A STUDY TO ASSESS THE HEALTH PROBLEMS OF ELDERLY WITH A VIEW TO PREPARE AN INTERVENTIONAL MODULE FOR THE CARE OF ELDERLY IN SELECTED AREAS AT BANGALORE

Gajanand R Wale*

Associate Professor, K T Patil College of BSc Nursing, Osmanabad (M.S), India.

ABSTRACT

Aging is a natural process occurring in all living beings and cannot be prevented or reversed but it is possible to slow the process. Aging is the gradual change in structure and functions which occurs with the passage of time, resulting in disease or trauma and causing increasing probability of death. Aim: The study was undertaken to assess the health problems of elderly and to identify the influence of selected socio demographic variables so as to develop an interventional for the elderly for their care. Methodology: Non-experimental research design, survey was used. The study was conducted among 157 elderly from Hegganahalli urban community. Sampling technique used for this study was non-probability convenient sampling. Structured interview schedule & descriptive design was used to collect the data & identify health problems of the elderly. The data were analyzed using descriptive and inferential statistics tools. The influences of selected demographic variables were found out using Chi square test. Based on the problems identified an interventional module was developed regarding the care of elderly.

INTRODUCTION

Elderly or old age consists of ages nearing or surpassing the average life span of human beings. The boundary of old age cannot be defined exactly because it does not have the same meaning in all societies. People can be considered old because of certain changes in their physiological activities or social roles [1].

Also old people have limited regenerative abilities and are more prone to disease, syndromes, and sickness as compared to other adults’ .In 1901 the proportion of the population aged 60 or over of India was about 5 percent, which marginally increased to 5.4 percent in 1951, and by 2001 this share was found to have risen to about 7.4 percent. About 75% of persons of age 60 and above reside in rural areas. Both the share and size of elderly population is increasing over time. From 5.6% in 1961 it is projected to rise to 12.4% of population by the year 2026 [2].

The size of the elderly population has risen from 12.1 million in 1901 to approximately 77 million in Census 2001. According to official population projections, the number of elderly persons will rise to approximately 140 million by 2021 [3].

According to the United Nations Department of Economic and Social Affairs, one out of every ten people on the planet is now 60 years of age or older. If the current trend of lowering birth rates and lowering death rates continues, by the year 2050 one out of five people...
will be aged 60 years or older and by 2150, one out of every three people will be aged 60 years or older. Additionally, the oldest old are the most rapidly expanding segment of the elderly population. Currently, the oldest old make up 11 percent of the 60+ age group and will grow to 19 percent by 2050 [4].

In simple words “aging is the gradual change in structure and functions which occurs with the passage of time, resulting from disease or trauma and causing increasing probability of death. Death is the end point of aging” [5].

The problems elderly are: Physical fitness and health problem, financial problem Physiological problem Problems of interaction in a social familial setting [6].

Each of these aspects may affect the quality and quantity of problems in other categories. As the population of elderly is exposing and necessitating the nurse has the important role in the aspect of promotion of health and prevention of health problems especially in elders. To prevent the health problems and to maintain the optimum health the main role of the nurse is to educate the elders regarding importance of healthy practices like exercise, walking, yoga, meditation, recreation and about healthy diets and proper sleeping hobbits [7].

OBJECTIVES OF THE STUDY
The objectives of the study are:
• To assess knowledge regarding health problems of elderly person.
• To find out the association between demographic variables viz., age, gender, religion, education, marital status, occupation, income, place of residence, presence of co morbid illness etc and knowledge.

MATERIAL AND METHODS (METHODOLOGY)
Research Approach
The present study intended to identify health problems faced by elderly and prepare an instructional module for the care of elderly. In order to achieve objectives a non Experimental descriptive method was found to be most suitable.

Research Design
In the present study a descriptive design was used to identify “a Health problem of elderly residing in Hegganahalli, Bangalore. Study was conducted as survey to identify the problems of elderly. Survey designs are concerned with gathering information from a segment of the population. During descriptive phase semi-structured interview was used to collect data regarding problems of elderly.

Setting and Population of the Study
The study was conducted at Hegganahalli Urban, Primary Health centre Bangalore. In the present study population was defined as persons (male and female) above 60 years of age.

Sample & Sample Size
The sample for the study consisted of 157 persons (male and female) above 60 years of age comes under Hegganahalli Urban PHC, Hegganahalli Bangalore.

Sampling Technique:
The non-probability convenient sampling was used in the study

Sampling Criteria
The criteria for the sample selection are:

Inclusion Criteria for Sampling
• Persons, who are above 60 years
• Persons, who are willing to participate in the study
• Those who can understand and Read Kannada or English
• Old age persons who has not attended any classes regarding health problems of the elderly.

Exclusion Criteria for Sampling
• Old age persons who are health professionals
• Old age persons who are seriously ill.

Data Collection Tools and Techniques
The structured interview was the technique used by the investigator for the collection of data.

Data collection was done through personal interview structured interview schedule. The research tool was devised on the basis of review of related literature and under the guidance of subject experts.

Tool and Technique
Instructional module was prepared by the investigator reviewing pertinent literature on the subject and under the guidance of subject experts’

• Interview schedule
• Instructional module

Data Collection Process
The duration of data collection was 4 weeks.
The purpose and nature of the study was clearly explained to the subjects. Each interview lasts for 10-15 minutes.

Plan for Data Analysis
The data collected from the subjects were grouped and analyzed by descriptive and inferential statistics. The
analysis was planned on the basis of objectives and hypothesis

**Hypothesis**

H1. There will be significant association between demographic variables and Knowledge.

**Method**

The study was conducted among 157 elderly from Hehhanahalli Urban PHC, Bangalore. Structured interview schedule was used for data collection. Sociodemographic data and details of physical, mental, spiritual dimensions of elderly were collected. The data were analyzed using appropriate statistical tools. The influences of selected demographic variables like age, sex, education, and income on the physical, mental, spiritual dimensions of elderly were found out using Chi square test. Based on the problems identified an interventional module was developed regarding the care of elderly [8].

**RESULTS**

**Distribution of Variable According to Age**

Table show 21.9% of elderly female were in the age group of 60-64 years, 17.9% were in the age group of 65-69 Yrs., 32.9% were in the age group of 70-74 Yrs., 19.2% in the age group of 75-79 Yrs., 10.7% in the age group of 80-84 Yrs and 6.9% were above 85Yrs. 35.7% of elderly male were in the age group of 60-64 years, 17.9% were in the age group of 65-69 Yrs., and 27.4% were in the age group of 70.

**Distribution of Variable According to Marital Status**

Male –female difference in longevity is reflected in this table. While 50% of females lost their spouses, only 20% of males lost their spouses. Percentage of married persons are also high among males (68.2) compared to 44.4% of males.

**Distribution of Variable According to Income**

Females seem to be economically better than males as 20.8% of females are having their income above 1000 compared to 11.7% of males.

**Distribution of Variable According To Religion**

The above table 1 and figure depicts that major portion of elderly males i.e., 58.8% and 66.7% of the elderly females were Hindus. 35.3% of elderly males 27.8% of elderly females were Muslims and 5.9% of the elderly males and 5.5% of the elderly females were.

**Section II: Physical health of the elderly**

According figure, 12.7% of the elderly were hypertensive, 10.2% Diabetic, 7% had arthritis, 7.6% had hearing and visual impairment, 0.6% had hypertension and skin problem and 0.6% had hypertension and cancer. Hypertension and diabetes, seems to affects the study group, considerably either alone or in combination with other diseases. Female Are Suffering more with diabetes and arthritis, impaired vision and hearing impairment.
Section I. Socio Demographic data

<table>
<thead>
<tr>
<th>SR. No</th>
<th>Demo - Graphical Variable</th>
<th>Male</th>
<th>Female</th>
<th>Total Number</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>1</td>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60-64 years</td>
<td>30</td>
<td>35.7</td>
<td>16</td>
<td>21.9</td>
</tr>
<tr>
<td></td>
<td>65-69 Years</td>
<td>15</td>
<td>17.9</td>
<td>12</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>70-74 Years</td>
<td>23</td>
<td>27.4</td>
<td>24</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td>75-79 Years</td>
<td>7</td>
<td>8.3</td>
<td>14</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>80-84 years</td>
<td>9</td>
<td>10.7</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>85 Years</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>6.9</td>
</tr>
<tr>
<td>2</td>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>married</td>
<td>58</td>
<td>68.2</td>
<td>32</td>
<td>44.4</td>
</tr>
<tr>
<td></td>
<td>single</td>
<td>3</td>
<td>3.5</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Widow / widower</td>
<td>17</td>
<td>20.0</td>
<td>36</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>separated</td>
<td>7</td>
<td>8.2</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>3</td>
<td>Monthly Income of the Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;500</td>
<td>49</td>
<td>57.6</td>
<td>36</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>501-1000</td>
<td>26</td>
<td>30.6</td>
<td>21</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td>1001-1500</td>
<td>0</td>
<td>0.0</td>
<td>8</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>1501-2000</td>
<td>7</td>
<td>8.2</td>
<td>7</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>&gt;2000</td>
<td>3</td>
<td>3.5</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>4</td>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>House wife</td>
<td>0</td>
<td>0.0</td>
<td>51</td>
<td>70.8</td>
</tr>
<tr>
<td></td>
<td>Pensioner</td>
<td>21</td>
<td>27.6</td>
<td>7</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Agriculture labor</td>
<td>31</td>
<td>36.5</td>
<td>6</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Not working</td>
<td>20</td>
<td>23.5</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Coolie</td>
<td>11</td>
<td>12.9</td>
<td>8</td>
<td>11.1</td>
</tr>
<tr>
<td>5</td>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hindu</td>
<td>50</td>
<td>58.80</td>
<td>48</td>
<td>66.70</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>30</td>
<td>35.30</td>
<td>20</td>
<td>27.80</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>5</td>
<td>5.90</td>
<td>4</td>
<td>5.50</td>
</tr>
<tr>
<td>6</td>
<td>Health Habits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No habits</td>
<td>41</td>
<td>48.2</td>
<td>46</td>
<td>63.9</td>
</tr>
<tr>
<td></td>
<td>Smoking</td>
<td>30</td>
<td>35.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Alcoholism</td>
<td>4</td>
<td>4.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Betel chewing</td>
<td>0</td>
<td>0.0</td>
<td>26</td>
<td>36.1</td>
</tr>
<tr>
<td></td>
<td>Smoking, alcoholism</td>
<td>4</td>
<td>4.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Smoking, betel chewing</td>
<td>6</td>
<td>7.1</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Section II. Association between selected demographic variables with physical, mental and spiritual dimensions of elderly.  

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Variables</th>
<th>Chi Squares</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Duration –HT In yrs</td>
<td>$\chi^2=13.144$</td>
<td>P=0.044  p-value is &lt; 0.05S</td>
</tr>
<tr>
<td>2</td>
<td>monthly income and regular treatment</td>
<td>$\chi^2=32.268$</td>
<td>P=0.000 p&lt;0.001S</td>
</tr>
<tr>
<td>3</td>
<td>Association between age and Hypertension</td>
<td>$\chi^2=20.970$</td>
<td>P=0.001 p&lt;0.001S</td>
</tr>
<tr>
<td>4</td>
<td>Association between age and arthritis</td>
<td>$\chi^2=10.027$</td>
<td>P=0.074 p&gt;0.05S</td>
</tr>
<tr>
<td>5</td>
<td>Association between age and occurrence of cancer\</td>
<td>$\chi^2=13.358$</td>
<td>P&lt;0.05  p=0.020S</td>
</tr>
<tr>
<td></td>
<td>Association between education and regular treatment</td>
<td>$\chi^2=16.008$</td>
<td>P=0.014 p&lt;0.05 S</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>7</td>
<td>Association between habits and hypertension</td>
<td>$\chi^2=16.744$</td>
<td>P=0.005 p&lt;0.05 S</td>
</tr>
<tr>
<td>8</td>
<td>Association between habits and DM</td>
<td>$\chi^2=17.450$</td>
<td>P=0.004 p&lt;0.05 S</td>
</tr>
<tr>
<td>9</td>
<td>Association between habits and arthritis</td>
<td>$\chi^2=8.110$</td>
<td>P=0.150 p&gt;0.05</td>
</tr>
<tr>
<td>10</td>
<td>Association between habits and respiratory problem</td>
<td>$\chi^2=20.911$</td>
<td>P=0.001 p&lt;0.05 S</td>
</tr>
</tbody>
</table>

*S- Statistical Significant

**DISCUSSION**
- There was the significant influence of socio-Demographic Variable on health status of Old ages
- A study was conducted and findings revealed that due to low education, poor economic conditions and rural backgrounds.
- The present study revealed that compliance to treatment more in educated group.
- The majority of the had visual problems followed by orthopedic problems. Chronic respiratory disorders were significantly more in men while orthopedic problems were more in women.
- A study was conducted and reported that the aging heart is susceptible to various types of disturbances in normal heart rhythm and conduction of electrical impulses. Each type of arrhythmia or conduction disorder carries a different risk of hospitalization.

**CONCLUSION**

The ageing population is both a medical sociological problem. In rapidly graying world, healthy ageing is vital for countries. The modern philosophy is that the old must continue to take their share in the responsibilities and in the enjoyment of the privileges, which are an essential feature of remaining an active member in the community.

**Interventional Module**
The module has been prepared to make elderly knowledgeable regarding their care. It consists of instructions regarding various activities of daily living.

**Instructions Regarding Various Activities of Daily Living**

Aged individuals share similar universal self care demands with all other human beings. Each aged individual has unique capacities and limitations regarding his or her ability to fulfill universal self care demands equally or similarly.

1. **Exercises**
   - It valuable at any age but are much benefit for the elderly.
   - The exercise programmers for the elderly are as follows:-
     - Carrying on regular activities of daily living is one means to exercise the body.
     - During shower bath the older person can perform flexion and extension exercises.
     - Deep breathing and limp exercise can be incorporated in to the period between awakening and rising from bed.
     - It is better to introduce exercise gradually and then to increase according tolerance

   [Avoid forceful exercise of an]

   - Exercise should be paced through the day, and fatigue from exercising should be avoided.

2. **Food Pattern**

   Dietary pattern in the elderly results for such factors as poor nutritional habits, economic constraints and underlying disease condition.
   - The caloric intake is adjusted to individuals’ needs to maintain normal weight and to prevent overweight and underweight.
   - Older people are vulnerable to low nutrient intake. Dietary studies show that calcium, thiamin, ascorbic acid, and vitamin-A are the nutrients. Most commonly lacking in the diet of the aged. Adequate intake of these is a must.
   - Avoid too much fat and cholesterol.
   - Avoid too much salt, Spicy and High Sugar Diet.

3. **Hydration**

   To maintain hydration status the elderly should consume 2000 to 2500 ml of fluid per day. It is essential to prevent dehydration.

4. **Use of leisure time**

   Leisure is relatively self determined, psychologically pleasant activity experienced as leisure by participant and providing opportunities for recreation, personal growth and services to others. The various instructions are
   - Engage in planed exercise program including a short walk in the evening.
   - Find time to read news paper and watch Television if
such facilities are available.

- Be involved in group, share the feelings, participate in group activities
- Utilize the recreational facilities available
- Participate in spiritual and religious activities.
- Cultivating friendship and interaction with others will help to prevent loneliness and isolation.

5. Rest and sleep
Importance: Human organisms need rest and sleep to conserve energy, prevent fatigue, provide respite and relieve tension. Sleep is an extension of rest and both are physiologic and mental necessities for survival. Some instructions are
- Naps and periods of rest during the day are beneficial
- Five to seven hours of night sleep should be sufficient
- Use warm milk at bed time, soft music etc.
- Satisfying regular activities promotes rest and relaxation

REFERENCES
5. United Nations Department of Economic and Social Affairs, 2011.