

**A STUDY OF FACTORS ASSOCIATED  
WITH HEALTH SEEKING BEHAVIOUR OF  
ELDERLY IN RURAL FIELD PRACTICE AREA OF  
SHRI B.M.PATIL MEDICAL COLLEGE, BIJAPUR.**

**By  
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Dissertation submitted to

**BLDE UNIVERSITY, BIJAPUR.  
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In Partial Fulfillment of the requirements for the degree of

**M.D**

In

**COMMUNITY MEDICINE**

**Under the Guidance of**

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## **LIST OF ABBERVATIONS USED**

P	-	Probability
WHO	-	World Health Organization
Yrs	-	Years
NSSI	-	National Sample Survey India
NPOP	-	National Policy for Older Person
SRS	-	Scientific Research Society
IEC	-	Information, Education and Communication



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***..... IS THERE ANYTHING WE CAN DO FOR THEM?***

***..... COME, LET US ADD LIFE TO THEIR YEARS***

# INTRODUCTION

“Live your life and forget your age.”

- Norman Vincent Peale

“Population ageing” is the process by which older individuals become a proportionally larger share of the total population was one of the most distinctive demographic events of the twentieth century. It will surely remain important throughout the twenty-first century. Initially experienced by the more developed countries, the process has recently become apparent in much of the developing world as well.<sup>1</sup> Today 60% of those aged 60+years live in the developing countries and their proportion will increase to 80% by 2050<sup>2</sup>.

The geriatric population is defined as population aged 60 years and above<sup>1</sup>. It is common to define the “young old” as aged 60 – 69 years, the “old old” as aged 70 – 79 years and the “oldest old” as 80 years and over<sup>3</sup>.

The elderly population (aged 60 years or above) in India accounts for 7.4% of total population in 2001. For males it was marginally lower at 7.1%, while for females it was 7.8%. Among states the proportion vary from around 4% in states like Dadra & Nagar Haveli, Nagaland Arunachal Pradesh, and Meghalaya to more than 10.5% in Kerala. Both the share and size of elderly population is increasing over time, from 5.6% in 1961 to 7.4% in 2001 and it is projected to rise to 12.4% of population by the year 2026.<sup>4</sup>

This increase in geriatric population is attributed to improvement in medical facilities and family planning programme<sup>5</sup>.

The elderly are at great disadvantage by all accounts especially with accelerating socio cultural changes. They form a vulnerable group not only from the point of view of physical health problems but also from psychosocial aspects namely economic, social, nutritional and others. Although it is true that India's philosophy and culture prescribe reverence and respect for the aged and recommend the care of the aged parents as a form of worship, these values are facing erosion at present. This has been the result of breakup of joint family system of living, migration of younger members to the urban area for employment and the competitive nature of modern living. Although 20% of aged are known to enjoy a fairly good level of health and contentment others present with various problems<sup>6</sup>.

Old age is associated with increased occurrence of a wide array of physiological, physical, mental and social impairments or losses, which may contribute independently or collectively to disabilities. These include elevated blood pressure, decreased immune response, reduced visual, auditory and olfactory acuity, loss of muscle and bone mass, fragility of the skin, slowing of mental responses, decreased cognitive ability, loss of spouses and companions, reduced income and loss of social role of autonomy etc<sup>7</sup>.

The care of elderly is drawing more and more attention of the Government and public. It is already a major social and health problem in affluent countries. It is ironical that while science has prolonged life, the changes that it has brought about in cultural and social pattern have robbed the elderly of the status and self esteem and have deprived them of chance to function usefully in the society<sup>8</sup>.

Attribution of ill health to ageing, low economic status and negative attitude of health workers towards the care of the elderly are some of the factors associated with delay in seeking health care.

Health seeking behaviour of elderly people in India is greatly influenced by the place where they reside and the socio-cultural factor prevailing in that area. Hence this study is conducted to identify the various socio-demographic and cultural factors influencing the health seeking behaviour of the elderly people. The findings of this study will in turn help the programme managers to plan and implement effectively various programmes for improving the health status of the elderly population.



## **OBJECTIVES OF THE STUDY**

- 1) To study the socio demographic profile of elderly people.
- 2) To study the role of these factors in health seeking behaviour of the elderly people.

## REVIEW OF LITERATURE

"Years wrinkle the skin but worry, fear and anxiety wrinkle the soul." -Vedas.

Ageing is a natural and universal process and is regarded as a normal biological phenomenon.

It involves series of progressive and irreversible biological changes.<sup>9</sup>

### **Mechanism of ageing<sup>10</sup>**

Ageing is a complex process comprising multiple mechanisms which involve the interaction of a large number of factors.

Theories of ageing fall into two groups

- i) Programmed/ genetic clock theories considered organ based. Gene regulation theory, explains ageing is the consequences of differential expression and suppression of genes after attainment of reproductive maturity.
- ii) Cellular based theories also termed accumulated / acquired damage theories.

According to this ageing results from accumulated damages that outstrip repair processes. The accumulated damage triggers a genetic program causing instabilities of the genome, thus leading to ageing.

The bulk of present opinion seems to favour a genetically determined, species specific, maximum life span, with acquired damage and immunologic events determining how close an individual comes to achieving it.

Ageing, it is said begins with conception. There is no cut-off age at which person become old since we are all growing old every minute<sup>11</sup>. Well known epics of ancient India describes four distinct stages of human life in the ageing process as follows:

- 1) 'Brahmacharya Stage' (up to 25 years).
- 2) 'Gruhashthashrama Stage':- (26<sup>th</sup> year to 50 years):
- 3) 'Vanaprasthashrama Stage'(51<sup>st</sup> year to 75 years):
- 4) 'Sanyasa' stage (76 years onwards):

According to this old age begins after 50 years.

In Greece, Hippocrater (460-370 BC) set the beginning of old age at fifty six years<sup>12</sup>.

KIRK H 1992<sup>9</sup> reveals in his study that there was tendency to categories the elderly in general as a group of frail individual's. However in order to maintain uniformity in formulating policy and programs, the age to define the elderly in most developing countries has been accepted as 60 years.

Denmark was the first country to introduce legislation defining people over 60 years as old age for its pension policy

The world health organization defines 'Elderly' as 'any person above the age of 60 years'. Based on their age, the elderly are further classified into 3 groups<sup>13</sup>:

- a. Young old: Persons in the age group of 60 years to 69 years
- b. Old old : Persons in the age group of 70 years to 79 years.
- c. Oldest old: Persons above the age of 80 years.

India, for all practical purposes, follows the definition of the World Health Organization for the elderly and uses 60 years as the cut-off age for the elderly. The National policy for older persons (NPOP) is directed towards this age group<sup>14</sup>.

## **Population trends**

During the 19<sup>th</sup> century, great advances made in the field of health, social sciences, economics and nutrition has enhanced the life expectancy. With this longevity in life expectancy has increased the geriatrics population in almost all countries. However there is wide disparity among the countries.

In the year 2002 there were estimated 605 million old persons in the world of which 400 million are living in low income countries. Italy and Japan have highest proportion of older persons (above 16.7% and 16% respectively in the 2003). By 2025 the number of elderly persons is expected to rise more than 1.2 billion with about 840 million, will be from low income countries<sup>15</sup>.

Geriatrics population is projected to reach 22% in North America, 17.5% in south East Asia 12% in Latin America and 10% in South Africa<sup>16</sup>. It is projected that in China and India alone there will be 270 million elderly citizens by 2020<sup>17</sup>.

In India as per SRS estimates (2003), geriatrics population constitutes 7.2 % of the total population.

### **Status of senior citizens**

In the pre-industrialized societies, extended families were common, where senior citizens were respected, and they were consulted on many matters. The aged always had a wealth of experience with universal human concerns such as the meaning of life, love and death. They were valued for their experiences and traditional skills. Old traditions customs and beliefs were transmitted by them to younger generations, leading to high honor and prestige. They participated actively in key areas in the community. They were key decision-makers in the family household, having control of productive resources such as land<sup>18</sup>.

## **IN ANCIENT INDIA**

"Mathrudevo Bhava, Pitru devo Bhava" (Mother is God, Father is God) – Vedas

In ancient India, respect for age was deeply embedded cultural value, and possibly derived its strength from ancient religious and secular text. Rules and regulation to look after elderly are found in ancient scriptures<sup>19</sup>. Elderly were considered as treasure of knowledge. Their blessings, decisions on important matters were frequently sought. In Indian philosophy there is elaborate theory of sought parental debt ( pitru rana ). Children were obligated to repay the debt as long as they were alive, by looking after aged parents till they lived. Kautilya stated that it is obligatory for the state to care for the elderly members of the community<sup>20</sup>.

## **STATUS IN MODERN ERA**

Globally the geriatric population (60<sup>+</sup>) has increased. With this, it has brought to the forefront many newer geriatric problems. Breakdown of joint family system, migration of youngsters for better features, has left senior citizens behind with nobody to take proper care. Thus lack of family support and economic support has created lot of physical, social and mental problems for the elders<sup>21</sup>.

According to Restro H.E Rozental (1994)<sup>22</sup>stunning growth of elderly population would demand special attention of policy and decision makers. Women issues are extremely important in considering social policies for elderly population.

Bagchi-Kalyan (1998).<sup>23</sup> in their study found some important areas of gerontological research in India. He felt that though Indian research studies had concentrated on the quality of care in institutions for the aged in India, the results did not give any satisfactory lead as to how to support those who were almost destitute. Social research for eliciting community support for the elderly care had not yet started

in India. Similarly a common practice in the western world of getting volunteers in the community, having them trained, and utilizing them for care of the elderly in individual homes, had not yet been attempted in India. Unfortunately, health care of the millions of elderly in the country was totally absent. It was no exaggeration to say that primary health care was, incapable of responding to the needs of elderly persons not only through specialized care, but also even through primary level of health care.

Ramsden JW (1992).<sup>24</sup> in his study described about geriatric assessment in the home. He felt that home assessment could reveal important Health and Social problems not identified in a clinical visit. Primary care physician could contribute more to help, and care for frail elderly patients if he assesses in the home

## **DEMOGRAPHY OF THE ELDERLY: GLOBAL SCENARIO**

An increase in life expectancy, along with decreased fertility rate and a combination of many other socioeconomic factors over the past few decades has resulted in a ‘demographic transition’ which has led to a rapid increase in the proportion of the elderly in the population<sup>25</sup>.

The population of the world in 1995 was 5.7 billion. The number will rise to reach 10.8 billion by 2050. As per United Nations projection the likely future scenario of world population (assuming medium fertility) is as shown in the following table-01

**TABLE NO: 1**  
**GLOBAL SCENARIO OF AGED 1995-2150**

<b>YEAR</b>	<b>Total POPULATION (In Billion)</b>	<b>% OF AGED 60yrs +</b>	<b>% OF AGED 65yrs +</b>	<b>% OF AGED 80yrs +</b>
<b>1995</b>	<b>5.678</b>	<b>9.5</b>	<b>6.5</b>	<b>1.1</b>
<b>2000</b>	<b>6.091</b>	<b>9.9</b>	<b>6.8</b>	<b>1.1</b>
<b>2025</b>	<b>8.039</b>	<b>14.6</b>	<b>10.8</b>	<b>1.7</b>
<b>2050</b>	<b>9.367</b>	<b>20.7</b>	<b>15.1</b>	<b>3.4</b>
<b>2075</b>	<b>10.066</b>	<b>24.8</b>	<b>19.1</b>	<b>5.3</b>
<b>2100</b>	<b>10.414</b>	<b>27.7</b>	<b>22.0</b>	<b>7.1</b>
<b>2125</b>	<b>10.614</b>	<b>29.2</b>	<b>23.6</b>	<b>8.6</b>
<b>2150</b>	<b>10.806</b>	<b>30.5</b>	<b>24.9</b>	<b>9.8</b>

The percentage of elderly in the world population is expected to increase rapidly from 9.5 to 20.7 in 2050. Among the elderly the number of aged 80 yrs and more will rise seventeen fold between 1995 and 2150 from 61 million in 1995 to 1054 million by 2150. This rise in number and proportion of older people will be witnessed all over the world; however most of the world's elderly are living and will continue to live in developing countries<sup>26</sup>.

## **DEMOGRAPHY OF THE ELDERLY IN DEVELOPED COUNTRIES**

As assessed by the United Nations, only the Western European region had a proportion of the elderly over 15% currently, the proportion of elderly in Greece and Italy is above 24% and is the highest in the world. It is expected that by 2025, Japan and Switzerland will have the highest proportion of elderly (over 35%)<sup>27</sup>. Currently, the proportion of elderly in the more developed regions of the world is 20.2%<sup>28</sup>.

## **DEMOGRAPHY OF THE ELDERLY IN DEVELOPING COUNTRIES**

The developing countries have also been hit by the phenomenon of population ageing. Of the estimated 605 million elderly people in the world, two thirds (i.e. around 400 million) reside in the developing countries<sup>29</sup>. The proportion of the elderly in the less developed regions of the world is 8.2%<sup>28</sup>.

About 9% of Asia population is aged above 60 years. Currently in 7 Asian countries, more than 10% of the population is constituted by the elderly. It is projected that by 2025, five developing countries will be among the ten countries with the largest number of older persons in the world: China (287 million) , India (168 million) , Indonesia (35 million) , Brazil (33 million) and Pakistan (18 million)<sup>27</sup>.

## **DEMOGRAPHY OF THE ELDERLY: INDIAN SCENARIO**

According to the Census of India 2011, in a population of over 1 billion, the population of the elderly is 102.1 million representing about 7.4% of the total population of the country<sup>30</sup> and is the second largest elderly population in the world.

The census has been the only source of information on the age structure of the population. The census from 1901 to 2001 has provided valuable evidence of population ageing. The growth of elderly population in the previous century is shown in table



**Table No: 2**

**Showing Growth of Population Aged 60 years or More in India.**

<b>Year</b>	<b>Total population in millions</b>	<b>Total geriatric population in millions</b>	<b>Males</b>	<b>Females</b>	<b>Percentage (M &amp; F)</b>
<b>1901</b>	<b>238.4</b>	<b>12.06</b>	<b>5.50</b>	<b>6.56</b>	<b>5.05</b>
<b>1911</b>	<b>252.1</b>	<b>13.17</b>	<b>6.19</b>	<b>6.98</b>	<b>5.22</b>
<b>1921</b>	<b>251.3</b>	<b>13.48</b>	<b>6.48</b>	<b>7.00</b>	<b>5.36</b>
<b>1931</b>	<b>279.0</b>	<b>14.21</b>	<b>6.94</b>	<b>7.27</b>	<b>5.09</b>
<b>1941</b>	<b>318.1</b>	<b>18.04</b>	<b>8.89</b>	<b>9.19</b>	<b>5.66</b>
<b>1951</b>	<b>361.1</b>	<b>19.61</b>	<b>9.67</b>	<b>9.94</b>	<b>5.43</b>
<b>1961</b>	<b>439.2</b>	<b>24.71</b>	<b>12.36</b>	<b>12.35</b>	<b>5.62</b>
<b>1971</b>	<b>548.2</b>	<b>32.70</b>	<b>16.87</b>	<b>15.83</b>	<b>5.96</b>
<b>1981</b>	<b>683.3</b>	<b>43.17</b>	<b>22.02</b>	<b>21.15</b>	<b>6.31</b>
<b>1991</b>	<b>843.9</b>	<b>56.68</b>	<b>29.36</b>	<b>27.32</b>	<b>6.71</b>
<b>2001</b>	<b>1027.0</b>	<b>79.07</b>	<b>41.11</b>	<b>37.95</b>	<b>7.69</b>
<b>2011</b>	<b>1210.19</b>	<b>102.1</b>	<b>52.20</b>	<b>50.09</b>	<b>8.90</b>

**Table No: 3**

**Proportion of the Population over the Age of 65 years – Comparison between different Countries<sup>31</sup>**

SI NO	Name of the Country	Percentage of elderly over the age of 65 years		
		1990	2030	2050
1	India	4.3	9.7	15.1
2	China	5.6	15.7	22.6
3	Japan	12.0	27.3	31.8
4	Italy	15.3	29.1	34.9
5	France	14.0	23.2	25.5
6	Germany	15.0	26.1	28.4
7	United Kingdom	15.7	23.1	24.9
8	Canada	11.2	22.6	23.8
9	United states of America	12.4	20.6	21.4

## **SELECTED DEMOGRAPHIC CHARACTERISTICS OF THE ELDERLY IN INDIA**

The Life expectancy at birth has doubled over the past 5 decades from 32.3 years in 1951 to 65.4 years in 2001 and is one of the main factors responsible for ageing of the population. It is further expected to reach 75.95 years by the year 2050<sup>32</sup>.

The life expectancy at age 60 is 16 years<sup>30</sup>. This means that there will be a large number of elderly in the population with a good length of life to be spent in their 'old age'.

The old age dependency ratio has risen from 10.5% in 1961 to 11.8% in 1991 and 12.6% in 2001. It is projected to be 16.1 by 2021<sup>27</sup>. The dependency ratio is higher in rural areas as compared to urban areas. About 90% of the elderly do not have a regular source of income<sup>33</sup>.

Majority of the elderly in India reside in rural areas. 33.1% of the elderly live with their children in rural areas compared to 34.9% in urban areas. About 3.1 million elderly persons in the country live alone; 2.5 million in rural and 0.6 million in urban. A larger number of females than males live alone. In terms of absolute number, 2.1 million out of 38.8 million (5.5 percent) of the elderly women aged 60 years and above in the country live alone<sup>33</sup>.

### **Existing Services for Senior Citizens:**

Persons retired from government services and organized sectors enjoy pension, Provident Fund and gratuity. They also enjoy health care benefits to some extent. This proportion of elderly in India is only 11 % which is very small. Remaining 89% of elderly are not getting any benefits at all. Oldage pensions have

been introduced by state governments for elderly destitute and infirm. Such systems have been in use since 1871. Women and men aged 65 years and above are eligible for old age pension. At present the amount is Rs.75 per month, which is very small.

Public Provident Fund (1968) Scheme is offered by post offices and State Bank of India, state bank of Mysore and syndicate bank. It is a long term saving scheme of 15 years duration. Mutual fund (1963) organizations offer Birla Sun Life Mutual Fund, Bank of Baroda Mutual Fund (BOB Mutual Fund), HDFC Mutual Fund, HSBC Mutual Fund, ING Vysya Mutual Fund, State Bank of India Mutual Fund, Kotak Mahindra Mutual Fund, LIC Mutual Fund,, GIC Mutual Fund some investment schemes for saving for retirement. Unit Trust of India offers 2 schemes, namely retirement benefit unit plan, and senior citizens unit plan covering health insurance also. Life Insurance Corporation of India also introduced a special insurance plan for senior citizens during 1999, the International year for the older persons. Kothari Mutual Fund has also a special pension plan for senior citizens. These schemes of mutual funds are offered only at certain time of the year, and not throughout the year. Also, returns from these schemes are subject to many fluctuations.

Senior citizens aged 65 years and above are entitled for travel concession in Railways and Air Journey. They get 30% concession in Rail Journey and 50% concession in Air journey<sup>21</sup>.

## **OLD AGE HOMES**

Old-age homes are very common in western world. Getting into old age home is very much a routine part of life for senior citizens. They are purpose built with nursing staff and other health care facilities. Most of these are run by government and charitable organizations. In our country also, there are oldage homes, but not many. At present there are about 950 old age homes in our country. Most of these are in South India and in cities<sup>21</sup>

First old age home in the country was started in Madras city in 1840 by a mission called 'Friend in need Society'. In 1862 it started old age homes in Bangalore, Calcutta and provided free boarding, and lodging for poor elderly. Later, more old age homes were started by trusts, missionaries and private organizations. In Karnataka, there are 78 old age homes. The number is growing fast. Number of senior citizens getting into old age homes is increasing<sup>21</sup>.

## **HEALTH SEEKING BEHAVIOUR**

‘Health is defined as state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity so that the individual is economically and socially productive’<sup>34</sup>. Health behaviour is a wide concept and is defined “as any behaviour associated with establishing and retaining a healthy state and aspects of dealing with any departure from the state”<sup>35</sup>.

Under this broad purview of Health Behaviour is an entity called Health Seeking Behaviour.

‘Health Seeking Behaviour’ is defined as “any activity undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy”<sup>36</sup>.

In other words, it is the sequence of remedial actions that individuals undertake to rectify perceived ill health which is initiated from symptom definition, whereupon a strategy for treatment is devised. When an individual perceives himself as sick, he adopts distinct behavioural changes which include confining to bed or staying away from work or consulting a healer, either traditional or a health worker for counsel, diagnosis and treatment<sup>37</sup>.

Health Seeking Behaviour in terms of illness behaviour refers to those activities undertaken by individuals in response to symptom experience. It typically includes mental debate about the significance and seriousness of these symptoms, lay consultation, decisions about action including self-medication, and contact with health professionals<sup>38</sup>.

Social and medical anthropologists for the last three decades have applied their mind to patients’ perspectives and conceptions about illness and medicine, to study how patients comply with the sick role - how they perceive the causes, their condition and make choices regarding the use or non-use of different kinds of health care<sup>39</sup>.

A deviation from state of health is mostly a subjective awareness of an individual, the relief of which may be sought within or outside of medical and health facilities<sup>40</sup>.

It has been opined that though symptoms of illness occur among all people, the mechanism to cope with it differs greatly among different groups with varying perceptions, interpretation and behaviour pattern<sup>37</sup>.

## **FACTORS ASSOCIATED WITH HEALTH SEEKING BEHAVIOUR**

Health seeking behaviour of a person is influenced by a large number of factors operating at the individual, family and community level. The way in which people conceptualize the aetiology of a health problem and their perception of symptoms plays an important role in seeking health<sup>41</sup>.

Majumder A opines that though illness is an unexpected occurrence of a random event, it has a fair degree of predictability with respect to demographic factors like age, gender, family size and marital status. For example, the size of a household may work positively or negatively. In a large family, per capita income may be less and therefore the ability to pay for health care will also be less: thus chances of utilizing care from a modern source may reduce. On the contrary, in larger families, interaction among the members or with the neighbours may be more intense which may increase chances of seeking health care<sup>42</sup>.

Other important factors apart from those mentioned above include knowledge, awareness, bio-social profile, past experiences with health services, influences at the community level, availability of alternative health care providers including indigenous practitioners and perceptions regarding efficiency and quality of the health care services<sup>41</sup>.

In a study done by Chakraborty satyajit (2005) in Kerala, 90% of the elderly, irrespective of their gender, consult doctors for their illness. Recognition of disease by the elderly, his/her response to it and reaching or changing a provider depended on several factors. Geographic location and time convenience were cited by 64.9% of elderly as reasons for choosing the first contact point. Over 40% had chosen the first contact point based on cost of care. Other reasons cited were quality of care (13.7%), faith in the provider (7.2%), lack of alternative (4.2%) and emergency (4.0%)<sup>43</sup>.

The result from the log it model in the study by Mathiyazhagan K supported the view that the decision to choose a health care provider was affected by socio demographic factors, health status variables, economic accessibility and familiarity with the health system<sup>44</sup>.

Socio-economic status, whether measured by education, income or other indices of social class has always been known to be associated with attitudes and health care practices<sup>45</sup>. In the study done in Agra Jain M, Nandan D, Misra S K (2002), it was seen that decision regarding the type of provider to be approached for seeking treatment largely depended on the socioeconomic status of the family. Poor families generally approached local indigenous practitioners or registered medical practitioners of the area who provided cheaper treatment and also sometimes gave medicines on credit. Some families approached government health facilities where treatment was provided at relatively lesser cost. However, families who could afford the expenditure preferred to go to private health facilities and doctors for seeking treatment<sup>46</sup>.

Illiteracy leads to ignorance about factors causing health and disease and thus influences the behaviour<sup>37</sup>. The 52<sup>nd</sup> round of National Sample Survey(NSS) used the education status of an individual as a proxy for familiarity with the health care system. It showed that those who had formal education had 85 percent higher likelihood of preferring private health care services than those without formal education<sup>47</sup>. A study conducted among the Rajbhanshi community in Nepal indicates that practice of using self-medication by uneducated persons was significantly higher than those who were educated. However, no statistical association was seen between the two groups in the use of either modern or alternative medicine. Modern, self and



alternative medication was sought by 96%, 57.1% and 22.8% families respectively in any kind of illness during past three months<sup>48</sup>.

In the study conducted by Rose N Gugi (1999) it was found that although across households, the ranking of facilities showed a similar pattern, among households with lower education level of the household head, preference for public facilities was higher (47.1%) compared to households where the household head had a higher education level (29%). At the same time, preference for use of non formal facilities was lower among higher income groups (20%) as compared with lower income groups (37.5%)<sup>49</sup>.

Income was found to be a very important factor in deciding to approach and in choosing the type of health care facility. It was found that high income had 40% higher probability and the middle income group had 9% higher probability to prefer a private health care provider as compared to a low income group<sup>44</sup>.

Individual preference towards a particular system of medicine is an important determinant of utilization of health services, which is a part of health seeking behaviour. Each system of medicine represents more or less a distinct stage in the development of healing art in the progress of human civilization. In India, various systems of medicine run parallel. Though the ultimate aim of every system of medicine is healing of disease or alleviating the pain, human behaviour in illness and their acceptance of mode of treatment varies<sup>50</sup>.

A study conducted by Gupta I and Dasgupta in New Delhi(2000) showed that allopathic system of medicine was preferred over all other forms of medicine across all socio-economic categories. Both Homeopathic and Ayurvedic systems of medicine were more important for the middle and upper income households compared to the lower income households<sup>51</sup>.

An urban hospital based study revealed that people apparently preferred medical care and drug therapy over self medications. Very few (3%) mentioned that they medicated themselves or used home remedies when they fall sick. Barely two or three said that they had used traditional healers or cultural and ritual practices<sup>52</sup>.

The 42<sup>nd</sup> round of the National Sample Survey (July 1986 to June 1987) found that in rural India about 53% of out-patient treatment was availed from private doctors while public hospitals and private hospitals accounted for 18% and 15% respectively. These proportions were found to vary between states. It was also found that most of the sick persons sought allopathic system of medicine for their treatment. At an all-India level, this system of medicine was used in 96% of cases. In rural areas, Homeopathy was preferred by 2.1% of the population while Ayurvedic medicine was sought by only 1% of the population<sup>53</sup>.

The estimates during the 52<sup>nd</sup> round of National Sample survey (July 1995-June 1996) were based on the data of actual utilization of health services while undergoing a spell of illness during the reference period. It was seen that private doctors were the most important single source of non hospitalized treatment. They accounted for 55% of the treatment in rural as well as urban areas of the country as a whole. In fact, the private sector accounted for over four fifth of medical treatment in the country. It also revealed a declining trend in the reliance on the public sector for non hospitalized treatment with rise in monthly per capita expenditure in urban areas of the country. The pattern for rural areas, however, did not exhibit clear relationship. The declining reliance on government sources for non hospitalized treatment of ailments was observed for rural and urban areas of all the major states, except rural and urban areas of Andhra Pradesh, urban Bihar and urban Maharashtra<sup>47</sup>.

In his working paper, Mathiyazhagan K. Commented that though there is a significant growth in the government infrastructure since our independence, its efficacy has been suspected and this has caused confusion and frustration among the people. In a supply-constrained public health system like ours, the sick have not waited for the government to find a way to provide better health services. They continue to bypass the inadequate government facilities to seek care in the private sector, which is expanding in almost all parts of the country<sup>44</sup>.

The reasons cited in favour of private health care facilities include good behaviour with patients and their relatives, surety of the best treatment for the patient, 24 hours availability, all services including investigation being available under one roof, proper maintenance and availability of all basic physical facilities, provision of transportation, proper monitoring of serious patients and availability of specialist doctors<sup>46</sup>.

Dilip T R and Duggal R (2004) in their study highlighted that more than three fourth of the study subjects who sought health care from the private sector reported “nearest facility” as a reason for doing so. Among those who utilized services in public hospital, it was seen that “nearest facility” (55%), “cost is affordable” and “good quality service” as reasons for seeking care from a public sector<sup>54</sup>.

The characteristics of a disease itself i.e. whether the disease is a chronic disease or an acute disease, whether the disease is minor or major and so on, also plays an important role in health seeking behaviour. Mosby’s medical dictionary defines a chronic illness as an illness which is of long duration; and an acute illness is defined as an illness which is usually characterised by signs and symptoms of rapid onset and is short duration<sup>55</sup>.

Mwensi H A. Relates the possible effect of illness stage on treatment choice; that more advanced illness may be treated differently than early stage disease where home and folk remedies may initially suffice<sup>45</sup>.

Grover A. Opines that health seeking is a central issue in all kinds of morbidity because the duration of symptoms increases the probability of severe morbidity and harmful sequelae<sup>41</sup>.

In her study, Rose N Gugi (1999) found that chronic conditions often called for frequent visits to health facility and therefore changes in the system may influence the behaviour pattern of the patients. Most of the chronic cases were attended in the public facilities. Choice of facility was based on perceived satisfactory services and the distance from the facility. There were also reported changes in use of facility<sup>49</sup>.

A study conducted among older persons in rural Bangladesh showed that for Acute Illness, a majority of the respondents preferred self-treatment and only one third visited a government hospital. However, in the case of chronic illnesses, a majority (87.6%) sought institutional care. The young-old respondents used government hospital more than the older group both for acute and chronic illness. It was observed that the elderly used multiple sources of treatment during illness. On the other hand, the rural health centre was found to be less utilized by the elderly respondents compared to the district hospital<sup>55</sup>.

In this study Masud A S highlighted that less than 25% of the sick population managed their illness by self-care i.e. they did not consult a health care provider for treatment in the year 1995 whereas this proportion increased sharply to almost 55% in 1999. Concomitant with this rise in self-care was a dramatic and generalised decline in consultation with both traditional and formal medical care practitioners<sup>56</sup>.

The central government in collaboration with has launched National Social Assistance Program in the year 1995 by providing pension skims (National Old age pension skims and national widow pension skims) to the truly destitute elderly that receive no family support<sup>57</sup>.

In a study done by Rajan, S Irudaya and Sanjay Kumar (2003) “Living Arrangements among Indian Elderly” reveals that in terms of health care facilities elderly illnesses have received very little attention<sup>57</sup>.

John Bongaarts and Zachary Zimmer (2002) in their study on the living arrangements of older adults in 43 developing countries around the world revealed that the average proportion living alone was nearly twice as high for women (11 percent) as for men (6.5 percent), largely because women experience a higher risk of widowhood than men. Roughly two-thirds of Asian men and women aged 65 years and older live with adult children<sup>58</sup>.

Roger P Worthington and Anupriya Gogne in their study (2011) highlighted that the primary health care system does not always function in the way that was originally intended due to problems such as poor standards of literacy, overt political and religious influences, an ever-expanding population, and poor doctor to patient ratios<sup>59</sup>.

A Lena, K Ashok, M Padma, V Kamath, A Kamath in their study(2003) shows that almost 98% of the respondents felt that old age had affected their day-to-day life. Among these, 86.4% felt that age had partially affected their daily activities. Half of the people interviewed felt neglected by their family members, while 47% felt unhappy in life and 36.2% felt they were a burden to the family. An unfavourable attitude was observed to be more among females than males<sup>60</sup>.

Anil Goswami, V.P. Reddaiah, S.K. Kapoor.in their study (1999) shows that there were 136 (16.8%) aged, who did not seek treatment for their reported health problems. The most common reason was on affordability (32.4%), followed by carelessness (31.6%) and disillusionment (23.5%) due to previous unsatisfactory experience. Very few reported distance, non availability of escort and fatalistic attitude as a reason for not seeking any treatment and these were more among females than males<sup>61</sup>.

Bose, AB and K.D.Gangrade (1988) in their study highlighted that the elderly married males enjoy better health than the elderly females. The study states that this is largely due to the traditional role that women play as the primary care givers. On the contrary, because of the lower status of the women and access to limited financial resources affects the health of women in genel, more so elderly women<sup>62</sup>.

Indrani Gupta Purnamita Dasgupta Maneeta Sawhney (1999) in their study stated that household income has a significant positive effect on seeking care, in both the models; the higher the income, the greater is the probability of seeking care. Similarly, lower education has a significant negative effect on seeking care, indicating that those with less education are also less willing or able to seek care. The number of working adults in the household has a significant positive effect on seeking care. This variable was included in addition to the household income variable, since much of the income in rural India is from non-salary sources, or from income that is not from formal work, i.e. farm income. Thus, in a household with a larger number of working members, there will be a positive and independent effect on seeking care, than in a household with fewer working members. In other words, household income alone (which could be only from a single source) may not be sufficient to ensure a greater probability of seeking care. Also, the first model indicates a negative and significant

gender effect, implying that education or income are not sufficient to eliminate a gender effect, and that even after controlling for these variables, women are less likely to seek care<sup>63</sup>.

Singh.C, Mathur J S et al (1994) Reported in their study on "social problems of aged in a rural population" that there were 68.5 % of Hindus forming majority in rural area,18.8% were Sikhs, 10.9% were Muslims, 1.1 % were Janis and 0.6 % were Christians<sup>64</sup>.

Banginwar A.S., Kulkarni P. V, Pratinidi AK(1998) reported in their study of elderly that, 60% were illiterates, 54.40% were economically dependent on others, and 21.05% women were widows<sup>65</sup>.

Christopher A.J(1992 ) Author reported in his study of 306 elderly in Thirupathur in Tamil Nadu, that 75% were illiterates, 2.61 % were receiving old age pension, 2.61 % were dependent on relatives, 52% were dependent and receiving help from children during problems, and 33.33% were staying with their sons<sup>66</sup>.

Dak TM, Sharma M L (1987). In their study of economic situation among elderly in Delhi felt that, inadequate financial resources were a major economic problem of Indian elderly. This was at a higher degree among female elderly, compared to male elderly<sup>67</sup>.

Kochar (1999) in her analysis of the familial support for medical expenditure of the elderly in rural Pakistan finds that the benefit to the elderly is not clear. There seems to be a significant correlation between individual contribution of older males to the households and the amount spent on medical expenditure. Since individual contributions decline with age and disability, medical expenditures also seem to reduce, despite greater need for medication<sup>68</sup>.



**Interviewing the Senior Citizen**



## MATERIALS AND METHODOLOGYS:

**Study area** : Village Shivangi which is about 26 kms from our college i.e., Shri B. M. Patil Medical College, Bijapur. The department runs rural health training centre in this village.

### Study period:

Research study: Nov. 2009 to June 2011.

Pilot study : Nov 2009 to Dec 2009.

Review of literature	}	Feb 2010 to Jan 2011
Collection of Data		
Compilation	}	Feb.2011 to June.2011.
Analysis		
Printing		

Study design: Cross sectional study

Study technique: Interview technique

Sample size: All the elderly people who are more than 60 yrs of age and are permanent residents of study area.

### **Exclusion Criteria:**

- 1) Elderly people who are not permanent residents.
- 2) Elderly people who do not want to participate in the study
- 3) Elderly people who could not be met even after 3 visits

**Methodology:**

Before actual study was taken up, a pilot study was conducted in the neighboring village Hadagali (8 klms from Shivangi). 50 elderly persons were interviewed. Based on the field experience, the proforma was modified.

This modified proforma was used in conducting the research study.

Total numbers of houses in village Shivangi are 1872. List of all elderly people in the village was prepared by visiting each house. Most of the elderly people were unsure of their exact age and almost none of them had a birth certificate or any document recording their date of birth; hence estimates were done on the basis of certain historical events or other significant events in their life. In a house where more than one elderly person of same sex was present, the senior most was involved.

After explaining the purpose of the study obtaining oral consent, one to one interview was conducted by taking him or her to an area where as much as privacy could be obtained. This was done to ensure that they could speak more openly. The study was conducted in broad day light & in a cordial atmosphere, three days in a week (Monday, Wednesday and Friday) between 9 am to 12 o' clock. The data so collected were entered in a

pretested questionnaire. Of the 762 elderly people, 710 people agreed to participate in the study.

**Statistical analysis:** Was done by using appropriate tables, graphs and by applying appropriate tests like Mean, Standard deviation, Chi square test & Z test.

**Definition of study variables:**

**Age:** Elderly were asked regarding their age. Age was recorded to the nearest complete year. According to WHO classification elderly people were classified as

A) Young old: Person in the age group of 60 years to 69 years.

B) Old old: Person in the age group of 70 years to 79 years.

C) Oldest old: Person above the age of 80 years.

**Education:** The elderly were asked about their educational qualification and were grouped as

**Illiterate –** A person who could not read and write with understanding in any language.

**Primary school –** A person who has studied up to 4<sup>th</sup> standard.

**Middle school -** A person who studied from 5<sup>th</sup> to 7<sup>th</sup> standard.

**High school -** A person who studied from 8<sup>th</sup> to 10<sup>th</sup> standard.

**College -** A person who studied up to PUC or degree.

**Diploma -** A person who has completed or pursuing the diploma course.

**Post graduate-** A person who has completed the post graduation.

## Type of Family

- 1) Nuclear Family : Family unit consisting of husband, wife and their dependent unmarried children living under one roof household and sharing common kitchen.
- 2) Joint Family : A number of married couples (who are in biological relationship with each other) and their children who live in the same house. Socio-Economic Status

The socio-economic status of the family was assessed by using modified B. G. Prasad classification by considering per capita income of the family. The modified B. G. Prasad classification as per the consumer price index

<b>Socio-economic Class</b>	<b>Per capita Income/month</b>
<b>Class I</b>	<b>Rs. &gt;3653</b>
<b>Class II</b>	<b>Rs.3652 to 1826</b>
<b>Class III</b>	<b>Rs. 1825 to 1095</b>
<b>Class IV</b>	<b>Rs. 1096 to 547</b>
<b>Class V</b>	<b>Rs. 548</b>

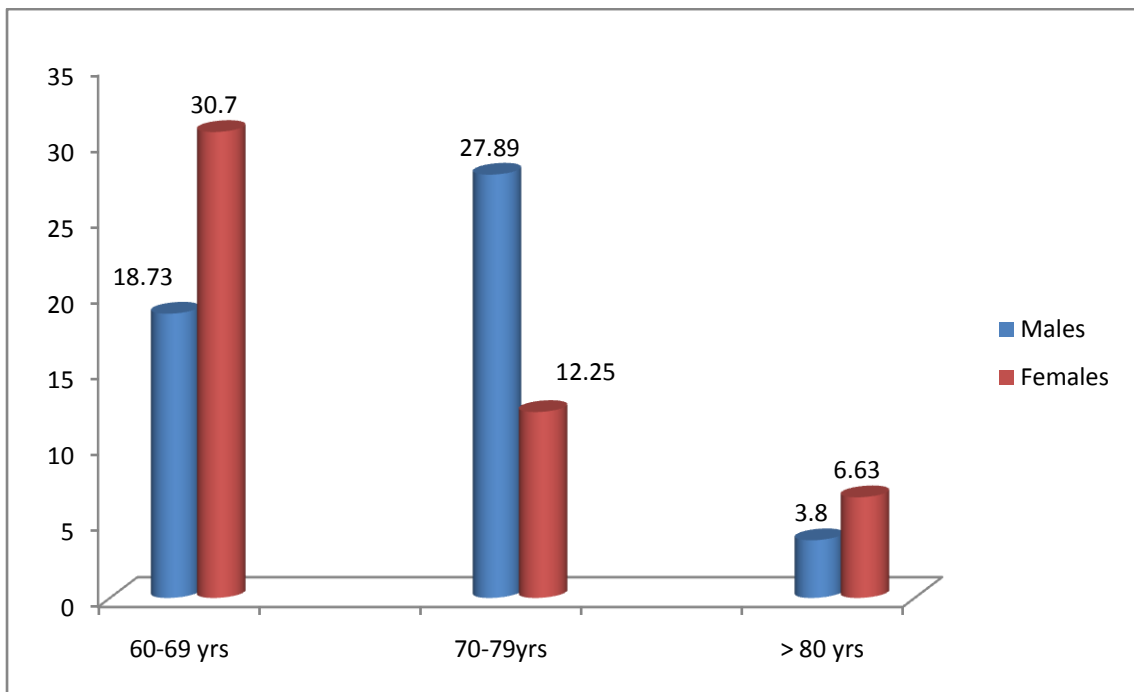
As per July 2009, the cost inflation rate 4.93, consumer price index = 741, correction factor =36.53

$$\text{Correction factor} = \frac{\text{Cost Inflation Rate X Consumer Price Index}}{100}$$

## RESULTS AND DISCUSSION

### General Information:

**Fig 4: Distribution of the Elderly by Age and Gender:**



**Table4: Distribution of the Elderly by Age and Gender:**

Age Groups	Gender		Total (%)
	Males (%)	Females (%)	
60-69 yrs	133 (18.73)	218 (30.70)	351 (49.43)
70-79 yrs	198 (27.89)	87 (12.25)	285 (40.14)
≥ 80 yrs	27 (3.80)	47 (6.63)	74 (10.43)
Total (%)	358 (50.42)	352 (49.58)	710 (100)

(Note: Figures in parentheses indicate percentages out of 710)

A total of 710 elderly persons were interviewed. Most of the elderly i.e. 49.43 % were ‘young-old’ while a small proportion i.e.10.43% belonged to ‘oldest old’ category. The mean age of the population is 70.13 yrs (S.D ± 6.64) .Mean age of males was 71.54yrs (S.D ± 6.37) and of females 68.71 yrs (S.D ± 6.62).Males and females were almost equal in proportion.

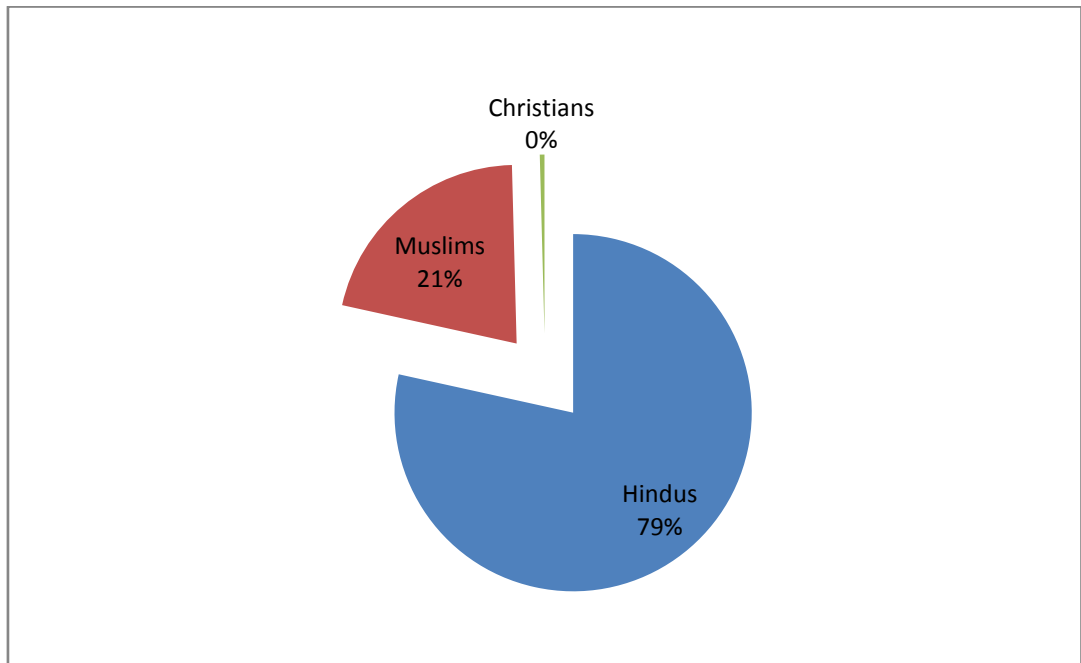
Kant S et al in their study among the elderly also showed similar pattern with regards to proportion of ‘young old’, ‘old old’ and ‘oldest old’ & gender distribution in their study population<sup>69</sup>.

In a study conducted by Rajeshree bhatt 73.5% were in the age group of 60-70yrs followed by19.7% in 79-80yrs and 7.8% in more than 89yrs of age<sup>70</sup>.

In our study, male (50.42%) population was almost equal to female (49.58%) population, while in a study conducted by Rajashree Bhatt et al it was male (33.9%) and female (66.1%)<sup>70</sup>; By Bhatia et al it was male (43.76%) and female 57.89%<sup>71</sup>; by Kishore at al it was male (45%) and female (55%)<sup>72</sup>, and by Anil Jacob Purty it was male (41.2%) female (58.8%)<sup>73</sup>.

In all these studies females are more compared to males while in our study it is almost equal.

**Fig 5: Distribution of the Elderly According to Religion:**



**Table 5: Distribution of Elderly According to Religion:**

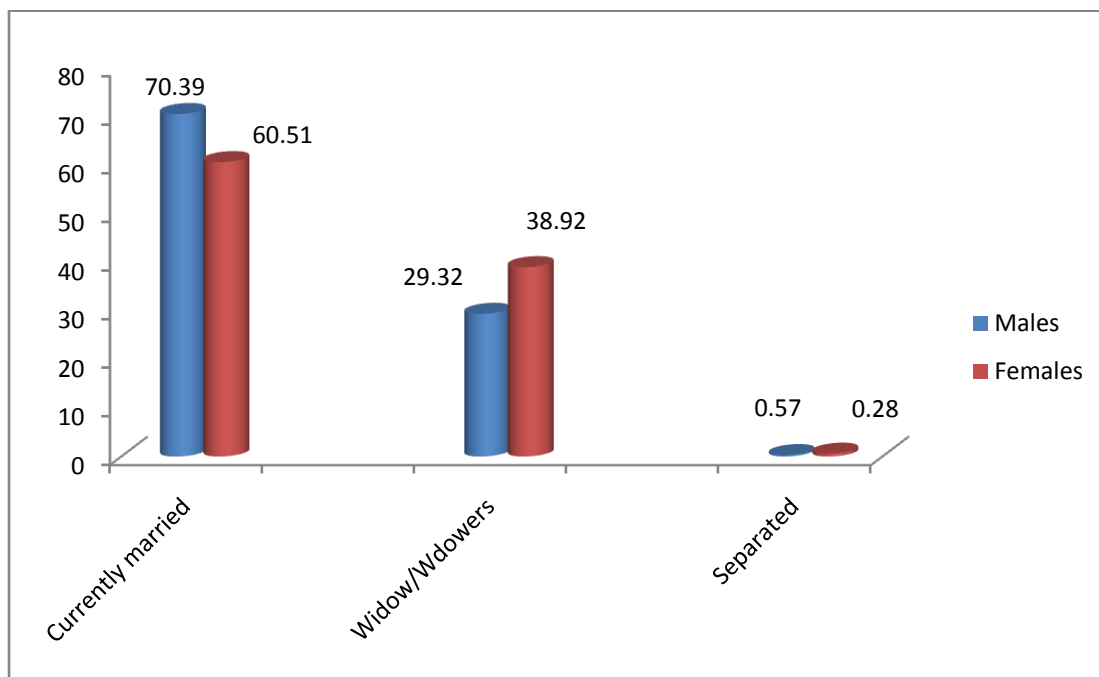
<b>Religion</b>	<b>Numbers</b>
Hindus	557 (78.45)
Muslims	150 (21.13)
Christians	3 (0.42)
Total (%)	710 (100)

(Note : Figures in parentheses indicate percentages of row totals)

Almost three forth of the study populations were Hindus. This is due to fact that majority of the population in the study area are Hindus.



**Fig 6: Distribution of Elderly According to Marital status :**



**Table 6: Distribution of Elderly According to Marital Status :**

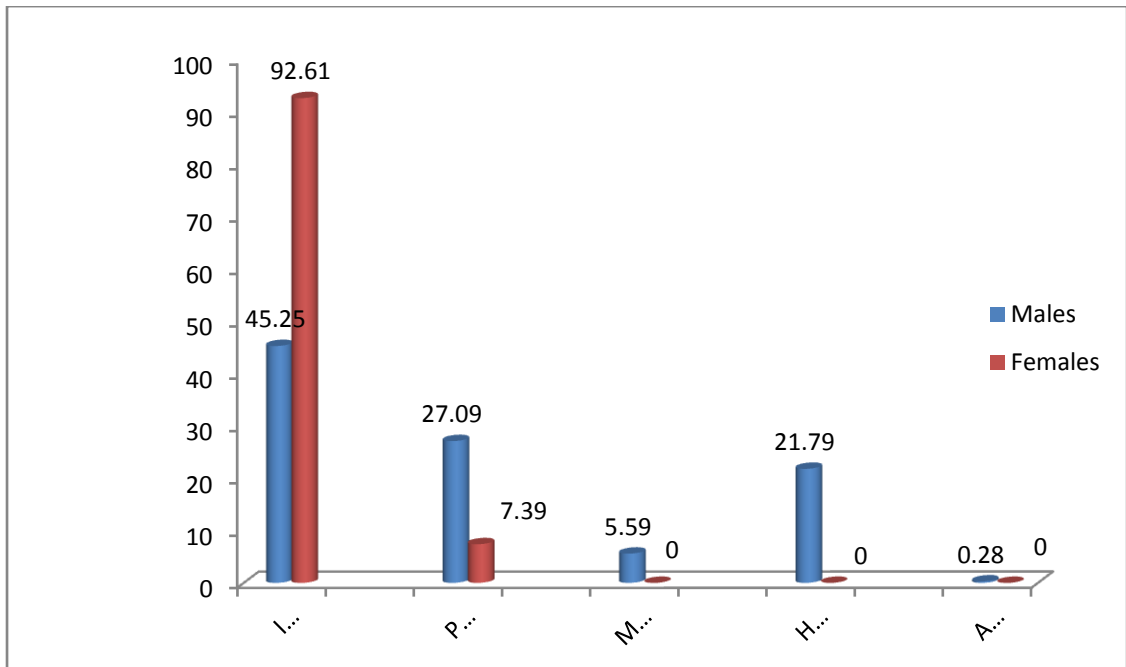
Gender	Marital Status			Total (%)
	Currently married (%)	Widow/ Widower (%)	Separated (%)	
Males	252 (70.39)	105 (29.32)	1 (0.28)	358 (50.42)
Females	213 (60.51)	137 (38.92)	2 (0.57)	352 (49.58)
Total	465 (65.49)	242 (34.09)	3 (0.42)	710 (100)

(Note: Figures in parentheses indicate percentages out of 710)

Nearly 65% of the study populations were currently married and about 35% constituted widow/widower or separated .Of the currently married 71% were males and 61% were females. According to censuses of India 2011. 76.8% of the males and 40% of the females were currently married<sup>31</sup>.

Of the 35% Widow/widowers nearly 57% were females. This may be due to the fact that in India men marry women who are much younger and also men remarry if their wife dies.

**Fig 7: Distribution of Elderly According to Educational Status:**



**Table 7: Distribution of Elderly According to Educational Status :**

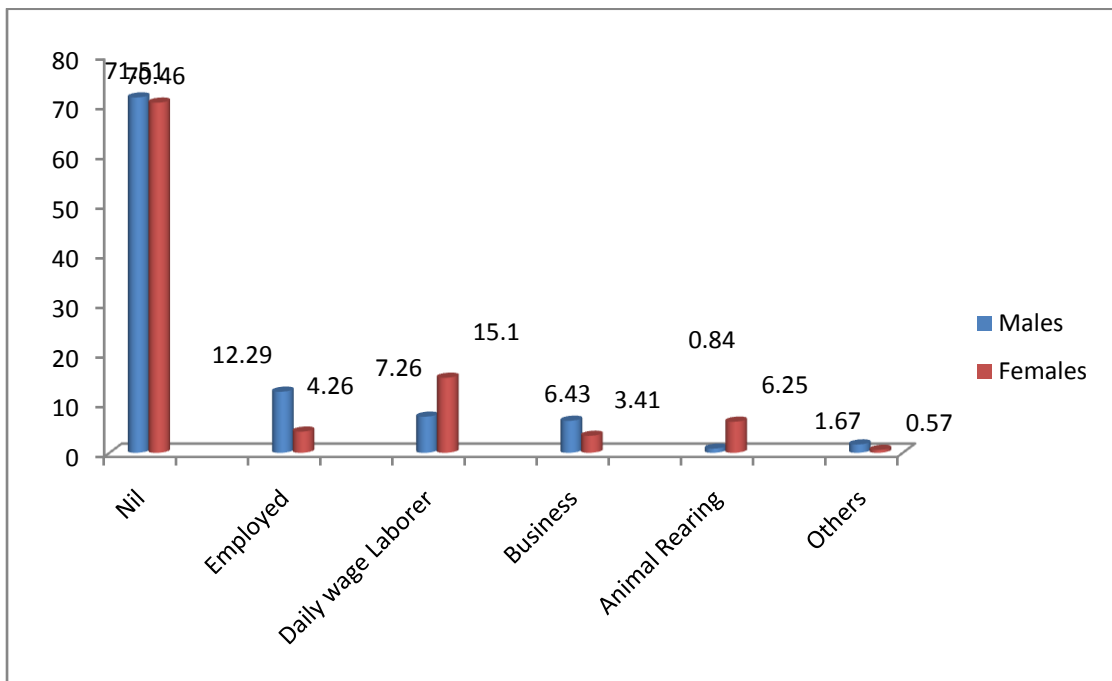
Gender	Highest Education Attained					Total (%)
	1	2	3	4	5	
Males	162 (45.25)	97 (27.09)	20 (5.59)	78 (21.79)	1 (0.28)	358 (50.42)
Females	326 (92.61)	26 (7.39)	0 (0)	0 (0)	0 (0)	352 (49.58)
Total	488 (68.73)	123 (17.32)	20 (2.82)	78 (10.98)	1 (0.15)	710 (100)

(1 = Illiterate, 2 = Primary school up to 4<sup>th</sup> standard, 3 = Middle school between 5<sup>th</sup> – 7<sup>th</sup> standard, 4 = High school between 8<sup>th</sup> – 10<sup>th</sup> standard, 5 = Above SSLC)

Most of the elderly, 488 (68.73%) were illiterates. The rate of illiteracy among the elderly males was found to be 45.25% while that among elderly females was found to be 92.61%. The rate of illiteracy obtained in our study is similar to that of the 52<sup>nd</sup> round of national sample survey (NSS) in India which revealed that around 63% of the elderly in India were illiterates; among elderly males the rate of illiteracy was found to be 38% while that among females it was found to be 79%<sup>48</sup>. In the study conducted by Anil Jacob Purty 78.7% of the respondent were illiterate<sup>73</sup>.

The illiteracy rate among elderly population is more because of the fact that, in rural area importance was not given to education and more so for the women.

**Fig 8: Distribution of Elderly According to Occupational Status :**



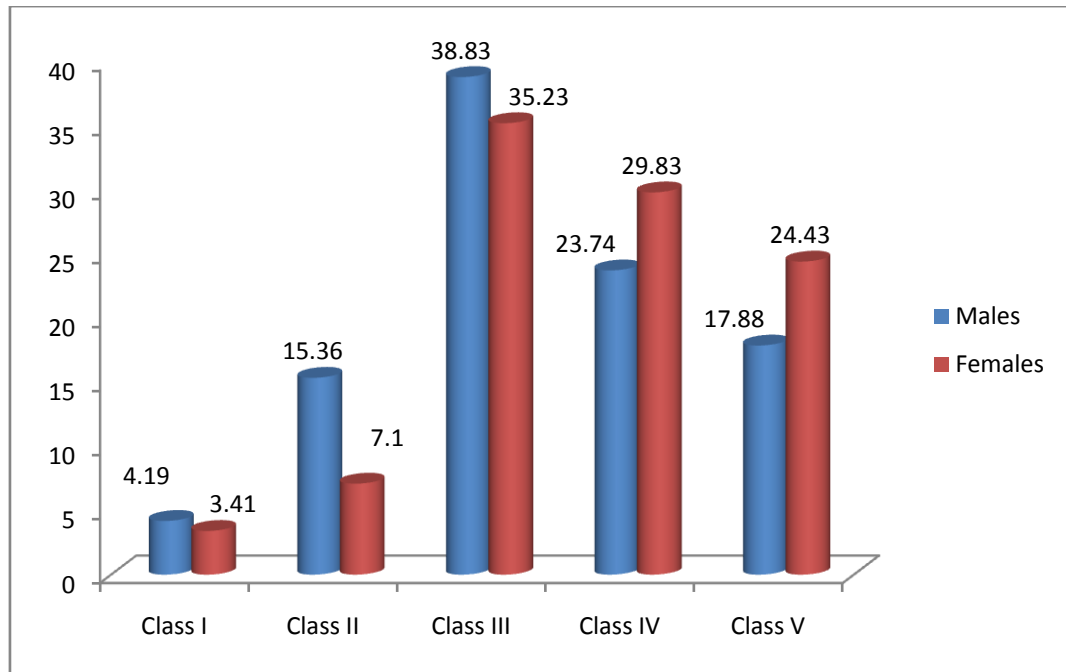
**Table 8: Distribution of Elderly According to Occupational Status :**

Gender	Status of Occupation						Total (%)
	1	2	3	4	5	6	
Males	256 (71.51)	44 (12.29)	26 (7.26)	23 (6.43)	3 (0.84)	6 (1.67)	358 (50.42)
Females	248 (70.46)	15 (4.26)	53 (15.1)	12 (3.41)	22 (6.25)	2 (0.57)	352 (49.58)
Total	504 (70.99)	59 (8.31)	79 (11.13)	35 (4.93)	25 (3.52)	8 (1.12)	710 (100)

(Note: Figures in parentheses indicate percentages of rows totals)(1 =Nil, 2 = Employed, 3 = Daily wage laborer, 4 =Business, 5 = Animal rearing, 6 = Others)

504 (70.99%) of the elderly were currently not working. According to 52<sup>nd</sup> round of NSSI 61.4% of elderly were not working. Percentage of elderly people not involved in economically productive activities is more compared to 52<sup>nd</sup> NSSI report. As NSSI report includes both Urban and Rural population<sup>47</sup>.

**Fig 9: Distribution of Elderly According to Socio-economic Class:**



**Table 9: Distribution of Elderly According to Socio-economic Class (According to B.G.Prasad Classification):**

Gender	Standard of living					Total (%)
	Class I	Class II	Class III	Class IV	Class V	
Males	15 (4.19)	55(15.36)	139 (38.83)	85 (23.74)	64 (17.88)	358 (50.42)
Females	12( 3.41)	25 (7.10)	124 (35.23)	105 (29.83)	86 (24.43)	352 (49.58)
Total	27(3.80)	80(11.27)	263(37.04)	190 (26.76)	150 21.13)	710 (100)

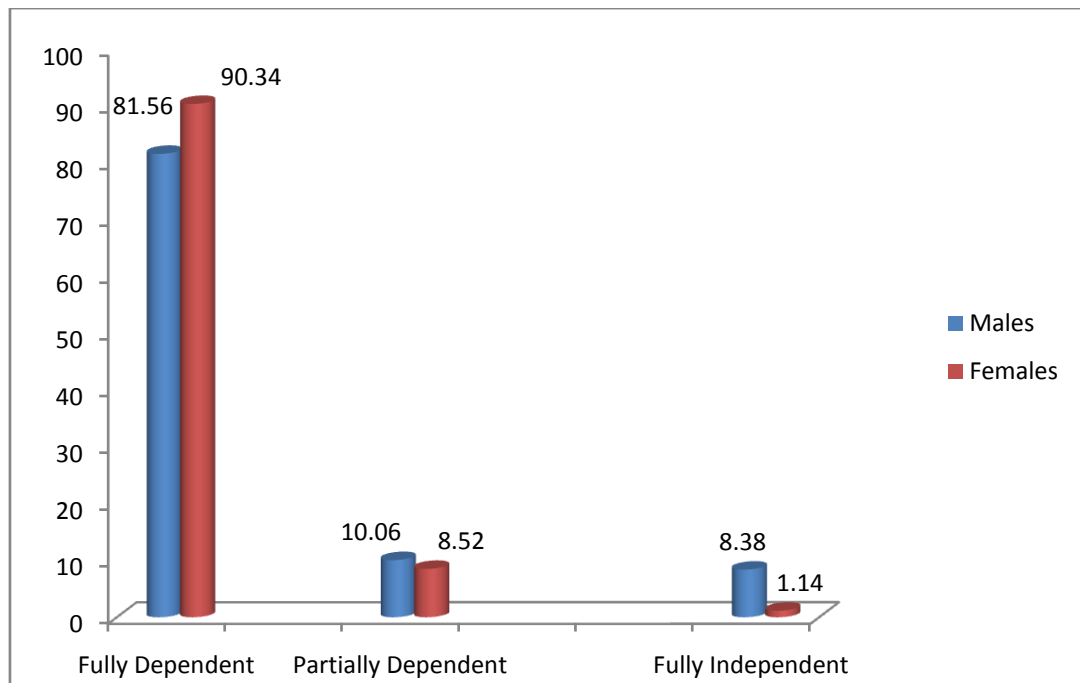
(Note : Figures in parentheses indicate percentages of row totals)

Majority of study population, 340(47.89%) belongs to lower Class (Class VI & Class V) only 107 (15%) to Class I & Class II category.

In the study of Anil Jacob Purty 62.8% were very poor<sup>73</sup>.



**Fig10: Distribution of Elderly According to Economical Status:**



**Table 10: Distribution of Elderly According to Economical Status:**

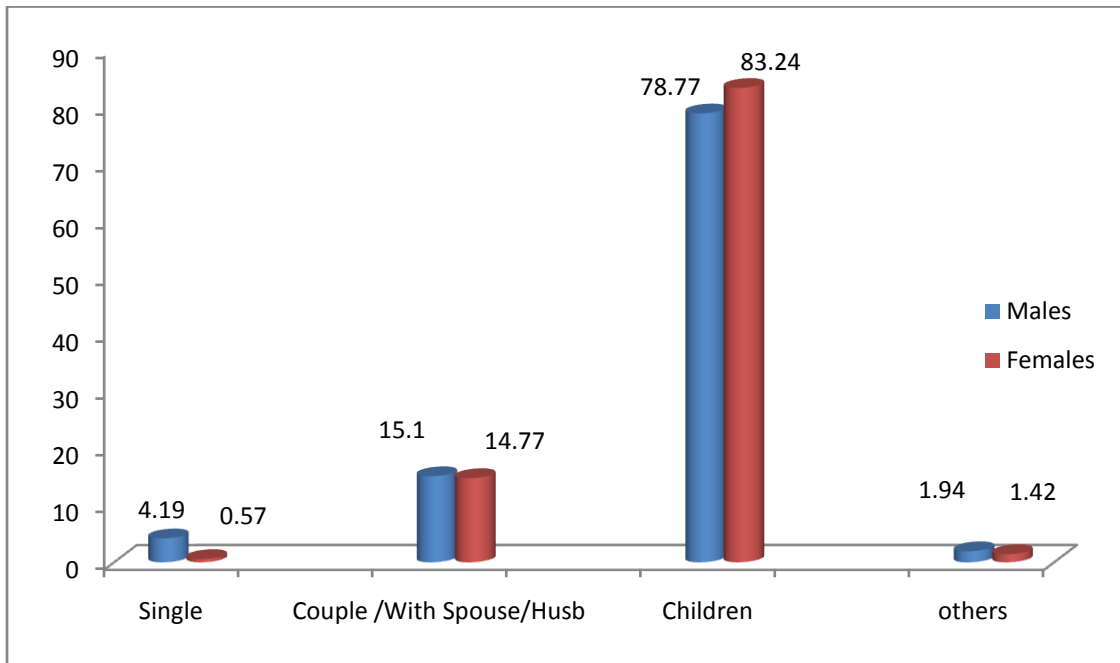
<b>Gender</b>	<b>Economic Status</b>			<b>Total (%)</b>
	<b>Fully Dependent</b>	<b>Partially Dependent</b>	<b>Fully Independent</b>	
Males	292 (81.56)	36 (10.06)	30 (8.38)	358 (50.42)
Females	318 (90.34)	30 (8.52)	4 (1.14)	343 (49.58)
Total	610 (85.92)	66 (9.30)	34 (4.78)	710 (100)

(**Note :** Figures in parentheses indicate percentages of row totals)

Maximum numbers of respondent, 610 (85.92%) were economically fully dependent on other members of the family. And more so, the females. Only very small proportion, 34(4.78%) were economically independent.

In the study conducted by Anil Jacob Purty 28.2% were fully dependent<sup>73</sup>. Sample surveys conducted in India also reflect a high degree of financial insecurity among elders<sup>47</sup>.

**Fig 11: Distribution of Elderly According Living Status:**



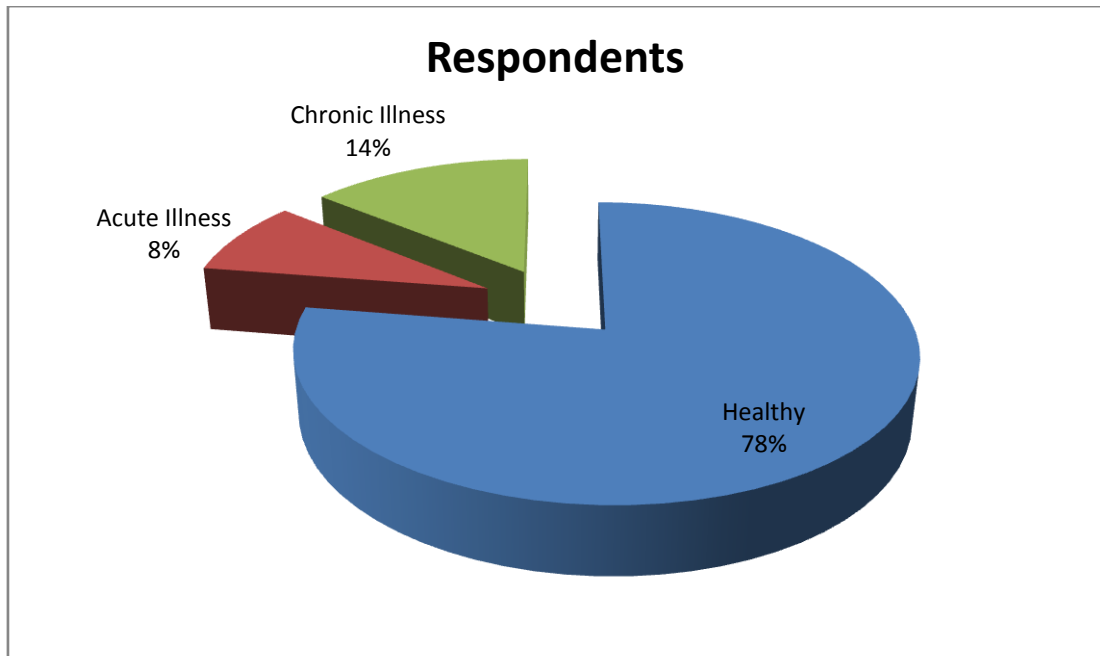
**Table 11: Distribution of Elderly According Living Status:**

<b>Gender</b>	<b>Living Arrangements of the Elderly</b>				<b>Total (%)</b>
	<b>Single (%)</b>	<b>Couple /With Spouse/Husb and (%)</b>	<b>With Children (%)</b>	<b>With others (%)</b>	
Males	15 (4.19)	54 (15.1)	282 (78.77)	7 (1.96)	358 (50.42)
Females	2 (0.57)	52 (14.77)	293 (83.24)	5 (1.42)	352 (49.58)
Total	17 (2.39)	106 (14.93)	575 (80.99)	12 (1.69)	710 (100)

(Note: Figures in parentheses indicate percentages of row totals)

Most of the respondent, 575 (80.99%) were living with their children and 106 (14.93%) couples were living together without their children. Only 17(2.395) lived alone. Similar findings were reported in 52<sup>nd</sup> round of NSSI (3.45%) of elderly live alone<sup>47</sup> and study of Kant S et al<sup>69</sup>.

**Fig12: Distribution of Respondents According to Health Status:**



**Table 12: Distribution of Respondents According to Health Status:**

<b>Population</b>	<b>Respondent</b>
<b>Healthy</b>	<b>550 (77.46)</b>
Suffering from Acute Illness (Within last one month's)	60 (8.45)
Chronic Illness -	100 (14.08)

**(Note: Figures in parentheses indicate percentages of row totals)**

Majority of the elderly population 550(77.46%) were healthy while 100 (14.08%) were suffering from one or other chronic illness and 60 (8.45%) of the respondents suffered from one or other acute illnesses during last one month prior to our visit.

Study conducted by A B Dey reveals 96% of his study subjects were having one or more chronic illnesses which is very high compared to our study<sup>74</sup>.



***..... IS THERE ANYTHING WE CAN DO FOR THEM?***

***..... COME, LET US ADD LIFE TO THEIR YEARS***

**Table 13 .Distribution of Elderly According to Chronic Illnesses (N=100):**

<b>Chronic illness</b>	<b>Males = 76</b>	<b>Females =24</b>	<b>Total =100</b>
Locomotor problems(Arthritis, Joint pain)	32(42.11)	18(75)	50(50)
Ophthalmic problems (Cataract & Vision impairment)	25(32.89)	13(54.16)	38(38)
G I Tract problems(Loss of Appetite, Constipation)	17(22.37)	19(79.16)	36(36)
Auditory Problems(Hearing disturbance)	14(18.42)	9(37.5)	23(23)
G U Tract problems (Bladder Incontinence)	20(26.32)	0(0)	20(20)
CVS System (Hypertension, Myocardial infection)	8(10.86)	2(8.33)	10(10)
Endocrine System (Diabetes Mellitus)	4(5.26)	Nil	4(4)
Others(Skin problems, Dental problems)	21(27.63)	12(50)	33(33)

**(Note: Figures in parentheses indicate percentages of row totals)**

In our study 50% of the respondent had locomotors problems. It is almost similar to study conducted by Rajashree Bhatt (48.6%)<sup>70</sup>, by Anil Jacob Purty (43.4%)<sup>73</sup> and Masuma Akthar Khanam (57.5%)<sup>75</sup> . An M k Sharma report in his study in rural area was 32.6% and that female to male ratio as 70.1:41.6%<sup>76</sup>.



In our study 38% of the elderly had ophthalmic problems (cataract and vision impairment). It is almost similar to study conducted by Rajashree Bhatt (42.7%)<sup>70</sup>, by Masuma Akthar Khanam (39.6%)<sup>75</sup>, by A B Dey (39.3%)<sup>74</sup> while less compared to Anil Jacob Purty's reports (57%)<sup>73</sup> and Rahul Prakash study (70%)<sup>77</sup>.

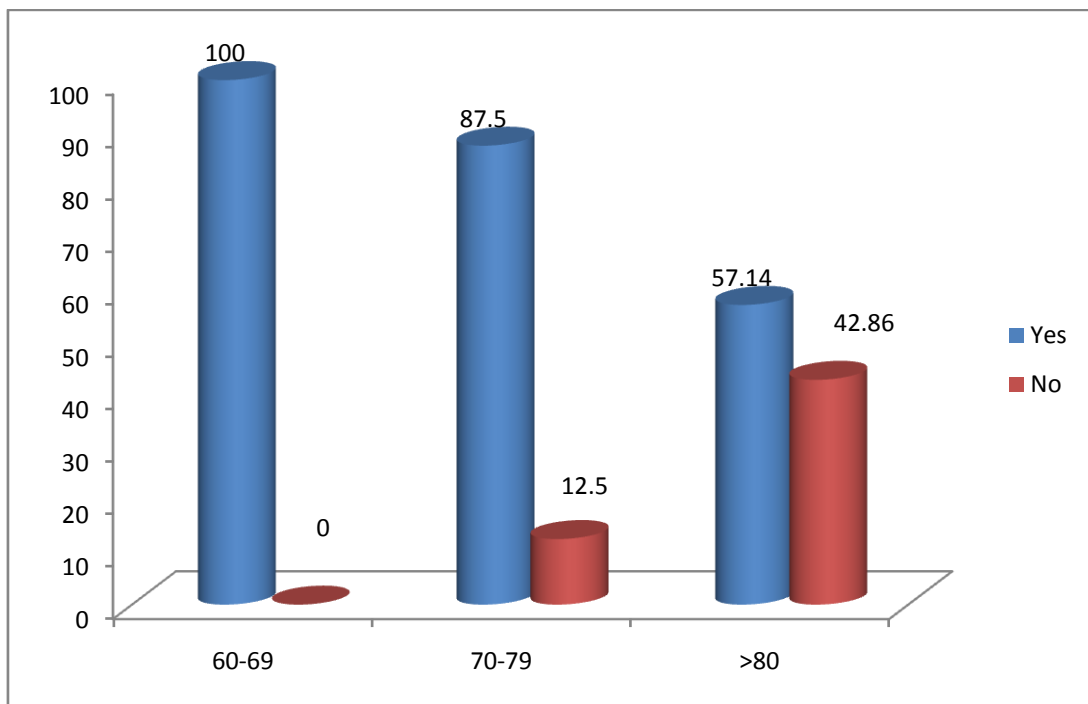
In our study 36% of respondents had problems related to gastrointestinal tract.

In our study 10% of the respondents were having hypertension which can be compared with that of Anil Jacob Purty's reports (14%)<sup>73</sup> while R Gupta in his study reports (4.5%) among rural population in Haryana<sup>78</sup>. However hypertension among our study population is very much less compared to reports of studies done by Bhatia et al (57.5%)<sup>71</sup>, A B Dey (39.9%)<sup>74</sup>, Rahul Prakash (48%)<sup>77</sup>, Rajashree Bhatt (34.4%)<sup>70</sup>, Masuma Akthar Khanam (38.7%)<sup>74</sup> and V B Singh (51%)<sup>79</sup>.

In our study only (4%) of respondent have diabetes mellitus which is low compared to study conducted by Anil Jacob Purty (8.1%)<sup>73</sup>, A B Dey (15.2%)<sup>74</sup>, Rajashree Bhatt (10.6%)<sup>70</sup>, Vijay Gupta (11%)<sup>80</sup> and Ramachandran (9.9%)<sup>81</sup>.

In our study population low prevalence of hypertension and diabetes may be due to the fact that they are not used to modern life styles.

**Fig 14: Health Seeking Behaviour for Chronic Illness: According to Age :**



**Table 14: Health Seeking Behaviour for Chronic Illness: According to Age:**

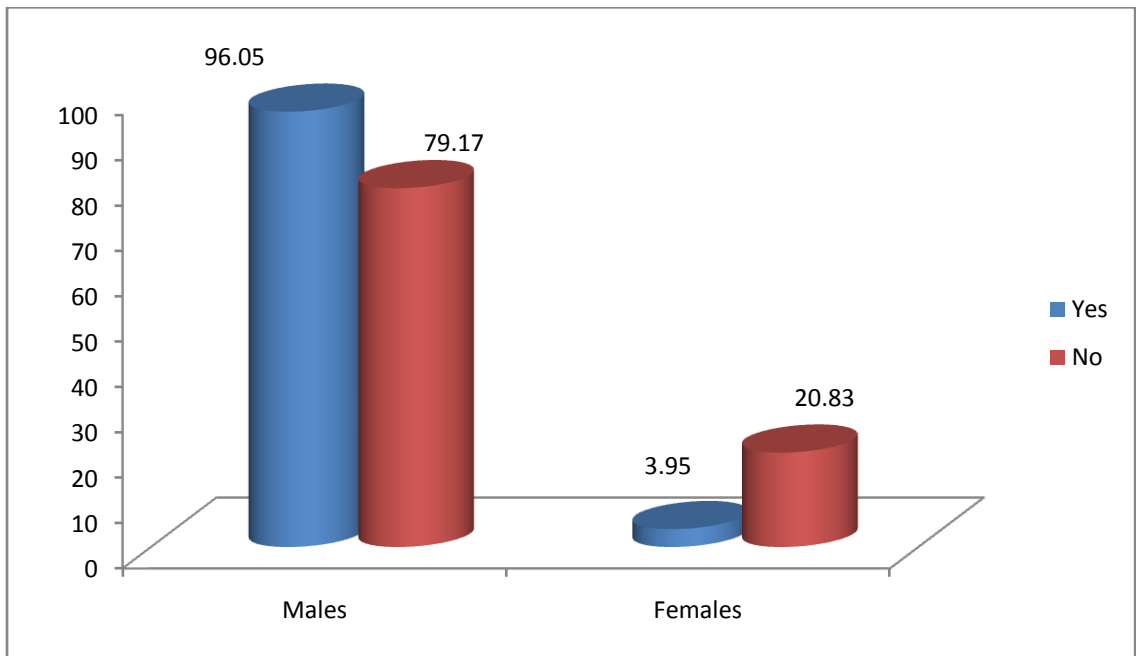
<b>Age Group</b>	<b>Health Seeking Behaviour</b>		
	<b>Yes</b>	<b>No</b>	<b>Total</b>
60-69 yrs	53 (100)	0(0)	53 (53.0)
70-79 yrs	35 (87.5)	5(12.5)	40 (40.0)
> 80 yrs	4 (57.14)	3(42.86)	7 (7.0)
Total	92(92.0)	8(8.0)	100 (100)

**(Chi square=17.265 p=0.01 Highly Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

Health seeking behavior has decreased as age advances and this relation is found to be statistically significant .The most probable reason may be that that they have left hope of getting cured from chronic illnesses.

**Fig15: Health Seeking Behaviour for Chronic illness: According to Gender:**



**Table 15: Health Seeking Behaviour for Chronic Illness: According to Gender:**

<b>Gender</b>	<b>Health Seeking Behaviour</b>		
	<b>Yes</b>	<b>No</b>	<b>Total</b>
Males	73 (96.05)	3 (3.95)	76 (76.0)
Females	19 (79.17)	5 (20.83)	24 (24.0)
Total	92 (92.0)	8 (8.0)	100 (100)

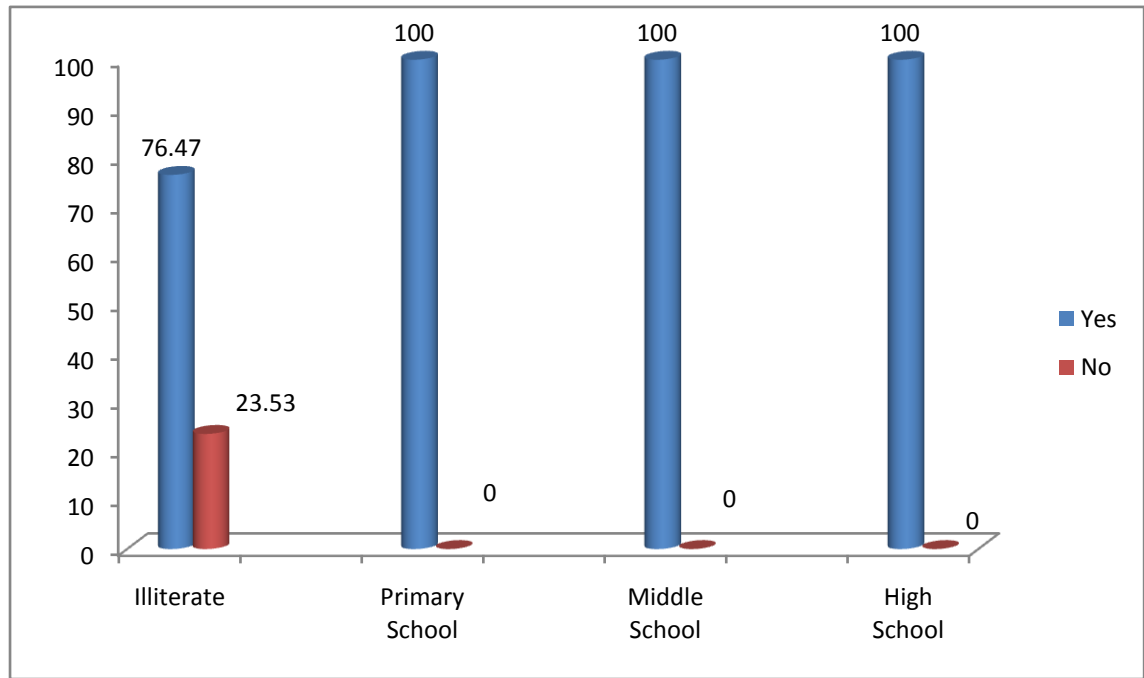
**(Chi square = 7.066 p = 0.008 highly significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

96% of males sought health care compared to only (79%) females which is statistically significant. The difference may be due to the fact that women are more dependent than men.

**Fig 16: Health Seeking Behaviour for Chronic Illness: According to Education**

**Status:**



**Table 16: Health Seeking Behaviour for Chronic Illness: According to Education**

**Status:**

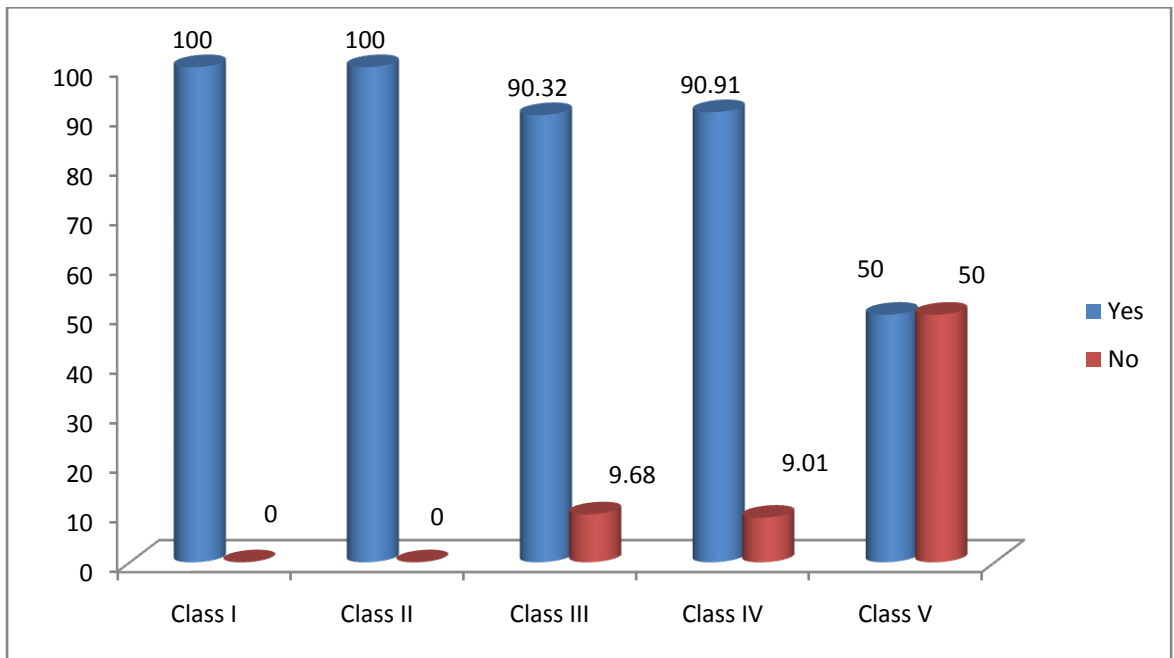
<b>Educational Status</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Illiterate	26 (76.47)	8 (23.53)	34 (34.0)
Primary School	34 (100)	0 (0)	34 (34.0)
Middle School	2 (100)	0 (0)	2 (2.0)
High School	30 (100)	0 (0)	30 (30.0)
Total	92 (92.0)	8 (8.0)	N = 100 (100)

**(Chi square = 16.88 p = 0.001 highly significant)**

**(Note:** Figures in parentheses indicate percentages of row totals)

Health seeking behavior is found more among literate people than illiterate people which is statistically highly significant.

**Fig17: Health Seeking Behaviour for Chronic Illness: According to Socio-economic Class:**





**Table 17: Health Seeking Behaviour for Chronic Illness: According to Socio-economic Class:**

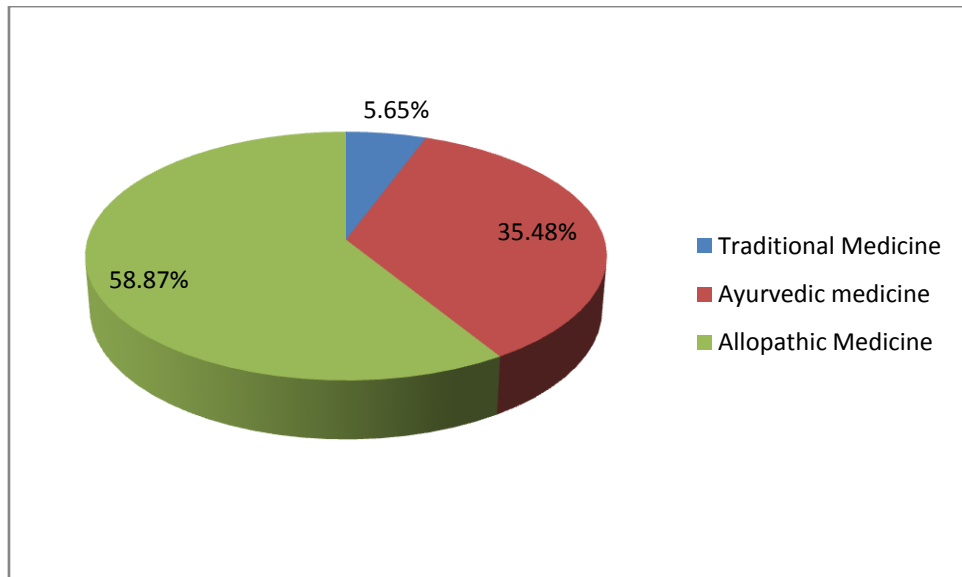
<b>Socio-economic Class</b>	<b>Yes</b>	<b>No</b>	<b>Total N=100</b>
Class I	15(100)	0(0)	15(15)
Class II	17(100)	0(0)	17(17)
Class III	28(90.32)	3(9.68)	31(31)
Class IV	30(90.91)	3(9.09)	33(33)
Class V	2(50)	2(50)	4 (4)

**(Chi square = 12.541 p=0.02 Highly Significant)**

**(Note:** Figures in parentheses indicate percentages of row totals)

Health seeking behavior is 100% in class I and Class II respondent and the difference among Class I, Class II and Class III, Class IV, Class V is statistically highly significant. This can be explained by the fact that Class I, class II people are economically better off.

**Fig 18: Distribution of Respondents According to Utilization of Types of Medicines:**



**Table 18: Distribution of Respondents According to Utilization of Types of Medicines (N=92):**

<b>Types of Medicines</b>	<b>Number</b>	<b>Percentage</b>
Traditional Medicine	7	5.65%
Ayurvedic Medicine	44	35.48%
Allopathic Medicine	73	58.87%
Total	124	100%

Multiple Answers.

Respondents have utilized one or other types of medicines at different times for relief from the symptoms. Overall 73(58.97%) respondent have taken Allopathic medicine while 44 (35.38) have used Ayurvedic medicine.

**Table 19: Health Seeking Behaviour According to Age Versus Types of Medicine**

**(N= 92):**

<b>Age Groups</b>	<b>Health Seeking Behaviour</b>			
	<b>Traditional Medicine</b>	<b>Ayurvedic Medicine</b>	<b>Allopathic Medicine</b>	<b>Total</b>
60-69 yrs	3(4.62)	19 (29.23)	43(66.15)	65 (70.65)
70-79 yrs	2(3.85)	23(44.23)	27(51.92)	52(56.52)
> 80 yrs	2 (28.57)	2 (28.57)	3 (42.86)	7 (7.61)

**Multiple Answers (Chi square = 10.186 p = 0.05 Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

Health Seeking Behaviour was more amongst young-old and decreased as age advances this difference in the behavior with increasing age is statistically significant.

**Table 20: Health Seeking Behaviour According to Education Versus Type of Medicine (N =92):**

Education Status	Health Seeking Behaviour			
	Traditional Medicine	Ayurvedic Medicine	Allopathic Medicine	Total N= 92
Illiterate	3(8.11)	15(40.54)	19(51.35)	37(40.22)
Primary School	2(4.55)	13(29.55)	29(65.91)	44 (47.83)
Middle School	1(25) } 4	1(25) } 29	2(50) } 54	4(4.35) } 87
High School	1(2.56)	15(38.46)	23 (58.97)	39(42.39)

**Multiple answers (Chi square = 5.759 p > 0.05 Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

As the literacy status increases the health seeking behaviour also increases which is statistically significant.

**Table 21: Health Seeking Behaviour According to Socio-economic Class Versus Type of Medicine (N=92):**

Standard of Living	Health seeking Behaviour			Total N=92
	Traditional Medicine	Ayurvedic Medicine	Allopathic Medicine	
Class I	0(0)	9(40.91)	13(59.09)	22 (23.91)
Class II	0(0)	12 (50)	12 (50)	24 (26.09)
Class III	5(13.89)	17(47.22)	14 (38.89)	36 (39.13)
Class IV	0(0)	6 (15.79)	32(84.21)	38(41.30)
Class V	2(50)	0(0)	2 (50)	4 (4.35)

**Multiple Answers (Chi square = 38.55 p= 0.001 Highly Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

About table shows that large numbers of respondents belonging to Upper and Middle Class (Class I,II and III) sought treatment for their elements from Allopathic followed by Ayurvedic compared to those belonging to Poor Class (Class IV and V). This difference is found to be statistically highly significant.

**Table22: Reasons for Seeking Health Care:**

<b>Reasons for Seeking Health Care</b>	<b>Males (N = 73)</b>	<b>Females (N = 19)</b>	<b>Total N = 92 (%)</b>
Because I want to be free of disease	61	14	75 (81.52%)
My friends suggested	32	10	42(45.65)
My family members force me to go	21	12	33 (35.87%)

**Multiple Answers (Chi square = 4.505 p = > 0.05 not significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

Large numbers of respondents 75(81.52%) said that they seek health care for their chronic illness as they want to be free from disease. Only one-third i.e. 33(35.87%) respondents told that their family members force them to go and consult the doctor.

**Table 23: Distribution According to Age Versus Source of Treatment (N=92):**

Age group	Sources of Treatment				
	Traditional Medicine (Home Remedies)	Private Allopathic Clinic	Government Hospital	Medical Stores	Total N=92
60-69 yrs	3(4.62)	37 (56.92)	21(32.31)	4(6.15)	65(70.65)
70-79yrs	2(3.85)	35(67.31)	15(28.85)	0(0)	52 (56.52)
>80 yrs	2 (28.57)	2 (28.57)	3 (40.86)	0(0)	7 (26.09)

**Multiple Answers (Chi square = 12.7 p = 0.05 Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

For majority of young old patients the source of treatment was Private Allopathic Clinic which account for (56.92%) where as majority of oldest old patient sought from Government Hospital (40.86%).



**Table 24: Distribution According to Gender Versus Source of Treatment (N=92):**

<b>Gender</b>	<b>Sources of Treatment</b>				
	<b>Traditional Medicine (Home Remedies)</b>	<b>Private Allopathic Clinic</b>	<b>Government Hospital</b>	<b>Medical Stores</b>	<b>Total  N=92</b>
Males	4(4.17)	63(65.62)	25(26.04)	4(4.17)	96(104.35)
Females	3(10.71)	11(39.29)	14(50)	0(0)	28(30.43)

**Multiple Answers (Chi square = 9.289 p= 0.05 Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

Table shows difference between Males and Females respondents in response to the sources of treatment. Female prefer Traditional Medicine more than males. Nearly 50% of women sought treatment from Government source while 65.62 % of males received the treatment from Private Doctors. These differences are statistically difference.

**Table 25: Distribution According to Education Versus Source of Treatment**

**(N=92):**

<b>Educational Status</b>	<b>Sources of Treatment</b>				
	<b>Traditional Medicine (Home Remedies)</b>	<b>Private Allopathic Clinic</b>	<b>Government Hospital</b>	<b>Medical Stores</b>	<b>Total N= 92</b>
Illiterate	3(8.11)	23(62.16)	11(29.73)	0(0)	37(40.22)
Primary School	2(4.55)	20(45.45)	22 (50)	0(0)	44 (47.83)
Middle School	1(25)	3(75)	0(0)	0(0)	4(4.35)
High School	1(2.56)	28(71.79)	6 (15.38)	4(10.27)	39(42.39)

**Multiple answers (Chi square = 25.474 p=0.01 Highly Significant)**

**(Note: Figures in parentheses indicate percentages of row totals)**

Table shows that as the level of education of the respondents increases their procuring treatment from Private Allopathic Clinics increases and this is statistically significant.

**Table 26: Reasons for not Seeking any form of Health Care**

<b>Reasons for not Seeking Any form of Health Care</b>	<b>Males (%) N = 3</b>	<b>Females (%) N = 5</b>	<b>Frequency (%) N = 8 (%)</b>
Economic Constraints	2(33.33)	4(66.67)	6(75)
Nobody Cares	3(60)	2(40)	5(62.5)
No Use of Medicines	3(42.86)	4(57.14)	7(87.5)

**Multiple Answers (Note: Figures in parentheses indicate percentages of row totals)**

Among 8 respondents suffering from chronic illness who did not avail any type of treatment were asked for reasons multiple reasons given the commonest one no use of medicines followed by economic constraints and 62.5% said that nobody cares them.

## SUMMARY

The present study was conducted in Shivangi Village where in Department of Community Medicine, BLDEU'S Shri B. M. Patil Medical College Hospital and Research Centre, runs Rural Health Training Centre .The objective of the study was to study the socio-demographic profile of the geriatric population and to understand the role of these factors in health seeking behavior. It was a cross- sectional study conducted between Nov 2009 to June 2011. 710 elderly people were interviewed from Jan 10 to Dec 10 and information procured was entered in pre tested proforma.

- In our study of the 710 participants, 351(49.43%) were 'young old' (60-69 yrs), 285(40.14%) 'Old old' and 74(10.43%) were oldest old.
- The male to female ratio was almost equal.
- The study population consisted mainly of Hindu religion (78.45%) followed by Muslims (21.13%).
- 65.49% of the elderly were currently married while 34.51% were widow/widowers or separated. Of the 34.09% widow/widowers nearly 57 % were females.
- 68.73% were illiterate. Of them 33.6% were males and 66.9% were females.
- 70.99% of elderly people were not leading any economically productive life.
- Only 15% of the respondents belonged to upper Socio-economic Class (Class I and Class II) while 47.89% belonged to poor socioeconomic class ( Class IV and Class V) as per revised B G Prasad's socioeconomic classification.
- 85.92% of the elderly people were economically fully dependent on other members of the family.
- 80.99% of elderly people were living with their children and 14.93% elderly people live together without their children.

- None of the respondents had any type of insurance.
- 550 (77.46%) were not suffering from any physical illnesses. In the remaining 160 (22.54%) elderly people, 100(14.08%) had one or other chronic illnesses and 60 (38 having chronic illnesses) suffered from one or other acute illnesses prior to one month of our visit.
- Of the 100 respondents having chronic illnesses, 50% had locomotors problems, 38% had ophthalmic problems, and 36% had problems related to gastro-intestinal tract. 10% of the respondents were having hypertension and 4% of the respondents had diabetes mellitus.
- 100 (14.8%) elderly people who were suffering from one or more than one chronic illnesses. 92(92%) sought health care for their chronic illnesses. A significantly higher proportion of 'young old' (100%) and 'old old' (87.5%) sought health care as compared to 'oldest old' (57.14%). This relation is statistically significant.
- 73(96.05%) of the elderly males sought health care as compared to elderly females 19(79.17%) which is statistically significant.
- 66(71.74%) of the elderly people who had attended school sought health care as compared to 26(28.26%) illiterate people. The difference is statistically significant.
- A majority of the elderly people belonging to upper socio-economic class (Class I and Class II) sought health care as compared to Middle and poor socio-economic class (Class III Class IV and Class V). This relation between socioeconomic class and utilization of health services is statistically significant.
- In our study respondents have utilized one or more than one type of medicines at different times for relief from symptoms.73(58.97%) respondent have taken

Allopathic Medicines while 44(35.38%) have used Ayurvedic medicine followed by 7(37.04%) using Traditional Medicine.

- 43 (58.90%) ‘young old’, 27(36.99%) ‘old old’ and 3(4.11%) ‘oldest old’ sought Allopathic Medicine while 19(43.18%) ‘young old’, 23(52.27%) ‘old old’ and 2 (4.55%) ‘oldest old’ sought Ayurvedic Medicines. The relation between age group and type of medicines availed is statistically significant.
- A large number of literate respondents sought treatment for their ailments from Allopathic Medicine followed by Ayurvedic Medicine. As the literacy level increases health seeking behaviour also increases, which is statistically significant.
- A significantly higher proportion of respondent belonging to Upper and middle class (Class I Class II and Class III) sought treatment for their ailments from Allopathic Medicine followed by Ayurvedic medicine compared to poor socio-economic class(Class IV and Class V).The difference is found to be statistically highly significant.
- 75(81.52%) of the respondent said that reasons for seeking health care for their chronic illness was that wanted to be free from symptoms and crippling nature while 33(35.87%) respondent told that their family members forced them to go and consult the doctor.
- Majority of the respondent, belonging to ‘young old’ said that their source for treatment was Private Allopathic Clinic followed by Government hospital.
- In our study females preferred traditional medicine more than males.50% of women sought sources of treatment for their ailments from Government Hospitals while 65.62% of males received the treatment from private doctor and the difference is statistically significant.

- As the level of education of the respondents increases their procuring treatment from Private Allopathic Clinic increases. This is statistically significant.
- Main reason for not seeking any treatment for their chronic ailment from 8 respondent who did not avail any treatment that drugs are of no use in providing relief permanently followed by economic constraints and there is nobody to care.

## CONCLUSION

100 (14.08%) respondents had one or more than one chronic illness among 710 elderly people studied. Majority i.e. 50% had locomotors problems followed by 38% with ophthalmic problems. It is heartening to note that 92% of those having chronic illnesses sought health care. The proportion of 'young old' and 'old old' seeking health care was more compared to 'oldest old'. Gender inequality, literacy and socio-economic class are factors which play an important role in health seeking behaviour.

In order to get relief from pain and disability the elderly people have sought treatment from all the sources i.e. Traditional, Ayurvedic and Allopathic medicine. This is because of the fact that they seek services from private agencies more than Government agencies. This in turn enhances the cost of the treatment which they cannot afford and force them to change the medicine from one system to other. As age advances they lose confidence on drugs and leave the suffering to the fate. This is evident from the fact that large proportion of 'oldest old' are not seeking any health care.

The real cause for gender inequality in seeking health care, are poor literacy status and economic dependency. These factors are to addressed more efficiently.



## RECOMMENDATIONS

Government of India under NRHM has incorporated Indigenous system of medicine i.e. Ayurveda, Unani, Siddha and Homeopathy (AYUSH) in the primary health centre to cater to the needs of rural people.

Effort should be made to enhance the utilization of these services at the primary health centre by enhancing **Information, Education and Communication (IEC)** activities.

To enhance the utilization of these services literacy status of elderly people, irrespective of gender, socio-economic class should be improved by implementing **Adult Literacy Program** more effectively.

The experience of the elderly people should be utilized in implementing poverty alleviation programs for the benefit of rural elderly people.

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## ANNEXURE

### **SECTION: 1 SOCIO DEMOGRAPHIC PROFILE OF THE FAMILY:**

- 1) Name.
- 2) Religion.
- 3) Age.
- 4) Sex.
  - a) Male      b) Female .
- 5) Education.
- 6) Marital status.
  - a) Married                      b) Unmarried                      c) Separated
  - d) Widow/ Widower          e) Divorced.
- 7) Address.
  - a) Yes b) No.
- 8) Total Income \_\_\_\_\_
- 9) Per Capita Income \_\_\_\_\_

- 1) How many children you have?
- 2) If yes - Males \_\_\_\_\_  
Females \_\_\_\_\_
- 3) Are you staying with them? Yes/ No.
  - a) If yes - With sons - Yes / No.
    - With daughter- Yes/No.
    - With spouse only- Yes / No.
    - With son and spouse – Yes / No.
- 4) Who spends for your health (Doctor Fee, Drugs etc).
  - Always myself.
  - Sometimes myself and sometimes children.
  - Always children only.

**SECTION 2: ASSESSMENT OF HEALTH SEEKING BEHAVIOUR:**

**REGARDING CHRONIC ILLNESS:**

- 1) Are you currently suffering from any chronic illness?
  - a) Yes
  - b) No.
- 2) If yes, what illness?
- 3) Since when are you suffering from this illness?
- 5) Whom do you visit for the treatment?
  - a) Traditional healers
  - b) Primary health centers
  - c) Private clinic
  - d) Tertiary care centre.
- 5) What treatment are you seeking for this illness?
  - a) No treatment
  - b) Self treatment
  - c) Allopathic medicine
  - d) Ayurvedic medicine e) Traditional medicine.
- 6) How often do you visit a doctor?
  - a) I don't visit any doctor
  - b) As per doctor's advice
  - c) As per wish of children / spouse
  - d) When symptoms exaggerated.
- 7) Why do you seek treatment?
  - a) I want to get well soon
  - b) My family members force me to go
  - c) My friends advise.
- 8) Why do you go to this particular place for treatment?
  - a) The doctor is very kind hearted
  - b) It is very close to house
  - c) It is not expensive
  - d) His hands are good.
- 9) Do you take the prescribed treatment regularly?
  - a) Yes
  - b) No.

10) If no, why?

- a) Medicines are expensive
- b) I don't think it is necessary to take regularly
- c) I don't get them in the nearby stores
- d) I cannot tolerate them if take more.

11) Why don't you take any treatment?

- a) The health care facility is too far
- b) The consultation is too expensive
- c) The doctor is not good
- d) My family does not allow me to go
- e) I don't have money to go a doctor

**SECTION 3: FACTORS ASSOCIATED WITH HEALTH SEEKING**

**BEHAVIOUR :**

**A.OCCUPATION AND INCOME**

1) What is your present occupation?

- a) Retired                      b) Agriculture                      c) Daily wage labourer  
d) Animal rearing              e) Petty business                  f) Tea stall      g) General shop.

2) What was your past occupation?

- a) Agriculture                  b) Daily wage laborer/collie  
c) Animal rearing              d) Service                              e) Business .

3) Do you have any regular source of income?

- a) Yes                              b) No.

4) What is your source of income?

- a)pension                      b) Lands                              c) Rent  
d) salary                        e) Interest from deposit              f) Insurance.

5) What is your income Rs.....per year?

6) Who bears expenses of medical care when you are ill?

- a) Myself                      b) Son                              c) Daughter                      d) Relatives.

7) Are you aware of health insurance?

- a) Yes                              b) No

a) Is your health insured?

- a )Yes                              b) No

b) If yes, which health insurance are you covered with

- a) Fully insured                  b) Subsidized.

## **B.DECISION MAKING**

- 1) When you are ill, who takes decision to seek treatment from a health care facility, in your family?
- a) Myself                      b) son                      c) spouse                      d) daughter
- e) daughter in law              f) By consensus              g) Relatives
- 2) Who decides where to go for the health check up?
- a) Myself                      b) son                      c) spouse
- d) daughter                      e) daughter in law              f) By consensus
- 3) Who usually comes with you to the health care facility?
- a) Self                      b) Spouse                      c) Son
- d) Daughter                      e) Relatives                      f) Friends
- g) Neighbor                      h) Brother                      i) Sister
- j) Grandchildren              k) none
- 4) Who takes care of you when you fall ill?
- a) Self                      b) Spouse                      c) Son                      d) Daughter
- e) Relatives                      f) Friends                      g) Neighbor                      h) Grandchildren
- i) Nobody
- 5) How is the attitude of your family members when you fall ill?
- a) Supportive only when there is a major illness
- b) Supportive always      c) Not supportive



## **C.PRACTICES**

1.a) Do you buy the medicines prescribed by the doctor?

- a) Yes                      b) No                      c) Occasionally.

1. b) If yes, why?

- a) i want to get well soon                      b) Easily available  
c) Cheap    d) Family members force me to take.

1. c) If no, why?

- a) They are too expensive    b) Not easily available  
c) I don't think these medications will help  
d) Nobody to bring medicines from shop.

2. a) Do you take the medicines regularly

- a) Yes    b) No

2. b) If yes, why

- a) The doctor has told    b) My health will improve  
c) My family members force me to take                      d) Cheap                      e) Easily available

2.c) If no, why

- a) I don't think they will improve my health  
b) I forget to take medicine                      c) It is costly                      d) not available