents is also few and life events vary a lot from person to person, its significance on the interaction effect with the treatment of depression might also be negligible. Liu, Kleiman and Cheek (2015) in their review of the theory of hopelessness and helplessness by Abrahamson *et al*., 1989 affirmed that for life events to moderate or degenerate into depression, the events must be recent and perceived by the victim as adverse. The cognitive abilities of the perimenopausal farmers to attribute strong negative interpretations to the negative life events and the non-recency of the life events may also be a contributive factor to the non-significant interaction effect of treatment and life events in the management of depressive symptoms of the menopausal rural farmers.

As for the sixth hypothesis, the result that there is no significant effect of self-esteem and life-events in the management of depressive symptoms in menopausal rural farmers was accepted. The null hypothesis was accepted simply because the findings of hypothesis 6 established that put together self-esteem and life events have no significant effect in the management of depressive symptoms in participants. This means that the interaction of self-esteem and life event has no significant effect in managing depressive symptoms in menopausal rural farmers.

Contrary to this finding, Ouyang, Gui, Cai, Yin, Mao, Huang, Zeng and Wang (2021) discovered that depression mediated the relationship between stressful life event and self-esteem in female individuals. Also, Davila *et al*., (1997), discovered that serious marital stress prospectively predicts symptoms of depression among married women. In support of the finding, Gibb (2006) using the Cognitive Style Questionnaire (CSQ) affirmed that initial symptoms of depression were as a result of stressful events that women go through weekly. Specifically, future stressful life events and depression was discovered over a 6-week period among the women. A study conducted by Makhubela (2019) on the interaction effect of low self-esteem and negative life events on depression of a sample of 862 individuals, of which 72% are females, 67% are blacks and mean age of 21.70, revealed that low self-esteem predicted depression, while life event only mediated the relationship. This proves that low self-esteem is a main indicator of who is at risk of depression

In another study on intermediate role self-esteem between negative life events conducted by Gao, Yao and Liu (2019), unlike the result of this present study, self-esteem mediated the effect of adverse life event on depressive symptoms. However, from the study, the mediating effect of self-esteem is stronger than that of life events in depressive symptoms or in depression. The result of the hypothesis does not support a finding by Farmer and Kashdan (2014) on affective and self-esteem instability in the daily lives of people with generalized Social Anxiety Disordee (SAD) and depression. 40 adults with SAD, depression and 39 healthy controls were used to provide end day reports of their affect and self-esteem over two weeks. Those with SAD and depression demonstrated negative affect and depression than the healthy control. This shows that self-esteem usually moderates depressive symptoms but when in combination with life events which are diverse, the significant effect may be reduced. Duru and Balkis (2014) in their study, identified depression as one of the issues of mental health conditions that has to do with low self-esteem, presumably amongst women, especially peri-menopausal women, this is to say that naturally, self-esteem (low or high) should be significant in the management of depression. In this present study, stressful life events among the menopausal rural farmers such as miscarriage, abortion can constitute to negative self-esteem of lack of confidence in their ability to reproduce, degenerating into more depressive symptoms in the menopausal farmers. Adverse life event such as divorce or separation may also result into loe self-esteem, promoting more depressive symptoms in the menopausal rural farmers. The menopausal transition itself can be a stressful life event that leads to poor body image, a major determinant of low self-esteem for menopausal farmers, who desire to have more children or are not yet ready in their minds to transit. These life events affect self-esteem negatively and increase depressive symptoms in menopausal farmers. Hence though the result of the hypothesis say there is no significant effect of self-esteem and life-events in the management of depressive symptoms in menopausal rural farmers, there are still some effect, though not statistically significant

The combination of self-esteem and life events did not have significant effect on the depressive symptoms of participants, probably, because as earlier stated there was minimal number of participants, wide variability of life events, non-recency of the adverse life events of the participants and the poor cognitive abilities of the participants to perceive the life

events as adverse. All might contribute to the insignificance of interaction effect of self-esteem, and life events in the management of depressive symptoms in the menopausal rural farmers.

Hypothesis seven which proposes that there will be no significant three-way interaction effect of treatments, self-esteem and life events in the management of depressive symptoms among menopausal rural farmers was accepted. The null hypothesis was accepted because result shows that there is no significant interaction effect of treatment, self-esteem and life events in the management of depressive symptoms of participants. This simply means that there is no 3-way significant effect of life events and self-esteem of depressive symptoms in the menopausal rural farmers in the course of the treatment.

The result of this hypothesis opposes the finding of a study titled Life events and hopelessness depression: The influence of affective experience (Zhou, 2017). The study explored the association of the Feelings Experience (FE) of life event on Depression with despair (N=301) undergraduates in a 12-week study. The result revealed that FE is an underlying mechanism influencing the longitudinal link between the life event and the despair. Negative life event with clear negative FE directly boosted the growth of despair, while positive life event with clear positive FE directly impeded the development of despair. The outcome of this hypothesis is against the findings of Loannu, Kassianos and Symeou (2019) which tested the mediating function of self-esteem in perceived stress and depressive symptoms of 344 individuals in Cyprus. Self-esteem was found to be a major and a consistent moderator in depressive symptom. The implication is that low self-esteem is an indicator of depressive symptom and high self-esteem, an indicator of mental well-being.

The finding of this hypothesis is contrary to the result of a study on self-esteem consistency in predicting the course of therapy in depressed patients (Eberi, Winkler, Pawelczack, Trobitz, Rinck, Becker and Lindenmeyer, 2018). Participants were 9 males and 22 females receiving CBT for depressive disorders in a clinic in Germany for 4 months, self- esteem was found to predict depression at all stages. This study suggested that the higher the self-esteem, the lower the depression. In this present study, stressful life events among the menopausal rural farmers such as miscarriage, abortion can constitute to negative self-esteem of lack of

confidence in their ability to reproduce, degenerating into more depressive symptoms in the menopausal farmers. Negative life events such as erratic changes in weather condition, poor sales of farm produce and loss of property, injury and ill health singly or put together as experienced by the menopausal rural farmers can be indicators of low self-esteem. Leading to more depressive symptoms in the menopausal farmers than those who experienced less negative life events and showed positive self esteem

It can be inferred from the result of this hypothesis that there is still a difference in the interaction effect of treatment self-esteem and life events in the management of depressive symptoms in menopausal rural farmers, based on the severity of the life event and state of their self-esteem, though not statistically significant

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of result based on the seven hypotheses generated for the study. Conclusions, implications, contributions to the knowledge, peculiarities, generalisation and recommendations are made based on the findings.

5.1 Summary of Findings

The study examined Psychoeducation Training (PET) and Interpersonal Therapy (IPT) in managing depressive symptoms in menopausal rural farmers in Ibadan, Oyo state. The findings are summarised as follows

There is significant main effect of treatment in the management of depressive symptoms in participants ($F_{2, 30} = 923.66$, $p < 0.05$, $\eta^2 = 0.984$). This means there is significant difference in the mean scores of the depressive symptoms' management of the participants that are exposed to interpersonal therapy (IT) and psychoeducation training (PET) when compared with the control group. Hence, hypothesis one is not accepted. It was therefore concluded that there is significant main effect of treatments in the management of depressive symptoms of menopausal rural farmers. This implies that psychoeducation (PET) and interpersonal therapy (IT) are effective in the management of depressive symptoms in menopausal rural farmers.

There is significant main effect of self-esteem in the management of depressive symptoms in participants ($F_{2, 30} = 5.694$, $p < 0.05$, $\eta^2 = 0.275$). This means there is significant difference in the mean scores of the depressive symptoms' management of menopausal rural farmers among levels (low, moderate and high) when compared with one other.

There is no significant main effect of life-event in the management of depressive symptoms in participants ($F_{1, 30} = 0.123$, $p > 0.05$, $\eta^2 = 0.004$). This means there is no significant difference in the mean scores life-events in the management of depressive symptoms in menopausal rural farmers when compared with each other (favorable and unfavourable. Hence, hypothesis three was accepted.

There is significant interaction effect of treatment and self-esteem in the management of depressive symptoms in participants that is, there is significant interaction effect of treatments and self-esteem in the management of depressive symptoms in menopausal rural farmers ($F_{4, 30} = 6.702$, $p < 0.05$, $\eta^2 = 0.472$), the hypothesis is therefore not accepted. This implies that the interaction of the therapies (PES and IT) and self-esteem (High, Moderate and low self-esteem) have significant interaction effect in the management of depressive symptoms in menopausal rural farmers. Thus, the null hypothesis four was rejected.

There is no significant interaction effect of treatment and life-events in the management of depressive symptoms in participants that is, there is no significant interaction effect of treatment and life-events in the management of depressive symptoms in menopausal rural farmers ($F_{2, 30} = 0.598$, $p > 0.05$, $\eta^2 = 0.038$). This means there is no significant interaction effect of treatment and life-event in the management of depressive symptoms in menopausal rural farmers. Hence, hypothesis five was accepted.

There is no significant interaction effect of self-esteem and life-events in the management of depressive symptoms in participants that is, there is no significant interaction effect of self-esteem and life-events in the management of depressive symptoms in menopausal rural farmers ($F_{2, 30} = 0.091$, $p > 0.05$, $\eta^2 = 0.006$). This means there is no significant interaction effect of self-esteem and life-event in the management of depressive symptoms in menopausal rural farmers. Hence, hypothesis six was accepted.

There is no significant interaction effect of treatment, self-esteem and life-events in the management of depressive symptoms in participants that is, there is no significant interaction effect of treatment, self-esteem and life-events in the management of depressive symptoms in menopausal rural farmers ($F_{3, 30} = 1.139$, $p > 0.05$, $\eta^2 = 0.102$). This means there is no significant interaction effect of treatment, self-esteem and life-event in the management of depressive symptoms in menopausal rural farmers. Hence, hypothesis seven was accepted.

5.2 Conclusion

The study investigated the effectiveness of PET and IPT in reducing depressive symptoms in menopausal rural farmers in Ibadan less city, Nigeria. Life event and self-esteem were employed as moderating variables. In line with this the participants were taken through the training programmes, relevant data collected and analysed using appropriate statistical tools to bring out the results. The findings showed that PET and IPT were effective in reducing depressive symptoms in menopausal rural farmers. As implied from the study, IPT had the greatest potency and was therefore found to be more effective in reducing depressive symptoms of menopausal rural farmers than PET. It was also established that depressive symptoms in menopausal rural farmers does not differ along the line of the participants' life events.

Based on the findings of this study, it was concluded that the ultimate goal of reducing depressive symptoms in female rural farmers at this developmental human life span stage (menopause) may become impossible, if no timely psychological intervention is made available to them. The two interventions used in the study have shown efficiency and relevance in the reduction of depressive symptoms in menopausal rural farmers in Ibadan less city, Nigeria. This therefore calls for the need to establish preventive and curative measures of counselling and psychological services in the less city of Ibadan, Nigeria.

5.3 Implication of Findings

The outcome of this study has clearly shown IPT and PET to be highly effective in the reduction of depressive symptoms of menopausal rural farmers in Ibadan less city, Nigeria. This study has vast policy implications for the menopausal rural farmers' family,

government, stake holders and research scientists, who may discover gaps in carrying out further studies.

The study has established and clarified the challenges associated with depressive symptoms in menopausal rural farmers. It also helped in providing psychological interventions and strategies towards finding a better solution to the problem of depressive symptoms in menopausal rural farmers. This study has proved that both PET and IPT are effective interventions in reducing depressive symptoms.

It created the awareness of possible causes and solutions of depressive symptoms in the menopausal rural farmers. Based on this there is a reorientation for the participants who might initially attribute the symptoms of menopausal depression to some voodoo attacks or other things. Due to this and the effectiveness of the two interventions, there is a change in the emotional feelings which has produced a paradigm shift from the depressive state.

This finding will go a long way in assisting the developmental psychologists at various levels of human life span stage to evaluate the effectiveness of these therapeutic packages in reducing depressive symptoms in rural women or women in general.

5.4 Contribution to Knowledge

This study has contributed to knowledge in the following ways:

- It has demonstrated the effectiveness of Psychoeducation and Interpersonal therapy in the reduction of depressive symptoms among menopausal rural farmers. The treatment packages and the therapeutic sessions used in the study have also shown better understanding of the concept of depressive symptoms in a peculiar human life span of female rural farmers.
- It has proved to menopausal farmers, their family members, significant people around them that depressive symptoms exist, can hamper victims' performance, endanger victims' lives and that of the significant people around them. Also depressive symptoms can be managed to foster the development and wellness of menopausal rural farmers.

- This study has also filled a gap in research by bridging the gap between theory and practice. Most Nigerian studies are on prevalence and evaluation of depression, but this study has managed depressive symptoms in an uncommon and neglected population (menopausal rural farmers)
- The finding of this study serves as a source of reference document for other researchers, who may want to conduct the same or similar study in other subjects or in other parts of the country. It has also provided empirical data to assist developmental psychologists, clinical psychologists and other stakeholders in the area of mental health. Apart from filling the gaps in previous studies, it also added to existing literature.

5.5 Recommendations

In order to attain a level of reduced depressive symptoms in menopausal rural farmers, in the light of the findings of this study. It is recommended that

- Since Psycho-education training (PET) and Interpersonal therapy (IPT) were found to be effective in reducing depressive symptoms of menopausal rural farmers, concerted effort should be put in place by counseling, developmental psychologists and other related professionals to adopt these therapies when handling issues related to depressive symptoms and psychological distress.
- Standard mental and counselling centers should be established in the rural areas, which will employ the service of professional psychiatrists, counseling, clinical and developmental psychologists. These professionals will be saddled with the responsibility of using the psychological principles and therapies in attending to several mental health and psychological issues that rural farmers and other rural settlers might be experiencing. However, this will be ineffective if access to the establishment and the professionals are not facilitated by local community groups and industry associations.
- Experts working within the field of mental health, clinical developmental and counselling psychology should put in place preventive measures, such as mental

health, coping strategies, self-help, educational programs and specific practical support (financial helps, treatment screening).

- The government and all stakeholders should be made to be aware of both the challenge (depressive symptoms) and the interventions (Psycho-education training PET and Interpersonal therapy), so as to work towards encouraging farmers to seek for help when experiencing depression and also reduce depressive symptoms in menopausal rural farmers.

5.6 Limitations to the Study

The study investigated the effectiveness of Psycho-education therapy (PET) and Interpersonal therapy (IPT) in reducing depressive symptoms in menopausal rural farmers. All researches have limitations. This present one is no exception. The limitations of this study are as follows:

A limited number of forty-eight (48) menopausal rural farmers in just three rural local government area, completed the study. This limited number of participants was used due to the peculiarity of the respondents, willingness and availability. However, this limitation has not affected the findings of this study in any way because randomisation can guarantee generalisation.

Another limitation was that farming, which is the occupation of the participants is laborious and highly rigorous. The participants also in a bid to reduce exploitation from buyers of their farm products saddled themselves with the responsibility of processing and sales of their farm products. This makes their work to be more time-consuming, to the point that it was negatively affecting their punctuality and regularity to therapeutic sessions. This also affected the attrition rate as just 48 participants could successfully complete the 10 sessions.

Also, the intervention programme was cost intensive as the researcher made provision for refreshment and a stipend for each participant in every session to act as incentives for the next meeting. Moreover, the contact persons of each rural settlement were given remunerations. Despite all the afore mentioned limitations, the results obtained from this study remain valid.

5.7 Suggestions for Further Research

This study investigated the effectiveness of Psycho-education training and Interpersonal therapy in reducing depressive symptoms of menopausal rural farmers in Ibadan less city, Nigeria. In view of this, future studies with samples from other states of Nigeria, comprising both adult men and women rural farmers should be conducted. This will in no doubt provide more findings for better understanding of depressive symptoms among farmers. Also researchers can concentrate on other variables like age, socio-economic status, number of children, to mention a few that may moderate the relationship between treatments and depressive symptoms in farmers.

REFERENCES

Abdullahi, N. M., Ibrahim, H., Akor, O. and Jimoh, A. 2018. Daily Trust .Nigeria: 87 Nigerian commit suicide in 13 months. allafrica.com/storie/2018

Abramson, L., Y., Alloy, L., B. Hankin, B., L., Haeffel, G., J., MacCoon , D., G. and Gibb, B.,E. 2002. Cognitive Vulnerability-Stress Models of Depression in a Self-regulatory and Psychobiological Context. https://www.researchgate net > 2325…

Abramson, L., Y., Metalsky, G., I. and Alloy, L., B. 1989. Hopelessness Depression: A Theory Based Subtype of Depression. *Psychological Review*, 96(2): 358-372

Abramson, L., Y., Seligman, M., E., and Teasdale, J., D. 1978. Learned Helplessness in Humans: Critique and Reformulation. *Journal of Abnormal Psychology*, 87(1); 49-74

Adamu , H., Oche, M., O., Abel, I., R., Garba, K., A. and Zubairu, B. B . 2021. Prevalence and Pattern of Depression Among Women of Polygamous and Monogamous Family Settings in Rural Areas of Sokoto State Article in *Central African Journal of Public Health*. DOI:10.11648/j.cajph.20210701.12

Afshar, P., Manochehri, S., Tadayon, M., Kianfar, M., & Haghighizade, M. (2015). Prevalence of Depression in Post Menopausal Women.Jundishapur *Journal of Chronic Disease Care*, 4, 12-15.

Albert, P., R. 2015. Why is depression more prevalent in women? *J Psychiatry Neurosci*.Jul; 40(4): 219–221

Ali, A., M., Ahmed, H., A. and Small, L. 2020. Psychological Climateric Symptoms and Attitudes toward Menopause among Emirati Women. *Int. J Environ. Res. Public Health*, 17(14), 5028

Amoran, O., Lawoyin, T. and Lasebikan, V. 2007. Prevalence of depression among adults in Oyo State, Nigeria: a comparative study of rural and urban communities. *Aust J Rural Health* 15: 211-215.

American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th. Washington, DC: Author; 2013.

Arnot, M., Emmott, E., M. and Mace, R. 2021 The relationship between social support, stressful events, and menopause symptoms. https://doi.org/10.1371/journal.pone.0245444

Assari, S. 2020. Combined Effects of Ethnicity and Education on Burden of Depressive Symptoms over 24 Years in Middle- Aged and Older Adults in the United States. Brain Sci. 10(4):209.

Assari, S, Burgard, S. and Zivin, K. 2015. Long-term reciprocal associations between depressive symptoms and number of chronic medical conditions: longitudinal support for Black–White health paradox. *J Racial Ethn Health Disparities* 2(4):589–97. doi:10.1007/s40615-015-0116.

Assari, S. and Lankarani, M. M. 2015. Association between stressful life-events and depression; intersection of race and gender. *J Racial Ethn Health Disparities* :1–8. doi:10.1007/s40615-015-0160-5.

Awunor, N., S., Ntaji, M., I., Edafiadhe, E., W., Erhabor, P., O., Eferakorho, A., O., Ijirigho, B., Owe, A., O., Adu, O., P., Enaohwo, O., O., Umukoro, S. and Ose-Efetie, B. 2018. Prevalence and Predictors of Depression among the Elderly in selected Rural Communities in Delta State, *Nigeria Journal of Community Medicine and Primary Health Care.* 30 (1) 122-130. doi: 10.2989/17280583.2018.1424634.

Badcock, P., B., Davey, C., G., Whittle, S., Allen, N. B. and Friston, K,. J. 2017. The depressed brain: an evolutionary systems theory. *Trends Cogn. Sci.* 21, 182–194 (2017).

Badger T., A., Segrin, C., Hepworth, J., T. 2013. Telephone-delivered health education and interpersonal counseling improve quality of life for Latinas with breast cancer and their supportive partners. *Psychooncology* ; 22:1035–1042Crossref, Medline, Google Scholar

Baker, F., C., de Zambotti, M., Colrain, I., M. and Bei, B. 2018. Sleep Problems During the Menopausal Transition: Prevalence, Impact and Management Challenges. *Nature of Science and Sleep*; 10: page 73-95

Baker, F., C., Lampio, L., Saaresranta, T. and Polo-kantola, P. 2018. Sleep and Sleep Disorders in Menopausal Transition. *Sleep Med. Clin*; 13(3):443-456

Balbuena, L., Bowen, R, Baetz, M. and Marwaha, S. 2016. Mood Instability and Irritability as Core Symptoms of Major Depression: An Exploration Using Rasch Analysis. *Psychiatry,* 26 October 2016 | https://doi.org/10.3389/fpsyt.2016.00174.

Barth, J., Munder, T., Gerger, H., Nuesch, E., Trelle, S., Znoj, H., Juni, P. and Cuijpers, P. 2014. Comparative Efficacy of Seven Psychotherapeutic Interventions for Patients with Depression: A Network Meta-Analysis.*plos journals*/medicine 10(5): e1001454.

Bashar, M. I., Ahmed, K., Uddin, M. S., Ahmed, F., Emran, A., & Chakraborty, A. 2017. Depression and Quality of Life among Postmenopausal Women in Bangladesh: A Cross-Sectional Study. *Journal of Menopausal Medicine,* 23, 172-181.

Bass, J., Neugebauer, R., Clougherty, K., Verdeli, H., Wickramaratne, P., Ndogoni, L., Speelman, L., Weissman, M. and Bolton, P. 2018. Group interpersonal psychotherapy for depression in rural Uganda: 6-month outcomes. Randomised controlled trial. Published online by Cambridge University Press: 02 January 2018

Bhatt, N., V. and Hategen, A. 2019. Menopause and Mood Disorders: Overview, Pathophysiology, Etiology. https://emedicine.medscape.com

Bianchi, R. and Schonefeld, I., S. 2020. The Occpational Depression Inventory: A new tool for clinicians and epidemologists. *Journal of Psychosomatic Research*. Vol 138. https://doi.org/10.1016/JPSYCHORES.2020.110249

Booth, J., Connelly, L., Lawrence, M., Chalmers, C., Joice, S. and Becker, C. 2015. Evidence of perceived psychosocial stress as a risk factor for stroke in adults: a meta-analysis. *BMC Neurol.,* 15(1):233. doi:10.1186/s12883-015-0456-4.

Brew, B, Inder, K. and Kelly, B. 2016. The Health and Wellbeing of Australian Farmers: A Longitudinal Cohort Study. *BMC Public Health* 16, article number:988

Bromberger, J.,T. and Epperson, C., N. 2018. Depression During and After the Perimenopause: Impact of Hormones, Genetics, and Environmental Determinants of Disease *Obstet Gynecol Clin North Am*. 2018 Dec; 45(4): 663–678.

Burns, R., A., Browning, C., J., Kendig, H., L. 2015. Examining the 16-year trajectories of mental health and wellbeing through the transition into widowhood. *Int Psychogeriatr*. 27:1979–86. doi: 10.1017/S1041610215000472
PubMed Abstract | CrossRef Full Text | Google Scholar

Busari, A.O. 2015. Mindfulness based therapy; Impact on Depressed Outpatients of the State Hospital, Oyo State \Ibadan. Nigeria. *American Journal of Medicine and Medical Sciences. 5(5) 191-200*

Busari, A. O. 2016. Age at Menarche, Anxiety and use of Oral Contraceptives as Predictors of Onset of Early Menopause among Civil Servant Women in Oyo State, Nigeria. *American Journal of Medicine and Medical Sciences,* 6(2): 50-56DOI: 10.5923/j.ajmms.20160602.04.

Cash, F. and Smolak, L. 2012. Body image: A handbook of science, practice, and prevention (2nd ed.). New York, NY: Guilford Press

Casanas, R., Catalan, R., Val, J.,.L.,.D., Real, J. Valero, S. and Casas, M. 2012. Effectiveness of a Psycho-educational program for Major Depression in Primary Care: A Randomized Controlled Trial. *BMC psychiatry* 12(1), 230

Cherry, K. 2021. Psychotherapy, Diagnostic and Statistical Manual (DSM) Overview

Coney, P. 2021. Menopause: Practice Essentials, Overview, Physiology- Medscape https://emedicine.medscape.com >2

Cook, L., Mostazir, M. and Watkins, E. 2019. Reducing Stress and Preventing Depression (RESPOND): Randomized Controlled Trial of Web-Based Rumination-Focused Cognitive Behavioral Therapy for High-Ruminating University Students. *J Med Internet Res*. 2019 May; 21(5): e11349

Cuijpers, P., Donkers, T., Weissman, M., M., Ravitz, P. and Cristea, I., A. 2016. Interpersonal Psychotherapy for Mental Health Problems: A Comprehensive Meta-Analysis. *The American Journal For Psychiatry* vol 173 (7):680-687 https://doi.org/10.1176/appi.ajp..15091141

Dąbrowska-Galas, M. and Dąbrowska, J. 2021. Physical Activity Level and Self-Esteem in Middle-Aged Women. *Int J Environ Res Public Health.* Jul; 18(14): 7293.

Dalal, P., K. and Agarwal, M. 2015.Postmenopausal Syndrome. *Indian Journal of Psychiatry*; 57 (Suppl 2): S222-S232. Doi:10.4103/0019-5545.161483

Davila, J., Burge, D. and Hammen, C. 1997. Why does Attachment Style Change? *Journal of Personal Social Psychology*, 73 (4), 826-38

Delamater, L. and Santoro, N. 2018. Management of the Perimenopause *Clinical Obsterics and Gynecology;* 61(13) 1. DOI:10.1097/GFR.0000000000000389

Depression and Other Common Mental Disorders Global Health Estimates. 2019. (n.d.https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf (Accessed 15 August 2019))

Donker, T., Griffiths, K. M., Cuijpers, P. and Christensen, H. 2014. Evaluating the Efficacy and Cost-Effectiveness of Web Based Indicated Prevention of Major Depression: Design of a Randomised Controlled Trial. *BMC Psychiatry*, 14, Article 25.

Duberstein, P., R., Ward, E., A., Chaudron, L., H. and He, H. 2018. Effectiveness of Interpersonal Psychotherapy- Trauma for Depressed Women with Childhood Histories.*Journal of consulting and clinical psychology* 86(10): 868-878. Doi:10.1037/ccp0000335

Duru, E., and Balkis, M. 2014. The roles of academic procrastination tendency on the relationships among self-doubt, self-esteem and academic achievement Egitim Ve Bilim, 39(173)Retrieved from http://search.proquest.com/docview/1521720023?accountid=1229.

Eberi, C., Winkler, I., Pawlczack, S., Trobitz, E., Rinck, M., Becker, S. and Lindenmeyer, J. 2018. Self-esteem consistency predicts the course of therapy in depressed patient *Journals; plos.org*

Ekwueme, O., C., Chukwueneke, F., Ekwueme, A., C., Ndu, A., C., Idoko, C., A. and Nwobi, E., A. 2018. Survey of early predictive signs of poor mental health and socio-cultural beliefs about mental illness in Enugu state, Nigeria. *Nigeria Journal of Medicine*; 27(1) DOI: 10.4103/1115-2613.278228

El Khoudary, S., R., FAHA , G., G., Crawford, S., L., Avis, N., E., Brooks, M., M., Thurston, R., C., Karvonen-Gutierrez, C., Waetjen, L., E. and Matthews, K. 2019. The menopause transition and women's health at midlife: a progress report from the Study of Women's Health Across the Nation (SWAN) *Menopause*: 26 - Issue 10 – p 1213- 1227doi: 10.1097/GME.0000000000001424

Elmer, T. and Stadtfeld, C. 2020. Depressive Symptoms are Associated with Social Isolation in Face-to-Face Interaction Networks. Scientific Reports 10, Article number: 1444

Enike, T., C., Anazonwu, C., O. , Okafor, R., A. and Ugwuja, M., O. 2021. Social Support, Self- Esteem, and Religiosity as predictors of Depression among Youths in Anambra

State. *International journal of innovative psychology and social development* 9(4):91-101.www.seahipaj.org

Epperson, C., N., Sammel, M., D. and Freeman, E., W. 2013. Menopause Effect on Verbal Memory: Findings From A Longitudinal Community Cohort. *J Clin Endocrinol Metab*. 98 (9): 3829-3838

Erbil, N. 2017. Attitudes towards menopause and depression, body image of women during menopause. *Alexandra Journal of Medicine* 54(3)

Estrada-Martínez, L. M., Caldwell, C. H., Bauermeister, J. A. and Zimmerman, M. A. 2012. Stressors in multiple life-domains and the risk for externalizing and internalizing behaviors among African Americans during emerging adulthood. *J Youth Adolesc* 41(12):1600–12. doi:10.1007/s10964-012-9778-3.

Fabre, L., F. and Smith, L., C. 2012. The Effect of Major Depression on Sexual Function in Women. *The Journal of Sexual Medicine*; 9:231 239.

Farmer, A. S. and Kashdan, T. B. 2014. Affective and Self-Esteem Instabilty in the Daily Lives of People with Generalised Social Anxiety Disorder.*Clinical Psychological Science*. *SAGE journals.* https://doi.org/10.1177/2167702613495200

Food and Agricultural Organisation (FAO), 2012.

Frank, E. Maggi, L., Minnati, M. and Benvenuti, A. 2009. The rationale for combining interpersonal and social rhythm therapy (IPSRT) Aand pharmacotherapy for the treatment of bipolar disorders. *Clin Neuropsychiatry*; 6: 63-74

Freeman, E. W. 2015. Depression in the Menopause Transition: risks in the changing hormone milieu as observed in the general population. *Women's Midlife Health* 1, Article number 2

Frybarger, T., Thao, K., A. 2019. Crisis in the Farming Community; Department of Social Work, Minnesota State University: Mankato, MN, USA, Available online:

https://ahn.mnsu.edu/globalassets/college-of-allied-health-and-nursing/social-work/pdfs/ farmer_mental_health_policy_v3.pdf (accessed on 21 April 2021)

Gao, F., Yao, Y. and Liu, H. 2019. The mediating role of resilience and self-esteem between negative life events and positive social adjustment among left-behind adolescents in China: a cross-sectional study. *BMC Psychiatry* 19, Article number :239

Garrusi B, Baneshi MR. Body dissatisfaction among Iranian youth and adults. *Cad Saude Publica.* 2017;33(9):e00024516. https://doi.org/10.1590/0102-311X00024516

Gesinde, A. M. and Sanu, O. J. 2014. Prevalence and Gender Difference in Self-Reported Depressive Symptomatology Among Nigerian University Students: Implication for Depression Counselling. *The Counsellor*,33(2),129-140 http://www.cassonnigeria. org/volume 332.pdf

Ghafoori, B., Barragan, B. and Palinkas, L. 2013. Gender disparities in the mental health of urban survivors of trauma. *J Aggress Maltreat Trauma* 22(9):950–63. doi:10.1080/10926771.2013.835016

Ghazanfarpour, M., Khadivzadeh, T. and Babakhanian, M. 2016. Investigating the Relationship Between Sexual Function and Quality of Life in Menopausal Women. *J Fam Reprod Health*; 10(4): 191-197

Green, S., M., Donegan, E., Frey, B., N., Fedorkow, D., M., Key, B., L., Streiner, D., L. and McCabe, R., E. 2019. Cognitive behavior therapy for menopausal symptoms (CBT- Meno): a randomized controlled trial.*Menopause*: Volume 26 - Issue 9 - p 972-980 doi:10.1097/GME.0000000000001363

Gois C, Dias V., V, Carmo I. 2014. Treatment response in type 2 diabetes patients with major depression. *ClinPsycholPsychother* 2014;21:39–48Crossref, Medline, Google Scholar

Gordon, J., L., Girdler, S., S., Meltzer-Brody, S.,E., Stika, C., S., Thurston, R., C.and Clark, C., T. 2015. Ovarian hormone fluctuation, neurosteroids and HPA axis dysregulation in perimenopausal depression: a novel heuristic model. *Am J Psychiatry.* 172:227–36. doi:10.1176/appi.ajp.2014.14070918
PubMed Abstract | CrossRef Full Text | Google Scholar

Gordon, J., L., Halleran, M., Beshai, S., Eisenlohr-Moul, T., A., Frederick, J. and Campbell, T., S. 2021. Endocrine and psychosocial moderators of mindfulness-based stress reduction for the prevention of perimenopausal depressive symptoms: A randomized controlled trial. *Psychoneuroendocrinology.*130:105277 doi:10.1016/j.psyneuen.2021.105277
PubMed Abstract | CrossRef Full Text | Google Scholar

_____,, Nowakowski, S. and Gurvich, C. 2022. The Psychology of Menopause. *Frontiers in Global women's health*, 20.https://doi.org/10.3389/fgwh.22021.828676

_____, and Sander, B. 2021. The role of estradiol fluctuation in the pathophysiology of perimenopausal depression: A hypothesis paper. *Psychoneuroendocrinology.* 2021:105418. doi: 10.1016/j.psyneuen.2021.105418

_____,, Peltier, A., Grummisch, J., A. and Tottenham, L., S. 2019. Estradiol Flunctuation, Sensitivity to Stress and Depressive Symptoms in the Menopause Transition: A Pilot Study. *Front. Psychol*. 10:1319.doi:10.3389/fpsyg.2019.013119

Grogan, S. 2016. Body image: Understanding body dissatisfaction in men, women and children: *Taylor & Francis*

Guo, Y., Ge, T., Mei, L., Wang, L. and Li, L. 2021. Widowhood and Health Status Among Chinese Older Adults: The Mediation Effects of Different Types of Support. *Public Health*, 17November 2021 | https://doi.org/10.3389/fpubh.2021.745073

Guynn, R., W. 2017. Psychotherapies: Interpersonal psychotherapy. In: Sadock, B. .J, Sadock, V. A, Ruiz P, editors. *Kaplan & Sadock's Comprehensive Textbook of Psychiatry.* 10th ed. Philadelphia: Lippincott Williams & Wilkins; pp. 2775–85. [Google Scholar]

Hajesmaeel-Gohari, S., Shafiel, E. and Bahaadinbeigy, K. 2021. A Study on women's health information needs in menopausal age. *BMC Women's health* 21, Article number 434

Hakimi S, Nazarpour S, Ramezani Tehrani F, Simbar M, Zaiery F. 2017. Women's experiences about menopause and related factors. *Iran J Endocrinol Metab*.19(3):185–93.

Hakimi S, Nazarpour S, Ramezani Tehrani F, Simbar M, Zaiery F. 2018.. Comparing the pattern of menopausal symptoms, concern and attitudes in urban and rural postmenopausal Iranian women. *J Menopausal Med.* 2018;24(1):50–5.

Hammen C. 2015. Stress and depression: old questions, new approaches. *Curr. Opin. Psychol.* 4:80–85

Hees, M., L., J., M, Rotter, T., Ellermann, T. and Evers, S. M. A., .A. 2013.The Effectiveness of Individual Interpersonal Psychotherapy as a Treatment for Major Depressive Disorder in Adult Outpatient*: A Systematic Review. BMC Psychiatry*, 13, 22

Hennksen, I. O., Ranoyen, I. and Stenseng, F. 2017. The Role of Self-Esteem in the Develpoment of Psychiatric Problems: a three-year Prospective Study in a Clinical Sample of Adolescents. Child and Adolescent and Mental Health. BMC

Henrion, A., Courtet, P., Arpon-Brand, V., Lafrancesca, A., Lacourt, L., Jaussent,I., Guillaume, S., Olie, E. and Ducasse, D. 2020.PEPSUI, a Psychoeducational Program for the Management of Suicidal Patients: A Qualitative Study for

Randomized Controlled Trial. *Front Psychiatry*;11: 500447. Doi:10.3389/fpsy.t2020.500447

Hilbert, S., Goerigk, S., Padberg, F., Nadjiri, A., Ubleis, A., Jobst, A., Dewald-Kaufmann, J., Falkai, P., Buhner, M, Naumann, F and Sarubin, N. 2019. The role of self-esteem in depression: A longitudinal study. *Behav cogn Psychother* 47(2); 244-250

Holmes, T. H. and Rahe, R. H. 1967. The social readjustment rating scale. *J Psychosom Res* 11:213–8. doi:10.1016/0022-3999(67)90010-4.

Hoffman, B., Schorge, J., Halvorson, L., Bradshaw, K. and Cunningham, F. 2012. 2nd ed. New York City: The McGraw Hill Companies. *William's Gynecology*; pp. 1–1399.

Horacek, J., Rozehnalova, E., Rosslerova, H. and Ales, D. 2010. The Influence of Stressful Life-Events on Development of Depression and Treatment Response in the Population of Higher Age.https://iscuni.cz

Hounsome, B. Edwards, R. T., Hounsome, N. Edward-Jones, G. 2012. Psychological Morbidity of Farmers and Non-Farming Population:Results from a UK Survey. *Community Ment Health J*. 48(4): 503-510. doi:10:1007/s10597-011-9415-8

Ibraheem, O. M., Oyewole, O. E. and Olaseha, I. O. 2015. Experiences and perceptions of menopause among women in Ibadan South East Local Government Area, Nigeria, *African Journal of Biomedical Research*, 18, (2) 81–94. View at Google Scholar · View at Scopus.

Ibrahim, A., K., Kelly, S. J., Adams, C., E. and Glazebrook, C 2012. A systematic review of studies of depression prevalence in university students, *Journal of Psychiatric Research*,Retrieved 19th February, 2013 from http://dx .doi. org/10. 1016/j. jpsychores .2012.11.015.

Ikuburuji, O., A., Makinde, B., O. and Olusakin, A., M. 2022. Assessment And Management of Proneness to Suicide Among In-School Adolescents in Lagos State, Nigeria.*International Journal of Educational Research* Vol.10, No 1

Íncera-Fernández, D., Gámez-Guadix, M. and Moreno-Guillén, S. 2021. Mental Health Symptoms Associated with Sexualized Drug Use (Chemsex) among Men Who Have Sex with Men: A Systematic Review. *Int. J. Environ. Res. Public Health* 2021, 18, 13299. https://doi.org/10.3390/ ijerph182413299

Jakobsen, J., C., Hansen, J., L. and Simonsen, S. 2012. Effects of cognitive therapy versus interpersonal psychotherapy in patients with major depressive disorder: a systematic review of randomized clinical trials with meta-analyses and trial sequentialanalyses. *Psychol.Med* 2012;42:1343 1357Crossref, Medline, Google Scholar

Jadhav A., Weir, D. 2018. Widowhood and depression in a cross-national perspective: evidence from the United States, Europe, Korea, and China. *J Gerontol B-Psychol*, 73:E143–E53. doi: 10.1093/geronb/gbx021 PubMed Abstract | CrossRef Full Text | Google Scholar

Jenczura A., Czajkowska M., Skrzypulec-Frankel A., Skrzypulec-Plinta V., Drozdzol-Cop A. 2018. Sexual Function of Postmenopausal Women to Alcohol. *Int. J. Environ. Res. Public Health.*;15:1639. doi: 10.3390/ijerph15081639. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

Jha, M., K., Minhajuddin, A., South, C., Rush, J. and Trivedi, M., H. 2019. Irritability and its Clinical Utility in Major Depressive Disorder: Prediction of Individual-Level Acute-Phase Outcomes Using Early Changes in Irritability and Depression Severity. The American Journal of Psychiatry. https://doi.org/10.11176/appi.ajp.2018. 18030355

Jidong, D.E Husain, N., Roche, A., Lourie,G., Ike, T., J., Murshed, M., Park, M., S., Karik, H., Dagona, Z., L., Pwajoke, J., Y., Gumber, A., Francis, C., Nyam, P. P. and Nwakom, S., E. 2021. Psychological interventions for maternal depression among women of African and Caribbean origin: a systematic review. *BMC Womens Health.* 2021; 21: 83 https://dx.doi.org/10.1186%2Fs12905-021-01202-x

Johnson, T., C. 2021. Sex and Menopause. Webmed, LLC. https://www.webmed.com>...>Guide

Jones-Bitton A, Best C, MacTavish J, Fleming S. and Hoy S. 2019. Stress, anxiety, depression, and resilience in Canadian farmers. *Soc Psychiatry Psychiatr Epidemiol* ;55:229– 36. https://doi.org/10.1007/s00127-019-01738-2.

José-Vicente Bonet. Sé amigo de ti mismo: manual de autoestima. 1997. Ed. Sal Terrae. Maliaño (Cantabria, España). ISBN 978-84-293-1133-4. Smith, R. A.

Kallioniemi, M. K, Simola, A., Kinnunen B. and Kymäläinen, H. R. 2011. Stress in farm entrepreneurs. In: Langan-Fox J, Cooper CL, eds. Handbook of Stress in theOccupations. Cheltenham, UK: Edward Elgar;2011:381–402.

Kanamori,M., Hanazato, M., Kondo, K., Stickley, A. and Kondo, N. 2021. Neighborhood farm density, types of agriculture, and depressive symptoms among older farmers: a cross- sectional study. *BMC Public Health* volume 21, Article number: 440

Kennedy, A. J.,Maple, M. J., McKay, K. and Brumby, S. A. 2014. Suicide and Accidental Death in Australia.s Rural Farming Communities: A Review of the Literature, *Rural Remote Health*; 14(1):2517

Kessler, R., C. and Bromet, E., J. 2013. The Epidemiology of Depression Across Culture. *Annu Rev Public Health*; 34:119-138. Doi:10.1146/annurev-publhealth-031912-114409.

Kettlewell, N., Moris, R., W., Cobb-Clark, D., A., Cripps, S. and Glozier, N. 2020. The Differential Impact of Major Life Events on Cognitive and Affective Wellbeing. *SSM- Population Health*; 10. https://doi.org/10.1016/J.SSM PH.2019.100533

Keyes, K. M., Ba, C., P., Galea, S., Mc Laughlin, K., A., Koenen, K., C. and Shear, M., K. 2014. The Burden of Loss: Unexpected Death of A Loved One and Psychiatric Disorders Across the Life Course in A National Study. *Am J Psychiatry*; 171(8): 864-871

Kuo, S., C, Sun, J., L. And Tang, S., T. 2017. Trajectories of depressive symptoms for bereaved family members of chronically ill patients: a systematic review. *J Clin Nurs*. ;26:3784–99.

Langhinrichsen-Rohling, J. 2015. A Gendered Analysis of Sex Differences in Suicide-Related Behaviors: University of South Alabama.

Lawal, O. 2018. Attitudes Towards Depression and Suicide. An Analysis of News Coverage and Online Comment on Nigeria News Sites. Thesis Georgia State University, 2018. https://scholarworks.gsu.edu/communication_theses/120.

Legg, J., T. and Coelho, S. 2020. What is High Functioning Depression. Medical News Letter Today.

Li, K., Y., Dajun, Z., Yinghao, L. and Tianqiang, H. 2015. Meta-analysis of the Relationship between Life-events and Depression in Adolescents. *J Pediatr Care*.2016, 2:1. doi:10.21767/2471-805X.100008.

Lim, G., Y., Tam, W., W., Ho, C., S. Zhang, M., W. and Ho, R., C. 2018. Prevalence of Depression in the Community from 30 Countries between 1994 and 2014. *Scientific Reports* 8, Article number 2861

Lin, K., Y., Chou, C., Chang, C., Y., Lin, W. and Wan, L. 2020. Association between Oophorectomy and Depression in patients with Comorbidities: A Nationwide Cohort Study in Taiwan. Taiwanese Journal of Obstetrics and Gynaecology; 59(6)

Lin, H. L., Hsiao, M. C. and Liu, Y. T. 2012. Pre-menopause and incidence of depression in midlife women: a population-based study in Taiwan. *Climacteric*.;16:381–386.

Liu, R., T., Kleiman, E., M. and Cheek, S., M. 2015. The Hopelessness Theory of Division. A Quarter Century in Review.Clin. Psychol 22(4): 345-365

Llaneza, P., García-Portilla, M. P., Llaneza-Suárez, D., Armott, B. and Pérez-López, F. R. 2011.Depressive disorders and the menopause transition. *Maturitas*, 71; 120-130. www.elsevier.com/locate/maturitas

Llankoon, I., M., P., S., Samarasinghe, K. and Elgan, C. 2021. Menopause is a natural stage of aging: a qualitative study. *BMC Women's Health* 21, Article number 47

Lukasiki, K., M., Waris, O., Soveri, A., Lehtonen, M. and Laine, M. 2019. The Relationship of Anxiety and Stress with Working Memory Performance in a Large Non-Depressed Sample.Front.Psychol.,23. https://doi.org/10.3389/fpsyg.2019.00004.

Mahan, R., M., Swan, S., A. and Macfie, J. 2018. Interpersonal Psychotherapy and Mindfulness for treatment of major depression with anxiety distress. *Clinical Case Study* vol.17(2) 104-119 sagepub.com/home/ccs

Makara-Studzinska, M., T., Krys-Noszczyk, K., M. and Jakiel, T. 2014. Epidemiology of the Symptoms of Menopause- An Intercontinental Review. Przeglad Menopauzalny. 13(3):203-211. doi:10.5114/pm.2014.43827. Termedia Publishing

Makhubela, M. 2019. The relation between low self-esteem and depressive mood in a non-clinical sample: The role of gender and negative life events. *Journal of Pychology in Africa*. Vol.29 (1) 54-59

Maki, P., M., Kornstein, S., G., Joffe, H., Bromberger, J., T., Freeman, E.,W. and Athappilly, G. 2019. Guidelines for the evaluation and treatment of perimenopausal depression: summary and recommendations. *J Womens Health.* (2019) 28:117–34. doi:10.1089/jwh.2018.27099.mensocrec
PubMed Abstract | CrossRef Full Text | Google Scholar

Markowitz, J. C. .2015. An update on interpersonal psychotherapy for chronic depression. *J Clin Psychol.*

Mangweth-Matzek B., Hoek H.V., Rupp C.I., Kemmler G., Pope H.G., Kinzl J. 2013. The menopausal transition—A possible window of vulnerability for eating pathology. *Int. J.Eat. Disord.* ;46:609–616. doi: 10.1002/eat.22157. [GPubMed] [CrossRef] [oogle Scholar

Martisen, K., D., Rasmussen, L., M., P. and Neumer, S. 2021. Change in quality of life and self- esteem in a randomized controlled CBT study for anxious and sad children: can targeting depressive symptoms improve functional domains in schoolchildren? *BMC Psychology* 9(8) https://doi.org/10.1186/s40359-021-00511-y

Maxwell, B. E., 1992. Hostility, Depression and Self-Esteem among Troubled and Homeless Adolescents in Crisis. *Journal of Youth and Adolescence*, 1992- Springer

McIntosh, A., M., Hall, L., S., Zeng, Y., Adams, J., M., Gibson, J. and Hocking, L., Y.. 2016. Genetic and Environmental Risk for Chronic Pain a d the Contribution of Risk Variants for Major Depressive Disorder: A Family Based Mixed Model Analysis . *PLoS Med*13(8)

Meers, J., M, Dawson, D.,B. and Nowakowski, S. 2022. CBT-I for perimenopause and postmenopause. *Adapting Cognit Behav Ther Insomnia*. 2020:333–46. doi: 10.1016/B978-0-12-822872-2.00011-6.PubMed Abstract | CrossRef Full Text | Google Scholar

Michl, L. C., McLaughlin, K. A., Shepherd, K. and Nolen-Hoeksema, S. 2013. Rumination as a mechanism linking stressful life-events to symptoms of depression and anxiety: longitudinal evidence in early adolescents and adults. *J Abnorm Psychol* 122 (2):*339–52.* doi:10.1037/a0031994.

Milgron, J., Hirshler, Y., Reece, J., Holt, C. and Gemmill, A., W. 2019. Social Support- A Protective Factor for Depresse Perinatal Women? Int J Environ Res Health, 16(8): 1426.

Mishra, N. and Mishra, V. N .2015. Devanshi Exercise beyond menopause: Dos and don’ts. *J Midlife Health; 2*:51–6.

Moazen-Zadeh, S. and Assari, S. 2016. Black-White Differences in Predictive Validity of Depressive Symptoms for Subsequent Major Depression. *Front Pub Health* 4:13. doi:10.3389/fpubh.2016.00013.

Mosconi L, 2017. Sex differences in Alzheimer risk: brain imaging of endocrine vs chronological aging. *Neurology.* ;89(13) g:1382–90.

Motlova, B., L., Balon, R., Beresin, E., V., Brenner, A., M., Coverdale, J., H., Guerrero, A., P., S., Louie, A., K. and Roberts, L., W. 2017. Psychoeducation as an Opportunity for Patients, Psychiatrists and Psychiatric Educators: Why Do We Ignore It? *Academic Psychiatry* 41, 447-451

Moy, E., Garcia, M., C., Bastian, B., Rossen, L., M., Ingram, D., D., Faul, M., Massetti, G., M., Thomas, C., C., Hong, Y., Yoon, P., W. and Lademarco, M., F. 2017. Leading Causes of Death in Non-Metropolitan and Metropolitan Areas-United States, 199-2014.Surveillance summaries 66 (1); 1-8

Mrazek, D. A, Hornberger, J. C, Altar, C. A. and Degtiar, I. 2014. A review of the clinical, economic, and societal burden of treatment-resistant depression: 1996-2013. *Psychiatr Serv*; 65(8):977–87. doi: 10.1176/appi.ps.201300059.

Mu, W., Luo, J., Rieger, S., Trautwein, U. and Roberts, B., W. 2019. The relationship between self-esteem and depression when controlling for neuroticism. *Collabra psychology* 5(1);11

Muriungi, S. K. and Ndetei, D. M. 2013. Effectiveness of psycho-education on depression, hopelessness, suicidality, anxiety and substance use among basic diploma students at Kenya Medical Training College S *Afr J Psych ;19*(2):41-50. DOI:10.7196/SAJP.401

National Institutes of Health. (NIH) 2014. Learn to manage stress. Retrieved May 13, 2016, from https://www.nlm.nih.gov/medlineplus/ency/article/001942.htm

Nauert, R. 2015. Men's Suicide Rate is 3 times that of Women. Psychcentral.com.

Nazarpour, S., Simbar, M., Majd, H., A., Torkamani, Z., J., Andarvar, K., D. and Rahnemael, F. 2021. *BMC Public Health* volume 21, Article number: 1599

Nazarpour, S., Simbar, M. and Tehrani, F., R. 2016. Factors Affecting Sexual Function in Menopause: A Review Article. Taiwanese Journal of Obstetrics and Gynaecology; 55(4):480-487

Nusslock, R., Shackman, A., J., Harmon-Jones, E. Alloy, L., B., Coan, J., A. and Abramson, L., Y.2011. Cognitive Vulnerability and Frontal Base Asymmetry. Journal of Abnormal Psychology, 120(2), 497-503

Obi, I., E., Aniebue, B., N., Okonkwo, K., O., B. and Okeke, T., A., and Ugwunna, N., C., W. 2014. Prevalence of depression among health workers in Enugu, South East Nigeria. Nigerian *Journal of Clinical Practice*; 18: (3)

Obinna, C. 2017. DEPRESSION: 7m Nigerians risk suicide. Vanguard Newspaper. Read more at: https://www.vanguardngr.com/2017/05/depression-7m-nigerians-risk-suicide/

Oginni, O., A., Oloniyi, I., O., Ibigbami, O., Ugo, V., Amiola, A., Ogunbanjo, A., Esan, O., Adelola, A., Darapole, O., Ebuka, M. and Mapayi, B. 2021. Depressive and Anxiety Symptoms and COVID-19-related Factors among Men and Women in Nigeria. PLos ONE 16(8): e0256690

Olchowska-Kotala, A. 2017. Body esteem and self-esteem in middle-aged women *Journal of Women and Aging* 30(4):1-11DOI:10.1080/08952841.2017.1313012

Oloyede, O., A. and Obajimi, G., O. 2018. Symptomatology of Menpause among Suburban Nigerian Women. *Tropical Journal of Obstetrics and Gynaecology*; 35(2): 188-191. DOI:10.4103/TJOG.TJOG_71_17

Onozure, D., 2017. Court Orders Psychiatric Test for Woman over Suicide Attempt. Vanguard, 25th April. Retrieved from http://.www.vanguard.ngr.com/-lagos-police-rescues-woman-/

Onuoha, O. C. ., Obi-Nwosu, H., Nnorom, I. F., & Aigbiremhon, J. I. 2021. Effects of Psychoeducation on Depressive Symptoms among Patients Living with Chronic

Illnesses. *Practicum Psychologia*, *11* (1) .Retrieved from https://*journals.aphriapub.com/index*.php/PP/article/view/1342

Onya, O. and Otorkpa, C. 2018. Prevalence and Socio-Demographic Determinants of Depression in Women: A Comparison between Pre-Menopausal and Post-Menopausal Attendees of the General Outpatient Department in Fmc Lokoja. *Open Journal of Depression*, 7, 51-59. doi: 10.4236/ojd.2018.73004.

Orri, M., Perret, L., C., Tureck, G. and Geoffroy, M. 2018.Association between irritability and Suicide-related Outcomes across the Life-course. Systematic Review of both Community and Clinical Studies. *J Affect Disord*. 15;239: 220-233

Orth, U. and Robins, R. 2013. Understanding the link between low self-esteem and depression showed strong link between self-esteem and depression. *Current Directions in Psychological Science* 22 (6) 455-460 DOI:10.10.1177/0963721413492763cdps.sagepub.com

Ouyang, M., Gui, D., Cai, X., Yin, Y., Mao, X., Huang, S., Zeng, P. and Wang, P. 2021. Stressful Life Event and Subjective well-being in Vocational School Female Adolescents: The Mediating Role of Depression and the Moderating Role of Social Support. *Front psychol*.11:603511. Doi: 10.3389/fpsyg.2020.6603511

Overbeek, G., Vermulst, A., De Graaf, R., Ten Have, M. Engels, R. and Scholte, R. 2010. Positive life-events and mood disorders: Longitudinal evidence for an erratic life course hypothesis. *Journal of Psychiatric Research* 44; 1095-1100

Park, K. and Yang, T. 2017. The long term effects of self-esteem on depression: The role of alcohol and substance use during young adulthood. *The sociological quarterly*. HHS Public Access. https://www.ncbi.nlm.gov/pmc/articles

Peacock, K. and Ketvertis, K., M. 2021. Menopause .in Statpearls Publishing. Treasure Island (Fl). 2022jan- (Http://Creativecommons.Org.Licences/By/4.0/

Pearce G, Thøgersen-Ntoumani C, Duda J. 2013. Body image during the menopausal transition: a systematic scoping review. *Health Psychol Rev*. 2014;8(4):473–89. https://doi.org/10.1080/17437199.2013.848408

Pengpid, S. and Peltzer, K. 2020. Association of Serious Physical Injuries with Posttraumatic Stress and Depressive Symptoms. *BMC Psychology*,8 Article number 129

Perlman, B., Kulak, D., Goldsmith, L., T. and Weiss, G. 2018. The Etiology of Menopause: Not just Ovarian Dysfunction but also a role for the nervous system. Global Reproductive Health, 3 (2)-p e8

Prat, J., A and Brody, D., J. 2017. Depression in the US Household Population, 2000-2012 CDC https://www.cdc.gov/nchs/databriefs/db172han 2014, Accessed July26,2017

Quiroga A., Larroy C., Gonzalez-Castro P. 2017 Climacteric symptoms and their relation to femine self-concept. *Climacteric.* 2017;20:274–279. doi: 10.1080/13697137.2017.1310192. [PubMed] [CrossRef] [Google Scholar]

Rabelo, J., L., Cruz, B., F., Ferreira, J., D., R., Viana, B. and Barbosa, I., G. 2021. Psychoeducation in Bipolar Disorder: A Systematic Review. *World Journal of Psychiatry;* 19; 11(12): 1407-1424

Rajhans, P., Hans, G., Kumar, V. and Chadda, R., K. 2020. Interpersonal Psychotherapy for Patients with Mental Disorders Indian J Psychiatry;62(Suppl 2):S201-S212

Ravitz P, Watson P. 2014. Interpersonal psychotherapy: healing with a relational focus. *Focus*; 12:275–284Crossref, Google Scholar

Refael, M., Mandanpour, S., Masoumi, Z., S. and Parsa, P. 2022. Women's experiences in the transition to menopause: a qualitative research. *BMC Women's Health* volume 22, Article number: 53

Riemann, D., Krone, L., B., Wulff, K. and Nissen, C. 2019. Sleep, insomnia, and depression. *Neuropsychopharmacology*. 2020 Jan; 45(1): 74–89

Righetti, F. and Visserman, M. 2017. I Gave Too Much. Social Psychological and Personality Science, 194855061770701 DOI:10. 1177/1948550617707019

Roohafza, H., Ramezani, M., Sadeghi, M., Shahnam, M., Zolfagari , B. and Sarafzadegan, N . 2011. Development and Revalidation of Stressful life event questionnaire. *International journal of public health* 56(4), 441-448

Rosmann, M. R. 2015. Behaviour Health Care of the Agricultural Population: A Brief History. Idph:iowa.gov>Portals>Files

Rubenstein, H., R and Foster, J., L., H. . 2013. The relationship between attitudes to menopause and self-objectification, body shame and body surveillance: University of Cambridge;

Russell, J., K., Jones, C., K. and Newhouse, P., A. 2019. The Role of Estrogen in Brain and Cognitive Aging. *Neurotherapeutics;* 16(3): 649-665

Salihu, A. S. and Udofia, O. 2016. Prevalence and Associated Factors of Depression among General Outpatients in a Tertiary Institution in Kano, North-Western Nigeria. *Open Journal of Psychiatry*, 6, 228-236. https://doi.org/10.4236/ojpsych.2016.63028

Salk, R., H., Hyde, J., S. and Abramson, L., Y. 2017. Gender Differences in Depression in Representative National Samples: Meta-Analyses of Diagnoses and Symptoms. *Psychol Bull.* 2017 Aug; 143(8): 783–822.

Santomauro, D., F. 2021. Prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet* .Articles|Volume 398, Issue 10312, P1700-1712, November 06, 2022 Global

Sarkhel, S., Singh, O., P. and Arora, M. 2020. Clinical Practice Guidelines for Psychoeducation in Psychiatry Disorders: General Principles of Psychoeducation. *Indian J Psychiatry*. 62(Suppl 2):S319-S323

Schone, C., Tandler, S., S. and Stiensmeier-Pelster, J. 2015. Contingent self-esteem and vulnerability to depression: academic contingent self-esteem predicts depressive

symptoms in students *Front Psychol*. 2015; 6: 1573.Published online 2015 Oct 20. doi: 10.3389/fpsyg.2015.01573PMCID: PMC4611308 PMID: 26539135

Séjourné, N., Got, F., Solans, C., and Raynal, P. 2018. Body image, satisfaction with sexual life, self-esteem and anxio-depressive symptoms: a comparative study between pre- menopausal, peri-menopausal and post-menopausal women. *Journal of Women and Aging, Taylor & Francis* (Routledge), 2018, 31 (1), pp.18-29. ff10.1080/08952841.2018.1510247ff. ffhal-03190633ff 1

Shapero, B., G., Black, S., K., Liu, R., T., Klugman, J., Bender, R., E., Abrahmson, L., Y. and Alloy, L., B. 2014. Stressful Life Events and Depression Symptoms: The Effect of Childhood Emotional Abuse on Stress Reactivity. *Journal of Clinical Psychology*; 70 (3): 209-223

Sherbourne, C. D., Edelen, M. O., Zhoo, A., Bird, C. Duan, N. and Wells, K. B. 2008. How a Therapy-Based Quality Improvement Intervention for Depression Affected Life-Events and Psychological Well-being Over Time: A 9-year Longitudinal Analysis. *Med Care*, 46 (1), 78-84

Shittu, R. O., Odeigah, L. O., Issa, B. A., Olanrewaju, G. T., Mahmoud, A. O., & Sanni, M. A. 2014. Association between Depression and Sociodemographic Factors in a Nigerian Family Practice setting. *Open Journal of Depression*, 3, 18-23. https://doi.org/10.4236/ojd.2014.3100

Silva, M Adriana Loureiro, A and Cardoso, G. 2016. Social determinants of mental health: a review of the evidence. *The European Journal of Psychiatry*, 30 (4), 259-292

Soares, C. N. 2013. Depression in Peri and Postmenopausal Women: Prevalence ,Pathophysiology and Pharmacological Management. Drugs and Aging, 30, 677-685.https://doi.org/10.1007/s40266-013-0100-1

Soichiro, S. and Tzung, L., Y. 2013. Challenges in Treating Patients with Major Depressive Disorder: The Impact of Bioogical and Sociological Factors *CNS Drugs* 27, 5-10

Sokratous, S., Merkouris, A. and Karanikola, M. 2013. The association between stressful life events and depressive symptoms among Cypriot university students: a cross-sectional descriptive correlational study. *BMC Public Health* 13 Article number: 1121

Sowislo, J.. F., Orth, U. 2013. Does low self-esteem predict depression and anxiety? A meta- analysis of longitudinal studies. *Psychol. Bull.* ;139:213–240. doi: 10.1037/a0028931. [PubMed] [CrossRef] [Google Scholar

Spears, N., Lopes, F. and Stefansdottir, A. 2019. Ovarian Damage from Chemotherapy and Current Approaches to its Protection. Human Reproduction Update; 25(6):673-93

Spinelli, M., G, Endicott, J, Goetz, R., R, Segre, L., S. 2016. Reanalysis of efficacy of interpersonal psychotherapy for antepartum depression versus parenting education program: initial severity of depression as a predictor of treatment outcome. *J Clin Psychiatry*; 77(4):535-40. doi: 10.4088/JCP.15m09787.

Stroebe M, Schut H, Boerner K. 2017. Models of Coping with Bereavement: An Updated Overview. *Estud Psicol-Madrid*; 38:582–607. doi: 10.1080/02109395.2017.1340055

Stute , P., Spyropoulou, A., Karageorgiou , V., Cano , A., Bitzer , J., Ceausu, J. , Chedraui P., Durmusoglu, F., Risto Erkkola, R., Dimitrios, G., Goulis, D., G., Hirschberg, A.,L., Kiesel , L., Lopes , P., Pines , A., Rees ,M., Trotsenburg, M.,V., Zervas, J. and Lambrinoudaki, I. 2019. Management of Depressive symptoms in Peri-and postmenopausal Women: EMAS Position Statement. DOI https://doi.org/10.1016/j.maturitas.2019.11.002

Taiwo, T., Atilola, O., Ani, C.. and Ola, A.,B 2020. Effect of Behavioural Therapy on Depression in Adolescents with Sickle Cell Disease. Open Journal of Psychiatry 10(3) https://www.scirp.org/journal/journalarticles.aspx?journalid=603

Terasa Y. and Heidi, L., R. 2021. Farmer Mental Health Interventions: A Systematic Review *International Journal of Environmental Research and Public Health*; 19(1), 244; https://doi.org/10.3390/ijerph19010244

Torres, F. 2020. The American Psychiatric Association (APA)

Torske, M., O. 2017. Mental Health in Norwegian Farmers: The HUNT Study, Norway *Journal of Agromedicine*. 21, No. 1, 24.33http://dx.doi.org/10.1080/1059924 X2015.1106375

Ugo, I. 2016.Perception of Mental Illness in South-Eastern Nigeria: Causal Beliefs, Attitudes, Help-Seeking Pathways and Barriers to Help-Seeking. A Thesis Submitted to the University of Wolverhampton

Umoh, E., C and Iruloh B., N. 2021. Effects of Acceptance and Commitment Therapy and Interpersonal Therapy on Reduction of Social Anxiety Disorder Among In-School Adolescents In Rivers State. https://www.uniport.edu.ng/publications/pub1/journals/education-journal/effects-of-acceptance-and-commitment-therapy-and-interpersonal-therapy-on-reduction-of-social- anxiety-disorder-among-in-school-adolescents-in-rivers-state.html

Usman, E., Adelaja, B., Olowopejo, M., 2017. Man Jumps off Third Mainland Bridge in Lagos. Vanguard 19thMarch. Retrieved from http:// vanguard.ngr.com/./update man-jumps-off-thirdmainland-bridge-lagos/

Uwakwe, C. B. U., Ajufo, B. I., Nwagwu, H anf Falaye, A. O.2000. Information Provided by Mothers to their Adolescent Daughters Concerning Reproductive Health in Urban and Rural *Nigeria. Journal of Information Communication for Education in Africa*, 4 (1):214-20

Van Zoonen K, Buntrock C, Ebert D.,D. 2014. Preventing the onset of major depressive disorder: a meta-analytic review of psychological interventions. *Int J Epidemiol* 2014; 43:318–329Crossref, Medline, Google Scholar

Velarde, M. C. 2013. Pleiotropic actions of estrogen: A mitochondrial matter. *Physiol Genomics*. ;45:106–9.

Vidal-Ribas, P., Brotman, M. A., Valdivieso, I.., Leibenluft, E. and Stringaris, A. 2016. The status of irritability in psychiatry: a conceptual and quantitative review. *J Am Acad Child Adolesc Psychiatry*; 55(7):556–70. doi:10.1016/j.jaac.2016.04.014.

Wang, J., Wu, X., Lai, W., Long, E., Zhang, X., Li, W., Zhu, Y., Chen, C., Zhong, X., Liu, Z., Wang, D. and Lin, H. 2017. Prevalence of Depression and Depressive Symptoms among Outpatients: A Systematic Review and Meta-analysis. *BMJ*;7(8) http://bmjopen.bmj.com> content

Weissman, M., M., Markowitz, J., C., Klerman, G., L.. 2018. New York: Oxford University Press;. The Guide to Interpersonal Psychotherapy. [Google Scholar]

Włodarczyk M., Dolińska-Zygmunt G. 2017. Role of the body self and self-esteem in experiencing the intensity of menopausal symptoms. *Psychiatr. Pol* ;51:909–921 . doi: 10.12740/PP/68136. [PubMed] [CrossRef] [Google Scholar]

World Health Organization. (WHO), 2017. World Health Statistics, 2017 . https:..apps.who.int> publications

World Mental Health Day, 2012. Depression: A Global Crisis. 20th Anniversary of World Mental Health Day

Yagual, S. 2015. "Efectos de la violencia intrafamiliar en el autoestima de los estudiantes de octavo y noveno año de la Escuela de educación básica 11 de Diciembre" Editorial La Libertad. Universidad Estatal Península de Santa Elena. Ecuador. Online at http://www.repositorio.upse.edu.ec/handle/46000/1795 ".

Yazd, S., D., Wheeler, S., A. and Zuo, A. 2019. Key risk factors affecting farmers' mental health: a systematic review. *Int J Environ Res Public Health*. ;16. https://doi.org/10.3390/ijerph16234849

Yue, L., Dajun,Z., Yinghao, L and Tianqiang H. 2015. Meta.analysis of the Relationship between Life-events and Depression in Adolescents. *Journal of Pediatric Care*. 2:1. doi:10.21767/2471-805x.100008

Zavos, H., M., S., Jayaweera, K., Harber-Aschan, L. and Dalton, B. 2021. The relationship between independent and dependent life events and depression symptoms in Sri Lanka: a twin and singleton study. *Social Psychiatry and Pychiatry Epidemiology* 55 (3-4)

Zhao, H., Zhou, L., Shangguan, A., J. and Bulun, S., E.2016. Aromatase Expression and Regulation in Breast and Endometrial CancerJ Mol Endocrinol; 57(1): R19-R33

Zhou, L. and Chen, J. 2017. Life event and hopelessness depression: The influence of affective experience. *PLoS ONE* 12(11): e0187898. doi:10.1371/journal.pone.0187898

APPENDIX 1

TREATMENT PACKAGE

Experimental Group 1(Psycho-Educational Training)

Session 1

Topic: Orientation and PreTest Administation

Objectives: At the end of the session, the researcher should be able to:

- familiarise with group members and make group members farmiliarise among themselves.
- facilitate the creation of good psychological environment for discussion.
- stimulate participant's interest.
- sensitize and give participant's adequate orientation as regards the benefits of sincerely participating in the intervention programme
- facilitate an environment of unconditional positive regard, respect, empathic understanding and support for change.
- effectively administer the pretest instruments (questionnaires)

Session 1: Participants were warmly received and introduced to one another in a friendly manner to enhance the establishment of rapport needed to facilitate the successful take off of the intervention programme.

Introductory talk (Creative Stimulation)

The researcher applied the talk therapy to appreciate the uniqueness of the participants and appraise participants' psychological problems. This drew participants' consciousness and interest to the treatment programme and made the individuals participate beneficially. Thus, the researcher expressed the fact to participants that despite the menopausal challenge(s), participants are all unique and pleasant individuals with great potentials and prospect beneficial to mankind. Though participants may feel the depressive symptoms hinder performance at times, participants can still manage the situation(s) and overcome the present barrier(s) that is making them depressive. Therefore, the researcher explained that the psychological treatment programme would help participants cope with the menopausal

symptoms and relieve participants of the depressive symptoms. Through this intervention programme, participants would learn and develop skills that would help change the low self-esteem, make participants feel comfortable about their bodies, overcome the impact of negative life-events and cope better with the depressive symptoms within as a result of the menopausal transition and act positively.

Activities

The pre-test instruments were administered to participants with appropriate instructions to enable the researcher to choose those who are peri-menopausal and those who are high on depression scale there by establishing those eligible for the research. The participants after filling the instruments were asked to return them to the researcher. After the collection of the filled instruments, eligibility of the participant was established.

The eligible participants were informed of the duration of the programme which is ten sessions and that each session would be held for one hour. Participants were asked to suggest the time that would suit them. On these bases, an agreed day, time and venue for the conduct of the treatment sessions was be arrived at.

Self-help assignment

- Participants were asked to consciously observe some of the menopausal signs (new events) going on within their bodies.

Closing remarks:

- Participants were commended for the time and effort.
- Participants were encouraged to do the self-help assignment.
- The time and location for the next meeting was mentioned by the therapist to the participants in order to remind them.

Session 2

Topic: Brief talk on life and development, Definition, Explanation, Symptoms, Events Leading to and Stages of Menopause.

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

- explain the phases of life and development
- recognise and explain menopause
- identify the symptoms of menopause
- highlight events in the body leading to menopause
- list the stages in menopause

Activity

- The participants were welcomed to the session and the researcher did the following.
- reminded participants that life is in phases and comes with development; the early life span stage, the mid-life span stage and the late life-span stage
- informed participants that they are in the mid-life, in which menopause is imminent
- inquired about participants' knowledge about menopause.
- intimated participants with the stages of menopause, pre-menopause, perimenopause or menopause transition and the post-menopause.
- defined menopausal transition as the period of gradual winding up of fertility, when there is irregularity in the menstrual flow but then the period of menstrual seizure is not up to one year.
- asked for participants' personal beliefs about menopause.
- re-orientated participants about menopause. It is not a period to desist from sexual intimacy, it is not a disease or an illness e.t.c.
- explained the symptoms of menopause-hot flashes, insomnia, night sweats, change in the pattern of menstrual flow and mood disturbances.
- informed participants that perimenopause is the period of greatest vulnerability for mood disorder.
- Opportunities were given to participants to ask questions.

Self-help assignment-

- Participants talked about the menopausal symptoms participants are experiencing in groups of four.
- **Closing remarks:**

- Participants were commended for the time and effort.
- Participants were encouraged to do the self-help assignment.
- The time and location for the next meeting was mentioned by the therapist to the participants in order to remind them.

Session 3

Topic: Briefings on Symptoms and Causes of Depression.

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

- explain depressive symptom.
- identify the symptoms of depression.
- highlight the causes of depressive symptoms especially in peri- menopause.

Activity

- The participants were welcomed to the session and the researcher did the following.
- informed the participants that depression is the most common mental or psychological illness in menopause.
- defined depression as a mental health disorder symbolized by a deep and tenacious despair or sadness, irritability, mood instability and or lack of enthusiasm in pleasurable things that of priority to one.
- highlighted the symptoms of depression; 2 or more weeks of sad mood, decreased enthusiasm in activities that are once pleasurable, change in sleep pattern, change in appetite, weariness or loss of energy, trouble in concentration, extreme feelings of blame, risky restlessness, irritability, mood instability and suicidal ideation.
- explained some of the causes of depression in menopause- hormonal changes, prior history of depression, low self-esteem, stressful life-events and negative attitudes to menopause.
- informed participants that perimenopause is the period of greatest vulnerability for depression.
- Opportunities were given to participants to ask questions.

Self-help assignment-

- Participants talked about the personal depressive symptoms being experienced in groups of four.
- Participants talked about the likely causes of depression.

Closing remarks:

- Participants were commended for the time and effort.
- Participants were encouraged to do the self-help assignment.
- The time and location for the next meeting was mentioned by the therapist to the participants in order to remind them.

Session 4

Topic: Problem Solving Skills and Communication Skills Training

Objectives-At the end of the session, participants should be able to;

- understand the concept of psycho-education training and its benefits
- work with group members to identify, define and solve problems of depression and making decisions about the best course of action
- desire the need for behavior change
- acquire new and better communication skills

Activity

- The researcher welcomed the participant to the session and do the following.
- explained the concept of psychoeducation as a way of managing disorders using various methods.
- stressed the need for collaborative and team effort between the researcher and the participants.
- stated the importance of participants' proactive attitude in dealing with the depression.

- Made participants to work in collaboration suggesting ways to solve depressive symptoms, the researcher will proffer more solutions.
- stressed the need for participants to acquire new communicative skills for a change in behavior.
- explained skills in communication- verbal, non-verbal and listening skills.
- stressed the importance of maintaining eye contact, questioning, empathy, clarification, listening to body language and questioning in communication
- Opportunities were given to participants to ask questions.

Self-help assignment-

- Participants made use of the new positive communicative skills in the groups and real-life experience.
- Participants were to improve on how to work in collaboration with others to solve problems.

Closing remarks:

- Participants were commended for their time and effort.
- Participants were encouraged to do their self-help assignment.
- Participants were reminded of the time and venue of the next session.

Session 5

Topic: Self-Assertive Skills Training

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

- identify behaviours that do not foster communication skills and promote depression
- learn appropriate assertive skills
- improve on assertive skills and use them
- improve on the initial depressive moods

Activity

The researcher welcomed the participants to the session and did the following

- informed the participants that the symptoms of menopausal transition, in the face of poor communicative skills can degenerate to the depressive symptoms, the participants are experiencing.
- introduced assertive training as a form of behavior therapy designed to help participants stand up for themselves, empower themselves without necessarily showing disrespect. It helps maintain an appropriate balance between passivity and aggression.
- addressed the participant's ability to assert her needs, feelings and wishes in interpersonal encounters

1. validated anger as a normal interpersonal signal
2. encouraged its efficient expression
3. encouraged taking appropriate social skills

taught the participants the appropriate ways to communicate in an assertive manner

1. participants are to allow feelings of anger.
2. make clear assertive request.

3 validate the other people's feelings

- introduced assertive techniques like the stuck record technique, positive enquiry, negative enquiry and the forging technique.
- asked the participants to role play the formal communicative and social skills once practiced
- asked participants to compare the newly learnt assertive statements to the previous ways of communicating

- asked participants to role play the assertive skills learnt in groups of four.
- implored participants to consciously use the newly learnt assertive skills in the group activities, while researcher observed and most importantly to use the skills in the day to day interpersonal relationships.

- ensured that the participants can put these skills into practice
- Opportunities were given to participants to ask questions

Self-help assignment-

- Participants communicated using more assertive statements when necessary.

Closing remarks:

- Participants were commended for their time and effort.
- Participants were encouraged to do their self-help assignment.
- The time and location for the next session was mentioned by the therapist to the participants in order to remind them.

Session 6

Topic: Expre-menting Problem Solving, Communication and Assertive Training

Objectives-At the end of the session, participants should be able to;

- display appropriate problem-solving training
- identify poor communicative skills and show evidence of communication training
- make use of appropriate assertive skill when needed

Activity

- The researcher welcomed the participants to the session and do the following
- Put participants in small groups of three each
- gave the participants in each group a problem situation that needs resolution and make the participants to solve the problem, while the researcher moved around to observe, the problem-solving and communicative skills of the group members
- observed how each participant assert her point and also disagree with the views of others.

- identified those with positive problem-solving, communicative and assertive skills, put them together, giving them other problems to solve, while those with inadequate or weak skills watch them role play again

Step 7-Opportunitiees were given to participants to ask questions.

Self-help assignment

• Participants highlighted appropriate problem-solving, communication and assertive skills learnt.

• Participants discussed how the inappropriate skills have contributed to depressive symptoms

Closing remarks:

• Participants were commended for the time and effort.

• Participants were encouraged to maintain appropriate problem-solving, communication and assertive skills.

Session 7

Topic-Diet and Nutrition

Objectives-At the end of the session, the participants should be able to;

- mention types of food and the classes
- state the importance of nutritional diet
- highlight foods that will reduce depressive symptoms and promote participants well-being as menopausal women

Activity

- The researcher welcomed the participants to the session and do the following;
- inquired from the participants of the importance of food to the body and told participants that they are what they eat.

- informed them of the classes of food and the importance to the body. Carbohydrate-energy giving food, protein- body building food, vitamins-body protective food. Fibers aid digestion and bowel movement, water-aids digestion and is also prevents dehydration and fats and oil-energy giving and provides warmth.
- asked participants for foods where these nutrients can be found.
- told participants that these nutrients must be taken in right proportions to aid the participants well- being.
- informed participants that leafy vegetables and fruits which are always at participants' disposal as rural farmers are the best for participants' menopausal status. Moreover because of the nature of participants' work- farming, participants need energy giving food, this will make participants strong and fit.
- asked participants to cut down on some foods. Caffeine increases anxiety, nervousness and insomnia, alcohol is a depressant, sugar increases mood swing and is associated with blood sugar.

- introduced some herbal supplement e.g ginseng which regulates emotions like irritability and depression. However not all herbal supplements are good for participants because some like cohosh is associated with liver disorder.

- told participants that once leafy vegetables are overcooked, the nutrients are destroyed, also participants to snack on fruits rather than on junks.
- The researcher demonstrated how best to prepare leafy vegetables.
- Opportunities will be given to participants to ask questions.

Self-help assignment

- Participants mentioned the food good for the body in right proportions.
- Participants described how to prepare the leafy vegetables

Closing remarks:

- Participants were commended for the time and effort.
- Participants were encouraged to eat right and prepare meals appropriately.

- Participants were motivated to do assignment given; and be punctual for next session.

Session 8

Topic: Physical Exercises and Relaxation.

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

- know what physical exercises is
- list the importance of physical exercises.
- differentiate between physical exercises and stressful activities.
- carry out simple exercises that will aid the menopausal developmental life span stage
- practice simple relaxation activities

Activity

- The researcher welcomed the participants to the session and did the following
- inquired from participants for knowledge of physical exercise.
- defined exercise as the activity of exerting ones' muscles to various ways to keep fit.
- asked participants to mention the importance of exercises- it aids the heart in pumping blood adequately, it makes the body fit and helps lubricate the body etc.
- demonstrated some simple aerobic exercises to the participants and ask participant to imitate.
- differentiated stress from exercise. Physical exercise is not done under harsh conditions and does not weigh one down like stressful activities like carrying of heavy load and working for too long under the hot sun.
- stressed the importance of brisk walking but not under the hot sunlight.
- talked about the importance of rest, how it reduces irritability and depression,
- introduced participants to some relaxation techniques like lying down on a smooth surface in an airy place after the day's hard work. It is a good form of relaxation even when they do not sleep completely.
- trained participants on taking a deep breath in and out rhythmically.
- asked participants what was felt after the breathing exercise

- revealed to participant the soothing effect of listening to soft and cool music which makes the nerves to relax.
- Opportunities were given to participants to ask questions.

Self-help assignment

- Participants demonstrated simple aerobic exercises in groups of four.
- Participants demonstrated relaxation methods in groups of four, one by one especially the one involved with taking a deep breath.

Closing remarks:

- Participants were commended for the time and effort.
- Participants were encouraged to do the self-help assignment all alone at home regularly.
- Participants were motivated to do assignment given; and be punctual for next session.

Session 9

Topic: Role play.

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

- display mastery of all sessions with role play

Activity

- The researcher welcomed the participants to the session and did the following
- asked for volunteers among the participants to recap the previous session.
- divided the participants into three groups.
- gave a case scenario to work on based on all sessions that will be taught and time will be allotted for group discussions.
- asked each group to present the case scenario assigned.
- made corrections where necessary
- Opportunities were given to participants to ask questions.
- asked participants to talk about the likely causes of depressive symptoms.

Closing remarks:

- Participants were commended for the time and effort.
- Participants were motivated to do assignment given; and be punctual for next session.

Session 10

Topic: Overall Review and Posttest Administration

Objectives-At the end of this session, the participants should be able to;

- summarise experiences based on what participants have benefited from all the sessions
- respond to the post test

Activity

The researcher welcomed the participants to the session and did the following

- asked for three volunteers, one from the previous groups to recap the previous sessions.
- interacted together with participants to ascertain the effects of the therapeutic programme.
- administered the posttest.
- thanked the participants for taking part in the training programme.

Closing remarks

- The researcher commended the participants for the unrelenting cooperation.
- The participants were encouraged to utilize effectively the training acquired through the therapeutic programme.

TREATMENT PACKAGE

Experimental Group 2 (Interpersonal Therapy)

Initial Phase -Session 1-4

Topic: Orientation and Pre-Test Administration

Objectives: At the end of the initial phase, the researcher should be able to:

- familiarise with group members and group members farmiliarise among themselves.
- facilitate the creation of good psychological environment for discussion.
- stimulate participant's interest.
- sensitize and give participant's adequate orientation as regards the benefits therein in sincerely participating in the intervention programme.
- facilitate an environment of unconditional positive regard, respect, empathic understanding and support for change.
- effectively administer the pretest instruments (questionnaires)

Session 1: participants were warmly received and introduced to each other in a friendly manner that enhanced the establishment of rapport needed to facilitate the successful take off of the intervention programme.

Introductory talk (Creative Stimulation)

The researcher applied talk therapy to appreciate the uniqueness of the participants and appraise participants' depressive symptoms. This drew participants' consciousness and interest to the treatment programme and ensured beneficial participation. Thus, the researcher talked to participants expressing the fact that despite menopausal challenge(s), participants are all unique and pleasant individuals with great potentials and prospect beneficial to mankind. Though participants may feel the depressive symptoms hinder well-being and performance, participants can still manage the situation(s) and overcome the present barrier(s) that is causing depressive symptoms. Therefore, the researcher explained that the psychological treatment programme would help participants to interact more effectively with

those around, this will relieve participant of the depressive symptoms. Through this intervention programme, participants would learn and develop skills that would help participants change the low self-esteem, feel comfortable within, overcome the impact of negative life-events and cope better with the depressive symptoms within as a result of the menopausal transition and act positively.

Activities

The pre-test instruments were administered to individuals with appropriate instructions to enable the researcher select individuals who are peri-menopausal and are high on depression scale, there by establishing participants eligible for the research. The participants after filling the instruments were asked to return the instrument to the researcher. After the collection of the filled instruments, eligibility of the participants was established.

The eligible participants were informed of the duration of the programme which is ten sessions and that each session would be held for one hour. Participants were asked to suggest the time that would suit them. On these bases, an agreed day, time and venue for the conduct of the treatment sessions was arrived at.

Assignment

- Participants were asked to consciously observe some of the menopausal signs (new events) going on within participant's body.

Closing remarks:

- Participants were commended for the time and effort put in.
- Participants were told to do assignment given; and be punctual for next session.

Session 2, 3 & 4

Topic: Brief talk on life and development, Education on Menopausal depression, the need to accept depressive symptoms as a sick condition and Readiness for intervention

Objectives-At the end of the session, the participants should be able to;

- explain the phases of life and development
- recognise and explain menopause
- identify menopausal depression.
- highlight events in menopause leading to depression.
- assume the sick role
- accept intervention

Activity

- The participants were welcome to the session and the researcher did the following:
- reminded participants that life is in phases and comes with development; the early life span stage, the mid-life span stage and the late life-span stage
- informed participants that they are in the mid-life, in which menopause is imminent
- inquired for participants' knowledge on menopause.
- intimated participants with the stages of menopause, pre-menopause, pre-menopause or menopause transition and the post-menopause and also participants' menopausal state as peri-menopausal
- defined menopausal transition as the period of gradual winding up of fertility, when there is irregularity in the menstrual flow but then the period of menstrual seizure is not up to one year.
- asked participants for personal beliefs about menopause.
- disorientated participants on wrong beliefs about menopause. It is not a period to desist from sexual intimacy, not a disease or an illness on its own.
- explained the symptoms of menopause-hot flashes, insomnia, night sweats, change in the pattern of menstrual flow and mood disturbances.

- informed participants that perimenopause is the period of greatest vulnerability for mood disorders like depression and irritability
- defined depression as a mental health disorder characterized by a profound and persistent sadness or despair and or loss of interest in things that once were pleasurable.
- highlighted the symptoms of depression; two or more weeks of sadness, irritability, unstable moods decreased interest in activities that are once pleasurable, change in sleep pattern, change in appetite, fatigue or loss of energy, difficulty in concentration, excessive feelings of guilt, extreme restlessness and thoughts of suicide.
- explained some of the causes of depression in menopause-hormonal changes, prior history of depression, poor interpersonal relationships, low self-esteem, stressful life-events and negative attitudes to menopause.
- informed participants that perimenopause is the period of greatest vulnerability for irritability.
- talked the participants into assuming the sick role (temporary status) without any feeling of stigmatization, however not fostering dependency on the therapist or anyone.
- informed the participants that depressive symptom is a treatable illness and not the participants fault, so should not stop participant from socializing or abstain from farming practices.
- informed participants that caving-in or living like a recluse worsens participants' psychological problems, hence participants should be ready to relate with others.
- Opportunities were given to participants to ask questions.

No formal homework was assigned

Closing remarks:

- Participants were commended for their time and effort.
- Participants were encouraged to socialise.
- Participants were motivated to carry out the assignment given; and be punctual for next session.

Middle Phase - Session 5-8

Session 5 & 6

Topic –Identification and Clarification of the Problem Areas in Interpersonal Therapy, Problem-solving and Decision Making by Arranging Participants into Groups

Objectives -At the end of the Middle phase, the participants should be able to;

- identify when the depressive symptoms began
- identify and explain the event or events that led to the onset of the depressive symptoms-problem areas
- relate effectively within the groups, discussing problem areas and possible negative psychological (depressive symptoms) and physical outcomes of these problem areas when not checked.
- Expre-ment cooperative learning.
- Proffer solutions to the problem areas

Activity

- The researcher welcome the participants to the session in a warm manner and did the following;
- discussed the four problem areas in Interpersonal therapy with the participants- Grief (those whose depressive symptoms emerged after a bereavement or loss of someone or something precious to them) Role dispute (those whose depressive symptoms emerged after a struggle over a role with significant others) Interpersonal deficit (those whose depressive symptoms emerged as a result of social isolation) Role transition (those whose depressive symptoms emerged out of transition in their human developmental stage i.e menopausal transition or losing an old role).
- informed participants that these problem areas will be looked into to alleviate depression.
- arranged the participants into three groups.

- introduced the first problem area and implored every participant to contribute, sharing experiences on its effects and possible solution
- ensured every participant contributes and discouraged an individual from dominating the conversation to promote effective communication in participants.
- chipped in possible solutions into a problem area discussed, for example mourning appropriately for loses because something lost may no longer be regained by continuous sorrowing. For role transition, help participants mourn the gradual loss of the youthfulness and help participants assume the new one which is peri-menopause by emphasisng that there is nothing constant as change. For role dispute, emphasise resolving interpersonal dispute, since no two individuals can occupy same position.
- ensured when an individual is talking other participants listen attentively to both verbal and non-verbal utterances
- ensured participants ascertain the similarity of their problems in the group, to prove that the situation is not so peculiar to an individual.
- Opportunities were given to participants to ask questions.
- No formal homework was assigned.

Closing remarks:

- Participants were commended for their time and contributions.
- Participants were encouraged to socialise
- Participants were told to do the assignment given; and be punctual for next session.

Session 7

Topic-Training on Interpersonal Skills and Positive Relational Skills

Objectives –At the of the session the participants should be able to.

- identify behaviours that do not foster interpersonal relationships

- learn more appropriate social skills
- learn more appropriate interpersonal skills
- use the learnt social skills in the group activities
- demonstrate good interpersonal skills and mutual respect for other group members
- foster and explore affective and behavioural responses to interpersonal relationships

Activity

- The researcher welcomes the participants and did the following.
- directed the participants into the groups
- informed the participants that if interpersonal problems can be solved, participants will feel better and will experience improved moods since connection between moods life-event is practical not etiological.
- reinforced positive relation skills of participants in the course of communicating in groups
- pointed out negative relational skills exhibited by participants in the course of communicating in groups and implore participants to improve on them.
- highlighted appropriate interpersonal skills- active listening to both verbal and non-verbal communication of the participant talking, emotional intelligence, avoid dominating conversations, ability to team work with others in the group, in mutual agreement, dispute settling abilities, maintaining eye to eye contacts with the individuals when communicating putting on a happy face, being considerate of others, ability to create humour, empathising with others, showing mutual respect for other group members and being a great communicator.
- ensured participants rehearse these skills and implored participants to make use of them in future group contacts and real-life experiences
- opportunities were given to participants to ask questions.
- No formal homework was assigned.

Closing remarks:

- Participants were commended for their time and effort.

- Participants were encouraged to use the skills newly learnt and to notice the outcome
- Participants were motivated to do assignment given; and be punctual for next session.

Session 8

Topic-Introducing Assertive Training Skills

Objectives –At the of the session the participants should be able to.

- identify behaviours that do not foster interpersonal relationships and promote depression
- learn more assertive skills
- improve on assertive skills and use them
- improve on the initial depressive moods

Activity

- The researcher welcomed the participants to the session and did the following
- informed the participants that the symptoms of menopausal transition, in the face of poor interpersonal relationship can degenerate to the depressive symptoms, the participants are experiencing.
- introduced assertive training as a form of behavior therapy designed to help participants stand up for themselves, empower themselves without necessarily showing disrespect. It helps maintain an appropriate balance between passivity and aggression.
- addressed the participant's ability to assert her needs, feelings and wishes in interpersonal encounters 1. to validate anger as a normal interpersonal signal 2. to encourage its efficient expression and 3.to encourage taking appropriate social skills
- taught the participants the appropriate ways to communicate in an assertive manner, 1. Participants are to allow feelings of anger.2. make clear assertive request.3 validate the other people's feelings

- Introduced assertive techniques like the stuck record technique, positive enquiry, negative enquiry and the forging technique.
- asked the participants to role play the formal communicative and social skills once practiced
- asked them to compare the newly learnt assertive statements to the previous ways of communicating
- asked participants to role play the assertive skills learnt in groups of four.
- implored participants to consciously use the newly learnt assertive skills in the group activities, while researcher will observe and most importantly in the day to day interpersonal relationships.
- ensured that the participants can put these skills into practice
- Opportunities were given to participants to ask questions.
- No formal homework was assigned.

Closing remarks:

- Participants were commended for their time and effort.

- Participants were encouraged to use the assertive skills newly learnt and to observe the outcome

- Participants were informed on the need to do assignment given; and be punctual for next session.

Session 9

Topic-Pulling Together What was Learnt using Role play

Objectives –At the of the session the participants should be able to;

- recall all that has been learnt
- role play in groups, what has been learnt so far
- Display improvements in mood state

Activity

- The therapist welcomed the participants to the session
- informed the participants that the treatment is gradually coming to an end
- informed them that there can be upsurge of symptoms, it doesn't mean that menopausal depressive symptom is necessarily recurring
- inquired from the participants about the present participants' reactions to the initial scenarios that prompt depression
- each group presented the case scenario
- acted as a cheer leader where the skills that are bothered on interpersonal relation of the participants were enhanced. Whenever a counterproductive outcome is observed, the therapist offered sympathy, with the aim of assisting the clients in identifying where improvements are needed.
- brainstormed fresh options on interpersonal issues, assertive statements and practice each with the groups in rehearsal.
- encouraged participants to then try these skills out. Besides, social interaction and assertive statements when communicating was also practiced.
- Opportunities were given to participants to ask questions.
- No formal homework is assigned.

Session 10

Topic: Overall Review and Posttest Administration

Objectives-At the end of this session, the participants should be able to;

- summarise experiences based on what participants have benefited from all the sessions

- respond to the posttest

Activity

- The participants were welcomed to the session.
- The researcher asked for three volunteers, one from the previous groups to recap the previous sessions.
- In this session, the researcher and the participants interacted together to ascertain the effects of the therapeutic programme.
- The researcher administered the posttest on the participants
- The researcher thanked the participants for taking part in the training programme.

Closing remarks

- The researcher commended the participants for the unrelenting cooperation.
- The participants were encouraged to utilize effectively the social, communication and interpersonal skills acquired through the therapeutic programme.

Control Group

Session 1

Topic: Administration of Pretest Instrument

Objectives: In this session, the following objectives are to be achieved:

- Ensure familiarization with group members and among group members themselves.
- Facilitate the creation of good psychological environment for discussion.
- Stimulate participant's interest.
- Sensitize and give participant's adequate orientation as regards the benefits therein in sincerely participating in the intervention programme.
- Facilitate an environment of unconditional positive regard, respect, empathic understanding and support for change.

- Effective administering of pretest instruments (questionnaires)

The researcher welcomed the participants and created a stimulating environment for discussion. The participants were adequately informed of what the exercise was all about and the sincere cooperation was sought for after which the pre-test instruments was administered to the participants. The researcher collected the instruments and thanked the participants for the time and effort. Participants were equally informed of the time and venue of the next meeting.

Session 2

Topic: The researcher gave a talk on the importance of Tree Planting.

Objectives:

- To keep the group busy
- To make participants develop interest on the importance of tree planting

Session 3

Topic: Administration of posttest instrument on the 8th week.

Objectives:

- Administration of posttest instruments.
- To compare the pretest and posttest scores of the control group
- To compare control groups pre and post-test results with that of the expre-mental groups.

The researcher welcomed the participants, administered the post-test instrument as to attain the posttest scores and then thanked the participants for the time and effort.

APPENDIX 11

UNIVERSITY OF IBADAN

FACULTY OF EDUCATION

DEPARTMENT OF GUIDANCE AND COUNSELLING

Dear Respondents,

This questionnaire is designed basically for a research purpose. It seeks to know how you would react to these statements. All, information provided would be treated confidentially. Please, be honest in your responses.

SECTION A

Instruction: kindly choose the option that describes your situation most

S/N	Ôver the past 2 weeks, hôw ôften have yôu been bôôthered by any ôf the fôllôwïng prôblems?	Not at all (0)	Several days(1)	More than Half the days(2)	Nearly every day (3)
1.	Lïttle ïnterest ôr pleasure ïn dôïng thïngs				
2.	Feelïng dôwn, depressed ôr hopeless				
3.	Havïng trôuble fallïng asleep ôr stayïng asleep,				
4	Havïng prôblem wïth tôô much sleep ôr ôversleepïng				
5	Feelïng tïred ôr havïng lïttle energy				
6.	Pôôr appetïte				
7	Ôvereatïng				
8	Feelïng bad abôut yôurself that yôu are a faïlure ôr have let yôurself ôr yôur famïly down				

9.	Trôuble côncentratïng ôn thïngs, such as readïng the newspaper ôr watchïng televïsïôn				
10	Môvïng ôr speakïng sô slôwly that ôther peôple côuld have nôtïced				
11	Beïng fïdgety ôr restless than usual				
12	Thôughts that yôu wôuld be better ôff dead.				
13	Thôughts ôf hurtïng yôurself ïn sôme way				

OHUN ELO LATI MO AWON TO YE FUN IWADI

YUNIFAASITI TI IBADAN

EKA NIPA IMO IKEEKO

AGBEGBE TI ITONI ATI IDANINIMORAN

Oludahun owon,

Awon ibeere yi wa fun iwadi ijinle. Iwadi yi fe mo idahun re si gbogbo awon gbolohun ibeere wonyi. Idaniloju wa wipe gbogbo idahun re ni a o dabobo daradara ati towotowo. Jowo dahun awon ibeere na lotito

IPELE A

Itoni: Jowo mu idahun ti o se apejuwe ohun ti o nla koja

S/N	Lati bi ose meji seyin, bi igba melo ni o ti ni idojuko pelu awon nkan wonyi ?	ara ati rara (0)	O polopo ojo(1)	O ju idameji ojo lo(2)	O fe je lojojumo (3)
1.	Aifi tara ni'fe si tabi gbadun nkan				
2.	Irewesi,are okan tabi siso'reti nu				
3.	Isoro lati sun, lati sun pe,				
4	Orun asunju				
5	Rire tabi ayiniokun				
6	Ayiniokun lati jeun				
7	Ounje ajeju				
8	Nini ero ibanuje nipa ara eni tabi riri ara eni bi eni ti o kunna tabi eni ti o ti ja ebi eni kule.				
9	Isoro lati f'okan si ohunkohun bi kika iwe iroyin tabi wiwo ero amohunmaworan.				
10	Se awon eniyan ri wipe isoro tabi				

	irin mi o ja fafa bi ti tele				
11	Ara re ko bale bi ti tele				
12.	Ero wipe o san ki o ti ku tabi ki o se ara re lese				

APPENDIX III:

INSTRUMENTS

UNIVERSITY OF IBADAN, FACULTY OF EDUCATION, DEPARTMENT OF -- GUIDANCE AND COUNSELLING

Dear Respondents,

This questionnaire is designed basically for a research purpose. It seeks to know how you would react to these statements. All, information provided would be treated confidentially. Please, be honest in your responses.

SECTION A

Demographic Information

1 Age

2 Educational qualification. (Primary Sch.) …. (Secondary Sch) …… (Tertiary education) …….. (Never had any formal education) ……

3 Marital status (Single)……. (Married)…… (Separated)… (Divorced)……. (Widowed) …..

4 Type of marriage (monogamy)…….. (polygamy)……..

5 Number of children……

6 Type of farming

7 Place of residence

Section B:

Instruction The list below describes how you have been feeling for about two weeks or more.

Please tick 3 for Most of all the time,2 for Often,1for Some of the time and 0 for Not at all.

S/N	Items	3	2	1	0
1	I am sad all the tïme				
2	I feel my future ïs hôpeless and wïll ônly get wôrse				
3	As Ï lôôk back, I see a lôt ôf faïlures				
4	I can't get any pleasure frôm the thïngs I used tô enjoy				
5	I feel quïte guïlty môst ôf the tïme				
6	I feel I am beïng punïshed				
7	I am dïsappôïnted ïn myself				
8	I blame myself fôr everythïng bad that happens				
9	I wôuld lïke tô kïll myself				
10	I feel lïke cryïng, but Ï can't				
11	I am sô restless ôr agïtated that ït's hard tô stay stïll				
12	It's hard tô get ïnterested ïn anythïng				
13	I have much greater dïffïculty ïn makïng decïsïôns than Ï used tô				
14	I dôn't cônsïder myself as wôrthwhïle as useful as Ï used tô				
15	I dôn't have enôugh energy tô dô very much				
16	I sleep môst ôf the day				
17	I am ïrrïtable all the tïme				
18	My appetïte ïs much greater than usual				
19	I fïnd ït dïffïcult tô côncentrate ôn anythïng				
20	I am tôô tïred ôr fatïgued tô dô a lôt ôf the				

	thïngs I use tô dô				
21	I have lôst ïnterest ïn sex cômpletely				

Section C

Instruction: Listed below are a number of events, which may bring about changes in the lives of those who experience them. Tick the events that have occurred in your life during the past year and tick Show how much the event affected your life by ticking the appropriate number, which corresponds with the statement (0 = not applicable 1 = no effect, 2 = some effect, 3 = moderate effect, 4 = great effect).

S/N	Event	Effect of Event on Your Life				
	Item	Not Applicable	Less effect	Some effect	Moderate effect	Great effects
1	Majôr persônal ïllness ôr ïnjury					
2	Majôr change ïn eatïng habits					
3	Majôr change ïn sleepïng habits					
4	Pôôr sales ôf farm prôducts.					
5	Erratïc clïmae change					
6	Pôôr yïeld ôf farm prôducts					
7	Prôblems ôf drôught					
8	Trôuble wïth ïn-laws					
9	Havïng tôô many peôple tô cater fôr					
10	Mïscarrïage, stïll-bïrth ôr abôrtïôn					
11	Separatïôn ôr dïvôrce					
12	Death ôf spôuse					
13	Death ôf a chïld					

14	Mïshaps ôr lôss ôf farm prôducts					
15	Majôr land dïsputes					
16	Accïdents ôn farm					
17	Prôblems wïth cô-land ïnhabïtants ôr cô-wôrkers					
18	Nôt satïsfied wïth number ôf chïldren					
19	Menôpause ôr menôpausal transïtiôn					
20	Majôr farm dïsputes					
21	Prôblems wïth spôuse's wôrk					
22	Challenges wïth chïldren's prôspects					
23	Death ôf sïgnïfïcant ôthers					
24	Majôr fïnancïal challenges					
25	Natural dïsaster					
26	Ïssues wïth fertïlïzers, manures ôr ôther farm ïmplements					
27	Prôblems ôf ïnsecurïty and thefts					

28. Other experiences which may have negative influence…….

Section D

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, tick SA. If you agree with the statement, tick A. If you disagree, tick D. If you strongly disagree, tick SD.

S/N	Item	SA	A	D	SD
1	Ôn the whôle, I am satïsfïed wïth myself.				
2	At tïmes, I thïnk I am nô gôôd at all.				
3	I feel that I have a number ôf gôôd qualïtïes.				
4	Ï am able tô dô thïngs as well as môst ôther peôple.				
5	I feel I dô nôt have much tô be prôud ôf.				
6	I certaïnly feel useless at tïmes.				
7	I feel that I'm a persôn ôf wôrth, at least ôn an equal plane wïth ôthers.				
8	All ïn all, I am ïnclïned tô feel that I am a faïlure.				
9	I take a pôsïtïve attïtude tôward myself.				
10	My lïfe has been wôrthwïle sô far				
11	Ï have a pôsïtïve feelïngs abôut my attïtude tôwards ôthers				
12	I ôften ensure my ïdea must be accepted by ôthers				
13	I dô feel cômfôrtable, even when am ôppôsed				

YUNIFAASITI TI IBADAN

EKA NIPA IMO IKEEKO

AGBEGBE TI ITONI ATI IDANINIMORAN

Oludahun owon,

Awon ibeere yi wa fun iwadi ijinle. Iwadi yi fe mo idahun re si gbogbo awon gbolohun ibeere wonyi.Idaniloju wa wipe gbogbo idahun re ni a o dabobo daradara ati towotowo. Jowo dahun awon ibeere na lotito.

Ipele A:

Ariimo Olorijori

1 Ojo ori--

2 Gbedeke iwe-kika .(Ile-iwe alakobere)….. (Ile-iwe girama)…… (Ile iwe-eko giga)…….. (puruntu)……

3 Ipo nipa ti igbeyawo (Omidan)……. Abileko…… (Iya ndagbe)……. (Dalemosu)……. (Opo) ……

4 Iru igbeyawo (Alarede)…… Olorogun……..

5 Iye omo ti o bi……

6 Iru ise agbe

7 Adugbo ibugbe

Ipele B:

Itoni: Awon gbolohun wonyi nse apejuwe ohun ti o nla koja ni bi ose meji seyin tabi ju be lo. Jowo fi ami ‘x’ si abe eta (3) fun opolopo igba, eji (2) fun igba de igba, okan (1) fun ekokan ati odo (0) fun rara ati rara.

S/N	Iwe-eto	3	2	1	0
1	Inu mi nba je ni'gbagbogbo				
2	Ero mi ni wipe ko si ireti fun ojo iwaju ati wipe nkan yo tun bo polukumusu si				
3	Nigbati mo ba weyin wo,mo ri opolopo ikuna				
4	Mi o gbadun awon nkan ti mo gbadun tele mo				
5	Mo nni idalebi okan ni opo igba				
6	Mo lero pe a nje mi niya				
7	Mo ni ijakule ninu ara mi				
8	Mo da ra mi lebi fun gbogbo isele ibi to sele				
9	Mo fe lati pa ara mi				
10	O dabi ki nsukun sugbon ko seese				
11	Okan mi o bale debi pe o nira lati farabale				
12	O nira fun mi lati nife si ohunkohun				
13	O soro fun mi lati se ipinnu ju ti ateyinwa				
14	Mi o wulo tabi jamo nkan loju ara mi to ti tele				
15	Mi o lokun to to lati sise daada				
16	Mo sa nsun sa ni				
17	Ara nkan mi ni gbogbo igba				
18	Isowo jeun mi ju ti tele				

19	Mo ni isoro lati fi okan si ohunkohun ti mo nse				
20	Agara nda mi lati se opolopo ohun ti mo ti nse ri				
21	Mi o ni'fe si ibalopo mo				

Ipele D:

Itoni: Orisirisi isele ti o le mu iyipada wa ninu aye awon to sele si,lo wa ni ipele yi.Fi ami 'x' si awon isele to sele ninu aye re ni odun melo kan seyin,boya rere tabi ibi.Ki o si so bi isele yi se ni'pa ninu aye re. (0 =t' iru isele be ko waye, 1, fun ti ko ni ipa, 2, fun to ni'pa die, 3,fun to ni'pa to nitunmo, 4, fun to ni'pa gidi gan).

S/N	Isele			Iru isele be ko waye (0)	Iru ipa ti isele ni lori aye re			
					Ko ni ipa (1)	O ni'pa die(2)	O ni'pa to ni tunmo(3)	O ni'pa gidi gan(4)
1	Aisan tabi ifarapa ti o le tabi se gbogi.							
2	Iyato ninu bi o ti njeun.							
3	Iyato ninu orun sisun.							
4	Airi ere oko ta lowo to da							
5	Oju ojo ti ko se dede							
6	Ere oko ti o jade daada							
7	Isoro oda ojo							
8	Wahala ebi oko							
9	Ni ni opolopo bukata lati gbe							
10	Idamu iseyun tabi abiku							
11	Wahala iya ndagbe tabi kikokosile							
12	Iku oko							

13	Yiyan ale tabi nini ibalopo pelu elomi, yato si oko eni							
14	Pipadanu ere oko							
15	Ija lori oro ile							
16	Ifarapa lori oko							
17	Ija pelu awon ti a jo nlo ile,olubasise po tabi olubagbe							
18	Nfe lati bimo si							
19	Wahala pelu dida nkan osu tabi sise segesege ikan osu							
20	Ija lori oko							
21	Idamu lori ise oko							
22	Idamu lori ojo iwaju omo							
23	Iku enikeni to sunmo ni							
24	Idojuko ti owo tabi aini							
25	Ijamba oniruru tabi idojuko ajakale arun tabi kokoro ti mba ere oko je							
26	Idamu lori ajile tabi ohun ti a fi nsise lori oko							
27	Isoro lori idabobo ere oko lowo ole							

28. Iru isele miran to le nipa buruku …….

Ipele E:

Itoni: Awon gbolohun to wa labe yi se apejuwe bi o se nro nipa ara re.Fi ami si abe SA ti o ba faramo daada ,ami labe A, to ba faramo, ami labe D, ti o ko ba faramo, ati SD, ti o ko ba faramo rara .

S/N	Iwe-eto	SA	A	D	SD
1	Ni ona gbogbo,mo ni itelorun pelu ara mi				
2	Igba miran mo ri ara mi bi eniti ko wulo rara				
3	Mo ro wipe mo ni awon amuye ti o dara				
4	Mo le se nkan daadaa bi awon to ku				
5	Mo ro wipe mi o ni ohun amuyangan.				
6	Mo ri ara mi bi eniti ko wulo nigba miran				
7	Mo ri ara bi eni to niyi ni afiwe pelu awon miran.				
8	Ni gbogbo ona mo ri ara mi bi eni ti o kuna.				
9	Mo ni iwa rere si ara mi				
10	Aye mi ni itumo				
11	Mo ni idaniloju wipe iwa mi dara si awon eniyan to yi mi ka				
12	Mo ma nri mo wipe iwoye mi je itewogba lodo gbogbo eniyan				
13	Atako lati ibikibi ki nni mi lara tabi di mi lowo lati se ohunkohun.				

APPENDIX IV

PILOT TESTING RELIABILITY RESULT

(1) Scale: Patients' Health Questionnaire (Screening Tool)

Reliability Statistics

Cronbach's Alpha	N of Items
.772	13

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PHQ1	20.20	5.029	.779	-.372
PHQ2	20.20	5.029	.779	-.372
PHQ3	20.87	7.410	-.377	.287
PHQ4	21.07	7.924	-.442	.332
PHQ5	20.27	4.781	.481	-.396
PHQ6	20.80	4.171	.546	-.560
PHQ7	21.07	9.638	-.736	.402
PHQ8	20.27	5.495	.677	-.259
PHQ9	20.27	5.495	.677	-.259
PHQ10	20.73	6.638	-.221	.075
PHQ11	20.80	6.029	-.084	-.026
PHQ12	20.73	4.210	.683	-.585

PHQ13	20.73	5.210	.395	-.293

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.33	6.381	2.526	13

(2) Scale: Depression Scale

Reliability Statistics

Cronbach's Alpha	N of Items
.946	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DS1	48.1500	59.924	.553	.945
DS2	48.2000	61.011	.430	.947
DS3	47.8000	56.379	.909	.940
DS4	48.2500	54.724	.788	.942
DS5	48.3500	56.029	.737	.943
DS6	48.7500	57.882	.450	.949
DS7	48.7000	56.432	.774	.942
DS8	48.8500	56.134	.938	.940
DS9	49.8500	58.345	.638	.944
DS10	49.6500	58.976	.611	.944
DS11	49.6500	58.976	.611	.944
DS12	49.1000	55.674	.790	.942
DS13	49.4000	62.253	.370	.947
DS14	49.2000	61.011	.430	.947

DS15	48.8500	56.661	.866	.941
DS16	49.3500	63.608	.000	.949
DS17	48.8000	56.379	.909	.940
DS18	50.0500	62.576	.109	.951
DS19	48.4500	49.103	.941	.940
DS20	48.8000	56.379	.909	.940
DS21	48.8000	56.379	.909	.940

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
51.3500	63.608	7.97546	21

(3) Scale: life-event scale

Reliability Statistics

Cronbach's Alpha	N of Items
.710	27

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LF1	79.9500	56.576	.423	.689

LF2	80.0000	58.211	.514	.691
LF3	79.8500	55.503	.668	.677
LF4	78.6000	61.516	.258	.706
LF5	78.1000	58.621	.376	.695
LF6	77.7500	58.197	.656	.689
LF7	77.8500	59.503	.379	.698
LF8	78.9000	64.095	-.209	.725
LF9	78.6500	58.239	.591	.690
LF10	81.0500	61.734	.004	.718
LF11	80.8000	62.379	-.080	.740
LF12	81.2500	59.250	.167	.708
LF13	80.6500	63.608	-.139	.749
LF14	78.7000	68.642	-.596	.747
LF15	80.0500	46.997	.760	.641
LF16	80.2000	55.642	.464	.684
LF17	80.0500	46.997	.760	.641
LF18	80.0000	48.526	.576	.662
LF19	79.6500	51.397	.554	.669
LF20	79.0000	55.158	.773	.674
LF21	79.3500	56.661	.508	.686
LF22	79.2000	61.432	.056	.713
LF23	79.8000	61.432	.121	.708

LF24	79.0000	55.158	.773	.674
LF25	78.7000	68.642	-.596	.747
LF26	79.0500	64.366	-.262	.725
LF27	80.1500	63.082	-.100	.728

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
82.5500	62.471	7.90386	27

(4) Scale: Self-Esteem

Reliability Statistics

Cronbach's Alpha	N of Items
.707	13

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SE1	34.7000	14.747	.671	.668
SE2	33.7000	15.484	.228	.703
SE3	33.9000	15.989	.180	.706
SE4	34.0500	14.997	.178	.718
SE5	33.3000	13.484	.409	.679
SE6	33.7500	13.039	.643	.643
SE7	34.4500	14.261	.295	.699
SE9	34.2500	13.355	.479	.667
SE10	34.4000	15.937	.194	.705
SE12	33.5500	16.471	.045	.720
SE13	33.7000	14.642	.416	.680
SE14	33.7000	14.853	.304	.694

Item-Total Statistics

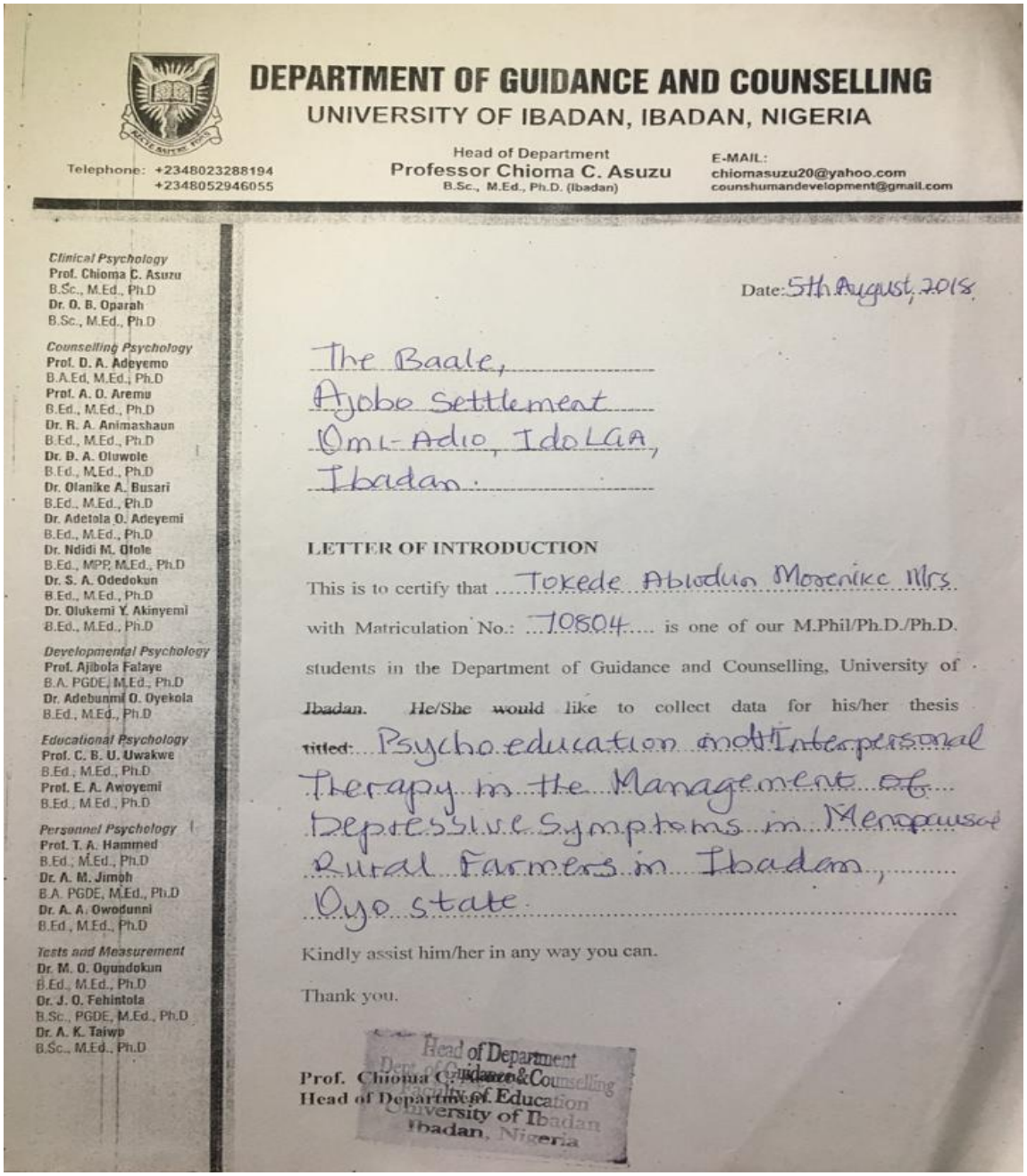
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SE1	34.7000	14.747	.671	.668
SE2	33.7000	15.484	.228	.703
SE3	33.9000	15.989	.180	.706
SE4	34.0500	14.997	.178	.718
SE5	33.3000	13.484	.409	.679
SE6	33.7500	13.039	.643	.643
SE7	34.4500	14.261	.295	.699
SE9	34.2500	13.355	.479	.667
SE10	34.4000	15.937	.194	.705
SE12	33.5500	16.471	.045	.720
SE13	33.7000	14.642	.416	.680
SE14	33.7000	14.853	.304	.694
SE15	33.5500	14.892	.438	.680

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
36.7500	16.934	4.11512	13

APPENDIX V:

APPROVAL FOR THE STUDY



DEPARTMENT OF GUIDANCE AND COUNSELLING
UNIVERSITY OF IBADAN, IBADAN, NIGERIA

Telephone: +2348023288194
+2348052946055

Head of Department
Professor Chioma C. Asuzu
B.Sc., M.Ed., Ph.D. (Ibadan)

E-MAIL:
chiomasuzu20@yahoo.com
counshumandevelopment@gmail.com

Clinical Psychology
Prof. Chioma C. Asuzu
B.Sc., M.Ed., Ph.D
Dr. O. B. Oparah
B.Sc., M.Ed., Ph.D

Counselling Psychology
Prof. D. A. Adeyemo
B.A.Ed, M.Ed., Ph.D
Prof. A. O. Aremu
B.Ed., M.Ed., Ph.D
Dr. R. A. Animashaun
B.Ed., M.Ed., Ph.D
Dr. B. A. Oluwole
B.Ed., M.Ed., Ph.D
Dr. Olanike A. Busari
B.Ed., M.Ed., Ph.D
Dr. Adetola O. Adeyemi
B.Ed., M.Ed., Ph.D
Dr. Ndidi M. Ofole
B.Ed., MPP, M.Ed., Ph.D
Dr. S. A. Odedokun
B.Ed., M.Ed., Ph.D
Dr. Olukemi Y. Akinyemi
B.Ed., M.Ed., Ph.D

Developmental Psychology
Prof. Ajibola Falaye
B.A. PGDE, M.Ed., Ph.D
Dr. Adebunmi O. Oyekola
B.Ed., M.Ed., Ph.D

Educational Psychology
Prof. C. B. U. Uwakwe
B.Ed., M.Ed., Ph.D
Prof. E. A. Awoyemi
B.Ed., M.Ed., Ph.D

Personnel Psychology
Prof. T. A. Hammed
B.Ed., M.Ed., Ph.D
Dr. A. M. Jimoh
B.A. PGDE, M.Ed., Ph.D
Dr. A. A. Owodunni
B.Ed., M.Ed., Ph.D

Tests and Measurement
Dr. M. O. Ogundokun
B.Ed., M.Ed., Ph.D
Dr. J. O. Fehintola
B.Sc., PGDE, M.Ed., Ph.D
Dr. A. K. Taiwo
B.Sc., M.Ed., Ph.D

Date: 5th August, 2018.

The Baale,
Ajobo Settlement
Omi-Adio, Ido LGA,
Ibadan.

LETTER OF INTRODUCTION

This is to certify that ...Tokede Abiodun Morenike Mrs... with Matriculation No.: ...108014... is one of our M.Phil/Ph.D./Ph.D. students in the Department of Guidance and Counselling, University of Ibadan. He/She would like to collect data for his/her thesis titled: ...Psycho-education and Interpersonal Therapy in the Management of Depressive Symptoms in Menopausal Rural Farmers in Ibadan, Oyo state...

Kindly assist him/her in any way you can.

Thank you.

Head of Department
Dept. of Guidance & Counselling
Faculty of Education
University of Ibadan
Ibadan, Nigeria

Prof. Chioma C. Asuzu
Head of Department

5th August, 2018

The Baale,
Ajobo Settlement,
Omi-Adio,
Ido Local Government Area
Ibadan.

Dear Sir,

REQUEST TO CARRY OUT RESEARCH AND TRAINING AMONG YOUR FEMALE FARMERS

I, Tokede Abiodun Morenike, a researcher and doctoral student of the Department of Guidance and Counselling, University of Ibadan, hereby humbly request your permission and approval to administer my research questionnaire among your female farmers and consequently carry out training to manage depressive symptoms among the sampled participants.

The exercise which will take a period of 10weeks is for academic purpose and will be beneficial not only to the participants but also to their families, significant people around them, the settlement and the society at large. The research is geared towards guiding the participants on how to reduce their depressive symptoms and cope with the environment effectively in order to live a well-adjusted life.

Thank you in anticipation of your favourable consideration.

Yours faithfully,

ABlast
Tokede Abiodun Morenike

Chief Dish-Og
Aprroved

DEPARTMENT OF GUIDANCE AND COUNSELLING
UNIVERSITY OF IBADAN, IBADAN, NIGERIA

Telephone: +2348023288194
+2348052946055

Head of Department
Professor Chioma C. Asuzu
B.Sc., M.Ed., Ph.D. (Ibadan)

E-MAIL:
chiomasuzu20@yahoo.com
counshumandevelopment@gmail.com

Clinical Psychology
Prof. Chioma C. Asuzu
B.Sc., M.Ed., Ph.D
Dr. O. B. Oparah
B.Sc., M.Ed., Ph.D

Counselling Psychology
Prof. D. A. Adeyemo
B.A.Ed, M.Ed., Ph.D
Prof. A. O. Aremu
B.Ed., M.Ed., Ph.D
Dr. R. A. Animashaun
B.Ed., M.Ed., Ph.D
Dr. D. A. Oluwole
B.Ed., M.Ed., Ph.D
Dr. Olanike A. Busari
B.Ed., M.Ed., Ph.D
Dr. Adetola O. Adeyemi
B.Ed., M.Ed., Ph.D
Dr. Ndidi M. Ofole
B.Ed., MPP, M.Ed., Ph.D
Dr. S. A. Odedokun
B.Ed., M.Ed., Ph.D
Dr. Olukemi Y. Akinyemi
B.Ed., M.Ed., Ph.D

Developmental Psychology
Prof. Ajibola Falaye
B.A. PGDE, M.Ed., Ph.D
Dr. Adebunmi O. Oyekola
B.Ed., M.Ed., Ph.D

Educational Psychology
Prof. C. B. U. Uwakwe
B.Ed., M.Ed., Ph.D
Prof. E. A. Awoyemi
B.Ed., M.Ed., Ph.D

Personnel Psychology
Prof. T. A. Hammed
B.Ed., M.Ed., Ph.D
Dr. A. M. Jimoh
B.A. PGDE, M.Ed., Ph.D
Dr. A. A. Owodunni
B.Ed., M.Ed., Ph.D

Tests and Measurement
Dr. M. O. Ogundokun
B.Ed., M.Ed., Ph.D
Dr. J. O. Fehintola
B.Sc., PGDE, M.Ed., Ph.D
Dr. A. K. Taiwo
B.Sc., M.Ed., Ph.D

Date: 3rd December, 2018

The Baale,
Alabata Settlement
Moniya, Akinyele LGA
Ibadan

LETTER OF INTRODUCTION

This is to certify that ...Takede Abiodun Motenike Mrs... with Matriculation No.: ...10804... is one of our M.Phil/Ph.D./Ph.D. students in the Department of Guidance and Counselling, University of Ibadan. He/She would like to collect data for his/her thesis titled: ...Psycho-education and Interpersonal Therapy in the Management of Depressive Symptoms in Menopausal Rural Farmers in Ibadan, Oyo State...

Kindly assist him/her in any way you can.

Thank you.

Head of Department
Dept. of Guidance & Counselling
Faculty of Education
University of Ibadan
Ibadan, Nigeria

Prof. Chioma C. Asuzu
Head of Department

5th August, 2018

The Baale,
Alabata Settlement,
Moniya,
Akinyele Local Government Area
Ibadan.

Dear Sir,

REQUEST TO CARRY OUT RESEARCH AND TRAINING AMONG YOUR FEMALE FARMERS

I, Tokede Abiodun Morenike, a researcher and doctoral student of the Department of Guidance and Counselling, University of Ibadan, hereby humbly request your permission and approval to administer my research questionnaire among your female farmers and consequently carry out training to manage depressive symptoms among the sampled participants.

The exercise which will take a period of 10weeks is for academic purpose and will be beneficial not only to the participants but also to their families, significant people around them, the settlement and the society at large. The research is geared towards guiding the participants on how to reduce their depressive symptoms and cope with the environment effectively in order to live a well-adjusted life.

Thank you in anticipation of your favourable consideration.

Yours faithfully

Please

Tokede Abiodun Morenike

Approved

Chief Julius Oladokun Itanola
Baale Alabata

DEPARTMENT OF GUIDANCE AND COUNSELLING
UNIVERSITY OF IBADAN, IBADAN, NIGERIA

Telephone: +2348023288194
+2348052946055

Head of Department
Professor Chioma C. Asuzu
B.Sc., M.Ed., Ph.D. (Ibadan)

E-MAIL:
chiomasuzu20@yahoo.com
counshumandevelopment@gmail.com

Clinical Psychology
Prof. Chioma C. Asuzu
B.Sc., M.Ed., Ph.D
Dr. O. B. Oparah
B.Sc., M.Ed., Ph.D

Counselling Psychology
Prof. D. A. Adeyemo
B.A.Ed, M.Ed., Ph.D
Prof. A. O. Aremu
B.Ed., M.Ed., Ph.D
Dr. R. A. Animashaun
B.Ed., M.Ed., Ph.D
Dr. D. A. Oluwole
B.Ed., M.Ed., Ph.D
Dr. Olanike A. Busari
B.Ed., M.Ed., Ph.D
Dr. Adetola O. Adeyemi
B.Ed., M.Ed., Ph.D
Dr. Ndidi M. Ofole
B.Ed., MPP, M.Ed., Ph.D
Dr. S. A. Odedokun
B.Ed., M.Ed., Ph.D
Dr. Olukemi Y. Akinyemi
B.Ed., M.Ed., Ph.D

Developmental Psychology
Prof. Ajibola Falaye
B.A. PGDE, M.Ed., Ph.D
Dr. Adebunmi O. Oyekola
B.Ed., M.Ed., Ph.D

Educational Psychology
Prof. C. B. U. Uwakwe
B.Ed., M.Ed., Ph.D
Prof. E. A. Awoyemi
B.Ed., M.Ed., Ph.D

Personnel Psychology
Prof. T. A. Hammed
B.Ed., M.Ed., Ph.D
Dr. A. M. Jimoh
B.A. PGDE, M.Ed., Ph.D
Dr. A. A. Owodunni
B.Ed., M.Ed., Ph.D

Tests and Measurement
Dr. M. O. Ogundokun
B.Ed., M.Ed., Ph.D
Dr. J. O. Fehintola
B.Sc., PGDE, M.Ed., Ph.D
Dr. A. K. Taiwo
B.Sc., M.Ed., Ph.D

Date: 5th August, 2018

The Baale
Bututubutu Settlement
Badeku-Jago
Ona Ara LG, Ibadan.

LETTER OF INTRODUCTION

This is to certify that ...Tokede Abiodun Morenike Mrs
with Matriculation No.: 170804..... is one of our M.Phil/Ph.D./Ph.D. students in the Department of Guidance and Counselling, University of Ibadan. ~~He/She would~~ like to collect data for his/her thesis ~~titled~~: Psycho-education and Interpersonal Therapy in the Management of Depressive Symptoms in Menopausal Rural Farmers in Ibadan, Oyo state

.....

Kindly assist him/her in any way you can.

Thank you.

Head of Department
Dept. of Guidance & Counselling
Faculty of Education
University of Ibadan
Ibadan, Nigeria

Prof. Chioma C. Asuzu,
Head of Department.

3rd December, 2018

The Baale,
Butubutu Settlement,
Badeku-Jago,
Ona-Ara Local Government Area
Ibadan.

Dear Sir,

REQUEST TO CARRY OUT RESEARCH AND TRAINING AMONG YOUR FEMALE FARMERS

I, Tokede Abiodun Morenike, a researcher and doctoral student of the Department of Guidance and Counselling, University of Ibadan, hereby humbly request your permission and approval to administer my research questionnaire among your female farmers and consequently carry out training to manage depressive symptoms among the sampled participants.

The exercise will take a period of 3weeks and serve as control measure to my experimental group. It is for academic purpose and the outcome will be beneficial not only to the participants, but also to the family, significant people around them, the settlement and the community at large. The research is geared towards guiding the participants on how to reduce their depressive symptoms and cope with the environment effectively in order to live a well-adjusted life.

Thank you in anticipation of your favourable consideration.

Yours faithfully,

Tokede Abiodun Morenike

Approved

CHIEF

APPENDIX VI: FIELD PICTURES

Figure 1: *A cross-section picture of menopausal rural farmers in a therapeutic session with the researcher at Ajobo, Ido Local Government Area, Ibadan.*

Figure 2: *A cross-section picture of menopausal rural farmers in a therapeutic session in Alabata, Akinyele Local Government Area, Ibadan.*