CHAPTER III
METHODOLOGY

3.1 Genesis

The Indian aged population is currently the second largest in the world. Population aging is the most significant result of demographic transition. Reduction in fertility and reduction in mortality have led to a longer life span for individuals. Consequently, there is an increase in the proportion of older people in the total population. The impact of geriatric diseases affected the quality of life of elderly people. Some of these issues are dealt here with.

3.2 Aim

The present study focused on the prevailing diseases among the aged and their quality of life. The study was undertaken to assess the prevalence of geriatric diseases and to compare the perception of quality of life between men and women belonging to the two age groups, viz., 65 to 70 years and 71 to 76 years. The study was intended to develop a package of educational program and to evolve new strategies to improve the health and quality of life of the elderly.

3.3 Objectives

1. To study the prevalence of geriatrics diseases among the selected group of elderly persons living in homes and institutions.

2. To assess and compare geriatric illness and quality of life of elderly people living in homes and institutions.

3. To compare the quality of life on WHO-QoL of elderly in the two age groups of men and women living in institutional and
non-institutional settings in the five broad dominions of quality of life.

- Physical health
- Psychological
- Level of Independence
- Social Relationship
- Environment and over all perception of QoL

4. To compare to prevalence of geriatric diseases and quality of life of men and women.

5. To compare the geriatric illness and quality of life between the two age groups of elderly, i.e., 65 to 70 and 71 to 76 years.

6. To study the association between the QoL of elderly and demographic variables namely marital status, education, number of children.

7. To compare the health related QoL based on SIS of elderly in the two age groups of men and women living in institutional and non-institutional settings on the following dimension.

- Physical functioning
- Psychological and emotional functioning
- Social functioning
- Food and Nutrition
- Diet Patterns
- Health Care and Habits

8. To develop a package of educational program suitable for the aged persons to improve their health and quality of life.

9. To study the impact of the educational program on the overall perception of quality of life and health of the experimental group of elderly living in homes.
3.4 Hypothesis

1. There exists a significant association between the prevalence of geriatric diseases and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents and c. Age of the respondents”.

2. There exists a significant association between the physical activities of respondents and the demographic variables, namely; a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

3. There exists a significant association between the psychological and emotional functioning of respondents and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

4. There exists a significant association between the social activities of respondents and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

5. There exists a significant association between the food intake of respondents and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

6. There exists a significant association between the health care habits of respondents and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.
7. There exists a significant association between the Quality of Life of respondents and the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents. Alternatively, there will be a difference in the mean scores on WHO-QoL between men and women in the Institutional and Non institutional setting.

8. There will be significant differences in the mean scores on each of the five domains of WHO-QoL for the sub groups on demographic variables namely a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

9. There exists a significant association between the Quality of Life of respondents and the demographic variables, namely, a. Marital status of the respondents. b. Education of the respondents, and c. Number of children in the family of respondents.

10. There exists a significant association between the Quality of Life of respondents and their health as well as diseases in relation to the demographic variables, namely, a. Institutional or Non Institutional setting in which the respondents stay. b. Sex of the respondents, and c. Age of the respondents.

11. The educational program will bring about a significant difference in the scores during the post test as compared to the pre test on the overall perception of quality of life (WHO QoL) and on different domains of quality of life among men and women in the two age groups of the experimental group of elderly living in their homes.

   a. There will be a difference in the extent of improvement due to intervention shown by men and women.
b. There will be a difference in the extent of improvement due to intervention shown by the two age groups.

12. The educational program will bring about a significant difference in the scores during the post test as compared to the pre test on the variables assessed on Structured Interview Schedule among men and women in the two age groups of the experimental group of elderly living in their homes.

a. There will be a difference in the extent of improvement due to intervention shown by men and women.

b. There will be a difference in the extent of improvement due to intervention shown by the two age groups.

3.5 Operational Definition

a) Elderly: Old age consists of ages nearing or surpassing the average life span of human beings and thus the end of the human life cycle. Euphemisms and terms for old people include seniors (American usage), senior citizens (British and American usage) and the elderly as occurs with almost definable groups of humanity.

In the present study aged people between the age group 65 to 76 years are referred as elderly.

b) Geriatric: Geriatric is the branch of medicine that focus on health promotion and the prevention and treatment of disease and disability in later life.

c) Quality of life: Quality of life is defined by the WHO as “individual 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, standard and concern”. This definition reflects the view that quality of life refers to subjective evaluation which is embedded in cultural, social and environmental context.
d) **Educational program:** The dissemination of information conducted in the form of modules intended to educate the elderly persons on the ways to improve their health and quality of life.

### 3.6 Sampling Procedure and Sampling description

The purposive random sampling technique was adopted for the present study. The sample was selected from Urban Bangalore District. The sample was drawn randomly from a cross section of the society keeping in view the criteria for selection of the sample that is elderly between age group 65 to 76 years who were living in old age homes and residing at residences. The sample living in residences were drawn from the following randomly drawn places in Bangalore.

- Basavangudi
- Basaweshwarnagar
- Bettahalasure
- Chandara Layout
- Malleshwaram
- Vijaynagar
- Rajajinagar
- Vidyaranayapura
- Mathikere
- Yeshwanthapura
- T.Dasarahalli
- Grinagar
- Jayanagar
- Indiranagar
- Pennaya
- Sunkadhakatte
- P.G.Halli
- Srirampuram
- Prakshnagar
- Yelahankaha

Old age people living in institutions were drawn from the following randomly selected old age homes in Bangalore.

- A.A.D Home, Bhagalur Road.
- Aashyraya Seva Trust, Rajaji Nagar.
- Abhayashram, ISRO layout.
- Ashraya Vridhashrama.
- Belaku Vridhashrama, Jayanagar.
- Cherish Foundation (R), Kalyan Nagar.
- Eshwar Old Age Home, Peenya 2nd Stage.
• Gandhi Old Age Home, Magadi main Road.
• Gandhi Senior Citizens Home, Near Bangalore University.
• Home for Elders, Banshankari 2nd stage.
• LIC HFL Care Homes Ltd., Madavara.
• Little Sisters of Poor- Home for the Aged, Hennur Road.
• Little Sisters of Poor, Hosur Road.
• Maneyangala old age Home, Malleshwaram.
• Mukthi, HRBR layout.
• Mussanje ( Sathmi Trust), Janajothinagar.
• Sathya Foundation, New Extension Mysore Road.
• Sri Sai Nemmadiya Mane, Vijayanagar.
• Sri Sai Old Age Home, Sunkadha Katte.
• Krishnashraya Dhama, HSR Laout.
• Sree Rama Vruddashrama, Malleshwaram.

While selecting the sample known cases of chronic psychiatric illness and mental deviations were avoided. So also the cases of severe and chronic illness were avoided. The sample included people who were considered normal at the time of selection.

A two phase sampling design was adopted for the present study. The sample size varied during the two phases of the study.

For the first phase of the study the total sample constituted 800 elderly people. The schematic breakup of the sample is given below in table 3.1.
Table - 3.1
Sample Size in Different Sub Groups

<table>
<thead>
<tr>
<th>Age group (In years)</th>
<th>Old Age people residing at home</th>
<th>Old age people living in old age homes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>65-70</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>71-76</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

For the second phase of study, 80 elderly of whom 40 were men and 40 women between the age group of 65 to 76 years. All were residing at their residence and were selected for experimental group on the basis of their willingness to participate in the educational program. Schematic breakup of sample for the second phase of study is given below in table 3.2.

Table - 3.2
Sample Distributions in the Second Phase of Study

<table>
<thead>
<tr>
<th>Age Group in years</th>
<th>Old age people residing at home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>65-76</td>
<td>40</td>
</tr>
</tbody>
</table>

3.7 Tools of Data collection

A. Structured Interview Schedule (SIS): The SIS was developed by the researcher to obtain details on demographic profile and on health and QoL of elderly persons. The SIS was developed to know the prevalence of geriatric diseases and quality of life elderly people. It consisted of part A and part B. Part 'A' deals with basic data; name, age, sex, number of children, marital status, occupation, education and their illnesses. Part ‘B’ related specific data divided into five broad categories to include the following facets.
- Physical Functioning
- Psychological and emotional functioning
- Social functioning
- Nutritional aspect
- Health care and habits.

For allotment of scores for different areas to assess the perception of quality of life, a four point scales was used with alternatives - Always, Sometimes, Occasionally and Never, rated respectively as Never - 0, occasionally - 01, Sometime - 02 and Always- 03.

To assess regular diet pattern, a five point scales was used with the score as - Daily-4, Thrice a Week-3, Twice a week-2, Weekly-1 and Never -0.

The score pertaining to each area was worked out separately in order to measure the QoL. Scoring pattern for each dimension showed in table 3.3.

**Table - 3.3**  
**SIS Scoring Pattern for Each Dimension**

<table>
<thead>
<tr>
<th>SIS Dimension</th>
<th>No. of Statements / Items</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Functioning</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Psychological and Emotional Functioning</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Food and Nutrition</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td>Diet Pattern</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>Health Care and Habits</td>
<td>12</td>
<td>36</td>
</tr>
</tbody>
</table>

**B. Standardized scale developed by WHO-QoL field version (1996)**  
is the second tool used in the study. This is a detailed compressive and holistic assessment scale focusing on the aspects of health and
A reliable international measure of QoL developed by World Health Organization. It consists of 100 questions splits into five broad domains having twenty-three different facets. The details of the domain and facets are shown in table-3.4.

**Table - 3.4**  
**WHO QoL domains and facets**

| Domain 1 | Physical capacity  
|          | Pain and discomfort  
|          | Energy and fatigue  
|          | Sleep and rest  
| Domain 2 | Psychological  
|          | Positive feeling  
|          | Thinking, learning, memory and concentration  
|          | Self-esteem  
|          | Bodily image and appearance  
|          | Negative feelings  
| Domain 3 | Level of independence  
|          | Mobility  
|          | Activities of daily living  
|          | Dependence on medication or treatment  
|          | Work capacity  
| Domain 4 | Social relationship  
|          | Personal relationships  
|          | Social support  
|          | Sexual activity  
| Domain 5 | Environment  
|          | Physical safety and security  
|          | Home environment  
|          | Financial resources  
|          | Health and social care: accessibility and quality  
|          | Opportunities for acquiring new information and skills  
|          | Participation and opportunities for recreation /leisure activities  
|          | Physical environment (pollution/ noise / traffic/ climate)  
|          | Transport  

**Scoring pattern**

The scoring pattern adopted in measuring each factors under the domains was a five point rating scale. The table 3.5 represents the
pattern of scoring. The type of response varied depending upon the criteria to be rated like quality or quantity/ satisfaction or dissatisfaction/ good or bad and frequency of occurrence. The scores were reversed for negative question.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all / very dissatisfied / very unhappy / never</td>
<td>1</td>
</tr>
<tr>
<td>A little / slightly / dissatisfied poor / unhappy / seldom</td>
<td>2</td>
</tr>
<tr>
<td>A moderate amount / moderately / neither satisfied nor dissatisfied / neither poor nor good / neither happy nor unhappy / quite often</td>
<td>3</td>
</tr>
<tr>
<td>Very much / mostly / satisfied / good / happy / very often</td>
<td>4</td>
</tr>
<tr>
<td>An extreme amount / extremely / completely very satisfied / very good / very happy / always</td>
<td>5</td>
</tr>
</tbody>
</table>

Depending upon the number of statements or questions under each domain and the facets the scores were allotted. The scores with respect to number of statements are given in the table 3.6.
Table - 3.6
Scoring pattern for each domain

<table>
<thead>
<tr>
<th>Domains</th>
<th>No. of statements</th>
<th>Maximum scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health</td>
<td>21</td>
<td>105</td>
</tr>
<tr>
<td>Psychological</td>
<td>21</td>
<td>105</td>
</tr>
<tr>
<td>Level of independence</td>
<td>24</td>
<td>120</td>
</tr>
<tr>
<td>Social Relation</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>Environment</td>
<td>24</td>
<td>120</td>
</tr>
<tr>
<td>Over all perception of QOL</td>
<td>100</td>
<td>510</td>
</tr>
</tbody>
</table>

The categorization of QOL is assessed based on mean and standard deviation value. The classification of low, moderate and high QOL is <63.51% score as low, 63.51%-69.71% as moderate and >69.71% as high QOL. The classification of respondents on overall perception of quality of life is based on the scores. The scores below 60.6 considered as low level, 60.7 to 75.4 as moderate and above 75.4 as high level of quality of life.

3.8 Reliability and validity of Tools

A. Structured Interview Schedule

Reliability coefficient of the tool was obtained using split half method developed by Brown prophecy. The formula for calculation the reliability as follows.

\[ r_{hf} = \frac{2r_1}{2 - r_1} \]

Where, \( r_1 \): Reliability Coefficient of Half test.
The obtained value of \( r_{ll} \) found to be 0.9215 which is higher than 0.70 hence, the tool constructed found to be reliable.

The SIS developed by the researcher inquires into different aspects related to health and well being of the elderly. It covers physical functioning, psychological and emotional functioning, social functioning, nutritional aspect and regular diet pattern and health care. These aspects are assessed using rating scales with multiple items relevant for the aged. The schedule is supposed to have face validity to assess Health related quality of life of the elderly as the respondents of the pilot study felt so. The content of the SIS takes care of the significant areas relevant for the health and well being of the elderly and hence the schedule is assumed to have content validity.

**B. WHO QoL Questionnaire**

The WHO- QoL assessments have been found to allow detailed quality of life data to be gathered on a particular population, facilitating the understanding of diseases and the development of treatment methods. It is possible to carry out multi center quality of life research and compare results obtained in different field settings. The tool has been developed cross culturally and therefore is valid and the assessments are genuinely reliable and sensitive to any settings.

Both the scales SIS and WHO- QoL were translated to Kannada, the regional language. Both English and Kannada versions of the questionnaire were used for data collection.

**3.9 Research Design and Procedure**

The research procedure was carried out in six phases as outlined below.
**Phase-I: Identification of old age Homes**

A list of all the old age homes was collected from the Social Welfare Department, Government of Karnataka. A survey of the various old age homes in Urban Bangalore District was made. 20 old age homes were selected randomly where there are more elderly between the age group of 65 to 75 years, since in some of the old age homes there were more of 80+ elderly.

**Phase-II: Selection of Sample**

As per the requirements of the study the sample was selected. The cross section of society with old age people belonging to the two age groups, namely 65 to 70 and 71 to 76 years residing in homes and old age institutions were selected. A total of four hundred samples were selected from old age homes of which two hundred were men and two hundred were women. A total sample of four hundred elderly living in their homes of which two hundred men and two hundred women were selected for the study visiting various parks, mahila mandals, clubs, senior citizens sanghas from different areas of urban Bangalore.

**Phase-III: Pilot Study**

A pilot study was conducted to determine the feasibility of the study and the scales. Hall, 1971, defines pilot study as “The preliminary or exploratory study which is a tryout of the questions and procedures on a small scale in order to determine whether or not the purpose of the researcher will be fulfilled”. A pilot study was undertaken with an objective to develop the SIS with 10 percent of sample of the main study.

**Phase-IV: Pre Test**

The total sample for the study was eight hundred. Four hundred older people residing at homes of which two hundred were
men and two hundred women classified into two age groups of 65 to 70 years and 71 to 76 years were subjected to pre test. An equal number of old age people living in old age homes were also grouped in the same way. The data was collected by interviewing the respondents with Structured Interview Schedule (SIS) developed by the researcher and standardized scale on quality of life developed by World Health Organization (WHO).

Prior permission was taken from the administrators of the old age homes explaining the significance of study and fixing the convenient date and time for the interview. Good rapport was built with the respondents before conducting the interview. The time taken for each respondent was about 40 minutes. The researcher took more time for data collection since the sample size was more.

The procedure used for elderly people living in home was slightly different. Elderly visiting parks, senior sangha, mahila mandala etc regularly were contacted for the purpose. They were informed about the significance of the study individually or in small groups. Appointments were fixed for their interview time and place and data collection followed.

**Phase-V: Educational Program**

The main objective of the study was to develop a module of educational program for senior citizens in order to impart awareness about geriatric diseases and ways to improve their health and quality of life. As per the research design, a module of educational program was developed. The educational program was planned to cover geriatric diseases, positive attitude, good practices to be followed in the management of geriatric diseases as well as ways to improve their health and quality of life. The program was conducted on a small sample and its effect on health and quality of life of elderly was assessed through a post test. The educational program was conducted
only for those who stayed at their houses and volunteered to participate in the program.

The educational programme was carried out on residents from vidyaranyapura, mattikere and yeshwanthpura in Bangalore City. A letter was sent to the respondents of pre-test sample explaining about the significance of planned educational module of program and willingness to attend the program. Respondents who showed interest in attending the program were listed for experimental group (EG). About ten percent of the sample equal to the main study was selected for EG which consisted of eighty, of which forty were men and forty were women respondents.

The designed module of educational program for the respondents was organized at Hiriya Nagarikara Vedike, Vidyaranyapura obtaining permission from the authorities of the organization. The reason for the choice of venue was it is centrally situated and it helped the respondents to attend the program. The duration of the program was for three months, weekly two days each for two hours duration. In each session different topics were covered. Various subject experts were also contacted by the investigator who requested them to be the resource person. Some of the sessions were modified based on the needs and requirements of the respondents. The sessions were conducted separately for men and women respondents on the same day. Morning sessions were conducted for men respondents between 11.00 am to 1.00pm and afternoon sessions were conducted for women respondents between 3.00 pm to 5.00 pm. For some of the sessions the respondents attended the classes according to their convenient time.

**Inauguration of the Educational Programme**

The educational programme was inaugurated on 30th June 2011 by the Mr.Anand Shetty, President of Heriya Nagrikara Vedike,
Vidyaranyapura, Bangalore. Dr.K.S.Roopa, Head of the Department of Human Development and Research Center, Smt. VHD Central Institute of Home Science gave the inaugural address for the program on the topic “Impact of geriatric diseases on quality of life of elderly”. Research scholar gave a brief note on the designed educational program which was scheduled for three months duration from 1\textsuperscript{st} July to 25\textsuperscript{th} September 2011. Attendance was ensured by making the program relevant and interesting for the group. Nearly ninety percent of the experimental group of respondents were regular and attended all the sessions.

**Conducting the Educational Program**

The educational program consisted of 24 sessions covering the various geriatric diseases and their management, active and healthy ageing, nutrition aspect, stress management, acupressure, humor and laughter yoga, importance of meditation.

Each session was conducted with an objective, using various teaching aids followed by question and answers, and group discussion. Booklets of various sessions conducted were also distributed for the respondents. The details of the sessions are given later in this section.

**Valedictory Function of Educational programme**

Valedictory function of educational programme for the respondents on “The prevalence of geriatric diseases and quality of life in elderly people” was organized on 25\textsuperscript{th} September 2011. Sri Ramanna, President of Sri Vidya Ganapathi temple, Vidyayanapura, was the Chief Guest of the program. Sri Basavaraju.L, President of Karnataka Association of Laughing Clubs, Sri Anand Shety President of Hiriya Nagrikar Vedeke were the special invitees for the program. Sri Anand Shetty addressed the participant’s with regard to facts, myths about elderly and how they should improve the quality of life.
Special invitee Sri Basavaraju, addressed the gathering about the role of humor and laughter and importance of physical exercise in improving the quality of life. From the participants side Sri Ananad Shetty summed up the sessions conducted and how it benefited the participants in gaining knowledge in the management of various geriatric and chronic diseases. Mr. Shetty admired the research scholar for taking up this project which helped many senior citizens to improve their health and quality of life and also thanked the guide Dr.K.S.Roopa for selection of participants of Vidyaranayapura area. The research scholar thanked the president of the Sree Vidya Ganpathi temple of Vidyayanayapura for providing the place for conducting the program. The research scholar was felicitated by the president of senior citizens sangha for organizing the program. Feed back of educational program was also obtained.

**Phase-VI: Post Test**

In the sixth phase of study the impact of the educational program was assessed using the same SIS with an interval of one month between the intervention and reassessment for the experiment group of respondents. WHO-QoL was administered for the respondents after collecting the data on SIS. The data obtained during pre and post assessment was analyzed with a view to verify the assumption and hypothesis set for the study.

**3.10 Limitations of the study:**

- The sample size was restricted to 400 elderly people living in old age homes and 400 elderly people living in residences in Bangalore urban District. Therefore the findings are limited to this sample.
- The study was restricted to senior citizens in the age group of 65 to 76 years.
The sample size was restricted to 40 men and 40 women living in residences for the experimental group to study the impact of educational program planed for the elderly. This limits the generalizations pertaining to the educational program to the active Bangalore urban sample living in their residence who can participate in such programs.

**Details of Educational Program:**

The details of module of educational program consisting of 24 sessions are as given below.

**SESSION- 1**

**ACTIVE AND HEALTHY AGEING**

**Objectives:**

A. To enlighten old age people with regard to active and healthy ageing.
B. To impart knowledge on determinants of active ageing.
C. To teach the participants how to improve their health and quality of life.

**Concepts Described:**

- Concept of Healthy ageing
- Determinants of active aging
- Risk factors
- Life style goals
- Tips for healthy ageing

**Teaching Aids:**

Display of News Paper Clippings, Charts and Posters.
**Method of information Input:**

Talk aided with visual presentation of posters and charts. Session was followed by group discussion.

**SESSION- 2**

**PHYSICAL ACTIVITY**

**Objectives:**

A. To educate senior citizens on the benefits of physical activity.
B. To foster physical activities among senior citizens and to make them become physically active.
C. To promote physically active life style for successful ageing.
D. To make the participants understand the significant health benefits through moderate amount of physical activity.

**Concepts described:**

- Significance of physically active life style.
- Higher risk of health problem that can be prevented being active.
- Lack of physical activity leading to chronic diseases.
- Benefits of regular physical activity on a variety of health outcomes.
- Recommended levels of physical activity for older adults.

**Teaching Aids:**

Charts, Porters and Pamphlets.

**Method of Information input:**

The above mentioned concepts were explained with the help of charts, posters and ice breaking activity. Case Studies were illustrated.
SESSION – 3 AND 4

RECREATION AND LEISURE TIME ACTIVITY

Objectives:

A. To enlighten senior citizens about various recreational activities.
B. To make them aware that recreation is a therapeutic refreshment of one’s body or mind.
C. To plan out some mental exercises for senior citizens.
D. To enlighten the participants about various leisure time activities.

Concepts Described:

- Concept of recreation and leisure activities
- Indoor activities - scarp booking, collage making, music
- Outdoor activity – blind folded, water play
- Mental exercise throughsh games- puzzles, one minute game.

Method of information Input:

Lecture was given describing the various recreational activities. One minute game and puzzles were conducted using the locally available resources. Participants were helped to design an album of their own.

Teaching Aids:

Pictures from magazines and materials display, photography album.
SESSION – 5 AND 6

BASIC FOOD GROUPS AND BALANCED DIET

Objectives:

A. To impart knowledge with regard to classification of food groups.
B. To educate elderly about the food groups and their nutrient content.
C. To create awareness on the importance of nutrients and their functions.
D. To educate participants to follow a correct food selection pattern.
E. To educate them on the need and significance of a balanced diet.

Concepts Described:

- Classification of food groups.
- Description of each group.
- Significance and nutrient contents of foods.
- Classification of nutrients based on their functions and regulatory mechanism in the body.
- Balanced diet
- Guidance to adequate and balanced diet.

Teaching Aids:

Posters, flashcards, charts, visual presentation of various foods with respect to their food groups.

Method of information input:

Lecture with demonstration of actual grouping of foods followed by visual presentation. Before lecturing, the respondents were questioned to assess their background knowledge on the subject.
SESSION – 7
NUTRITION IN OLD AGE

Objectives:

A. To educate elderly on the significance of proper nutrition in old age.
B. To educate the participants on the recommended nutrient intakes.
C. To bring in awareness about the dietary guidelines for older people.

Concepts Described:

- Nutrition in old age.
- Recommended nutrient intake.
- Guide to healthy eating.
- Tips for healthy eating.
- Dietary guidance for obese persons.

Teaching Aids:

Charts, posters

Method of Information Input:

Lecture method accompanied by visual presentation. A group discussion on the local customs followed regarding the food consumption of respondents. The respondents were given opportunities to clear many of their doubts.
SESSION – 8 AND 9
DIABETES IN OLD AGE

Objectives:

A. To educate elderly about the disease diabetes.
B. To make the participants understand that diabetes is a lifelong chronic condition.
C. To improve their quality of life through life style modifications.
D. To educate them with regard to diabetic meal planning.
E. To mange diabetes in a friendly way.

Concepts Described:

- What is Diabetes?
- Types of diabetes
- Diabetes mellitus is a life-long chronic condition
- Symptoms, Prevention, Risk factors
- Hypoglycemia – Causes, Symptoms, Prevention – Treatment
- Life style modification
- Importance of yoga, meditation
- Management of diabetes in old age
- Diabetic meal planning

Teaching Aids:

Power Point Presentations, Posters, Charts and Display of Meal.

Method of Information Input:

Lecture was aided with visual presentation of posters, charts and Illustration of case studies. Group discussion was conducted. Pamphlets were distributed to the respondents. Counseling was organized inviting the nutrition experts. Diabetic meal was displayed.
SESSION – 10
CARDIO VASCULAR DISEASE

Objectives:

A. To impart knowledge about cardio vascular diseases (CVD).
B. To bring in awareness of facts about CVD.
C. To educate elderly about risk factors for heart attack.
D. To educate them about stroke and risk factors of stroke.

Concepts Described:

- Introduction to CVD
- Facts about CVD
- Symptoms of Heart attack
- What has to be done if heart attack occurs?
- Risk factors for heart attacks
- Stroke - symptoms, Prevention and Risk factors

Teaching Aids:

Display of articles clipping, Charts, Posters.

Methods of Information Input:

The session was conducted by the guest speaker. Many of the respondents were hypertensive and needed an expert guidance. Visual aids were used in the lecture.

SESSION – 11
HYPERTENSION

Objectives:

A. To educate the respondents about high blood pressure
B. To highlight the general facts of hypertension.
C. To impart knowledge about the management of hypertension.
Concepts Described:

- Concept of high blood pressure
- Symptoms prevention
- Risk factors
- Precautionary measure to control Blood Pressure
- Management of hypertension in old age

Teaching Aids:

PPT and Posters

Methods of Information Input:

The session was conducted by the guest speaker as many of the respondents were hypertensive. Lecture was supplemented with visual presentation of photographic aid posters. This session also involved questioning. In this session respondents cleared the doubts they had and put many questions to know about the management of hypertension.

SESSION – 12

CANCER

Objectives:

A. To educate the elderly about the different types of cancer
B. To create awareness about the biology of cancer in old age.
C. To educate the participants with regard to prevention of cancer and screening

Concepts Described:

- Types of cancer
- Biology of cancer in old age
- Management of cancer
- Quality of life in older persons with cancer
• Prevention of cancer and screening

**Teaching Aids:**

PPT and Posters

**Methods of Information Input:**

Lecture was given by the guest faculty using PPT followed by question and answer session. Two of the respondents were affected by cancer and counseling was carried out by the expert on how to manage and improve the quality of life.

**SESSION – 13**

**ARTHrites AND OSTEOPOROSIS**

**Objectives:**

A. To impart knowledge about the disorder arthritis and osteoporosis.
B. To bring in awareness on the precautionary measures.
C. To reinforce the importance of adhering to foods rich in calcium.

**Concepts Described:**

• Concept of osteoporosis and arthritis
• Types, symptoms, prevention, delay of onset.
• Risk factors
• Osteoporosis – Diet plan

**Teaching Aids:**

Flash cards, posters, photography

**Methods of Information Input:**

Knowledge was imparted to the respondents through a lecture session using visual aids followed by group discussion.
SESSION – 14
GASTROENTERITIS

Objectives:

A. To educate the participants about gastroenteritis disease.
B. To create awareness as to how these diseases spread.
C. To teach them the precautionary measures to be taken.

Concepts Described:

- Concept of arthritis and gastroenteritis
- Causes
- Prevention
- Self care and home remedies
- Gastrointestinal – functional disorder
- Constipation
- Importance of fiber in the diet for elderly

Teaching Aids:

Charts, PPT

Methods of Information Input:

Lecture method using PPT. Interactive session was supplemented by the group discussion.

SESSION – 15
MENTAL HEALTH IN OLD AGE

Objectives:

A. To enhance the knowledge of elderly about mental health in old age.
B. To educate them about psycho social variables leading to mental and emotional problems in the elderly.
**Concepts Described:**

- Mental health in old age
- Mental and emotional problems in the elderly
- Psychological concerns of the elderly
- How to overcome loneliness
- Mental functions that can get affected with ageing

**Teaching Aids:**

Power Point Technique (PPT)

**Methods of Information Input:**

Lecture was delivered by the guest faculty using PPT followed by interaction with the respondents.

**SESSION – 16**

**PSYCHIATRIC DISORDERS IN OLD AGE**

**Objectives:**

A. To impart knowledge about the psychiatric disorder in old age.
B. To educate the respondents on the factors that determine an active mind.
C. To enlighten them with regard to various mental activities that boost brain power.

**Concepts Described:**

- Psychiatric Disorders
- Depression
- Anxiety disorder
- Hypochondrias
- Paranoid disorder
- Dementia
- Factors that determine an active mind
• Mental activities that boost brain power
• Tips for effective mental workouts

**Teaching Aids:**

Photography and PPT

**Methods of Information Input:**

Lecture was delivered by the guest faculty followed by group discussion. Some of the mental activities that boost brain power were conducted for the respondents by investigator.

**SESSION – 17**

**HEALTH CARE TO IMPORVE QUALITY OF LIFE**

**Objectives:**

A. To educate the respondents on the ways to improve their health.
B. To impart knowledge about health care and functional disorders in old age.
C. To enhance the pre-existing knowledge to remain healthy.

**Concepts Described:**

• Concept of health
• Ways to improve their health
• Eye and skin care
• Tips to remain healthy
• Perception of quality of life

**Teaching Aids:**

Posters and Charts
Methods of Information Input:

Lecture was given describing the various types of disease conditions and how to take care of their health. Suggestions were given on how to remain healthy and improve their quality of life.

SESSION – 18

FALL AND FALL RELATED INJURIES IN OLD AGE

Objectives:

A. To bring in awareness among participants on how fall related injuries occur in old age.
B. To educate them on the risk factors of fall and fall related injuries in old age.
C. To educate them about the precautionary measures to be taken in daily life.

Concepts Described:

- Fall related injuries
- Causes of fall in old age
- Types of fractures that occur due to fall
- Prevention of falls and accidents

Teaching Aids:

Photography and PPT

Methods of Information Input:

Lecture using PPT followed by interactive session. Many case studies on fall related injuries were presented.
SESSION – 19

BREATHING PROBLEM IN OLD AGE

Objectives:

A. To educate the elderly on common symptoms of breathing problem.
B. To create awareness among participants about the major breathing disorders in older adults.
C. To bring in awareness among the participants about the precautionary measures to be taken for breathing problems.

Concepts Described:

- Symptoms of breathing difficulty
- Persistent cough
- Wheezing
- Difficulty in breathing
- Diagnosis and treatment
- Major breathing disorders in older adults
- Chronic abstractive pulmonary disease
- Asthma
- Obstructive sleep
- Aspiration

Teaching Aids:

PowerPoint Presentation

Methods of Information Input:

Guest lecture was organized. Lecture was given using PPT. Some of the respondents had problems of breathing and asthma. This enabled interactive talk and group discussion.
SESSION – 20

HOME REMEDIES FOR GERIATRIC DISEASES

Objectives:

A. To create awareness among participants about various home remedies for geriatric diseases.

B. To bring in awareness about the importance of sleep for well being.

C. To educate the participants about the health benefits of eating nuts and dry fruits.

Concepts Described:

• Home Remedies for diseases
• Anemia
• Arthritis
• Asthma
• Bladder infection and stones
• Constipation
• Cough
• Depression
• Diarrhea
• Eye problem
• Fatigue
• Headache
• Hiccups
• Importance of sleep for wellbeing
• Reasons for loss of sleep
• Health benefits of eating nuts and dry fruits

Teaching Aids:

Charts, Posters, Flannel graph, Case illustrations.
Methods of Information Input:

Lecture was given describing the various home remedies for diseases. The participants showed interest as many of them were suffering from various diseases. The participant also showed keen interest to know the health benefits of eating nuts and dry fruits.

SESSION – 21
ACUPRESSURE THERAPY

Objectives:

A. To create awareness among participants about Acupressure and Acupressure therapy.
B. To educate them on how acupressure helps in removing pain.

Concepts Described:

• What is Acupressure?
• How acupressure helps in pain reduction.
• How acupressure helps for different part of body.

Teaching Aids:

Chart, posters, demonstration and banner

Methods of Information Input:

Lecture cum demonstration of some acupressure therapy. It was demonstrated for the respondents.

SESSION – 22
STRESS AND STRESS MANAGEMENT FOR THE ELDERLY

Objectives:

A. To educate elderly about stress and management of stress in daily life.
B. To bring in awareness to learn healthier ways to manage stress.
C. To educate them on how to deal with stressful situations.

**Concepts Described:**

- Concept of stress
- Stressors
- Unhealthy ways of coping with stress
- Learning healthier ways to manage stress
- Dealing with stressful situations
- Stress management tips for elderly

**Teaching Aids:**

PowerPoint Presentation

**Methods of Information Input:**

Lecture was given by the guest faculty using PPT followed by group discussion. Some of respondents discussed about the stressful situation at home and got clarification as to how to deal with that situation.

**SESSION – 23 AND 24**

**HUMOUR AND LAUGHTER YOGA**

**Objectives:**

A. To bring in awareness about the importance of humor and laughter in improving the quality of life.
B. To educate the elderly on the benefits of humor and laughter.

**Concepts Described:**

- Concept of humor and laughter
- Benefits of laughter
- Standard format of a laughter session developed by Madan Kataria.
**Teaching Aids:**

Demonstration

**Method of Information Input:**

Demonstration of laughter yoga was conducted by the anchor person. Respondents participated and enjoyed the session.