AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF NURSING STRATEGIES ON QUALITY OF LIFE AMONG ELDERLY LIVING IN SELECTED OLD AGE HOMES AT CHENNAI.

By

Mrs.P.Malathi

A dissertation submitted to

THE TAMILNADU DR.MGR MEDICAL UNIVERSITY, CHENNAI.

In the partial fullfilment of the

REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN PSYCHIATRIC (MENTAL HEALTH) NURSING

APRIL 2012

AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF NURSING STRATEGIES ON QUALITY OF LIFE AMONG ELDERLY LIVING IN SELECTED OLD AGE HOMES AT CHENNAI.

Approved by dissertation committee on 10.01.2011

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"Still your mind in me; still yourself in me;

without a doubt you still be united with me;

lord of love dwelling in your heart, work and everything of you!"

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ABSTRACT

Introduction: Aging compromises the physical and psychological faculties of elderly. Deficits in the quality of social relationships lead to feelings of isolation and loneliness in elderly which is a risk factor for poor physical and mental health.

Aims: (a) To assess the level of quality of life (QOL) among experimental and control group in the pre and post test. (b) To determine the effectiveness of nursing strategies among experimental and control group. (c) To associate the level of quality of life with selected demographic variables in experimental group.

Methodology: An experimental study was done using Modified WHOQOL-BREF scale in two settings. A total of 30 samples were selected by simple random sampling in each setting. Intervention was given to experimental group which included physical exercise, group work and recreational activities for about two weeks. Data was analyzed with descriptive and inferential statistics.

Results: About 19(63%) participants in experimental group and 24(80%) in control group had poor QOL in the pre test. The mean overall QOL of experimental group was 57.9 in the post test which was 36.1 in the pre test. There was a significant difference ($p>0.001$) in the level of QOL among experimental group before and after the nursing strategies. There was a significant difference ($p>0.001$) in the level of QOL between experimental and control group after the nursing strategies. There was a significant association ($p>0.05$) between age, educational status, monthly income, duration of stay at old age home and the level of QOL in experimental group.

Conclusion: Structured program of activities would be helpful for the elderly in order to overcome the loneliness and for the better QOL.

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2.3.2011

To
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Annai Illam old age home,
No.34, east mada street,
Mylapore,
Chennai.

Madam,

This is to bring to your kind information, that our M. Sc., (N) I year student Ms. P. Malathi has to conduct her PG dissertation, as a part of her curriculum requirement at your esteemed institution.

I request you to kindly permit her for the same.

Thanking you,

Yours truly,
2.3.11

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Enclosed:
1. Methodology
2. Tool for the study

Permit to Do your Study

For ANNAI ILLAM
Secretary

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2.3.2011

To
The Administrator,
Don Bosco Beatitudes social welfare centre,
Vyasarpadi,
Chennai.

Madam,

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For DONBOSCO OLD AGE HOME

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CERTIFICATE

This is to certify that the dissertation titled "A study to assess the effectiveness of nursing strategies on QOL among elderly living at selected old age homes at Chennai" is submitted for the English correction.

SIGNATURE OF THE ENGLISH GUIDE: R. Sh

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CONTENT VALIDITY CERTIFICATE

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Date: 8/3/14

Designation: Professor in Nursing.

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CONTENT VALIDITY CERTIFICATE

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CHAPTER-I
INTRODUCTION

"IT IS NOT SUFFICIENT TO ADD

YEARS TO LIFE; BUT

IT IS MORE IMPORTANT TO ADD

LIFE TO YEARS"- WHO

Human life is divided and understood at different stages such as infancy, babyhood, childhood, adolescence, adulthood and old age. Aging is a fact of life which does not take place all of a sudden. With aging morphological, physiological and psychological changes occur. It would affect the quality of life of elderly which also affects their social life.

Aging is fixed and definite for all individuals in the normal course of a lifetime. Aging is a natural and universal phenomenon. It has a multi dimensional process which is not only a biological and medical concern but also has social, economic, psychological and demographical importance.

Joanne & Giblin (2011) stated the factors that influencing the aging. Those include attitude towards aging, the level of self esteem throughout life, the extent of physical change caused by illness, the presence or absence of emotional support systems and the ability to maintain a degree of control. These factors will determine whether the aging adults will be successful in accomplishing this task. The emotional support, health care, financial support and socializing activities were left unfulfilled for many elderly. The person's

social obligations, privileges and expectations undergo a change in the empty nest stage of the life cycle.

Rowe and Kahn (2010) stated the three components of successful aging such as low probability of disease or disability, high cognitive and physical function capacity and active engagements with life.

Eliopoulas.C (2005) suggested six dimensions of successful aging include, no physical disability over the age of 75 years as rated by a physician, good subjective health assessment i.e good self-ratings of one's health, length of undisabled life, good mental health, objective social support, self-rated life satisfaction in eight domains namely marriage, income-related work, children, friendship and social contacts, hobbies, community service activities, religion and recreation.

Erik Erikson (1963) depicted the "Eight Stages of Life" in his theory on psychosocial development. According to him, the human personality is developed in a series of eight stages that take place from the time of birth and continue on throughout an individual’s life. He characterized old age as a period of "Integrity vs. Despair", during which a person focuses on reflecting back on their life. Those who are unsuccessful during this phase will experience many regrets and will be left with feelings of bitterness and despair. Those who feel proud of their accomplishments will feel a sense of integrity. Looking back with few regrets and a general feeling of satisfaction are the indicators of successful completion of this phase.

Aging compromises the physical and psychological faculties of elderly so they need and seek enhanced family support. Socioeconomic and demographic transformations restraint families' ability to care the elderly at home. This gap in demand and provision of care and support of the elderly is bridged to some extend by long-term care institutions like Old Age Homes.

WHO (2011) announced the ten facts of aging. That includes around the world old age is the fastest growing age group, population aging raises special challenges for the developing countries, increasing life expectancy, inequalities in health, need for training the health care providers about aging issues, policies to protect elderly during emergencies, increased risk of falls and increasing elder abuse.

Sonya & Louise (2011) stated that social engagement and meaningful relationships are the critical determinants of the quality of life of elderly. Deficits in the quality of these social relationships lead to feelings of isolation and loneliness in elderly which is a risk factor for poor physical and mental health. It is important that the gerontological nurses need to develop strategies for the management of loneliness in aged care residents.

BACKGROUND OF THE STUDY

WHO (2002) stated that growing population of aging challenges the society to adapt, in order to maximize the health and functional capacity of older people as well as their social participation and security. As one grows older, the key goal of the individuals and policy makers should be maintaining autonomy and independence. Active aging allows people to realize their potential for physical, social and mental wellbeing throughout

the life course and to participate in society, while providing them with adequate protection, security and care when they need.

The life expectancy is also lengthening. As life expectancy continues to rise, one of the greatest challenges of public health is to improve the quality of life in later years. Life expectancy rose rapidly due to improvements in public health, nutrition and medicine.

According to ***World Development Indicators (2008),*** the average life expectancy of world is 68.9 years. Life expectancy of an Indian is 63.7 years which was 40 years in 1960.

According to ***CIA World Fact book (2011)*** estimation, average life expectancy of an Indian at birth is 69.89, for an Indian male 67.46 and of an Indian female 72.61.

National Institute on Aging (2010) stated that there are 580 million people aged above 60 years of age around the world. Among them, 60% of elderly are in developing countries. This figure is expected to rise to 700 million by 2020.

In India, according to 2001 census, the elderly population was 75.3 million which was 7.43 % of the total population. This is expected to rise to 137 million in 2021, 179 million in 2031 and further to 301 million in 2051. According to 2011 census, Tamilnadu had 6 crore elderly population.

Bruce and Yuri (2006) stated that the ultimate objective of the successful aging is to improve the quality of life (QOL) among the elderly.

Quality of life is an universally desired outcome that is essential to human health. Quality of life is described often with both objective and subjective dimensions. The elderly people evaluate their quality of life on the basis of social contacts, dependency, health, material circumstances and social comparisons.

The World Health Organization Quality of Life group defined quality of life as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”.

Wold (2008) stated that among the older population, poor self concept, depression and other negative feelings are commonly seen. Studies have shown that the percentage of older adults experiencing physical and mental health problems appears to be higher than among other age groups.

Elliopoulas (2005) stated that many myths prevail regarding mental health and the elderly. Many people believe that loss of mental functioning, senility or mental incompetence is a natural part of old age. Nurses can play a significant role in ensuring that the myths and realities of mental health in old age are understood.

According to ***WHO (2005),*** 236 elderly per one lakh population suffer from mental illness around the world. National Institute of mental health (2001) projects 15 million older adults will need mental health services by the year 2030. Advances in science and technology are enabling people to

live longer but at the same time chronic illnesses have a greater impact on quality of life.

NEED FOR THE STUDY

The aging process happens during an individual's lifespan. All are involved in this process and none can escape it. When one is young, aging is associated with growth, maturation, and discovery. Many human abilities peak before 30years of age, while other abilities continue to grow throughout the life. The great majority of those over 65 years of age are healthy, happy and fully independent with adequate support systems.

Mathew (2011) stated that aging is affected by genetic and environmental factors. Although the genetic factors are unalterable, the environmental factors can be modified. Through that, mental and physical capabilities will be maintained that will result in better QOL.

Globally, persons aged 60 years and older are projected to increase from 376 million in 1980 to 1121 million in the year 2025. Centre for Development Studies estimated that the current elderly population of Tamilnadu is six crore. By 2020, Tamilnadu will have higher proportion of elderly (13.65%). Since our country is anticipating a further increase in proportion of elderly, it is important to evolve programs to deal with these emerging grey problems.

The traditional norms and values of Indian society laid stress on showing respect and providing care for the elderly. Consequently, the older members of the family were normally taken care in the family itself. The

family, commonly the joint family type and social networks provided an appropriate environment in which the elderly spent their lives. But now the condition of senior citizens is substandard. Children have forgotten their moral values, culture and even love for their parents. They have become so busy in their lives that they do not have time to take care of their parents.

The advent of modernization, industrialization, urbanization and occupational differentiation vested authority with elderly. These have led to defiance and decline of respect for elders and eroded the traditional values among the members of younger generation. Although the nation develops economically and modernize in other aspects, family support and care of the elderly are unlikely to disappear in the near future.

Some old people are put in homes for the aged and are conveniently forgotten by their children. While the government has built special homes for the elderly and provides them the care they need, it is no substitute for one's own home. These homes are for those who are childless and do not have anyone to look after them. Surprisingly, in the homes for the aged, there are many inmates who are put there as their children find them as a burden.

Elderly are at somewhat greater risk than younger age groups for the development or recurrence of mental health problems. Around the world, one in four elderly has a significant mental disorder. Yet despite the high prevalence of psychiatric disorder and mental health problems in later life, elderly remain vastly underserved by the current mental health system.

Higher age often brings about health problems and decrease in functional capacity. This means that we have a growing number of elderly living with chronic diseases, health problems and decreasing capacity. For these people, the goal of health care cannot be simply freedom from disease. The health care providers should help these people to live a good life as possible despite their illnesses and decreasing capacities.

With all these demographic trends of aging, the health professionals will be challenged to design strategies that address the higher prevalence of illness within the aging population. Many chronic conditions found among elderly can be managed, limited and even can be prevented. Elderly are more likely to maintain good health and functional independence if appropriate community based support services are available.

Meera (2009) stated that the risk of depression among elderly increases with other illnesses and when their ability to function becomes limited. In old age, depression and depressive symptoms constitute a common mental health disorder. Elderly most often have depressive symptoms that do not meet the diagnostic criteria laid down. The life transition involved in institutionalization might have profound impact on the psychosocial well being of the elderly.

Hey (1996) intimated that the aged can achieve high level wellness through the promotion of productivity, self actualization, self respect, self determination and continued personal growth. By enabling those to be an active participant in the developmental process will help to improve their quality of life.

Asothai & Vasanti (2011) stated that mental health is as important as physical health for elderly people. Hence it is important to take adequate steps to ensure a sound mental health and avoiding depression, memory loss, and dissatisfaction in life.

A coordinated approach is necessary to ensure the quality of life with reference to their self fulfillment, health, recreation and social interaction. So the investigator felt the necessity to establish the strategies to improve the quality of life of elderly.

STATEMENT OF THE PROBLEM

An experimental study to assess the effectiveness of nursing strategies on quality of life among elderly living in selected old age homes at Chennai.

OBJECTIVES

1) To assess the level of quality of life among experimental and control group in the pre and post test.

2) To determine the effectiveness of nursing strategies among experimental and control group.

3) To associate the level of quality of life with selected demographic variables in experimental group.

OPERATIONAL DEFINITION

1. Effectiveness

It refers to the outcome of nursing strategies which is given to improve the quality of life of elderly. The outcome is measured through modified WHOQOL-BREF scale.

2. Nursing strategies

The nursing strategies are the scheduled interventions in order to improve the quality of life of the elderly in all the four domains namely physical, psychological, social and environmental. It includes physical exercise to enhance physical functioning, group work to enhance socialization, recreation to enhance psychological function and effective utilization of leisure times.

3. Quality of Life

The quality of life means the sense of satisfaction of the elderly in all the domains namely physical, psychological, social and environmental.

4. Elderly

It refers to the population in the age group of 60-80 years residing in elderly homes.

HYPOTHESES

Hypothesis-1

There is a significant difference in the level of QOL of experimental group before and after the nursing strategies.

Hypothesis-2

There is a significant difference in the level of QOL between experimental and control group after the nursing strategies.

Hypothesis-3

There is a significant association between the level of quality of life and selected demographic variables of experimental group.

ASSUMPTIONS

1) The QOL is deteriorated among the elderly who are institutionalized.

2) The poor QOL will lead to late life depression and other mental health problems among the elderly.

3) Scheduled interventions can be helpful to improve the QOL of elderly.

LIMITATIONS

1) Study was conducted only in two settings named Don Bosco Beatitudes old age home at Vyasarpadi and Annai Illam old age home at Mylapore.

2) Sample size was limited to 30 in each setting.

3) The period of data collection was limited to six weeks.

PROJECTED OUTCOME

1) The nursing strategies are helpful in the improvement of QOL of elderly living at old age homes.

2) It brings them the maximum functioning in all the areas such as physical, psychological, social and environmental.

HUMAN RIGHTS PROTECTION

- This study was done after obtained permission from college ethical committee.
- Prior permission was obtained from the administrators of the elderly homes where this study was conducted.
- The participants were explained about the study and oral consent was obtained.

CONCEPTUAL FRAMEWORK

Modified Linzhan's Quality of Life Model

and General Systems Theory

The conceptual framework selected for this study was based on the General Systems Theory developed by Von Ludwig Bertlanfy (1968) and Linzhan's QOL Model (1992). According to the general system theory, a system is a set of components or units interacting with each other within a boundary that filter the kind and the safe of blow of inputs and outputs to and fro in the system.

Systems can be opened or closed. Open systems are open for exchanges of matter, energy and information with their environment from which the system recover input and gives back output in the form of matter, energy and information. There are five components in the system theory.

INPUT

It is any type of information, energy and material that enters the system from environment through its boundaries. In this study, input is assessing the demographic profile and assessing the level of QOL of elderly (60-80years) who is living in selected old age homes.

THROUGHPUT

It is a process that allows the inputs to be changed so that it is useful to the system. In this study, the throughput is implementation of the nursing strategies which has been put forth to improve the various domains of QOL.

OUTPUT

It is any information, energy and material that leave the system and enters the environment through system boundaries. It is varying widely depending on the type and purpose of the system and effectiveness of actual input. In this study, the output is assessing the level of QOL of elderly after the scheduled intervention.

EVALUATION

It is another component of a system which means measuring the success or failure of the output and consequently the effectiveness of system. In this study evaluation includes the effectiveness of nursing strategies on QOL among elderly.

FEEDBACK

It is the information given back to the system to determine whether the purpose or end result of the system has been achieved. Feedback allows this system to monitor its internal functions so that it can reach or increase inputs and throughput. In this study, feedback monitors the adequacy of input and changes in throughput. The functioning of open living system is cyclical which changes constantly.

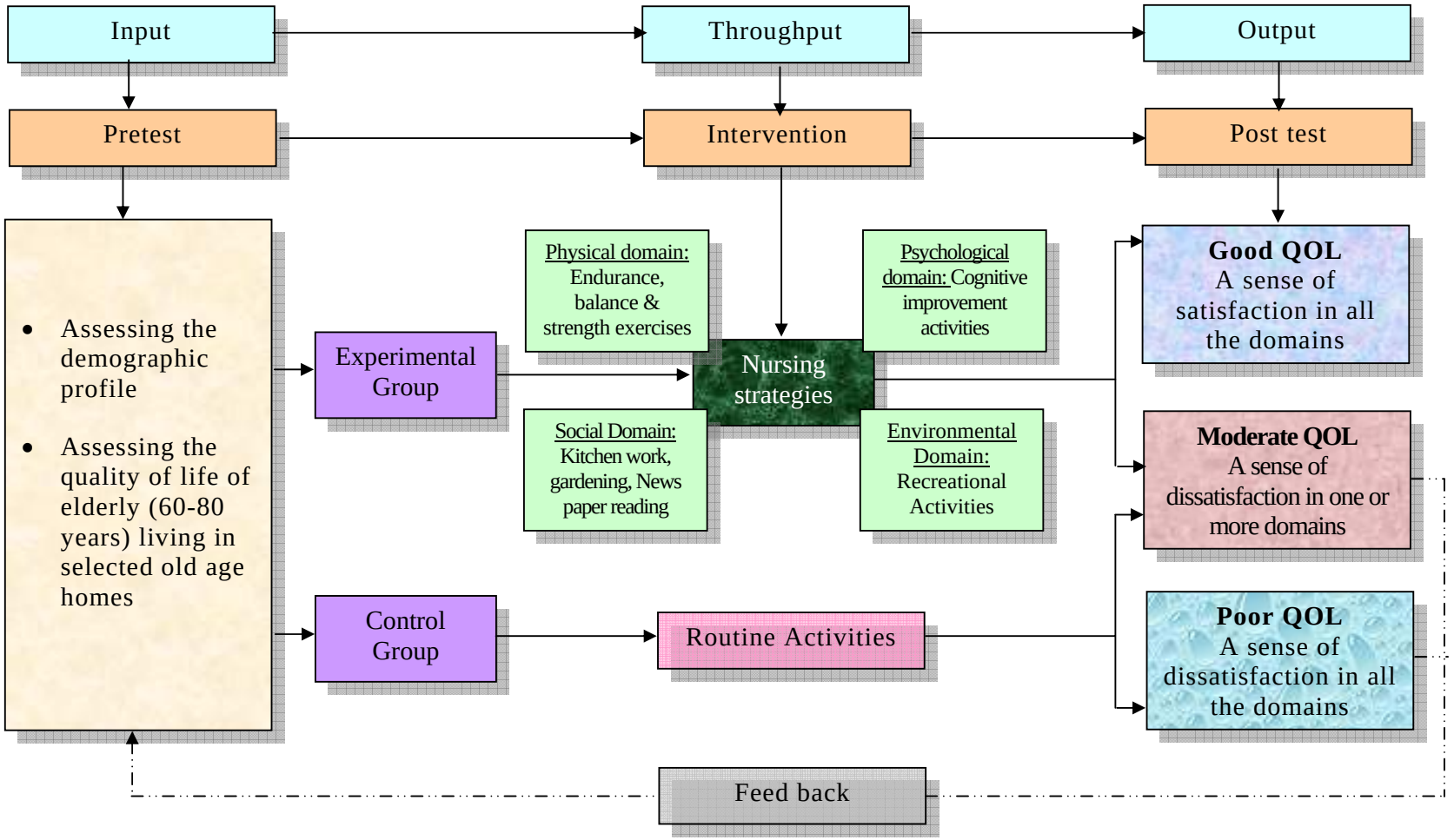

Fig-1: Modified Linzhan's QOL Model (1992) & Von Ludwig Bertlanfy's General Systems Theory

CHAPTER-II
REVIEW OF LITERATURE

According to ***Polit (2007),*** research review literature is a written summary of the state of evidence on a research problem. A literature review helps to lay the foundation and provide context for a study. For this study, literature was gathered from books, journals, internet and newspaper.

After gathered the reviews have been presented under the following headings:

1) Literature related to physical concerns and QOL of elderly

2) Literature related to psychosocial concerns and QOL of elderly

3) Literature related to nursing strategies on elderly QOL

1) Literature related to physical concerns and QOL of elderly

Jayestri (2011) stated that sleep in elderly is characterized by difficulty in falling asleep, trouble in staying asleep and early morning awakening. Pharmacological interventions although effective, have been associated with hazardous side effects. Non-pharmacological interventions like relaxation techniques, exercise, activities during daytime will be feasible and effective in improving sleep thereby quality of life.

Michelle (2011) said that the benefits of physical activity are numerous for the improvement of the quality of life of the elderly. Aerobic exercises, talking with same age people, involving in activity of interest can help an elderly person in his life become more mobile. The health

professionals can help in improving the quality of life for the elderly with simple activity.

Tizu (2011) had done a randomized controlled trial to examine the effectiveness of cognitive behavioral strategies with exercise in reducing the fear of falling among elderly. Data was collected on falls, mobility, social support behavior & satisfaction and QOL. Intervention was given for five months and the results suggested that the cognitive behavioral interventions with exercise helped elderly to enhance their mobility, to manage their fear of falling and their QOL.

Kennath (2009) said that preventive care makes older people healthier. Several new forms of preventive health care for the elderly have been introduced in recent years. Studies showed that they have proved effective. One example is physical activity on prescription, both for preventive purposes and as a form of treatment. Older people are prescribed not just exercise in general but a certain type of physical activity, like balance, strength exercises sometimes in combination with medication.

Smyth.A (2008) stated in her article that sleep is a vital physiological process which helps to maintain mood, memory and cognitive performance. It plays a pivotal role in the normal function of endocrine and immune system. Many elders are not getting adequate sleep.

Etnier et.al., (2006) stated that the physiological and potential cognitive benefits of physical activity in aging. Physical activity enhances cardiovascular fitness thereby increases cerebral blood flow and oxygen

delivery to the brain. It helps to increase neuron formation and maintaining brain volume.

Weissman et.al., (1991) indicated that fewer older adults (1-2%) meet the diagnostic criteria for a major depressive episode than younger adults (3-4%). However, a larger proportion of older adults report clinically significant symptoms of depression that do not meet the diagnostic criteria for an major depressive episode. Also, the rates of depressive symptoms are higher among older adults in inpatient medical centres and long-term care facilities than they are among seniors who live in retirement communities.

Yumin et.al., (2011) conducted a study to examine the effect of functional mobility and balance on health related QOL among elderly people living at home. The study included 122 elderly people aged 65 and over. Statistically significant difference was identified in the health related QOL of participants. It is thought that the inclusion of functional mobility and balance training in elderly care and rehabilitation programs would be useful for the elderly people to develop functional independence and in increasing their health related QOL.

Augusto (2010) had conducted a study to evaluate the effect of physical activity from the program on physical aptitude, functional capacity, corporal balance and QOL among 323 elderly women. Results from the Wilcoxon test demonstrated significant differences for the post-test assessment of functional capacity and general QOL. These results suggested that the physical activities employed in the program resulted in significant improvements in the functional capacity and QOL of elderly women.

Fraga et.al., (2010) had done a study to analyze the impact of a physical activity program (recreation and walking) over the aerobic resistance, the functional autonomy and the quality of life of elderly women. To this experimental study the elderly women (65 ± 6.40 years old) were randomly separated in experimental group (n = 31) and a control group (n = 28). The intervention happened with classes of recreation and walking practice, three times a week, for one hour, for the period of four months. The results revealed significant improvements among the experimental group in the aerobic resistance, functional autonomy and QOL. It was concluded that the systematic physical exercise interferes in a positive way at the autonomy, aerobic resistance and QOL of the elderly women.

Taguchi et.al., (2010) had done an intervention study to see the effects of a 12-month multi component exercise program on physical performance, daily physical activity, and quality of life among elderly people. The subjects consisted of 65 elders, 31 were allocated to the intervention group and 34 to the control group. The intervention group participated in supervised exercises once a week for 12 months and in home-based exercises. The exercise program consisted of various exercises related to flexibility, muscle strength, balance, and aerobic performance. After 12 months of exercise training, results indicated that the intervention group had significant improvements in lower-limb strength and on the sit-and-reach test.

Kramer et.al., (2005) had done a meta analysis of 18 clinical trials on the impact of fitness interventions on cognition of older adults. They examined the type of exercise intervention, duration, length of involvement

and cardiopulmonary improvement. Global cognitive improvements were noted in experimental group. It shows that cognitive function is preserved by physical activities.

Suzuki et.al., (2004) had conducted a randomized controlled trial of exercise intervention for the prevention of falls in community-dwelling Japanese elderly women. Fifty-two subjects who expressed a wish to participate in the trial were randomized, 28 to an exercise-intervention group and 24 to a control group. The intervention group attended a six month program of fall prevention exercise classes aimed at improving leg strength, balance, and walking ability; this was supplemented by a home-based exercise program that focused on leg strength. Participants showed significant improvements in tandem walk and functional reach after the intervention program, with enhanced self confidence. At the 8-month follow-up, the proportion of women with falls was 13.6% in the intervention group and 40.9% in the control group. It was concluded that a moderate exercise intervention program plus a home-based program significantly decreases the incidence of falls in both the short and the long term, contributing to improved health and quality of life in the elderly.

2) *Literature related to psychosocial concerns and QOL of elderly*

Anis (2011) suggested that making small, healthy lifestyle changes and involvement in meaningful activities are critical to healthy aging. Small day-to-day changes can result in measurable improvements in quality of life. Guided by lifestyle advisors, seniors participating in the study made small, sustainable changes in their routines (such as visiting a museum with a friend

once a week) that led to measurable gains in quality of life, including lower rates of depression and better reported satisfaction with life.

Carvel (2009) stated that quality of life getting worse for older people and effects of age discrimination, poverty and neglect worse than in previous year. A poll of more than 1,000 people over 65years was taken. Among the participants, 24% said their quality of life had deteriorated in the last 12 months. A further 66% of older people said their life had not improved at all. Fifty-two per cent said that people-planning services do not pay enough attention to older people and 11% said they were lonely.

Andrea (2008) stated that the geriatric nurses must develop multidimensional cognitive structures to maintain cognitive health and vitality of elderly. Effective strategies identified for promoting cognitive health and vitality are categorized as follows: prevention and management of chronic conditions, nutrition, physical activity, mental activity, and social engagement.

Hendry et.al., (2006) indicated that The National Institutes of Health experts from the Aging, Mental health, and Neurological diseases and Stroke have identified a need for research on healthy aging. The expert panel called for research in four key areas such as cognitive activity, physical activity, social engagement and nutrition for improved quality of life of elderly.

Salthouse (2006) stated that elderly with cognitively stimulating leisure activities like chess and board games, crossword puzzles maintain

preferable memory and reasoning in their remaining life. This would help them to live independently.

Yeolekar (2005) indicated that concurrent with the advancement of geriatric medicine/services arise an issue of perplexing dilemma of longevity and compromised quality of life that needs to be considered and resolved to the extent possible. All in all, the medical/health and social service institutions in the country need to prepare for the demands of care of the frail/disabled senior citizens to minimize the gap between the longevity and associated poorer quality of life.

Lowry & Ryan.A (2003) stated that recreational therapy is a concept of meeting the patient's psychological and social needs through meaningful daily activities. Recreation, play or work, no matter what word is used to describe activity; activities are an essential part of an individual's life. In adult life meaningful activities are just as vital as this early type of play to prevent boredom, isolation and aggression.

Glass & Berkman (2003) stated that many studies have been done on socialization and aging. The newest study revealed that a person cannot acquire social skills without a life-long exposure to social situations. As one is growing old, the circle of friends usually becomes smaller. The reason for this is that friends can pass away or become incapacitated to a point of not being able to drive. Senior centers can be established to help ease the transition of aging. They can plan activities such as exercise, meals, games, and trips. Engage the elder in learning a new language, any type of brain stimulation game, being a volunteer at local soup kitchens or libraries, join

other social groups, such as church or civic organizations where social interaction is certainly more prevalent than sitting at home.

Pitkala K.H (2011) had done a randomized controlled trial to see the effects of Socially Stimulating Group Intervention on lonely older people's cognition. The three month intervention was given to two hundred and thirty five participants with the aim of enhancing interaction and friendships between participants and to socially stimulate them. Group intervention which included three types of activities depending on the participants' interests: 1) therapeutic writing 2) group exercise and 3) art experiences were given**.** The dimension of mental function in the experimental group showed significant improvement at 12 months in the intervention group compared with the control group. It was concluded that psychosocial group intervention improved lonely older people's cognition.

Jayestri & Karaline (2011) had done a descriptive study among the elderly to identify the reasons for joining in the old age homes. For this 150 elderly were selected by convenient sampling from various old age homes in and around Pondicherry. It was found that one third of elderly joined the old age home for social security. About 21% were neglected and rejected by the family members. About 87% participants depend upon old age homes as they had no support from their family. It was concluded that the social and family support is reducing for a person as he grows old.

Fernandez (2010) had done a study to analyze the influence of a cognitive training program on 53 elderly with age-related memory loss. The results of cognitive performance have been compared with a control group

consisting of 51 elderly with no cognitive training. Moreover, this research analyzed the relationship between cognitive changes and the variation in the perceived and quality of life of elderly people in both groups. The results showed significant changes in the experimental group, demonstrating improved cognitive performance and quality of life perception.

Rana et.al., (2009) had conducted a study to examine the change in health-related quality of life among elderly persons as a result of health education intervention includes physical activity, advice on healthy food intake, environmental safety, social awareness and other aspects of management. A community-based intervention study was performed in eight randomly selected villages (Intervention: n = 4; Control: n = 4) in rural Bangladesh. A total of 1135 elderly persons were selected for this study. The analyses include 839 participants (Intervention: n = 425; Control: n = 414) who participated in both baseline and post-intervention surveys. This study concluded that provision of community-based health education intervention might be a potential public health initiative to enhance the health related QOL in old age.

Gautam.R (2007) had conducted a study to explore whether participation in leisure, social and religious activities are related to satisfaction with life in older adults of Nepal. A cross-sectional quantitative study of older adults 60 years and over in Nepal was conducted with face-to-face interviews using structured instruments. A convenience sample of 489 community dwelling older adults, 247 men and 242 women, were included in the study. The results saying prayers, watching television and listening to the

radio, and participating in physical activity correlated to lower depression for older men, but only watching television and listening to the radio related to lower rates of depression for women. Socializing with others was related to higher satisfaction with life for men, but for women visiting friends, socializing with others, and watching television and listening to the radio related to improved satisfaction with life. Activity engagement significantly improved mental health in older adults. It was concluded that specific activity participation was a significant correlate of lower levels of depression and higher levels of satisfaction with life among older adults in Nepal.

Kavitha (2007) had done a comparative study on QOL among senior citizens living in home for the aged and in the family set up. For this 50 senior citizens were selected from the home for aged and the family set up. The findings revealed that majority of senior citizens living in the home for the aged reported moderate QOL where as none of the senior citizens in the family set up reported high QOL. Overall mean score regarding QOL was found higher among the senior citizens living in family set up than the senior citizens living in the home for the aged.

Matsuo et.al., (2003) had done effects of activity participation of the elderly on quality of life. Study was conducted with 321 elderly subjects over 65 years of age using a 24-item questionnaire regarding personality and depressive inclination and the visual analogue scale-happiness to measure QOL. The activity participation group was involved in five types of activity: community centre activity course, learning and lecture participation, club activity, elderly manpower service activity and other activities. The QOL of

the activity participation group was significantly higher than the non- activity participation group.

Kutner et.al., (2002) had done cooperative studies of intervention techniques. It was a series of clinical trials of biomedical, behavioural, and environmental interventions to reduce the risks of frailty and injury among the elderly. Reliable assessment of the quality of life reported by the subjects is a central issue in evaluating the interventions. Results suggested that a behavioral, environmental intervention may have a significant impact on an elderly person's sense of well-being.

3) *Literature related to nursing strategies on elderly QOL*

Clark. F et.al., (2011) had done a randomized controlled trial to determine the effectiveness and cost-effectiveness of a preventive lifestyle-based occupational therapy intervention, administered in a variety of community-based sites, in improving mental and physical well-being and cognitive functioning in ethnically diverse older people. Participants included 460 men and women aged 60 years. The intervention group had a significantly greater increment in quality-adjusted life years ($p<0.02$), which was achieved cost-effectively. It was concluded that a lifestyle-oriented occupational therapy intervention has beneficial effects for ethnically diverse older people, cost-effective, is applicable on a wide-scale basis, and promote well-being in older people.

Ruth & Patricia (2011) had conducted a study to assess the effectiveness of garden walking and art therapy to reduce the depression of the elderly. In this study prior to the intervention, 47% of participants had

depression scores in the severe range and 53% in the mild range. At the end of the intervention, none of the participants had scores in the severe range, 89% had scores in the mild range, and 11% had scores in the normal range. This study provided an evidence for nurses wishing to guide older adults in safe, easy, and inexpensive ways to reduce depression.

Graham et.al., (2010) had done a study to assess the effectiveness of memory training activities on better memory, self efficacy, function in instrumental activities of daily living and health promotion among elderly. In this study, majority of the participants were females, 70-75 years old and studied up to primary school. Intervention was given for one year and the results showed that the participants had greater gains on global cognition and had fewer memory complaints. They have concluded that the psychosocial interventions are effective and can be implemented by geropsychiatric nurses as well as general nurses.

Phillips et.al., (2010) had done a study to test the effect of a story telling program, time slips on communication, neuropsychiatric symptoms, and quality of life among institutionalized elderly. Eight weeks intervention was given to experimental group (n = 28) and usual care was given to control group (n = 28). Results indicated that comparing with the control group, the treatment group exhibited significantly higher pleasure at third week ($p < 0.001$), sixth week ($p < 0.001$), and seventh week ($p < 0.05$).

Ya-Chuan (2009) had done a study to determine the effect of group reminiscence on physical function, behavioral competence, and depression among institutionalized elders. The experimental group (n = 21) received six

to eight group reminiscence sessions over two months compared with a routine care control group (n = 24). Results showed a statistical significance among experimental group. He concluded that group reminiscence is a therapeutic intervention for institutionalized elders that can be managed by trained nursing staff. It is a cost-effective approach to improve psychosocial well-being for institutionalized older people.

Bakshi (2008) stated that the effort today is not to heal but to protect aging. The health care scenario demands nurses to determine QOL of elderly and develop supportive care to help them in attaining and maintaining maximum QOL in the process of aging.

Neva.L (2008) had conducted a quasi experimental study to test the effectiveness of a theory based interventional program on self care, life satisfaction, self esteem among 40 elderly for 6 weeks. Elderly people were provided with various activities like education, group activities, reviewing of their life etc. Results indicated that there was significant improvement in their performance of ADL, satisfaction over their life and self esteem. So she concluded that the theory based intervention program was effective.

Chao et.al., (2006) had done a quasi experimental study to describe the effect of group therapy on self esteem and life satisfaction among elderly. Intervention was provided for nine weeks and subjects were assessed after one week. Results indicated that group therapy significantly improves self esteem and life satisfaction. It also enhanced the social interaction of the elderly.

Antony (2006) had conducted an interventional study to assess the QOL of elderly before and after laughter therapy among 60 elderly living at old age homes. The intervention was given for about five weeks and the outcome was measured in terms of improvements in various domains of QOL. Results indicated the statistically significant difference between pre and post test in all domains of QOL. It was concluded that the laugher therapy was effective in improving the QOL.

Victoria et.al., (2004) had done a study to assess the effectiveness of indoor gardening on socialization, activities of daily living and loneliness among elderly. In this study 66 participants were included and intervention was given for about five weeks. The results demonstrated the significant improvement in social interaction and activities of daily living. They concluded that the five weeks program of indoor gardening was more effective in improving the socialization and physical function.

CHAPTER-III
METHODOLOGY

RESEARCH APPROACH

The research approach is a complete plan chosen to carry out the study. The research approach chosen for this study was quantitative approach.

RESEARCH DESIGN

According to ***Polit (2007)*** research design is the researcher's overall plan for obtaining answers to the questions being studied and for handling various challenges to the worth of the study evidence. For this study, true experimental design was chosen.

Group	Pretest	Intervention	Post test
Experimental Group	O1	x	O2
Control Group	O1	–	O2

Keys:

O1 – Pre assessment of level of QOL among experimental and control group.

X – Nursing strategies to improve the QOL

O2 – Post assessment of level of QOL among experimental and control group.

SETTINGS OF THE STUDY

According to ***Polit (2007)*** setting for a research is the context in which the subjects are going to be studied. This study was done in two settings named Don Bosco Beatitudes old age home, Vyasarpadi and Annai Illam old age home at Mylapore. Don Bosco Beatitudes old age home at

Vyasarpadi is situated at 5km from Central Railway Station. This home came into existence in 1965. It was under the control of Don Bosco Beatitudes, an autonomous charitable trust. There were three sisters and one secretary residing in the home to look after the elderly. At the time of study, there were 80 residents. Majority of them were above 60years of age and admitted by their children or voluntarily due to various reasons. The inmates were allowed to be visited by their family on second Saturday of every month. Other than that, social workers used to visit them often throughout the year. There were regular health checks conducted by the management once in six months. There were no scheduled activities available for the elderly except prayer meets.

Another setting was Annai Illam old age home at Mylapore which was situated at 10km from Central Railway station. It was established in the mid 1980s by Mrs.Rani Krishnan, a social worker. It was a private institution for the elderly. It had 43 inmates with one in charge and three servants at the time of study. The inmates were left by their children, their relatives and also some were voluntarily joined. The visitors are allowed to visit the inmates all the days in a year. Medical checkup was a routine for all the inmates once a year and also in need. Television was the only recreation for the inmates.

Among these two settings, Don Bosco Beatitudes old age home at Vyasarpadi was selected as experimental group and Annai Illam old age home at Mylapore was selected as the control group.

POPULATION

A population is the entire aggregation of cases in which a researcher is interested. Population of this study was elderly residing at Donbosco Beatitudes old age home at Vysarpadi and Annai Illam old age home at Mylapore.

SAMPLE

A sample is a subset of population elements. In this study, 30 inmates of Don Bosco Beatitudes old age home and 30 inmates of Annai Illam old age home were selected as samples.

SAMPLING TECHNIQUE

Sampling is the process of selecting a portion of the population to represent the entire population. For this study, simple random sampling technique was used to select the samples (lottery method).

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

Elderly who,

- were between 60-80 years of age.
- understood Tamil or English.
- were willing to participate in the study.

Exclusion criteria

Elderly who

- had acute physical illness.

- were physically and mentally challenged.
- had impaired vision and hearing.
- had degenerative disorders like dementia and Alzheimer's disease and other mental illness.

DESCRIPTION OF THE TOOL

The tool used in this study had two parts as follows:

- **Part 1**: Demographic variables proforma
- **Part 2**: Modified WHOQOL-BREF scale

Part-1: Demographic variables proforma

The demographic variables proforma included age, gender, educational status, marital status, previous occupation, monthly income, number of children, religion, duration of stay at old age home, type of visitors, frequency of visits per year and leisure activities.

Part-2: Modified WH QOL-BREF scale

The brief version of the modified World Health Organization's Quality of Life (WHOQOL-BREF) was used. In this scale, the quality of life was classified under four domains, including two items for general quality of life. The total numbers of items were 20.

The modified WHOQOL-BREF scale had the following items in each domain:

- General QOL - 2 items (Q 1,2)
- Physical domain - 3 items (Q 3,4,5)

- Psychological domain - 6 items (Q 6,7,8,9,10,11)
- Social domain - 2 items (Q 12,13)
- Environmental domain - 7 items (Q 14, 15, 16,17,18,19 and 20).

The items were rated by 5 point Likert scale. This scale contained both positive and negative questions. The total numbers of positive questions were 19 and negative question was one (Q.11). The negative question was rated reversely. The minimum score was 20 which indicated poor quality of life and maximum score was 100 which indicated good quality of life.

SCORE INTERPRETATION

- 68-100 : Good quality of life
- 34-67 : Moderate quality of life
- 20-33 : Poor quality of life

VALIDITY AND RELIABILITY

Content validity was obtained from experts after the necessary modifications made in the tool. Reliability of the tool was checked by test retest method. The r value was 0.86 which indicated good reliability of the tool.

PILOT STUDY

Pilot study was conducted in Don Bosco Beatitudes Old age home and Annai Illam old age home from 7.3.2011 to 21.3.2011 after receiving permission from the administrators of the old age homes. Three elderly who

met inclusion criteria were selected by simple random sampling in both the groups.

The intervention was given to the experimental group at Don Bosco Beatitudes Old age home for seven days and post test was conducted on ninth day for both the group. The results were analyzed and interpreted.

DATA COLLECTION PROCEDURE

The main study was conducted from 4.6.2011 to 15.7.2011. By using the simple random sampling, 30 elderly who met the inclusion criteria were selected from both the experimental and control group.

In the first week, pre test was done by interview method with the demographic variables proforma and modified WHOQOL-BREF scale for the experimental and control group.

The intervention was given to the experimental group for about two weeks. During the intervention period, the participants in the experimental group had been given physical exercise in the morning 6-6.30am, engaged in group works like gardening, newspaper reading and kitchen work from 10-11am. In the evening, from 3-5pm, participants were engaged in indoor and outdoor games, cognitive improvement activities such as memory games, solving puzzles and riddles, painting, drawing and sharing their unforgettable life events with the group.

Post test was done for both the groups in the fifth week by using the same tool.

PLAN FOR DATA ANALYSIS

For the analyzing the data, both the descriptive and inferential statistics were used. The Design chosen was a true experimental design.

S. No	OBJECTIVES	STATISTICAL METHOD	STATISTICAL PROCEDURES
1.	To assess the level of quality of life among experimental and control group in the pre and post test.	Descriptive statistics	Frequency, Percentage distribution, Mean and SD
2.	To determine the effectiveness of nursing strategies among experimental and control group.	Inferential statistics	Paired t test, Independent t test (unpaired t test).
3.	To associate the level of quality of life with selected demographic variables in experimental group.	Inferential statistics	Chi-square test

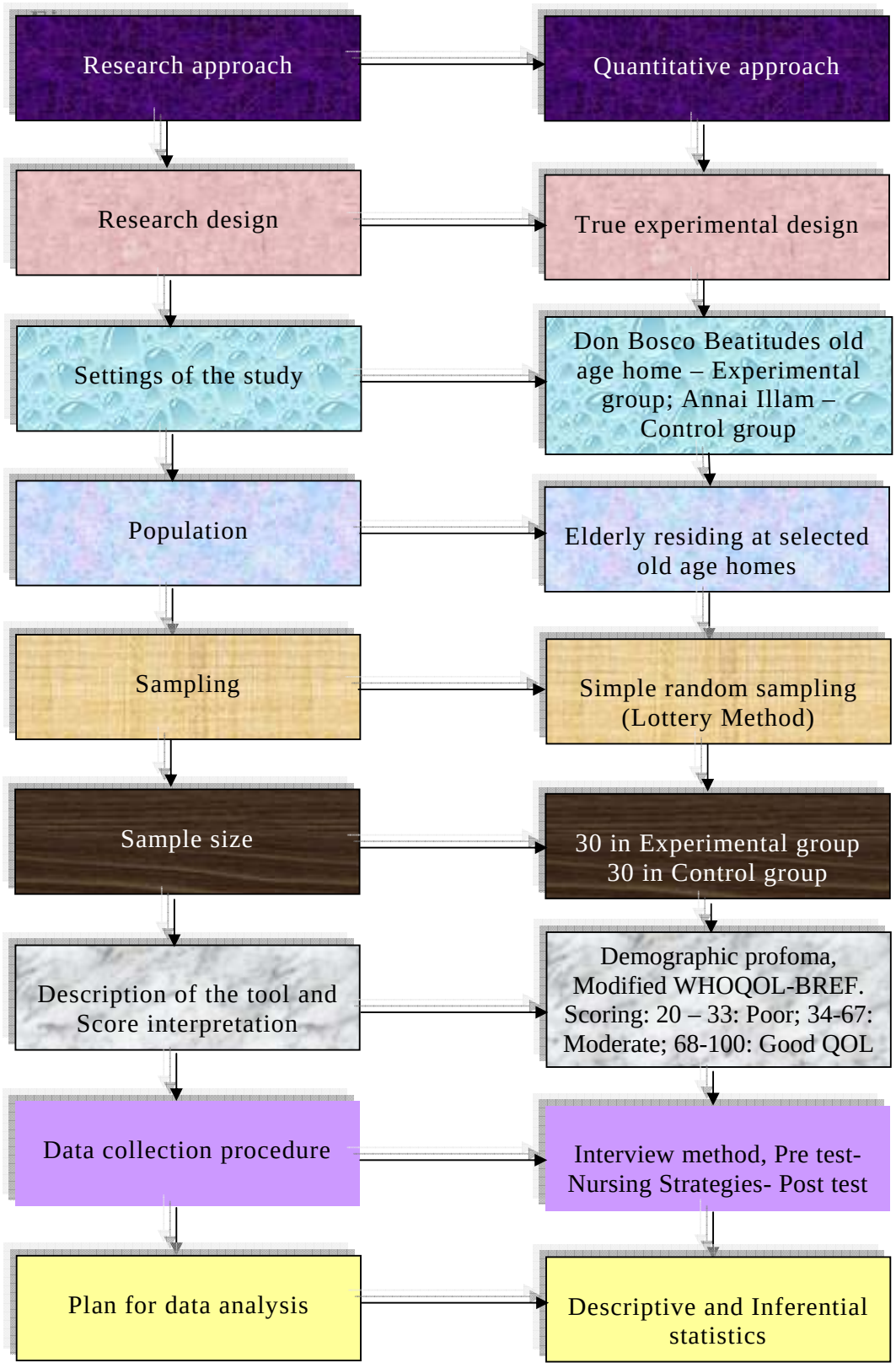

Fig-2: Schematic representation of Research methodology

CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION OF FINDINGS

Statistical analysis is a method for rendering quantitative information which is meaningful and intelligible. This chapter deals with the analysis and interpretation of various data collected for this study.

The data obtained were classified under 3 headings:

- SECTION A : Frequency and percentage distribution of demographic variables of experimental and control group.
- SECTION B : Comparison of pre and post test level of quality of life among experimental and control group.
- SECTION C : Association between selected demographic variables of experimental group and level of quality of life.

SECTION A

Table-1: Frequency & percentage distribution of demographic variables of elderly among experimental and control group

(n=30+30)

S. No	*Demographic Variables*	*Experimental group*		*Control group*		*Chi square Value*
		No	*%*	*No*	*%*	
1	**Age**					
	a) 60-65yrs	12	40	8	27	1.64 df=3;NS
	b) 66-70yrs	12	40	13	43	
	c) 71-75yrs	4	13	7	23	
	d) 76-80yrs	2	7	2	7	
2	**Gender**					
	a) Male	12	40	7	23	2 df=1;NS
	b)Female	18	60	23	77	
3	**Educational status**					
	a) Illiterate	14	47	22	73	4.4 df=3;NS
	b) Primary school	16	53	8	27	
	c) High school	0	0	0	0	
	d) Degree	0	0	0	0	
4	**Marital status**					
	a) Single	1	3	6	20	5.4 df=3;NS
	b) Widow/widower	27	90	22	73	
	c) Divorced	1	3	2	7	
	d) Separated	1	3	0	0	

S. No	*Demographic Variables*	*Experimental group*		*Control group*		*Chi square Value*
		No	*%*	*No*	*%*	
5	**Previous occupation**					
	a) Unemployed	0	0	0	0	3.7
	b) Own business	8	27	7	23	df=4;NS
	c) Govt. employment	0	0	0	0	
	d) Coolie	22	73	23	77	
6	**Monthly income**					
	a) Below Rs.1500	15	50	17	57	3.94
	b) Rs.1501-3000	10	33	13	43	df=3;NS
	c) Rs.3001-4500	5	17	0	0	
	d) Above Rs.4500	0	0	0	0	
7	**Number of children**					
	a) Nil	1	3	11	37	13.2 ***S**
	b) One	6	20	4	13	df=3;
	c) Two	12	40	12	40	
	d) More than two	11	37	3	10	
8	**Religion**					
	a) Hindu	23	77	22	73	0.08
	b) Christian	7	23	8	27	df=3;NS
	c) Muslim	0	0	0	0	
	d) Others	0	0	0	0	

S. No	*Demographic Variables*	*Experimental group*		*Control group*		*Chi square Value*
		No	*%*	*No*	*%*	
9	**Duration of stay at old age home**					3.2 df=2;NS
	a) <1 year	4	13	10	33	
	b) 1-5 years	17	57	14	47	
	c) >5 years	9	30	6	20	
10	**Type of visitors**					15.8***S** df=3;
	a) Children	22	73	1	3	
	b) Relatives	3	10	4	13	
	c) Friends	0	0	1	3	
	d) Others	30	17	30	100	
11	**Frequency of visits/year**					0 df=2;NS
	a) 1-5 times	0	0	0	0	
	b) 5-10 times	0	0	0	0	
	c) >10 times	30	100	30	100	
12	**Leisure activities**					1.2 df=3;NS
	a) Reading books	0	0	0	0	
	b) Watching television	17	57	22	73	
	c) Chatting with friends	10	33	7	24	
	d) Others	3	10	1	3	

*p>0.05

Table 1 shows that among experimental group, majority of the elderly 24 (80%) were belonging to 60-70 years of age, more than half of them 18(60%) were females and 16(53%) attended primary school. Among them majority 27(90%) were widow/ widower and no government employees. Half of the elderly 15(50%) were earning below Rs. 1500. Only 1(3%) had no children. Majority of the elderly 23(77%) were belonging to Hindu religion. Majority 17(57%) were living in the old age home for about 1-5 years. For about 22(73%) of elderly had children as their regular visitors and all of the elderly had visitors more than 10 times in a year. Majority 17(57%) were watching television during their leisure times.

Among control group, majority of the elderly 21(70%) were belonging to 60-70yrs of age group. About 23(77%) were females and 22(73%) were illiterate. Majority of the elderly 22(73%) were widow/ widower. About 23(77%) were coolie workers and 17(57%) earned below Rs.1500. About 12(40%) of them had two children and 22(73%) belonged to Hindu religion. Majority 14(47%) were staying at old age home for 1-5 years. Only 1(3%) had children as their visitors and all the elderly were being visited by others more than 10 times in a year. About 22(73%) were watching television during their leisure time.

The chi square value showed no significance at the level of $p>0.05$ which indicated that the experimental and control group was homogenous.

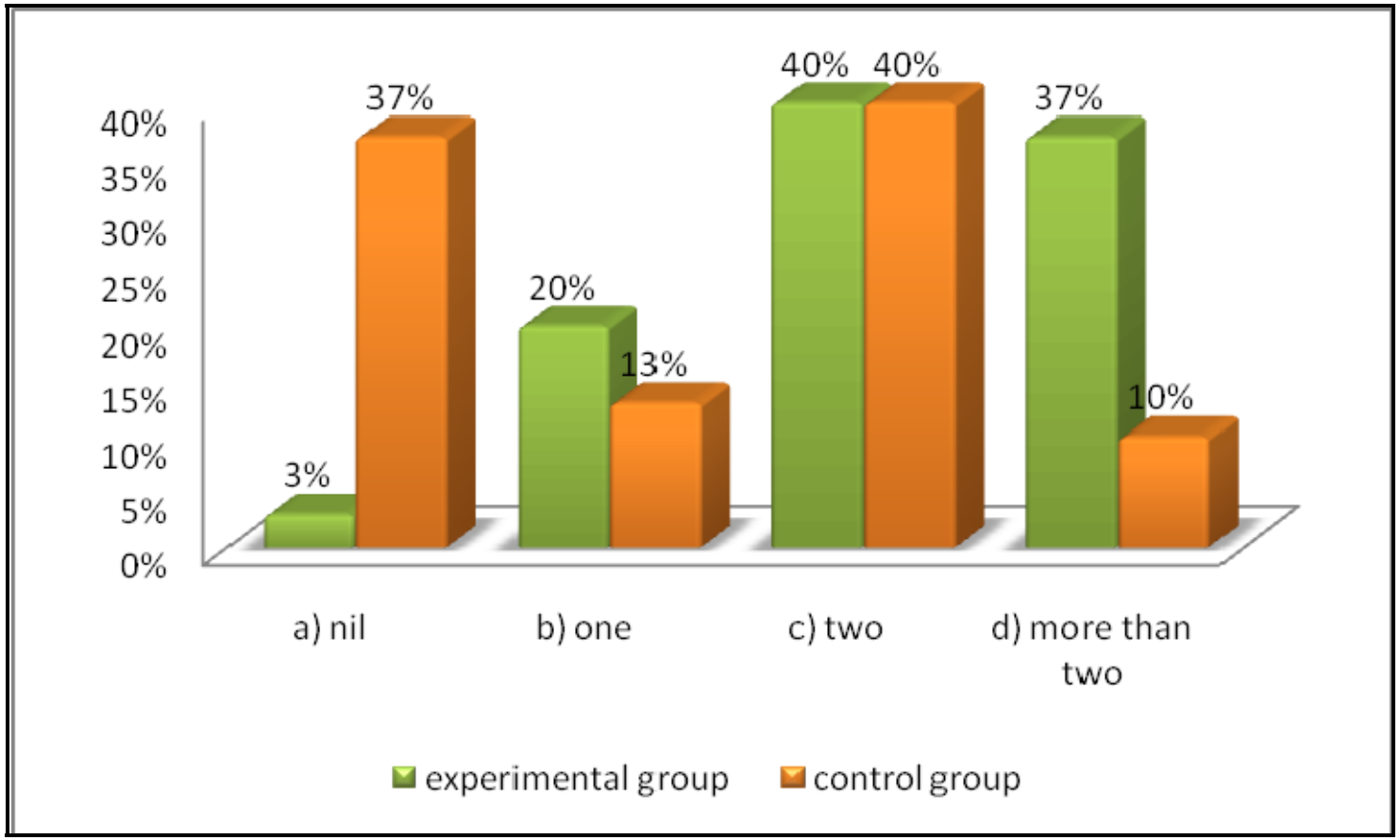

Fig-3: Percentage distribution of number of children among experimental & control group

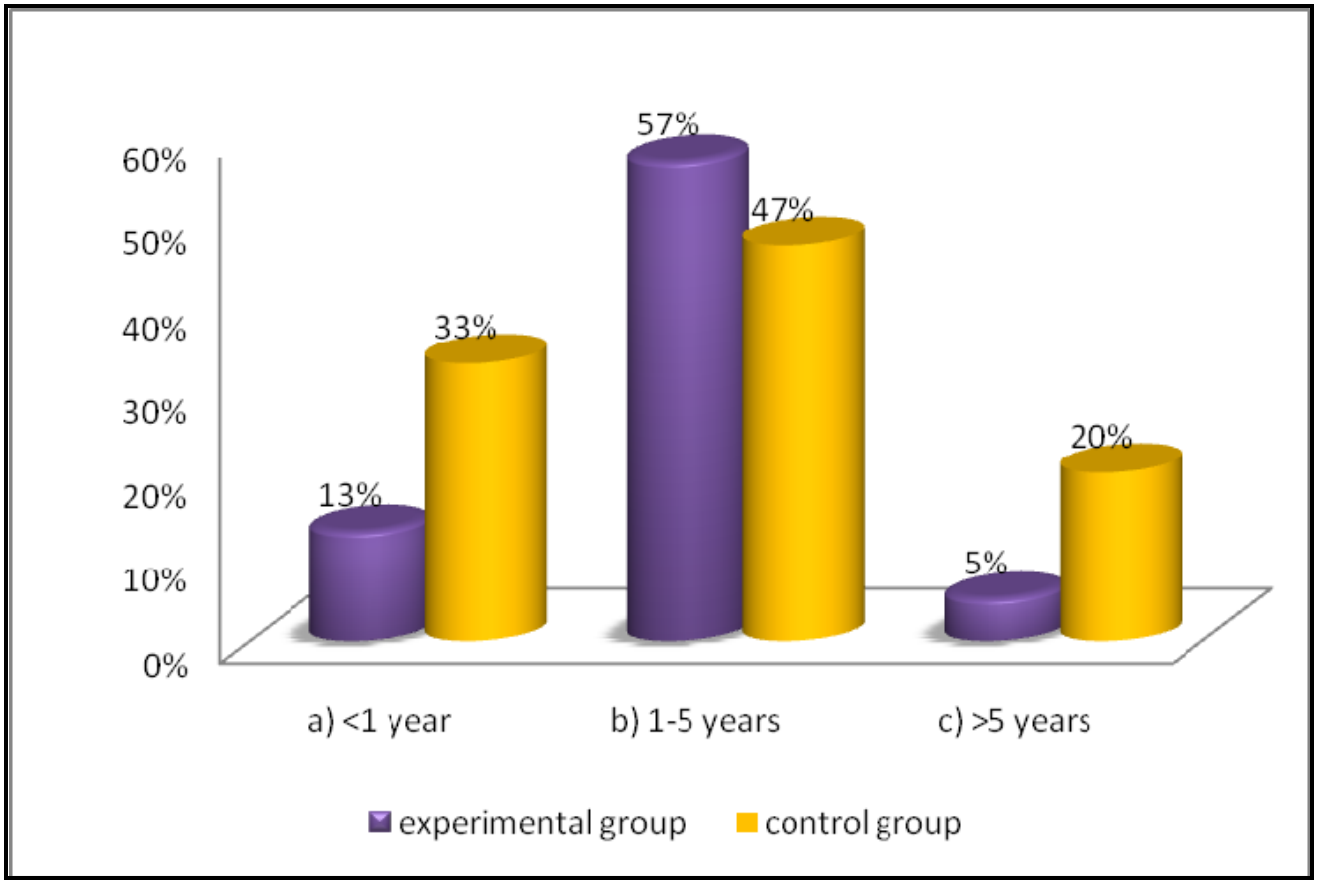

Fig-4: Percentage distribution of duration of stay at old age homes among experimental and control group

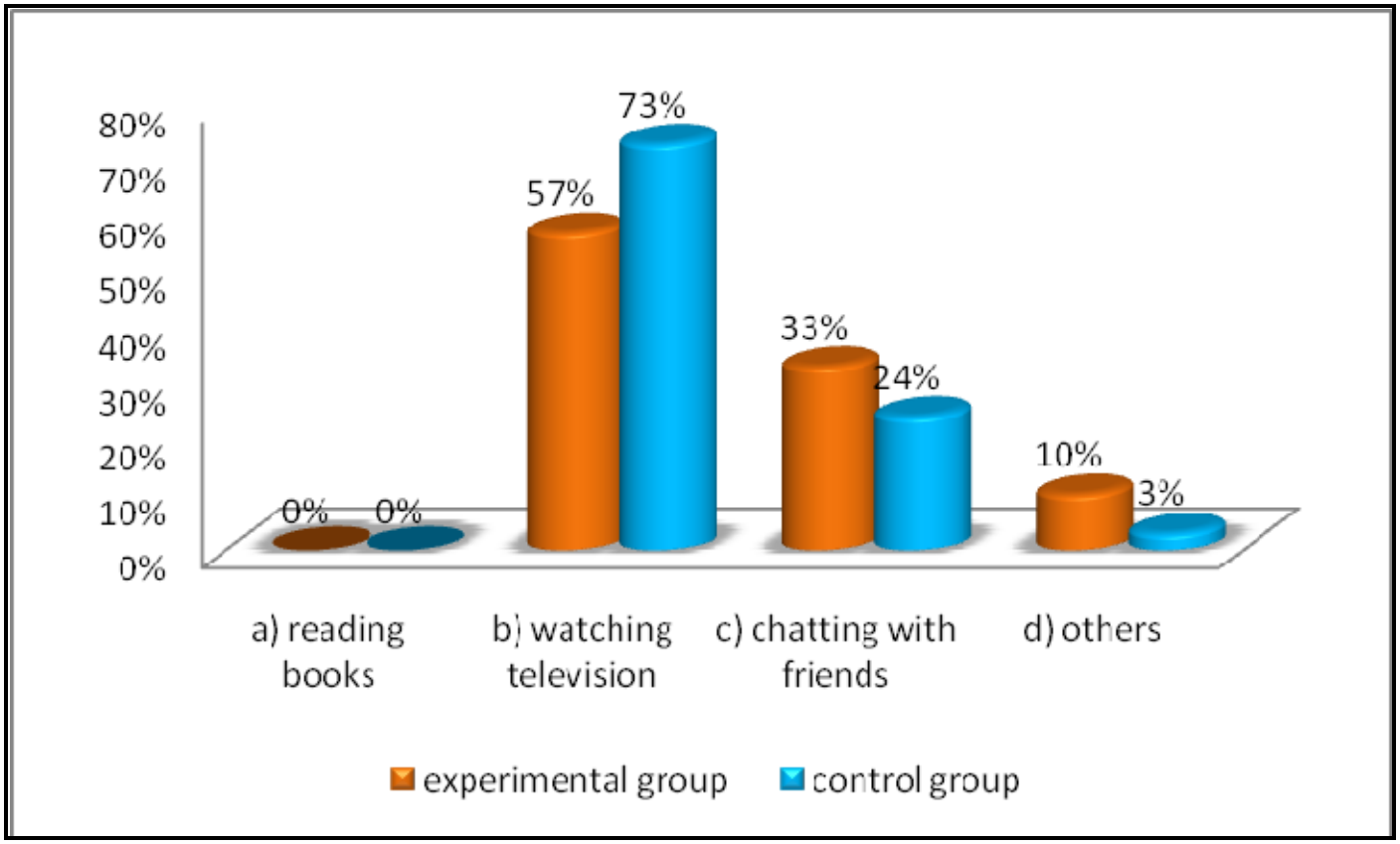

Fig-5: Percentage distribution of leisure activities among experimental and control group

SECTION B

Table-2: Frequency & percentage distribution of level of various domains of QOL in the pre & post test among experimental group

(n=30)

S.No	*Domains of QOL*	*Poor QOL*				*Moderate QOL*				*Good QOL*			
		Pre test		*Post test*		*Pre test*		*Post test*		*Pre test*		*Post test*	
		No	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*
1	Overall	19	63	0	0	11	37	12	40	0	0	18	60
2	General	19	63	0	0	11	37	12	40	0	0	18	60
3	Physical	20	67	0	0	10	33	17	57	0	0	12	40
4	Psychological	16	53	0	0	14	47	24	50	0	0	6	20
5	Social	20	67	0	0	10	33	14	47	0	0	16	53
6	Environmental	4	13	0	0	26	87	29	97	0	0	1	3

Table 2 shows that in the pre test, no participants had good QOL in any domains. After the intervention, the post test showed that no participants were in the category of poor QOL in any domain.

Table-3: Frequency & percentage distribution of level of various domains of QOL in the pre & post test among control group.

(n=30)

S. No	*Domains of QOL*	*Poor QOL*				*Moderate QOL*				*Good QOL*			
		Pre test		*Post test*		*Pre test*		*Post test*		*Pre test*		*Post test*	
		No	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*
1	Overall	24	80	0	0	6	20	0	0	0	0	0	0
2	General	25	83	25	83	5	17	5	17	0	0	0	0
3	Physical	24	80	24	80	6	20	6	20	0	0	0	0
4	Psychological	20	67	20	67	10	33	10	33	0	0	0	0
5	Social	24	80	24	80	6	20	6	20	0	0	0	0
6	Environmental	4	13	4	13	26	87	26	87	0	0	0	0

Table 3 shows that majority of the participants 25(83%) had poor QOL which was the same in the post test. About 24(80%) of the participants had poor QOL in physical and social domain. None of them had good QOL in psychological domain and environmental domain. No difference was observed in any domain of QOL between the pre and post test.

Table-4: Mean and standard deviation of various domains of QOL among experimental and control group in the pre and post test

(n=30+30)

S. No	***Domains of QOL***	***Experimental group***				***Control group***			
		Pre test		***Post test***		***Pre test***		***Post test***	
		Mean	***SD***	***Mean***	***SD***	***Mean***	***SD***	***Mean***	***SD***
1	Overall	36.1	7.4	57.9	9.5	32.8	5.5	32.8	5.5
2	General	3.4	1.6	6.3	1.3	2.7	1.2	2.7	1.2
3	Physical	5.5	1.8	9.9	2.5	4.9	1.4	4.9	1.4
4	Psychological	10.6	1.9	17.4	2.9	9.9	1.6	9.9	1.6
5	Social	2.9	1.1	6.4	1.1	2.5	0.9	2.5	0.9
6	Environmental	13.1	2.2	17.9	3.3	12.6	1.7	12.6	1.7

Table 4 shows that in experimental group, the mean overall QOL was 57.9 in the post test which was 36.1 in the pre test. There was significant increase in the post test mean of all the domains of QOL. In control group, the pre and post test mean of overall QOL and other domains of QOL was remaining unchanged.

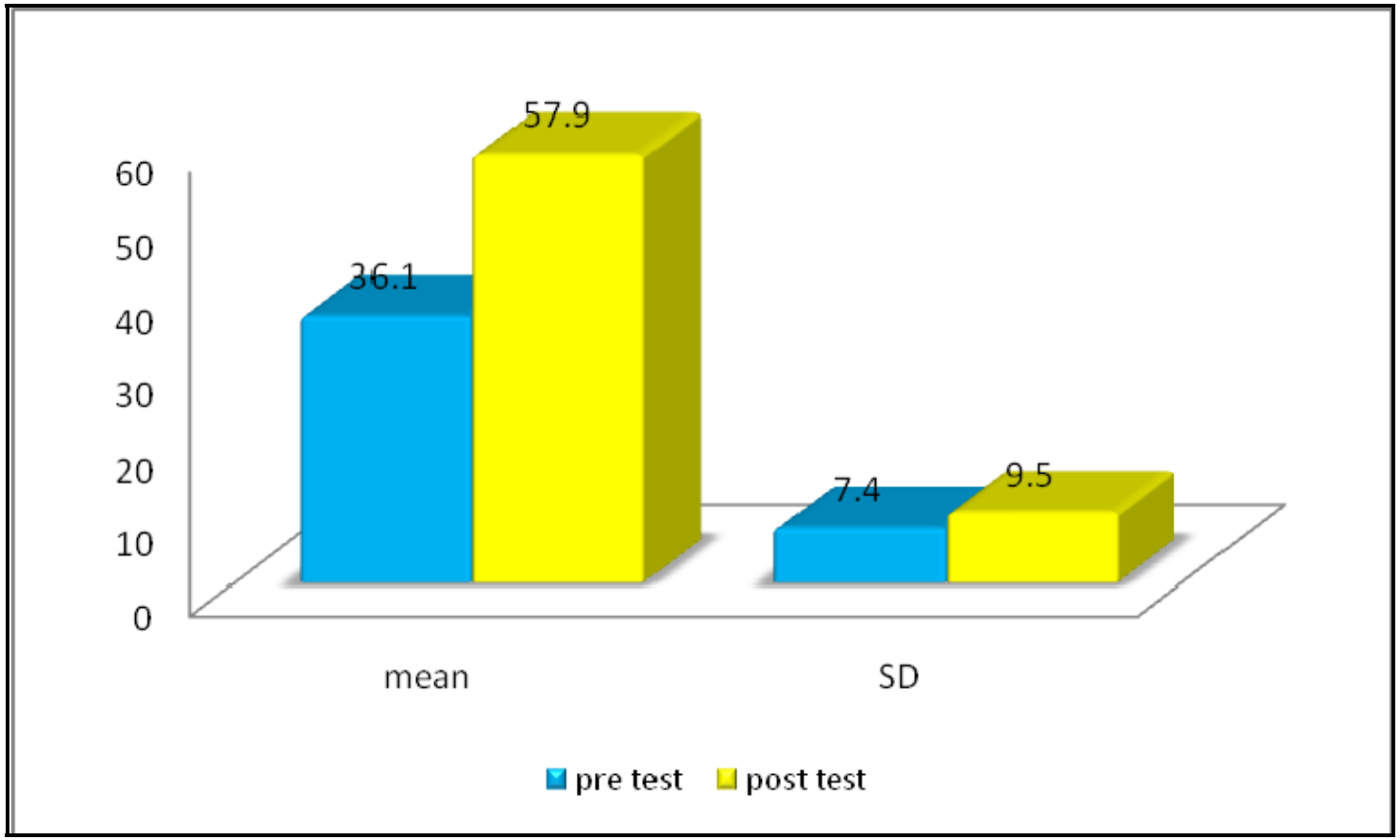

Fig-6: Mean and SD of overall QOL among experimental group in the pre & post test

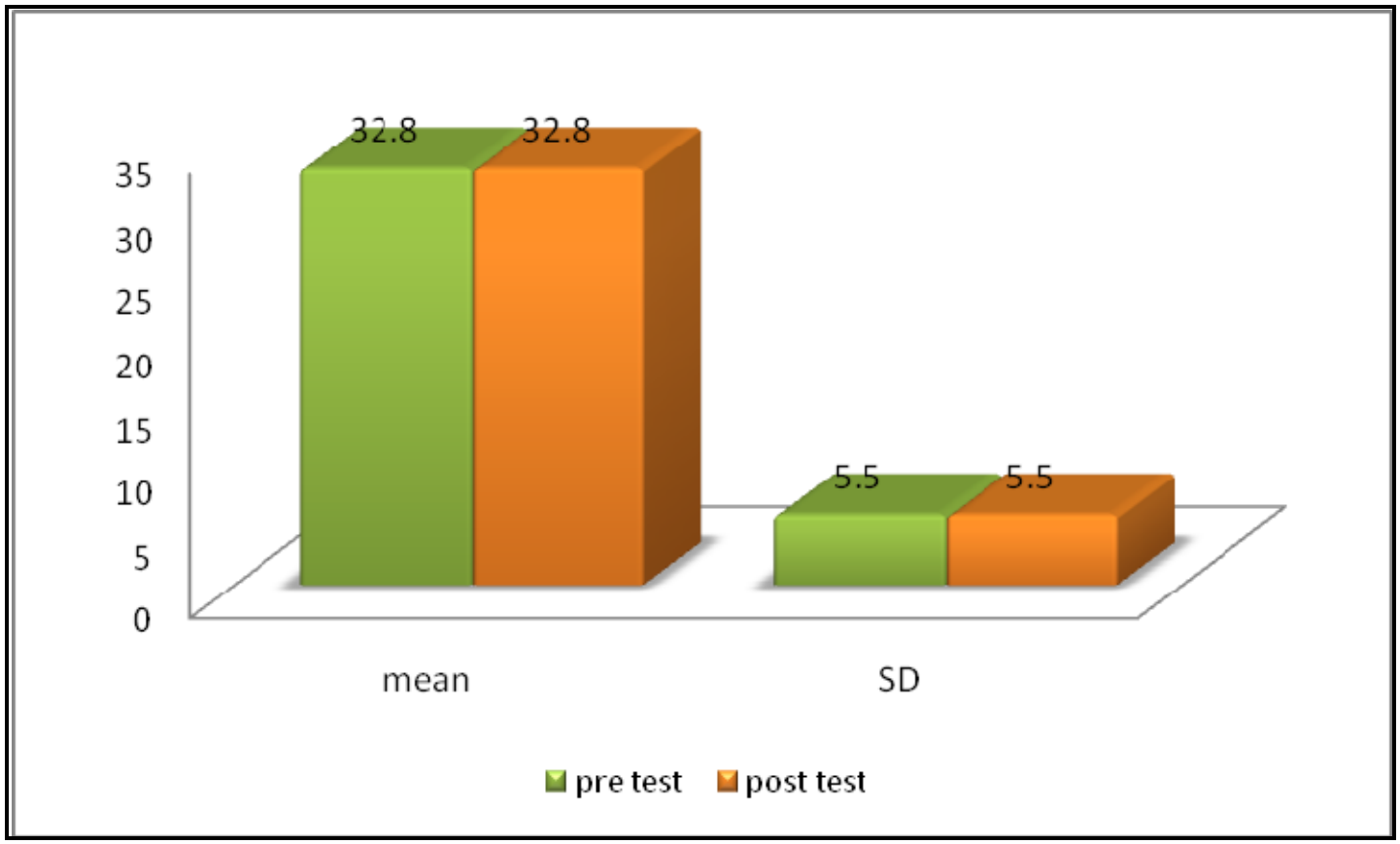

Fig-7: Mean and SD of overall QOL among control group in the pre & post test

Table-5: Effectiveness of nursing strategies on QOL among elderly in the experimental group

(n=30)

S. No	***Domains***	***Pre test***		***Post test***		***Paired t test***
		Mean	***SD***	***Mean***	***SD***	
1	Overall	36.1	7.4	57.9	9.5	8.4*** df=29
2	General	3.37	1.59	6.53	1.28	9.5*** df=29
3	Physical	5.47	1.83	9.9	2.51	13.4***df=29
4	Psychological	10.63	1.99	17.4	2.9	18.1***df=29
5	Social	2.9	1.13	6.43	1.1	14.8***df=29
6	Environmental	13.13	2.22	17.9	3.34	11.4***df=29

***p>0.001

Table 5 shows that there was a significant difference (p>0.001) in the level of QOL among the experimental group before and after the nursing strategies. The hypothesis one was accepted.

Table-6: Comparison of post test level of overall QOL between the experimental and control group

(n=30+30)

Group	Mean	SD	Unpaired t test
Experimental	57.9	9.5	t= 12.50*** df= 58
Control	32.8	5.5	

***p>0.001

Table 6 shows that there was a significant difference (p>0.001) in the level of QOL between the experimental and control group after the nursing strategies. The hypothesis two was accepted.

SECTION C

Table-7: Association between the level of QOL and selected demographic variables among experimental group

(n=30)

S. No	Demographic Variables	Level of QOL			Chi square Value
		Poor	Moderate	Good	
1	**Age**				
	a) 60-65yrs	3	9	0	13.13*S df=6;
	b) 66-70yrs	10	2	0	
	c) 71-75yrs	4	0	0	
	d) 76-80yrs	2	0	0	
2	**Gender**				
	a) Male	6	6	0	1.53 df=2 NS
	b)Female	13	5	0	
3	**Educational status**				
	a) Illiterate	13	1	0	9.84*S df=1
	b) Primary school	6	10	0	
	c) High school	0	0	0	
	d) Degree and above	0	0	0	
4	**Marital status**				
	a) Single	1	0	0	1.99 df=6 NS
	b) Widow/widower	16	11	0	
	c) Divorced	1	0	0	
	d) Separated	1	0	0	
5	**Previous occupation**				
	a) Unemployed	0	0	0	3.66 df=6 NS
	b) Own business	3	4	0	
	c) Govt. employment	0	0	0	
	d) Coolie	16	7	0	

S. No	Demographic Variables	Level of QOL			Chi square Value
		Poor	Moderate	Good	
6	**Monthly income**				
	a) Below Rs.1500	12	3	0	5.91*S df=2
	b) Rs.1501-3000	6	4	0	
	c) Rs.3001-4500	1	4	0	
	d) Above Rs.4500	0	0	0	
7	**Number of children**				
	a) Nil	1	0	0	3.39 df=6 NS
	b) One	2	4	0	
	c) Two	8	4	0	
	d) More than two	8	3	0	
8	**Religion**				
	a) Hindu	14	9	0	0.25 df=6 NS
	b) Christian	5	2	0	
	c) Muslim	0	0	0	
	d) Others	0	0	0	
9	**Duration of stay at old age home**				
	a) <1 year	0	4	0	9.76*S df=4
	b) 1-5 years	14	3	0	
	c) >5 years	5	4	0	
10	**Type of visitors**				
	a) Children	15	7	0	1.39 df=6 NS
	b) Relatives	1	2	0	
	c) Friends	0	0	0	
	d) Others	19	11	0	

S. No	Demographic Variables	Level of QOL			Chi square Value
		Poor	Moderate	Good	
11	**Frequency of visits/year**				0 df=4
	a) 1-5 times	0	0	0	
	b) 5-10 times	0	0	0	
	c) >10 times	19	11	0	
12	**Leisure activities**				1.16 df=6 NS
	a) Reading books	0	0	0	
	b) Watching television	12	5	0	
	c) Chatting with friends	5	5	0	
	d) Others	2	1	0	

*p>0.05

Table 7 depicts that there was a significant association (p>0.05) between the level of QOL and the demographic variables like age, educational status, income and duration of stay at old age home. The hypothesis three was accepted.

CHAPTER-V
DISCUSSION

The aim of the present study was to determine the effectiveness of nursing strategies on QOL among elderly living in selected old age homes. The research design adopted for this study was true experimental research design. Thirty elderly were selected randomly for both the experimental and control group. Pre test was conducted for both the groups using the demographic variables proforma and modified WHOQOL-BREF scale. Planned nursing strategies were given to the experimental group for two weeks. After one week post test was conducted for both the groups by using the same tool.

Major findings of the study are discussed in the following headings:

DESCRIPTION OF THE POPULATION

As shown in table 1, majority of the participants from both the experimental 24(80%) and control 21(70%) groups in the age group of 60-70years. With regard to gender, females were the majority in both experimental 18(60%) and control 23(77%) groups.

About the educational status of the participants, 16(53%) attended up to primary school in experimental group where as in control only 8(23%) attended primary school. On account of marital status, majority of the participants were widow/widower in both the experimental 27(90%) and control 22(73%) groups.

Regarding previous occupation, majority of the participants were coolie workers in both experimental 22(73%) and control 23(77%) groups. On account of monthly income of participants, majority had earned below Rs.1500 per month in both the experimental 15(50%) and control 17(57%) groups.

In regard to the number of children, about 12(40%) of the participants in the experimental group had two children whereas in the control group, 11(37%) had no children. On account of religion, majority belonged to Hindu religion in both the experimental 23(77%) and control 22(73%) groups.

In regard to type of visitors, 22(73%) of participants in the experimental group were visited by their children where as in control group only 1(3%) were visited by their children. All the participants in both the groups were visited by others. About the frequency of visits per year, all the participants were visited for more than 10 times in a year.

In the respect of duration of stay at old age homes, majority of the participants in both the experimental 17(57%) and control 14(47%) groups were staying for 1-5 years of duration. On account of leisure activities 17(57%) of participants from experimental group and 22(73%) of participants from control group mentioned watching television was their leisure activity.

These results were similar to a study conducted by ***Hephzibah (2011)*** with the aim of assessing the effectiveness of reminiscence therapy on QOL among elderly at old age homes by using the WHOQOL-BREF scale. In that study among 35 samples, majority were females (65%), above 65 years of age

(77%), illiterate (66%), Hindu (97%), staying old age homes for about 1-5 years (51%)

OBJECTIVES OF THE STUDY

The first objective of the study was to assess the level of QOL among experimental and control group in the pre and post test.

In the data analysis, as shown in table 2, among experimental group, majority of participants 19(63%) had poor QOL and 11(37%) had moderate QOL in the pre test. In the post test, 12(40%) had moderate QOL, 18(60%) had good QOL.

These findings were similar to the study conducted by ***John carvel (2009)*** using survey method among more than 1,000 people over 65years to assess the level of QOL of them. Results revealed that 24% said their quality of life had deteriorated in the last 12 months. A further 66% of older people said their life had not improved at all. He concluded that generally the elderly QOL is deteriorating as the age progresses and must be taken in to account by the health system.

Among the control group, majority of the participants 24(80%) had poor quality of life and 6(20%) had moderate quality of life in the pre test. No change was found on the QOL in the post test among control group.

The second objective was to determine the effectiveness of nursing strategies among experimental and control group.

As shown in table 2**,** the findings revealed that after the intervention, majority of the elderly 18(60%) had good QOL and 12(40%) had moderate QOL in the post test. Table 4 showed that the mean overall QOL was 57.9 in the post test which was 36.1 in the pre test.

In the table 5, the paired t test results showed the significant difference ($p>0.001$) in the level of QOL of experimental group before and after the nursing strategies. It implied that the nursing strategies were effective on QOL of elderly among experimental group. The hypothesis one was accepted.

These findings were supported by a randomized controlled trial done by ***Sorenson & Silvia (2011)*** to determine the effectiveness of mental and physical health intervention strategies against usual care on elderly QOL. In this study, 168 elderly above the age of 65years were included. In the experimental group 81 participants received intervention and in the control group 87 participants received the usual care. The results indicated higher improvements in QOL among the experimental group elderly after the physical and mental health intervention strategies.

In the table 6, the unpaired t test results showed the significant difference ($p>0.001$) in the level of QOL between experimental and control group after the nursing strategies. Hypothesis two was accepted.

These findings were supported by a study conducted by ***Matsuo et.al (2003).*** This study was conducted among 321 elderly to assess the

effectiveness of various activities on QOL. The experimental group was given 5 types of activities such as community centre activity course, learning and lecture participation, club activity, elderly manpower service activity and other activities. The QOL of the experimental group was significantly higher than the control group. The experimental group participants reported the significant improvements in their social life, self esteem and physical health.

The third objective was to associate the level of quality of life with selected demographic variables in experimental group.

As shown in table 7, there was a significant association ($p>0.05$) between the demographic variables like age, educational status, income and duration of stay at old age home and the level of QOL of experimental group. This implied that advancing age, lower educational status, lower income and higher duration of stay at old age home were indirectly proportionate to level of QOL. The hypothesis three was accepted.

This was similar to a study conducted by ***Hephziba (2011)*** to assess the effectiveness of reminiscence therapy on QOL among elderly living at old age homes. In this study, pre experimental design was used and 37 elderly were included. The results revealed that age and educational status of the elderly were indirectly proportionate to the level of QOL.

CHAPTER-VI
SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

SUMMARY OF THE STUDY

This study was an experimental study to assess the effectiveness of nursing strategies on QOL among elderly living in selected old age homes.

Elderly of 60-80 yrs of age who did not have any physical and mental illness were included in this study. For conceptual framework, Modified Linzhan's quality of life model and Von Bertlanfy's general system theory was adopted.

For this study true experimental design was chosen. The settings selected for this study were Don Bosco Beatitudes old age home at Vyasarpadi as experimental group and Annai illam old age home at Mylapore as control group. From these two settings, 30 elderly were selected in each setting by simple random sampling method.

The data was collected with demographic variables proforma and Modified WHOQOL-BREF scale which had 20 items to assess the level of QOL of elderly. The demographic variables proforma contained 12 characteristics of elderly such as age, gender, educational status, marital status, previous occupation, monthly income, number of children, religion, duration of stay at old age home, type of visitors, frequency of visits per year and leisure activities.

Data collection was done by interview method. After the pre test, intervention was given to the experimental group for about two weeks. Post test was done for both the groups using the same tool. Both the descriptive and inferential statistics were used to analyze the data.

In the pre test, majority of the participants in experimental group 19(63%) had poor QOL. After the nursing strategies, 18(60%) of the experimental group had good QOL and 12(40%) had moderate QOL. The mean overall QOL of experimental group after nursing strategies was 57.9 which was 36.1 in the pre test. Among the control group, 24(80%) participants had poor QOL. The mean overall QOL of control group was 32.8 in the pre test and remained same in the post test.

The paired t test has shown significant difference ($p>0.001$) in the level of QOL among experimental group before and after the intervention. The hypothesis one was accepted.

The unpaired t test has shown significant difference ($p>0.001$) in the level of QOL between experimental and control group after the nursing strategies. Hypothesis two was accepted.

Association of level of QOL with selected demographic variables was analyzed by using chi-square test. There was a significant association ($p>0.05$) between the level of QOL and the demographic variables such as age, educational status, income and duration of stay at old age home in experimental group. Hypothesis three was accepted.

MAJOR FINDINGS OF THE STUDY

1) Majority of the participants from experimental group 24(80%) were belonging to 60-70 years old, 18(60%) were females, 16(53%) attended primary school, 27(90%) widow/widower, 22(73%) coolies and earned below Rs.1500, 12(40%) had two children, 23(77%) were Hindus, 17(57%) were staying at old age home for 1-5 years, 22(73%) were visited by children, 17(57%) had television watching as leisure activity.

2) Majority of the participants from control group 21(70%) were belonging to 60-70 years old, 23(77%) were females, 22(73%) were illiterate, 22(73%) widow/widower, 23(77%) coolies, 17(57%) earned below Rs.1500, 12(40%) had two children, 22(73%) were Hindus, 14(47%) were staying at old age home for 1-5 years, 30(100%) were visited by others, 22(73%) had television watching as leisure activity.

3) Majority of the participants from both the experimental 19(63%) and control group 24(80%) had poor QOL in the pre test.

4) The mean overall QOL of experimental group was 57.9 in the post test which was 36.1 in the pre test.

5) There was a significant difference ($p>0.001$) in the level of QOL among experimental group before and after the nursing strategies.

6) There was a significant difference ($p>0.001$) in the level of QOL between experimental and control group after the nursing strategies.

7) There was a significant association ($p>0.05$) between the level of QOL and demographic variables such as age, educational status, monthly income, duration of stay at old age home in experimental group.

CONCLUSION

Nowadays, the population of the elderly grows absolutely and relatively to the overall population worldwide. Concepts such as quality of life, wellbeing, social interaction and connectivity are of crucial importance, and are directly linked to the environment in which the elderly are living in.

The results of this study implied that QOL is worsening with the progressing age and lower educational status of the elderly. The QOL also depends upon the amount of income generated and the duration of stay at old age home. Structured program of activities would be helpful for the elderly in order to overcome the loneliness and for the better QOL.

NURSING IMPLICATIONS

Nursing practice

Psychiatric nurses can develop a structured program for the hospitalized elderly in order to improve their QOL which might be deteriorated due to some illness. Health education programs can be conducted to create awareness among the public regarding elderly care.

Nursing education

The nurse educator should teach the students about the promotion of mental health and prevention of mental illness among elderly. The preventive aspects of elderly care can be included in the curriculum. Continuing nursing

education can be conducted on the aspects of current trends in improving QOL of elderly.

Nursing administration

The nurse administrator can develop policies on routine activities to be given for the elderly who is institutionalized. Frequent evaluation of the effectiveness of routine activities should be made. Continuing nursing education programs on elderly care should be organized.

Nursing research:

Findings of this study can be used as a basis for future studies related to elderly QOL. The nurse researcher should frequently conduct research on various activities which would be helpful in improving QOL of elderly.

RECOMMENDATIONS FOR FURTHER STUDY

- This study can be replicated on large scale.
- Single nursing intervention like cognitive improvement activities can be studied for the improvement of elderly QOL.
- Comparative studies on elderly QOL can be done on urban and rural, male and female, institutionalized and non-institutionalized.
- This study can be conducted among elderly living with their family.

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PART-1: DEMOGRAPHIC VARIABLES PROFORMA

1. **Age (years):**
   a) 60-65
   b) 66-70
   c) 71-75
   d) 76-80
2. **Gender:**
   a) Male
   b) Female
3. **Educational status:**
   a) Illiterate
   b) Primary school
   c) High school
   d) Degree and above
4. **Marital status:**
   a) Single
   b) Widow/widower
   c) Divorced
   d) Separated
5. **Previous occupation:**
   a) Unemployed
   b) Own business
   c) Govt. employment
   d) Coolie
6. **Monthly income:**
   a) Below Rs.1500
   b) Rs.1501-3000
   c) Rs.3001-4500
   d) Above Rs.4500

7. **Number of children:**
    a) Nil
    b) One
    c) Two
    d) More than two
8. **Religion:**
    a) Hindu
    b) Christian
    c) Muslim
    d) Others
9. **Duration of stay at old age home:**
    a) Less than one year
    b) 1-5 years
    c) More than 5 years
10. **Type of visitors:**
    a) Children
    b) Relatives
    c) Friends
    d) Others
11. **Frequency of visits per year:**
    a) 1-5 times
    b) 6-10 times
    c) More than 10 times
12. **Leisure activities:**
    a) Reading books
    b) Watching television
    c) Chatting with friends
    d) Others

PART-2: MODIFIED WHOQOL-BREF SCALE

INSTRUCTIONS:

- The following questions ask how you feel about your quality of life, health, or other areas of your life.
- I will read out the question to you along with the options. Please choose the answer that appears most appropriate.
- If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in your mind your standards, hopes, pleasures and concerns. We ask what you think about your life in the last four weeks.

GENERAL QOL

1. How would you rate your quality of life?
   a) very poor
   b) poor
   c) neither poor nor good
   d) good
   e) very good

2. How satisfied are you with your health?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

PHYSICAL DOMAIN

3. Do you have enough energy for everyday life?
   a) Not at all
   b) A little
   c) Moderately
   d) Mostly
   e) Completely

4. How satisfied are you with your sleep?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

5. How satisfied are you with your ability to perform your daily living activities?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

PSYCHOLOGICAL DOMAIN

6. How much do you enjoy life?
   a) Not at all
   b) A little
   c) Moderately
   d) Very much
   e) Extremely

7. To what extent do you feel your life to be meaningful?
   a) Not at all
   b) A little
   c) Moderately
   d) Very much
   e) Extremely

8. How well are you able to concentrate?
   a) Not at all
   b) A little
   c) Moderately
   d) Very much
   e) Extremely

9. Are you able to accept your bodily appearance?
   a) Not at all
   b) A little
   c) Moderately
   d) Mostly

e) Completely

10. How satisfied are you with yourself?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

11. How often do you have negative feelings such as blue mood, despair, anxiety, depression?
   a) Never
   b) Seldom
   c) Quite often
   d) Very often
   e) Always

SOCIAL DOMAIN

12. How satisfied are you with your personal relationship?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

13. How satisfied are you with the support you get from your friends?
   a) very dissatisfied
   b) dissatisfied
   c) neither satisfied nor dissatisfied
   d) satisfied
   e) very satisfied

ENVIRONMENTAL DOMAIN

14. How safe do you feel in your daily life?
   a) Not at all
   b) A little
   c) Moderately
   d) Very much
   e) Extremely

15. How healthy is your physical environment?
    a) Not at all
    b) A little
    c) Moderately
    d) Very much
    e) Extremely

16. Do you have enough money to meet your needs?
    a) Not at all
    b) A little
    c) Moderately
    d) Mostly
    e) Completely

17. How available to you is the information that you need in your day-to-day life?
    a) Not at all
    b) A little
    c) Moderately
    d) Mostly
    e) Completely

18. To what extent do you have the opportunity for leisure activities?
    a) Not at all
    b) A little
    c) Moderately
    d) Mostly
    e) Completely

19. How satisfied are you with the conditions of your living place?
    a) very dissatisfied
    b) dissatisfied
    c) neither satisfied nor dissatisfied
    d) satisfied
    e) very satisfied

20. How satisfied are you with your access to health services?
    a) very dissatisfied
    b) dissatisfied
    c) neither satisfied nor dissatisfied
    d) satisfied
    e) very satisfied

INTERVENTION SCHEDULE

TIME	INTERVENTIONS	BENEFITS
6.30-7am 	**Physical exercises:** ***1. Exercises on lying posture:*** • Stretch the arms & legs; take deep breath; exhale slowly. • Clap the hands directly above the head & put on bed. ***2. Exercises on sitting posture (chair exercises):*** • Circling motion of the shoulder joint with the arm at the side. • Circling arms. • Rotating the head. • Flexing & extending the neck. • Kicking the legs on floor while sitting in the chair. ***3. Exercises in regular activities:*** • Rolling pencil on a hard surface. • Flexing fingers around a pencil. • Exaggerating chewing movements. • Rubbing the back with towel. • Tightening the retro peritoneal muscles. • Holding the abdomen to	• Promotion of circulation, respiration, digestion, elimination, mobility, appetite, socialization, & positive self image. • Promotion of balance. • Prevents falls. • Promotes grip.

TIME	INTERVENTIONS	BENEFITS
10-11am 3-5pm 	tighten the abdominal muscles. **Group activities:** • Reading newspaper • Kitchen work • Gardening **Recreational activities:** • Indoor & Outdoor games. • Cognitive improvement activities- solving the puzzles, riddles, memory games. • Sharing their unforgettable life events. • Leisure activities- painting, drawing and beads work.	• Supporting each other. • Coping with psychological challenges. • Decrease sense of isolation. • Increase the ability to make decisions and function more independently. • Form of activity therapy. • Opportunity for fun & feeling of goodness. • Train the memory. • Stimulate & sustain the attention and concentration. • Creates interest. • Effective utilization of leisure time.