

**EFFECTIVENESS OF NEED- BASED INTERVENTION  
ON LEVEL OF DEPRESSION, FAMILY SUPPORT,  
QUALITY OF LIFE AMONG ELDERLY CLIENTS  
WITH DEPRESSION IN SELECTED RURAL  
POPULATION.**

**THESIS**

**Submitted to**

**The Tamil Nadu Dr.M.G.R Medical University, Chennai**

*for the award of the degree of*

**DOCTOR OF PHILOSOPHY  
IN  
NURSING**



*By*

**Ms. HEMAVATHY.J, M.Sc(Nursing)**

**OCTOBER 2014**

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*Under the Guidance of*

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TINSVHS T.T.T.I.POST, CHENNAI-113**

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## **CERTIFICATE**

This is to certify that the thesis entitled “**AN EFFECTIVENESS OF NEED-BASED INTERVENTION ON LEVEL OF DEPRESSION, FAMILY SUPPORT, QUALITY OF LIFE AMONG ELDERLY CLIENTS WITH DEPRESSION IN SELECTED RURAL POPULATION**” submitted by **Ms.HEMAVATHY.J** for the award of the degree of Doctor of Philosophy in Nursing, is a bonafide record of research done by her during the period of study under my supervision and guidance and that it has not formed on basis for the award of any Degree, Diploma, Associateship, fellowship or other similar title. I also certify that this thesis is her original independent work. I recommend this thesis should be placed before the examiners for their consideration for the award of Ph.D. Degree.

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## **DECLARATION**

I hereby declare that this entitled “**AN EFFECTIVENESS OF NEED-BASED INTERVENTION ON LEVEL OF DEPRESSION, FAMILY SUPPORT, QUALITY OF LIFE AMONG ELDERLY CLIENTS WITH DEPRESSION IN SELECTED RURAL POPULATION**” is my own work carried out under the guideship of **Dr. LAKSHMI VIJAYAKUMAR, M.B.B.S., D.P.M, Ph.D., FRCP., Psych(Hon) Ph.D RESEARCH GUIDE, DIRECTOR, V.H.S.** approved by Research Degree Committee.

I further declare that to the best of my knowledge the thesis does not contain any part of any work which has been submitted for the award of any degree either in this university or in any other University / Deemed university without proper citation.

**Ms.HEMAVATHY.J**  
**RESEARCH SCHOLAR**

**Place :**

**Date :**

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## LIST OF ABBREVIATIONS

ADL	-	Activities of Daily Living
ANOVA	-	Analysis of Variance
CI	-	Confidence Interval
CESD	-	Centre for Epidemiological Scale for Depression
COPD	-	Chronic Obstructive Pulmonary Disease
DALYS	-	Disability Adjusted Life Years
DF	-	Degree of Freedom
DM	-	Diabetes Mellitus
DSM	-	Diagnostic and Statistical Manual
ECT	-	Electro Convulsive Therapy
FSS	-	Family Support Scale
F-Test	-	Fisher's Test
GDS	-	Geriatric Depression Scale
GDS-SF	-	Geriatric Depression Scale Short Form
HRQOL	-	Health Related Quality of Life
HT	-	Hypertension
IADL	-	Instrumental Activities of Daily Living
ICD-10	-	International Classification of Disease
ICCR	-	International Centre for Collaborative Research
MDD	-	Major Depression Disorder

MD	-	Major Depression
MI	-	Myocardial Infarction
MMSE	-	Mini Mental State Examination
NIMH	-	National Institute of Mental Health
NGO	-	Non-Governmental Organization
OACHC	-	Omayal Achi Community Health Centre
PPS	-	Probability Proportional Size
PAF	-	Population Attributable Fractions
QOL	-	Quality of Life
SD	-	Standard Deviation
SCID	-	Structured Clinical Interview for DSM – IV
SHLSE	-	Surveys of Health & Living Status of Elderly
US	-	United States
WHO	-	World Health Organization
WHOQOL	-	World Health Organization Quality of Life

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## **ABSTRACT**

### **INTRODUCTION**

Ageing is a universal process and it affects every individual, family, community and society. It is a normal, progressive and irreversible process. Ageing is generally defined as a process of decline in the functional capacity of an individual that results from structural changes, with advancement of age. It should be seen in the perspective not merely a matter of accumulating years but also a process of "adding life to years, not years to life", following the World Health Day theme in 2012 "Good health adds life to years".

The old age experiences many life stressors that can affect the level of depression such as loneliness, unemployment, poor financial support, chronic health problems, poor health status and poor functional capacity. A major component of the burden of illness for the elderly derives from prevalent chronic disabling conditions that often accompany ageing. This can be prevented or delayed, not only by medical but also by social, economic and environmental interventions.

### **AIM**

To assess the effectiveness of Need-based intervention on the level of depression, Family support, Activities of Daily Living, Quality of life among elderly clients with depression in a selected rural population.

## **OBJECTIVES**

The objectives of the study were:

1. To assess the pre and post test level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression in experimental and control group.
2. To assess the effectiveness of Need- based intervention on level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression within and between experimental and control group.
3. To correlate between the level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression in the experimental group.
4. To associate the mean difference score on the level of depression with associated factors Family support, Activities of daily living, Quality of life of elderly clients with depression with their selected demographic variables in experimental group.

## **RESEARCH HYPOTHESES**

**RH<sub>1</sub>:** There will be significant difference between the pre and post test level of depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression within and between the experimental and control group at  $p < 0.05$  level.

**RH<sub>2</sub>:** There will be significant correlation between the level of depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression in experimental and control group at  $p < 0.05$  level.

**RH<sub>3</sub>:** There will be significant association of mean difference in the score on the level of depression, Family Support, Activities of Daily Living, Quality of Life score with selected background variables among elderly clients in experimental and control group at  $p < 0.05$  level.

## **METHODOLOGY**

### **Research design**

The research design for the proposed research adopted for the present study was experimental design. The experimental group (intervention group) was compared with a control group of Depression on the same base line. The control group was exposed to the routine care intervention and namely the outcome variable was exposed to Need-based intervention by using randomization among the mild, moderate and severe depression. The severe cases were referred to Psychiatrist.

### **Variables**

#### **Dependent Variables**

Need -based Intervention and Level of Depression,

#### **Independent Variable**

Level of Family Support, Activities of Daily Living and Quality of Life.

#### **Confounding Variables**

Age, Gender, Education, Religion, Marital status, Occupation, Family Monthly income, Habits, No. of siblings, Birth order, Type of family, Family size, No. of children, Co-morbid condition and Recreational activities.

## **STUDY SETTING**

The setting for the study was Omayal Achi Health Centre located in rural outskirts of Chennai.

## **POPULATION**

### **Target Population**

The target population for the study comprised of elderly with depression residing in the villages.

### **Accessible Population**

The subjects were recruited from 18 adopted villages belonging to the intensive coverage area of Omayal Achi Community Health Centre Project.

## **SAMPLE AND SAMPLE SIZE**

Selected depressive elderly clients of the adopted rural villages of Omayal Achi Health Centre who fulfill the inclusion criteria will be the samples of the study. Sample size was estimated by using Statcalc – Epi Info.

## **SAMPLING TECHNIQUE**

Cluster sampling technique was used to select the villages. Household survey of the rural villages was done to identify the depressive clients among elderly by using random table method with those who fulfill inclusive criteria.

### **Measurement tool**

1. Mini Mental State Examination described by Folstein & McHugh. It was widely used to measure the cognitive function. It is extensively validated and found more

reliable. A cut off 23 for the presence of cognitive impairment has been suggested with variations depending on lack of education. The MMSE reliability was 0.84.

2. Geriatric Depression Scale Version developed by Sheikh and Yesavage, 1986: it is used to identify depression in older adults in community setting.

The reliability of GDS measured through Cronbach's Alpha = 0.865, proved highly reliable to screen depression.

3. Family Support scale was developed by Dunst, Jenkins, Hansley, 1984, was used to measure the support of the family among older people residing in the rural population. The reliability of Family Support scale was measured through Cronbach's Alpha = 0.77, proved highly reliable to assess family support.

4. Activities of Daily Living: Kartz index developed by Sidney Kartz MD, 1963, was used to measure the activities of daily living. The reliability of the tool was 0.95 and it proved highly reliable to assess activities of daily living among elderly.

5. Quality of Life of Elderly WHO (BREF) found to have 4 domains to analyze the quality of life among community dwelling (40 – 90) minutes.

## **INTERVENTION TOOL**

### **Need- based intervention:**

Need-based intervention denotes the combined comprehensive nursing interventions developed by the investigator for the elderly clients with depression for a period of 2 months. This includes:



**Moderate to severe depression:**

**Psychosocial/Non-Pharmacological Treatment and Advice:**

**Psychoeducation:** for the person and his or her family, as appropriate about the depression and its need to be managed.

**Structured physical activity programme:** adjunct treatment option for moderate-severe depression (WHO). Seniors Chair Exercise Program Organizing of physical activity of moderate duration 3 times per week for Strength, balance, coordination, stamina, posture, agility, release of tension, range of motion, respiratory health, core strength, fall prevention, energy, well being and better rest.

**Relaxation training:** The intervention involves training the person in techniques such as breathing exercises and Jacobson's progressive relaxation to elicit the relaxation response. Jacobson's progressive relaxation teaches how to identify and relax specific muscle groups. Usually treatment consists of daily relaxation exercises for at least 1 – 2 months.

**RESULT**

The findings of the study revealed that the overall the post test mean score of level of depression was 9.28 and 11.56 with standard deviation of 2.06 and 1.40. The calculated 't' value was  $t=11.58$  which showed a high statistical significance at  $p<0.001$  between experimental and control group respectively, Family Support was 54.18 and 28.04 with standard deviation of 17.11 and 8.60. The calculated 't' value was  $t= 17.62$  which showed a high statistical significance at  $p<0.001$  between experimental and control group respectively, Activities of Daily Living was 4.41 and 1.91 with standard deviation of 1.56 and 0.63. The calculated 't' value was  $t=18.80$  which showed a high

statistical significance at  $p < 0.001$  between experimental and control group respectively, Quality of Life was 51.09 and 36.30 with standard deviation of 4.54 and 6.15. The calculated 't' value was  $t = 24.47$  which showed a high statistical significance at  $p < 0.001$  between experimental and control group respectively. Hence the study concluded that the effectiveness of Need-based intervention had significant improvement in Family support, Activities of daily living and Quality of life score of elderly clients in the experimental group.

## **DISCUSSION**

There was a significant reduction in level of depression with improvement in Family support, Activities of daily living, Quality of life score of elderly clients in the experimental group. Thus the Need-based intervention was found to be effective in the reduction in level of depression with improvement in Family support, Activities of daily living, Quality of life score of elderly clients in the experimental group.

## **IMPLICATIONS**

Depression can be reduced by improving the Activities of daily living, Family support with basic needs even without anti-depressants.

## **CONCLUSION**

Old age experience many life stressors that can affect the level of depression such as loneliness, unemployment, poor financial support, chronic health problems, poor health status and poor functional capacity. Elderly persons with depression are more likely to experience poor Family support, lesser functioning on Activities of daily living, and poorer Quality of life than normal people.

The findings of the study revealed that elderly are vulnerable and prone to depression. The major focus is on the Need-based intervention in the reduction of level of depression with improvement in Family support, Activities of daily living, Quality of life score of elderly clients in the experimental group and was found effective. Hence, Need-based intervention can be used as an interventional tool to reduce the level of depression and it also improves the Family support, Activities of daily living, Quality of life among elderly.

The findings of the study will be incorporated in the Wellness Clinic Program of Omayal Achi Community Centre which not only addresses the physical health of the elderly, but also the mental health.

## INTRODUCTION

Ageing is a universal process and it affects every individual, family, community and society. It is a normal, progressive and irreversible process. Ageing is generally defined as a process of decline in the functional capacity of an individual that results from structural changes, with advancement of age. It should be seen in the perspective not merely a matter of accumulating years but also a process of "adding life to years, not years to life", following the World Health Day theme in 2012 "Good health adds life to years".<sup>1</sup>

The physiological decline in ageing refers to the physical changes an individual experiences because of the decline in the normal functioning of the body resulting in poor mobility, vision, hearing, inability to eat and digest food properly, a decline in memory, the inability to control certain physiological functions, and the onset of various chronic conditions. Change in socio-economic status adversely affects the individual's way of life after retirement. The economic loss is due to a change from salary to pension or unemployment leading to economic dependency on children or relatives. A feeling of low self-worth may be felt due to the loss of earning capacity and social recognition. This state of mind is harmful. With the prospect of this stressful situation worsening in the coming decades, ways and means of managing effectively needs to be examining both at the individual and community levels.

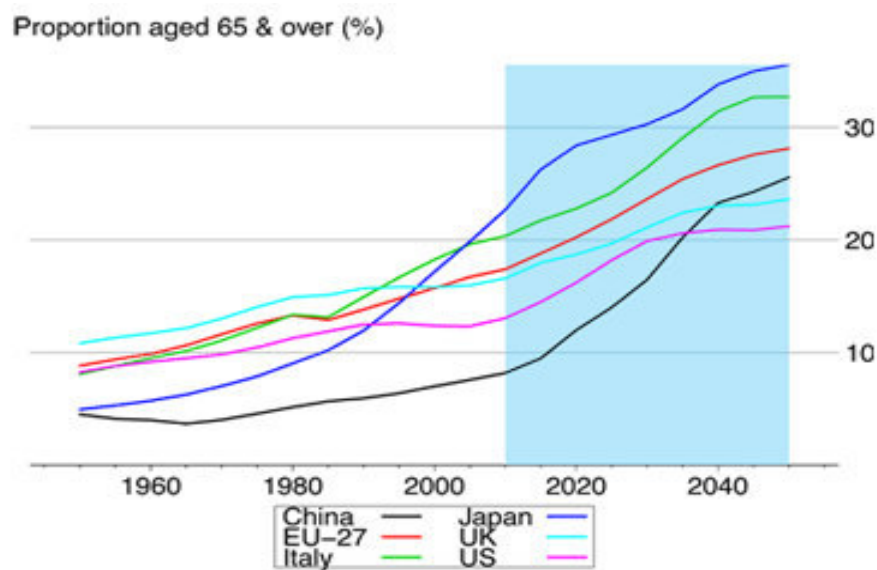
The old age experiences many life stressors that can affect the level of depression such as loneliness, unemployment, poor financial support, chronic health problems, poor health status and poor functional capacity. A major component of the burden of illness

for the elderly derives from prevalent chronic disabling conditions that often accompany ageing. This can be prevented or delayed, not only by medical but also by social, economic and environmental interventions.

### 1.1 BACKGROUND AND SIGNIFICANCE OF THE STUDY

Ageing is taking place in the world's adult population and within the older population itself. The proportion of persons aged 80 years or over within the older population increased from 7 per cent in 1950 to 14 per cent in 2013. According to the medium-variant projection, this proportion of "oldest-old" within older persons is expected to reach 19 per cent in 2050 and 28 per cent in 2100. If this projection is realized, there will be 830 million persons aged 80 years or over by the end of the century, seven times as many as in 2013 **WHO REPORT (2013)**<sup>2</sup>.

**Chakraborti's (2004)** study reported that more than half of the world's elderly population lives in the Asia – Pacific region. As compared to a 52% distribution of elderly in Asia for 2000, projected figures for 2050 will be 62% in Asia.<sup>3</sup>



**Fig.1: Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement.**<sup>4</sup>

**Kalavar et al., (2008)** pointed out that the largest number of elderly persons in Asia are in China, followed by India, Japan, and several other countries.<sup>5</sup>

**Caldwell et al (2005)** in rural areas of developing nation older adults comprise more than 20% of the population, in contrast to their comprising 12.4% of the population in the entire United States. Rural older adults are usually socio-economically disadvantaged and have poor housing, higher poverty rate and less formal education. Moreover, health care services are fewer and less accessible. Thus, older adults experience problems such as under diagnosis, more disability, poorer health outcomes and lower rates of monitoring chronic conditions.<sup>6</sup>

**Passel & Cohn (2008)** observed that the aging of the population is a global phenomenon occurring at a record - breaking rate, especially in developing countries around the world. The U.S economy, as well as health and social services are affected by this marked increase in the proportion of the older adults in the population. By the year 2030, 23% of the population in the United States will consists of individuals older than 65 years of age. Among older adults the fastest – growing subgroups are the minorities, the poor, and those aged 85 yrs and older. In 2005, the percentage of adults older than 65 was 12%; by 2050 this will rise to 19%.<sup>7</sup>

WHO statistics project that, by 2020, depression will rank second with respect to both productive and potential life years lost. Witnesses speak of the most tragic complication of depression: suicide. The suicide rate 14 among men aged 90 years and older was stated as being 33.1 per100,000, almost double the average across all age groups. Depression was frequently mentioned as a significant mental health issue among

the elderly and found that as much as 15% of seniors who live in the community suffer from depression. However, this proportion increases to as high as 80–90% within long-term care facilities.<sup>8</sup>

Although the rate of older adults with depressive symptoms tends to increase with age, depression is not a normal part of growing older. Rather, in 80% of cases it is a treatable condition. Unfortunately, depressive disorders are a widely under-recognized condition and often are untreated or under treated among older adults. Hispanic adults aged 50 and above reported more current depression than white non-Hispanic, black non-Hispanic adults, or other non-Hispanic adults (11.4% compared to 6.8%, 9.0%, and 11%, respectively). Women aged 50 and above reported more current and lifetime diagnosis of depression than men (8.9% compared to 6.2% for current depressive symptoms; 19.1% compared to 11.7% for lifetime diagnosis).<sup>9</sup>

The prevalence of depression (2013) reported by various countries projected that in Mexico (5.1%), Japan (19.8 – 33.5%), U.S (3.6%), Hong Kong (9.7%), Malaysia (8%), Pakistan (45.9%) and Uganda (29%).<sup>10,11,12,13,14,15</sup>

India has around 100 million elderly at present and the number is expected to increase dramatically over the next four decades from 8 percent in 2010 to 20 percent in 2050. By mid-century, this age group is expected to encompass 323 million people, a number greater than the total U.S. population in 2012. **United Nations Population Fund and Help age International, (2012).**<sup>16</sup>

India is in a phase of demographic transition .As per the 1991 census, the population of the elderly in India was 57 million as compared with 20 million in 1951. There had been a sharp increase in the number of elderly persons between 1991 and 2001 and it had been projected that by the year 2050, the number of elderly people would rise to about 324 million **Help age India (2007)**<sup>17</sup>

**Irudayarajan (2005)** observed that in India as many as 75% of elderly persons were living in rural areas. About 48.2% of elderly persons were women, out of whom 55% were widows. A total of 73% of elderly persons were illiterate and dependent on physical labor. One-third was reported to be living below the poverty line, i.e., 66% of older persons were in a vulnerable situation without adequate food, clothing, or shelter. About 90% of the elderly were from the unorganized sector, i.e., they had no regular source of income.<sup>18</sup>

**Joshik et al., (2003)** found that elderly people in rural and urban areas of Chandigarh in Haryana observed that as many as 87.5% had minimal to severe disabilities.<sup>19</sup>

**Table 1.1: Elderly as suffering from one Disability**

	Elderly suffering with disability in India								
	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>South</b>	39.25	38.6	38.92	32.36	33.76	33.09	36.13	36.33	36.23
<b>West</b>	44.31	43.13	43.7	35.64	39.39	37.54	40.1	41.36	40.75
<b>North</b>	37.02	39.6	38.26	36.96	34.81	35.88	37.0	38.27	37.62
<b>East</b>	43.89	46.85	45.28	38.28	41.18	39.71	41.92	44.73	43.27

**Source: National Family Health Survey (2001)**<sup>20</sup>



**Dey AB et al .,(2001)** conducted a community based study in Delhi among 10,000 elderly people, it was found that problems related to backache and arthritis topped the list.<sup>21</sup>

**Ahluwalia (2004)** found that elderly people who belong to middle and higher income groups were prone to develop obesity and its related complications due to a sedentary lifestyle and decreased physical activity.<sup>22</sup>

**Singh P et al., (2004)** found that among 206 elderly persons attending the Geriatric clinic at a tertiary care hospital in Delhi, about 34% of the men and 40.3% of the women were obese respectively and prone to physical and mental distress.<sup>23</sup>

**Khandelwal SK (2003)** found that elderly people were highly prone to mental morbidities due to ageing of the brain problems associated with physical health, cerebral pathology; socio-economic factors such as breakdown of the family support systems and decrease in economic independence. The mental disorders that are frequently encountered include dementia and mood disorders.<sup>24</sup>

**Jamuna D, Reddy LK (1997)** found that the rapid urbanization and societal modernization had brought in its wake a breakdown in family values and the framework of family support, economic insecurity, social isolation, and elderly abuse leading to a host of psychological illnesses. In addition, widows are prone to face social stigma and ostracism.<sup>25</sup>

**Karthikeyan S et al., (1999)** found that the socio-economic problems of the elderly were aggravated by factors such as the lack of social security and inadequate facilities for health care, rehabilitation and recreation. Also, in most of the developing countries, pension and social security is restricted to those who had worked in the public sector or the organized sector of industry.<sup>26</sup>

**Goel PK et al., (1999)** found through various surveys that retired elderly people were confronted with the problems of financial insecurity and loneliness.<sup>27</sup>

**According to National Sample Survey (2006)** data reported the old age dependency ratio. It was found to be higher in rural areas (125) than in urban areas (103). With regard to the state of economic development, a higher number of males in rural areas, 313 per 1000, were fully dependent as compared with 297 per 1000 males in urban areas. For the aged female, an opposite trend was observed (706 per 1000 for females in rural areas compared with 757 for females in urban areas).<sup>28</sup>

**Bose A (1997)** reported that over 81% of the elderly confessed to have increased stress and psychological problems in modern society, while 77.6% complained about mother-in-law/ daughter-in-law conflicts being on the increase.<sup>29</sup>

**Chokkanathan S, Lee AE (2005)** reported that elderly were prone to abuse in their families or in institutional settings.. This includes physical abuse (infliction of pain or injury, psychological or emotional abuse (infliction of mental anguish and illegal exploitation), and sexual abuse. The study examined that the extent and correlation of elder mistreatment among 400 community- dwelling older adults aged 65 year and

above in Chennai found the prevalence rate of mistreatment to be 14%. Chronic verbal abuse was the most common followed by financial abuse, physical abuse, and neglect. A significantly higher number of women faced abuse as compared with men; adult children, daughter-in-law, spouses and sons-in-law were the prominent perpetrators.<sup>30</sup>

**Table No 1.2: According to National Health Statistics (2012)<sup>31</sup>**

S.NO.	MAJOR DISORDERS	PREVALENCE
1	Dementing disorder	66.5%
2	Depressive disorder	56%
3	Somatoform disorder	47%
4	Anxiety disorder	37%
7	Sleep disorder	62%
8	Suicidal risk	54%

**Blazer et al., (2003)** found that the Late- life depression (LLD) or geriatric depression was common among elderly. However, the disorder remains under-diagnosed and under-treated. Unlike depression in young adults, physical condition was a more heavily weighted factor in Late -Life depression. In addition, co-morbidity was particularly common in Late- Life depression, probably arising from biological, psychological and social mechanisms. These include suicidal behavior, decreased physical, cognitive and social functioning, and greater self-neglect, all of which were associated with increased mortality.<sup>32</sup>

**According to National Institute of Mental Health NIMH (2004)** reported that depression accounts for up to 70% of late – life suicides. Research has shown that older adults who commit suicide suffer from the most treatable kind of depression but do not receive needed mental health services.<sup>33</sup>

**According to National Institute of Mental Health, NIMH (2007)** reported that although depression in older adults is common, it is not a normal result of aging. It is estimated that of the 35 million people over age of 65, 2 million (almost 6%) suffer from severe depression, and another 5 million (around 14%) suffer from less severe forms of depression. Many older adults suffer from subsyndromal depression, in which they experience many, but not all, the symptoms of a major depressive episode. These individuals have an increased risk of developing major depression and a disproportionate number of older adults with depression are likely to die by suicide. Unfortunately, the symptoms of depression often go unrecognized in this population, although older adults generally make a frequent medical visits. Thus older individuals suffering from depression are at risk of being untreated.<sup>34</sup>

**Chang- Quan et al., (2010)** reported that the prevalence of Late- life depression was about 10% in community, and about 40% in hospitals and long term facilities. Functional impairment increases in patients with multiple co-morbidities. Poor health status and chronic diseases were risk factors for depressive symptoms in the elderly inpatients.<sup>35</sup>

**Yalom (2005)** found that elderly groups are useful because they can diminish social isolation and loneliness and help the members understand that they are not alone in their situation. Group members can learn creative ways to raise their mood and increase quality of life.<sup>36</sup>

**Arslantas D, et al., (2013)** conducted a cross – sectional study to determine the prevalence of depression among the elderly to examine the relationship between depression and dependency in activities of daily living. There were 251 individuals aged 65 years and older living in the two centers and 203(80.8%) of them had been reached. The depression status was assessed by using the Geriatric Depression Scale, Katz's Activities of Daily Living. The study found that the prevalence of depression was significantly higher in women with increasing scores on ADL and IADL for each  $p < 0.05$ . The study concluded that the primary health care should be integrated into community based and it would be appropriate to plan early diagnosis and treatment programs for the elderly.<sup>37</sup>

**Levin et al., (2007)** a meta- analysis study showed that stroke, loss of hearing, poor eyesight, cardiac disease and chronic lung disease were factors associated with depression in old age.<sup>38</sup>

**Cremens (2008)** found that aging is accompanied by increase in psychiatric and medical illness. This increase is brought about in part by increasingly stressful life events (e.g., the loss of a spouse, family members, and independence) and co-morbid illness.<sup>39</sup>

**Castro L.C, et al (2009)** conducted a study to identify the significant impact of psychological problem in the elderly. In the later part of life psychological problem had a high prevalence and was associated with increased morbidity, mortality, functional impairment, poorer quality of life and significant societal cost. It is an extremely important and urgent need to create awareness and earlier intervention to prevent psychological problem.<sup>40</sup>

**Wu et al., (2000)** found that Quality of life was a surrogate indicator for general well-being. Quality of life in elderly patients was a significant independent predictor of functional status. Depressive symptoms are also closely related to Quality of life.<sup>41</sup>

**Unsar et al., (2010)** found that depressive symptoms in elderly in-patients with chronic illness were associated with decline in self-rated quality of life. Moreover, Late-life depression also had significant negative impact on quality of life and was associated with increased mortality due to either suicide or chronic illness.<sup>42</sup>

In this regard, a model health service provider is - The Omayal Achi Community Health Centre, it was established in 1995 at Pandeewaram near Chennai in Rural South India, which is bound to provide holistic health care service to its community people focusing on preventive and promotive services. The Omayal Achi Community Health Centre was established in 1995. The Centre is one of the NGO's run by MR Omayal Achi MR Arunachalam Trust. It was upgraded with infrastructure, equipment, manpower in the year 2002. The Health Center is at present covering 43 villages housing 49,000 population and provides comprehensive family nursing services to 18 villages. The

Health Centre renders various spectrum of care from Pediatric to Geriatric care on daily basis.

The Health Centre also conducts a special outpatient clinic for chronic diseases. This investigator is an alumnus of Omayal Achi College of Nursing, who has stayed after BSc Nursing to join as faculty member over the past 14 years. After interaction with the rural population for several years, this investigator has developed deep understanding of the culture and ethos – based psychosocial and health needs. The investigator felt strongly that the preventive and curative health care gap could be effectively filled by implementing a structured programme of need-based intervention, psycho education, breathing exercise, senior citizen chair exercise, progressive muscle relaxation to reduce the level of depression and improve the level of Family support, Activities of daily living, and Quality of life among elderly clients with Depression. Hence, it was decided to take the strategies to the door step of community and focus on community participation of older adults.

The present study intends to assess the effectiveness of Need- based intervention on level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression in a selected rural population.

## **AIMS AND OBJECTIVES**

### **2.1 STATEMENT OF THE PROBLEM**

An Experimental study to assess the effectiveness of Need- based intervention on level of depression, Family support, Activities of Daily Living, Quality of life among elderly clients with depression in a selected rural population.

### **2.2 AIM**

To assess the effectiveness of Need- based intervention on level of depression, Family support, Activities of Daily Living, Quality of life among elderly clients with depression in a selected rural population.

### **2.3 OBJECTIVES**

The objectives of the study were:

1. To assess the pre and post test level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression in the experimental and control group.
2. To assess the effectiveness of Need-based intervention on level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression within and between the experimental and control group.
3. To correlate the level of depression with associated factors Family support, Activities of daily living, Quality of life among elderly clients with depression in the experimental and control group.



4. To associate the mean difference score on the level of depression with associated factors Family support, Activities of daily living, Quality of life of elderly clients with depression with their selected demographic variables in experimental group.

## **2.4 OPERATIONAL DEFINITION**

### **2.4.1 Effectiveness**

It refers to the outcome of Need-based intervention on level of depression, Family Support, Activities of Daily Living, Quality of Life after administration of Need-based intervention which is appraised by Geriatric Depression Scale, Mini Mental Status Examination, Quality of life of elderly (WHO) BREF- 4) which has 26 items, Family support scale, the Kartz Index of Activities of Daily Living in the experimental group whereas routine care followed for control group.

### **2.4.2 Need-based intervention**

Need-based intervention denotes the combined nursing interventions developed by the investigator for the elderly clients with depression carried out over a period of 2 months which includes: elder care education for caregivers, psychosocial or non pharmacological treatment of moderate - severe depression.

### **2.4.3 Level of depression**

It refers to identifying the elderly with a feeling of sadness as manifested by hopelessness, helplessness, worthlessness, inability to sleep, suicidal ideas (which will be assessed in this study by using Geriatric Depression Scale).

#### **2.4.4 Family Support**

It refers to the family members either spouse, kith and kin, those relatives of the same family living under the same roof who interact regularly with the elderly (which will be assessed in this study by using Family Support Scale).

#### **2.4.5 Activities of Daily Living**

It refers to the level of independency in doing Activities of Daily Living among elderly (which will be assessed in this study by using Kartz Index of Activities of Daily Living).

#### **2.4.6 Quality of life**

It refers to the physical health, psychological, social, environmental health dimensions of the elderly (which will be assessed in this study by using World Health Organization Quality of Life – BREF tool).

#### **2.4.7 Elderly clients with depression**

It refers to the men and women aged 60 years and above and had been identified as having moderate to severe depression by using Geriatric Depression Scale.

### **2.5 ASSUMPTIONS**

1. Depression is more prevalent among elderly in the rural population.
2. Early identification and Need-based intervention may help to reduce the level of depression which in turn will enhance the Activities of Daily Living, Family Support, Quality of Life among elderly clients with depression.

## **2.6 RESEARCH HYPOTHESES**

**RH<sub>1</sub>:** There will be significant difference between the pre and post test level of depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression within and between the experimental and control group at  $p < 0.05$  level.

**RH<sub>2</sub>:** There will be significant correlation between the level of depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression in experimental and control group at  $p < 0.05$  level.

**RH<sub>3</sub>:** There will be significant association of mean difference in the score on the level of depression, Family Support, Activities of Daily Living, Quality of Life score with selected background variables among elderly clients in experimental and control group at  $p < 0.05$  level.

## **2.7 THEORETICAL FRAMEWORK**

Conceptual framework based on Von Bertalanffy's General System Model will be utilized to guide the researcher in conducting the proposed research work.

The world we live in is a complex system composed of subsystems that interact among themselves, with each having clearly defined boundaries and coherent dynamics. Systems theory was developed by biologist Ludwig Von Bertalanffy in the 1930s to simplify world complexity to the human mind and make it more understandable (Von Bertalanffy, 1962). Systems theory looks at the world as a system composed of smaller subsystems. Systems as a representation of life phenomena used by humanity in everyday life serves to describe the functioning of these phenomena.

## **Significance of Systems Theory**

Systems theory can be used to clearly and concisely understand health care structures, processes and outcomes, processes and their interactions within a health care system. Systems theory can be used as a framework to describe the components of systems and the relationships between these components, the boundaries of the system, the goals of the system, and the system's ability to change and adapt in response to internal and external forces. Systems theory and thinking can help us understand how health care organizations and systems work and it allows us to clearly assess, visualize, analyze and understand the structure, processes, and feedback loops that make up the organization. This correct and clear understanding of the organization as a system is a necessity, to be able to manage organizations effectively and efficiently and to achieve the goals of the organization.

## **System Definition**

A system is a collection of independent but interrelated elements or components organized in a meaningful way to accomplish an overall goal. The function of any system is to convert or process materials, energy, and/or information (inputs) into a product or outcome for use within the system, or outside of the system (the environment) or both.

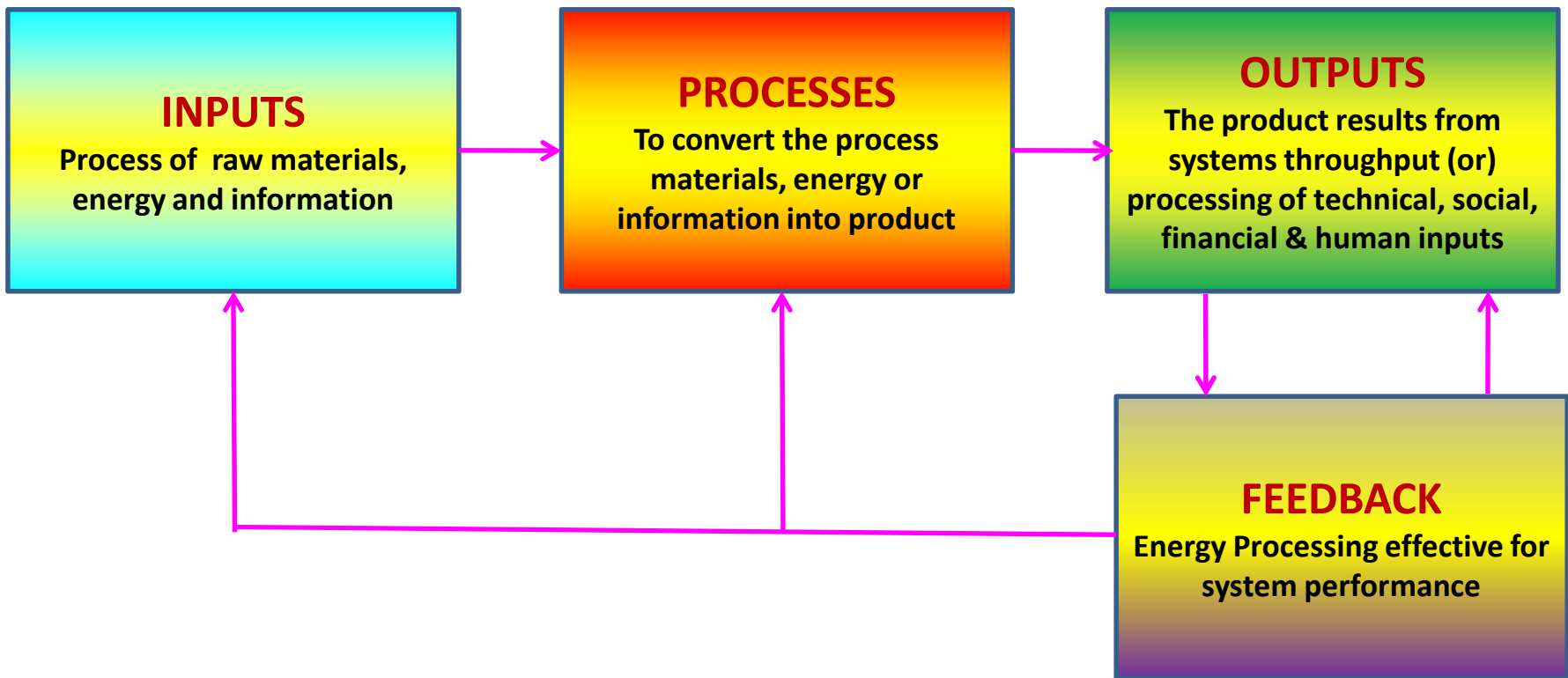
## **Definition of Key Terms**

**Inputs** include raw material, energy and resources processed to produce the outputs of the organization.

**Throughputs** are the processes used by the system to convert raw materials or energy (inputs) from the environment into products or services that are usable by either the system itself or the environment.

**Output** is the product or service which results from the system's throughput or processing of technical, social, financial and human input.

**Feedback** is information about some aspect of data or energy processing that can be used to evaluate and monitor the system and to guide it to more effective performance.



**FIG.2.1: CONCEPTUAL FRAMEWORK BASED ON LUDWIG VON BERTALANFFY GENERAL SYSTEM MODEL – GENERAL CONCEPT**

## **2.8 APPLICATION OF LUDWIG VON BERTALANFFY GENERAL SYSTEM MODEL FOR THE PRESENT STUDY**

A conceptual framework or model is made up of concepts that are the mental image of phenomena. These concepts are linked together to express the relationship between them. The study design of the thesis is to assess the effectiveness of Need-based intervention on level of depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression in a selected rural population.

The conceptual model for the study is based on Modifications made on Von Bertalanffy's General System Theory.

According to General System Theory a system is a set of components or units interacting with each other, within a boundary that facilitate the kind and the rate of flow of input and output to and from the system.

All systems are open in which there is a continuous exchange of matter, energy and information. Open system have varying interaction with environment from which the system rears input, and gives output and inflow of matter, energy and information.

### **THE MAJOR CONCEPTS DESCRIBING THE PHENOMENA**

#### **Input**

Input is information needed by the system. It is also referred to as imparting phase. Here, according to the investigator, Need-based intervention is provided to the elderly with depression, using psycho education, breathing exercise, senior citizen chair exercise, and progressive muscle relaxation exercise.

**Throughput**

Throughput is the activity phase. Here the investigator conducts psycho education, breathing exercise, senior citizen chair exercise, and progressive muscle relaxation exercise for a period of two months to the elderly with depression on a group basis. During this phase, the investigator observes the changes in the behaviour.

**Output**

The information are continuously processed through the system and released as output in an altered state. Here it refers to the attainment of level of coping among the elderly with depression through psycho education, breathing exercise, senior citizen chair exercise, progressive muscle relaxation exercise (Need- based intervention) which is assessed through pretest done before providing Need- based intervention and post test done after providing the Need-based intervention. The post test assessment refers to the reduction in the level of depression attained by the elderly with depression after providing Need -based intervention.

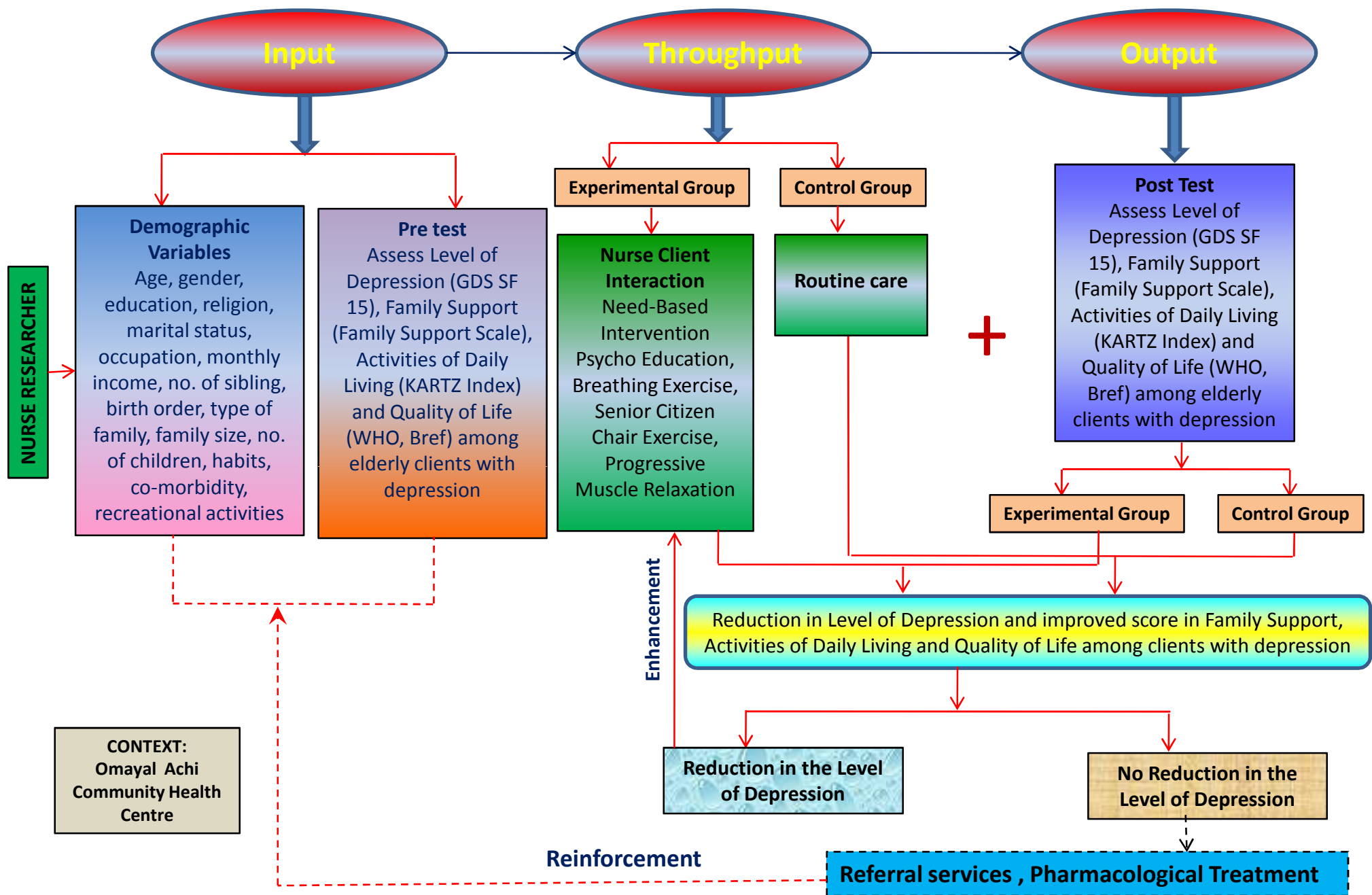
**Feedback**

Feedback is evaluation or response of system. Here feedback may be positive or negative. In this study feedback emphasize to strengthen the output based on the training provided to the elderly with depression the outcome of Need-based intervention.

The investigator promotes reduction in the level of depression for the elderly with depression by assessing demographic variables and by doing the pretest using level of depression (GDS), Family Support (Family Support Scale), Activities of Daily Living (Kartz Index), Quality of Life (WHOBREF). Psycho education, breathing exercise,



senior citizen chair exercise, progressive muscle relaxation exercise (Need-based intervention) providing for a period of two months to the elderly with depression. The post test score are analyzed. The elderly with reduction in the depression after post test will be able to function to an optimal level.



**Fig.2.1.2: Application of Conceptual Framework based on Von Bertalanffy's General System Model**

## REVIEW OF LITERATURE

Review of literature is a systematic search of a published work to gain information about a research topic (**Polit and Hungler**).

The literature review was based on extensive survey of books, journals and international nursing studies. A review of literature relevant to the study was undertaken which helped the investigator to develop insight into the problem and gain information on what has been done in the past. An extensive review of literature was done by the investigator to lay a broad foundation for the study and a conceptual framework framed based on Peplau's Interpersonal Relationship theory to proceed with the study under the following headings.

For the purpose of logical sequence the chapter was divided into the following sections.

**Section 3.1:** Review of literature related to general concepts of depression among elderly.

**Section 3.2:** Review of literature related to depression among elderly.

**Section 3.3:** Scientific studies related to impact of depression among elderly.

**Section 3.4:** Scientific studies related to Need- based interventions to decline the depressive status among elderly.

## **SESSION 3.1: REVIEW OF LITERATURE RELATED TO GENERAL CONCEPTS OF DEPRESSION AMONG ELDERLY**

### **Definition**

#### **Depression elderly**

Depression is a medical illness in which a person has persistent feelings of sadness, often with discouragement and a lack of self-worth.

Depression in the elderly is a widespread problem, but it is not a normal part of aging. It is often not recognized or treated.

#### **Causes of depression in older people**

##### **Physical ill health**

There is a complex relationship between physical illness, disability and depression. Many physical illnesses also cause depression through a variety of biological mechanisms. Physical illnesses that can cause depression in old age include cancer, thyroid disease, vitamin deficiencies and infections. There is also mounting evidence that cerebrovascular disease is an important risk factor for late life depression. So it is essential that any older person who becomes depressed for the first time in old age has a thorough medical evaluation.

Many physical illnesses in old age result in permanent disabilities which can restrict a person's mobility and often require assistance with self-care. This may result in loss of dignity, a sense of being a burden on others and fears of institutionalization. Finally, medications that are required to treat many physical problems are associated

with depression; particularly drugs used to treat high blood pressure, and steroids, painkillers and tranquilizers.

### **Social isolation and loneliness**

Many people experience social isolation and loneliness in old age, either as a result of living alone, a lack of close family ties, reduced connections with their culture of origin, or an inability (often through lack of transport) to actively participate in the local community. When this occurs in combination with physical disablement, demoralization and depression are common.

### **Loss in old age**

Symbolic and real losses are the psychological basis of many depressions. Old age represents a period of life where losses are cumulative and frequent. Many elderly people cope well with losses such as the death of their partner, siblings, friends and pets, and the loss of independence, health, home and lifestyle. However, for other people, these losses can trigger the development of depressive symptoms.

### **Types of depression in older people**

The most common type of depression in older age is non-melancholic depression which is linked to psychological factors, personality characteristics and stressful life events. However, when there is a history of depression in earlier life, it is likely that genetic factors may contribute to the course of the depressive illness. Depression that first develops in later life, usually after age 60, is more commonly associated with physical health problems that accompany ageing. An older person in good physical

health with no history of previous episodes has a relatively low risk of developing depression at a later age.

### **Signs of depression in older people**

The common depressive symptoms (such as a loss of interest in life, lack of enjoyment in normal activities, apprehension, poor sleep, persistent thoughts of death, chronic unexplained pain, poor concentration or impaired memory) are incorrectly attributed to old age, dementia or poor health.

### **The typical ways that depression may present in old age are:**

#### **Chronic unexplained physical symptoms**

Older people may complain of a range of physical symptoms for which no adequate medical explanation can be found. Common symptoms include dizziness, chronic aches and pains, constipation, weight loss and insomnia. Usually symptoms of depression become apparent on close questioning, though the older person may not see it that way and may deny that it could be the problem. In extreme cases, an older person may believe that they have an incurable illness which can be a risk for suicide.

#### **Memory loss**

Depression in old age is often accompanied by memory changes which become the main focus for intervention rather than the depressive illness. Treatment of the underlying depression can usually improve memory if there is no corresponding dementing process as well.

**Behavioural changes**

These can be quite varied and can include:

- Avoidance of leaving the home, refusal to eat, shoplifting, hoarding behaviours or alcohol abuse
- Preoccupations with changing their will, giving away personal possessions, talking about death, or taking an unprecedented interest in firearms

These behaviours should not only alert friends and family to the possibility of depression, but also to the risk of suicide

**Treatment of depression in older people**

There are a range of treatments available to treat older people:

- For more severe depression, antidepressant medication is usually required. Antidepressant medication may take longer to work in older people, so trials of at least six to eight weeks may be required
- Electroconvulsive therapy (ECT) is a useful treatment in melancholic and psychotic depression when individuals have failed to respond to medication, or when the depression is very severe
- In the non-melancholic depressions, the usual range of psychotherapies is applicable, though therapists need to take into account the limitations imposed by poor hearing, poor eyesight and physical discomfort

Other helpful treatments for depression include social activities, physical exercise and music therapy.

**The consequences of untreated depression in older persons:**

Late- life depression increases risk for medical illness and cognitive decline. Unrecognized and untreated depression has fatal consequences in terms of both suicide and non-suicide mortality. Depression is the single most significant risk factor for suicide in the elderly population. Tragically, many of those people who go on to die by suicide have reached out for help- 20 percent see a doctor the day they die, 40 percent the week they die and 70 percent in the month they die. Yet depression is frequently missed. Elderly person are more likely to seek treatment for other physical ailments than they are to seek treatment for depression.

**Prevention of depression in old age:**

Lifestyle changes in mid-life may be the key to the prevention of depression in old age includes:

- reduction of high blood pressure
- cessation of cigarette smoking
- reduction of cholesterol and lipid levels increased physical exercise
- weight control
- a diet rich in fish, grains and greens

Other ways to reduce the risk of depression include mental stimulation, social activities and control of chronic pain.



## II. SESSION 3.2: REVIEW OF LITERATURE RELATED TO DEPRESSION AMONG ELDERLY

**Barcelos – Ferreira R, et al., (2013)<sup>44</sup>** investigated a cross sectional study on Quality of life and physical activity associated to lower prevalence of depression in community dwelling of 1563 elderly subjects aged 60 years or older from Sao Paulo. The study results found that major depression was diagnosed in 60 patients (3.8%). The frequency of major depression and the relationship with socio demographic factors, cognitive and functional impairment, clinical significant depressive symptoms and clinical disease were assessed. The results of the study found were: A higher odds ratio of MD was associated with female gender, being widowed, previous depressive episode, hypertension, use of psychotropic medication, and alcohol use. A lower odds ratio of depression diagnosis was associated with physical activity and going to cinema.

**Barry LC, et al., (2013)<sup>45</sup>** examined a longitudinal study to associate between indication by disability burden and subsequent depression among older persons. A total of 754 community living persons aged  $\geq 70$  underwent monthly assessments in four essential activities of daily living and assessment of depression every 18 months for up to 108 months. Within each 18 month person interval, participants disability burden was operationalized as none or any and according to the severity (none, mild or severe) and chronic (none, non chronic or chronic) given the highest level of severity or chronic experienced during a given 18 months interval respectively. Participants who had any versus no disability during the previous 18 months were 65% more likely to experience subsequent depression (OR = 1.65; 95% confidence interval CI – 34, 2.02).

**Elkady HM, Ibrahim HK (2013)**<sup>46</sup> conducted a descriptive cross sectional study to assess the prevalence of depression among a group of elders in Alexandria, Egypt and compare the characteristic of elders in 3 different settings among 100 people aged 60+ years. Based on the Geriatric Depression Scale (Short form) the highest prevalence of scores have suggestive or indicative of depression was among elders who were hospitalized (79%) had ophthalmic diseases (85.7%) or tumor (80%) had 2+ chronic co-morbidities (64.9%) were taking 4+ medications daily (83.3%) were more physically dependent and had 2+ hospital admissions \in the last 3 years (90.9%).

**Komatsu M et al (2013)**<sup>47</sup> conducted a large scale cohort study to investigate factors associated with Activities of Daily Living in independently living elderly persons in the community among 4,472 individuals aged 65 years. The results found that the male, female and 5 year old groups showed significant differences in the median score of 12 ADL items between any two groups.

**Maqsood F et al (2013)**<sup>48</sup> examined a prevalence study to correlate of self reported depressive symptoms among older persons of Punjab from 4191 older persons aged 60+ using Probability Proportional to Size (PPS) of population. The results of logistic regression analysis showed that region, area, living index, independent source of income, self reported health conditions, and functional impairment were significant factors affecting self – reported depressive symptoms. An important cross – cultural difference was a lower risk of depressive symptoms among women, which may reflect the buffering effects of family co – residence and the position of seniors in extended families.

**Chen S et al (2012)**<sup>49</sup> conducted a prevalence study designed to establish major depressive disorder among 1275 older adults in primary care clinic in urban China and to examine the correlates, and the natural course of late – life depression over a year. The results estimated prevalence of MDD was 11.3% with the SCID interview. Increasing age, female gender and lower educational level, living alone, low support from family, high medical illness burden, and impairment of daily function were significantly associated with MDD in later life. Less than 1% of these patients received treatments. More than 60% of patients with MDD at baseline remained depressed throughout the 12 month follow up period; and only 3 patients had been treated during the 12 month follow up.

**Davison TE, (2012)**<sup>50</sup> conducted a cross-sectional study to examine the relationship between depression and multiple biopsychosocial factors. Among participants were 50 aged care residents with a diagnosis of major depressive disorder, based on a clinical assessment using the SCID-I, and a matched sample of 50 residents without depression. The results were unique predictors of scores on the Geriatric Depression Scale-15 environmental mastery, purpose in life, and autonomy. These three variables discriminated between participants with and without a diagnosis of MDD with 80% accuracy.

**de Silva SA, Sczufca M, Menezes PR (2012)**<sup>51</sup> conducted a cross-sectional one-phase population-based study with 2,072 individuals aged 65 years or over living in a low-income area of São Paulo, Brazil. Depressive symptoms and ICD-10 depression were assessed with the Geriatric Mental State and the Neuropsychiatry Inventory. The study assessed functional disability with the WHO Disability Assessment Schedule

Instrument. The prevalence of depressive symptoms and ICD-10 depression was 21.4 and 4.8 %, respectively.

**Hammami S, Hajem S (2012)**<sup>52</sup> conducted a cross-sectional study to examine prevalence and risk factors for depression among randomly selected homes in geographical islets. It was carried out among the elderly aged more than 65 years living in their home in Monastery City (Tunisia). The study results showed out of 598 (female 66 %, mean (SD) age 72.3 (7.4) years) elderly persons interviewed, 136 (22.7 %) were screened to have a Mini-Geriatric Depression Scale more than or equal to 1. The analysis revealed that the following were significant ( $P < 0.01$ ) independent predictors of risk of depression: female sex (OR=2.36 [95 % CI=1.43-3.94]), having a low level of education (OR=4.02 [95 % CI=1.38-11.65]), disability (OR=3.50 [95 % CI=1.94-6.46]), a history of stroke (OR=2.90 [95 % CI=1.20-7.72]) and the use of hypnotic medications (OR=2.47 [95 % CI=1.38-4.42]) in elderly living in their home.

**Hidaka S, et al., (2012)**<sup>53</sup> conducted a prevalence study to estimate DSM III – R major depressive episodes, depressive symptoms cases and co-existing mild cognitive impairment among 1888 Japanese Community – Dwelling older people. The results found that prevalence of major depressive episodes and depressive symptoms cases were estimated to be 4.5% (95% CI, 3.4 – 6.0) and 11.5% (95% CI, 4.2 – 28.0), respectively.

**Julien D et al., (2012)**<sup>54</sup> conducted an integrative review to find relationships between neighborhood characteristic and depressive mood among older adults using PSYCINFO and MEDLINE. The results revealed that selected neighborhood characteristics were associated with depressive mood after theoretically meaningful.

**Lee CT et al., (2012)<sup>55</sup>** conducted a longitudinal study to investigate the risk factors and health related behaviours associated with depressive symptoms among 1481 non-demented Taiwan's elderly with a 4 – year follow up period. The results revealed three independent risk factors for depressive symptoms: fewer leisure activities (Odds ratio OR = 0.56, 95% confidence interval, CI = 0, 38 – 0.83, p = 0.0034), more mobility limitations CI = 1.68 – 3.50, p<0.001.55

**Leggett A, et al., (2012)<sup>56</sup>** conducted a descriptive study to examine the frequency and correlates of two mental health indicators: depressive symptoms and worry among 600 adults and older stratified by gender (50% women), age (mean = 70.33), and rural/urban (50% rural) was recruited in Da Nang, Vietnam and surrounding rural districts. The study findings showed forty seven percent of the sample had scores above the cut – off for clinical depression and scores on the worry scale were high.

**Li X et al (2012)<sup>57</sup>** conducted a longitudinal study to assess the distinctive pattern for the development of physical limitation and depression and to explore their correlation to form a proper prevention strategy by using data from the Beijing (1992 – 2009) hosted by Xuanwa hospital for subjects with full information on depression and physical limitation. The study findings showed that the three heterogeneous trajectories for physical limitation and two distinct groups for an increase in depression were detected.

**Mc Hugh JE, Lawlor BA (2012)<sup>58</sup>** conducted a comparative study on exercise, social support and three aspects of psychological distress from 583 community dwelling older adults. The results showed that the exercise and social support from friends were both associated with lower scores of depression, anxiety and perceived stress.

**Oliveira MF, et al., (2012)<sup>59</sup>** conducted an exploratory study to evaluate the symptomatology of self-referred depression by the 240 elderly residents in João Pessoa in the state of Paraíba between October and December 2010. It was found that 75.8 % had no degree of symptomatology of depression, and 24.2 % manifested mild or severe depression. According to these variables, in the elderly patients with depression it was found that: in relation to age, the elderly with mild and severe depression appear more frequently between 71 and 76 years - 31%; in relation to gender, females stand out with 86%; on marital state, married couples with 41.3 %, and widowers with 34.5 %; considering family income, from 1 up to 3 minimum wages, 50%, revealed mild incidence; with respect to schooling, elderly people who have no depression, 84.6 %, can read and write.

**Riebe G, et al., (2012)<sup>60</sup>** conducted an observational mixed method of 4335 care management session notes from 597 participants to examine for activity scheduling as a core component of effective care management for late life depression. The results revealed the common activity categories included physical activity (32%), medication management (22%), active non physical (19%) and passive (14%) activities.

**Rubio – Aranda et al (2012)<sup>61</sup>** conducted a cross sectional study to describe and analyse the influence of social relations in the elderly who belong to the Basic Health Zone Substations (Zaragoza) a representative rural area of Aragon. The study findings showed that the risk of suffering depression is higher in women (OR = 5.6, CI = 3.0 – 10.5), patients with co-morbidity (OR = 12.2 CI = 5.1, 1 – 29.2), people who speak by phone with other at least 5 times a week (OR = 3.5 CI = 1.7 – 5.5), who have no one to confide in (OR = 2.7, CI = 1.0 – 4.8), they do not see their family as much as they want

to (OR = 2.1 CI = 1.3 – 4.4) and who are dependent on others for daily living activities (OR = 2.6 CI = 1.5 – 4.6).

**Tsai AC et al (2012)**<sup>62</sup> conducted a cross sectional study to examine the association of metabolic syndrome, metabolic disorders and functional impairment with depression in older Taiwan (M = 1023). The study results showed that the presence of any number of metabolic disorders without functional impairment regardless of the number of metabolic disorder was associated with a significantly higher risk of depression after adjusting for confounding factors (OR = 5.13) 95% (CI = 2.13 – 12.36 p<0.05). The presence of a basic activities of daily living (ADL) dependency was significantly associated with a 1.45 times higher likelihood of depression (OR = 1.45) 95% (CI = 1.17 – 1.79 p<0.05).

**Barry LC (2011)**<sup>63</sup> conducted a prospective cohort study to determine the association between depressive symptoms and functional transitions over time in older persons in New Haven. The results found that depressive participants were more likely than those who were non-depressed to transition from state of no disability to mild.

**Carriere I et al (2011)**<sup>64</sup> conducted a longitudinal study to associate late life depression and incident activity limitations: influence of gender and symptom severity. The findings of the study showed that in men, mild depressive symptomatology was associated with increased incident limitations on instrumental activities of daily living. In women, severe depressive symptomatology was related to social restrictions. Men and women with 2 years increase in CES-D score were highly at risk for social restriction and limitations in mobility and IADL.

**Chan MF, et al (2011)**<sup>65</sup> conducted a prevalence study on level of depression of older men in Macau and identified factors that predict depression among 839 older men by using structured questionnaire. The study findings showed that prevalence rate of depression of older men was 8.6%, the history of stroke ( $p = 0.039$ ), insomnia ( $p < 0.001$ ), palpitations ( $p = 0.014$ ), poor social network ( $p = 0.005$ ) and self perceived health status ( $p = 0.001$ ) were significant risk factors for depression.

**Choi NG, Ha JH (2011)**<sup>66</sup> conducted a comparative study based on data from the National Social Life, Health and Ageing Project to examine possible gender differences in the relationship between the level of spouse / partner support and depressive symptoms in late life. Depressive symptoms were measured by 11 – items, four point center for Epidemiologic Scale for Depression (CES – D), and spouse / partner support was measured by a four – item scale an abbreviated version of the original spouse support strain scale developed by Schusters Kessler and Aseltine (1990). The results revealed that low perceived spouse / partner support, as opposed to unavailability of the support, was associated with higher CES-D scores among women only, while high spouse / partner support was associated with lower CES-D scores for both genders. These relationships patterns were found in both younger and older groups of men and women.

**Glaesmer (2011)**<sup>67</sup> conducted a population based study to determine age and gender specific prevalence and risk factors for depressive symptoms among German population of 1,659 individuals aged 60 to 85 years. The result findings showed the depressive symptoms were found in 28.7% of the participants, while 6.6% were affected



by MD or MID. The highest prevalence of MD and depressive symptoms was found in the oldest age groups. MID showed an unsteady course across age groups in both sex.

**Lin (2011)**<sup>68</sup> conducted a cross sectional survey to examine the prevalence and risk factors for depression in older adults in the Beijing area as part of the National survey for older Chinese adults, 2002 older adults were interviewed. The results among Beijing older adults 13.01% were categorized as depressed. Prevalence rates of depression in rural and urban older adults were 26.63% and 10.79% respectively.

**Kim, Chen YL (2011)**<sup>69</sup> conducted an exploratory study to investigate factors that influence depression among 148 participants aged 60 years or older Korean immigrants in Toronto. The results showed that acculturation factor were not associated with depression.

**Sung K (2011)**<sup>70</sup> conducted a descriptive study to identify the factors that are associated with depressive symptoms in community dwelling, low income, among 107 older Korean women with hypertension. A logistic regression analysis was used to determine the factors that affected depressive symptoms. The results indicated that the depressive women had been diagnosed with hypertension for a longer period of time and took a larger number of medications that the women in the non-depressive group.

**Barua A, Kar N (2010)**<sup>71</sup> conducted a cross-sectional study to evaluate the Indian version of this instrument to identify depression in the elderly Indian community over a period of eight months (from March 1 to October 31, 2002) in the three taluks of Udupi, Kundapura, and Karkala; belonging to the Udupi district of South India. 627

people were selected in the age group of 60 years and above for the study. Simple random sampling, without replacement method, using the probability proportionate to size (PPS) technique was used. The study results showed the prevalence of depression in elderly population was determined to be 21.7% (95% CI = 18.4 - 24.9). The Indian version of WHO-five well-being index (1998 version) showed a sensitivity of 97.0%, specificity of 86.4%, positive predictive value of 66.3% and an overall accuracy of 0.89. The Kappa statistics showed significantly high reliability of  $k = 0.71$ .

**Poongothai S, Pradeepa R, Ganesan A, Mohan V (2009)**<sup>72</sup> conducted an Epidemiology Study to determine the prevalence of depression in an urban south Indian population. The overall prevalence of depression was 15.1% (age-adjusted, 15.9%) and was higher in females (females 16.3% vs. males 13.9%,  $p < 0.0001$ ). The odds ratio (OR) for depression in female subjects was 1.20 [Confidence Intervals (CI): 1.12-1.28,  $p < 0.001$ ] compared to male subjects. Depressed mood was the most common symptom (30.8%), followed by tiredness (30.0%) while more severe symptoms such as suicidal thoughts (12.4%) and speech and motor retardation (12.4%) were less common. There was an increasing trend in the prevalence of depression with age among both female ( $p < 0.001$ ) and male subjects ( $p < 0.001$ ). The prevalence of depression was higher in the low income group (19.3%) compared to the higher income group (5.9%,  $p < 0.001$ ). Prevalence of depression was also higher among divorced (26.5%) and widowed (20%) compared to currently married subjects (15.4%,  $p < 0.001$ ).

**Prakash O, Gupta LN, Singh VB, Nagaraja Rao G (2009)**<sup>73</sup> conducted a prevalence study to explore the screening for depressive symptoms using a 15-item Geriatric Depression Scale (GDS) in medical clinics. The study was carried out in

outpatient setting of geriatric clinic of tertiary care hospital using the Hindi version of GDS-15. Out of 100 eligible older medical clinic patients, 22% of participants scored high on the GDS ( $\geq 5$ ) and 18% were definitely having a depressive disorder as per ICD10. The sensitivity of the GDS instrument was 100% and specificity 94%. This study confirmed that a brief screening instrument like the GDS helps to identify and diagnose depression.

### **SECTION 3.3: SCIENTIFIC STUDIES RELATED TO IMPACT OF DEPRESSION AMONG ELDERLY.**

**Alexandre Tda S., (2012)<sup>74</sup>** conducted a study on gender differences in incidence and determinants of disability in activities of daily living among elderly individuals (N = 1634) by using Modified Kartz Index. The study found that the incidence density was 42.4/1000 women/year and 17.5/1000 men / year. After adjusting for socio economic status and health conditions, women with chronic diseases and social vulnerability continued to have a greater incidence of disability.

**Argyropoulos K, Gourzis P, Jelastopulu E (2012)<sup>75</sup>** conducted a prevalence study to estimate the depression in elderly population of an urban area and to investigate the association with various aggravating or protective factors. The sample consisted of 239 subjects, aged >60 years, members of "daycare centers for older people" (KAPI) in the municipality of Patras, W-Greece. The results of the GDS indicated 45% of the studied population having depressive symptoms (36% moderate, 9% severe), while having been affected with chronic depression reported 49(20.5%) and out of them 34(66.8%) stated to have been diagnosed by a medical doctor. In detail, out of the

162(67.8%) subjects reporting never have been affected by a depression, 37(22.8%) and 8(4.9%) screened positive for moderate and severe depressive symptoms, respectively.

**Berlau DJ (2012)**<sup>76</sup> conducted a longitudinal study to measure the incidence of disability in individuals aged 90 years and older and examine factors that may increase risk of disability. The results revealed that the overall incidence of disability was 16.4% per year (95% confidence interval: 13.3-20.0) and did not differ by gender. Disability incidence increased with age from 8.3% in the 90-94 age group to 25.7% in the 95 years and older age group. Several factors were associated with increased risk of disability, including history of congestive heart failure, depression, poor self-rated quality of life, and cognitive impairment.

**Bilotta C, et al., (2012)**<sup>77</sup> a cross-sectional survey of 239 community-dwelling outpatients aged 65+ On Quality of life in older outpatients living alone in the community in Italy analyses, living alone was associated with the lowest score-based tactile of two specific dimensions of QOL out of seven, namely 'social relationships and participation' [odds ratio (OR) 2.73, 95% confidence interval (CI) 1.08-6.91] and home and neighborhood' (OR 4.96, 95% CI 1.75-14.07), independently of the main demographic, social, functional and clinical characteristics of the subjects. Amongst the 107 subjects living alone, independent correlates of these dimensions of QOL were depression, having no caregiver and having never been married. Depression, having no caregiver and having never been married could provide a valuable means of identifying older people living alone who are at greater risk of a poor QOL and who would most benefit from effective social and medical interventions.

**Boralingaiah P, Bettappa P, Kashyap S (2012)**<sup>78</sup> conducted a community-based cross-sectional study to determine the extent of functional impairment among the elderly and to know the psychological distress of the elderly in urban population Mysore. The study results found that 162 out of 207 elderly men (78.3%) were more functional than 240 out of 319 aged women (75.2%). Severe functional impairment was almost same in both gender (4%) while moderate impairment was noted slightly more among aged women. The functional score was significantly higher for young old, for literates, for middle class and for employed. Anxiety and insomnia were found in 3.4% of the aged (males 2.4% and females 4.1%) followed by somatic symptoms 2.9%, social dysfunction 1.5% and severe depression 1.1%. All psychological distress was found more among elderly women. The prevalence of mental illnesses was found to be significantly higher for age more than 75 years.

**Chen CM, et al., (2012)**<sup>79</sup> conducted a longitudinal study to examine the relationship of depression severity and cognitive performance and the impact of such an interaction on functional ability in Chinese elderly subjects with late – onset depression. The result found that the depressed subjects had greater levels of depression and apathy, poorer performance in Trail making Test – Part B, and mild Parkinson's were associated with lower functional scores.

**Duba AS, Rajkumar AP (2012)**<sup>80</sup> conducted a descriptive study among 1000 participants aged over 65 years from Kaniyambadi block, Vellore, India and assessed their disability status, socio-demographic profile, psychiatric morbidity, cognitive functioning and anthropometrics .The study results found that advanced age, illiteracy, hunger, poor nutrition, arthritis, hearing impairment, gastro-intestinal and respiratory

diseases, dementia and travel costs to primary health facilities increased the risk of disability significantly. Hypertension, diabetes and depression were not associated with disability. Modifiable social determinants and medical diseases together contributed to disability in this Population.

**Estrada A, et al., (2012)<sup>81</sup>** conducted a cross sectional study, to explore quality of life among 276 subjects selected from 39 long term institutions located in the city of Medellín, Colombia. The results revealed that most (71%) considered themselves autonomous for undertaking daily, habitual activities. Other statistics included the following: 45.7% with depression, 33.0% with anxiety, 28.3% with functional problems, and 54.3% at risk of malnutrition. A negative quality-of-life assessment was associated with the following factors: female, diabetes, depression, anxiety and high functional capacity. A positive quality-of-life assessment was associated with individuals who voluntarily came to the institution.

**Fiori KL, Denckla CA (2012)<sup>82</sup>** conducted a longitudinal study (1992 – 1993) to examine the association between various aspects of social support and depressive symptoms separately among men and women. The study finding revealed that men who provided instrumental support to non-kin only had the highest levels of depressive symptoms whereas women who provided instrumental support to kin only had the highest levels of symptoms.

**Poulin J, et al., (2012)<sup>83</sup>** conducted a comparative study to examine the two sources of informal support – perceived family and friend support and the psychological well – being self esteem, depression and loneliness of 150 Chinese and 145 American

elders. The study finding revealed that the relationship between family support and loneliness was stronger for the Chinese elderly than the US elderly.

**Fusco O, et al., (2012)<sup>84</sup>** conducted an exploratory study to verify which specific physical function measure is a more important predictor of quality of life from 73 community-dwelling older persons attending a geriatric cardiovascular clinic. The results revealed that the mean age of the sample population (women 52%) was 77.6 (SD=8.3) years old. Given significant gender interactions between physical function and quality of life, separate analyses were conducted for men and women. In women, all physical function measures were significantly associated with quality of life measures in unadjusted models ( $p$ -values $<0.05$ ). The EuroQoL visual analogic scale maintained its significant associations with SPPB, ADL and IADL, even after adjustment for potential confounders. In men, no physical function measure was consistently associated with quality of life in the fully-adjusted models. Gender-specific differences in the perception of quality of life were reported for disabilities in specific IADL tasks.

**Gong Y, Wen X, et al., (2012)<sup>85</sup>** conducted a cross-sectional door-to-door survey utilizing a sample of 1,317 individuals aged 60 years and above in rural China to investigate the associations between family characteristics and depressive symptoms, and provide new evidence and recommendations for prevention and intervention in the depressive symptoms of older adults. The results found that the potential confounders, only family-related negative life events, support of family members, and self-reported family economic status had significant effects on depressive symptoms in older adults. Experiencing a family-related negative life event was the most significant variable (OR = 11.70, 95% CI: 7.72-17.73), the second was support of family members (OR = 6.93, 95%

CI: 3.26-14.70), while family economic status was less important than support of family members (OR = 2.38, 95% CI: 1.08-5.25).

**Holwerda TJ, et al., (2012)<sup>86</sup>** conducted a prospective cohort study of 4004 older persons aged 65-84 years with a 10-year follow-up. The study found that at 10 years follow-up, significantly more men than women with feelings of loneliness at baseline had died. After adjustment for explanatory variables including social isolation, the mortality hazard ratio for feelings of loneliness was 1.30 [95% confidence interval (CI) 1.04-1.63] in men and 1.04 (95% CI 0.90-1.24) in women. No higher risk of mortality was found for social isolation.

**Jogerst GJ (2012)<sup>87</sup>** conducted a cross sectional study to evaluate the differences in depressive symptoms, compare socio demographic and health related variables associated with depressive symptoms and report level of impact of depressive symptoms on daily activities among 60 – 93 years who attend primary care clinic in Korea, Russia or USA. The results revealed at least mild depression occurred in 28% of Koreans, 65% of Russian and 27% of US participants.

**Kooshlar H, et al., (2012)<sup>88</sup>** conducted a cross-sectional and correlation survey examined the association between different types of living arrangements and life satisfaction in older Malaysians, A total of 1880 of older adults were selected by multistage stratified sampling. The results showed that the older adults living with children as the commonest type of living arrangement for older adults in peninsular Malaysia. Compared to living alone, living only with a spouse especially and then co-residency with children were both associated with better life satisfaction ( $p < .01$ ) and



social support function ( $p < .01$ ). The mediating effect of social support function enhanced the relation between living arrangements and life satisfaction.

**Nyunt MS (2012)**<sup>89</sup> conducted a prospective study on the impact of changes in depressive symptoms or depressed mood on changes in functional ability among community living older persons who were treated for depressive symptoms in a primary care and Hing, older persons aged 60 and above with depressive symptoms ( $N = 267$ ) followed up in a primary care treatment program over 12 months. The study results found that an improvement in GDS scores was significantly associated with improvement in AD ( $\beta = 0.355$ )  $p < 0.001$  and IADL scores ( $\beta = 0.165$ ,  $p = 0.018$ ) after adjusting for baseline functional status MMSE, chronic medical co-morbidities and other variables. The conversion in GDS status to “non-depressive” state ( $GDS \leq 4$ ) was associated with an improvement in ADL change scores ( $\beta = 0.281$ ,  $p = 0.019$ ).

**Salguero A, et al., (2012)**<sup>90</sup> conducted a correlation study to investigate in a sample of Spanish elderly whether measures of physical activity are related to health-related quality of life (HRQoL) and symptoms of depression in community dwelling and institutionalized Elderly. The sample of 436 elderly (234 women and 202 men, aged 60-98 years) from the North of Spain. 58% were community-dwellers and 42% were institutionalized in senior residences. The Scores for various domains of the SF-36 and for depressive symptoms significantly differed among less and more active individuals of the same sex and institutionalization category. Differences generally reached a higher extent in institutionalized subjects in comparison to community dwellers.

**Su D, Wu XN, Zhang YX, (2012)<sup>91</sup>** conducted a comparative study about the levels of depression and social support among empty-nest elderly who living in the rural and urban area of Hunan province, China. This cross-sectional study enrolled 809 empty-nest elderly living throughout the province as the study respondents. The general information, depression conditions and social supports were investigated by using the self-made General Information Questionnaire, Geriatric Depression Scale (GDS) and Social Support Rating Scale (SSRS). The study findings revealed that the differences in gender, education level, marital status, economic status, self-perceived income, insurance, children visit frequency and religious beliefs factors between rural and urban empty-nester old people were statistically significant ( $p < 0.05$ ). The average GDS score of rural group was ( $14.57 \pm 5.43$ ), which was higher than the average GDS score ( $13.18 \pm 6.51$ ) of urban group ( $p < 0.01$ ). Objective support scores showed statistical significance between the rural and urban empty-nest elderly ( $p < 0.05$ ).

**Theeke LA, Goins RT, Moore J, Campbell H (2012)<sup>92</sup>** conducted a descriptive study to examine loneliness and the relationships between loneliness, depression, social support, and QOL in chronically ill, older Appalachians. The majority of the 65% female sample (M age = 75 years) were married and impoverished. Participants' number of chronic illnesses averaged more than 3. Over 88% of participants reported at least 1 area of functional impairment. Loneliness was prevalent with UCLA loneliness scores indicating moderate to high loneliness, ranging from 39 to 62 (possible scores were 20-80). Higher loneliness scores correlated with depression, lower QOL, and lower social support, particularly lower emotional support. This study provides evidence that loneliness is a significant problem for older chronically ill Appalachian adults and that it may be related to low emotional support.

**Tiwari SC, Pandey NM, Singh I (2012)<sup>93</sup>** conducted an exploratory study to determine mental health and associated morbidities among inhabitants of old age homes. The study result showed forty five elderly inhabitants who had given their consent to participate in the study were interviewed. Depression (37.7%) was found to be the most common mental health problem followed by anxiety disorders (13.3%) and dementia (11.1%). A majority of the inhabitants (64.4%) were having psychiatric morbidity and no one was observed physically fit.

**Uhm DC (2012)<sup>94</sup>** conducted a predictive study to identify factors affecting Health Related Quality of Life (HRQOL) in patients with rheumatoid arthritis among 131 patients in South Korea. The results showed that pain, disability in ADL, disease activity, and depression correlated negatively with physical and mental dimensions of HRQOL.

**Urzúa A, et al., (2012)<sup>95</sup>** conducted an exploratory study to evaluate the relationship between self-reported quality of life and related variables 406 older adults aged  $71 \pm 7$  years (83% women), that were members of older people organizations and lived in Antofagasta, Chile. The results revealed the older people that perceived themselves as sick had significantly lower quality of life scores. Self-acceptance, social support, autonomy and having a purpose in life also influenced the perception of quality of life.

**Yamazaki S, (2012)<sup>96</sup>** conducted a prospective cohort study to evaluate the risk factors of functional disability by depressive state. A total of 783 men and women, aged 70 years and over, participated. The participants were followed in terms of the onset of

functional disability by using a public long-term care insurance database. The Geriatric Depression Scale (GDS) was used to measure depressive state. Age, sex, history of chronic disease, living alone, fall experience, cognitive impairment, instrumental activities of daily living (IADL), the Motor Fitness Scale (MFS), frequency of going out and social support at baseline were used as the main covariates. The incidence of functional disability was 38 persons in the non-depression group and 42 persons in the depression group (RR 2.34; 95% CI 1.46-3.79). The results of the depression group showed a significant difference in cognitive impairment (HR 3.51; 95% CI 1.39-8.85), MFS (HR 5.60; 95% CI 1.32-23.81) and IADL (HR 3.37; 95% CI 1.65-6.85). The results of the non-depression group showed a significant difference in MFS (HR 2.97; 95% CI 1.47-6.96), and frequency of going out (HR 3.21; 95% CI 1.47-6.96).

**Wang J, Zhao X (2012)**<sup>97</sup> conducted a comparative study on Family functioning and social support for 102 elderly patients with major depression and 107 non-depressed elderly people in an urban area of Shanghai, China. The elderly patients with major depression had worse family functioning and lower social support than elderly individuals without depression. Multivariate linear regression analysis showed associations between depressive symptoms and unhealthy family functioning, lower social support and single marital status.

**Brown PJ, Rose SP (2011)**<sup>98</sup> conducted an exploratory study to investigate whether anxiety and depressive symptomatology moderates the relationship between age and quality of life among 443 adults ages 30-98 years recruited from university maintained volunteer registries. The results found that Depression and anxiety were

negatively associated with quality of life in the Psychological and Social domains ( $p' < 0.001$ ), but age was not (Psychological,  $p = 0.07$ ; Social,  $p = 0.98$ ).

**Coleman PG, et al., (2011)<sup>99</sup>** conducted an exploratory investigation into the role of spirituality and religious practices in protecting against depression among older people living in rural villages in Bulgaria and Romania. The study demonstrates significantly lower levels of spiritual belief in the Bulgarian sample (Bulgarian mean 29.7 (SD = 19.1), Romanian mean 47.6 (SD = 11.2),  $t = 10.2$ ,  $p < 0.001$ ), as well as significantly higher levels of depression (Bulgarian mean 12.0 (SD = 4.9), Romanian mean 7.3 (SD = 4.1),  $t = 9.3$ ,  $p < 0.001$ ), the later attributable in larger part to higher morbidity and disability rates, but less evidently to differences in strength of belief.

**Dunne E, et al., (2011)<sup>100</sup>** examined a longitudinal study to associate between older-adults goal adjustment capacities functional disability and depressive symptoms among 135 community older-adults. The findings suggested that an adaptive role for good disengagement capacities in older adults when confronted with increase in functional disability, the capacity to withdraw effort and commitment from unattainable goals can help prevent older adults from experiencing long term increase in depressive symptoms.

**Kwok SY, Yeung DY, Chung A (2011)<sup>101</sup>** conducted a cross-sectional survey the moderating role of perceived social support on the relationship between physical functional impairment and depressive symptoms among Chinese nursing home elderly in Hong Kong. A total of 187 elderly (54 males and 133 females) participated in the survey. The analyses showed that females reported more depressive symptoms than their male

counterparts, and a positive relationship was found between education level and depressive symptoms. Perceived institutional peer support was negatively correlated, while physical functional impairment was positively correlated with depressive symptoms. However, there was no significant correlation between perceived family support and depressive symptoms.

**Pelcastre-Villafuerte BE, et al., (2011)<sup>102</sup>** conducted a qualitative study to analyze social support and living conditions among poor elderly people in Mexican cities. 40 men and 63 women participated in the study. The study identified a significant lack of support from government and religious or civil society organizations. The family is still the main source of support for the elderly. Increased government collaboration is dramatically needed to combat the misconception that the needs of the elderly are the individual family's responsibility rather than a collaborative effort by society.

**Mazzella F, et al., (2010)<sup>103</sup>** conducted an evaluative study to identify the relationship between social support and co-morbidity on 12-year mortality of elderly people. A random sample of 1288 subjects aged 65-95 years. At 12-year follow-up, mortality progressively increases with low social support and co-morbidity increasing (from 41.5% to 66.7% and from 41.2% to 68.3%, respectively;  $p < 0.001$ ). Moreover, low social support progressively increases with co-morbidity increasing (and  $12.4 \pm 2.5$  to  $14.3 \pm 2.6$ ;  $p < 0.001$ ). Accordingly, multivariate analysis shows an increased mortality risk of 23% for each increase of tactile of social support scale (Hazard ratio=HR=1.23; 95% CI=1.01-1.51;  $p=0.045$ ). Moreover, when the analysis was performed considering different degrees of co-morbidity we found that social support level was predictive of

mortality only in subjects with the highest co-morbidity (HR=1.39; 95% CI = 1.082-1.78; p=0.01).

**Kamble SV, Dhumale GB, Goyal RC, Phalke DB, Ghodke YD (2009)<sup>104</sup>** conducted a cross sectional study that the Elderly people are prone to psychiatric disorders through vicissitudes such as social isolation, malnutrition, economic and emotional depression in a Primary Health Centre Area in Ahmednagar district of Maharashtra during 2003-2005 to assess prevalence of depression among elderly persons and to study social factors influencing depression. Goldberg and Bridges' scale was used to diagnose depression among 494 randomly selected study subjects. The study results found that 31.4% of elderly persons were having depression. It was more common among females (37.4%), illiterates (37.9%), class V socioeconomic status (55.8%), divorced and unmarried.

**Rajkumar AP, Thangadurai P, Senthilkumar P (2009)<sup>105</sup>** adopted a case control framework to establish the nature, prevalence and factors associated with geriatric depression in a rural south Indian community, recruited 1000 participants aged over 65 years from Kaniyambadi block, Vellore, India. The study found that the Prevalence of geriatric depression (ICD-10) within the previous one month was 12.7% (95% CI 10.64-14.76%). Low income (OR 1.78; 95% CI 1.08-2.91), experiencing hunger (OR 2.58; 95% CI 1.56-4.26), history of cardiac illnesses (OR 4.75; 95% CI 1.96-11.52), transient ischemic attack (OR 2.43; 95% CI 1.17-5.05), past head injury (OR 2.70; 95% CI 1.36-5.36) and diabetes (OR 2.33; 95% CI 1.15-4.72) increased the risk for geriatric depression after adjusting for other determinants using conditional logistic regression.

Having more confidants (OR 0.13; 95% CI 0.06-0.26) was the significant protective factor. Age, female gender, cognitive impairment and disability status were not significantly associated with geriatric depression. DSM-IV diagnosis of major depression was significantly correlated with experiencing hunger, diabetes, transient ischemic attack, past head injury, more disability and less nourishment; having more friends was protective.

**Singh A, Misra N (2009)**<sup>106</sup> conducted a descriptive study to investigate the relationships among depression, loneliness and sociability among 55 elderly people (both men and women). The tools used were Beck Depression Inventory, UCLA Loneliness Scale and Sociability Scale by Eysenck. The results revealed a significant relationship between depression and loneliness.

#### **SECTION 3.4: SCIENTIFIC STUDIES RELATED TO NEED-BASED INTERVENTIONS TO DECLINE THE DEPRESSIVE STATUS AMONG ELDERLY.**

**Boen H, Dalgard OS, Johansen R (2012)**<sup>107</sup> conducted an experimental study to examine the effect of a preventive senior centre group programme consisting of weekly meeting on depression and quality of life. A total of 138 persons were randomized into an intervention group (N = 99) and control group (N = 61). The study concludes that for the depressed, more specialized programmed to cope with depression may be a more appropriate intervention.

**Cramm JM, Hartgerink JM, et al., (2012)**<sup>108</sup> conducted a cross sectional study to identify the relationship between self-management abilities, well-being and depression



among older adults (>65 years of age) who were vulnerable to loss of function after hospital discharge. Three months after hospital admission, 296/456 patients (65 % response rate) were interviewed in their homes. The results revealed that investing in resources for long-term benefits, taking care of a variety of resources, taking care of resource multifunctional and being self-efficacious were associated with well-being.

**Dalgard OS, et al., (2012)<sup>109</sup>** conducted a case control study to examine the effect of a preventive senior centre group programme consisting of weekly meetings on social support, depression. A questionnaire was sent to a random sample of 4000 persons over 65 years in Oslo and a total of 2,387 completed questionnaires were obtained. The study revealed that there was an increase in social support in both groups, but greatest in the intervention group.

**Ellison JM, Kyomen HH, Harper DG (2012)<sup>110</sup>** conducted an exploratory study on prevalence and impact on quality of life to detect and treat the disorder among elderly. The study finding demonstrated the effectiveness of depression treatment in primary care and this suggests the feasibility of increasing our patients' access to care. Growing appreciation of the path physiology of depression and its interrelationships with cognitive impairment may increase our ability to limit or delay certain aspects of cognitive impairment through more aggressive treatment of depression. Improved recognition and treatment of late-life depression holds great potential for improving physical and mental health in later life, reducing disability in later years, and improving quality of life.

**Jacobs JM, et al., (2012)<sup>111</sup>** conducted a Longitudinal Cohort Study (1990-2010), which prospectively followed a representative sample (born 1920-1921), of 1,861 people, all of whom underwent home-based comprehensive assessment. To present the changing prevalence of common geriatric syndromes, functional parameters, common disease status and health care utilization, at ages 70, 78 and 85, in order to help address the question of when does contemporary aging actually begin. At age 70, the cohort had good health, low co-morbidity, preserved cognition, mobility and independence in basic and Instrumental Activities of Daily Living (IADL). Rising co-morbidity, declining cognitive status, increasing depression, and difficulty in ADL's were seen at 78. By age 85, compared to age 70, co-morbidity had tripled, depression, hearing and visual impairment, falls, dizziness and mobility problems had doubled; 23% of subjects had cognitive impairment, 42.5% suffered urinary incontinence, and dependence in basic and instrumental ADL's was common (37.8 and 51.7%, respectively). Home care was 4.5, 10.1, and 24.6%, and hospitalization in the previous year occurred among 12.3, 18.8 and 27.8% at ages 70, 78 and 85, respectively.

**Kstetri DM, et al (2012)<sup>112</sup>** conducted a comparative study to describe the care and support for elderly men and women in an urban and rural elderly people of Bhaktapur district, Nepal. The results revealed that more than half of the respondents were found having single or multiple features of loneliness, anxiety, depression and insomnia. The rate of point prevalence loneliness was found higher in the above 80 years of age, urban respondents.

**Langlois F, Vu TT, Chassé K (2012)**<sup>113</sup> conducted a comparative study to associate that physical exercise can help improve cognition and quality of life among 83 participants aged 61-89 years were assigned to an exercise-training group (3 times a week for 12 weeks) or a control group (waiting list). Frailty was determined by a complete geriatric examination using specific criteria. Pre and post-test measures assessed physical capacity, cognitive performance, and quality of life. The results compared with controls, the intervention group showed significant improvement in physical capacity (functional capacities and physical endurance), cognitive performance (executive functions, processing speed, and working memory), and quality of life (global quality of life, leisure activities, physical capacity, social/family relationships, and physical health).

**Lee CT, Yeh CJ, Lee MC (2012)**<sup>114</sup> conducted a prospective cohort and population-based study in Taiwan, examined the predictors of improvement in case-level depressive symptoms in the elderly among 206 non-demented and case-level depressed subjects aged 65 and older who were interviewed at baseline in 2003 and follow-up in 2007. The independent predictors of improvement in depression over a 4-year follow-up period are more social support and fewer mobility limitations at baseline. With regards to practical health-related behaviors, the 2 items of social support most associated with improvement in depression were willingness of significant others to talk with you and satisfaction with dependence upon significant others; the 2 items of mobility limitations most associated with non-improvement of depression were difficulty in carrying things and squatting.

**Reddy NB, et al., (2012)**<sup>115</sup> conducted a prevalence study on 800 rural elderly subjects, aged 60 years and more, to know the psychiatric morbidity among the rural elderly living in ten randomly selected villages, served by the Rural Health Training Center (RHTC), Valadi, in Tamilnadu state, India. Cognitive functioning was assessed by the Mini Mental Status Examination (MMSE), and the depression by the Geriatric Depression Scale - Shorter version. A majority of the subjects were widows / widowers, illiterates, living with family, and showing economic dependency. The prevalence of cognitive impairment was 43.25%, with a mean MMSE score of  $23.32 \pm 4.4$ , and the depression was 47.0% and  $6.16 \pm 3.4$ . Cognitive impairment, depression, and a disturbed sleep pattern were associated with female sex, age, illiteracy, poverty, loneliness, and the low socioeconomic status of the family. The study showed a definite association between the socio demographic factors and psychiatric morbidity.

**Hsu HC, Tung HJ (2011)**<sup>116</sup> conducted an exploratory study to identify the relationship between coping strategies and adaptation difficulties for the disabled elderly. Totally, 505 persons were analyzed with the physically disabled elderly in long-term care institutions and in rehabilitation departments in middle Taiwan. Analysis revealed that three types of coping strategies were identified: (i) acceptance and action reduced the difficulty in adapting to disability in the health-care and social life dimensions; (ii) venting and avoidance increased the difficulty in adapting in the health-care, domestic environment and psychological distress dimensions; and (iii) seeking support was related to greater adapting to difficulty in terms of family relationships.

**Kamen C et al., (2011)<sup>117</sup>** examined a longitudinal study to evaluate change in family support and depression symptoms over the course of 23 years and included the potential moderators of gender and participation in treatment. A sample of 373 depressed individuals provided data in five waves with baseline, 1 – year, 4 – years, 10 – years and 23 – years follow ups. Multi level modeling was used to evaluate relationships between variables. Higher family support was associated with less depression at baseline and predicted a steeper trajectory of recovery from depression over 23 years. This relationship was moderated by gender, such that women with supportive families reported the most rapid recovery from depression.

**Oddone CG et al., (2011)<sup>118</sup>** conducted a longitudinal study to explore the relationship between social support and depression in older adults. The investigator used Montgomery - Asberg Depression Rating Scale (MADRS) every 3 months. The results revealed that older patients differed from never – depressed older adults in dimensions of social support and the relationship between these variables differed by depression status.

## MATERIALS AND METHODS

### 4.1 RESEARCH APPROACH

The research approach selected for the present study is quantitative research approach, as the study aimed to assess the effectiveness of Need- Based Intervention on level of Depression, Family support, Activities of daily living, and Quality of life among elderly clients with Depression.

### 4.2 RESEARCH DESIGN

The research design for the proposed research adopted for the present study is Experimental design.

	<b>Group</b>	<b>O<sub>1</sub> Pre Test</b>	<b>X Intervention</b>	<b>O<sub>2</sub> Post Test</b>
<b>RANDOMIZATION</b>	<b>Experimental Group</b>	Assess the level of Depression, Family support, Activities of daily living, Quality of life among elderly clients with Depression among selected rural population	Need- based intervention for elderly client with cut off of moderate and severe Depression for 2 months duration.	Assess the level of Depression, Family support, Activities of daily living, Quality of life among elderly clients with Depression among selected rural population
	<b>Control Group</b>	Assess the level of Depression, Family support, Activities of daily living, Quality of life among elderly clients with Depression among selected rural population	Treatment as usual	Assess the level of Depression, Family support, Activities of daily living, Quality of life among elderly clients with Depression among selected rural population

### **4.3 VARIABLES UNDER STUDY**

#### **4.3.1 Dependent Variables**

Need-Based Intervention, Level of Depression,

#### **4.3.2 Independent Variable**

Level of Family support, Activities of daily living, Quality of life.

#### **4.3.3 Confounding Variables**

Age, Gender, Education, Religion, Marital status, Occupation, Monthly income, Habits, No. of siblings, Birth order, Type of family, Family size, No. of children, Co-morbid condition and Recreational activities.

### **4.4 STUDY SETTING**

The setting for the study was Omayal Achi Health Center located in rural outskirts of Chennai.

### **4.5 POPULATION**

#### **4.5.1 Target Population**

The target population for the study comprised of elderly with Depression residing in the villages.

#### **4.5.2 Accessible Population**

The subjects were recruited from 18 adopted villages belonging to the intensive coverage area of Omayal Achi Community Health Centre Project.

#### 4.6 SAMPLE AND SAMPLE SIZE

Selected depressive elderly clients of the adopted rural villages of Omayal Achi Health Centre who fulfill the inclusion criteria will be the samples of the study. Sample size was calculated by using Statcalc – Epi Info.

Sample size was calculated using pilot study incidence of level of Depression using the intervention planned to reduce severity of depression with  $\alpha_{\text{error}} = 5\%$  and  $\beta_{\text{error}} = 20\%$ . Required sample size per group is 155 with 5% drop out rate 162 was taken as sample size.

$$N = \frac{P_1Q_1 + P_2Q_2](Z\alpha + Z\beta)^2}{(P_1 - P_2)^2}$$

#### 4.7 CRITERIA FOR SELECTION OF SAMPLE

##### 4.7.1 Inclusion Criteria

1. All consulting elderly who are aged 60 and above residing in selected setting.
2. Elderly who can understand Tamil.
3. Elderly residing in the selected setting during the study.
4. Those who score >23 in Mini Mental State Examination.
5. Those who scored  $\geq 9$  in GDS (SF-15).

##### 4.7.2 Exclusion Criteria

1. Those who have severe hearing impairment.
2. Those who score <23 in Mini Mental State Examination.



#### **4.8 SAMPLING TECHNIQUE**

1. List of rural villages adopted by Omayal Achi Health Centre was obtained.
2. Cluster sampling technique was used to select the villages. Household survey of the rural villages was done to identify the depressive clients among elderly by using random table method with those who fulfill inclusive criteria.
3. Cluster Randomization was used to categorize the samples to experimental and control group.

#### **4.9 DATA COLLECTION INSTRUMENT**

With the investigators personal and professional experience and after the extensive review of literature and discussion with the experts, the tool will be developed.

The proposed tool may be described in following sections:

The tool consists of three sections:

##### **4.9.1 SCREENING TOOL:**

###### **I. Section A:**

1. Mini Mental State Examination described by Folstein & McHugh. It was widely used to measure the cognitive function. It is extensively validated and found more reliable. A cut off 23 for the presence of cognitive impairment has been suggested with variations depending on lack of education. The MMSE reliability was 0.84.<sup>119</sup>

###### **I. Section B:**

1. Demographic variables which includes age, gender, education, religion, marital status, occupation, monthly income, habits, no. of siblings, birth order, type of family, family size, no. of children, co-morbid condition and recreational activities .

## II. Section C:

1. Geriatric Depression Scale Version developed by Sheikh and Yesavage, 1986: it is used to identify depression in older adults in community setting.

Scoring:

No-0

Yes-1

Cut off scores:	Normal	0 – 4
	Mild	5 – 8
	Moderate	9 – 11
	Severe	12 – 15

(5 – 7 minutes to complete)

The reliability of GDS measured through Cronbach's Alpha = 0.865, proved highly reliable to screen depression. <sup>120</sup>

2. Family Support scale developed by Dunst, Jenkins, Hansley, 1984, was used to measure the support of the family among older people residing in the rural population.

Cut off percentage:

Poor support	0 -25
Inadequate support	26-50
Moderate support	51-75
Adequate support	76-100

The reliability of Family Support scale was measured through Cronbach's Alpha = 0.77, proved highly reliable to assess family support. <sup>121</sup>

3. Activities of Daily Living: Kartz index developed by Sidney Kartz MD, 1963, was used to measure the activities of daily living. The reliability of the tool was 0.95 and it proved highly reliable to assess activities of daily living among elderly.

Cut off scores:	Full function	6
	Moderate impairment	4
	Severe functional impairment	$\geq 2$

The reliability of the tool was 0.95 and it proved highly reliable to assess activities of daily living among elderly.<sup>122</sup>

4. Quality of Life of Elderly WHO (BREF) found to have 4 domains to analyze the quality of life among community dwelling (40 – 90) minutes.<sup>123</sup>

#### **4.9.2 INTERVENTION TOOL**

##### **Need- based intervention:**

Need-based intervention denotes the combined comprehensive nursing interventions developed by the investigator for the elderly clients with depression for a period of 2 months. This includes:

##### **Moderate to severe depression:**

##### **Psychosocial/Non-Pharmacological Treatment and Advice:**

**Psychoeducation:** for the person and his or her family, as appropriate about the depression and its need to be managed.

**Structured physical activity programme:** adjunct treatment option for moderate-severe depression. Seniors Citizen Chair Exercise Program Organizing of physical activity

moderate duration 3 times per week to strength, balance, coordination, stamina, posture, agility, release of tension, range of motion, respiratory health, core strength, fall prevention, energy, well being and better rest. (Video- Assisted Teaching).

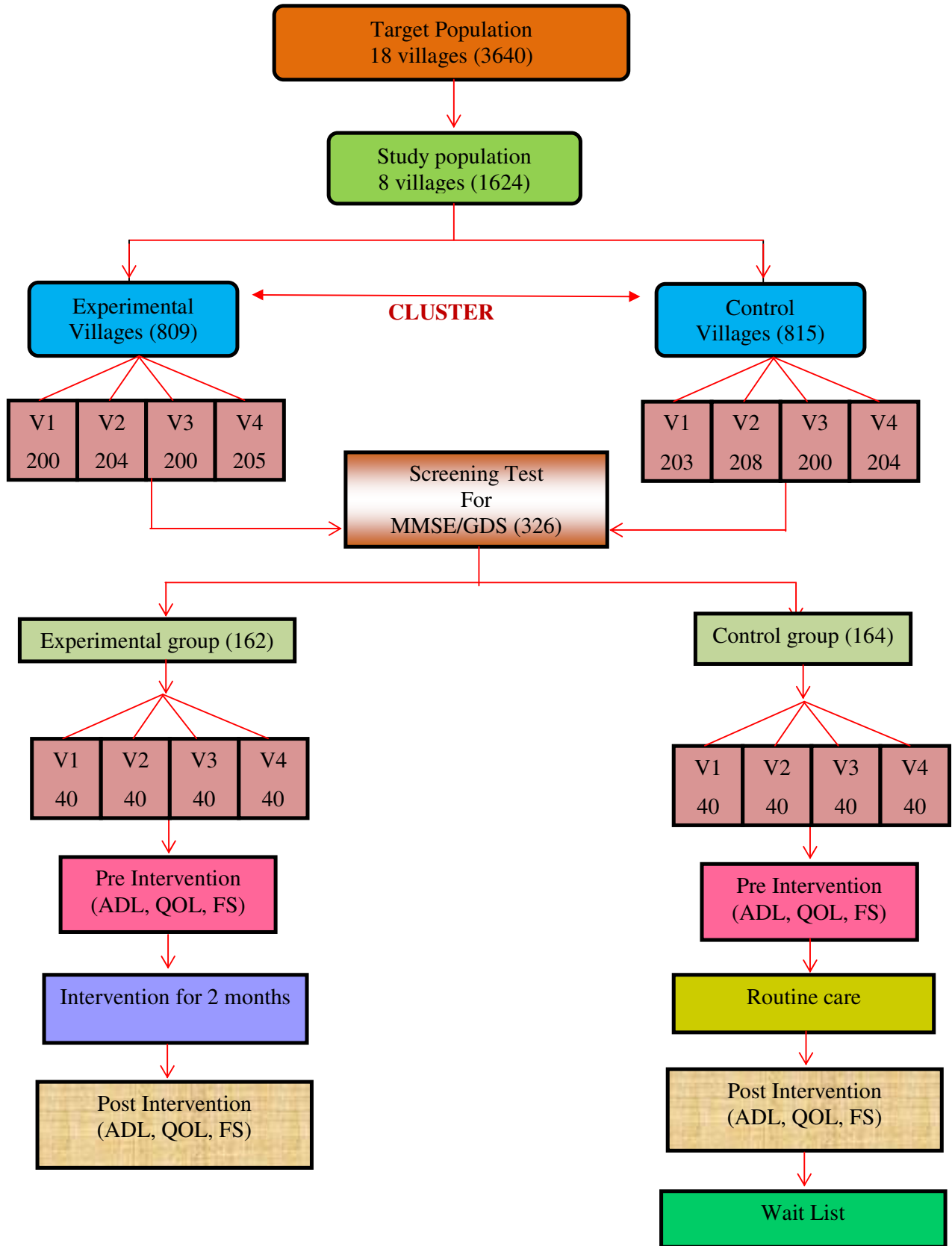
**Relaxation training:** The intervention involves training the person in techniques such as breathing exercises and Jacobson's progressive relaxation to elicit the relaxation response. Jacobson's progressive relaxation teaches how to identify and relax specific muscle groups. Usually treatment consists of daily relaxation exercises for at least 1 – 2 months.

**Regular follow-up**

**INTERVENTION TOOL**

<b>Village</b>	<b>No. of Samples</b>	<b>Group</b>	<b>No. of days</b>	<b>Session</b>	<b>Duration of intervention Reinforcement (2 months)</b>
V <sub>1</sub>	40	10	Day 1	Morning	Pretest Need Based Intervention Psycho education Breathing exercise Senior citizen Chair exercise Progressive Muscle Relaxation Post Test
		10		Evening	
		10	Day 2	Morning	
		10		Evening	
V <sub>2</sub>	40	10	Day 3	Morning	
		10		Evening	
		10	Day 4	Morning	
		10		Evening	
V <sub>3</sub>	40	10	Day 5	Morning	
		10		Evening	
		10	Day 6	Morning	
		10		Evening	
V <sub>4</sub>	40	10	Day 7	Morning	
		10		Evening	
		10	Day 8	Morning	
		10		Evening	

The intervention carried out both in the morning and evening for 2 hours every day and reinforced consecutively for 2 months.



**Fig. 4.9.1: SCHEMATIC REPRESENTATION OF RESEARCH DESIGN**

#### **4.10 CONTENT VALIDITY**

The content validity of the tool was obtained from 5 psychiatrists, 8 psychiatric nursing experts and 3 psychologists, 3social worker. The content validity for the translated tool in Tamil language was obtained from a Tamil Scholar. As per the expert's advice changes were made in the demographic variables. All modifications were made and incorporated in the final tool.

#### **4.11 ETHICAL CONSIDERATIONS**

The research study was approved by Institutional Ethics Review Board (IERB) held on December 2011 by International Centre for Collaborative Research (ICCR), Omayal Achi College of Nursing, Chennai.

##### **A) BENEFFICENCE & NONMALEFFICENCE**

###### **a) The right to Freedom from harm and discomfort**

The study Subjects will not be subjected to harm and but help to reduce the level of depression by performing Need- based intervention.

###### **b) The right to protection from exploitation**

The investigator explained the procedure and nature of the study to the participants and ensured that none of the participants will be exploited or denied fair treatment. Informed written consent was obtained from the participants.

##### **B) RESPECT FOR HUMAN DIGNITY**

The investigator followed the second ethical principle of respect for human dignity. It includes the right to self determination and the right to full disclosure.

**a) The Right to Self-determination (Autonomy)**

The investigator gave full freedom to the participants to decide voluntarily whether to participate in the study or to withdraw from the study and the right to ask questions.

**b) The Right to Full Disclosure**

The researcher has fully described the nature of the study, the person's right to refuse participation and the researcher's responsibilities based on which both the oral and written informed consent was obtained from the participants.

**C) JUSTICE**

The researcher adhered to the third ethical principle of justice. It includes participant's right to fair treatment and right to privacy.

1. The control depressive clients were also given the same intervention as Wait List Control Group Design.
2. Level of satisfaction for each intervention was assessed in the experimental group.

**D) CONFIDENTIALITY**

The researcher maintained confidentiality of the data provided by the study participants by using Random Table Method in Statcalc – Epi Info.

**4.12 RELIABILITY OF THE TOOL**

After pilot study reliability of the tool was assessed by using Split Half Method.

Correlation Coefficient values are:



Depression	-	0.75
Family Support	-	0.72
Activities of Daily Living	-	0.77
Quality of Life	-	0.84

These correlation coefficients are very high and it is a good tool for assessing the effectiveness of Need-based intervention on level of depression with associated factors Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression in a selected rural population.

#### **4.13 PILOT STUDY**

The pilot study is a trial run for main study to test the reliability, feasibility of the study and tool. The pilot study was conducted at adopted villages of Omayal Achi Community Health Center. The study was conducted after obtaining the formal permission from the Principal Omayal Achi College of Nursing.

Self introduction about the investigator and information regarding the nature of the study was explained to the samples to gain cooperation in the procedure of data collection privacy and confidentiality was maintained throughout the process of data collection.

8 villages was categorized into experimental and control group by using cluster sampling technique (each 4 villages for experimental and control group).10 elderly with depression were selected as samples from each villages. The samples were scrutinized through Mini mental state examination. The pre test was done in both experimental and

control group to assess the level of Depression, Family Support, and Quality of Life among elderly clients with Depression.

The intervention as Need-based intervention, psycho education, breathing exercise, senior citizen chair exercise, progressive muscle relaxation was implemented for two days by the investigator in each village for about two hours (morning and evening).The intervention was reinforced for a period of two weeks, followed by which the post test was done at the end of the sixteenth day.

The results of the pilot study revealed that the tool was reliable and the study was feasible. The pilot study aided the investigator to determine the method of statistical analysis and the time required for the data collection and intervention.

#### **4.14 PROCEDURE FOR DATA COLLECTION**

A formal permission obtained from the Principal Omayal Achi College of Nursing. Self introduction about the investigator and information regarding the nature of the study was explained to the samples to gain cooperation in the procedure of data collection. Privacy and confidentiality was maintained throughout the process of data collection.

8 villages were categorized into experimental and control group by using cluster sampling technique (each 4 villages for experimental and control group).40 elderly with Depression were selected as samples from each villages. The samples were scrutinized through Mini mental status examination. The pre test was done in both experimental and control group to assess the level of depression (GDS SF-15) , Family support(Family

Support Scale),Activities of Daily Living (Kartz Index) Quality of Life (WHO BREF) among elderly clients with depression.

The intervention as: Need-based intervention, psycho education, breathing exercise, senior citizen chair exercise, progressive muscle relaxation was implemented for eight days by the investigator in each village for about two hours (morning and evening ).The interventions was reinforced for a period of two months, followed by which the post test was done.

#### **4.15 PLAN FOR DATA ANALYSIS**

Both descriptive and inferential statistics were used.

##### **4.15.1 Descriptive Statistics**

1. Frequency and percentage distribution were used to analyze the demographic variables.
2. Mean and standard deviation were used to assess the level of Depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression.

##### **4.15.2 Inferential Statistics**

1. Paired 't' test used to compare the pre and post test level of Depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with depression in the experimental and control group.

2. Correlation coefficient to compare between pre and post test level of Depression, Family Support, Activities of Daily Living, Quality of Life in the experimental and control group among elderly clients.
3. Chi-square was used to associate the post test level of Depression, Family Support, Activities of Daily Living, Quality of Life among elderly clients with their selected demographic variables.

## RESULTS AND ANALYSIS

This chapter deals with analysis and interpretation of data collected from the depressive clients to analyze the effectiveness of Need -based intervention on level of depression, Family Support, Activities of Daily Living and Quality of Life.

Data analysis begins with description that applies to any study in which the data are numerical with some concepts. Descriptive statistics allows the researcher to organize the data to examine the quantum of information and inferential statistics used to determine the relationship and casualty.

The data were entered into Statcalc – Epi Info.

The findings of the study were organized and presented in following sections.

### ORGANIZATION AND PRESENTATION OF DATA

#### **Section 5.1: Description of demographic variables of the elderly clients with depression in the experimental and control group.**

Table 5.1.1 Frequency and percentage distribution of demographic variables of the elderly clients with depression in the experimental and control group.

#### **Section 5.2: Assessment of item-wise mean, standard deviation and comparison of level of depression, Family Support, Activities of Daily Living, Quality of Life in the experimental and control group in pretest of elderly clients with depression.**

Table 5.2.1 Item-wise mean, percentage and comparison of level of depression in the experimental and control group in pretest of elderly clients with depression.

Table 5.2.2 Item-wise mean, percentage and comparison of Family Support in the experimental and control group in pretest of elderly clients with depression.

Table 5.3.3 Item-wise mean, percentage and comparison of Activities of Daily Living in the experimental and control group in pretest of elderly clients with depression.

Table 5.3.4 Domain-wise mean, percentage and comparison of Quality of Life in the experimental and control group in pretest of elderly clients with depression.

**Section 5.3: Assessment and comparison of pretest and post test level of depression, Family Support, Activities of Daily Living, Quality of Life within and between experimental and control group of elderly clients with depression.**

Table 5.3.1 Frequency and percentage distribution of pretest and post test level of depression between experimental and control group of elderly clients with depression.

Table 5.3.2 Frequency and percentage distribution of pretest and post test level of Family Support between experimental and control group of elderly clients with depression.

Table 5.3.3 Frequency and percentage distribution of pretest and post test level of Activities of Daily Living between experimental and control group of elderly clients with depression.

Table 5.3.4 Domain-wise frequency and percentage distribution of pretest and post test level of Quality of Life between experimental and control group of elderly clients with depression.

- Table 5.3.5 Comparison of pretest and post test level of depression within experimental and control group of elderly clients with depression.
- Table 5.3.6 Comparison of pretest and post test level of Family Support within experimental and control group of elderly clients with depression.
- Table 5.3.7 Comparison of pretest and post test level of Activities of Daily Living within experimental and control group of elderly clients with depression.
- Table 5.3.8 Comparison of pretest and post test Domain-wise Quality of Life within experimental and control group of elderly clients with depression.
- Table 5.3.9 Comparison of pretest and post test level of depression between experimental and control group of elderly clients with depression.
- Table 5.3.10 Comparison of pretest and post test level of Family Support between experimental and control group of elderly clients with depression.
- Table 5.3.11 Comparison of pretest and post test level of Activities of Daily Living between experimental and control group of elderly clients with depression.
- Table 5.3.12 Comparison of pretest and post test level of Domain-wise Quality of Life between experimental and control group of elderly clients with depression.
- Table 5.3.13 Overall effectiveness of Need-Based intervention of pretest and post test level of depression, Family Support, Activities of Daily Living, Quality of Life between experimental and control group of elderly clients with depression.

**Section 5.4: Correlation of pretest and post test between level of depression, Family Support, Activities of Daily Living and Quality of Life of elderly clients with depression in the experimental group.**

Table 5.4.1 Correlation of pretest and post test between level of depression, Family Support, Activities of Daily Living and Quality of Life of elderly clients with depression in the experimental group.

.Table 5.4.2 Correlation of pretest and post test between Family Support, Activities of Daily Living, Quality of Life and level of depression of elderly clients with depression in the experimental group.

.Table 5.4.3 Correlation of pretest and post test between Activities of Daily Living, Quality of Life, level of depression and Family Support of elderly clients with depression in the experimental group.

.Table 5.4.5 Correlation of pretest and post test between Quality of Life, level of depression, Family Support and Activities of Daily Living of elderly clients with depression in the experimental group.

**Section 5.5: Association between mean differed score of depression, Family Support, Activities of Daily Living, Quality of Life with their demographic variables of elderly clients with depression in the experimental group.**

Table 5.5.1 Association between mean differed score of depression with their demographic variables of elderly clients with depression in the experimental group.

Table 5.5.2 Association between mean differed score of Family Support with their demographic variables of elderly clients with depression in the experimental group.



Table 5.5.3 Association between mean differed score of Activities of Daily Living with their demographic variables of elderly clients with depression in the experimental group.

Section 5.5.4 Association between mean differed score of Quality of Life with their demographic variables of elderly clients with depression in the experimental group.

**SECTION 5.1: DESCRIPTION OF DEMOGRAPHIC VARIABLES OF THE ELDERLY CLIENTS WITH DEPRESSION IN THE EXPERIMENTAL AND CONTROL GROUP.**

**Table 5.1.1(a): Frequency and percentage distribution of demographic variables of the elderly clients with depression in the experimental and control group.**

**N = 320**

Demographic information		Group				Chi square test
		Experiment (160)		Control (160)		
		No	%	No	%	
Age in years	60 -65 yrs	90	56.3%	90	56.3%	$\chi^2=0.00$ d.f=3 p=1.00
	66 -70 yrs	30	18.8%	30	18.8%	
	71 -75 yrs	20	12.5%	20	12.5%	
	>75 yrs	20	12.5%	20	12.5%	
Gender	Male	56	35.0%	60	37.5%	$\chi^2=0.21$ d.f=1 p=.064
	Female	104	65.5%	100	62.5%	
Education	Non-literate	92	57.5%	99	61.9%	$\chi^2=0.65$ d.f=3 p=.088
	Primary school	59	36.9%	53	33.1%	
	Higher secondary	7	4.4%	6	3.8%	
	Graduate	2	1.3%	2	1.3%	
Religion	Hindu	127	79.4%	133	83.1%	$\chi^2=1.42$ d.f=2 p=.067
	Muslim	3	1.9%	3	1.9%	
	Christian	30	18.7%	24	15.0%	
Marital status	Married	103	64.4%	113	70.6%	$\chi^2=1.42$ d.f=2 p=.049
	Unmarried	5	3.1%	4	2.5%	
	Widow/Widower	52	32.5%	43	26.9%	
Occupation	Salaried employee	87	54.4%	73	45.6%	$\chi^2=4.85$ d.f=3 p=0.30
	Self employed	22	13.8%	23	14.4%	
	Unemployed	34	21.3%	35	21.9%	
	Pensioner	7	4.4%	9	5.6%	
	Housewife	10	6.3%	20	12.5%	
Family Monthly Income in Rs.	< Rs.5000	147	91.9%	147	91.9%	$\chi^2=0.91$ d.f=3 p=.082
	Rs.5001 -10000	2	1.3%	2	1.3%	
	Rs.10001 -15000	2	1.3%	4	2.5%	
	>Rs.15000	9	5.6%	7	4.4%	

The above table 5.1.1(a) depicts that about 160 participants have participated in experimental group and 160 have participated in control group.

With regard to age in experimental group, out of 160 participants, 90(56.3%) were between 60 – 65 years, 30(18.8%) belonged to 66 – 70 years, 20(12.5%) of them belonged to 71 – 75 years and 20(12.5%) of them belonged to >75 years.

Similarly in control group, out of 160 participants 90(56.3%) were in 60 – 76 years, 30(18.8%) were in 66 – 70 years, 20(12.5%) were in 71 – 75 years and 20(12.5%) of them belonged to >75 years.

With regard to the gender, 56(35%) were males and 104(65.5%) were females in experimental group. Similarly, in control group, 60(37.5%) were males and 100(62.5%) were females.

With regard to educational status of the participants 92(57.5%) were illiterate, 59(36.9%) of them had primary education, 7(4.4%) of them had high school education and 2(1.3%) of them were graduates in experimental group. In control group, 99(61.9%) were illiterates, 53(33.1%) of them had primary education, 6(3.8%) of them had high school education, and 2(1.3%) of them were graduates in control group.

With regard to the religion, 127(79.4%) were Hindus, 3(1.9%) were Muslims and 30(18.7%) were Christians in experimental group, likewise in control group, 133(83.1%) were Hindus, 3(1.9%) were Muslims and 24(15%) were Christians.

With regard to the marital status, about 103(64.4%) of them were married, 5(3.1%) were unmarried and 52(32.5%) were widow/Widower in experimental group. It

matches with the control group, where 113(70.6%) of them were married, 4(2.5%) were unmarried and 43(26.9%) were widow/widower.

With relevance to occupation, 87(46.3%) of them were salaried employees, 22(13.8%) of them were self employed, 34(21.3%) of them were unemployed, 7(4.4%) of them were pensioner and 10(6.3%) of them were housewife in experimental group. Similarly in control group, 73(40%) of them were salaried employees, 23(14.4%) of them were self-employed, 35(21.9%) of them were unemployed, 9(5.6%) of them were pensioner and 20(12.5%) of them were housewife in control group.

While considering family monthly income status, 147(91.9%) had an income of <Rs.5000, 2(1.3%) had an income of Rs.5001 – 10,000, 2(1.3%) had an income of Rs.10001 – 15000 and 9(5.6%) had an income of >Rs.15000 in the experimental group. Similarly in the control group, 147(91.9%) had an income of <Rs.5000, 2(1.3%) had an income of Rs.5001 – 10,000, 4(2.5%) had an income of Rs.10,001 – 15,000 and 7(4.4%) had an income of >Rs.15000 in the control group.

**Table 5.1.1(b): Frequency and percentage distribution of demographic variables of the elderly clients with depression in the experimental and control group.**

**N = 320**

Family information		Group				Chi square test
		Experiment (160)		Control (160)		
		No	%	No	%	
No. of sibling	1- 2	39	24.4%	37	23.1%	$\chi^2=1.02$ d.f=3 p=.0.79
	3- 4	35	21.9%	42	26.3%	
	5- 6	82	51.3%	76	47.5%	
	7- 8	4	2.5%	5	3.1%	
Birth Order	First	33	20.6%	37	23.1%	$\chi^2=1.40$ d.f=3 p=0.70
	Second	32	20.0%	37	23.1%	
	Third	35	21.9%	28	17.5%	
	Fourth & above	60	37.5%	58	36.3%	
Type of family	Joint family	65	40.6%	70	43.8%	$\chi^2=0.50$ d.f=2 p=0.77
	Nuclear family	91	56.9%	85	53.1%	
	Extended family	4	2.5%	5	3.1%	
Family Size	1 - 2	63	39.4%	57	35.6%	$\chi^2=1.98$ d.f=3 p=.0.58
	3 - 4	38	23.8%	32	20.0%	
	5 - 6	57	35.6%	68	42.5%	
	7 - 8	2	1.3%	3	1.9%	
No.of Children	None	7	4.4%	4	2.5%	$\chi^2=2.02$ d.f=3 p=0.58
	1 - 2	34	21.3%	37	23.1%	
	3 - 4	57	35.6%	65	40.6%	
	5 - 6	62	38.8%	54	33.8%	

The above table 5.1.1(b) depicts that with regard to the number of siblings about 39(24.4%) had 1 – 2 siblings, 35(21.9%) had 3 – 4 siblings, 82(51.3%) had 5 – 6 siblings, and 4(2.5%) had 7 – 8 siblings in experimental group. Likewise, about 37(23.1%) had 1 – 2 siblings, 42(26.3%) had 3 – 4 siblings, 76(47.5%) had 5 – 6 siblings and 5(3.1%) had 7 – 8 siblings in control group.

While considering the birth order about 33(20.6%) were first child, 32(20%) were second child, 35(21.9%) were third child and 60(37.5%) were fourth and above in experimental group. Similarly in control group, 37(23.1%) were first child, 37(23.1%) were second child, 28(17.5%) were third child and 58(36.3%) were fourth and above.

Majority 65(40.6%) were in joint family, 91(56.9%) were in nuclear family and 4(2.5%) were in extended family in the experimental group. In the control group, 70(43.8%) were in joint family, 85(53.1%) were in nuclear family and 5(3.1%) were in extended family.

With relevance to the family size, 63(39.4%) had 1 – 2 persons, 38(23.8%) had 3 – 4 persons, 57(35.6%) had 5 – 6 persons and 2(1.3%) had 7 – 8 persons in experimental group. Similarly in control group, 57(35.6%) had 1 – 2 persons, 32(20%) had 3 – 4 persons, 68(42.5%) had 5 – 6 persons and 3(1.9%) had 7 – 8 persons in control group.

While considering the number of children, 7(4.4%) had no children, 34(21.3%) had 1 – 2 children, 57(35.6%) had 3 – 4 children, 62(38.8%) had 5 – 6 children in experimental group. In the control group, 4(2.5%) had no children, 37(23.1%) had 1 – 2 children, 65(40.6%) had 3 – 4 children and 54(33.8%) had 5 – 6 children.

**Table 5.1.1(c): Frequency and percentage distribution of demographic variables of the depressive clients in the experimental and control group.**

**N = 320**

Personal information		Group				Chi square test
		Experiment (160)		Control (160)		
		No	%	No	%	
Habits	Nil	80	50.0%	66	41.8%	$\chi^2=3.29$ d.f=6 p=0.77
	Smoking	20	12.5%	22	13.9%	
	Alcohol	16	10.0%	24	15.2%	
	Panparag /Tobacco	18	11.3%	17	10.8%	
	Others	9	5.6%	11	7.0%	
	Smoking+alcohol	12	7.5%	13	8.2%	
	Smoking+alcohol+panparag	5	3.1%	5	3.2%	
Co-morbidity	Nil	29	18.1%	31	19.5%	$\chi^2=12.99$ d.f=12 p=0.38
	Arthritis	25	15.6%	26	16.4%	
	Hip fracture	4	2.5%	3	1.9%	
	COPD	4	2.5%	2	1.3%	
	Parkinson's disease	1	.6%	1	.6%	
	Diabetes	5	3.1%	7	4.4%	
	Hypertension (HT)	27	16.9%	27	17.0%	
	Others	11	6.9%	23	14.5%	
	Diabetes+Hypertension	21	13.1%	16	10.1%	
	Hypertension+COPD	6	3.8%	10	6.3%	
	Arthritis+Diabetes	12	7.5%	8	5.0%	
	Arthritis+Diabetes+hypertension	10	6.3%	3	1.9%	
	Myocardial infarction+HT	5	3.1%	2	1.3%	
Recreational Activity	Nil	12	7.5%	11	6.9%	$\chi^2=5.46$ d.f=10 p=0.85
	Watching Television (TV)	113	70.6%	113	71.1%	
	Listening to Music	2	1.3%	1	.6%	
	Reading Books	1	.6%	2	1.3%	
	Reading Newspaper	5	3.1%	5	3.1%	
	Inter personal communication	10	6.3%	12	7.5%	
	Watching TV+ Inter personal	10	6.3%	4	2.5%	
	Reading Newspaper+Inter personal	1	.6%	4	2.5%	
	Watching TV+paper	2	1.3%	3	1.9%	
	Watching TV+Music	2	1.3%	2	1.3%	
Watching TV+Books+News	2	1.3%	2	1.3%		

The above table 5.1.1(c) depicts that with regard to habits 80(50%) had no habits, 20(12.5%) had habit of smoking, 16(10%) had habits of taking alcohol, 18(11.3%) had habit of taking panparag/tobacco, 9(5.6%) had other habits, 12(7.5%) had habit of smoking and alcohol and 5(3.1%) had habit of smoking/alcohol and pan in experimental group.

In control group, 66(41.8%) had no habits, 22(13.9%) had habit of smoking, 24(15.2%) had habit of taking alcohol, 17(10.8%) had habit of taking panparag/tobacco, 11(7%) had other habits, 13(8.2%) had habit of smoking and alcohol and 5(3.2%) had habit of smoking / alcohol and pan in control group.

With regard to the co-morbidity of illness 29(18.1%) had no illness, 25(15.6%) had arthritis, 4(2.5%) had hip fracture, 4(2.5%) had COPD, 4(2.5%) had Parkinson's disease, 5(3.1%) had diabetes, 27(16.9%) had hypertension, 11(6.9%) had other illness, 21(13.1%) had diabetes and hypertension, 6(3.8%) had hypertension and COPD, 12(7.5%) had arthritis and diabetes, 10(6.3%) had arthritis, diabetes, and hypertension and 5(3.1%) had myocardial and hypertension in experimental group.

In control group, 31(19.5%) had no illness, 26(16.4%) had arthritis, 3(1.9%) had hip fracture, 2(1.3%) had COPD, 1(0.6%) had Parkinson's disease, 7(4.4%) had diabetes, 27(17.0%) had hypertension, 23(14.5%) had other illness, 16(10.1%) had diabetes and hypertension, 10(6.3%) had hypertension and COPD, 8(5%) had arthritis and diabetes, 3(1.9%) had arthritis, diabetes and hypertension and 2(1.3%) had myocardial infarction and hypertension.



With regard to the recreational activities 12(7.5%) were not interested in recreational activities, 113(70.6%) were interested in watching TV, 2(1.3%) were interested in listening to music, 1(0.6%) were interested in reading books, 5(3.1%) were interested in reading newspaper, 10(6.3%) were interested in inter-personal relationship, 10(6.3%) were interested in watching TV and inter-personal relationship, 1(0.6%) were interested in reading newspaper and inter-personal relationship, 2(1.3%) were interested in watching TV and reading newspaper, 2(1.3%) were interested in watching TV and listening to music, 2(1.3%) were interested in watching Television, reading books, and newspaper in the experimental group. Likewise, in control group 11(6.9%) were not interested in recreational activities, 113(71.1%) were interested in watching TV, 1(0.6%) were interested in listening to music, 2(1.3%) were interested in reading books, 5(3.1%) were interested in reading newspaper, 12(7.5%) were interested in inter-personal relationship, 4(2.5%) were interested in watching TV and inter-personal relationship, 4(2.5%) were interested in reading newspaper and inter-personal relationship, 3(1.9%) were interested in watching TV and newspaper, 2(1.3%) were interested in watching TV and listening to music, 2(1.3%) were interested in watching TV, reading books and newspaper.

**SECTION 5.2: ASSESSMENT OF ITEM-WISE MEAN, PERCENTAGE AND COMPARISON OF LEVEL OF DEPRESSION, FAMILY SUPPORT, ACTIVITIES OF DAILY LIVING, QUALITY OF LIFE IN THE EXPERIMENTAL AND CONTROL GROUP IN PRETEST OF ELDERLY CLIENTS WITH DEPRESSION.**

**Table 5.2.1: Item-wise mean, percentage and comparison of level of depression in the experimental and control group in pretest of elderly clients with depression.**

**N = 320**

S.No.	Questions	Response	Experiment (160)		Control (160)	
			No.	%	No.	%
1.	Are you basically satisfied with your life?	No	108	67.5	112	70.0
2.	Have you dropped many of your activities and interests?	Yes	133	83.1	128	80.0
3.	Do you feel that your life is empty?	Yes	135	84.4	131	81.9
4.	Do you often get bored?	Yes	142	88.8	137	85.6
5.	Are you in good spirit most of the time?	No	121	75.6	123	76.9
6.	Are you afraid that something bad is going to happen to you?	Yes	129	80.6	132	82.5
7.	Do you feel happy most of the time?	No	113	70.6	110	68.8
8.	Do you often feel helpless?	Yes	139	86.9	143	89.4
9.	Do you prefer to stay at home, rather than going out and doing new things?	Yes	146	91.3	138	86.3
10.	Do you feel that you have more problems with memory than most?	Yes	125	78.1	118	73.8
11.	Do you think it is wonderful to be alive now?	No	129	80.6	120	75.0
12.	Do you feel pretty worthless the way you are now?	Yes	132	82.5	125	78.1
13.	Do you feel full of energy?	No	106	66.3	111	69.4
14.	Do you feel that your situation is hopeless?	Yes	111	69.4	123	76.9
15.	Do you think that most people are better off than you are?	Yes	107	66.9	112	70.0
	<b>Overall</b>		<b>125</b>	<b>78.1</b>	<b>124</b>	<b>77.5</b>

Table 5.2.1 depicts the Item-wise mean, percentage and comparison of level of depression between experimental and control group in pretest of elderly clients with depression.

With regard to the satisfaction of life 108(67.5%) samples gave the response as “No” in experimental group and 112(70%) samples gave the response as “No” in the control group in the pretest.

In relation to giving up of the activities and interest 133(83.1%) samples gave the response as “Yes” in experimental group and 128(80%) samples gave the response as “Yes” in control group in the pretest.

Considering the emptiness in life, 135(84.4%) samples gave the response as “Yes” in experimental group and 131(81.9%) samples gave the response as “Yes” in control group in the pretest.

With respect to boredom, 142(88.8%) samples gave the response as “Yes” in experimental group and 137(85.6%) samples gave the response as “Yes” in control group in the pretest.

Considering the good spirit, 121(75.6%) samples gave the response as “No” in experimental group and 123(76.9%) samples gave the response as “No” in control group in the pretest.

With regard to pessimistic attitude 129(80.6%) samples gave the response as “Yes” in experimental group and 132(82.5%) samples gave the response as “Yes” in control group in the pretest.

Relating to happiness 113(70.6%) samples gave the response as “No” in experimental group and 110(68.8%) samples gave the response as “No” in control group in the pretest.

With regard to feeling helpless 139(86.9%) samples gave the response as “yes” in experimental group and 143(89.4%) samples gave the response as “Yes” in control group in the pretest.

With regard to taking up activities and doing new things, 146(91.3%) samples gave the response as “Yes” in experimental and 138(86.3%) samples gave the response as “Yes” in control group in the pretest.

The capacity of the memory 125(78.1%) samples gave the response as “Yes” in experimental and 118(73.8%) samples gave the response as “Yes” in control group in the pretest.

In relation to feeling wonderful to be alive, 129(80.6%) samples gave the response as “No” in experimental and 120(75%) samples gave the response as “No” in control group in the pretest.

Considering the worthiness of life, 132(82.5%) samples gave the response as “Yes” in experimental and 125(78.1%) samples gave the response as “Yes” in control group in the pretest.

Regarding the full of energy, 106(66.3%) samples gave the response as “No” in experimental and 111(69.4%) samples gave the response as “No” in control group in the pretest.

Considering the situation of hopelessness, 111(69.4%) samples gave the response as “Yes” in experimental and 123(76.9%) samples gave the response as “Yes” in control group in the pretest.

With regard to attitudes towards other people’s bitterness, 107(66.9%) samples gave the response as “Yes” in experimental and 112(70%) samples gave the response as “Yes” in control group in the pretest.

**Table 5.2.2: Item-wise mean, percentage and comparison of family support in the experimental group and control group in pretest off elderly clients with depression.**

(N = 320)

S.No.	Questions	Min- Max Score	Experiment (160)		Control (160)	
			Mean Score	%	Mean Score	%
1.	Your parents	1 – 5	1.31	26.2	1.25	25
2.	Your spouse o partner’s parents	1 – 5	1.82	36.4	1.83	36.6
3.	Your relatives (other than parents)	1 – 5	1.51	30.2	1.52	30.4
4.	Your spouse of partner’s relative kin	1 – 5	1.1	22	1.01	20.2
5.	Spouse or partner	1 – 5	2.4	48	2.32	46.4
6.	Your friends	1 – 5	2.3	46	2.31	46.2
7.	Your spouse or partner’s friends	1 – 5	1.6	32	1.62	32.4
8.	Your own children	1 – 5	2.4	48	2.3	46
9.	Other parents	1 – 5	1.5	30	1.52	30.4
10.	Co-workers	1 – 5	2	40	2.1	42
11.	Parent groups	1 – 5	1.61	32.2	1.51	30.2
12.	Social groups/clubs	1 – 5	1	20	0.98	19.6
13.	Church members/minister	1 – 5	1.2	24	1.23	24.6
14.	Your family or child physician	1 – 5	1.2	24	1.22	24.4
15.	Early childhood intervention program	1 – 5	1.11	22.2	1.14	22.8
16.	School/day care centre	1 – 5	1.22	24.4	1.16	23.2
17.	Professional helpers/social workers therapies and teachers	1 – 5	1.41	28.2	1.34	26.8
18.	Professional agencies	1 – 5	1.4	28	1.38	27.6
	<b>Overall</b>	<b>18 - 90</b>	<b>28.09</b>	<b>31.2</b>	<b>27.74</b>	<b>30.8</b>

Table 5.2.2 depicts the Item-wise mean, percentage and comparison of family support between experimental and control group in pretest of elderly clients with depression.

With respect to the support from parents, 1.31(26.2%) were in experimental and 1.25(25%) were in control group in the pretest.

With regard to the support from spouse of partner's parents 1.82(36.4%) were in experimental and 1.83(36.6%) were in control group in the pretest.

In relation to the support from relatives kin (other than parents) 1.51(30.2%) were in experimental and 1.52(30.4%) were in control group in pretest.

Considering the spouse of partners relatives kin 1.1(22%) were in experimental and 1.01(20.2%) were in control group in the pretest.

With respect to the support from spouse or partner 2.4(48%) were in experimental and 2.32(46.4%) were in control group in the pretest.

With regard to the support from trends, 2.3(46%) were in experimental and 2.31(46.2%) were in control group in the pretest.

Considering the support from spouse or partner's friends 1.6(32%) were in experimental and 1.62(32.4%) were in control group in the pretest.

With respect to the support from own children 2.4(48%) were in experimental and 2.3(46%) were in control group in the pretest.

With regard to the support from other parents 1.5(30%) were in experimental and 1.52(30.4%) were in control group in the pretest.

With regard to the support from co-workers 2(40%) were in experimental and 2.1(42%) were in control group in the pretest.

With regard to the support from parent groups 1.61(32.2%) were in experimental and 1.51(30.2%) were in control group in the pretest.

Considering the support from social group of clubs 1(20%) were in experimental and 0.98(19.6%) were in control group in the pretest.

With respect to the support from Church members / Minister 1.2(24%) were in experimental and 1.23(24.6%) were in control group in the pretest.

With respect to the support from family or child's physician 1.2(24%) were in experimental and 1.22(24.4%) were in control group in the pretest.

Considering the support from early childhood intervention program 1.11(22.2%) were in experimental and 1.14(22.8%) were in control group in the pretest.

With regard to the support from school/day care centre 1.22(24.4%) were in experimental and 1.16(23.3%) were in control group in the pretest.



With regard to the support from professional helpers / social workers, therapies, teachers 1.41(28.2%) were in experimental and 1.34(26.8%) were in control group in the pretest.

With regard to the professional agencies 1.4(28%) were in experimental and 1.38(27.6%) were in control group in the pretest.

**Table 5.2.3: Item-wise mean, percentage and comparison of Activities of Daily Living in the experimental and control group in pretest of elderly clients with depression.**

**N = 320**

S.No.	Questions	Experiment (160)		Control (160)	
		No.	%	No.	%
1.	Bathing	55	34.4	50	31.3
2.	Dressing	48	30	46	28.8
3.	Toileting	47	29.4	48	30
4.	Transferring	44	27.5	42	26.3
5.	Contenance	50	31.3	49	30.6
6.	Feeding	52	32.5	50	31.3

Table 5.2.3 depicts the Item-wise mean, percentage and comparison of activities of daily living between experimental and control group in pretest of elderly clients with depression.

With regard to the activities of bathing the pretest score in the experimental group was 55(34.4%) and 50(31.3%) in the control group.

Considering the Activities of Dressing the pretest score in the experimental group was 48(30%) and 46(28.8%) in the control group.

In relation to the activities of toileting the pretest score in the experimental group was 47(29.4%) and 48(30%) in the control group.

With respect to the activities of transferring oneself the pretest score in the experimental group was 44(27.5%) and 42(26.3%) in the control group.

With respect to the activities of construction of routine care the pretest score in the experimental group was 50(31.3%) and 49(30.6%) in the control group.

In relation to the activities of feeding oneself the pretest score in the experimental group was 52(32.5%) and 50(31.3%) in the control group.

**Table 5.2.4: Domain-wise mean, percentage and comparison of Quality of life in the experimental and control group in pretest of elderly clients with depression.**

**N = 320**

S.No.	Quality of life		Pretest	
			Mean	%
1	Experimental Group (N = 160)	Physical	46.05	10.69
		Psychological	34.24	6.84
		Social	27.97	11.92
		Environmental	34.20	8.71
		Overall	35.62	4.52
2	Control Group (N = 160)	Physical	46.29	10.26
		Psychological	33.54	7.48
		Social	28.13	12.56
		Environmental	35.41	9.06
		Overall	35.84	5.09

Table 5.2.4 depicts the Domain-wise mean, percentage and comparison of Quality of life between experimental and control group in pretest of elderly clients with depression.

With regard to the physical domain the pretest score in the experimental group was 46.05 (10.69%) and 46.29(10.26%) in the control group.

Considering the psychological domain the pretest score in the experimental group was 34.24(6.84%) and 33.54(7.48%) in the control group.

In relation to the social domain the pretest score in the experimental group was 29.97(11.92%) and 28.13(12.56%) in the control group.

With respect to the environmental domain the pretest score in the experimental group was 34.20 (8.71%) and 35.41(9.06%) in the control group.

The overall pretest score in the experimental group was 35.62(4.52%) and 35.84(5.09%) in the control group.

**SECTION 5.3: ASSESSMENT AND COMPARISON OF LEVEL OF DEPRESSION, FAMILY SUPPORT, ACTIVITIES OF DAILY LIVING, QUALITY OF LIFE OF ELDERLY CLIENTS WITH DEPRESSION IN EXPERIMENTAL AND CONTROL GROUP.**

**Table 5.3.1: Assessment and comparison of pretest and post test level of depression of elderly clients with depression in experimental and control group.**

**N = 320**

S.No.	Level of depression		Experiment (160)		Control (160)		Chi-Square Test
			No.	%	No.	%	
1	Pretest	Mild	0	0	0	0	$\chi^2 = 0.31$ P = 0.57 d.f = 2 N.S
		Moderate	36	22.5	42	26.3	
		Severe	124	77.5	118	73.8	
2	Post Test	Mild	15	9.4	0	-	$\chi^2 = 11.27$ P = 0.001*** d.f = 2 S
		Moderate	113	70.6	45	28.1	
		Severe	32	20.0	115	71.9	

\*\*\*p<0.001, S – Significant

Table 5.3.1 depicts the comparison of pretest and post test level of depression of elderly clients with depression in experimental and control group.

In the pretest, 36(22.5%) had moderate level of depression, 124(77.5%) had severe level of depression in the experimental group. Similarly, 42(26.3%) also had moderate level of depression and 118(73.8%) had severe level of depression in the control group.

In the post test, 15(9.4%) had mild level of depression, 113(70.6%) had moderate level of depression and 32(20%) had severe level of depression, 45(28.1%) had moderate level of depression and 115(71.9%) had severe level of depression in the experimental and control group respectively.

The chi-square level also revealed that there was no significant difference in control group. However in the experimental group, there was a high level of statistical significant difference proving that the need based intervention had significant impact on the level of depression of elderly clients with depression.

**Table 5.3.2: Assessment and comparison of pretest and post test level of Family Support of elderly clients with depression in experimental and control group**

**N = 320**

S.No.	Level of Family Support		Experiment (160)		Control (160)		Chi-Square Test
			No	%	No	%	
1	Pretest	No support	40	25.0	39	24.4	$\chi^2 = 0.51$ $P = 0.77$ d.f = 2 N.S
		Inadequate support	62	38.7	68	42.5	
		Moderate support	58	36.3	53	33.1	
		Adequate support	0	0	0	0	
		<b>Total</b>	<b>160</b>	<b>100</b>	<b>160</b>	<b>100</b>	
2	Post Test	No support	0	0	37	23.1	$\chi^2 = 148.4$ $P = 0.001^{***}$ d.f = 3 Significant
		Inadequate support	10	6.2	70	43.8	
		Moderate support	96	60.0	53	33.1	
		Adequate support	54	33.8	0	0	
		<b>Total</b>	<b>160</b>	<b>100</b>	<b>160</b>	<b>100</b>	

\*\*\*p<0.001, S – Significant

Table 5.3.2 depicts the comparison of pretest and post test level of Family Support of elderly clients with depression in experimental and control group.

In the pretest, 40(25%) of elderly clients had no family support, 62(38.7%) of elderly clients had inadequate support, 58(36.3%) of elderly clients had moderate support in the experimental group.

Similarly, 39(24.4%) of elderly clients had no family support, 68(42.5%) of elderly clients had inadequate support, 53(33.1%) of elderly clients had moderate support in the control group.



In the post test, 10(6.2%) of elderly clients had inadequate support, 96(60%) of elderly clients had moderate support, 54(33.8%) of elderly clients had adequate support in the experimental group.

In contrast, 37(23.1%) of elderly clients had no support, 70(43.8%) of elderly clients had inadequate support, 53(33.1%) of elderly clients had moderate support in the control group.

The chi-square level also revealed that there was no significant difference in control group. However in the experimental group, there was a high level of statistical significant difference proving that the Need-based intervention had significant impact on the level of family support of elderly clients with depression.

**Table 5.3.3: Assessment and comparison of pretest and post test level of Activities of Daily Living of elderly clients with depression in experimental and control group.**

**N = 320**

S.No.	Level of activities of daily living		Experiment (160)		Control (160)		Chi-Square Test
			No	%	No	%	
1	Pretest	Full function	-	-	-	-	$\chi^2 = 0.29$ P = 0.58 d.f = 1 N.S
		Moderate imp.	37	23.1	33	20.6	
		Severe imp.	123	76.9	127	79.4	
2	Post Test	Full function	67	41.9	-	-	$\chi^2 = 128.05$ P = 0.001*** d.f = 2 S
		Moderate imp.	57	35.6	36	22.5	
		Severe imp.	36	22.5	134	77.5	

\*\*\*p<0.001, S – Significant

Table 5.3.3 depicts the comparison of pretest and post test level of Activities of Daily Living of elderly clients with depression in experimental and control group.

In the pretest, 37(23.1%) of them had moderate impairment of activities of daily living, 123(76.9%) of them had severe impairment of activities of daily living in the experimental group. Similarly, 33(20.6%) of them had moderate impairment of activities of daily living and 127(79.4%) of them had severe impairment of activities of daily living in the control group.

In the post test, 67(41.9%) of them had full function of activities of daily living, 57(35.6%) of them had moderate impairment of activities of daily living and 36(22.5%) of them had severe impairment of activities of daily living. 36(22.5%) of them had moderate impairment of Activities of daily living and 134(77.5%) of them had severe impairment of Activities of daily living in the control group.

The chi-square level also revealed that there was no significant difference in control group. However in the experimental group there was a high level of statistical significant difference proving that the Need-based intervention had significant impact on the level of Activities of daily living of elderly clients with depression.

**Table 5.3.4: Comparison of Quality of life of elderly clients with depression in experimental and control group.**

**N = 320**

S.No.	Quality of life		Pretest		Post Test	
			Mean	%	Mean	%
1	Experimental Group (N = 160)	Physical	46.05	10.69	61.44	10.73
		Psychological	34.24	6.84	49.57	6.79
		Social	27.97	11.92	43.99	12.10
		Environmental	34.20	8.71	49.56	8.61
		Overall	35.62	4.52	51.09	4.54
2	Control Group (N = 160)	Physical	46.29	10.26	46.91	10.47
		Psychological	33.54	7.48	34.02	8.82
		Social	28.13	12.56	28.61	13.10
		Environmental	35.41	9.06	35.65	9.30
		Overall	35.84	5.09	36.30	6.15

Table 5.3.4 depicts the comparison of Quality of life of elderly clients with depression in experimental and control group.

In the pretest the physical domain score in the experimental group was 46.05 (10.69%) and 46.29(10.26%) in the control group, the psychological domain the pretest score in the experimental group was 34.24(6.84%) and 33.54(7.48%) in the control group, the social domain the pretest score in the experimental group was 27.97(11.92%) and 28.13(12.56%) in the control group and in the environmental domain the pretest score in the experimental group was 34.20 (8.71%) and 35.41(9.06%) in the control group.

In the post test the physical domain score in the experimental group was 61.44 (10.73%) and 46.91(10.47%) in the control group, the psychological domain the pretest

score in the experimental group was 49.57(6.79%) and 34.02(8.82%) in the control group, the social domain the pretest score in the experimental group was 43.99(12.10%) and 28.61(13.10%) in the control group and in the environmental domain the post test score in the experimental group was 49.56 (8.61%) and 35.65(9.30%) in the control group.

The overall pretest score in the experimental group was 35.62(4.52%) and 35.84(5.09%) in the control group, whereas the overall post test score in the experimental group was 51.09(4.54%) and 36.30(6.15%) in the control group.

The overall level of Quality of life revealed that there was no significant difference in control group. However in the experimental group, there was a statistical significant difference proving that the need based intervention had significant impact on the level of Quality of life of elderly clients with depression.

**Table 5.3.5: Comparison of pretest and post test level of depression within experimental and control group of elderly clients with depression.**

**N = 320**

Level of depression	Experiment (160)		Control (160)	
	Mean	S.D	Mean	S.D
Pretest	11.78	1.28	11.67	1.29
Post Test	9.28	2.06	11.56	1.40
Paired 't' test	t = 13.15, p = 0.001, d.f = 159, S***		t = 1.71, p = 0.10, d.f = 159, N.S	

\*\*\*p<0.001, S – Significant

Table 5.3.5 shows the comparison of level of depression score within experimental and control group.

In experimental group the pretest mean score was 11.78 with S/D of 1.28 whereas the post test mean score was decreased to 9.28 with S.D of 2.06.

In contrast in the control group the pretest mean score was 11.67 with S.D of 1.29, whereas the post test mean score was 11.56 with S.D of 1.40.

The paired 't' value was t = 13.15 a p<0.001 level for experimental group proved that the component of Need Based Intervention had reduced the level of depression mean score. The table shows that there is no significant reduction in the level of depression mean score in the control group.

Table 5.3.5 presented the effectiveness of Need-based Intervention on level of depression within experimental and control group. Thus, it inferred that the Need Based Intervention had showed reduction in the level of depression of elderly clients with depression in the experimental group.

**Table 5.3.6: Comparison of pretest and post test level of Family support within experimental and control group of elderly clients with depression.**

**N = 320**

Level of family support	Experiment (160)		Control (160)	
	Mean	S.D	Mean	S.D
Pretest	28.09	9.38	27.44	8.55
Post Test	54.18	17.11	28.04	8.60
Paired 't' test	t = 15.58, p = 0.001, d.f = 159, S		t = 1.78, p = 0.09, d.f = 159, N.S	

Table 5.3.6 shows the comparison of level of family support score within the experimental and control group.

In experimental group the pretest mean score was 28.09 with S.D of 9.38, whereas the post test mean score was increased to 54.18 with S.D of 17.11.

In contrast in the control group the pretest mean score was 27.44 with S.D of 8.55, whereas the post test mean score was 28.04 with S.D of 8.60.

The paired 't' value was  $t = 15.58$  at  $p < 0.001$  level for experimental group proved that the component of Need-based intervention had improved the level of family support mean score.

The table shows that there is no significant improvement in the level of family support mean score in the control group.

Table 5.3.6 presented the effectiveness of Need-based Intervention on level of family support within experimental and control group. Thus, it inferred that the Need-based Intervention had showed improvement in the level of family support of elderly clients with depression in the experimental group.



**Table 5.3.7: Comparison of pretest and post test level of Activities of Daily Living within experimental and control group of elderly clients with depression.**

**N = 320**

Level of activities of daily living	Experiment (160)		Control (160)	
	Mean	S.D	Mean	S.D
Pretest	1.84	0.91	1.80	0.90
Post Test	4.41	1.56	1.91	0.63
Paired 't' test	t = 18.48, p = 0.001, d.f = 159, S***		t = 1.60, p = 0.12, d.f = 159, N.S	

\*\*\*p<0.001, S – Significant

Table 5.3.7 shows the comparison of level of Activities of daily living score within the experimental and control group.

In experimental group the pretest mean score was 1.84 with S.D of 0.91 whereas post test the mean score was increased to 4.41 with S.D of 1.56.

In contrast in the control group the pretest mean score was 1.80 with S.D of 0.90, whereas the post test mean score was 1.91 with S.D 0.63.

The paired 't' value was t = 18.48 at p<0.001 level for experimental group proved that the component of Need-based intervention had improved the level of Activities of daily living mean score.

The table shows that there is no significant improvement in the level of Activities of Daily Living mean score in the control group.

Table 5.3.7 presented the effectiveness of Need Based Intervention on level of Activities of Daily Living within experimental and control group. Thus, it inferred that the Need-based Intervention had showed improvement in the level of Activities of Daily Living of elderly clients with depression in the experimental group.

**Table 5.3.8: Comparison of pretest and post test level of Quality of life within experimental and control group of elderly clients with depression.**

**N = 320**

S.No.	Quality of life		Pretest		Post Test		Paired 't' test
			Mean	%	Mean	%	
1	Experimental Group (N = 160)	Physical	46.05	10.69	61.44	10.73	t = 63.97*** p = 0.001
		Psychological	34.24	6.84	49.57	6.79	t = 79.28*** p = 0.001
		Social	27.97	11.92	43.99	12.10	t = 38.99*** p = 0.001
		Environmental	34.20	8.71	49.56	8.61	t = 75.11*** p = 0.001
		Overall	35.62	4.52	51.09	4.54	t = 98.23*** p = 0.001
2	Control Group (N = 160)	Physical	46.29	10.26	46.91	10.47	t = 0.62 p = 0.16
		Psychological	33.54	7.48	34.02	8.82	t = 0.65 p = 0.15
		Social	28.13	12.56	28.61	13.10	t = 1.82 p = 0.42
		Environmental	35.41	9.06	35.65	9.30	t = 1.42 p = 0.28
		Overall	35.84	5.09	36.30	6.15	t = 0.62 p = 0.83

\*\*\*p<0.001, S – Significant

Table 5.3.8 shows the comparison of level of Quality of life score within the experimental and control group.

In the pretest the physical domain score in the experimental group was 46.05 (10.69%) and the post test score was 61.44 (10.73%) ,the psychological domain the

pretest score in the experimental group was 34.24(6.84%) and the post test score was 49.57(6.79%), the social domain the pretest score in the experimental group was 27.97(11.92%) and the post test score was 43.99(12.10%) and in the environmental domain the pretest score in the experimental group was 34.20 (8.71%) and the post test score was 49.56 (8.61%).

In the pretest the physical domain score in the control group was 46.29(10.26%) and the post test score was 46.91(10.47%), the psychological domain the pretest score in the control group was 33.54(7.48%) and the post test score was 34.02(8.82%) ,the social domain the pretest score in the control group was 28.13(12.56%) and the post test score was 28.61(13.10%) and in the environmental domain the pretest score in the control group 35.41(9.06%) and the post test score was 35.65(9.30%)

In experimental group the overall pretest score was 35.62(4.52%) whereas, post test score was increased to 51.09 (4.54%).

In contrast, the control group the overall pretest score was 35.84(5.09%) whereas the post test score was 36.30(6.15).

The overall paired 't' value was  $t = 98.23$  at  $p < 0.001$  level for experimental group proves that the component of need based intervention had improved the level of Quality of life score.

The table shows that there is no significant improvement in the level of Quality of life score in the control group.

Table 5.3.8 presented the effectiveness of Need-based Intervention on level of Quality of life within experimental and control group. Thus, it inferred that the Need-based Intervention had showed improvement in the level of Quality of life of elderly clients with depression in the experimental group.

**Table 5.3.9: Comparison of pretest and post test level of depression between experimental and control group of elderly clients with depression.**

**N = 320**

Level of depression	Experiment (160)		Control (160)		Unpaired 't' test
	Mean	S.D	Mean	S.D	
Pretest	11.78	1.28	11.67	1.29	t = 0.78, p = 0.43 d.f = 318, N.S
Post Test	9.28	2.06	11.56	1.40	t = 11.58, p = 0.001 d.f = 318, S

Table 5.3.9 shows the comparison of level of depression score between experimental and control group.

In experimental group the pretest mean score was 11.78 with S.D of 1.28 whereas the post test mean score was decreased to 9.28 with S.D of 2.06.

In contrast the control group the pretest means score was 11.67 with S.D of 1.29, whereas the post test mean score was 11.6 with S.D of 1.40.

The comparison of the post test mean score using student independent 't' test revealed that the post test 't' value was  $t = 11.58$  at  $p < 0.001$  level which meant that there is significant difference between the experimental and control group.

Table 5.3.9 presented the effectiveness of Need-based Intervention on level of depression between experimental and control group. Thus, it inferred that the Need-based Intervention had showed reduction in the level of depression of elderly clients with depression in the experimental group.

**Table 5.3.10: Comparison of pretest and post test level of Family support between experimental and control group of elderly clients with depression.**

**N = 320**

Level of family support	Experiment (160)		Control (160)		Unpaired 't' test
	Mean	S.D	Mean	S.D	
Pretest	28.09	9.38	27.44	8.55	t = 0.64, p = 0.51 d.f = 318, N.S
Post Test	54.18	17.11	28.04	8.60	t = 17.62, p = 0.001 d.f = 318, S***

\*\*\*p<0.001, S – Significant

Table 5.3.10 shows the comparison of level of family support score between experimental and control group.

In experimental group, the pretest mean score was 28.09 with S.D of 9.38, whereas the post test mean score was increased to 54.18 with S.D of 17.11

In contrast the control group, the pretest mean score was 27.44 with S.D of 8.55 whereas the post test mean score was 28.04 with S.D of 8.06.

The comparison of the post test mean score using student independent 't' test revealed that the post test 't' value was t = 17.62.

Table 5.3.10 presented the effectiveness of Need-based Intervention on level of family support between experimental and control group. Thus, it inferred that the Need-based Intervention had showed improvement in the level of family support of elderly clients with depression in the experimental group.

**Table 5.3.11: Comparison of pretest and post test level of Activities of Daily Living between experimental and control group of elderly clients with depression.**

**N = 320**

Level of activities of daily living	Experiment (160)		Control (160)		Unpaired 't' test
	Mean	S.D	Mean	S.D	
Pretest	1.84	0.91	1.80	0.90	t = 0.55, p = 0.58 d.f = 318, N.S
Post Test	4.41	1.56	1.91	0.63	t = 18.80, p = 0.001 d.f = 318, S

Table 5.3.11 shows the comparison of level of Activities of daily living score between experimental and control group.

In experimental group the pretest mean score was 1.84 with S.D of 0.91 whereas post test the mean score was increased to 4.41 with S/D of 1.56.

In contrast the control group, the pretest mean score with 1.80 with S.D of 0.90, whereas the post test mean score was 1.91 with S.D 0.63

The comparison of the post test mean score using student independent 't' test revealed that the post test 't' value was t = 18.80.

Table 5.3.11 presented the effectiveness of Need Based Intervention on level of Activities of daily living between experimental and control group. Thus, it inferred that the Need Based Intervention had showed improvement in the level of Activities of daily living of elderly clients with depression in the experimental group.



**Table 5.3.12: Comparison of pretest and post test level of Quality of Life between experimental and control group of elderly clients with depression.**

**N = 320**

S.No.	Quality of life		Experiment (160)		Control (160)		Unpaired 't' test
			Mean	%	Mean	%	
1	Pretest	Physical	46.05	10.69	46.29	10.26	t = 0.21 p = 0.83
		Psychological	34.24	6.84	33.54	7.48	t = 0.87 p = 0.38
		Social	27.97	11.92	28.13	12.56	t = 0.11 p = 0.90
		Environmental	34.20	8.71	35.41	9.06	t = 1.21 p = 0.22
		Overall	35.62	4.52	35.84	5.09	t = 0.42 p = 0.67
2	Post Test	Physical	61.44	10.73	46.91	10.47	t = 12.25*** p = 0.001
		Psychological	49.57	6.79	34.02	8.82	t = 17.67*** p = 0.001
		Social	43.99	12.10	28.61	13.10	t = 10.76*** p = 0.001
		Environmental	49.56	8.61	35.65	9.30	t = 13.87*** p = 0.001
		Overall	51.09	4.54	36.30	6.15	t = 24.47*** p = 0.001

\*\*\*p<0.001, S – Significant

Table 5.3.12 shows the comparison of level of Quality of life score between experimental and control group.

In the pretest the physical domain score in the experimental group was 46.05 (10.69%) and the post test score was 61.44 (10.73%), the psychological domain the pretest score in the experimental group was 34.24(6.84%) and the post test score was 49.57(6.79%), the social domain the pretest score in the experimental group was 27.97(11.92%) and the post test score was 43.99(12.10%) and in the environmental domain the pretest score in the experimental group was 34.20 (8.71%) and the post test score was 49.56 (8.61%).

In the pretest the physical domain score in the control group was 46.29(10.26%) and the post test score was 46.91(10.47%), the psychological domain the pretest score in the control group was 33.54(7.48%) and the post test score was 34.02(8.82%), the social domain the pretest score in the control group was 28.13(12.56%) and the post test score was 28.61(13.10%) and in the environmental domain the pretest score in the control group was 35.41(9.06%) and the post test score was 35.65(9.30%)

In experimental group the overall pretest score was 35.62(4.52%) whereas, post test score was increased to 51.09 (4.54%).

In contrast, the control group the overall pretest score was 35.84(5.09%) whereas the post test score was 36.30(6.15).

The overall unpaired 't' value was  $t = 24.47$  at  $p < 0.001$  level for experimental group proves that the component of need based intervention had improved the level of Quality of life score. The table shows that there is no significant improvement in the level of Quality of life score in the control group.

Table 5.3.12 presented the effectiveness of Need Based Intervention on level of Quality of life within experimental and control group. Thus, it inferred that the Need-based Intervention had showed improvement in the level of Quality of life of elderly clients with depression in the experimental group.

**Table 5.3.13: Overall effectiveness of Need-Based intervention of pretest and post test level of depression, Family Support, Activities of Daily Living, Quality of Life between experimental and control group of elderly clients with depression.**

**N = 320 (160 + 160)**

Variables	Group	Max. Score	Pretest Mean	%	Post Test Mean	%	Mean Diff.	Mean % Diff.	Pretest Odds Ratio (95% CI)	Pretest Significance	Post Test Odds Ratio (95% CI)	Post Test Significance
Depression	Exp.	15	11.78	78.5	9.28	61.9	2.50	↓ 16.6	0.93 (0.78-1.11)	P=0.43	2.03 (1.72-2.39)	P=0.001
	Con.	15	11.67	77.8	11.56	77.2	0.09	↓ 0.6				
Family Support	Exp.	90	28.09	31.2	54.18	60.2	26.09	↑ 29	0.99 (2.03-2.54)	P=0.52	2.29 (2.03-2.54)	P=0.001
	Con.	90	27.44	30.5	28.04	31.2	0.60	↑ 0.7				
ADL	Exp.	6	1.84	30.7	4.41	73.5	2.57	↑ 42.8	5.68 (3.86-8.33)	P=0.54	5.68 (3.86-8.33)	P=0.001
	Con.	6	1.80	30.0	1.91	31.8	0.11	↑ 1.8				
QOL	Exp.	130	59.33	45.6	80.74	62.1	21.41	↑ 16.5	2.34 (2.26 – 2.43)	P=0.48	2.34 (2.26-2.43)	P=0.001
	Con.	130	59.79	46.0	60.11	46.2	0.32	↑ 0.2				

The table 5.3.13 shows the overall effectiveness of Need-Based intervention of pretest and post test level of depression, Family Support, Activities of Daily Living, Quality of Life between experimental and control group of elderly clients with depression.

The findings revealed that the overall the post test mean score of level of depression was 9.28 and 11.56 with standard deviation of 2.06 and 1.40. The calculated 't' value was  $t=11.58$  which showed a high statistical significance at  $p<0.001$ , Family Support was 54.18 and 28.04 with standard deviation of 17.11 and 8.60. The calculated 't' value was  $t= 17.62$  which showed a high statistical significance at  $p<0.001$ , Activities of Daily Living was 4.41 and 1.91 with standard deviation of 1.56 and 0.63. The calculated 't' value was  $t=18.80$  which showed a high statistical significance at  $p<0.001$ ,

Quality of Life was 51.09 and 36.30 with standard deviation of 4.54 and 6.15. The calculated 't' value was  $t=24.47$  which showed a high statistical significance at  $p<0.001$  between experimental and control group respectively. Hence the study concluded that the effectiveness of Need-based intervention had significant improvement in Family support, Activities of daily living and Quality of life score of elderly clients in the experimental group.

**SECTION 5.4: CORRELATION OF PRETEST AND POST TEST BETWEEN LEVEL OF DEPRESSION, FAMILY SUPPORT, ACTIVITIES OF DAILY LIVING AND QUALITY OF LIFE OF ELDERLY CLIENTS WITH DEPRESSION IN EXPERIMENTAL GROUP.**

**Table 5.4.1: Correlation between mean differed pretest and post test between level of depression, Family Support, Activities of Daily Living and Quality of Life of elderly clients with depression in experimental group.**

**N = 160**

Variables	Pretest			Post Test		
	Mean	S.D	'r' Value	Mean	S.D	'r' Value
Family support	28.09	9.38	r = -0.11 p = 0.17	54.18	17.11	r = -0.42*** p = 0.001
Level of depression	11.78	1.28		9.28	2.06	
Activities of daily living	1.84	0.91	r = -0.12 p = 0.16	4.41	1.56	r = -0.34** p = 0.01
Level of depression	11.78	1.28		9.28	2.06	
Quality of life	35.62	4.52	r = -0.17 p = 0.14	51.09	4.54	r = -0.47*** p = 0.001
Level of depression	11.78	1.28		9.28	2.06	

\*\*\*p<0.001, \*\*p<0.01

Table 5.4.1 depicts the correlation between mean differed pretest and post test between level of depression, Family Support, Activities of Daily Living and Quality of Life of elderly clients with depression in experimental group.

In experimental group the pretest mean score of level of depression was 11.78 with S.D of 1.28 with the pretest mean score of Family Support was 28.09 with S.D of 9.38. The correlation co-efficient value was r = -0.11 at p= 0.17, whereas the post test

mean score of level of depression was decreased to 9.28 with S.D of 2.06 with the post test mean score of Family Support was increased to 54.18 with S.D of 17.11. The correlation co-efficient value was  $r = -0.34$  at  $p=0.001$ ,

In experimental group the pretest mean score of level of depression was 11.78 with S.D of 1.28 with the pretest mean score of Activities of Daily Living was 1.84 with S.D of 0.91. The correlation co-efficient value was  $r = -0.12$  at  $p= 0.16$ , whereas the post test mean score of level of depression was decreased to 9.28 with S.D of 2.06 with the post test mean score of Activities of Daily Living was increased to 4.41 with S.D of 1.56. The correlation co-efficient value was  $r = -0.34$  at  $p=0.01$ .

In experimental group the pretest mean score of level of depression was 11.78 with S.D of 1.28 with the overall pretest score of Quality of Life was 35.62(4.52%). The correlation co-efficient value was  $r = -0.17$  at  $p=0.14$ , whereas the post test mean score of level of depression was decreased to 9.28 with S.D of 2.06 with the overall post test mean score of Quality of Life was increased to 51.09 (4.54%). The correlation co-efficient value was  $r = -0.47$  at  $p=0.001$ .

**Table 5.4.2: Correlation of pretest and post test between Family Support, Activities of Daily Living, Quality of Life and level of depression of elderly clients with depression in experimental group.**

**N = 160**

Variables	Pretest			Post Test		
	Mean	S.D	'r' Value	Mean	S.D	'r' Value
Level of depression	11.78	1.28	r = -0.11 p = 0.17	9.28	2.06	r = -0.42*** p = 0.001
Family support	28.09	9.38		54.18	17.11	
Activities of daily living	1.84	0.91	r = 0.16 p = 0.24	4.41	1.56	r = 0.25** p = 0.01
Family support	28.09	9.38		54.18	17.11	
Quality of life	35.62	4.52	r = 0.11 p = 0.15	51.09	4.54	r = 0.35** p = 0.01
Family support	28.09	9.38		54.18	17.11	

\*\*\*p<0.001, \*\*p<0.01

Table 5.4.2 depicts the correlation between mean differed pretest and post test between Family Support, level of depression, Activities of Daily Living and Quality of Life of elderly clients with depression in experimental group.

In experimental group the pretest mean score of Family Support was 28.09 with S.D of 9.38 with the pretest mean score of level of depression was 11.78 with S.D of 1.28 .The correlation co-efficient value was r = -0.11at p= 0.17, whereas the post test mean score of Family Support was increased to 54.18 with S.D of 17.11 with the post test mean score of level of depression was decreased to 9.28 with S.D of 2.06. The correlation co-efficient value was r = -0.42 at p=0.001,



In experimental group the pretest mean score of Family Support was 28.09 with S.D of 9.38 with the pretest mean score of Activities of daily living was 1.84 with S.D of 0.91 .The correlation co-efficient value was  $r = 0.16$  at  $p= 0.24$ , whereas the post test mean score of Family Support was increased to 54.18 with S.D of 17.11 with the post test mean score of Activities of daily living was increased to 4.41 with S.D of 1.56. The correlation co-efficient value was  $r = 0.25$  at  $p=0.01$ .

In experimental group the pretest mean score of Family Support was 28.09 with S.D of 9.38 with the overall pretest mean score of Quality of life was 35.62 with S.D of 4.52 .The correlation co-efficient value was  $r = 0.11$  at  $p= 0.15$ , whereas the post test mean score of Family Support was increased to 54.18 with S.D of 17.11 with the overall post test mean score of Quality of life was increased to 51.09 with S.D of 4.54. The correlation co-efficient value was  $r = 0.35$  at  $p=0.01$ ,

**Table 5.4.3: Correlation of pretest and post test between Activities of Daily Living, Quality of Life, level of depression and Family Support of elderly clients with depression in experimental group.**

**N = 160**

Variables	Pretest			Post Test		
	Mean	S.D	'r' Value	Mean	S.D	'r' Value
Level of depression	11.78	1.28	r = -0.12 p = 0.16	9.28	2.06	r = -0.34** p = 0.01
Activities of daily living	1.84	0.91		4.41	1.56	
Family Support	28.09	9.38	r = 0.16 p = 0.24	54.18	17.11	r = 0.25** p = 0.01
Activities of daily living	1.84	0.91		4.41	1.56	
Quality of life	35.62	4.52	r = 0.16 p = 0.11	51.09	4.54	r = 0.49*** p = 0.001
Activities of daily living	1.84	0.91		4.41	1.56	

\*\*\*p<0.001, \*\*p<0.01

Table 5.4.3 depicts the correlation between mean differed pretest and post test between Family Support, level of depression, Activities of Daily Living and Quality of Life of elderly clients with depression in experimental group.

The pretest mean score of Activities of daily living was 1.84 with S.D of 0.91 with the pretest mean score of level of depression was 11.78 with S.D of 1.28 .The correlation co-efficient value was r = -0.12at p= 0.16, whereas the post test mean score of Activities of daily living was increased to 4.41 with S.D of 1.56 with the post test mean score of level of depression was decreased to 9.28 with S.D of 2.06. The correlation co-efficient value was r = -0.34 at p=0.01,

The pretest mean score of Activities of daily living was 1.84 with S.D of 0.91 with the pretest mean score of Family Support was 28.09 with S.D of 9.38. The correlation co-efficient value was  $r = 0.16$  at  $p = 0.24$ , whereas the post test mean score of Activities of daily living was increased to 4.41 with S.D of 1.56 with the post test mean score of Family Support was increased to 54.18 with S.D of 17.11. The correlation co-efficient value was  $r = 0.25$  at  $p = 0.01$ ,

The pretest mean score of Activities of daily living was 1.84 with S.D of 0.91 with the overall pretest mean score of Quality of life was 35.62 with S.D of 4.52 .The correlation co-efficient value was  $r = 0.16$  at  $p = 0.11$ , whereas the post test mean score of Activities of daily living was increased to 4.41 with S.D of 1.56 with the overall post test mean score of Quality of life was increased to 51.09 with S.D of 4.54. The correlation co-efficient value was  $r = 0.49$  at  $p = 0.001$ ,

**Table 5.4.4: Correlation of pretest and post test between Quality of Life, level of depression, Family Support and Activities of Daily Living of elderly clients with depression in experimental group.**

**N = 160**

Variables	Pretest			Post Test		
	Mean	S.D	'r' Value	Mean	S.D	'r' Value
Level of depression	11.78	1.28	r = -0.17 p = 0.14	9.28	2.06	r = -0.47** p = 0.001
Quality of life	35.62	4.52		51.09	4.54	
Family Support	28.09	9.38	r = 0.11 p = 0.15	54.18	17.11	r = 0.35** p = 0.01
Quality of life	35.62	4.52		51.09	4.54	
Activities of daily living	1.84	0.91	r = 0.16 p = 0.11	4.41	1.56	r = 0.49*** p = 0.001
Quality of life	35.62	4.52		51.09	4.54	

\*\*\*p<0.001, \*\*p<0.01

Table 5.4.4 depicts the correlation between Quality of Life, level of depression, Family Support and Activities of Daily Living of elderly clients with depression in experimental group.

The overall pretest mean score of Quality of life was 35.62 with S.D of 4.52; with the pretest mean score of level of depression was 11.78 with S.D of 1.28. The correlation co-efficient value was r = -0.17 at p= 0.14, whereas the overall post test mean score of Quality of life was increased to 51.09 with S.D of 4.54 ,with the post test mean score of level of depression was decreased to 9.28 with S.D of 2.06 The correlation co-efficient value was r = -0.47 at p=0.001.

The overall pretest mean score of Quality of life was 35.62 with S.D of 4.52, with the pretest mean score of Family Support was 28.09 with S.D of 9.38. The correlation coefficient value was  $r = 0.11$  at  $p = 0.15$ , whereas the overall post test mean score of Quality of life was increased to 51.09 with S.D of 4.54, with the post test mean score of Family Support was increased to 54.18 with S.D of 17.11. The correlation coefficient value was  $r = 0.35$  at  $p = 0.01$ ,

The overall pretest mean score of Quality of life was 35.62 with S.D of 4.52. with the pretest mean score of Activities of daily living was 1.84 with S.D of 0.91. The correlation coefficient value was  $r = 0.16$  at  $p = 0.11$ , whereas the overall post test mean score of Quality of life was increased to 51.09 with S.D of 4.54, post test mean score of Activities of daily living was increased to 4.41 with S.D of 1.56. The correlation coefficient value was  $r = 0.49$  at  $p = 0.001$ ,

**SECTION 5.5: ASSOCIATION BETWEEN MEAN DIFFERED SCORES OF DEPRESSION, FAMILY SUPPORT, ACTIVITIES OF DAILY LIVING, QUALITY OF LIFE WITH THEIR DEMOGRAPHIC VARIABLES OF ELDERLY CLIENTS WITH DEPRESSION IN THE EXPERIMENTAL GROUP.**

**Table 5.5.1: Association between mean reduction score of depression with their demographic variables of elderly clients with depression in the experimental group.**

**N = 160**

Demographic Variables		Pretest		Posttest		Mean Reduction Score		Oneway ANOVA F-test/ t-test
		Mean	SD	Mean	SD	Mean	SD	
<b>Gender</b>	Male	12.11	1.20	8.68	2.09	3.43	2.20	<b>t=3.68</b> <b>p=0.001***</b>
	Female	11.61	1.29	9.60	1.98	2.01	2.38	
<b>Education</b>	Non-literate	11.60	1.26	9.53	1.93	2.07	2.33	<b>F=2.75</b> <b>p=0.04*</b>
	Primary school	11.93	1.27	9.02	2.30	2.91	2.57	
	Higher secondary	12.86	1.07	9.06	1.95	3.80	2.38	
	Graduate	12.60	1.41	8.00	.00	4.60	1.41	
<b>Type of family</b>	Joint family	11.68	1.31	9.58	2.14	2.09	2.57	<b>F=3.19</b> <b>p=0.04*</b>
	Nuclear family	11.87	1.27	8.99	1.99	2.88	2.26	
	Extended family	11.50	1.00	10.75	1.26	.75	1.50	
<b>Family Size</b>	1 - 2	11.75	1.22	8.03	2.08	3.71	2.45	<b>F=2.70</b> <b>p=0.05*</b>
	3 - 4	11.95	1.33	8.71	1.89	3.24	2.36	
	5 - 6	11.74	1.33	9.39	2.08	2.35	2.38	
	7 - 8	11.00	.00	8.80	2.12	2.20	2.12	

\*\*\*p<0.001, \*p<0.05

Table 5.5.1 illustrates the association between mean reduction score of depression with their demographic variables of elderly clients with depression in the experimental group.

The one way ANOVA 'F' test and unpaired 't' test was used to find out the association between the depression with their selected demographic variables of elderly clients with depression. The calculated 'F' value indicated that there was a significant association present with education, type of family and family size of the elderly clients with depression. The calculated 't' value indicated that there was a significant association present with gender of the elderly clients with depression. There is no significant association with rest of the demographic variables in the experimental group.

The variable which influences the reduction in depression of the elderly clients were education, type of family, family size and gender. The male and more educated elder clients were having more reduction of depression than others. The researcher found that elderly with depression was more common in women. It might be because of these facts that in female (not in male), dependency directly affects depression. The subjects with low education levels had statistically significantly higher depressive symptoms than highly educated persons. The study pointed that the association between low educational level and depression may be due to difficulty in understanding certain questions so this difference could be factitious. This might be the reason for the significant association of the depression of the elderly clients with education, type of family, family size and gender in the experimental group.

**Table 5.5.2: Association between mean gain score of Family Support with their demographic variables of elderly clients with depression in the experimental group.**

**N = 160**

Demographic Variables		Pretest		Posttest		Mean Gain Score		Oneway ANOVA
		Mean	SD	Mean	SD	Mean	SD	F-test/t-test
<b>Age in years</b>	60 -65 yrs	29.14	9.95	53.58	15.03	24.43	16.87	<b>F=6.63</b> <b>p=0.001***</b>
	66 -70 yrs	28.50	8.80	50.00	13.66	21.50	16.53	
	71 -75 yrs	25.80	7.86	51.60	14.34	25.80	12.61	
	>75 yrs	25.05	8.50	65.70	13.50	40.65	14.28	
<b>Education</b>	Non-literate	28.39	9.18	43.02	14.89	14.63	16.48	<b>F=29.15</b> <b>p=0.001***</b>
	Primary school	27.71	9.97	56.20	15.83	28.49	17.89	
	Higher secondary	25.57	8.04	53.71	12.02	28.14	10.56	
	Graduate	34.50	6.36	59.00	15.56	24.50	21.92	
<b>Type of family</b>	Joint family	29.50	2.38	48.00	11.37	18.50	12.71	<b>F=5.73</b> <b>p=0.01**</b>
	Nuclear family	29.37	9.24	55.63	15.06	26.25	16.25	
	Extended family	26.22	9.62	52.52	15.26	26.31	18.02	
<b>Family Size</b>	1 – 2	29.48	9.07	51.14	15.71	21.67	16.35	<b>F=3.02</b> <b>p=0.05*</b>
	3 – 4	26.65	9.27	61.77	14.47	35.12	15.79	
	5 – 6	27.50	9.98	47.71	15.41	20.21	19.34	
	7 – 8	37.00	.00	54.50	6.36	17.50	6.36	
<b>Co-morbidity</b>	Nil	31.59	7.24	69.90	14.50	38.31	16.32	<b>F=2.60</b> <b>p=0.01**</b>
	Arthritis	26.92	6.90	55.16	15.78	28.24	17.58	
	Hip fracture	31.50	1.73	37.75	8.81	6.25	8.10	
	COPD	28.50	10.75	56.25	15.78	27.75	11.53	
	Parkinson's disease	10.00	.	60.00	.	50.00	.	
	Diabetes (DM)	31.40	2.51	58.80	6.80	27.40	5.68	
	Hypertension (HT)	27.22	11.28	51.67	14.56	24.44	14.47	
	Others	28.55	13.55	50.00	15.49	21.45	18.80	
	DM+HT	26.14	9.63	50.52	14.17	24.38	14.87	
	HT+COPD	33.83	5.74	44.17	10.94	10.33	12.53	
	Arthritis+DM	26.42	10.17	48.17	10.99	21.75	15.75	
	Arthritis+DM+HT	27.40	9.79	51.90	13.60	24.50	15.35	
MI+HT	21.40	10.88	50.80	21.32	29.40	25.98		

\*\*\*p<0.001, \*\*p<0.01\*p<0.05



Table 5.5.2 illustrates the association between mean gain score Family Support, with their demographic variables of elderly clients with depression in the experimental group.

The one way ANOVA 'F' test and unpaired 't' test was used to find out the association between the Family support with their selected demographic variables of elderly clients with depression. The calculated 'F' value indicated that there was a significant association present with age, education, type of family and family size and co-morbidity of the elderly clients with depression in the experimental group.

The variable which influences the gain score of Family support of the elderly clients were age, education, type of family, family size and co-morbidity. The male and more educated elder clients were having gain score of family support than others. The GDS-15 score was significantly related to type of living. Subjects who were living alone had more depressive symptoms. The study concluded that there was a significant increase in the risk of depression status associated with the lack of social support among elderly clients.

The prevalence of depression in male and female, researcher believes that elderly depression was more common in women. It might be because of this fact, that in female (not in male), dependency directly affects depression. Subjects with low education levels had statistically significantly higher depressive symptoms than highly educated persons; the author pointed that the association between low educational level and family support might be due to difficulty in understanding certain questions so this difference could be factitious.

The study had found an independent and robust relationship between depressive symptoms and chronic physical pain. With older adults, arthritis pain, diabetes, hypertension were one of the most common risk factors of depression. The rate of major depression increases in a linear fashion with greater pain severity among elders. These might be the reason for the significant association of the Family support of the elderly clients with age, gender, occupation, birth order, family size and habits in the experimental group.

**Table 5.5.3: Association between mean gain score of Activities of Daily Living with their demographic variables of elderly clients with depression in the experimental group.**

**N = 160**

Demographic Variables		Pretest		Posttest		Mean Gain Score		Oneway ANOVA F-test/t-test
		Mean	SD	Mean	SD	Mean	SD	
<b>Age</b>	60 -65 yrs	1.84	.58	4.62	1.57	2.78	1.73	<b>F=3.53</b> <b>p=0.02*</b>
	66 -70 yrs	1.57	.50	4.50	1.59	2.93	1.70	
	71 -75 yrs	1.80	.70	3.80	1.28	2.00	1.62	
	>75 yrs	2.25	.79	3.90	1.52	1.65	1.76	
<b>Education</b>	Non-literate	1.75	.44	4.03	1.56	2.28	1.62	<b>F=3.79</b> <b>p=0.01*</b>
	Primary school	1.95	.75	3.98	1.49	2.03	1.77	
	Higher secondary	2.14	1.35	4.87	1.51	2.83	2.51	
	Graduate	1.50	.71	6.00	.00	4.50	.71	
<b>Marital status</b>	Married	1.84	.61	5.37	1.56	3.52	1.72	<b>F=2.97</b> <b>p=0.05*</b>
	Unmarried	2.00	.00	3.20	1.10	1.20	1.10	
	Widow	1.81	.72	4.60	1.55	2.79	1.84	
<b>Occupation</b>	Salaried employee	1.94	.64	4.41	1.58	2.47	1.80	<b>F=4.08</b> <b>p=0.01*</b>
	Self employed	1.68	.48	4.50	1.44	2.82	1.40	
	Unemployed	1.76	.74	4.41	1.69	2.65	2.04	
	Pensioner	1.43	.53	4.57	1.51	3.14	1.35	
	Housewife	1.80	.42	4.00	1.33	2.20	1.40	
<b>Type of family</b>	Joint family	2.06	.63	4.25	1.64	2.18	1.90	<b>F=5.75</b> <b>p=0.01**</b>
	Nuclear family	1.70	.59	4.69	1.46	2.99	1.57	
	Extended family	1.25	.50	4.40	2.31	3.15	2.63	
<b>Family Size</b>	1 - 2	1.73	.45	4.75	1.46	3.02	1.52	<b>F=3.36</b> <b>p=0.02*</b>
	3 - 4	1.87	.78	4.47	1.35	2.61	1.69	
	5 - 6	1.93	.70	4.04	1.71	2.11	1.94	
	7 - 8	2.00	.00	3.00	1.41	1.00	1.41	

\*\*p<0.01 \*p<0.05

Table 5.5.3 illustrates the association between mean gain score of Activities of Daily Living with their demographic variables of elderly clients with depression in the experimental group.

The one way ANOVA 'F' test and unpaired 't' test was used to find out the association between the mean differed score of Activities of Daily Living and with their selected demographic variables of elderly clients with depression. The calculated 'F' value indicated that there was a significant association present with age, education, marital status, occupation, type of family, family size and habits of the elderly clients with depression.

The variables age, education, and type of living (alone or with family), occupation, source of income, supporting system (such as charities) significantly associated with the mean differed score of Activities of Daily Living. The percentage of depression was higher in subjects living alone than those living with others, living with personal wealth and retirement salary. These might be the reason for the significant association of the Activities of Daily Living of the elderly clients with age, gender, occupation, birth order, family size and habits in the experimental group.

**Table 5.5.4: Association between mean gain score of quality of life with their demographic variables of elderly clients with depression in the experimental group.**

**N = 160**

Demographic Variables		Pretest		Posttest		Mean Gain Score		Oneway ANOVA F-test/t-test
		Mean	SD	Mean	SD	Mean	SD	
<b>Age in years</b>	60 -65 yrs	59.49	6.03	86.54	9.17	26.06	10.77	<b>F=3.63</b> <b>p=0.01**</b>
	66 -70 yrs	60.17	3.88	83.50	9.17	23.33	9.60	
	71 -75 yrs	58.25	6.58	79.95	8.22	21.70	10.74	
	>75 yrs	58.45	5.43	78.75	9.50	20.30	11.38	
<b>Gender</b>	Male	57.88	6.09	81.50	8.71	23.63	9.67	<b>t=1.96</b> <b>p=0.05*</b>
	Female	60.12	5.30	80.33	9.24	20.21	10.93	
<b>Occupation</b>	Salaried employee	59.11	5.39	84.40	9.26	25.29	10.38	<b>F=5.50</b> <b>p=0.001***</b>
	Self employed	60.68	7.27	81.86	9.26	21.18	11.10	
	Unemployed	58.88	5.86	78.53	7.12	19.65	9.21	
	Pensioner	60.14	4.56	80.57	9.14	20.43	10.28	
	Housewife	59.20	4.64	77.70	13.03	18.50	16.02	
<b>Birth Order</b>	First	58.61	8.01	83.67	7.36	25.06	11.18	<b>F=3.34</b> <b>p=0.02*</b>
	Second	60.19	4.05	80.59	8.33	20.41	9.07	
	Third	59.60	4.93	77.00	9.30	17.40	10.05	
	Fourth and above	59.12	5.34	81.38	9.57	22.27	10.75	
<b>Family Size</b>	1 - 2	58.87	4.67	84.13	8.95	25.25	10.12	<b>F=3.15</b> <b>p=0.03*</b>
	3 - 4	60.66	6.89	82.21	8.48	21.55	11.23	
	5 - 6	58.93	5.85	78.00	9.04	19.07	10.18	
	7 - 8	60.00	.00	68.00	18.38	8.00	18.38	
<b>Habits</b>	Nil	59.79	5.72	87.96	9.11	28.18	10.05	<b>F=2.93</b> <b>p=0.01**</b>
	Smoking	59.10	7.50	79.10	7.87	20.00	10.78	
	Alcohol	60.63	4.80	77.25	8.89	16.63	10.60	
	Panparag /Tobacco	58.61	5.26	80.89	8.66	22.28	9.47	
	Others	58.56	2.88	76.89	11.07	18.33	13.24	
	smok+alco	58.75	5.43	80.25	9.58	21.50	12.71	
	smok+alco+pan	54.20	4.02	70.40	6.58	16.20	6.42	

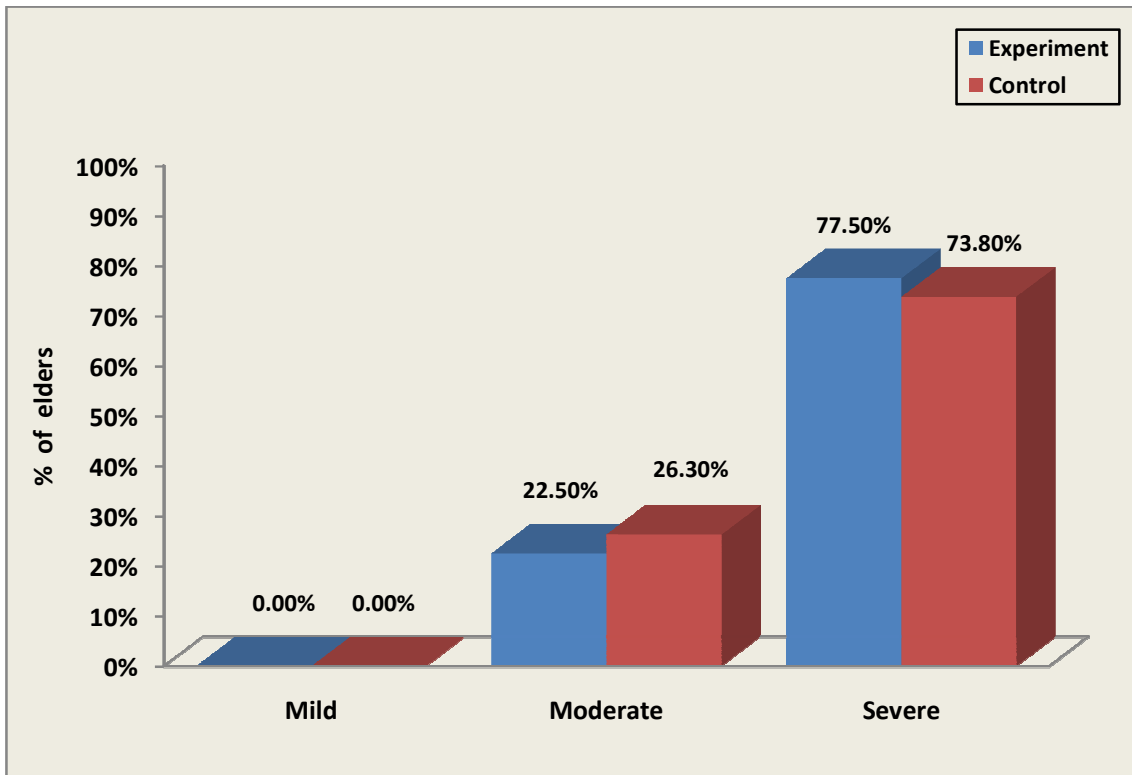
\*\*\*p<0.001, \*\*p<0.01, \*p<0.05

Table 5.5.4 illustrates the association between mean gain score of Quality of Life with their demographic variables of elderly clients with depression in the experimental group.

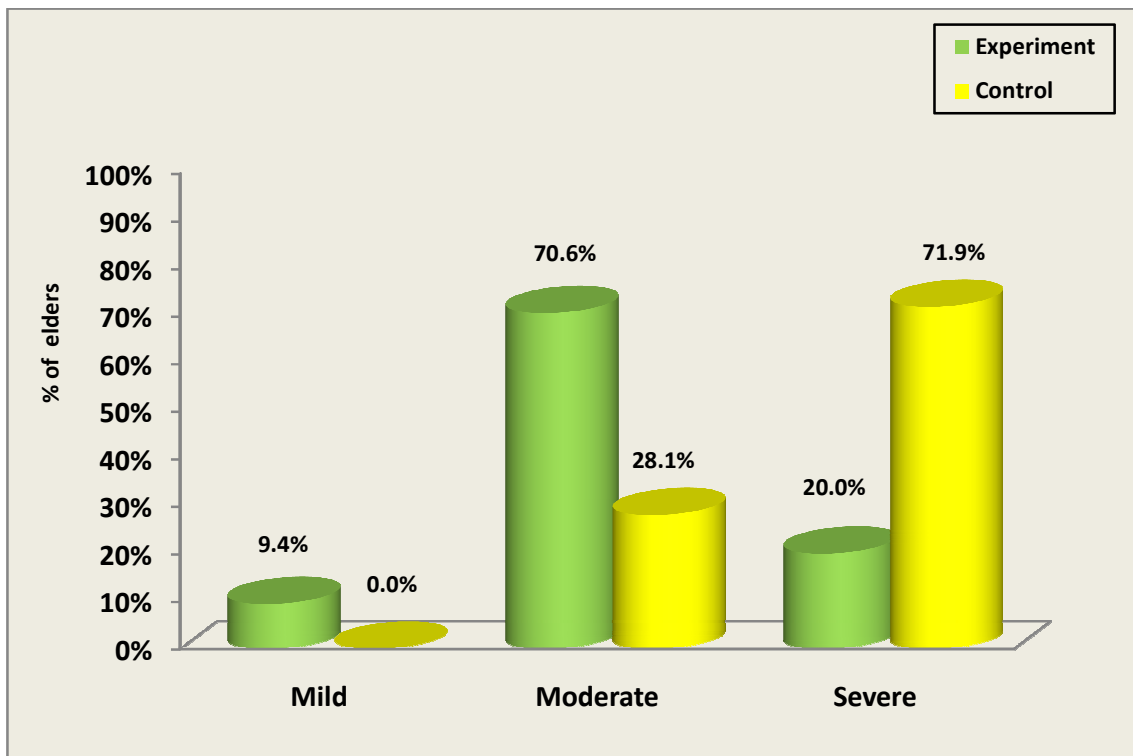
The one way ANOVA 'F' test and unpaired 't' test was used to find out the association between the Quality of Life with their selected demographic variables of elderly clients with depression. The calculated 'F' value indicated that there was a significant association present with age, gender, occupation, birth order, family size and habits of the elderly clients with depression.

The variables which influence the level of Quality of life in depression of the elderly clients were age, gender, occupation, birth order, family size and habits of the elderly clients with depression.

The male and more educated elder clients had better Quality of life than others. The researcher found that elderly with depression was more common in women. It might be because of this fact that in female (not in male), dependency directly affects the depression. The variables age, education, and type of living (alone or with family), occupation, source of income and supporting system (such as charities) significantly associated with mean differed score of Quality of Life. The percentage of depression was higher in subjects living alone than those living with others, living with personal wealth and retirement salary. These may be the reason for the significant association of the Quality of life of the elderly clients with age, gender, occupation, birth order, family size, habits in the experimental group.

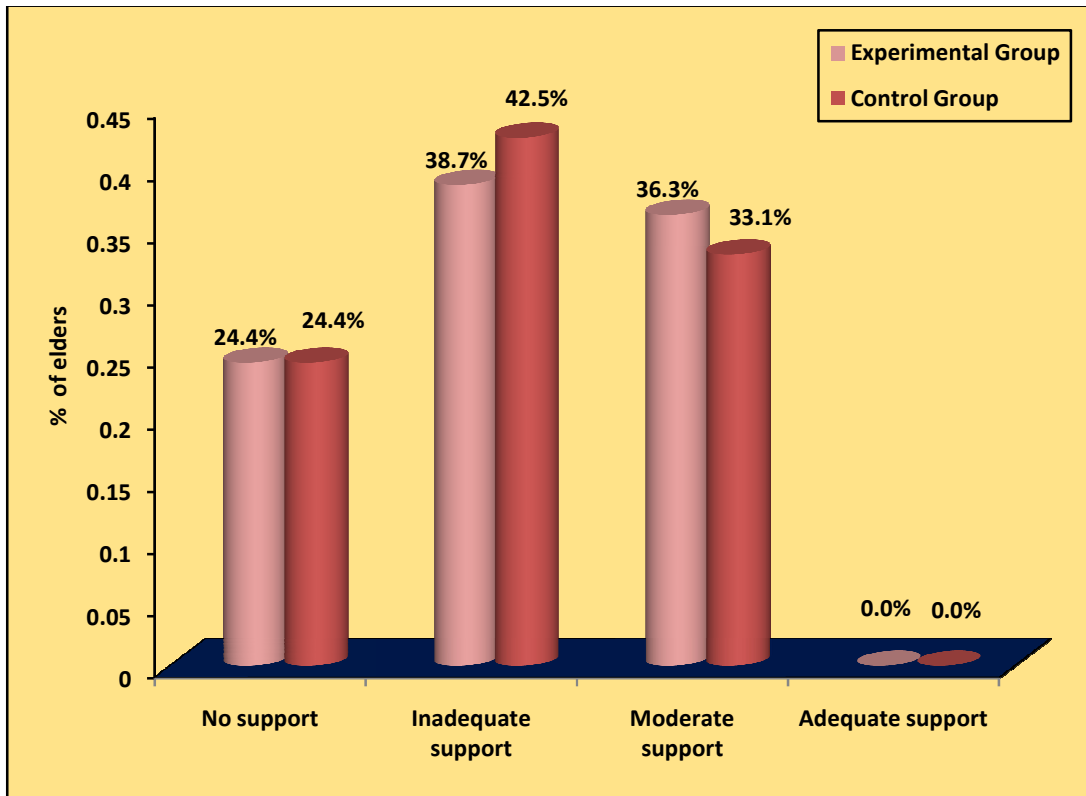


**Fig.5.3.1(a): Comparison of pretest level of depression among elderly clients with depression**

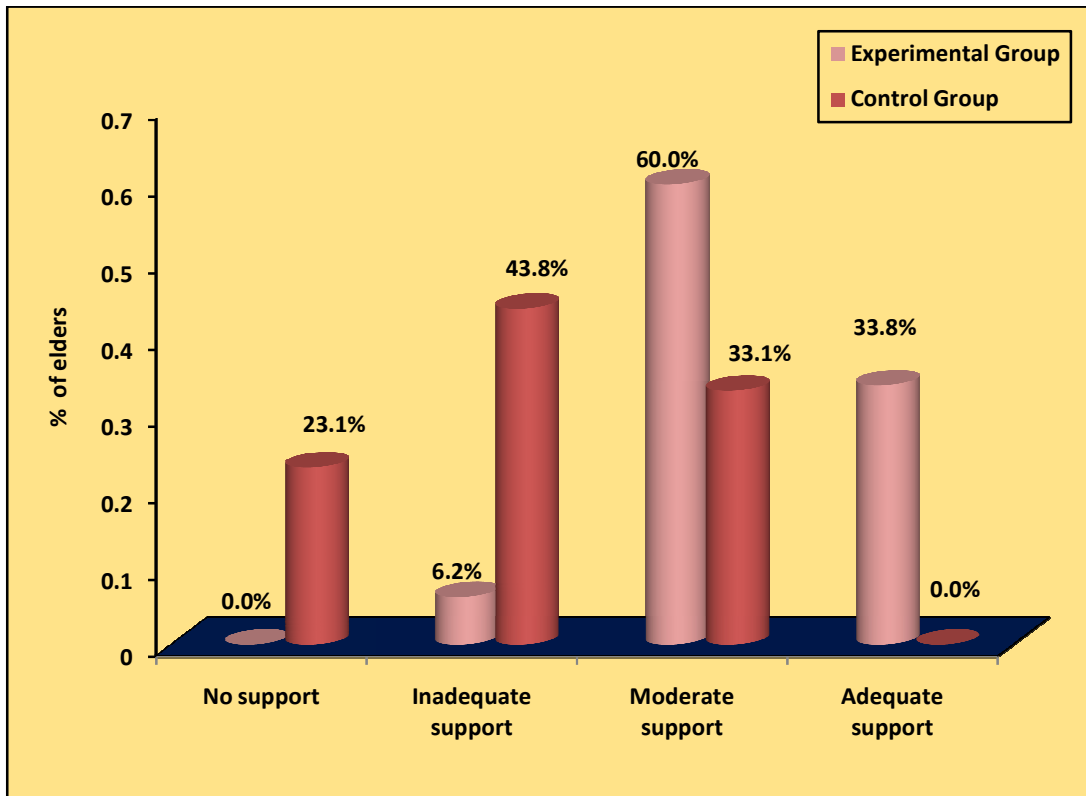


**Fig.5.3.1(b): Comparison of post test level of depression among elderly clients with depression**

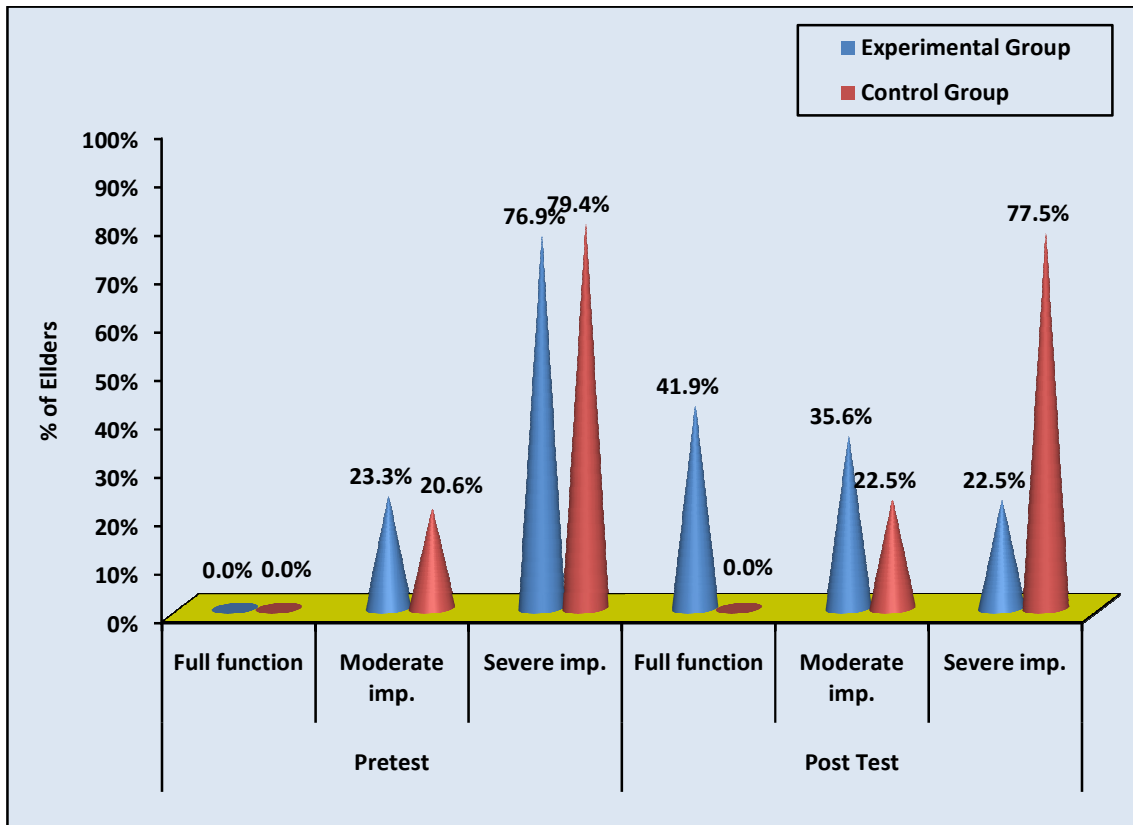




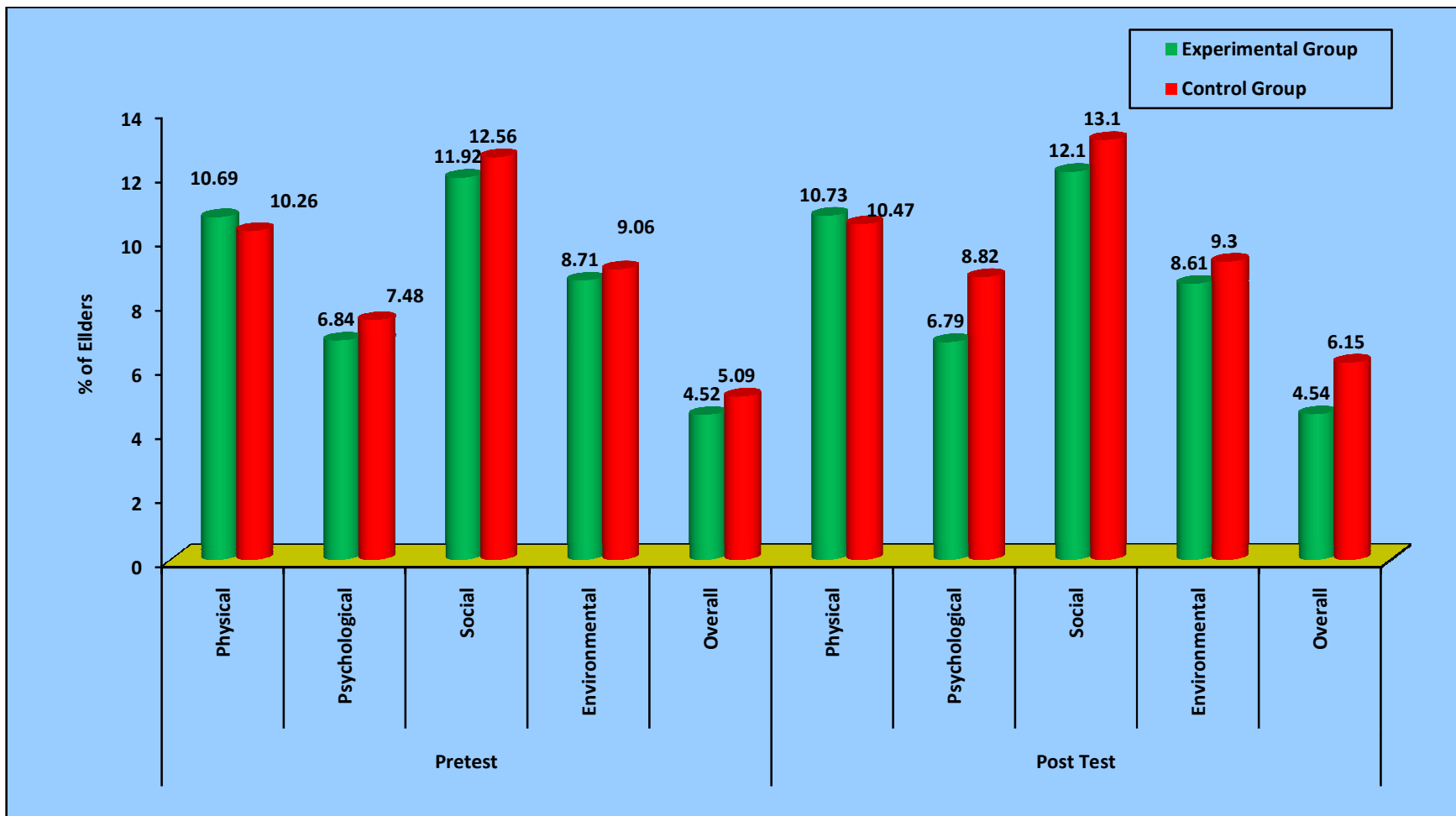
**Fig.5.3.2(a): Comparison of pretest level of Family Support among elderly clients with depression**



**Fig.5.3.2(b): Comparison of post test level of Family Support among elderly clients with depression**



**Fig.5.3.3: Comparison of pre and post test level of Activities of Daily Living among elderly clients with depression**



**Fig.5.3.4: Comparison of pretest and post test level of Quality of Life among elderly clients with depression**

## DISCUSSION

The study findings revealed that the Need-based intervention was found to be effective in the reduction of level of depression, improvement in Family Support, Activities of Daily Living and Quality of Life of elderly depressed in the community.

### **Level of Depression among elderly in the experimental groups:**

The findings of the study revealed that the severely depressed client from 77.5% reduced to 20%, improved to 70.6% moderate and 9.4% mild level of depression. Hence, the study findings revealed that there was a significant reduction in the severe level of depression and improvement in the moderate and mild level of depression. The overall comparison of level of depression revealed that there was a statistically significant reduction in the level of depression at  $p < 0.001$  level.

The study findings which bear similarity to the findings of the present study **Marmar CR et.al., (1998)** in reducing the risk of depression by bereavement counseling, support, new skill training and maintenance of routine protocols (**Brown LF, et.al., 1996**), enhancement of social support (**Morgan DL 1989**) individual or group therapy to facilitate adjustment to loss of function (**Anderson BL, 1992**) and sleep enhancement protocols (**Morin CM, et.al., 1999**).<sup>124,125,126,127</sup>

Depression in the elderly is a widespread problem that is not often diagnosed and frequently under treated. In this study the comparison of mean score in the level of depression before (11.78) and after intervention (9.28) showed significant reduction in the level of depression at  $p (< 0.001)$ . **Kosozal et.al (2010)** concludes that the Mind-

Body Intervention showed significant reduction in depression when compared to medications provided for the elderly, and may be seen to support the present study.

The present study findings revealed that the Need-based intervention had significant impact on level of depression of elderly client which includes psycho - education, Breathing exercise, Senior Citizen Chair Exercise and Progressive Muscle Relaxation Technique.

In this study, as Family Support, Activities of Daily Living and Quality of Life improved, the level of depression was reduced. The same findings are congruent with the study by **Onishi, et al., (2004)** who reported that the overall GDS score was correlated with Basic Activities of Daily Living (BADL) and Instrumental Activities of Daily Living (IADL). Depression was completely mediated between social support and health related Quality of Life. On the contrary, a study by **Bekele, et al., (2013)** reported that depression was not completely mediated between social support and health related quality of life.

#### **Family support among elderly in the experimental group:**

The findings revealed that the inadequate Family Support client from 38.7% reduced to 6.2% and improved to 60% moderate and 33.8% adequate level of family support. Hence the study findings revealed that there was a significant improvement in the level of Family Support among elderly depressed client. The overall comparison of level of Family Support revealed that there was a statistically significant improvement in the level of family support at  $p < 0.001$  level.

A strong social support network and social contact will definitely improve the physical and mental health of the older adults. In this study the comparison of level of family support score before (mean 28.09) and after intervention (mean 54.18) showed significant improvement in the level of family support at  $P (<0.001)$ . **Bitzan and Kruzick (1990)** conclude that frequent contact with friends, especially close ones, greatly reduces the risk of loneliness among elderly. This is in support of the finding in the present study.<sup>128</sup>

In this study, as Family Support, Activities of Daily Living and Quality of Life improved, the level of depression reduced. The findings were similar to the study of **Fonlin J et al (2012)** and confirm that the relationship between family support and loneliness was stronger among elderly population.

#### **Level of Activities of Daily Living among elderly in the experimental groups:**

The findings revealed that the severely impaired functioning client 76.9% had reduced to 22.5% and improved to 35.6% moderate and 41.9% full functioning. Hence the study findings revealed that there was a significant improvement in the level of Activities of Daily Living among elderly depressed client. The overall comparison of level of Activities of Daily Living revealed that there was a statistically significant improvement in the level of Activities of Daily Living at  $p<0.001$  level.

Greater physical activity showed improvement in prevalent depression (**Mc Aulley, et al., 2000**). In this study the comparison of level of activities of daily living score before (mean 1.84) and after intervention (mean 4.41) showed significant improvement in the level of Activities of Daily Living at  $p<0.001$ ). The present study

findings find further support in the study by **Callahan, et.al, (2005)** also found a significant improvement in physical functioning among older adults with major depressive disorder.

In this study, as Activities of Daily Living, Family Support and Quality of Life improved, the level of depression was reduced. The findings are similar to those of the study by **Maritire, et al., (2002)** who conclude that increased depressive symptoms coupled with physical limitation, on receipt of social support, show greater desire for independence among older adults.

#### **Quality of life among elderly in the experimental groups:**

The study findings revealed that there was a significant improvement in the level of Quality of Life to include the physical domain (10.69%) to (10.73%) showing (0.04%) improvement, psychological domain (6.84%) to (6.79) showing (0.05%) improvement, social domain (11.92%) to (12.10%) showing (0.18%) and environment domain (8.71%) to (8.61%) showing (0.1%) improvement in the Quality of Life before and after intervention respectively. **Park J Roh S (2013)** concluded that viable coping resources associated with the social support and enhanced Quality of Life alleviates depression. Similarly, **Langlois, et al., (2012)** reported that physical exercise improves quality of life among older adults.

In this study the comparison of level of overall Quality of Life score before (mean 59.33) and after intervention (mean 80.74%) which showed significant improvement in the Quality of Life at  $P (<0.001)$ . **Unutzer, et al., (2010)** concluded that the primary care treatment showed significant improvement in health status and overall



Quality of Life and ensured fewer the depressive symptoms among older adults .This supports the present study.

In the present study the correlation showed that as quality of life improved the level of depression reduced, the findings are similar with the study by **Garrido-Abejhar (2012)** who has reported that the “Geriatric care protocol” showed positive correlation on perceived social support, physical disability, quality of life among elderly clients, supporting the present study.

#### **Association of socio demographic variables:**

There was significant association between mean reduction score of depression and mean gain scores of Family Support, Activities of Daily Living, Quality of Life with age, gender, education, occupation, type of family, family size in the experimental group. The study findings reported that female gender were more depressed than males and found that there was significant difference between the gender at  $p=0.001$ . Two studies by **Duraiswamy, et al., (1999)** and **Rojas Fernandez CH (2010)** reported late-life depression female gender and advanced age were associated with poor quality of life and corresponds with findings in the present study.<sup>129,130</sup>

The studies by **Gautam, et al.,( 2007)** and **Demura and Sato (2002)** supports the findings that elderly women, are significantly more depressed than men at  $P(<0.01)$ .The education level showed significant association with geriatric depression has been supported by the study of **(Pfaff, et al., 2009)** .

The type and size of family showed significant association with geriatric depression. The support of care givers, friends and family will help in decreasing the risk of developing depression (**Oxman and Hull, 2001**)<sup>131</sup>

**Rossi and Rossi (1990)** in particular found that widowed parents tend to receive assistance than those living with spouse. On the contrary, **Autonuclei (2002)** does not agree with the study findings rather reveals that there was no significant association between Social Support and health among older adults. **Thomas, et al., (2002)** observed that home-based exercise program had decreased pain and improved physical functioning among elderly patient with arthritis.

A study by **Unutzer, et al., (2010)** on enhanced depression care management showed improvement in pain and functional outcomes in elderly .It also showed fewer depressive symptoms and better general health status and overall quality of life than elderly who received the usual care.

**Berlau DJ, (2012)** who reported that several factors associated with risk of disability, social support, quality of life including history of depression. In contrast, a case control study by **Rajkumar AP, et al., (2009)** found that socio demographic profiles, psychiatric morbidity, were significant protective factors were age, female gender, cognitive impairment and disability status were not significantly associated with geriatric depression.

## **SUMMARY, NURSING IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS**

Ageing is a universal process and it affects every individual, family, community and society. It is a normal, progressive and irreversible process. Sterling Ross commented “You do not heal old age, you protect it, you promote it and you extend it”. These are in fact the principles of Preventive Medicine. Ageing is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes, with advancement of age. It is not merely a matter of accumulating years but also a process of "adding life to years, not years to life." The World Health day theme in 2012 was “Good health adds life to years”.

Old age experiences many life stressors that can affect the level of depression such as loneliness, unemployment, poor financial support, chronic health problems, poor health status and poor functional capacity. A major component of the burden of illness for the elderly derives from prevalent chronic disabling conditions that often accompany ageing. This can be prevented or delayed, not only by medical but also by social, economic and environmental interventions

Psychoeducation – The relationship of the caregiver to the care recipient can have an impact on the content of the education and support programmes and tend to be less normative. Education improves skills providing care to the others and to oneself. Structured physical activity programme (Senior Citizen Chair Exercise) – It helps to build strength, improve the circulation and also helps to feel rejuvenated. Addressing current psychosocial stressors, Reactivate social networks, Relaxation training

(Progressive Muscle Relaxation) – It focuses on relaxation sensation, creates pleasant affective conditions, neutralizes effects of stress reaction, improves concentration, increases feeling of control, improves ability to block inner talk, energizes and improves sleep and help in the relationship with others. Breathing Exercise – It is an excellent tool to stimulate the relaxation response that results in less tension and overall sense of well-being. Regular follow-up is found to be effective in reducing the level of depression and improves the level of activities of daily living, family support, and quality of life of elderly clients with depression.

### **NURSING IMPLICATIONS**

1. Prevalence of depression is often ignored untreated or undertreated among older adults.
2. Nurses are often the first part of contact for elderly clients hence they need to have knowledge and awareness of scales.
3. Awareness regarding geriatric education and management unit has to be made to the nurses.
4. Depression can be reduced by improving the activities of daily living, family support with basic needs even without Antidepressants.
5. Nurses should take initiative in assessing the risk factors of depression among elderly
6. Based on the study the improvement of activities of daily living, family support and quality of life reduces the level of depression.
7. Need-based intervention needs to be taught in the primary care settings.
8. Nurses need to provide holistic care by an effective utilization of various tool-kit in their own setting.

9. Nurses need to be pro-active to improve the health seeking behaviour of the elderly.
10. Nurses can focus on improving the social support networks and social contact as these are related to good physical and mental health and can decrease the risk of suicide.
11. Nurses should utilize intervention tool-kit to stimulate the relaxation response that results in less tension and overall sense of wellbeing.
12. Increased utilization of health care services were needed for the older adults as loneliness lowers the quality of life.
13. Effects should be taken by the Nurses to improve primary care treatment of depression in persons with co-morbid illness.
14. Nurses should give more importance on regular follow- up which is found to be effective in improving family support, the activities of daily living, quality of life and reducing the level of depression among elderly.
15. Nurses can focus on the process of social support received and provided that deals with loneliness of older adults.
16. Nurses should emphasize an inter-disciplinary assessment of all relevant disorder, prevention of complications and iatrogenic conditions, early mobilization/ rehabilitation and comprehensive discharge planning.

## **CONCLUSION**

Old age experience many life stressors that can affect the level of depression such as loneliness, unemployment, poor financial support, chronic health problems, poor health status and poor functional capacity. Elderly persons with depression are more

likely to experience poor Family support, lesser functioning on Activities of daily living, and poorer Quality of life than normal people.

The findings of the study revealed that elderly are vulnerable and prone to depression. The major focus was on the Need-based intervention in the reduction of level of depression with improvement in Family support, Activities of daily living, Quality of life score of elderly clients in the experimental group and was found effective. Hence, Need-based intervention can be used as an interventional tool to reduce the level of depression and it also improves the Family support, Activities of daily living, Quality of life among elderly.

The findings of the study will be incorporated in the Wellness Clinic Program of Omayal Achi Community Centre which not only addresses the physical health of the elderly, but also the mental health.

## **RECOMMENDATIONS**

1. The same study can be done using longitudinal method.
2. Qualitative method can be done to identify risk factors of depression among elderly.
3. The investigator recommends performing Need-based intervention in reducing the level of depression at Primary Health Care settings among elderly.
4. A comparative study can be done to study the rural and urban population separately.
5. Incorporate with normal training and group training.

**STRENGTHS OF THE STUDY**

1. The standardised tools are utilized in the study.
2. Assessment tool-kit can be translated and widened as an assessment schedule.
3. Intervention – control were similar.
4. Need-based intervention is more effective rather than generic intervention.
5. The interventions can be utilized and carried out by all Primary Health Care Workers.

**WEAKNESS**

1. Shorter duration.
2. Longer time sustainability.
3. Block randomization was not used for the selection of samples in the study.

**LIMITATIONS**

1. Need- based intervention will be effective if practiced for longer duration.
2. Relied upon self- reports of co-morbidity and did not assess the severity of the disease.

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## **INFORMED CONSENT REQUISITION FORM**

### **GREETINGS:**

I am **Ms.Hemalatha.J**, Ph.D Scholar in Nursing under the Tamil Nadu Dr.M.G.R Medical University, Chennai. I am conducting a study entitled **“Effectiveness of Need based Intervention on level of depression, family support, activities of daily living and quality of life among elderly clients with depression in a selected rural population”**.

I request you to participate in the study by giving your free and frank answers to the questions being asked; confidentiality of your responses will be maintained.

Your co-operation is requested and much appreciated.

Thank You,

**Participant Signature**

**TOOL – I**  
**SEMI STRUCTURED INTERVIEW SCHEDULE**  
**QUESTIONNAIRE**

**Demographic Data:**

1. Code No.:

2. Age in years

1. 60 – 65
2. 66 – 70
3. 71 – 75
4. 76 and above

3. Gender

1. Male
2. Female

4. Education

1. Non-literate
2. Primary school
3. Higher secondary
4. Graduate
5. Professional
6. Others

5. Religion

1. Hindu
2. Muslim
3. Christian
4. Others

6. Marital Status

1. Married
2. Unmarried
3. Widow
4. Divorced
5. Separated
6. Others

7. Occupation

1. Government
2. Private
3. Self employed
4. Unemployed
5. Pensioner
6. Non – pensioner
7. Housewife
8. Others

8. Family Monthly Income in Rs.

1. <Rs.5,000/-
2. Rs.5,001 – Rs.10,000
3. Rs.10,001 – Rs.15,000
4. >Rs.15,000/-

9. Habits

1. Smoking
2. Alcohol
3. Panparag /Tobacco
4. Others

10. No. of siblings

1. None
2. One
3. Two
4. Three
5. Four
6. Five
7. Six & above

11. Birth Order

1. First
2. Second
3. Third
4. Fourth and above

12. Type of family

1. Joint
2. Nuclear
3. Extended
4. Other

13. Family size

1. Single
2. Two members
3. Three members
4. Four members
5. Five members
6. Six members
7. Seven members
8. Eight members
9. Nine and above



14. No. of children's

1. No
2. One
3. Two
4. Three
5. Four
6. Five
7. Six
8. Seven and above

15. Habitant

1. Urban
2. Rural
3. Semi urban
4. Others

16. Co-morbid physical condition

1. Dementia
2. Stroke
3. Cancer
4. Arthritis
5. Hip fracture
6. Myocardial infarction
7. Chronic obstructive pulmonary disease
8. Parkinson's disease
9. Diabetes
10. Hypertension
11. Others

17. Recreational Activities

1. Watching TV
2. Listening to Music
3. Reading Books
4. Reading Newspaper
5. Chatting

## SCREENING TOOL

### TOOL II: MINI – MENTAL STATE EXAMINATION (MMSE)

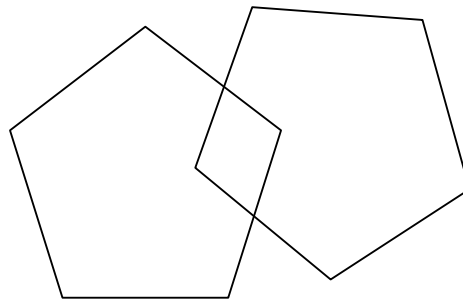
To assess the mini mental status to identify cognitive impairment among the elderly clients.

Make the patient comfortable and establish rapport. Ask questions in the order listed. Total possible score is 30.

Maximum Score	Score	
		<b>ORIENTATION</b>
5	( )	What is the (year) (season) (date) (day) (month)?
5	( )	Where are we (state) (country) (town or city) (hospital) (floor)?
		<b>REGISTRATION</b>
3	( )	Name 3 common objects (e.g., “apple”, “table”, “penny” Take 1 second to say each. Then ask the patient to repeat all 1. Give 1 point for each correct answer. Then repeat them until he/she learns all. Count trials and record. Trials: _____
		<b>ATTENTION AND CALCULATION</b>
5	( )	Serial 7’s backwards. Stop after 5 answers. Alternatively, spell “WORLD” backwards. The score is the number of better in correct order (D ___ L ___ R ___ O ___ W ___)
		<b>RECALL</b>
3	( )	Ask for the 3 common objects named during registration above. Give 1 point for each correct answer. {Note: Recall cannot be tested 3 objects were not remembered during registration}.

## LANGUAGE

- 2 ( ) Name a “pencil” and “watch” [2 points]
- 1 ( ) Repeat the following “Not ifs” ands or “buts” [1 point]
- 3 ( ) Follow a 3 stage command: [2 points]  
“Take a paper in your right hand.  
fold it in half; and put it on the floor.” [3 point]
- 1 ( ) Read and obey the following: CLOSE YOUR EYES [1 point]
- 1 ( ) Write a sentence. [1 point]
- 1 ( ) Copy the following design. [1 point]



Maximum Total Score: 30

Total score

Suggested guideline for determining the severity of cognitive impairment.

Mild : MMSE  $\geq 21$  21 – 23

Moderate : MMSE 10 – 20 19 – 21

Severe : MMSE 20 <19

Expected decline in MMSE scores on untreated mild in moderate Alzheimer’s patient is 2 to 4 points per year.

**Total Score**

1. Inclusive

2. Exclusive

### TOOL III:GERIATRIC DEPRESSION SCALE: SHORT FORM

To assess the level of depression among the elderly clients.

Choose the best answer for how you have felt over the past week:

S.No.	Questions	
1.	Are you basically satisfied with your life? <b>YES/NO</b>	<input type="checkbox"/>
2.	Have you dropped many of your activities and interests? <b>YES/NO</b>	<input type="checkbox"/>
3.	Do you feel that your life is empty? <b>YES/NO</b>	<input type="checkbox"/>
4.	Do you often get bored? <b>YES/NO</b>	<input type="checkbox"/>
5.	Are you in good spirits most of the time? <b>YES/NO</b>	<input type="checkbox"/>
6.	Are you afraid that something bad is going to happen to you? <b>YES/NO</b>	<input type="checkbox"/>
7.	Do you feel happy most of the time? <b>YES/NO</b>	<input type="checkbox"/>
8.	Do you often feel helpless? <b>YES/NO</b>	<input type="checkbox"/>
9.	Do you prefer to stay at home, rather than going out and doing new things? <b>YES/NO</b>	<input type="checkbox"/>
10.	Do you feel that you have more problems with memory than most? <b>YES/NO</b>	<input type="checkbox"/>
11.	Do you think it is wonderful to be alive now? <b>YES/NO</b>	<input type="checkbox"/>
12.	Do you feel pretty worthless the way you are now? <b>YES/NO</b>	<input type="checkbox"/>
13.	Do you feel full of energy? <b>YES/NO</b>	<input type="checkbox"/>
14.	Do you feel that your situation is hopeless? <b>YES/NO</b>	<input type="checkbox"/>
15.	Do you think that most people are better off than you are? <b>YES/NO</b>	<input type="checkbox"/>

**Total Score**

1. Inclusive

2. Exclusive

Answers in **bold** indicate depression. Score 1 point for each bolded answer.

A score > 5 points in suggestive of depression.

A score ≥ 10 points in almost always indicative of depression.

A score > 5 points should warrant a follow-up comprehensive assessment.



### Instructions

This questionnaire asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last two weeks. For example, thinking about the last two weeks, a question might ask:

	<i>(Please circle the number)</i>				
	<b>Not at all</b>	<b>A little</b>	<b>Moderately</b>	<b>Weekly</b>	<b>Completely</b>
Do you get the kind of support from others that you need?	1	2	3	4	5

You should circle the number that best fits how much support you get from others over the last two weeks. So you would circle the number 4 if you got a great deal of support from others.

	<i>(Please circle the number)</i>				
	<b>Not at all</b>	<b>A little</b>	<b>Moderately</b>	<b>Mostly</b>	<b>Completely</b>
Do you get the kind of support from others that you need?	1	2	3	4	5

You would circle number 1 if you did not get any of the support that you needed from others in the last two weeks.

	<i>(Please circle the number)</i>				
	<b>Not at all</b>	<b>A little</b>	<b>Moderately</b>	<b>Mostly</b>	<b>Completely</b>
Do you get the kind of support from others that you need?	1	2	3	4	5

**Please read each question, assess your feelings, and circle the number on the scale that gives the best answer for you for each question.**

S.No.		<i>(Please circle the number)</i>				
		Not at all	A little	Moderately	Weekly	Completely
1.	How would you rate your quality of life?	1	2	3	4	5

S.No.		<i>(Please circle the number)</i>				
		Very Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

**The following questions ask about how much you have experienced certain things in the last two weeks.**

S.No.		<i>(Please circle the number)</i>				
		Not at all	A little	A moderate amount	Very Much	An Extreme Amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4.	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5



S.No.		<i>(Please circle the number)</i>				
		Not at all	Slightly	A moderate amount	Very Much	Extremely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

**The following questions ask about how completely you experience or were able to do certain things in the last two weeks.**

S.No.		<i>(Please circle the number)</i>				
		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

S.No.		<i>(Please circle the number)</i>				
		<b>Very Poor</b>	<b>Poor</b>	<b>Neither Poor Nor Well</b>	<b>Well</b>	<b>Very Well</b>
15.	How well are you able to get around?	1	2	3	4	5

**The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.**

S.No.		<i>(Please circle the number)</i>				
		<b>Very Dissatisfied</b>	<b>Dissatisfied</b>	<b>Neither Satisfied nor Dissatisfied</b>	<b>Satisfied</b>	<b>Very Satisfied</b>
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities.	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with your abilities?	1	2	3	4	5
20.	How satisfied are you with your personal relationship?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5

S.No.		<i>(Please circle the number)</i>				
		Very Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied
24.	How satisfied are you with your access to health services?	1	2	3	4	5
25.	How satisfied are you with your mode of transportation?	1	2	3	4	5

**The following question refers to how often you have felt or experienced certain things in the last two weeks.**

S.No.		<i>(Please circle the number)</i>				
		Never	Seldom	Quite Often	Very Often	Always
26.	How often do you have negative feelings, such as blue mood, despair, anxiety, depression.	1	2	3	4	5

Did someone help you to fill this form?  
*(Please circle Yes or No)*

Yes

No

How long did it take to fill out this form?

**Total Score**

1. Inclusive

2. Exclusive

## TOOL V: FAMILY SUPPORT SCALE

To assess the family support among the elderly clients.

### INTERVENTION:

**READ AND FOLLOWING:** I'm going to read you a lot of people and groups that often are helpful in members of a family raising a young child. Please choose one of the members in the care to describe how helpful services have been in your family during the past 3 to 6 months. If a service of help has not been available in your family during this period of time, check the not available response.

For example, if your parents were not helpful to your family during the past 3 to 6 months, choose (1) – “Not at all Helpful”. If they were sometimes helpful choose (2) – “Sometimes Helpful”. Choose (3) if they were generally helpful, (4) if very helpful and (5) if extremely helpful. If your parents are no longer living choose (6) which tells me they were not available during this time period.

		0 Not Available	1 Not at all Helpful	2 Some times helpful	3 Generally Helpful	4 Very Helpful	5 Extremely Helpful
1.	Your parents						
2.	Your spouse of partner's parents						
3.	Your relatives kin (other than parents)						
4.	Your spouse of partner's relative kin						
5.	Spouse or partner						
6.	Your friends						
7.	Your spouse or partner's friends						
8.	Your own children						
9.	Other parents						
10.	Co-workers						
11.	Parent groups						
12.	Social groups/clubs						
13.	Church members / minister						
14.	Your family or child's physician						
15.	Early childhood intervention programme						
16.	School/day care centre						
17.	Professional helpers / social Workers, therapies, teachers etc.						
18.	Professional agencies (public health, social services, mental health, etc.)						

**Total Score**

1. Inclusive

2. Exclusive

## TOOL – VI

### Katz Index of Independence in Activities of Daily Living

To assess the Activities of Daily Living among elderly clients

<b>ACTIVITIES POINTS (1 OR 0)</b>	<b>INDEPENDENCE: (1 POINT) NO supervision, direction or personal assistance</b>	<b>DEPENDENCE: (0 POINTS) WITH supervision, direction, personal assistance or total care</b>
BATHING POINTS: _____	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
DRESSING POINTS: _____	(1 POINT) Gets clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING POINTS: _____	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TRANSFERRING POINTS: _____	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transferring aides are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE POINTS: _____	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
FEEDING POINTS: _____	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.

A score of 6 indicates full function, 4 indicates moderate impairment, and 2 or less indicates severe functional impairment.

**Total Score**

1. Inclusive

2. Exclusive

## வினாத்தான்

### பகுதி - அ

**தகவலர் பற்றிய விவரங்கள்:**

1. எண்:
  - அ) 60 - 65 வயது
  - ஆ) 66 - 70 வயது
  - இ) 71 - 75 வயது
  - ஈ) 76 வயதிற்கு மேல்
  
3. பால் இனம்
  - அ) பெண்
  - ஆ) ஆண்
  
4. கல்வித் தகுதி
  - அ) படிக்காதவர்
  - ஆ) ஆரம்பக்கல்வி
  - இ) மேல் நிலைக்கல்வி
  - ஈ) பட்டயப்படிப்பு
  - உ) பட்டப்படிப்பு மற்றும் அதற்கு மேல்
  
5. சமயம்
  - அ) இந்து
  - ஆ) முஸ்லீம்
  - இ) கிறிஸ்துவர்
  - ஈ) மற்றவை

6. திருமண நிலை

- அ) மணமானவர்
- ஆ) மணமாகாதவர்
- இ) விதவை
- ஈ) விவாகாத்தானவர்
- உ) பிரிந்து வாழ்பவர்
- ஊ) மற்றவை

7. உத்யோகம்

- அ) அரசாங்க வேலை
- ஆ) தனியார் வேலை
- இ) சுய தொழில்
- ஈ) வேலை இல்லாதவர்
- உ) குடும்பத் தலைவி
- ஊ) மற்றவை

8. குடும்ப மாத வருமானம்

- அ) <ரூ.5001
- ஆ) ரூ.5001 - ரூ.10,000
- இ) ரூ.10,001 - ரூ.15,000
- ஈ) >ரூ.15,000/-

9. பழக்க வழக்கங்கள்

- அ) புகை பிடித்தல்
- ஆ) குடி பழக்கம்
- இ) பான்பராக், புகையிலை
- ஈ) மற்றவை

10. உடன் பிறந்தோரின் எண்ணிக்கை

- அ) ஒருவரும் இல்லை
- ஆ) ஒன்று
- இ) இரண்டு
- ஈ) நான்கு

உ) ஐந்து

ஊ) ஆறு & அதற்கு மேல்

11. பிறப்பு வரிசை

அ) முதலாவது

ஆ) இரண்டாவது

இ) மூன்றாவது

ஈ) நான்கு மற்றும் அதற்கு மேல்

12. குடும்ப அமைப்பு

அ) தனிக்குடும்பம்

ஆ) கூட்டுக்குடும்பம்

இ) பிளவுப்பட்ட குடும்பம்

ஈ) மற்றவை

13. குடும்ப உறுப்பினரின் எண்ணிக்கை

அ) மூன்று உறுப்பினர்கள்

ஆ) நான்கு உறுப்பினர்கள்

இ) ஐந்து உறுப்பினர்கள்

ஈ) ஆறு உறுப்பினர்கள்

உ) ஏழு உறுப்பினர்கள்

ஊ) எட்டு உறுப்பினர்கள்

எ) ஒன்பது மற்றும் அதற்கு மேல்

14. மணமானவர் என்றால் குழந்தைகளின் எண்ணிக்கை

அ) குழந்தை இல்லை

ஆ) ஒன்று

இ) இரண்டு

ஈ) மூன்று

உ) நான்கு

ஊ) ஐந்து

எ) ஆறு

ஏ) ஏழுக்கு மேல்



15. வசிக்கும் இடம்

- அ) கிராமப்புறம்
- ஆ) நகர்ப்புறம்
- இ) புறநகர்ப்பகுதி
- ஈ) மற்றவை

16. இரு பாதிப்புள்ள நோய்

- அ) மன சோர்வினால் ஏற்படும் நிலை
- ஆ) பக்க வாதம்
- இ) புற்று நோய்
- ஈ) வலியுடைய மூட்டு வீக்கம்
- உ) இடுப்பு எலும்பு முறிவு
- ஊ) மாரடைப்பு நோய்
- எ) நாள்பட்ட நுரையீரல் அடைப்பு நோய்
- ஏ) பார்க்கின்சன் நோய்
- ஐ) மற்றவை

17. பொழுது போக்கு செயல்கள்

- அ) தொலைக்காட்சி பார்ப்பது
- ஆ) இசை கேட்பது
- இ) புத்தகம் படிப்பது
- ஈ) பத்திரிகை படிப்பது
- உ) பேசி அரைட்டை அடிப்பது

## குறிப்பேடு 2: குறுகிய மனநிலை ஆய்வு படிவம் (MMSE)

இது முதியவர்களிடையே காணப்படும் புலனுணர்வு அறிவாற்றல் குறைபாட்டை கண்டறிய பயன்படுத்தும் ஒரு படிவம் ஆகும்.

முதலில் நோயாளியுடன் நல்லுறவையும், சமூக நிலையையும் உருவாக்கிக் கொண்டு, இறகு முறையே கொடுக்கப்பட்டுள்ள கேள்வி கரு\_\_ வரிசையாய் கேட்க வேண்டும். இதன் மொத்த மதிப்பெண் 30 ஆகும்.

**அதிகப்பட்ச மதிப்பெண்**      **நோயாளி பெறும் மதிப்பெண்**

**அறிமுகம்**

- 5                    (            )      இது எந்த வருடம்/பருவம் (அ) காலம் / தேதி / நாள் / மாதம்?
- 5                    (            )      நாம் இருக்கும் மாநிலம் / தேசம் / பட்டணம் / மருத்துவமனை எது?

**குறிப்புகள் பதிப்பு:**

- 3                    (            )      மூன்று பொதுவான பொருட்களின் பெயரை கூறவும் (உ.ம். ஆப்பிள், மேசை, ரூபாய்) குறிப்பை சொல்ல, வினாடி எடுத்துக் கொள்ளவும். பிறகு நோயாளியை ஒவ்வொன்றாக கேட்கவும்.

சரியான மதிப்பெண் ஒவ்வொன்றிற்கும் 1 மதிப்பெண் வழங்கவும். அவர்கள் முழுமையாய் கற்கும்/கவனிக்கும் வரை மீண்டும், மீண்டும் கூறவும்.

கொடுக்கும் தவணைகள் அனைத்தும் பதிவு செய்யவும். எத்தனை பதிவுகள்: \_\_\_\_\_

**கவனிப்பு மற்றும் கணிப்பு**

- 5                    (            )      வரிசை எண் 7க்கு பிறகு பின்புறமாக சொல்லவும். 5 பதில்களுக்கு பிறகு நிறுத்தவும். வார்த்தையின் எழுத்துகளை பின்புறமிருந்து மாற்றி கொள்ளவும். சரியான வரிசையில் சொன்னால் சரியான மதிப்பெண்ணை கொடுக்க

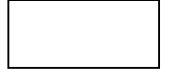
வேண்டும்.

(D \_\_\_ L \_\_\_ R \_\_\_ O \_\_\_ W \_\_\_)

நினைவு கொள்ளுதல்

- 3 ( ) அறிமுக பதிப்பின் போது கேட்ட 3 பொதுவான பொருட்களை கேட்கவும்.  
ஒவ்வொரு சரியான விடைக்கும் 1 மதிப்பெண் வழங்கவும். (குறிப்பு: குறிப்பு பதிவின் போது அம்மூன்று பொருட்களையும் நினைவில் கொள்ளும் படி சொல்லக்கூடாது).

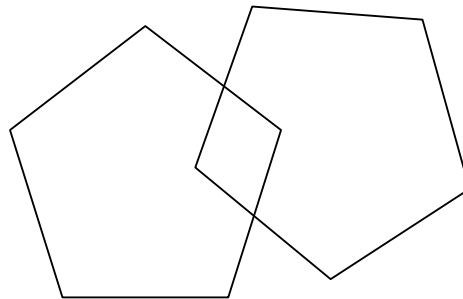
மொழி



- 2 ( ) ஒரு பென்சில் (அ) கைகடிகாரத்தின் பெயர் கூறவும் (2 புள்ளிகள்)
- 1 ( ) பின்வரும் சொல்லை திரும்ப மறுபடியும் சொல்லவும் இல்லாதிருந்தால் (அ) ஆனாலும் (1 புள்ளி)
- 3 ( ) பின்வரும் 3 வகை கட்டளை செய்யவும். (2 புள்ளிகள்)

தங்களது வலக்கையில் ஒரு தாளை எடுக்கவும். அதை பாதி அறைகளாக மடித்துக் கொள்ளவும். பிறகு அதை தரையில் போடவும் ”  
[3 புள்ளிகள்]

- 1 ( ) வாசித்து பிறகு செய்யவும்  
கண்களை மூடவும் (1 புள்ளி)
- 1 ( ) ஒரு வாக்கியத்தை எழுதவும் (1 புள்ளி)
- 1 ( ) கிழே உள்ள படத்தை பார்த்து வரையவும்  
[1 புள்ளி]



அதிக பட்ச மதிப்பெண்: 30

மொத்த மதிப்பெண்:

புலனுணர்வு அறிவாற்றல் குறைபாட்டின் அளவை கண்டறியப் பரிந்துரைக்கப்பட்ட வழி காட்டி:

துவக்க நிலை : MMSE  $\geq 21$  21 – 23

சற்றே அதிகரித்த நிலை : MMSE 10 – 20 19 – 21

முழுமையாய் பாதித்த நிலை : MMSE 20 <19

எதிர் நோக்கும் துவக்க நிலை (அ) சற்றே அதிகரித்த நிலையில் உள்ள புலனுணர்வு அறிவாற்றல் குறைபாடுள்ள குணப்படுத்தப்படாத அல்ஜிமேயர் நோயாளிகள் 2 முதல் 4 புள்ளிகளை வருடத்தில் பெருகின்றனர்

.

மொத்த மதிப்பெண்

1. உள்ளடக்கிய

2. பிரத்யேக



**குறிப்பேடு-3:வயோதிகர்/முதியோருக்கான மன அழுத்த அளவுகோல் குறுகிய படிவம்**

கடந்த வாரங்களில் நீங்கள் உணர்ந்தவற்றை சரியான முறையில் தேர்வு செய்க.

வ.எண்	கேள்விகள்
1.	அடிப்படையில் உங்கள் வாழ்க்கை திருப்தி அளிப்பதாக உள்ளதா? <input type="checkbox"/> ஆம் / இல்லை
2.	பலவிதமான உங்களது விருப்பங்கள் மற்றும் செயல்களை இழக்கும் நிலை நேரிட்டதுண்டா? ஆம் / இல்லை <input type="checkbox"/>
3.	எப்போதாவது நீங்கள் வெறுமையாக உணர்ந்ததுண்டா? ஆம்/இல்லை <input type="checkbox"/>
4.	எப்போதும் வெறுப்பாக உணருகிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>
5.	எப்போதும் நீங்கள் உற்சாகமாய் இருக்கிறீர்களா? ஆம்/இல்லை <input type="checkbox"/>
6.	கெட்ட நிகழ்வுகள் ஏதேனும் உங்களுக்கு நேறும் என்று நீங்கள் எப்போதாவது பயந்ததுண்டா? ஆம் / இல்லை <input type="checkbox"/>
7.	எப்போது நீங்கள் சந்தோஷமாக உள்ளீர்கள் என்று உணர்ந்திருக்கிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>
8.	எப்போதாவது நீங்கள் உங்களை உதவி செய்ய இயலாதவர் என்று எண்ணியிருக்கிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>
9.	பல புதிய ஆக்கங்களை/செயல்களாஇ வெளியில் செய்வதை விட வீட்டிலேயே இருப்பதை நீங்கள் விரும்பியதுண்டா? ஆம்/இல்லை <input type="checkbox"/>
10.	உங்களது ஞாபகமின்மை மற்ற பிரச்சினைகளை விட மிகவும் பாரமானது கடினமானது என உணர்ந்ததுந்தா? ஆம் / இல்லை <input type="checkbox"/>
11.	வாழும் வாழ்க்கை அற்புதமானது என நீங்கள் நினைக்கிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>
12.	நீங்கள் செல்வது பாவபாதை அல்லது உபயோகம் அற்றது <input type="checkbox"/> உணர்கிறீர்களா? ஆம் / இல்லை
13.	முழு ஆற்றல் உள்ளவர் என நீங்கள் உணர்ந்திருக்கிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>
14.	நம்பிக்கையற்ற சூழலில் வாழ்வதாக நீங்கள் உணர்ந்ததுண்டா? ஆம் / இல்லை <input type="checkbox"/>
15.	தங்களைவிட மற்றவர்கள் மேலானவர்கள்/உயர்ந்தவர்கள் என்று நீங்கள் நினைக்கிறீர்களா? ஆம் / இல்லை <input type="checkbox"/>

மொத்த மதிப்பெண்கள்

1. உள்ளடக்கிய

2. பிரத்யேக

**குறிப்பேடு - 1V**  
**WHO QOL - BRIEF - 1**

**உங்களைப்பற்றி:**

உங்களிடம் உங்களைப்பற்றி சில பொதுவான கேள்வி கேட்கப்படும் சரியான விடையை நீங்கள் வட்டமிட வேண்டும் அல்லது எழுதுதல் வேண்டும்.

நீங்கள் உங்களுடைய பாலினத்தை குறிப்பிட வேண்டும்?

ஆண்  பெண்

நீங்கள் உங்களுடைய பிறந்த தேதியை குறிப்பிட வேண்டும்?

நாள் \_\_\_\_\_ மாதம் \_\_\_\_\_ வருடம் \_\_\_\_\_

உங்களுடைய அதிகப்பட்ச கல்வித்தகுதி?

(அ) எதுவும் இல்லை  (ஆ) முதல் நிலை   
(இ) மேல்நிலை  (ஈ) பட்டதாரி

உங்களுடைய திருமண நிலை?

(அ) தனிநபர்  (ஆ) திருமணமானவர்   
(இ) பிரிந்தவர்கள்  (ஈ) சட்டப்பூர்வமாகப் பிரிந்தவர்கள்   
(உ) கணவன் மனைவியை இழந்தவர்கள்

நீங்கள் இப்பொழுது உடல்நிலை சரியில்லாதவரா?

(அ) ஆம்  (ஆ) இல்லை

உங்கள் உடல்நிலையில் ஏதேனும் குறைபாடு இருந்தால் அதை என்னவென்று நினைக்கிறீர்கள்?

(அ) நோய்  (ஆ) பிரச்சனை

**கேள்விகள்:**

இந்தக் கேள்வித் தாளில் உங்களுடைய வாழ்க்கைதிறன் உடல்நிலை வாழ்க்கையின் மற்றப் பகுதியைப் பற்றி நீங்கள் எவ்வாறு உணர்கிறீர்கள் என்று கேட்கப்படும் அனைத்து கேள்விகளுக்கும் பதில் அளிக்கவும். உங்களுக்கு ஒரு கேள்விக்கான பதில் அளிக்கவும். உங்களுக்கு ஒரு கேள்விக்கான நிச்சயமான பதில் தெரியவில்லை என்றால் அதற்கு நிகரான ஒரு பதிலை தேர்ந்தெடுத்து குறிப்பிடவும். இது நீங்கள் நினைத்த முதல் பதிலாக இருக்கும்.

தயவு செய்து உங்கள் தரம், எதிர்ப்பார்ப்பு, விருப்பம் மற்றும் அக்கரை ஆகியவற்றை மனதில் கொள்ள வேண்டும். கடந்த இரண்டு வாரங்களாக நீங்கள் என்ன யோசிக்கிறீர்கள் என்று கேட்கப்படும்.

உங்களுடைய தேவைக்கேற்ற அளவி மற்றவர்களிடம் இருந்து உதவி கிடைக்கிறதா?

(அ) இல்லை  (ஆ) அவ்வளவு இல்லை  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகபட்சமாக  (உ) முழுமையாக

கடந்த இரண்டு வாரங்களாக மற்றவர்களிடம் இருந்து உங்களுக்கு எவ்வளவு உதவி கிடைத்ததென்று இதிலுள்ள சிறந்த விடைக்கான என்னை வட்டமிட வேண்டும். ஆதலால் உங்களுக்கு அதிகபட்சமான உதவி கிடைத்திருந்தால் என் நான்கில் வட்டமிட வேண்டும்.

உங்களுடைய தேவைக்கேற்ற அளவு மற்றவர்களிடமிருந்து உதவி கிடைக்கிறதா?

(அ) இல்லை  (ஆ) அவ்வளவு இல்லை  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகபட்சமாக  (உ) முழுமையாக

கடந்த இரண்டு வாரங்களாக மற்றவர்களிடம் இருந்து உங்களுக்கு எந்தவித உதவியும் கிடைக்கவில்லை என்றால் என் ஒன்றில் வட்டமிட வேண்டும். கேள்விகளை ஒவ்வொன்றாக படிக்கவும், உங்கள் உணர்வுகளை மதிப்பிட்டு இங்குள்ள கால அட்டவணையில் சிறந்த விடையை வட்டமிட வேண்டும்.

1. உங்களுடைய வாழ்க்கைத்தரத்தை எப்படி மதிப்பிடுகிறீர்கள்?

(அ) மிக மோசமான நிலை  (ஆ) மோசமான நிலை   
(இ) நடுத்தரமான நிலை  (ஈ) நல்ல நிலை  (உ) மிக நல்ல நிலை

2. உங்களுடைய உடல் ஆரோக்கியம் உங்களுக்கு எந்த அளவு மனநிறைவு தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) நடுத்தரமான நிலை  (ஈ) மனநிறைவு உண்டு   
(உ) மனநிறைவு உள்ளது

இந்த இரண்டு வாரங்களாக சில காரியங்களில் எந்த அளவிற்கு அனுபவம் உள்ளது என்பதைப்பற்றி பின்வரும் கேள்விகளில் கேட்கப்படும்.

3. எந்த அளவிற்கு உங்களுடைய உடல்வலி நீங்கள் செய்ய வேண்டிய வேலையை தடை செய்கிறது என்று நினைக்கிறீர்கள்?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

4. உங்களுடைய தினசரி வாழ்க்கையில் உங்கள் கடமைகளை செய்வதற்கு எந்த அளவு மருத்துவ சிகிச்சை தேவைப்படுகிறது?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

5. உங்கள் வாழ்க்கை வாழ்வதில் எவ்வளவு சந்தோஷம்?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

6. உங்களுடைய வாழ்க்கை எந்த அளவிற்கு அர்த்தம் உள்ளதாக இருக்கிறது என்று நீங்கள் உணர்கிறீர்கள்?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

7. உங்களால் எவ்வளவு நன்றாக கவனம் செலுத்த முடிகிறது?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக



8. உங்களுடைய தினசரி வாழ்க்கையில் நீங்கள் எவ்வளவு பாதுகாப்பை உணர்கிறீர்கள்?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

9. உங்களுடைய சுற்றுச்சூழல் எவ்வளவு ஆரோக்கியமான இருக்கிறது?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

10. உங்களுடைய தினசரி வாழ்க்கையில் உங்களுக்கு போதுமான சக்தி கிடைக்கிறதா?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

11. உங்கள் உடல் வெளித்தோற்றத்தை உங்களால் ஒத்துக்கொள்ள முடிகிறதா?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

12. உங்கள் செலவுகளை சந்திக்க போதுமான பணவசதி உள்ளதா?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

13. உங்களுடைய தினசரி வாழ்க்கையில் தேவைப்படக்கூடிய தகவல்கள் எந்த அளவு கிடைக்கிறது?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

14. உங்களுக்கு எந்த அளவு நேர செயல்களுக்கு வாய்ப்பு கிடைக்கின்றது?

(அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

15. உங்களால் எவ்வளவு நன்றாக இடம்விட்டு இடம் செல்ல முடிகிறது?

- (அ) இல்லவே இல்லை  (ஆ) சிறிதளவு  (இ) நடுத்தரமான நிலை   
(ஈ) அதிகமாக  (உ) மிக அதிகமாக

கடந்த இரண்டு வாரங்களாக பின்வரும் கேள்விகளில் உங்களது வாழ்க்கையின் பல்வேறு விஷயங்களில் உங்களுக்கு எவ்வளவு மனநிறைவு மற்றும் நல்ல உணர்வுகளை உள்ளது என்பதை பற்றி கேட்க்கப்படும்?

16. உங்களுடைய தூக்கம் உங்களுக்கு எந்த அளவுக்கு திருப்தியை மனநிறைவை தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

17. தினசரி வேலைகளை செய்வதற்கான போதுமான திறமை எந்த அளவிற்கு உங்களுக்கு மனநிறைவை தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

18. உங்கள் வேலையின் செயல்திறன் உங்களுக்கு எவ்வளவு மனநிறைவை தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

19. உங்கள் மீது உங்களுக்கு எவ்வளவு மனநிறைவு உள்ளது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

20. நெருங்கிய உறவுகளில் உங்களுக்கு எவ்வளவு மனநிறைவு இருக்கிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

21. தாம்பத்திய வாழ்க்கையில் உங்களுக்கு எவ்வளவு மனநிறைவு உள்ளது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

22. உங்கள் நண்பர்கள் மூலம் உங்களுக்கு கிடைக்கும் உதவி எந்த அளவிற்கு மனநிறைவை தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

23. நீங்கள் வாழும் இடத்தின் நிலை உங்களுக்கு எந்த அளவு மனநிறைவு தருகிறது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

24. நீங்கள் மருத்துவ சேவைகளை அனுசுவதில் உங்களுக்கு எவ்வளவு மனநிறைவு உள்ளது?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

25. உங்களுடைய போக்குவரத்திற்க்கான வசதி உங்களுக்கு மனநிறைவை தருகிறதா?

- (அ) அதிகமான மனநிறைவு இல்லை  (ஆ) மனநிறைவு இல்லை   
(இ) மனநிறைவும் (ம) மன நிறைவற்றும்  (ஈ) மனநிறைவு உண்டு   
(உ) அதிகமாக மனநிறைவு உள்ளது

சில காரியங்களில் உங்களது உணர்ச்சி மற்றும் அனுபவம் எவ்வளவு உள்ளது என்று நீங்கள் அடிக்கடி உணர்கிறீர்கள் என்பதைப் பற்றி பின்வரும் கேள்விகளில் கேட்கப்படும்.

26. உங்களுக்கு எவ்வளவு முறை மந்தமனப்பான்மை, வெருப்பு, பதட்டம், மனத்தளர்ச்சி போன்ற எதிர்மறைவான உணர்வுகள் உண்டாகின்றன?

- (அ) இல்லை  (ஆ) எப்பொழுதாவது  (இ) அடிக்கடி   
(ஈ) மிக அடிக்கடி  (உ) எப்பொழுதும்

## குறிப்பேடு V: குடும்ப ஒத்துழைப்பு அளவுகோள்



### நடத்துபவர்க்கு:

**பின்வருவனவற்றை வாசிக்கவும்:** ஒரு குறிப்பிட்ட மக்கள் (அ) குழுவில், ஒரு சிறு குழந்தையின் உயர்விற்கு அவரது குடும்பத்தினர் எவ்வகையில் உதவினார்கள் என்பதை நான் ஒரு பரிசோதனையாக செய்யப்போகிறேன். கடந்த 3-6 மாதங்களில் எங்கள் குடும்பத்தினரில் எங்களுக்கு உதவிய சில மூல நபர்களை கீழே கொடுக்கப்பட்ட அட்டவணையில் தேர்வு செய்யவும். இக்குறிப்பிட்ட நாட்களுக்குள் உங்களுக்கு உதவிய அந்த மூல நபர் உங்கள் குடும்பத்தை சாராதவராக இருந்தால், இல்லை என கொடுக்கப்பட்டுள்ளவற்றை தேர்வு செய்யவும்.

(உ.ம்) உங்கள் குடும்பத்தில் உள்ளவர்கள் கடந்த 3 - 6 மாதங்களில் உங்களுக்கு உதவவில்லை என்றால் எண்(1) ஐ தேர்வு செய் - இது எப்போதுமே உதவவில்லை என்றும், ஒரு சில நேரங்களில் மட்டும் என்றால் எண் (எ) ஐ தேர்வு செய், எப்போதாவது என்றால் எண் (3) ஐயும், பொதுவாக உதவுவார்கள் என்றால் எண் (4) ஐயும், எல்லா நேரங்களிலும் உதவுவார்கள் என்றால் எண்(5) ஐயும் தேர்வு செய்யவும். உங்கள் பெற்றோர் நெடுநாளாக உங்களுடன் இல்லை என்றால் எண் (0) ஐ தேர்வு செய். இக்குறிப்பிட்ட கால அளவில் அவர்கள் உங்களுடன் இல்லை என்பதை தீர்மானிக்கிறது.

	0 அவர்கள் உடல் இல்லை	1 இது வரை உதவியதில்லை	2 சில வேளையில் உதவிஅடுண்டு	3 பொதுவாக உதவுவார்கள்	4 மிகவும் உதவியாக இருப்பார்கள்	5 எல்லா நேரத்திலும் உதவுவார்கள்
1. உங்களது பெற்றோர்கள்						
2. உங்களது கணவரின் பெற்றோர்கள்						
3. பெற்றோர் தவிர மற்ற உறவினர்கள் (இரத்த சொந்தம்)						
4. உங்கள் கணவரின் உறவினர்கள்						
5. கணவர்						
6. நண்பர்கள்						
7. உங்கள் கணவரின் நண்பர்கள்						
8. நீங்கள் பெற்ற குழந்தைகள்						
9. மற்றவர்களின் பெற்றோர்கள்						
10. உடன் வேலை செய்கிறவர்கள்						
11. பெற்றோர் வகையர்						
12. சமூகத்தினர்/குழுமங்கள்						
13. சபை உறுப்பினர்கள் / மந்திரிகள்						
14. உங்களது குடும்ப/குழந்தை மருத்துவர்						

		0 அவர்கள் உடல் இல்லை	1 இது வரை உதவியதில்லை	2 சில வேலையில் உதவிஅடுண்டு	3 பொதுவாக உதவுவார்கள்K	4 மிகவும் உதவியாக இருப்பார்கள்	5 எல்லா நேரத்திலும் உதவுவார்கள்
15.	ஆரம்ப குழந்தை நல நிகழ்ச்சிகள்						
16.	பள்ளிகள்/காப்பு நிலையங்கள்						
17.	சமூதாய பணியாளர்கள்						
18.	தொழில் நுட்ப குழுக்கள் (சுகாதார நிலையம், மனநிலை மருத்துவம்)						

மொத்த மதிப்பெண்கள்

1. உள்ளடக்கிய

2. பிரத்யேக

## குறிப்பேடு - VI

**சுதந்திரமாக அன்றாடவாழ்க்கையின் நடவடிக்கைகளை மதிப்பிடும்**

### கார்ட்ஸ் அளவை

நடவடிக்கைகள் புள்ளிகள்(1 அல்லது 0)	சுதந்திரமாக: (1 புள்ளி) மேற்பார்வை இல்லை, குறித்து காட்டுதல் அல்லது தனிப்பட்ட உதவி`	சார்பு: (0 புள்ளிகள்) மேற்பார்வையிடுதல், குறித்து காட்டுவது, தனிப்பட்ட உதவி அல்லது முழுமையாக கவனித்தல்
குளித்தல் புள்ளிகள்:_____	(1 புள்ளி) முழுமையாக குளித்தல் அல்லது உடலின் ஒரு பகுதியை மட்டும் குளிப்பதற்காக மற்றவர் உதவி தேவை அதாவது பின்புறம், பிறப்புறுப்பு பகுதி அல்லது செயலிழந்த பகுதி	(0 புள்ளிகள்) அதிகபட்ச உடல் பகுதியை நீராடுவதற்காகவும், குளியல் தொட்டி அல்லது குளியல் அறையிலிருந்து வெளியே வருவதற்கும் மற்றவர் உதவி தேவை. முழுமையான குளியல் தேவை.
ஆடை அணிதல் புள்ளிகள்:_____	(1 புள்ளி) மூடிய பெட்டியிலிருந்து துணிகளையும், உள்ளாடைகளையும் எடுத்தல், மற்றும் வெளிப்புற ஆடைகளை அணிவது பொத்தான்கள் உள்பட. ஷூக்களை கட்டுவதில் உதவியை எதிர்பார்க்கலாம்.	(0 புள்ளிகள்) சுயமாக ஆடை அணிவதற்காகவும் அல்லது முழுமையாக ஆடை அணிவதற்காகவும் மற்றவர் உதவி தேவை.
கழிப்பறை பயன்பாடு புள்ளிகள்:_____	(1 புள்ளி) பிறர் உதவி இன்றி கழிப்பறைக்கு செல்வது, ஆடை சரி செய்தல் மற்றும் பிறப்பு உறுப்பை சுத்தம் செய்தல்	(0 புள்ளிகள்) கழிப்பறை செல்லவும், தன்னைத்தானே சுத்தம் செய்யவும், அல்லது படுக்கை மலத்தட்டு உபயோகிக்கவும் அல்லது கம்மோடு பயன்படுத்த உதவி தேவை
இடம் மாற்றுதல் புள்ளிகள்:_____	(1 புள்ளி) பிறர் உதவியின்றி படுக்கையில் இருந்து அல்லது நாற்காலியில் இருந்து மாறுதல். இயந்திரம் மூலம் மாறுவதை ஏற்றுக்கொள்வது	(0 புள்ளிகள்) படுக்கையிலிருந்து நாற்காலிக்கு மாறவும் அல்லது முழுமையாக மாற்றுதலுக்கும் உதவி தேவை.
கட்டுப்பாடு புள்ளிகள்:_____	(1 புள்ளி) சிறுநீர் மற்றும் மலம் கழித்தலில் சுயமாக கட்டுப் படுத்தும் நிலை	(0 புள்ளிகள்) பகுதியாக அல்லது முழுவதுமாக மலம் மற்றும் சிறுநீரை அடக்க முடியாத நிலை.
உண்ணுதல் புள்ளிகள்:_____	(1 புள்ளி) தட்டிலிருந்து வாய்க்கு உணவை உதவியின்றி எடுத்துச் செல்வது. உணவை பிறர் சமைக்கும் நிலை.	(0 புள்ளிகள்) குறைந்த அல்லது முழுவதுமாக உணவு உட்கொள்வதற்கு உதவி தேவை அல்லது பெற்றோர் உணவு அளித்தல் தேவை.

6 புள்ளிகள் குறிப்பது முழுமையான செயல்பாடு, 4 புள்ளிகள் குறிப்பது மிதமாக பாதிப்பு, 2 புள்ளிகளுக்கு குறைவாக இருப்பது கடுமையான செயல்பாடு குறைபாட்டைக் குறிக்கும்.

மொத்த மதிப்பெண்கள்

1. உள்ளடக்கிய

2. பிரத்யேக

**INDIVIDUALIZED PLAN OF CARE**  
**NURSING CARE OF CLIENT WITH DEPRESSION**

<b>S.No.</b>	<b>Diagnosis</b>	<b>Goals</b>	<b>Interventions</b>
1.	Risk for suicide related to depressed mood and feelings of low self worth as evidenced by isolation; expresses that “I don’t deserve to live.	Express desire to live	<ol style="list-style-type: none"> <li>1. Evaluate the clients risk for suicide through careful observation of behaviour and direct questioning (asking for suicidal intent and plans)</li> <li>2. Initiate suicide precautions as needed, according to policy and regulatory standards.</li> <li>3. Refrain from judging or preaching to the client or having a shocked facial expression at the client’s verbalization of suicidal thoughts, feelings or intentions, instead, demonstrate a calm, empathetic confident attitude.</li> <li>4. Listen actively to the client’s story regarding how the client came to the point of suicide, using therapeutic skills such as reflection, clarification, and validation and indicate acceptance of the client’s thoughts and feelings.</li> </ol>
2.	Impaired social interaction related to total dependence on others, evidenced by expression by inadequacy in or absence of significant purpose in life.	Participates actively in all group activities	<ol style="list-style-type: none"> <li>1. Engage client in interaction on a regular basis.</li> <li>2. Initiate brief, frequent contacts with the client throughout the day.</li> <li>3. Comment initially on neutral topics or subjects of common interest (items in the room, daily news topics, the menu)</li> <li>4. Engage the client gradually in interaction with others clients beginning with one to one contacts, progressing toward informal gatherings and</li> </ol>

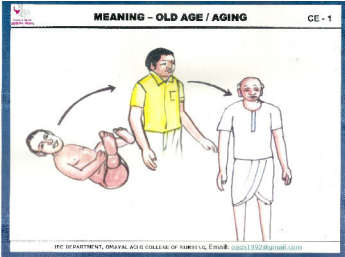
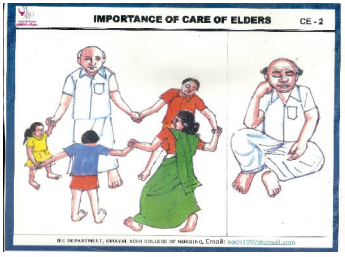


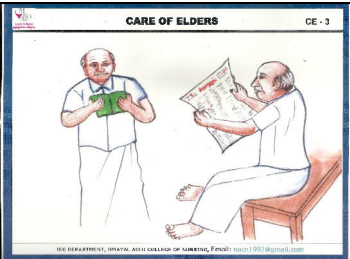
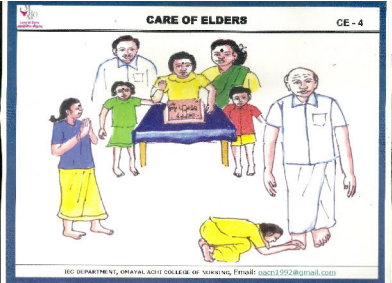
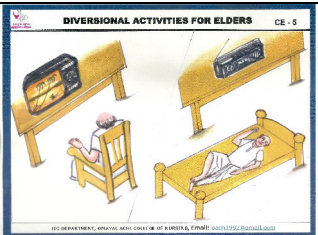
S.No.	Diagnosis	Goals	Interventions
			<p>eventually participating in structured group activities.</p> <p>5. Provide those activities that the client finds rewarding and satisfying.</p>
3.	Chronic low self esteem related to psychosocial stressors as evidenced by verbalization of negative feelings about self and life.	Verbalizes will to live and plans for future.	<p>1. Activate the client to wash, dress, and comb hair and use appropriate toiletries.</p> <p>2. Allow the client vent feelings.</p> <p>3. Accept the client's feelings without fudging or shutting out the client because of your discomfort.</p>
4.	Ineffective coping related to hopelessness, powerlessness as evidenced by demonstrating depletion of coping resources "I'd be better off dead"	Demonstrate effective coping strategies	<p>1. Activate the client to focus on strengths rather than on weakness.</p> <p>2. Assist the client to learn strategies that promote more positive thinking.</p> <p>3. Help the client to prioritize the problems from the most to the least urgent.</p> <p>4. Assist client to find immediate solutions for the most troubling problems.</p> <p>5. Praise the client for adaptive coping: making rational decisions based on accurate judgment.</p>
5.	Hopelessness related to life style of helplessness and dependency evidenced by depressed mood.	Demonstrate hopeful behaviour	<p>1. Conduct a suicide assessment asking the client for plans, methods and access to method.</p> <p>2. Encourage client to verbalize feelings of hopelessness.</p> <p>3. Assist the client to identify behaviours that promote hopelessness.</p> <p style="padding-left: 20px;">a. Morbid thoughts and conversations.</p>

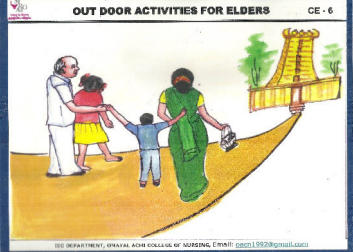
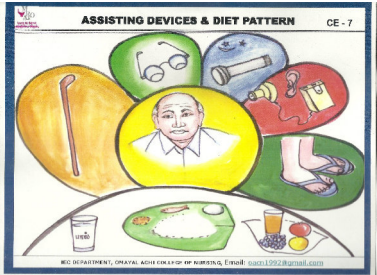
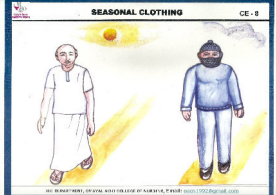
S.No.	Diagnosis	Goals	Interventions
			<ul style="list-style-type: none"> <li>b. Decreased participation in activities.</li> <li>c. Isolation</li> </ul> <p>4. Inform the family that the client needs unconditional love, support and encouragement.</p>
6.	Powerlessness related to life style of helplessness and dependency on others as evidenced by depressed mood.	Makes choices in the management of care	<ul style="list-style-type: none"> <li>1. Identify situations and events that contribute to the client's sense of powerlessness.</li> <li>2. Activate the client to express needs openly. Discuss ways needs can be met without manipulation.</li> <li>3. Assist the family with ideas and methods that empowers the client in the home environment.</li> <li>4. Continue to support and monitor psycho social treatment plans.</li> </ul>
7.	Self care deficit related to weakness, depressed mood as evidenced by inability to fulfill activities of daily living.	Client will accomplish activities of daily living to the best of his or her ability	<p>Provide simple, structured environment.</p> <ul style="list-style-type: none"> <li>1. Identify self care deficit <ul style="list-style-type: none"> <li>a. Provide assistance as required promote independent actions as able.</li> <li>b. Allow plenty of time for client to perform task.</li> <li>c. Provide guidance and support for independent actions by taking the client through the task one step at a time.</li> <li>d. Provide structured schedule of activities that do not change from day to day.</li> <li>e. Activities of daily living should follow home routines as closely</li> </ul> </li> </ul>

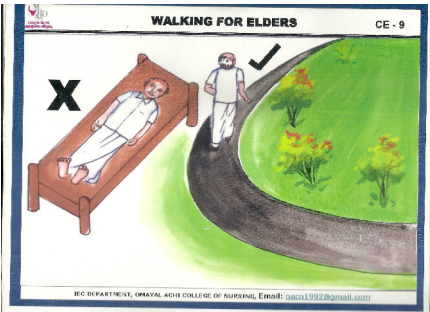
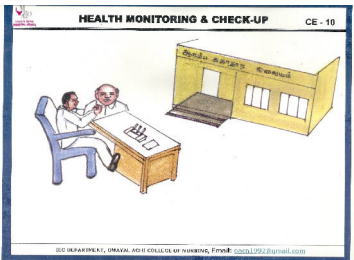
S.No.	Diagnosis	Goals	Interventions
			<p>as possible.</p> <p>f. Allow consistency in assignment of daily caregivers.</p>
8.	<p>Interrupted family process related to functional crisis as evidenced by feelings of stress in relationship with care receiver.</p>	<p>Family demonstrates the ability to work together and accept the changing roles of the members.</p>	<ol style="list-style-type: none"> <li>1. Establish the degree to which the family function and integrity are interrupted as a result of the family members.</li> <li>2. Identify dysfunctional and harmful patterns of communication within the family.</li> <li>3. Involve the family in the therapeutic modalities relevant to its needs such as group therapy.</li> <li>4. Acknowledge the family sacrifice and team work in caring for the clients.</li> <li>5. Praise the family at regular intervals, for contributing to the health and well-being of a loved one.</li> <li>6. Educate the family with information knowledge and available resources in the literature.</li> </ol>

## CARE OF ELDERLY – CONTENTS

S.No.	Objective	Contents	Teachers Activity	Learners Activity
1.	Meaning of old age	<p><b>Meaning of old age / Aging:</b></p> <p>Aging refers to the progressive, irreversible change that takes place in an individual starting from the time of birth until death. According to the WHO – 60 years is specified as the age when an individual is termed as elderly.</p> 		
2.	Importance of caring the elderly	<p><b>Importance of caring the elders:</b></p> <p>It is essential to care for elderly clients and value them as an important member of the family. So as to enable them to cope with their changing physical, psychological, social and functional abilities. An elderly individual, who is</p> 		

S.No.	Objective	Contents	Teachers Activity	Learners Activity
		isolated, rejected or abused by the family or society has a very high tendency of progressing into depression.		
3.	Care of elderly	<p><b>Care of elders:</b></p> <p>The senior citizens should update the recent happening by reading books and newspapers.</p> 		
4.	Care of elderly	<p><b>Care of elders:</b></p>  <p>Value the elders as an asset to the family. Give them importance during the functions and festivals. Honour them during the family functions.</p>		
5.	Diversional activities for elders	<p><b>Diversional activities for elderly:</b></p> <p>Senior citizens can relax and enjoy the time by watching TV and listening to music.</p> 		

S.No.	Objective	Contents	Teachers Activity	Learners Activity
6.	Outdoor activities for elders	<p><b>Outdoor activities for elders:</b></p> <p>Engage the elders by arranging the outdoor activities like visiting the Temple / Mosque / Church as a family.</p> 		
7.	Assisting devices and diet pattern	<p><b>Assisting devices and diet pattern:</b></p> <p>Elders can use the walking stick, spectacles, torch light, hearing aid, skid free chapels to assist themselves. Elders should consume the well balanced diet and adequate fluids to nourish themselves. Easily digestible recipes to be consumed as small and frequent meals. Fiber rich diets like fruits and vegetables to be consumed more to ease the bowel pattern.</p> 		
8.	Seasonal clothing	<p><b>Seasonal clothing:</b></p> <p>During summer season the elders should wear cotton clothes and during the winter season they should</p> 		

S.No.	Objective	Contents	Teachers Activity	Learners Activity
		wear woolen clothings to protect the optimum health.		
9.	Walking for elders	<p><b>Walking for elders:</b></p>  <p>To improve the blood circulation and general well being the elders should go for walking every day and engage themselves in performing the activities of daily living and avoid prolong bed rest.</p>		
10.	Health monitoring & check – up	<p><b>Health monitoring and Check – up:</b></p> <p>Elders should consult the doctors once in 3 months regularly, to rule out the health problems.</p> 		

**Moderate to severe depression:**

**Psychosocial/Non-Pharmacological Treatment and Advice:**

**Structured physical activity programme:** adjunct treatment option for moderate-severe depression. Seniors Citizen Chair Exercise Program Organizing of physical activity moderate duration 3 times per week to strength, balance, coordination, stamina, posture, agility, release of tension, range of motion, respiratory health, core strength, fall prevention, energy, well being and better rest. (Video Assisted Teaching).

**Relaxation training:** The intervention involves training the person in techniques such as breathing exercises and Jacobson's progressive relaxation to elicit the relaxation response. Jacobson's progressive relaxation teaches how to identify and relax specific muscle groups. Usually treatment consists of daily relaxation exercises for atleast 1 – 2 months.

**Breathing exercise:**

S.No.	Steps	Procedure
1.	I	Sit comfortably with your back straight. Put one hand on your chest and the other on your stomach.
2.	II	Breathe in through your nose. The hand on your stomach should rise. The hand on your chest should move very little.
3.	III	Exhale through your mouth, pushing out as much air as you can while contracting your abdominal muscles. The hand on your stomach should move in as you exhale, but your other hand should move very little.
4.	IV	Continue to breathe in through your nose and out through your mouth. Try to inhale enough so that your lower abdomen rises and falls. Count slowly as you exhale.

**Note:** If sitting up any difficulty, try lying on the floor.



### Progressive Muscle Relaxation Technique:

Steps	Procedure
1.	Loosen your clothing, take off your shoes, and get comfortable.
2.	Take a few minutes to relax, breathing in and out in slow, deep breaths.
3.	When you're relaxed and ready to start, shift your attention to your right foot. Take a moment to focus on the way it feels.
4.	Slowly tense the muscles in your right foot, squeezing as tightly as you can. Hold for a count of 10.
5.	Relax your right foot. Focus on the tension flowing away and the way your foot feels as it becomes limp and loose.
6.	Stay in this relaxed state for a moment, breathing deeply and slowly.
7.	When you're relaxed and ready to start, shift your attention to your left foot. Take a moment to focus on the way it feels.
8.	Slowly tense the muscles in your left foot, squeezing as tightly as you can. Hold for a count of 10.
9.	Relax your left foot. Focus on the tension flowing away and the way your foot feels as it becomes limp and loose.
10.	Stay in this relaxed state for a moment, breathing deeply and slowly.
11.	When you're relaxed and ready to start, shift your attention to your right calf. Take a moment to focus on the way it feels.
12.	Slowly tense the muscles in your right calf, squeezing as tightly as you can. Hold for a count of 10.
13.	Relax your right calf.. Focus on the tension flowing away and the way your calf feels as it becomes limp and loose.
14.	Stay in this relaxed state for a moment, breathing deeply and slowly.
15.	When you're relaxed and ready to start, shift your attention to your left calf. Take a moment to focus on the way it feels.
16.	Slowly tense the muscles in your left calf, squeezing as tightly as you can. Hold for a count of 10.
17.	Relax your left calf. Focus on the tension flowing away and the way your calf feels as it becomes limp and loose.
18.	Stay in this relaxed state for a moment, breathing deeply and slowly.

<b>Steps</b>	<b>Procedure</b>
19.	When you're relaxed and ready to start, shift your attention to your right thigh. Take a moment to focus on the way it feels.
20.	Slowly tense the muscles in your right thigh, squeezing as tightly as you can. Hold for a count of 10.
21.	Relax your right thigh. Focus on the tension flowing away and the way your thigh feels as it becomes limp and loose.
22.	Stay in this relaxed state for a moment, breathing deeply and slowly.
23.	When you're relaxed and ready to start, shift your attention to your left thigh. Take a moment to focus on the way it feels.
24.	Slowly tense the muscles in your left thigh, squeezing as tightly as you can. Hold for a count of 10.
25.	Relax your left thigh. Focus on the tension flowing away and the way your thigh feels as it becomes limp and loose.
26.	Stay in this relaxed state for a moment, breathing deeply and slowly.
27.	When you're relaxed and ready to start, shift your attention to your hips and buttocks. Take a moment to focus on the way it feels.
28.	Slowly tense the muscles in your hips and buttocks, squeezing as tightly as you can. Hold for a count of 10.
29.	Relax your hips and buttocks. Focus on the tension flowing away and the way your hips and buttocks feels as it becomes limp and loose.
30.	Stay in this relaxed state for a moment, breathing deeply and slowly.
31.	When you're relaxed and ready to start, shift your attention to your stomach. Take a moment to focus on the way it feels.
32.	Slowly tense the muscles in your stomach, squeezing as tightly as you can. Hold for a count of 10.
33.	Relax your stomach. Focus on the tension flowing away and the way your stomach feels as it becomes limp and loose.
34.	Stay in this relaxed state for a moment, breathing deeply and slowly.
35.	When you're relaxed and ready to start, shift your attention to your chest. Take a moment to focus on the way it feels.
36.	Slowly tense the muscles in your chest, squeezing as tightly as you can. Hold for a count of 10.

<b>Steps</b>	<b>Procedure</b>
37.	Relax your chest. Focus on the tension flowing away and the way your chest feels as it becomes limp and loose.
38.	Stay in this relaxed state for a moment, breathing deeply and slowly.
39.	When you're relaxed and ready to start, shift your attention to your back. Take a moment to focus on the way it feels.
40.	Slowly tense the muscles in your back, squeezing as tightly as you can. Hold for a count of 10.
41.	Relax your back. Focus on the tension flowing away and the way your back feels as it becomes limp and loose.
42.	Stay in this relaxed state for a moment, breathing deeply and slowly.
43.	When you're relaxed and ready to start, shift your attention to your right arm and hand. Take a moment to focus on the way it feels.
44.	Slowly tense the muscles in your right arm and hand, squeezing as tightly as you can. Hold for a count of 10.
45.	Relax your right arm and hand. Focus on the tension flowing away and the way your right arm and hand feels as it becomes limp and loose.
46.	Stay in this relaxed state for a moment, breathing deeply and slowly.
47.	When you're relaxed and ready to start, shift your attention to your left arm and hand. Take a moment to focus on the way it feels.
48.	Slowly tense the muscles in your left arm and hand, squeezing as tightly as you can. Hold for a count of 10.
49.	Relax your left arm and hand. Focus on the tension flowing away and the way your left arm and hand feels as it becomes limp and loose.
50.	Stay in this relaxed state for a moment, breathing deeply and slowly.
51.	When you're relaxed and ready to start, shift your attention to your neck and shoulders. Take a moment to focus on the way it feels.
52.	Slowly tense the muscles in your neck and shoulders, squeezing as tightly as you can. Hold for a count of 10.
53.	Relax your neck and shoulders. Focus on the tension flowing away and the way your neck and shoulders feels as it becomes limp and loose.
54.	Stay in this relaxed state for a moment, breathing deeply and slowly.
55.	When you're relaxed and ready to start, shift your attention to your face. Take

<b>Steps</b>	<b>Procedure</b>
	a moment to focus on the way it feels.
56.	Slowly tense the muscles in your face, squeezing as tightly as you can. Hold for a count of 10.
57.	Relax your face. Focus on the tension flowing away and the way your face feels as it becomes limp and loose.
58.	Stay in this relaxed state for a moment, breathing deeply and slowly.

**Note:** If you are left-handed you may want to begin with your left foot instead.

**Regular follow-up**

- Follow up regularly (e.g. in person at the clinic, by phone or through community health workers).
- Re-assess the person for Improvement (e.g after 4 weeks).

## பாதுபாப்பு தனிப்பட்ட திட்டம்

### மருத்துவ பராமரிப்புத் திட்டம்

வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
1.	தாழ்வு மனப்பான்மை மற்றும் மன உலைச்சல் ஆகியவற்றால் ஏற்படுகின்ற உணர்வினால் தற்கொலைக்கு துணிவது “எனக்கு வாழ்வதற்கு பிடிக்க வில்லை” என்று வெளிப்படுத்துவது	வாழ்வதற்கு விருப்பம் உண்டு என்று வெளிப்படுத்துதல்	<p>1. தற்கொலைக்கு துணிபவர்களின் நடவடிக்கைகளை மிகவும் கவனமாக கூர்ந்து கவனித்து அவர்களிடம் நேர்காணலை மேற்கொண்டு மதிப்பிட வேண்டும் (தற்கொலைக்கான தூண்டுதலையும், திட்டங்களையும் கேட்டறிதல்)</p> <p>2. தேவைப்படும் போது தற்கொலையை தடுப்பு முறைகளை கொள்கை மற்றும் தர ஒழுங்குமுறையாக துவங்க வேண்டும்.</p> <p>3. தற்கொலைக்கு முயற்சித்தவர்களிடம் அறிவுரை கூறுவதோ அல்லது அவர்களை மதிப்பிடுவதையோ தவிர்க்க வேண்டும். தற்கொலைக்கு முயற்சி செய்பவர்கள் தங்கள் எண்ணங்கள், உணர்ச்சிகள் மற்றும் விருப்பங்களை வெளிப்படுத்தும் போது நாம் அதிர்ச்சியான முகபாவனையோடு கேட்பதற்கு பதிலாக அமைதியாக, பரிதாபப்படாமல், நம்பிக்கையான மனோபாவத் தோடு கேட்டறிய வேண்டும்.</p> <p>4. சிகிச்சை திறன்களான பிரதிபலித்தல், தெளிவாக்கல் மற்றும் உறுதியாக்குதல் ஆகியவற்றின் உதவியோடு தற்கொலைக்கு முயற்சித்தவர்கள் தற்கொலை செய்வதற்கான காரணங்களை அதிக ஊக்கத்தோடு கேட்டறிய வேண்டும். மேலும்</p>

வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
			அவர்களின் எண்ணங்களையும், உணர்ச்சிகளையும் ஏற்றுக் கொண்டதற்கான அறிவிப்பை தெரியப்படுத்தவும்.
2.	பலவீனமான சமூக தொடர்புக்கு சம்பந்தமுடைய மற்றவர்களை முழுமையாக சார்ந்திருத்தல், வாழ்க்கையில் முக்கிய நோக்கம் இல்லை என்று வெளிப்படுத்துவது அல்லது நோக்கம் இல்லாமை	அனைத்து குழு நடவடிக்கைகளில் தீவிரமாக பங்கேற்பது	<ol style="list-style-type: none"> <li>1. பாதிக்கப்பட்டவர்களை சரியான அடிப்படையில் தொடர்பில் வைத்திருக்க வேண்டும்.</li> <li>2. ஒரு நாள் முழுவதும் பாதிக்கப்பட்டவர்களை குறுகிய மற்றும் அடிக்கடி தொடர்பில் வைத்திருக்க வேண்டும்.</li> <li>3. பொதுவாக விருப்பமுள்ள நடுநிலை விஷயம் அல்லது சங்கதிகளைப் பற்றி முதலில் விமர்சனம் செய்தல் வேண்டும். (அறைகளில் இருக்கும் பொருள்கள், தினந்தோறும் செய்திகள், சாப்பிடுவதற்கு தயாரிக்கப்பட்டிருக்கும் வகைகள்)</li> <li>4. பாதிக்கப்பட்டவரை படிப்படியாக பாதிக்கப்பட்ட மற்றவர்களோடு பழகச்செய்ய வேண்டும். முதலில் ஒருவரோடு ஒருவர் தொடர்பு கொள்ள வகை செய்ய வேண்டும். முறையாக இல்லாத கூட்டங்களில் தொடங்கி இறுதியாக வடிவமைக்கப்பட்ட செயல் குழுக்களில் பங்கேற்க செய்ய வேண்டும்.</li> <li>5. பாதிக்கப்பட்டவர்களுக்கு திருப்தியும், பயனளிப்பதாக உள்ள செயல்களை அளிக்க வேண்டும்.</li> </ol>
3.	தங்களைப் பற்றியும் தங்கள் வாழ்க்கை பற்றியும் எதிர்மறையான உணர்ச்சிகளை கொண்டிருப்பது அவர்கள் தீராத தாழ்வு மனப்பாண்மை சம்பந்தப்பட்ட உளவியல் மன	வாழ்வும் வாழ்வின் எதிர்கால திட்டங்களை கூறுதல்	<ol style="list-style-type: none"> <li>1. பாதிக்கப்பட்டவர்களை குளிக்க, ஆடை உடுத்திக்கொள்ள தலை சீவிக்கொள்ள மற்றும் ஆடை அலங்காரத்திற்கு தகுந்த பொருள்களை உபயோகிக்க அவர்களாகவே செயல்படுத்த வேண்டும்.</li> </ol>

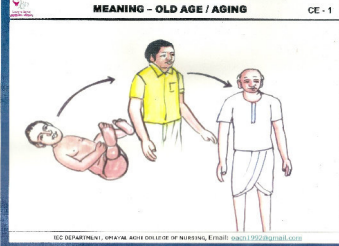
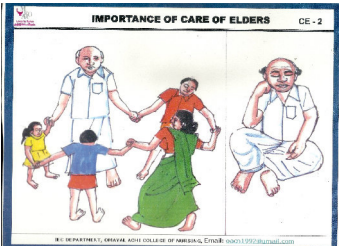
வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
	அழுத்தங்களால் பாதிப்பட்டவர்களாகிறார்கள்		<p>2. பாதிக்கப்பட்டவர்களின் உணர்ச்சிகளை வெளியிட அனுமதிக்க வேண்டும்.</p> <p>3. உங்களுடைய அசௌகரியத்திற்காக பாதிக்கப்பட்டவர்களின் உணர்ச்சிகளை பொய்யாக நினைக்காமல் அல்லது அவர்களின் வாயடைக்காமல் அவர்களின் உணர்ச்சிகளை ஏற்றுக்கொள்ள வேண்டும்.</p>
4.	நம்பிக்கையின்மை தொடர்பான பயனற்ற சமாளிப்பு, சக்தியின்மை ஆகியவை குறைபாடுமிக்க சமாளிக்கும் திறமையால் “நான் இறப்பதே மேல்” என்ற நிலையை காட்டுகிறது.	பயனுள்ள சமாளிக்கும் உத்திகளை செய்துக்காட்டுதல்	<p>1. பாதிக்கப்பட்டவர்களை பலவீனத்தை காட்டிலும் பலத்தையே மையமாக்கி அவர்களை செயல்படுத்த வேண்டும்.</p> <p>2. உறுதியான திட்டங்களுக்கு உயர்வளிக்கக்கூடிய உத்திகளை கற்றுக் கொள்ள உதவிச் செய்ய வேண்டும்.</p> <p>3. பாதிக்கப்பட்டவர்களுக்கு எந்த பிரச்சனை முதன்மையானது எது இறுதியானது என முன்னுரிமைபடுத்த உதவ வேண்டும்.</p> <p>4. அதிக அளவில் பாதிப்பு தரக்கூடிய பிரச்சனைகளுக்கு உடனடியாக தீர்வு காண பாதிக்கப்பட்டவர்களுக்கு உதவ வேண்டும்.</p> <p>5. துள்ளியமான தீர்ப்பை அடிப்படையாகக் கொண்டு நியாயமான தீர்மானம் செய்ததற்கும், ஈடுகொடுப்பதில் ஒத்து போனதற்கும் பாதிக்கப்பட்டவர்களை பாராட்ட வேண்டும்.</p>
5.	வாழ்க்கையின் நடைமுறையில் பிறர் உதவி இல்லாமல் மற்றும் அடுத்தவர்களை சார்ந்திருப்பதில் நம்பிக்கையற்ற நிலை	நம்பிக்கையான நடத்தையை செய்து காண்பித்தல்	<p>1. தற்கொலைக்கான ஒரு மதிப்பீட்டை நடத்தி அதன் மூலம் அவர்களின் திட்டங்களையும், வழிமுறைகளையும் மற்றும் முறைகளை பின்பற்றுவதை கேட்டறிதல்.</p>

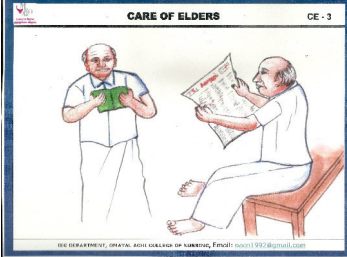
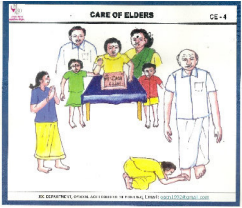
வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
	ஏற்படுவதனால் உற்சாகமற்ற மனநிலை ஏற்படுதல்		<p>2. அவநம்பிக்கையினால் ஏற்படும் உணர்ச்சிகளை பாதிக்கப் பட்டவர்கள் வெளியே சொல்வதற்கு ஊக்குவிக்க வேண்டும்.</p> <p>3. அவநம்பிக்கையை ஊக்குவிக்கக் கூடிய நடத்தைகளை கண்டுக்கொள்ள பாதிக்கப்பட்டவர்களுக்கு உதவ வேண்டும்.</p> <p>அ) ஆரோக்கியமற்ற எண்ணங்கள் மற்றும் உரையாடல்கள் ஆ) குறைந்த நிலையில் பணிகளில் கலந்து கொள்ளுதல் இ) தனிமை ஈ) பாதிக்கப்பட்டவர்களுக்கு நிபந்தனையற்ற அன்பும், ஆதரவும், ஊக்கமும் தேவைப்படுகின்றது என்பதை அவர்கள் குடும்பத்தாருக்கு தெரிவிக்கவும்.</p>
6.	சக்தியற்ற நிலையானது வாழ்க்கை நடைமுறையில் உதவியற்ற மற்றும் மற்றவர்களை சார்ந்திருக்கக் கூடிய நிலையுடன் இணைந்திருக்கும் இதனை உற்சாகமற்ற நிலையின் மூலம் வெளிப்படும்.	பாதுகாப்பு மேற்கொள்வதில் தேர்வு செய்தல்	<p>1. பாதிக்கப்பட்டவர்களுக்கு சக்தியற்ற நிலையை ஏற்படுத்தக் கூடிய சூழ்நிலைகளையும் மற்றும் நிகழ்வுகளையும் கண்டறிதல்</p> <p>2. பாதிக்கப்பட்டவர்களின் தேவைகளை வெளிப்படையாகக் கூற அவர்களை செயல்படுத்த வேண்டும். தேவைகளை பூர்த்தி செய்யும் வழிமுறைகளை மாற்றாமல் இருத்தல் வேண்டும்.</p> <p>3. வீட்டு சூழ்நிலையில் பாதிக்கப்பட்டவர்களுக்கு அதிகாரமளிக்க தகுந்த எண்ணங்களையும் வழிமுறைகளையும் பாதிக்கப் பட்டவரின் குடும்பத்தாருக்கு கூறி உதவ வேண்டும்.</p> <p>4. உளவியல் மற்றும் சமூக ரீதியான சிகிச்சை திட்டங்களை கண்காணித்து அதனை தொடர உறுதுணையாக இருக்க வேண்டும்.</p>

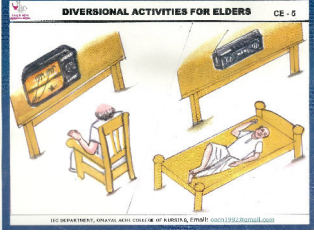

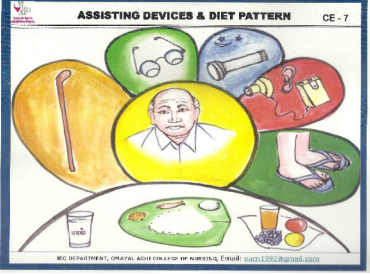


வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
7.	சக்தியற்ற மற்றும் உற்சாகமற்ற மன நிலையுடன் தொடர்புடைய சுயபராமரிப்பு அன்றாட வாழ்வியல் நடவடிக்கைகளை பூர்த்தி செய்ய இயலாத நிலையின் மூலம் புலப்படும்.	பாதிக்கப்பட்டவர்கள் அன்றாட வாழ்வியல் நடவடிக்கைகளை தங்களால் இயன்ற அளவு செம்மையாக செய்வார்கள்	<p>சாதாரணமாக வடிவமைக்கப்பட்ட சூழ்நிலையை அளிக்கவும்:</p> <ol style="list-style-type: none"> <li>1. சுய பராமரிப்பு குறைபாடுகளை கண்டறிதல் <ol style="list-style-type: none"> <li>அ) முடிந்தவரை சுதந்திரமான செயல்களை செய்ய தேவைப்படும் உதவிகளை செய்தல்.</li> <li>ஆ) பாதிக்கப்பட்டவர்களுக்கு கொடுக்கப்பட்ட வேலைகளை செய்து முடிக்க அதிகமான நேரத்தை அளிக்க வேண்டும்.</li> <li>இ) பாதிக்கப்பட்டவர்கள் படிப்படியாக சுதந்திரமான பணிகளை செய்து முடிக்க ஆதரவாகவும் மற்றும் வழிகாட்டியாகவும் இருத்தல் வேண்டும்.</li> <li>ஈ) அன்றாடம் மாறாமல் இருக்கக்கூடிய செயல்களுக்கான அட்டவணையை அளிக்க வேண்டும்.</li> </ol> </li> <li>2.) அன்றாடம் செய்யும் செயல்கள் வீட்டு வேலைகளை தொடர்பு உடையதாக இருக்கும் அளவிற்கு இணையாக இருத்தல் வேண்டும்.</li> <li>ஊ) தினமும் பராமரிப்பவர்களுக்கு வேலையை சீராக அளிக்க வேண்டும்.</li> </ol>
8.	செயல்பாட்டு நெருக்கடியை தொடர்புடைய குறிக்கிடப்பட்ட குடும்ப செயல்முறையானது பாதுகாப்பு பெறுபவர்களுடனான உறவு முறையில் ஏற்பட்ட மன அழுத்த உணர்வால் வெளிப்படும்	ஒன்றாக இணைந்து வேலை செய்தல் மற்றும் குடும்ப அங்கத்தினருடன் ஏற்பட்ட மாறும் நிலையை ஏற்றுக்கொள்வது	<ol style="list-style-type: none"> <li>1. எந்த அளவிற்கு குடும்பம் செயல்படுகிறது மற்றும் எந்த அளவிற்கு ஒருமைப்பாடு தடுக்கப்படுகிறது என்பதை ஊர்ஜிதம் செய்ய வேண்டும்.</li> <li>2. குடும்பத்துள் செயலிழந்த மற்றும் தீங்கு விளையக்கூடிய தகவல் தொடர்பு இருப்பதை கண்டறிய வேண்டும்.</li> </ol>

வ.எண்.	நோயை கண்டறிதல்	குறிக்கோள்	
		<p>போன்றவற்றை குடும்பத்தினர் செயல்படுத்தி காட்டினர்</p>	<p>3. குழுவாக சிகிச்சை அளிப்பதில் தொடர்புடைய சிகிச்சை புலனுணர்வில் குடும்பத்தை இணைக்க வேண்டும்.</p> <p>4. ஒரு குழுவாக பாதிக்கப்பட்டவர்களை பராமரித்தல் மற்றும் குடும்ப தியாகம் ஆகியவற்றை ஒப்புக்கொள்ள வேண்டும்.</p> <p>5. அன்பானவரின் உடல் நலம் மற்றும் நன்றாக இருப்பதற்கு தமது பங்கை அளித்த குடும்பத்தினை வழக்கமான கால இடைவெளியில் புகழ வேண்டும்.</p> <p>6. இலக்கியத்தில் இருக்கும் தகவல், அறிவுத்திறன் மற்றும் வளங்களைப் பற்றி குடும்பத்தாருக்கு கற்பிக்க வேண்டும்.</p>

வ.எண்	குறிக்கோள்	உள்ளடக்கம்	ஆசிரியர் செயல்பாடு	கற்பவர் செயல்பாடு
1.	முதியோர் - பொருள்	<p><b>முதியோர் பொருள்/ வயதானவர்:</b></p> <p>முதியோர் என்பது முன்னேறுகிற, திரும்ப பெறமுடியாத மாறுதல். அது ஒரு தனி மனிதர் பிறந்தது முதல் இறப்பது வரை உள்ள காலகட்டத்தை கொண்டது.</p> <p>உலக சுகாதார மையப்படி ஒரு தனி நபர் 60 வயதை எட்டியவுடன் அவரை முதியவர் என்று குறிக்கிறது.</p>	 <p>MEANING - OLD AGE / AGING CE - 1</p>	
2.	முதியவர்களை பராமரிக்கும் முக்கியத்துவம்	<p><b>முதியவர்களை பராமரிக்கும் முக்கியத்துவம்:</b></p> <p>முதிய வயதுடைய வாடிக்கையாளர்களை பராமரிப்பது முக்கியத்துவமானது. அவர்களை குடும்பத்தில் முக்கியமான உறுப்பினராக மதிப்பிட வேண்டும். இதனால் உடல் ரீதியாகவும், உளவியல் ரீதியாகவும், சமுதாய மற்றும் செயல்பாடு ரீதியாகவும் ஏற்படும் மாறுதல்களை</p>	 <p>IMPORTANCE OF CARE OF ELDERLY CE - 2</p>	

வ.எண்	குறிக்கோள்	உள்ளடக்கம்	ஆசிரியர் செயல்பாடு	கற்பவர் செயல்பாடு
		சமாளிக்கும் திறன்களுக்கு ஏதுவாக இருக்கும். ஒரு முதிய தனி நபரை குடும்பத்தாலோ அல்லது சமுதாயத்தாலோ தனிமைப்படுத்தப்படும், மறுக்கப்படும் அல்லது தவறாக கருதப்பட்டாலோ அவர்கள் மன அழுத்தத்திற்கு தள்ளப்படும் நிலையை ஏற்படுத்தும்.		
3.	முதியவர்களை பராமரித்தல்	<p><b>முதியவர்களை பராமரித்தல்:</b></p> <p>மூத்த குடிமக்கள் புத்தகம் மற்றும் செய்தித்தாள் படிப்பதன் மூலம் அன்றாட நடப்புகளை உடனுக்குடன் அறிந்து கொள்ள முடியும்.</p>	 <p>CARE OF ELDERLS CE - 3</p>	
4.	முதியவர்களை பராமரித்தல்	<p><b>முதியவர்களை பராமரித்தல்:</b></p> <p>முதியவர்களை குடும்பத்தின் ஒரு சொத்தாக மதிப்பிட வேண்டும். முக்கியமான நிகழ்ச்சிகள் மற்றும் திருவிழாக்களின் போது அவர்களுக்கு அதிக முக்கியத்துவம் அளிக்க வேண்டும். குடும்ப நிகழ்ச்சிகளின் போது அவர்களுக்கு மரியாதை செலுத்த வேண்டும்.</p>	 <p>CARE OF ELDERLS CE - 1</p>	

வ.எண்	குறிக்கோள்	உள்ளடக்கம்	ஆசிரியர் செயல்பாடு	கற்பவர் செயல்பாடு
5.	முதியோருக்கான மனதை திசை திருப்பும் செயல்பாடுகள்	<p><b>முதியோருக்கான மனதை திசை திருப்பும் செயல்பாடுகள்:</b></p> <p>மூத்த குடிமக்கள் தொலைக்காட்சி பார்பதன் மூலமும் மற்றும் சங்கீதம் கேட்பதன் மூலமும் சந்தோஷமும் மற்றும் ஆசுவாசப்படுத்திக் கொள்ள முடியும்.</p> 		
6.	முதியோர்களின் வெளிப்புற நடவடிக்கைகள்	<p><b>முதியோர்களின் வெளிப்புற நடவடிக்கைகள்:</b></p> <p>வெளிப்புற நடவடிக்கையாக முதியோர்களை குடும்பத்தினர் கோயில்/மசூதி/தேவாலயங்களுக்கு குடும்பமாக சென்று வர ஏற்பாடு செய்ய வேண்டும்.</p> 		
7.	சாதனங்கள் உதவி மற்றும் உணவு முறை	<p><b>சாதனங்கள் உதவி மற்றும் உணவு முறை:</b></p>  <p>முதியோர்கள் தங்களுக்கு உதவியாக கைத்தடி, கண்ணாடி, டார்ச் லைட், காது கேட்க பயன்படும் கருவி, வழக்காத காலணி ஆகியவற்றை உபயோகிக்கலாம்</p>		

வ.எண்	குறிக்கோள்	உள்ளடக்கம்	ஆசிரியர் செயல்பாடு	கற்பவர் செயல்பாடு
		முதியோர்கள் சரிவிகித உணவு மற்றும் தேவையான அளவு நீராகாரம் எடுத்துக்கொள்வதன் மூலம் தங்களை நல்ல நிலையில் வைத்துக்கொள்ள முடியும். எளிதாக ஜீரணம் ஆகக்கூடிய உணவினை குறைந்த மற்றும் சிரிய கால அளவில் உட்கொள்ள வேண்டும். நார் சத்து நிறைந்த பழங்கள் மற்றும் காய்கறிகளை உட்கொள்வதன் மூலம் குடலை நல்ல நிலையில் வைத்துக்கொள்ள முடியும்.		
8.	பருவகால ஆடைகள்	<p><b>பருவகால ஆடைகள்:</b></p> <p>வெயில் காலத்தில் பருத்தி ஆடையும் மற்றும் குளிர் காலத்தில் கம்பளி ஆடையும் அணிவதன் மூலம் உகந்த உடல் நிலையை பாதுகாத்து கொள்ள முடியும்.</p>		
9.	முதியோர்களின் நடைபயிற்சி	<p><b>முதியோர்களின் நடைபயிற்சி:</b></p> <p>இரத்த ஓட்டத்தை மேம்படுத்தவும் மற்றும் பொது நலன் கருதியும் முதியோர்கள் நாள்தோறும் நடைபயிற்சி மேற்கொள்ள வேண்டும். மேலும் அவர்கள் அன்றாட வாழ்க்கை நடவடிக்கைகளை மேற்கொள்ள வேண்டும் மற்றும் படுக்கையில் நெடுநேரம் ஓய்வெடுப்பதை தவிர்க்க வேண்டும்.</p>		

வ.எண்	குறிக்கோள்	உள்ளடக்கம்	ஆசிரியர் செயல்பாடு	கற்பவர் செயல்பாடு
10.	சுகாதார கண்காணிப்பு மற்றும் உடல் பரிசோதனை	<p><b>சுகாதார கண்காணிப்பு மற்றும் உடல் பரிசோதனை:</b></p> <p>முதியோர்கள் 3 மாதத்திற்கு ஒரு முறை தவறாமல் மருத்துவரை அணுகி உடல் நலம் பற்றி பரிசோதனை செய்துக் கொள்ள வேண்டும். இதன் மூலம் உடல் ரீதியான பிரச்சனைகளை தவிர்க்க முடியும்.</p> 		

**தளர்வு நுட்பம் 1: மன அழுத்தத்திற்கான மூச்சு தியானம்**

தளர்வு நுட்பமானது மிக எளிமையான ஆனால் சக்திவாய்ந்த தளர்வு நுட்பமாகும். இது முழுமையான, தூய்மையான சுவாசத்தை கவனத்தில் கொண்டதாகும். இது கற்றுக்கொள்வதற்கு மிக எளிமையானது மேலும் எந்த இடத்திலும் இதை நடைமுறைப்படுத்தி மன அழுத்தத்தை மிக எளிதாக கட்டுப்பாட்டுக்குள் கொண்டு வர முடியும். இந்த மூச்சு தியான பயிற்சியானது மற்ற தளர்வு நுட்பங்களுக்கு மைல்கல்லாக உள்ளது. இது மற்றய தளர்வு உறுப்புகளான நறுமண சிகிச்சை மற்றும் இசையுடன் இணைக்க முடியும்.

**ஆழ்ந்த சுவாச தியானத்தை நடைமுறைப்படுத்தல்**

வ.எண்	படிகள்	வழி முறைகள்
1.	I	வசதியாக உங்கள் முதுகுபுறம் நேராக இருக்குமாறு அமர வேண்டும். உங்களது ஒரு கையை மார்பிலும் மற்றொரு கையை வயிற்றிலும் வைக்க வேண்டும்.
2.	II	உங்கள் மூக்கின் வழியாக மூச்சை விட வேண்டும். உங்கள் வயிற்றில் வைத்த கை உயர வேண்டும். உங்கள் மார்பில் வைத்த கை சிறிது அளவு நகர வேண்டும்.
3.	III	உங்கள் வயிற்றுப் பகுதியில் உள்ள தசைகள் இறுகுமாறு மூச்சை வாயின் வழியாக வெளியே வேண்டும். உங்கள் வயிற்றின் மேல் உள்ள கை நீங்கள் மூச்சை வெளியே விடும் போது உள்புறமாக நகர வேண்டும். ஆனால் உங்களது இன்னொரு கை சிறிதளவே நகர வேண்டும்.
4.	IV	உங்கள் மூக்கின் வழியாக காற்றை சுவாசித்து மற்றும் உங்கள் வாயின் வழியாக வெளியே விடுவதை தொடர்ந்து செய்ய வேண்டும். போதுமான அளவு காற்றை சுவாசிப்பதனால் உங்களது அடி வயிறானது உயர்வது மற்றும் தாழ்வதுமாக இருக்கும். காற்றை வெளிவிடும் போதும் மெதுவாக கணக்கிட வேண்டும்.

**குறிப்பு:**

உட்கார்ந்த நிலையில் உங்களால் வயிற்றிலிருந்து சுவாசிப்பது கடினமாக இருந்தால் தரையில் படுத்துக் கொண்டு முயற்சி செய்ய வேண்டும். சிறிய புத்தகத்தை உங்களது வயிற்றின் மேல் வைத்து அது மூச்சு உள்ளிழுக்கும் போது உயர்வதும் வெளியிடும் போது தாழ்வதுமாக முயற்சி செய்ய வேண்டும்.



**முற்போக்கான தசை தளர்வு பயிற்சி**

படிகள்	வழி முறைகள்
1.	உங்கள் ஆடைகளை தளர்த்தி, உங்களுடைய காலணிகளை கழற்றிவிட்டு உங்களை வசதியாக வைத்துக்கொள்ளுங்கள்.
2.	உங்களை ஆசுவாசப்படுத்திக்கொள்ள சில நிமிடங்களை எடுத்துக்கொண்ட பிறகு, உள்ளேயும் மற்றும் வெளியேயும் மெதுவாக ஆழமான மூச்சை எடுங்கள்.
3.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய வலது கால் நோக்கி இருக்கவேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில 2 நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
4.	மெதுவாக உங்கள் வலது காலில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
5.	வலது காலை தளர்த்துங்கள். காலில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் கால் தளர்வடைவதை உணருங்கள்.
6.	இந்த தளர்வு நிலையில் சிறிது நேரம் இருந்த பின்னர் மெதுவாகவும் ஆழமாகவும் மூச்சு விடுங்கள்.
7.	நீங்கள் தயாரானவுடன் உங்களது கவனத்தை இடது கால் நோக்கி செலுத்துங்கள்.
8.	அதே மாதிரியான தசை இறுக்கம் மற்றும் தளர்த்தி கொள்ளும் முறையை பின்பற்றுங்கள்.
9.	இதே போல் உங்கள் கவனம் உடலில் மேல் பகுதியை நோக்கி செல்லும் போது மெதுவாக அப்பகுதியில் உள்ள தசைகளை இறுக்கியும் தளர்த்தியும் மெதுவாக செல்லுங்கள்.
10.	இப்பயிற்சி முதல் சில நடைமுறைகளில் படிக்கமாகும். ஆனால் உங்கள் நோக்கம் இல்லாத பகுதியில் உள்ள தசைகளை இறுக்கச்செய்ய முயற்சி செய்யாதீர்கள்.
11.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய இடது கால் நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
12.	மெதுவாக உங்கள் இடது காலில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
13.	இடது காலை தளர்த்துங்கள். காலில் பதற்றம் விட்டுச் செல்வதை உணர

படிகள்	வழி முறைகள்
	கவனத்தை செலுத்துங்கள். உங்கள் கால் தளர்வடைவதை உணருங்கள்.
14.	இந்த தளர்வு நிலையில் சிறிது நேரம் இருந்த பின்னர் மெதுவாகவும் ஆழமாகவும் மூச்சு விடுங்கள்.
15.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய வலது முழங்கால்கால் தசை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
16.	மெதுவாக உங்கள் வலது முழங்கால்கால் தசையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அமுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
17.	வலது முழங்கால்கால் தசையை தளர்த்துங்கள். வலது முழங்காலில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் கால் தளர்வடைவதை உணருங்கள்.
18.	இந்த தளர்வு நிலையில் சிறிது நேரம் இருந்த பின்னர் மெதுவாகவும் ஆழமாகவும் மூச்சு விடுங்கள்.
19.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய இடது முழங்கால்கால் தசை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
20.	மெதுவாக உங்கள் இடது முழங்கால்கால் தசையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அமுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
21.	இடது முழங்கால்கால் தசையை தளர்த்துங்கள். இடது முழங்காலில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் கால் தளர்வடைவதை உணருங்கள்.
22.	இந்த தளர்வு நிலையில் சிறிது நேரம் இருந்த பின்னர் மெதுவாகவும் ஆழமாகவும் மூச்சு விடுங்கள்.
23.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய வலது தொடையை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
24.	மெதுவாக உங்கள் வலது தொடையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அமுத்துங்கள். 10 எண்ணும்

படிகள்	வழி முறைகள்
	வரை அவ்வாறு செய்யுங்கள்.
25.	வலது தொடையை தளர்த்துங்கள். வலது தொடையில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் வலது தொடை தளர்வடைவதை உணருங்கள்.
26.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய இடது தொடையை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
27.	மெதுவாக உங்கள் இடது தொடையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
28.	இடது தொடையை தளர்த்துங்கள். இடது தொடையில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் தொடை தளர்வடைவதை உணருங்கள்.
29.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய இடது மற்றும் பிட்டம் நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
30.	மெதுவாக உங்கள் இடது மற்றும் பிட்டத்தில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
31.	இடது மற்றும் பிட்டத்தை தளர்த்துங்கள். இடது மற்றும் பிட்டத்தில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் இடது மற்றும் பிட்டம் தளர்வடைவதை உணருங்கள்.
32.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய வயிற்றை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
33.	மெதுவாக உங்கள் வயிற்றில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
34.	வயிற்றை தளர்த்துங்கள். வயிற்றில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் வயிறு தளர்வடைவதை உணருங்கள்.
35.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள்

படிகள்	வழி முறைகள்
	கவனத்தை உங்களுடைய மார்பை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
36.	மெதுவாக உங்கள் மார்பில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
37.	மார்பை தளர்த்துங்கள். மார்பில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் மார்பு தளர்வடைவதை உணருங்கள்.
38.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய பின் புறத்தை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
39	மெதுவாக உங்கள் பின்புறத்தில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
40.	பின்புறத்தை தளர்த்துங்கள். பின்புறத்தில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் பின்புறம் தளர்வடைவதை உணருங்கள்.
41.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய வலது கையை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
42.	மெதுவாக உங்கள் வலது கையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
43.	வலது கையை தளர்த்துங்கள். வலது கையில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் வலது கை தளர்வடைவதை உணருங்கள்.
44.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய இடது கையை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சிலநிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
45.	மெதுவாக உங்கள் இடது கையில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
46.	இடது கையை தளர்த்துங்கள். இடது கையில் பதற்றம் விட்டுச் செல்வதை

படிகள்	வழி முறைகள்
	உணர கவனத்தை செலுத்துங்கள். உங்கள் இடது கை தளர்வடைவதை உணருங்கள்.
47.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய கழுத்து மற்றும் தோளை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
48.	மெதுவாக உங்கள் கழுத்து மற்றும் தோள் தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
49.	கழுத்து மற்றும் தோளை தளர்த்துங்கள். கழுத்து மற்றும் தோளில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் கழுத்து மற்றும் தோள் தளர்வடைவதை உணருங்கள்.
50.	நீங்கள் தளர்வு நிலையை அடைந்து ஆரம்பிக்க தயாரானவுடன் உங்கள் கவனத்தை உங்களுடைய முகத்தை நோக்கி இருக்க வேண்டும். அதை உணரும் வகையில் கவனத்தை செலுத்த சில நிமிட நேரத்தை எடுத்துக்கொள்ளுங்கள்.
51.	மெதுவாக உங்கள் முகத்தில் உள்ள தசைகளை இறுக்கமாக்கி, உங்களால் முடிந்த வரை அதை இறுக்கமாக அழுத்துங்கள். 10 எண்ணும் வரை அவ்வாறு செய்யுங்கள்.
52.	முகத்தை தளர்த்துங்கள். முகத்தில் பதற்றம் விட்டுச் செல்வதை உணர கவனத்தை செலுத்துங்கள். உங்கள் முகம் தளர்வடைவதை உணருங்கள்.

**குறிப்பு:** நீங்கள் இடது கை பழக்கம் உள்ளவராக இருந்தால் இடது காலில் தொடங்க வேண்டும்.