SOCIO-ECONOMIC CONDITIONS, MORBIDITY PATTERN AND SOCIAL SUPPORT AMONG THE ELDERLY WOMEN IN A RURAL AREA

By

Mrs. R.S. SARASA KUMARI

ASSISTANT PROFESSOR
MEDICO-SOCIOLOGY
DEPARTMENT OF COMMUNITY MEDICINE
MEDICAL COLLEGE
THIRUVANANTHAPURAM
2001

ACKNOWLEDGMENTS

I wish to express my deep sense of gratitude to ***Dr. K.N. Nair****, Programme Co-ordinator, Center for Development Studies Thiruvananthapuram, for his constructive criticisms and worthy suggestions to do a comprehensive study in a field, which has not been given due priority in the country.*

I wish to express my debt of gratitude to ***Prof. P.R. Gopinathan Nair****, Programme Advisor, Center for Development Studies, Thiruvananthapuram for his valuable suggestions to make my endeavor worthy enough.*

I am deeply indebted to ***Dr. K. Gopinathan*** *formerly Professor of Paediatrics, SAT Hospital, Thiruvananthapuram for his valuable encouragement and help in each and every part of my study.*

I am extremely thankful to ***Mrs. S. Rema Devi****, Associated Professor, Medicosociology, Department of Community Medicine, Medical College, Thiruvananthapuram for her valuable advice and sincere help through out the work.*

I am, also thankful to ***Mr. Syamalan****, Associate Professor of Biostatistics, Family Welfare Department, SAT Hospital for his valuable guidance in analysing the data and writing the report.*

I express my sincere thanks to ***Mr. Benhur Gilbert*** *and* ***Mr. Sudheer****, the investigators who had successfully completed data collecting.*

I am extremely happy to thank each and every aged woman who has willingly co-operated with us in the study.

I am very much thankful to ***Mr. T. Santhosh,*** *Computer operator for his whole-hearted support in printing the report.*

I take this opportunity to express my sincere gratitude to each and everyone who have given me moral support in doing this study.

R.S. Sarasakumari

CONTENTS

1. ACKNOWLEDGMENT
2. INTRODUCTION
3. OBJECTIVES
4. REVIEW OF LITERATURE
5. METHODOLOGY
6. RESULTS AND DISCUSSION
7. SUMMARY AND CONCLUSIONS
8. SUGGESTIONS
9. APPENDIX

   Bibliography

   Questionnaire

   Data Sheet

   Score sheet

ABSTRACT

Objectives

1. *To examine the social and health problems among the elderly women across different socio-economic groups.*
2. *To identify the perceived morbidity pattern among the elderly women in the interior areas and nearer to the city corporation.*
3. *To study the provision and utilization pattern of various support systems provided by governmental and non governmental agencies for the welfare of the elderly women.*
4. *To study the felt needs of the elderly women for the betterment of their social and healthy living.*

Methods

A community level descriptive study was carried out in Sreekaryam Panchayat during January-April 2000. Two areas, based on the nearness to the city corporation were selected and each ward from both the areas were randomly selected for the study. Out of the total 238 elderly women in the randomly selected ward in rural Sreekaryam, 100 subjects were included in the study using systematic random sampling technique. The same method was adopted for the selection of 100 subjects from among the 212 elderly women nearer to the city corporation. Using a structured interview schedule data were collected for economic status, physical disabilities – WHO classification of disability scale, chronic and acute diseases – WHO's International Classification of Diseases, Psychological morbidity – abuse, isolation, loneliness and depression, IADL & PADL – Kat scale, social interactions and social relations – expression of

subjects, availability of support systems, utilization and felt needs of elderly women. A composite scoring system was used to classify SES into lower, middle and upper - classification (Kuppuswami, 1976).

Statistical analysis

Data was analysed with the help of SPSS software package and statistical significance was verified.

Conclusion

44% in rural set up and 26% in urban set up were in lower income group, where as 70% in urban set up, 56% in rural set up were in middle income. 64.5% were widows and 31% were illiterate. Only 10% were having oldage pensions or any other source of income. And the rest were economically fully dependent. 70% of the respondents had average living conditions. 70.3% and 83% were having chronic and acute diseases respectively. 70% had visual problems but only few were using spectacles. 20% of the subjects were partially or fully dependent physically (ADL). Urinary incontinence was a major psychosomatic problem of about 50% of the subjects. Loneliness seemed to be a common psychological problem in both the areas. 20% rated their own health as poor, 74% as satisfactory and 6% as good. Majority of the subjects enjoyed non formal support from family members. About 60% of the elderly women headed their families and had domestic responsibilities. More than 51.5% were pan chewers. All the subjects studied were in need of geriatric care facilities at local level, visits by health workers, geriatric OPs in all the hospitals, geriatric wards in district level hospitals and medical colleges. None was interested in seeking shelters at oldage homes or day care centres.

INTRODUCTION

Aging is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes, with advancement of age. High fertility and declining mortality are the major factors responsible for population increases in most countries of the world, especially the developing ones. Longevity has increased significantly in the last few decades mainly due to the socio-economic and health care developments. These factors are responsible for the higher numerical presence of elderly people leading to higher dependency ratio. Demographers, researchers, and responsible citizens have started to think about the aged population and its problems because of the demographic transition in many countries of the third world now taking place in a much shorter period of time. Aging of the population will be one of the major challenges of the near future.

In India, the attainment of the age 60 has been mostly considered for the purpose of classifying aged persons, where as the USA, UK and other western countries, it is from 65 years. Aging is not a new phenomenon, but the problems that occur with aging appears to be a product of modern age. Current projections indicate that from 1980 to 2020 about 75% of the additional numbers in the global elderly will be in developing countries. Geriatric population is rapidly increasing and about 1 million elderly persons are added per month to the world (United Nations 1988).

The life expectancy at birth is 66 yrs in the world and 60 years in India and 68 years in Kerala. As per United Nations classification, Indian society would progress from a mature society (elderly population between 4-7% of the

total population) to an aging society, (elderly population more than 7% of the total population) by the turn of the country[39].

"According to the population projections for the next 20 years period till 2016, worked out by the expert committee headed by Registrar General and Census Commission of India, the 60+ population of India will grow from 56 million in 1991 to 71 million in 2001, 96 million in 2011 and 113 million in 2016"[40].

The total population of Kerala is projected to increase from 27.6 million in 1986, 45 million in 2026. During the first quarter of the 21st century, the population of Kerala will experience a dramatic aging. Old age dependency in Kerala will be 18.13 in 2011 when compared to 13.77 in 1991.

Advancing age seems to bring meaningless misery mainly because the elderly have been neglected and by passed by modern society. Aging may be viewed as a biological process, psychological and social development process of individuals including transition in social position, roles, status and attitude. This makes it necessary to look into the various aspects of their problems, social, economic, psychological health and other allied aspects.

In the traditional joint families infirmities were taken care of by the individuals, immediate circle of relations and family members. Older people enjoyed a sense of honour and authority and had the responsibility in decision making. More over at aggregate level, number of old people were also less. However in recent times as a result of changing circumstances due to demographic transition, rapid pace of industrialization and urbanization, disintegration of joint family structures into unitary ones, increasing participation of families in non agricultural labour force, the older people become more

vulnerable to physical disabilities as a result of social economic and emotional alienation and isolation.

Older people usually suffer from chronic conditions. The duration of both acute and chronic conditions is longer for the elderly and their chronic conditions are more likely to be lethal. Frequent chronic ailments among the elderly are Diabetes Mellitus, Hypertension, Cardiovascular diseases, Cancer, Arteriosclerosis, Kidney diseases, Parkinson's disease, Arthritis, Dementia etc. Most often elderly may suffer from multiple chronic conditions, visual defects, hearing impairment and deterioration of speech which can cause social isolation. These will be more severe among elderly women as they suffer specific health problems than the usual.

Due to the predominating rural character of the India's population, it would be natural to expect that most of the elderly people would also be living in rural areas. In rural areas, health of the older persons may be particularly influenced by poverty, lack of education, poor nutrition and increased risks of accidents. In the first half of the 21st century, the major socio-economic problems will be the maintenance of the health and nutrition of the elderly through social security, social assistance and other social support mechanisms. A comprehensive social security system is not functioning in our country as in western countries.

In most developed and developing countries women's biological, psychological and social development across life span is compromised by cultural, political and economic factors. The remarkable thing about older women in our culture is that they still survive against all odds against them. Long experience of discrimination, deprivation and neglect reflects in their later years. There is no retirement for an elderly woman till either death or dementia or

disability occur. Poverty, malnutrition, poor health care and depression are also the major problems faced by the elderly women.

In Indian culture women are not allowed freedom or are equal to men. ('Manusmrithi – Pitharakshathi Kaumare, Bhartharakshathi Yauvane; Rekhshanthi Sthavireputhra, Na Sthree Swathanthriyamarhathe'). Female security is considered to depend on the willingness of fathers, husbands or sons to support female family members; where as male security depends on the ownership and control of family property.

"Various factors such as food sharing practices, eating the left overs, poor medical facilities, poor sanitation as well as low levels of education may be responsible for poorer nutritional and health status of the elderly women from lower in-come group[27]. Added to this, incidence of widowhood is much higher among the female aged than among the males. This is the trend all over the world and so is in India. In 1991 only 15% of the meals were widowed, as many as 54% of females were widowed. The absolute number of elderly widowed women in India was very large 14.8 million in 1991.

In our country, the economic security, social fulfillment and personal dignity are not well assured as in western countries due to economic imbalance. The position of the elderly woman in the family is depended upon her economic position, support systems available, marital and health status.

Though a large number of studies on various factors influencing the aged especially elderly women during the process of senescence are available in western countries not much data have been a generated as applicable to the Indian situation. In this context the present study was conducted in Kerala, where ageing society occurs more rapidly than in other states of India. With the aged

population constituting 10% (India 7.8%) and moving towards 20% in another 25 years (India 14%), Kerala is moving fast towards an 'aged society'. The percentage of aged population is hence close to that of the developed countries of the world. The Socio-economic conditions, Morbidity pattern and Social support among the elderly women in a Rural area was taken to high light these points, the problems and needs of this vulnerable category of the elderly with evidence based data.

OBJECTIVES

1. TO EXAMINE THE SOCIAL AND HEALTH PROBLEMS AMONG THE ELDERLY WOMEN ACROSS DIFFERENT SOCIO-ECONOMIC GROUPS.
2. TO IDENTIFY THE PERCEIVED MORBIDITY PATTERN AMONG THE ELDERLY WOMEN IN THE INTERIOR AREAS AND NEARER TO THE CITY CORPORATION.
3. TO STUDY THE PROVISION AND UTILIZATION PATTERN OF VARIOUS SUPPORT SYSTEMS PROVIDED BY GOVERNMENTAL AND NON-GOVERNMENTAL AGENCIES FOR THE WELFARE OF THE ELDERLY WOMEN.
4. TO STUDY THE FELT NEEDS OF THE ELDERLY WOMEN FOR THE BETTERMENT OF THEIR SOCIAL AND HEALTHY LIVING.

REVIEW OF LITERATURE

1. Definitions

"Aging is a biological process, experienced by mankind in all times. However, concern for aging of population is a relatively new phenomenon, which has araised due to significantly large increase in the number and proportions of aged persons in the society"[26]. In the words of Seneca, "Old is an incurable disease", but more recently, Sir. James Sterling Ross Commented : "You do not heal old age. You protect it; you promote it; you extend it"[24]. As already noted, with the aged population constituting 10% (India 7.8%) and moving towards 20% in another 25 yrs (India 14%), Kerala is moving fast towards an 'aged society'. The percentage of aged population is hence close to that of the developed countries of the world.

"Biologically" aging begins at least as early as puberty and is a continuous process throughout adult life. "Socially", the characteristics of members of society who are perceived as being old vary with the cultural setting and from generation to generation. 'Economically', the elderly are sometimes defined in terms of retirement from the work force but, especially in societies with a normal or statutory retirement age, many individuals cease economic activity for reasons unrelated to aging. And many of those who cease to work, continue to contribute indirectly to their society's economy through support to working family members, voluntary work, or deployment of wealth. 'Chronologically', age has long been used as an indicator of the expected residual life span. Recent changes in the mortality rates have changed the predictive significance of chronological age, and refinement of care objectives has shifted

the emphasis from prolonging life expectancy to increasing life expectancy free of disability"[43].

Though years of existence in calendar years define age in a generic manner, the actual implications may vary. Age, today can be related to a period of life with a natural decrease in functional capability of the body and starts around the middle of the perceived life span of 100 years.

"According to Hindu tradition, life has four Ashramas (Stages) – Brahmacharya, Grahastha, Vanaprastha and Sanyasa with a life regarded as one hundred years. Many devide life equally into these four Ashramas. It is said that "Vanaprastha and Sanyasa Ashrama" are meant for those whom we call the aged persons"[36].

2. Demographic aspects of Aging

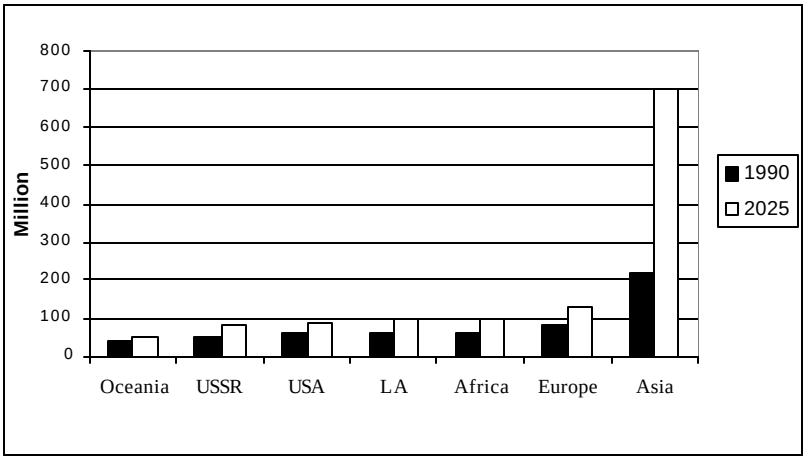
In 1990, 9.2% of the world's population was aged 60 years or more. In the more developed and less developed regions, the proportions were 17.1% and 6.9% respectively. The highest proportion of the elderly was found in Europe (18.7%) Japan had the highest proportion among the individual Asian countries, with 17.2% (Table 1)[35].

Table 1 : Population aged 60 or over : major regions of the world and selected countries 1990.

Region and Country	Size Millions	Percent of Total population
World	486.9	9.2
More developed regions	206.3	17.1
Less developed regions	281.9	6.9
Africa	30.8	4.8
Latin America	32.3	7.2
Northern America	46.3	16.8
Europe	93.2	18.7
Oceania	3.4	12.8
USSR	42.4	14.7
Asia	239.7	7.7
China	101.4	8.9
Japan	21.2	17.2
Southern Asia	78.0	6.5
India	60.6	7.1

Source : World Population Prospects, 1990 UN Publication.

Table 2 : Regional distribution of population aged 60 and over by 1990-2025.



Source : United Nations Publication (1991). World Publication Perspectives 1990.

Table 3 : Size and proportion of the population in 60 + age group from 1951-2001 (India)

Year	1951	1961	1971	1981	1991	2001
No: of persons in millions	21	25	33	42	55	76
Percentage of total population	2.7	5.7	6.1	6.5	6.6	7.7

In table 3, elderly reflects the large increase in the number of 60 + age group during 1951-2001.

"Kerala, the southern state of India has been acclaimed for her demographic superiority in many ways. The state experiences low level of birth rate and high life expectancy at birth (66.8 years for males and 72.3 for females) together with a higher density of population"[12]. In 2001, the figure has changed to 74 years and 80 years for males and females respectively.

Table 4 : Population by broad age group : Kerala 1991-2021. Economic and Social Aspects of population aging in Kerala, India)

Year	Age Group		Percentage	Total
	0-14	15-59	60+	-
1991	29.2	62.0	8.8	100
1996	27.7	62.8	9.5	100
2001	26.6	63.2	10.2	100
2006	25.7	68.3	10.8	100
2011	24.7	63.5	11.9	100
2016	23.5	62.7	13.8	100
2021	22.6	61.4	16.0	100

Source : Registrar General Census of India. Series 9 Kerala Thiruvananthapuram.

Out migration, which was a characteristic feature of the younger age groups of both Kerala and Punjab could have contributed to their higher proportion of the elderly. Since the population of Kerala was larger than that of Punjab, the absolute number of aged in Kerala is greater.

Population projection indicates that proportions of the females in the elderly population would become even more in the future owing to the expected larger increments in life expectancy of females.

"Older men can rely on their wives for care as they grow frail, a common pattern every where, but older women, often after first cared for an aging parent or parent-in-law, then for an aging husband, are themselves left without a spouse or grown children to provide the care they need. The problems that elderly women face are moreover, frequently compounded by their difficulties in obtaining sufficient income because of their limited access to pension and rights to property. Special attention is needed to the support and care of elderly women"[10]. In developed countries proper care and other social security measures provide far-reaching results in the quality of life of elderly people.

Table 4.1 : Expectation of life at birth assumed in Kerala

Period	Expectation of life at birth	
	Males	Females
1991-96	73.43	79.43
1996-2001	74.47	80.47
2006-2011	75.20	81.20
2011-2016	76. 29	82.29
2016-2021	76.74	82.74
2021-2006	77.17	83.15

Source : Economic and social commission for Asia and the Pacific

Table 5 : Marital status of elderly population by sex Kerala 1981[3].

Age group		Single	Married	Widowed	Divorced
60-64	M	2.2	90.8	6.0	1
	F	2.9	42.6	52.3	2.2
65-69	M	2.3	87.8	8.9	1.0
	F	2.4	33.0	63.0	1.6
70+	M	1.9	77.9	19.1	1.1
	F	1.6	16.7	80.7	1.0

In most of the developing countries, women are worse off than men with regard to a number of important dimensions of human existence. Indira Jaya Prakash, in her work on 'Aging women a Liability or Asset' doubts "If men who were once active in the labour force and had made substantial tangible contribution to national economies are considered as burden, then how will women who always had been invisible contributors be treated when are old and no longer useful?"[16].

3. Socio-economic aspects of aging:-

"The health and well being of the elderly are affected by many aspects of their social and physical environment. These include life-style, marital status, family support and social networks, income, work, retirement and environmental factors like condition of housing.

A large number of the elderly females are illiterate in most of the studies and it may be the reason before 60 years back female education was rare in our country even in Kerala. Therefore work force participation is less.

"Two thirds of the elderly males and 90-95 percent of the elderly females are illiterate and a large number of them, particularly women, are single owing to the death of the spouse. It is also estimated that about 18 million males and 3.5 million females aged 60 years and above would need jobs for their economic support. These figures have been derived on the proportion currently working. Besides 55 million of the aged will not be working in 2001, majority of whom probably will not have adequate savings nor family assistance. Such a grim situation would call for larger financial investments to save these elderly people

from destitution and provide a minimum level of decent maintenance to them either by a government or by voluntary organizations"[6].

Most studies have revealed that a high percentage of elderly females are illiterate. The reason may be derived from the fact that female education was rare in our country (including Kerala) till the recent past. This accounts for the low work force participation prevailing amongst the elderly females today.

"Now the traditional value system is undergoing change along with the changes taking place in the family structure. Nowadays elderly are not given the same respect as they used to get before. They are not shown adequate care and attention by their family members partly due to the limited resources and partly due to growth of "individualism" in modern industrial life"[9].

"A recent study revealed that 19 percentage of the population above 60 years still work in the villages in Kerala"[30].

Ageism due to modernization is the discrimination against old people because they are old and allows younger generation to see them as different from themselves. Marginalisation is a key factor which alienates or desocialises the old. For example "In England, about two thirds of all hospital beds are occupied by those over 65. It is a huge economic burden on the community to meet the cost of retirement pensions and support vast medical social services. Besides a great strain is placed on the younger generation to look after them"[24].

Community especially the young spurn the elderly due to the latter's inability to function on there own and make an active contribution to the economy.

Active involvement from the young and the aged is required to avoid this marginalisation. The youth can be counselled to accept the aged just as they

would accept a new born. The aged can be informed to be more accommodative to the decisions of the young and strive to contribute to the family within their constraints. As noted in WHO TRS 1984, "No country can provide formal health and social services adequate to serve as a substitute for the informal care system, even if it were desirable to do so"[44].

The aged in the traditional societies enjoyed, unparallel sense of humor, authority and decision making power in the family and were treated as repositories of experience and wisdom. This experience, during crisis situations emotional, economic and social was duly appreciated and given weightage by younger generations. The change in the value system, individualism of the youth in transitional Indian family system have become responsible for the declining authority and status of the aged.

According to the Hindu Tradition, which has influenced other religious groups in India, the elderly are to be treated with veneration and respect. The average Indian Family, irrespective of class, caste and religion, respects its elder members. But as a result of the dramatic decrease in fertility and mortality, the size, composition and role of family members have changed.

There is a definite weakness of the traditional and joint family structures, especially in the loss of family support for the elderly.

In our country 2/3 of the elderly people live in rural areas in the midst of poverty, lack of social support and in poor living arrangements. According to one study, 70% of the population in India live in villages, a very large proportion is illiterate and lives below the poverty line"[31].

According to the UN estimates there are 208 million aged women in the world and about half of them live in rural areas of developing countries (UN

1990). It has been further estimated that elderly women in India would constitute 14.1% of the total population of India by 2025 (United Nations 1990)[5].

"The great longevity of women would mean that there would be more widows than widowers, the more so as grooms were usually older than their brides. In addition there was a higher remarriage rate among widowers than among widows"[27].

In assessing the socio-economic status, it is important to keep in mind that for a variety of reasons, the financial problems of old people constitute an important problem area. In our country, the economic security, social fulfillment and personal dignity are not well assessed due to economic imbalance.

"Continued participation of the elderly in the economic life, even after retirement promoted autonomy and reduced the need for family and community support. However the economic security of older women was important because they were less likely to have worked outside the house and were more likely to be widowed"[28].

Economic security of elderly women today is always at threat due to losses opportunities and low level of self esteem and initiatives contributed by the society in the past.

4. Morbidity pattern

Morbidity has been defined as "any departure, subjective or objective, from a state of physiological well being. The term is used equivalent to such terms as sickness, illness disability WHO Expert committee on Health Statistics noted on its 6th Report that morbidity could be measured in terms of 3 units. (i) Person who were ill, (ii) the illnesses (provides of spells of illness) that these persons experienced and (iii) the duration (days, weeks etc) of these illnesses.

The aged population has special health problems that are basically different from those of adult or young. Most diseases in aged are chronic in nature – cardiovascular, arthritis stroke, cataract, deafness, cancer, chronic infections etc. Disease process are usually multiple[37].

Morbidity pattern among the elderly varied from country to country. Chronic conditions which produced infirmity and disability became more common in old age.

"Morbidity due to cancer, CHD, Diabetes, Hypertension and Arteriosclerosis had increased while there was a decline in morbidity among the elderly from conditions like skin diseases, visual and hearing handicaps and multiple orthopaedic problems"[43]. Epidemiologically there has been a shift in disease pattern from communicate to non-communicable diseases and is considered as the net result of the demographic transition.

According to the International Classification for Impairments, Disabilities and Handicaps (ICIDH) issued by WHO, the disability refers to restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being.

K. Vijayakumar et al (1992) conducted a survey in Thiruvananthapuram city, Kerala to assess the health and functional status of the elderly. Out of the 658 elderly covered 20.15 of males and 68.1% of females were widowed. The women were found to be poorer suffering a lot having more morbidity than the men, in spite of their greater life expectancy. The diagnosed illness included hypertension (18.4%) arthritis and joint complaints (12.1%) chronic bronchitis (11.7%) Diabetes (9.5%) and Coronary Heart Disease (5.7%). Chronic bronchitis and Diabetes were more among the males whereas hypertension was more among

the females 20.9% of men and 32.8% of women were habituated to chewing of betal leaves. Perceived morbidity was higher among the females than men[38].

5. Activities of daily living

Two major aspects of ADL need consideration namely physical activities and instrumental activities. Physical activities (basic activities) include self care tasks such as feeding, transferring, dressing, continence and care of self at the toilet and bathing. Assessments are derived from measures developed by Katz S (1983).

Instrumental items in ADL include handling money, using telephones, preparing meals cleaning the house etc.

According to a survey from Andhra Pradesh rural area by Dr. Jayarami Reddi et al one fifth of the elderly women were unable to perform common tasks of daily use. Increased incapacity was observed with advancing age[23].

6. Support systems

Elderly people may experience a wide range of needs for support, which could vary from needs for practical help or assistance in the event of physical disability and security, constant with the personal and social losses, which have been sustained. No community support mechanisms are organised for the welfare of the elderly women in our country. Even in the Primary Health Care delivery system these vulnerable sections are left.

In India millions of people in the rural areas depend entirely on the Primary Health Care System. It is unfortunate that the Primary Health Care

workers, male and females have no training in health care of the elderly and are unaware as to how to counsel the elderly individuals both males and females[17].

In Primary Health Centre level or subcentre level there is no provision of Health care delivery system to the elderly population alone any where in our country. The multipurpose health workers are not given training regarding the care of elderly. Nor registers are kept for collecting the details of elderly people as the authorities do in the case of infant, child, adolescents and eligible couples.

This emphasises the need for health care support from the younger generation.

"The socio-biological view considers the phenomenon of social support to be deeply rooted in our biological inheritance, providing a central influence in our success as life form"[28]. As Richard E Pearson's view every human being has emotional attachment to his own Kins and Creeds.

One of the major psychological problems of elderly women is loneliness as most of them are widowed and also due to mobilization as explained by Asgarali and Aruna Brooter. "The concepts of loneliness with particular reference to old age and suggested that successful treatment of loneliness in life reduces the risk of more serious complication, such as feelings of meaninglessness, decrease in social contacts, self esteem and trust"[2].

The sense to receive and provide social support exists is inherent in every human. Low social contribution and low social support leads to depression and proneness to disease both psychological and physiological.

"In Kerala, which has the highe st proportion of elderly in India and has several social security schemes, 73.6% of the rural females and 76% of the urban

females are fully dependent on others. This shows that vulnerable elderly women are even in Kerala, known for its high order of social investment"[12].

Even though social investment was a major blessing of traditional joint families in India, in all developing countries, women especially elderly women are spending their later phase of life without adequate or even negligible security measures.

In short, a variety of comprehensive, valid and reliable, multidimensional, functional assessments are available. It needs to be ensured that the measures used are sound so that appropriate services in adequate amounts can be provided to improve the functional status of the elderly.

"Paul Wallace a popular writer dramatically described this phenomenon, the process of senescence as 'AGE QUAKE'. If we understand the implications of aging, age quake will not decent on us unexpectedly like an earth quake with death and destruction all around. Instead we will be prepared to face a world converging on the elderly"[26]. According to Paul Wallace all the individuals should be prepared to face later years in life within their own limitation gloriously.

METHODOLOGY

Design

The present study was carried out using a descriptive design, cross sectional study advocated to collect information based on the above objectives.

Setting

The community level study was conducted in Sreekaryam Panchayat having an area of 23.73 Sq. km in Thiruvananthapuram District of Kerala. A few wards of this Panchayat area was divided into two urban and rural based on the nearness to the City Corporation. From among the rural wards (War No: X, XI and XII) one ward (Ward No. XI), was randomly chosen for the study as this area was remote and having rural characteristics and interiorly situated. And similarly from among urban wards (ward N. III, IV and V), one ward was randomly chosen for the study.

Population and sample

The percentage of elderly population in Sreekaryam Panchayat (constituting 15 wards and having a population of 49570), was 10.94% of the total population. Out of which a little more than 50% are elderly women (M:F=2499 : 2973). There were 238 elderly women in the randomly selected ward in rural Sreekaryam (Ward XI Aruvikarakonam). Out of these 238, total elderly women in the specified ward 100 subjects were included in the study using systematic random sampling technique (every alternate house).

The same method was adopted for the selection of 100 subjects from one ward (total elderly women 172) nearer to the urban Sreekaryam (Ward V). In order to make the house holds equal to the rural ward, 40 households from ward No. IV having elderly women were included in the study. Out of the (172 + 40)

elderly women, 100 subjects were included using systematic random sampling technique. Ward No. IV is also close to city area.

Out come and study variables

A structured interview schedule was administered to collect data from the elderly women.

Variables included were age, education, previous and present occupation, personal income, per capita income and housing conditions.

Morbidity pattern (perceived morbidity)

The variables included were disabilities like immobility, visual and hearing impairments, use of physical aids (spectacle, hearing aids, wheel chair, walking sticks) based on WHO's Classification of Disability Scale 1981.

Chronic diseases from 3 months and acute disease from one month duration as per WHO's International Classification of Diseases were included for assessing morbidity of elderly women. In the case of medically diagnosed conditions, medical records like OP tickets, prescription papers, discharge cards and medicines used were cross checked. Proper training regarding medication acute and chronic diseases relevant to the present study was given to the investigator before administering the questionnaire. More than five acute diseases and all the chronic conditions (any one occurred 1 yr back) were taken into account for considering morbidity. An identical composite scoring system (WHO) was followed.

Psychological morbidity among the elderly women was assessed using 4 item variables (abuse, isolation, loneliness and depression).

ADL includes physical ADL for bodily functioning and instrumental ADL for activities basic to independence in the proper functioning in the family

as well as the community depending on the socio-cultural practices prevalent in our society. PADL and IADAL from KATZ scale were used for assessing ADL. Depending upon the score obtained, elderly women were divided into 3 categories (depended, partially depended and not depended). For bladder control the question included was whether they have full control, partial control or no control.

Social relations and interaction :

They were assessed through a separate scoring system. Depending upon the social relation score, the variables were grouped into SRIN I and SRIN II and all the variables were included based on the expression of the subjects and not based on the object assessment. In SRIN I, relations were assessed as poor, satisfactory and good depending on the total score (help in crisis situation, listen most when need to talk, spend more time, comfort when in need) with none, friends, relatives and family members respectively. In SRIN II the proximity to elderly women by family members, friends, relatives, status in the family, role in the family, domestic responsibilities, leisure time activities, savings were assessed through separate scoring.

Social support :

- Availability of the support system, provision, utilization and felt-need of the elderly women in the study areas were assessed.
- Family care from the family members (spouse, children, in-laws, grand children).
- Non-formal support like in-laws, neighbours, friends, relatives.
- Community care includes – day care centres, old age homes, elderly women organization.

- Both governmental and non-governmental organization for the welfare of the elderly women.
- Social welfare measures like financial support, social security measures, integrated welfare services etc.
- Availability and accessibility of health care services like PHC, Sub-centre, Private hospitals, Private medical practitioners.
- Availability of geriatric clinics or geriatric wards in the PHC or in Government hospital level.
- Availability of physical aids such as spectacles, hearing aids, walking sticks, wheel chair, dentures, proper health education by health workers, utilization of these measures. Here also a composite scoring and individual scoring system were followed.
- From the family and non formal support, physical support, economic support and preference of staying were included and graded as good, satisfactory and poor for family members, relatives, friends and none respectively.
- SES of the subjects were assessed by taking into consideration an identical scoring system suitable for Kerala's situation. The educational status, previous / present occupation, personal income, per capita income (Majority of the elderly women were illiterate or having primary level of education and were engaged in agrarian sector or household activities and also most of them were staying with their children who were in active labour force. So the economic status was dependent upon per capita income). Housing conditions as applied to the elderly population were also assessed.

A composite scoring was used to classify them into 3 groups – lower, middle and upper. The results obtained were analysed across SES and morbidity, SES and use of physical aids, SES and psychological morbidity, marital status and social relations and family support were analysed and then statistical significance was verified.

Data Collection

Tools used :

The study was based on primary data and was collected from the elderly women. Trained investigators were appointed to collect data through house visits. The period of data collections by interview method was January-April 2000.

A structured interview schedule which was appropriately pretested in 5% of the total aged women from an identical area. Uniform type of training was given to both the investigators before administering the questionnaire.

The elderly women and the family members in Ward XI (rural set up) were very co-operative and friendly and a good rapport was established before administering the questionnaire. Time spent for each interview was about 40-60 minutes.

In ward V (urban setup), the subjects as well as their family members were not much co-operative and hence strict privacy could not be kept due to the unnecessary interference of their family members.

Ward XI was actually a remote village area and transport facility was inadequate. The houses were scattered and also the geographical situation was unfavourable to complete the field visit in time. No help was received from the health workers as they were not visiting the houses regularly. Supervision was carried out twice in a week till the field visit was over.

Exclusion criteria :

Elderly women having psychiatric disorders and full hearing impairments.

Inclusion:

Elderly women who are willing to participate in interview without compulsion.

Difficulties faced during filed study :

The rural set up, ward XI was actually a remote area and transport facilities were inadequate.

RESULTS AND DISCUSSIONS

A descriptive study was undertaken among the elderly women in Sreekaryam Panchayat area during the period from January – April 2000. Information was collected from 101 elderly women from rural area and 101 elderly women from area having urban characteristics from the same Panchayat. The aim of the study was to investigate the Socio-economic conditions, Morbidity pattern (physical disabilities, chronic diseases, acute diseases, psychological morbidity and activities of daily living) and also social support (availability, utilization and felt needs) mechanisms among the elderly women in both rural and urban areas.

A composite scoring system was used to assess the outcome variables as well as study variables. In certain cases individual variables were also assessed to identify the problems which are found to be more relevant to the geriatric populations especially elderly women.

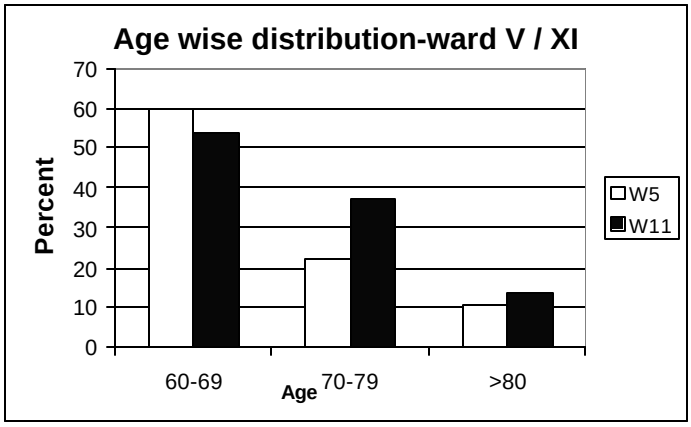
Socio-economic factors :

Demographic variables:-

Age :

From table 1, it is seen that majority (56.4% of aged women were in the age group 60-69 followed by 32.2% in 70-79 and 11.4% in 80 and above if both the wards studied were taken together. Same trend was followed even if the two wards were considered separately. In either groups, the percentage of women in the age group 80 and above was exactly the same (11%). However the number of women in 60-69 age group was rather high in ward V (60.4%) compared to that

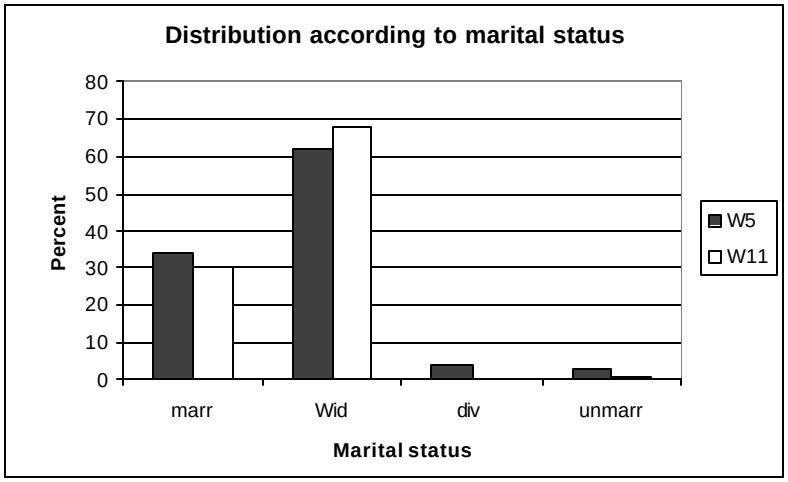
of ward XI (52.5%), still the difference happened to be statistically insignificant ($P > 0.05$).



Therefore it is inferred that both the samples had more or less same age distribution.

Religion : While considering the distribution of religion there was a remarkable difference between the two groups. In Ward XI, Hindus were more (90%) in the place of only 69.3% in ward V. Correspondingly the Christian population happened to be 4 times high (20.8%) in ward V compared to ward XI (5%). Similarly the Muslim population was two times higher in ward V compared to ward XI.

Marital status : In the present study, 30% of the old age population were currently married. Widows constituted 65% of the total women studied (68% in ward XI and 61% in ward V). Remarried / divorced / never married women were very few and constituted about 5%. Statistically no difference was noted in the percentage distribution of women according to marital status in the two wards. Widow-hood is disproportionately high among females compared to the male elderly. According to the 1991 census, there were 33 million widows in India.



Level of education : Though literacy status in Kerala is assumed to be 95% or more, 30% in ward V and 32% in ward XI were illiterate and 53% in ward V and 55% in ward XI were having primary level of education. The remaining 12-16% had secondary or above level of education and only one woman had studied upto graduation. In the case of education also no appreciable difference was noticed in the two groups.

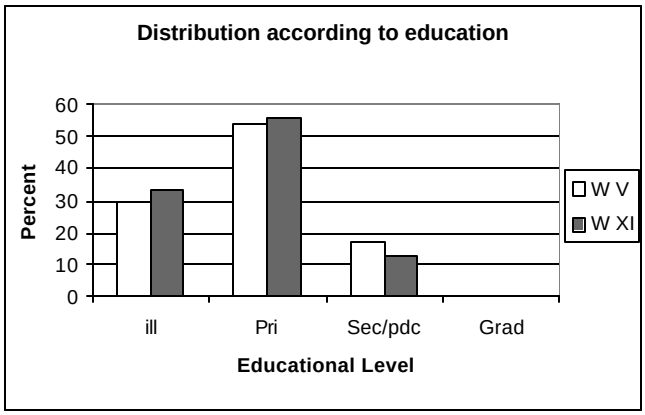


Table 1: Socio-economic variables (Ward V & Ward XI of Sreekaryam Panchayat)

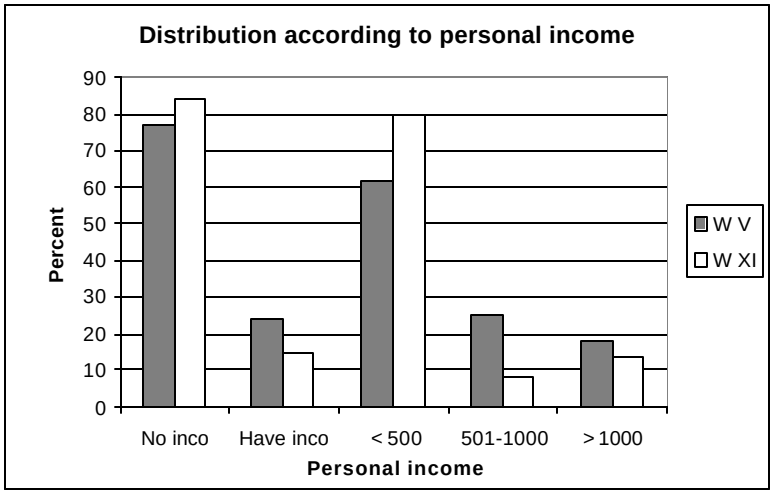
Sl No	Socio-economic	Ward V		Ward XI		X^2	P value
		No:	%	No.	%		
1	Age 60-69 yrs	61	60.4	53	52.5	0.51	P>0.05
	70-79 yrs	29	20.8	36	35.6	(df=2)	(NS
	80+	11	10.9	12	11.9		
2	Religion – Hindu	70	69.3	91	90.1	14.2	P<0.01
	Christian	21	20.8	5	5.0	(df=2)	
	Muslim	10	9.9	5	5.0		
3	Marital status						
	Currently married	32	31.7	30	29.7	4.1	P>0.05
	Widows	62	61.4	69	68.3	(df=3)	
	Remarried/	3	3.0	-	-		
	Divorced	2	2.0	1	1.0		
	Near married						
4	Education						
	Illiterate/Primary	84	83.2	88	87.1	0.626	P>0.05
	Secondary PDC	17	16.8	13	12.9	(df=1)	(NS)
	Graduation&above	-	-	-	-		
5	Per capita income						P >
	..	77	76	81	80.2%		0.199
	Below 1000 L	15	14.8	17	16.8%	3.23	(NS)
	1001-3000 M	9	7.2	3	3%		
	1001-3001						
	3001 & above U						
6	Personal income						
	No income	77	76.2	86	85.1	4.16	P>0.05
	Have income	24	23.8	15	14.9	(df=3)	(NS)
	Below Rs.500 L	15	62.5	12	80		
	Rs. 501-1000 M	5	24.8	1	7		
	1001 & above U	4	16.7	2	13		

Type of family : It is observed that nuclear families were more in ward XI (31.7%) compared to ward V (16.8%). It may probably be due to the fact that ward V is more close to the urban area, which may have extended families if husbands and wives were employed. However in both the groups more than 68% had extended families. Among the elderly females two thirds i.e. 66.5% were from households wherein one or more married sons were staying with them.

There was only one family which had the characteristics of joint family system, that also included in extended family.

Regarding previous occupation, in both the wards 80% of the elderly women were engaged in household affairs and the rest were engaged in agriculture/manual labour/doing petty business. Considering present occupation also about elder 70% of the elderly women were engaged in house hold activities even with their ailments and 5 to 10% were at rest and others were engaged in income generating activities and were included in lower SES group.

Personal income : It is significant that hardly 9.5% had income of their own, and was only a meagre amount either from old age pension or from other sources.



In ward V, 76.2% had no personal income compared to 85.1% in ward XI. Regarding the income status 62.5% in ward V and 80% in ward XI had below Rs.500 per month. Statistically no difference was noted in the income status of the two groups.

Per capita income : Per capita income was assessed to determine the economic status of the elderly women. However the elderly women were not much

educated or in working free previously or at present the total family income was considered to assess the SES as the spouse, children or in laws were earning members and staying with the aged women.

In assessing Socio-economic status, it is important that data on standard of living may be hard to interpret especially where the aged are part of extended families where resources are pooled. Individual income may give a poor picture of Socio-Economic Status.

Accessibility to transport : Regarding accessibility to transport 71.3% in ward V and 57.4% in ward XI had such facility. Ward XI happened to have less access to transport facility. It was quite possible because ward XI was located at the farthest boundary of Sreekaryam Panchayat which is situated far away from the urban area.

Housing conditions: Housing conditions in majority of the two wards were satisfactory. Regarding the type of house, cleanliness, ventilation, proper space to move about for the elderly and having separate room, separate cot, water facility, personal hygiene in both the wards about 70% of the respondents had average housing conditions except for water facility. 90% of the elderly women in ward XI had no tap water facility; their main source of water was the well.

Table 2 : Distribution according to level of health on the basis of disability

Level of Health	Ward V		Ward XI		Total		X2	P Value
	No.	%	No.	%	No.	%		
Good	75	74.5	88	87.1	163	80.7	6.815 (df=2)	P<0.05
Satisfactory	23	22.8	13	12.9	36	17.8		
Poor	3	2.8	-	-	3	1.5		

Morbidity : It was seen from table 2 that 22.8% in ward V and 12.9% in ward XI had only satisfactory health status. In ward V, people had only poor level of health (2.8%) status compared to no such cases in ward XI. While considering the overall health status 80.7% had good level of health. Out of which 74.5% were in ward V and 87.1% in ward XI. Thus statistically the health status of the elderly women in ward XI appeared to be more healthy.

Use of physical aids : While considering the use of physical aids like spectacles, hearing aids, wheel chair, walking sticks, 11% of ward V and 34% of ward XI were the users. In fact the percentage of users showed three fold increase in ward XI mostly due to the use of spectacles for the active involvement in family affairs. The difference noted in the percentage of use of physical aids between the two groups turned out to be highly significant (P<0.001).

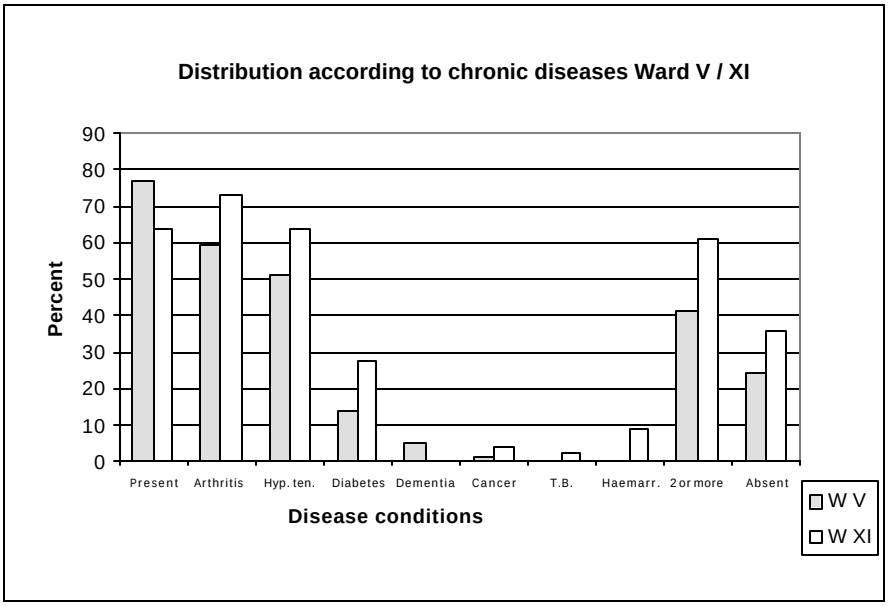
Table 3 : Use of physical aids

	Ward V		Ward XI		X2	P value
	No.	%	No.	%		
Used	11	11	34	34	15.12	P<0.001
Not used	90	90	67	67	(df=1)	

Table 4 shows the distribution of respondents according to their disease conditions based on acute or chronic diseases. The elderly women suffered from several health problems in old age. Impaired vision, loss of memory and urinary incontinence were some of the commonly reported problems. Most of the women in both the groups were suffering from more than one disease conditions.

Table 4 : Distribution according to disease conditions

Disease condition	Ward V		Ward XI		X2	P value
	No.	%	No.	%		
Acute disease						
Present (since I month)	83	82.2	85	84.2	5.22	P > 0.05
One illness	11	13.25	7	8.2		
Two	12	14.46	16	18.8		
Three	9	10.84	11	12.9		
Four	6	7.23	9	10.6		
Five or more	45	54.22	52	61.2		
Absent	18	17.2	12	11.9		
Chronic disease						
Present	77	76.2	65	64.4	0.242	P>0.05
Arthritis	45	58.4	47	72.3		
Hypertension	39	50.6	42	64.6		
Diabetes	11	14.3	17	26.2		
Dimentia	-	-	3	4.6		
Cancer	1	1.3	2	3.1		
T.B	-	-	1	1.5		
Haemarrhoids	-	-	5	7.69		
More than two diseases	32	41.6	40	61.5		
Absent	24	23.8	36	35.6		



Acute diseases : It was attempted to estimate the frequency of acute diseases among the elderly women studied. In ward V, 82.2% had one or more acute diseases during the last one month in place of 84.2% in ward XI. 11.9% of the elderly women in ward XI and 17.8% in ward V reported that they did not have sickness during the last month. Statistically no appreciable difference is noted in the frequency of illness in both the wards. Elderly women are more susceptible to various acute diseases because 54.2% of ward V and 61.2% of ward XI women had five or more different illness during the one-month period. However 27% had one or two illness during the period. The acute diseases included were fever, cough, sneezing, common cold sore throat, joint pain, head-ache, giddiness, loss of memory, oedema on knees/ankles, heart burn, tooth-ache, stomach-ache, vomiting, diarrhoea, eye diseases, anxiety, incontinence, accidents, skin diseases, weight loss, back-ache, chest pain (WHO-International Classification of Disease Scale).

Chronic diseases : With regard to chronic diseases, 76% of elderly women in ward V and 64% of women in ward XI had the history of chronic diseases. The major problem was Arthritis (joint pain) which varies from 58.4% - 72.3% among those who had chronic disease, which is followed by hypertension 50.6% in ward V and 66.4% in ward XI, diabetes mellitus, 14.3% in ward V and 26.2% in ward XI. There were three cases of Dementia, two cases of cancer (breast cancer and uterine cancer) which were diagnosed and treated and one case of Tuberculosis reported from ward XI. Many considering the multiplicity of chronic illness condition of each elderly women, 41.65 of them in ward V and 61.5% in ward XI had more than two chronic illness.

Table 5 : Distribution according to levels of ADL in ward V and ward XI

Level of SDL	Ward V		Ward XI		Total	
	No.	%	No.	%	No.	%
Fully depended	3	3	4	4.0	7	3.4
Partially depended	17	16.8	10	9.9	27	13.4
Not depended	81	80.2	87	86.1	16.8	83.2

$X^2 = 3.696$; d.f = 3; P>0.05 (NS)

Activities of Daily living (basic and instrumental) :

In table 5, the level of ADL has been estimated. Out of 101 elderly women studied in ward V three percent were fully dependent followed by 16.8% partially dependent. In ward XI the corresponding percentages were 4% and 10% respectively. In both the groups 80% or more were not dependent. Majority of the elderly women were able to perform activities like bathing, dressing, toileting, transfer in and out of bed and feeding on their own. Statistically the ADL level showed no significant difference between the two groups.

Feelings of loneliness were reported by 55% of elderly women in ward V and 45% of women in ward XI. Numerically, the feeling of loneliness was low among women in ward XI compared to ward V probably due to the increased involvement in family affairs.

Longer lives coupled with the tradition of marrying older men means that more women will face the loneliness and vulnerability of widowhood. With a spouse's death, older women face a significant loss of economic security also.

While considering the rating of health 20% of either groups rated their own health as poor. At the same time 68% of women in ward V and 74% of women in ward XI described their health status as average. Only 6% of ward XI women and 11% of ward V rated their health as good. Statistically no difference is observed in the rating of health in the two different groups.

Bladder control : Information on Bladder control on old age women also were collected. Full control of the bladder was there in about 50%, if both the groups are taken together. However in ward V, 55% reported full bladder control compared to 42% of ward XI. In 55% of ward XI women and 44% of ward V women had only partial control. Both the groups were identical with regard to bowel control statistically. Chandrapraksh in his article "Aged women coping with life" in the book - National Institute of Primary Health Care by Bhatia PC notes that "Urinary incontinence is defined as urinary dysfunction characterised by involuntary passage of urine through urethral orifice. It is more common in females (m : f = 1 : 2). It is a common cause of institutionalisation and is a contributory factor in causation of pressure sores, urinary tract infection and depression. Majority of the subjects who had stress incontinence, i.e. involuntary

loss of urine, with physical exercise i.e. coughing sneezing etc. Etiology is post menopausal pelvic floor toxicity"[7].

Visual problems were invariably present in about 70% of the cases and remaining 30% had good visual capacity. Out of those who had problems, 65% of ward V and 65% of ward XI had difficulty in seeing things. Only 3-4% had very poor visual problems. Even in this case there is no difference between the two groups.

Social relations and interactions :

As seen from table 6, 95% of the women had family and non-formal support during crisis from spouse, children, in-laws, relatives, friends and neighbours. Out of those who had support, 93% in ward V were given by spouse, children or in-laws where as the corresponding percentage in ward XI was 99. Hardly 5% were not having any support in either groups. Statistically no difference is noticed in the level of support during crisis.

While considering, who spend more time with elderly women, in ward V, 81% remarked mostly spouse, children or in laws. The corresponding in ward XI was 86%. In ward V, 6.9% opined that relatives and friends too spent time with them compared to 1% in ward XI. In either groups about 12% showed no such spending of time with anybody.

Out of the 202 women studied, 62% remarked they are being considered as the head of the family. Regarding their role in the family, 59% of the elderly women in ward XI remarked positively, where as the corresponding figure in ward V was only 26%. Thus the involvement in family affairs was more than two times higher among women in ward XI compared to women in ward V.

It is further studied to see the extend of leisure time activities. 47.5% of elderly women in ward XI and 34% of women in ward V had no leisure time activities. It is already established that the elderly women in ward XI had more involvement in daily life and hence their leisure time activities may be comparatively less. With regard to the involvement in daily prayer, 97% of ward V and 89% of ward XI showed involvement. Numerically the women without such involvement were three times higher in ward XI (11%) compared to 3% in ward V. Statistically the difference was insignificant. The numerical predominance of women engaged in prayers was more in ward V probably due to the different religious break up noticed there. Chewing was the only habit seen among the elderly women in both the study area. In both the groups 41-42% were pan chewers and the remaining 58-59% had no such habits.

Table 6 : Distribution according to social relations and interactions

SRI	Ward V		Ward XI		X2	P value
	No	%	No.	%		
a. Support during crisis 1. Spouse, children, in-laws, grand children	95 88	94 93	97 96	96 99	0.042	P>0.05 (NS)
2. Relatives, friends, neighbours	7	7	1.0	1.0		
3. None	6	5.9	4	4		
b. Spent time						
1. Spouse, children, in-laws, grand children	82	81.2	87	86.1	4.69	P>0.05 (NS)
2. Friends, neighbours	7	6.9	1.0	1.0		
3. None	12	11.9	13	12.9		
a. Comfort						
1. Spouse, children, in-laws, grand children	86	87.1	91	90.1	2.12	P>0.05 (NS)
2. Relatives, friends, neighbours	6	5.9	2	2		
3. None	7	6.9	8	7.9		

Table 7 : Distribution according to social interaction

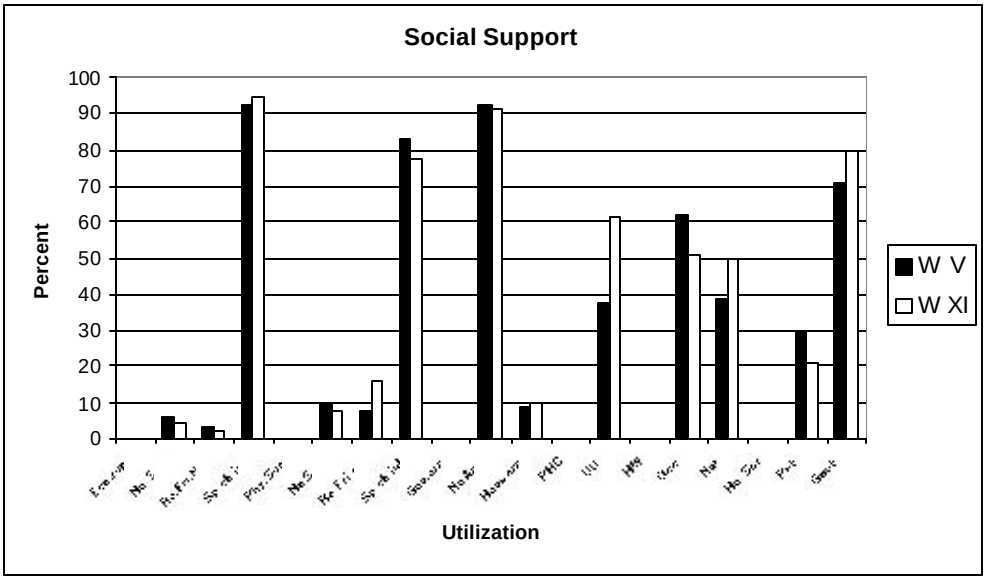
Interaction	Ward V		Ward XI		X2	P value
	No	%	No.	%		
Head of the family						
Yes	66	65.3	61	61	2.73	P>0.05 (NS)
No	35	34.7	40	39.6		
Role in the family						
Yes	26	25.7	60	59.0	24.1	P < 0.001
No	75	74.3	41	41.0		
Leisure time activities						
Present	67	66	53	52.5	4.02	P <0.05 (NS)
Absent	34	34	48	47.5		
Regular pray						
Regularly	98	97	90	89	3.76	P>0.05 (NS)
Rarely	3	3	11	11		
Special gatherings						
Never	26	26	30	30	8.37	P<0.01
Rarely	64	63	46	45	(df2)	
Regularly	11	11	25	25		

26.30% of women never attended any social gatherings like marriage, auspicious occasions or religious functions. 63% of respondents in ward V and 45% of in ward XI rarely used to attend such meetings. In fact the involvement in social gatherings was very high among women in ward XI (25%) compared to women in ward V (11%). It showed the increase in involvement in daily life by the elderly women in ward XI.

Social relations and social interactions were good (83% in ward V and 98% in ward XI). 11% and 7% respectively remarked as satisfactory. Only 6%

had poor social relations and social interactions. Social interactions and social relations were assessed using composite scoring system.

Social support



Economic support : It is noticed from table 8 that souse, children or in-laws were giving economic support to more than 90% of elderly women. However 6% of ward V women and 4% of ward XI pointed out that they were not in receipt of any economic support. 2-3% reported that they were getting economic support from relatives and friends. According to Mala Kapur et al in their study on "Sociological analysing of support net workers in old age in India-Aging Indian perspective and global scenario", observed that "to a large extent support in the form of general care, that is help in personal care, advice, economic support and companionship, support on a regular basis come from the apouse and or the procreated unit of the offspring residing with the elderly".

The traditional way of supporting the elderly in our culture still remains in most of the societies.

82% of the elderly women in ward V and 76% of the women in ward XI had sources of other social support like pr oximity and visits by their children and other family members, and also had occasions in attending social gathering and auspicious occasions. Even in this respect 8-10% did not have any social support. The number of women getting social support from relatives, friends and neighbours were two times higher among ward XI, though the difference was not been established statistically. 90-91% of elderly women were not getting any assistance from government. In ward XI, 10% were getting financial assistance (old age pension/widow pension) from government, in the place of 9% in the other group.

Table 8 : Distribution according to utilization of support systems

Type of support	Ward V		Ward XI		X2	P value
	No	%	No.	%		
a. Economic support						
1. No support	6	6	4	4		
2. Relatives/frie nds/ neighbours	3	3	2	2	0.681	P>0.05 (NS)
3. Spouse/children/in-laws	92	91	95	94		
b. Physical support						
1. No support	10	10	8	8		
2. Relatives/friends/ neighbours	8	8	16	16	3.97	P>0.05 (NS)
3. Spouse/children/in-laws	83	82	77	76		
c. Govt. Assistance						
1. No assistance	92	91	91	91	2.054	P>0.05
2. Have assistance	9	9	10	10	df=1	(NS)
d. PHC/Sub-center					11.6	P<0.01
1. Utilised	38	38	61	60	df=1	
2. Not utilised	63	62	40	40		
e. Health workers visit						
1. Occasionally	62	61	51	50.5	16.72	P<0.01
2. Not at all	39	39	50	49.5	df=1	
f. Hospital services						
1. Private hospitals	30	30	21	21	2.25	P>0.05
2. Government	71	70	80	79	df=1	(NS)

Health services : With regard to the utilization of PHC/Sub-centre/Govt. hospitals, only 38% of ward women responded positively in place of 60% in ward XI. Thus women in ward XI were mostly availing the health services from government sector. The differences in the percentage is found to be highly significant ($P<0.01$).

Visit by health workers : It is further enquired about the regularity of the visit by health workers. None of the elderly women reported that the health workers visit regularly. However 61% of women in ward V and 51% in ward XI were of opinion that they were visiting occasionally. The remaining 39% of ward V and 49% of ward XI express their opinion that health workers are not at all visiting their houses.

Regarding the preference of private hospitals to government hospitals, 79% of ward XI women mostly go to government hospitals compared to only 70% in the other group. In ward V, 30% preferred private hospitals compared to 21% in the other group. Statistical significance is not present.

SES

As seen from table 9, 44% of women in ward XI belonged to low SES in the place of 26% in ward V. Accordingly 70% of ward V women were in the middle SES in the place of 56% in ward XI. None of the women in ward XI happened to be in high SES. Difference in the socio-economic status between the two wards happended to be significant statistically ($P<0.01$). It is quite likely that the aged women in ward XI belonged to lower socio-economic status, more than that of ward V and hence they are more involved in the daily activities. Most of the women in ward XI had not worked outside. They had worked only in agrarian sector or engaged in household activities till they become physically not able.

Table 9 : Distribution of elderly women according to SES

SES	Distribution according to SES					X2	P value
	Ward V		Ward XI		Total		
	No.	%	No.	%			
Lower	26	26	44	44	70		
Middle	71	70	57	56	128	10.16	P<0.01
Upper	4	4	-	-	4	Df=2	

Association between SES and ADL :

In Table 10, the association between SES and ADL show 5.7% of the lower SES group, 2.3% of upper SES group are fully depended on other for their daily activities whereas 18.6% of lwer SES group and 10.2% middle SES and 25% upper SES are partially depended and 75.7% of lower SES group, 87.5% of middle SES group and 75% of upper SES group are not depended on others for their daily activities such as moving about inside the house, going to toilet, taking bath, washing clothes and instrumental activities such as managing money, using telephones or to write at least the minimum like putting signature or to write their own names. The difference is not statistically significant (P>0.05).

Table 10 : Association between SES and ADL

ADL	Socio economic						Total		X2	P value
	Low		Middle		Upper					
	No.	%	No.	%	No.	%	No.	%		
Fully depended	4	5.7	3	2.3	-	-	7	34		
Partially	13	18.6	13	10.2	1	25	27	13.4	6.81	P>0.05 (NS)
Nor depended	53	75.7	112	87.5	3	75	168	83.2		

Association with SES and Social relation and interaction:

Regarding the support during crisis situation of the elderly women, 94.3% of the lower SES group, 89.8% of middle SES group and 75% of upper SES group received support from family members whereas support given by friends,

relatives and neighbours constitute only 2.9% in lower SES, 4.7% in middle SES and no support in upper SES group from neighbours, relatives and friends. For 2.9% of lower SES, 5.5% of middle SES and 25% of upper SES groups have no support from any one.

Association between SES and leisure time activities, habits and loneliness:

Table 11 shows 42.8% of lower SES group, 65% of middle SES group and 100% of upper income group had leisure time activities like watching TV, listening radios, reading newspapers or magazines. In both the areas no recreational facilities were available for the elderly women.

Table 11 : SES, Association between leisure time activities loneliness and Habits

	Socio economic							P value
	Low		Middle		Upper		X2	
a. Leisure time								
1. Present	30	42.8	87	68	4	100	14.86	P<0.001
2. Absent	40	57.2	41	32	-	-		
b. Loneliness								P>0.05
1. Present	35	50	60	47.2	4	100	4.34	(NS)
2. Absent	35	50	67	52.8	9	-		
c. Habits								
1. Chewing	32	45.7	50	39.1	1	25	1.25	P>0.05
2. No habits	38	54.3	78	60.9	3	75		(NS)

Regarding habits, 45.75 lower SES, 39.1% of middle SES and 25% of upper SES group were using betal leaves for chewing. Considering the major psychological problems, loneliness among the elderly, 50% of lower SES group, 47.2% among the total elderly women in both the areas had this problem.

Association between SES and psychological morbidity:

Table 12 shows a clear evidence of psychological problem among the elderly women and represented 64.3% in lower SES group 58.6% in middle SES group and 100% in upper SES group were suffering from psychological problems

such as loneliness, isolations, depression and abuse statistical significance is not seen between the two groups.

Table 12 : Association between psychological morbidity and SES

SES Psychological morbidity	Low		Middle		Upper		Total	
	No.	%	No.	%	No.	%	No.	%
Present	45	64.3	75	58.6	4	100	124	61.4
Absent	25	35.7	53	41.4	-	-	78	36.6
Total	70	35	128	63	4	200	202	100

$X2 = 3.19$; df = 2 $P>0.05$ (NS)

Mean Socio-economic, morbidity, ADL, social relation and social support among the elderly women in ward V / XI.

In the present study, the data were further analysed by considering the mean scores computed for various components related to SES, morbidity, ADL and social support. With regard to the SES, the mean score was 26.45 for elderly women in ward V compared to 24.85 among women in ward XI. In fact ward V is situated near to the urban area and hence increased SES score was anticipated. The student 't' test happened to be statistically significant. A similar finding is followed in the case of social relations / interactions score (mean 12.85 in ward V 12.35 in ward XI). Still the general morbidity score (mean 7.85 in ward V and 8.0 in ward XI) and mean ADL score (28.04 in ward V and 27.79 in ward XI) showed no statistical significance in difference between the two wards. Thus it is inferred that the aged women in both the wards had more or less similar ADL score on general morbidity (physical disabilities) score. Regarding the social relations and interactions and social support score, women in ward XI had better condition over ward V women. It was 10.58 and 10.70 respectively in ward XI compared to 9.84 and 9.43 respectively in ward V. These differences have high

statistical significance. These findings suggest the increased involvement of elderly women in ward XI which is situated away from the urban area compared to ward V which is very close to the urban population.

Table 13 : Mean ± SD of quality of life scores and level of significance in ward V and XI.

Area of quality of life assessed	Mean ± of score		t value	P value
	Ward V	Ward XI		
Socio-economic status	26.45±3.38	24.85±2.89	3.60	P<0.001
Social relation and interaction	12.85±1.37	12.35±1.30	2.69	P<0.01
Morbidity general	7.88±1.0	8.08±0.64	1.67	P>0.05 (NS)
ADL-Total score	28.04±3.40	27.79±3.88	0.48	P>0.05 (NS)
Social relation and interaction (total)	9.84±1.40	10.58±1.80	3.27	P<0.01
Social support (total)	9.43±1.11	10.70±1.40	7.14	P<0.001

SES and utilization of health services:

As table 14 shows, 49.3% in lower SES, 46.9% in middle SES and 75% in upper SES were not utilizing the services of PHC/subcentre. Reasons they specified were that PHC was far away, that is, more than about 10 Km from their residence (Ward XI), and all the required medicines were not available even if they reach the centre. Where as ward V women reported that eventhough PHC is near, the required medicines or doctors may not be available when they visit.

Table 14 : Association between SES and utilization of health services PHC / subcentre and Govt. or private hospital (Ward V and Ward XI)

Services	Socio economic						X2	P value
	Low		Middle		Upper			
PHC / subcentre								
Not utilised	34	49.3	60	46.9	3	75	3.25	P<0.05
Utilised	35	50.7	68	53.1	1	25		(NS)
Hospital service								P>0.05
Private	15	21.7	34	266	2	50	1.86	(NS)
Government	54	78.3	94	73.4	2	50		

Regarding the health visitors' visit to their houses, majority of the elderly women were of the opinion that multipurpose health workers visited them rarely whereas 21.7% in lower SES, 26.6%in middle SES and 50% in upper SES utilised hospitals for their health problems and others depended on government medical college and other government hospitals for their treatment.

SUMMARY AND CONCLUSION

The increase of demographic aging process in our country has a series of socio-economic problems as well as health problems. Problems of the ageing women are mostly not due to age per se largely due to psychosocial environment, diminishing supports and changes in life situations.

In this study, majority of the elderly women in both the study areas were illiterate and perhaps this might have been one of the reasons for negligence in their health problems. WHO reports on women, Aging and Health (1998) says that people with greater education consistently show less disability and better chances of recovery after illness. In both the study areas 26% of the elderly women were in lower socio-economic group, 70.5% in middle socio-economic group and only 4% were in upper socio-economic group. 98% of the elderly women would have come in the lower socio-economic group if the percapita income was also included to assess the SES.

60% of the aged women in this study were widows. The last two three decades of the end of the life span of many elderly women are spent as widows due to existing socio-cultural factors in the country and most of the cases this condition is characterised by economic dependence on others or complete destitution. The net result in all such cases will be physiological, psychological as well as social morbidity. In the Bureau of Women's Welfare and Development's Women in India - A Statistical Profile, it is clearly mentioned that psychological disorders are the major clinical symptoms of elderly widows, that is, 'Affective disorders especially depression, dementia and delusional disorders, are the major clinical conditions in the elderly widows'[5]. In the rural set up 31.7% of families were nuclear while only 16.8% were nuclear families in urban set up.

Lack of accessibility to transport was one of the reasons for the elderly women in rural set up (Ward XI) not utilizing health care services. The other reasons being geographic distance, financial conditions to avail the service, lack of knowledge of services available and unwillingness to utilise the services and also physical disabilities. Regarding the utilization of the services of PHC / Subcentre, very few were availing the services due to lack of medicines or lack of proper transport facilities and personal help.

In the case of chronic diseases 76.2% in ward V (urban) and 64.4%% in ward XI (rural) were having chronic diseases where 41.6% in urban set up and 61.5% in rural set up had more than two chronic diseases. The major chronic diseases among the elderly women in both the study groups were arthritis, hypertension and diabetes mellitus. Dr. Arabinda Bhattacharya (JIMA Vol 95 No 2 De 1997) had observed that 85% of people over 65 have atleast one chronic illness and 30% have 3 or more illnesses. More than 82% of the elderly women in both the areas had acute diseases during the one month, prior to the study. Urinary incontinence was common in both samples. 50% of the elderly women in the study group reported that although they were having such a problem, were reluctant to reveal due to stigma and fear of isolation. Daily activities were performed by 80% of the woman by themselves. Visual problems were suffered by 70% in both the groups.

Loneliness was the common psychological distress seen among the study group in both the areas. More than 70% of the elderly women enjoyed social relations, social interactions and social support mainly from their family members (spouse, children, or in-laws). Any type of community support such as financial

assistance, organizations, elderly women's club or provision of raw food items were not available to these woman in either the rural or urban set up.

The study indicates that to a large extent support in the form of general care-that is, physical support, financial support, moral support on a regular basis come from spouse, children or in laws. It can be stated that family set up is an important contribution towards healthy and constructive support network. Government assistance was enjoyed by very few elderly women in the study group (only about 10% were utilizing oldage pensions).

All the aged women in both the wards opined that they were in need of health and personal care. Geriatric medicine and gerentological information, as an important component should be introduced in the Medical curriculum: NGOs should be encouraged to take up mobile geriatric services to rural area. No free physical aids such as spectacles, wheel chair, hearing aids, dentures etc were not supplied at any time free of cost in this study area.

3% of the elderly women in ward XI (rural set up) were demented, which is a progressive degenerative disorder and produce increased difficulty in coping with daily activities. These subjects were able to discuss the family matters as the problem was in the initial stage.

SUGGESTIONS

Since age is associated with increase in physical illness and disability aging becomes an essential part of the health care delivery system. Living arrangement, financial position and well being would undergo change in old age especially after widow hood. Therefore in-depth studies through multidisciplinary assessment on issues like socioeconomic problems, morbidity pattern, psychological stress and social security needs of the elderly should be done nation wide. As women out number men, welfare interventions need to be planned and implemented for woman specifically to address their needs. Strategies should also be developed to create general awareness on the specific problems of the elderly women.

As the existing health delivery system is not providing any special attention to the aged and in rural areas the health care of the elderly is almost entirely depended on Primary Health Care, multipurpose female Health Workers should be given training in female geriatric services. Health Insurance policy for the elderly woman in rural areas has to be formulated and Rehabilitation of the elderly should be done through integrated community Development Programmes.

Physical aids should made available to the elderly who are below the poverty line. Day care centres and senior women's club, organizations with recreation facilities should be established in each ward in every Panchayat. Integrated health care services as well as comprehensive social security measures could provide better quality of life to the aged. Mobile geriatric unit could be more effective as it can cover a large number of aged women in rural areas especially the immobile.

Traditional role of respecting and caring elders should be reinforce through school level and interventions from the primary level.

Priority should be given to elderly women in all the intervention programmes.

Elderly women should be given legal security against abuse and harassment.

Immunisation like Tetanus Toxoid should be provided free of cost to all the elderly through PHC / Government Hospitals.

The experiences and expertise of the elderly should be utilised for the society.

The increased life expectancy of elderly women in rural area does not mean that their life is free from morbidity or disability and it is not a healthy life expectancy. A national security programme should be designed in such away that elderly people who are disabled, frail and destitute become eligible to governmental support.

Policy makers should evaluate successful programmes for the elderly of other countries and adopt them to suit local conditions and economic viability. Separate processing schemes for the elderly is to organised to meet their needs of reduced mobility and safety precautions.

Like younger age group, the aged also require health, personal and social care Establishment of separate geriatric clinics in PHCs, Government hospitals and also geriatric wards in the hospitals with specialization in geriatrics.

Our "Womb to Tomb" social security policy should be strengthened.

BIBLIOGRAPHY

1. Arrows for Change – Women's and Gender Prospectives in health policies and Programmes – September, 1999 Volume 5 No 2 ISSN 1394 – 4444.
2. Asgarali Patel and Aruna Broota "Loneliness and Death – anxiety among the Elderly" – The role of family set up and religious Belief Help Age. India Research Development Journal Vol 6 (3) June 2000 – Sept. 2000.
3. Bhat MPN., Irudyarajan – Population Projections for Kerala, Registrar General, Census of India Services Kerala, TVPM, Director of Census Operation 1981-2026.
4. Bureau of Women's Welfare and Development. Women in India – a Statistical profile. 1998 – New Delhi.
5. Bhatia PC 'Aged women Coping with Life' National Institute of Primary Health Care, New Delhi.
6. Chanana HB and PP Talwar 'Aging in India. Its Socio Economic and Health implications Asis Pacific Population Journal ESCAP, Bangkok Vol. V 1987.
7. Chandraprakash 'Aged women coping with life'. National Institute of Primary Health Care (Bhatia PC), New Delhi.
8. Charlotte Perkins Gilman – Feminist "The man made World or an Androcentric culture Women and Aging Transcending the myths (Linda R, Gannen) New York 1999.
9. Desai KG. 'Aging in India' Tata Institute of Social sciences 1982, Bombay.

10. Economic and Social Commission of Asia and the Pacific Populations Programme United Nations Asia Pacific Population Journal Vo.7 No.3 1992.

11. Economic and Social Commission of Asia and the Pacific Population Programme United Nations Asia Pacific Population Journal Vo.13 No.3 1998.

12. Generation Gap – A threat to Family care of Kerala's elderly by Research officers. International Institute of Population Services, Deonar, Mumbai 400088.

13. Government of India, Family Welfare Programme in India year book 1986-87, Ministry of Health and Family Planning.

14. George J Stolnetz. Social Aspects and Country reviews of Population Aging. Europe and North America. Social and Health Aspects of United States.

15. International Classification of Diseases – WHO 83-84.

16. Indira Jayaprakash – Aging Women : a Liability or an Asset? Help Age India Research Development Journal Vol. 2 (2) 1996.

17. Kalyan Bagchi (President society for Gerentological Research) healthy aging Help Age India, Research Development Journal Vol. 6 (3) June 2000 September 2000.

18. Kasthuri Sen. Aging – Debates on Demographic Transition and Social Policy. Zed book Ltd. London and New Jersey.

19. Katz .S (1983) Assessing self maintenance Activities of Daily Living.

20. Kosberg – Jordan : Family care of the elderly. Social and cultural changes sage publications.

21. Linda R Gannen. “Women and ageing transcending the myth” – Charlotte Perkins Godman (The man made world and Androcentric culture, Lond & New York 1999).

22. Mary Bhat PN (1992) Changing Demography of elderly in India. Current Science Vol.

23. Mansharavarthi. Mortality and Morbidity Pattern in Elderly Women” Aged women coping with life National Institute of Primary Health Care New, Delhi.

24. Park K. Park’s Text Book of Preventive and Social Medicine. 16th edition. 2000 M/S. Bharasidas, Bharat Publishers Jabalpur.

25. Paul Wallace. Age Quake. “Riding the Demographic Roller Waster shaking business, finance and our world” – Nicholas, Brealey publishing London 1999.

26. Pat RN, Jena B – Socio Demographic Dimensions. A study on senescence and disease Ashis Publishing Home.

27. Pallavi Mehta. ‘news Letter’ – Women’s house hold development studies. Information Centre Issue No. 15 March 1996.

28. Richard E Pearson ‘Counseling and Social Support Perspectives in Contemporary Theory, Research and Practice Sage Publications, New Delhi.

29. Reddy PJ et al “Perception of Old age support in selection of daughter in law – A study of the unorganized sector’ ageing – Indian perspectives and global scenario.

30. Schwartzben, Sanden H – The IVth Family support Group. A description model of the use of multifamily group in a home for the aged – Social Work with Groups Vo. 12 (1) 1989.

31. Sabharwal. President Help Age India 'Aged Women Coping with life' Ed Dr, PC Bhatta. National Institute of Primary health Care, New Delhi.

32. Sheela M Paece "Researching Social Gerentology "Concepts Methods and Issues – Sage Publications.

33. Thomas Mathew – Study on the Quality of life among the elderly population in MCH unit Panagappara, Trivandrum Kerala 1993 (Dissertation for DPH – University of Kerala).

34. Usha S Nayar (Tata Institute of Social Sciences) Economic and Social Commission for Asia and the Pacific. Asian population studies series No. 141 Situation of Ageing the Chip and Old Block.

35. United Nations Publication (1991) World Publication Perspectives 1990 Sales No. E 91 XIII 4.

36. United Nations Publication 1992 Economic and Social Aspects of Population ageing in Kerala, India UN, New York.

37. Vinod Kumar, Professor of Medicine – Ageing Indian Perspectives and Global scenario 1996. All India Institute of Medical Sciences, New Delhi.

38. Vijayakumar K et al (1992) Life and Health of the elderly in a community in transition. Results of a survey in Thiruvananthapuram City.

39. Vijayakumar S. Population ageing in India Help Age India Research Development Journal Vol 5 (2) 1999.

40. Vijayaunni IAS. The Greying Population in India 1991 census results. Help Age India Research Development Journal.

41. Voter's list Sreekaryam Panchayat, Thiruvananthapuram district.

42. WHO Clarification of Disability Scale 1981.

43. WHO Technical Report series 779 (1989), Health of the elderly WHO Geneva 1989.

44. WHO Technical Report series 706 (1984). The Uses of Epidemiology in the study of Report of a WHO expert Group Geneva (1984).

SCORE SHEET

I. A Socio Economic (Three codes)

1. Education	1. Illiterate, Primary 2. Secondary, PDC 3. Graduate / above
2. Previous occupation	1. Household, unskilled 2. Agriculture, petty business 3. Office work, professional
3. Present occupation	1. Household, unskilled 2. Agriculture, petty business 3. Social service 0. Rest
4. Personal income	1. No income, <500 RS 2. 501-1000 3. 1001 & above
5. Percapita income	1. < 1000 2. 1001-3000 3. 3001 and above

B. Socio Economic (Two codes)

6. Type of house	1. Katch	2. Semipukka and pukka
7. Access to transport	1. No	2. Yes
8. No. of rooms	1. < 2	2. >2
9. Separate room	1. No	2. Yes
10. Separate cot	1. No	2. Yes
11. Inadequate space	1. No	2. Yes
12. Ventilation	1. Inadequate	2. Adequate
13. Lighting	1. Inadequate	2. Adequate
14. Cleanliness	1. Poor	2. Satisfactory
15. Water supply	1. Well	2. Pipe
16. Latrine	1. Away	2. Attached
17. Personal hygiene	1. Poor	2. Satisfactory

I.A-I.B Total 1-5 (15), 6-17 (24)

Maximum score 39; minimum 17	
Score given for lower socio economic	17-24
Score given for middle socio economic	25-32
Score given for upper socio economic	33-39

II A. Social relations and social interaction (1) three codes

1. Who will listen you most when you need to talk ?
   1. Spouse, children, inlaws 2. Relatives, friends, neighbours 3. Others, none

2. Whom do you feel would help you most if you are in a crisis situation
   1. Spouse, children, inlaws 2. Relatives, friends, neighbours 3. Others, none

3. Who will spend more time with you ?
   1. Spouse, children, inlaws 2. Relatives, friends, neighbours 3. Others, none

4. Whom will comfort you when need it ?
   1. Spouse, children, inlaws 2. Relatives, friends, neighbours 3. Others, none

Maximum score 12 minimum 4
1. Good relations score (4-6)
2. Satisfactory relations score (7-9)
3. Poor relation score (10-12)

II.B Social relation and interaction (II) 2 codes

1. Are you the head of the family now ?	1. No	2. Yes
2. Do you have any role in family ?	1. No	2. Yes
3. Does any body depend on you ?	1. No	2. Yes
4. Do you have any domestic responsibility	1. No	2. Yes
5. Do you believe in GOD	1. No	2. Yes
6. Do you pray regularly	1. No	2. Yes
7. Do you have any savings	1. No	2. Yes
8. Do you have any leisure time activities?	1. No	2. Yes

Maximum score 16 minimum 8
Social interactions Good (13-16) Poor (8-12)

III A. Morbidity pattern General (3 codes)
Physical disabilities

1. How is your ability in conversation ?
   1. Poor 2. With difficulty 3. Good
2. How is your ability in hearing ?
   1. Poor 2. With difficulty 3. Good
3. How is your ability in vision ?
   1. Poor 2. With difficulty 3. Good

B. Chronic disease (3 months duration) (3 codes)
Disease conditions

1 Diabetes Mellitus	2. Blood Pressure (HT)	3. Heart disease
4. Arthritis	5. Cancer	6. TB
7. Kidney diseases	8. Asthma	9. Dementia
10. Haemorrhoids	11. Peptic ulcer	12. Paralysis
13. Hernia	14. GIT	15. Alzheimers

16. More than two.

Disease conditions 1-15 (hare the disease condition)
More than 2 chronic disease – 16
No illness 0

C. Acute disease

Disease condition and frequency of occurrence within one month duration – 1, 2, 3, 4, 5, 6, 7.

Self rating of health by respondents 1. Good 2. Average 3. Poor.

D. Psychological morbidity (4 codes)

1. Do you feel frustration	1. No	2. Yes
2. Do you feel loneliness	1. No	2. Yes
3. Do you feel isolated	1. No	2. Yes
4. Do you think that you are abused	1. No	2. Yes

Maximum score 8; minimum – 4

Psychological morbidity present (4-6)

Absent (7-8)

E. Activities of Daily Living (Basic and Instrumental

1. Can you feed on your own ?
   1. Depended 2. Partially depended 3. Not depended

2. Can you bath with out help ?
   1. Depended 2. Partially depended 3. Not depended

3. Transfer in and out of bed ?
   1. Depended 2. Partially depended 3. Not depended

4. Move about inside the house ?
   1. Depended 2. Partially depended 3. Not depended

5. Go to toilet
   1. Depended 2. Partially depended 3. Not depended

6. Dress and undress
   1. Depended 2. Partially depended 3. Not depende d

7. Bladder/bowel control
   1. Depended 2. Partially depended 3. Not depended

8. Household works
   1. Depended 2. Partially depended 3. Not depended

9. Washing clothes
   1. Depended 2. Partially depended 3. Not depended

10. Manage money / possessions
    1. Depended 2. Partially depended 3. Not depended

Maximum score 30; minimum 10

1. Depended (10-17)
2. Partially depended (18-26)
3. Not depended (27-30)

F. Social support I

a. Family and nonformal (physical support, economic support and preference of staying) 3 codes.

1. Whom do you depend for physical support
   1. None 2. Relatives friends and neighbours 3. Spouse, children, inlaws
2. Who do you depend for economic support ?
   1. None 2. Relatives friends and neighbours 3. Spouse, children, inlaws
3. Whom do you like to stay with ?
   1. None 2. Relatives friends and neighbours 3. Spouse, children, inlaws

   Total score – 9 minimum – 3

   Poor (3-5) satisfactory (6-7), Good (8-9)

b. Visit to and visits by the elderly women (3 cods)

1. How often your children visit you ?	1. Never	2. Rarely	3. Regularly
2. How often your relatives visit you ?	1. Never	2. Rarely	3. Regularly
3. Do you visit places of workship	1. Never	2. Rarely	3. Regularly
4. Do you participate in social gatherings	1. Never	2. Rarely	3. Regularly
5. Do your neighbours visit you ?	1. Never	2. Rarely	3. Regularly

Maximum score 15; minimum 5.

1. Never (5-8) poor
2. Rarely (9-12) Satisfactory
3. Regularly (13-15 good)

C. Community support 96 codes)

1. Are you a member of any associations / any organization	1. No	2. Yes
2. Are you getting financial assistance from govt.	1. No	2. Yes
3. Do you think there should be some organization for the elderly	1. No	2. Yes
4. Is there any old age homes/daycare centers in the locality	1. No	2. Yes

5. Do you prefer oldage homes ?
6. Do you prefer day care centre ?

   Maximum score 12; minimum 6

   No support 6-9 Have support 10-12.

d. Health services (2 codes)

1. Are you utilising the services of PHC	1. No	2. Yes
2. Does the health workers visit you ?	1. No	2. Yes
3. Is there any geriatric clinic in the area	1. No	2. Yes
4. Do you think that geriatric wards should be operated in the hospitals ?	1. No	2. Yes

5. Where do you go if you become sick ?
   1. Private hospitals
   2. PHC, subcentre, government hospitals
6. Is there any free health care services in the locality ? 1. No 2. Yes
7. Do you think that the services of PHC/subcentre can be improved? 1.No2.Yes

Maximum score = 14; Minimum 7; Health service satisfactory 11-14

Poor = 7-10

SOCIO-ECONOMIC CONDITIONS, MORBIDITY PATTERN AND SOCIAL SUPPORT AMONG THE ELDERLY WOMEN IN A RURAL AREA

House Ho: Ward No:

Panchayat : Sreekariyam

A. SOCIO-ECONOMIC

1. Name	:	
2. Address	:	
3. Age	:	1. 60-69 2. 70-79 3. 80+
4. Religion	:	1. Hindu 2. Xian 3. Muslim
5. Marital status	:	1. Married 2. Widowed 3. Separated 4. Remarried 5. Divorced 6. Single
6. Education	:	1. Illiterate 2. Primary 3. Secondary 4. PDC 5. Graduation & above
7. Previous occupation	:	1. House hold 2. Unskilled 3. Agriculture 4. Petty business 5. Social service
8. Present Occupation	:	1. Household 2. Unskilled 3. Agriculture 4. Petty business 5. Social service
9. Personal income per month from all sources	:	1. Nil 2. Below Rs.500 3. 5001-1000 4. 1001 and above

<u>Family History</u>

10. Type of family	:	1. Nuclear 2. Extended 3. Joint
11. Family composition	:	1. Stays alone 2. With others

Sl. No	Name	Rln.	Age	Sex Edn.	Occ n	Income	Illness
1 2 3 4 5 6							

12. Per capita income : 1. Below 1000 2. 1001-3000
3. 3001 & above

Housing and hygiene

13. Type of house : 1. Katcha 2. Semipukka 3. Pukka

14. Location (access to transport facility) : 1. No 2. Yes

15. No. of rooms : 1. Less than 2 2. More than 2

16. Do you have separate room: 1. No 2. Yes

17. Do you have a cot : 1. No 2. Yes

18. Adequate space in the house to move about : 1. No 2. Yes

19. Ventilation : 1. Inadequate 2. Adequate

20. Lighting : 1. Inadequate 2. Adequate

21. Cleanliness : 1. Poor 2. Good

22. Water supply : 1. Well 2. Pipe

23. Pipe water : 1. Outside the House 2. Inside

24. Latrine : 1. Away 2. Attached

25. Personal hygiene : 1 Poor 2. Satisfactory

B. SOCIAL RELATIONS AND SOCIAL INTERACTIONS

26. Who will listen to you most when you need to talk ?

1. Spouse Children Inlaws Grand children
2. Relatives Friends Neighbours
3. Others None

27. Whom do you feel would help you most if you are in a crisis situation ?

1. Spouse 2. Children 3. Inlaws 4. Grand children
5. Relatives 6. Friends 7. Neighbours 8. Others

28. Whom will spend more time with you ?

1. Spouse 2. Children 3. Inlaws 4. Grand children
5. Relatives 6. Friends 7. Neighbours 8. Others 9. None

29. Whom will comfort you when you need it ?

1. Spouse Children Inlaws Grand children
2. Relatives Friends Neighbours
3. Others 4. None

30. Are you the head of the family now ? : 1. No 2. Yes

31. Do you have any role in the family ? : 1. No 2. Yes

32. Does any body depend on you ? : 1. Yes 2. No

33. Do you have any domestic responsibilities?
(like getting milk, marketing, attending children): 1. No 2. Yes

34. Do you prefer traditional joint family ? : 1. No 2. Yes

35. Do you believe in God ? : 1. No 2. Yes

36. Do you pray regularly ? : 1. No 2. Yes

37. Do you have any savings ? : 1. No 2. Yes

38. Do you have any leisure time activities ?
(Reading news paper, magazines, books
watching TV, listening radios etc) : 1. No 2. Yes

39. Do you have any personal habits such as
(3. chewing 4. None) : 1. No 2. Yes

C. MORBIDITY PATTREN

a. General (Disabilities)

40. How is your ability in conversation ?
    1. Very poor 2. With difficulty 3. Good

41. How is your hearing ability ?
    1. Very poor 2. With difficulty 3. Good

42. How is your visual ability ?
    1. Very poor 2. With difficulty 3. Good

43. Are you using physical aids such as
    1. Visual 2. Hearing 3. Wheel chair
    4. Walking sticks 5. Dentures 6. None

b. Chronic disease

44. Do you suffer from any of the chronic disease medically diagnosed ?
    (more than 3 months duration) 0 No illness.

1. Diabetes Mellitus	2. Blood Pressure (HT)	3. Heart Disease
4. Arthritis	5. Cancer	6. TB
7. Kidney diseases	8. Asthma	9. Dementia
10. Haemorrhoids	11. Peptic ulcer	12. Paralysis
13. Hernia	14. GIT	15. Alzheimers
16. More than two		

45. Have you been hospitalised for the treatment ? 1. Yes 2. No

C. Acute diseases

46. During the past 30 days have you suffered from any of the following symptoms?
    (more than one mark the total numbers)

1. Fever	2. Cough	3. Sneezing
4. Common cold	5. Sore throat	6. Joint pain
7. Oedema on Knees/ankles	8. Head ache	9. Giddiness
10. Loss of memory	11. Heart burn	12. Tooth ache
13. Stomach pain	14. Vomiting	15. Diarrhoea
16. Eye diseases	17. Anxiety	18. Incontinence
19. Accidents	20. Skin disease	21. Weight loss
22. Back ache	23. Bleeding	24. Chest pain

47. However do you rate your health
    1. Good 2. Average 3. Poor

d. Psychological

48. Do you feel frustration ? : 1. Yes 2. No

49. Do you feel lonely ? : 1. Yes 2. No

50. Do you think that you are isolated ? : 1. Yes 2. No

51. Do you think that your are abused ? : 1. Yes 2. No

e. Activities of daily living (basic and instrumental)

52. Can you feed on your own ?

1. Dependent 2. Partially dependent 3. Not dependent

53. Can you take bath without help ?
1. Dependent 2. Partially dependent 3. Not dependent

54. Can you transfer in and out of bed on your own ?
1. Dependent 2. Partially dependent 3. Not dependent

55.Can you move about inside the home ?
1. Dependent 2. Partially dependent 3. Not dependent

56. Can you go to toilet on your own ?
1. Dependent 2. Partially dependent 3. Not dependent

57. Can you dress and undress of your own ?
1. Dependent 2. Partially dependent 3. Not dependent

58. Can you control bowel / bladder ?
1. No Control 2. Partial control 3. Full control

59. Can you do the house hold works ?
1. Dependent 2. Partially dependent 3. Not dependent

60. Can you wash your cloths ?
1. Dependent 2. Partially dependent 3. Not dependent

61. Can you manage money, telephone, possessions
1. Dependent 2. Partially dependent 3. Not dependent

f. Social support

a. Family and nonformal

62. Whom do you depend on physical support ?
    1. Spouse 2. Children 3. Inlaws 4. Grand children
    5. Relations 6. Friends 7. Neighbours 8. Others 9. None

63. Whom do you depend on economic support ?
    1. Spouse 2. Children 3. Inlaws 4. Grand children
    5. Relations 6. Friends 7. Neighbours 8. Others 9. None

64. Whom do you like to stay with
    1. Spouse, Children, Inlaws, Grand children
    2. Relations,Friends, Neighbours
    3. Others 4. None

65. How often your relatives visit you ?
    1. Never 2. Rarely 3. Regularly

66. How often your relatives visit you ?
    1. Never 2. Rarely 3. Regularly

67. Do your neighbours visit you ?
    1. Never 2. Rarely 3. Regularly

68. Do you visit places of worship ?
    1. Never 2. Rarely 3. Regularly

69. Do you participate in any social gathering ?
    1. Never 2. Rarely 3. Regularly

b. Community support

70. Are you a member of any association/women organistion ? : 1.No 2.Yes

71. Are you getting financial assistance from government ?
    (1. Like service pension 2. Old age pension 3. Window pension): 1.No 2.Yes

72. Do you thin that there should be some organisations for the elderly ?
    1.No 2.Yes

73. Is there any old age homes/day care centres / organisations in your locality ?
    1.No 2.Yes

74. Do you prefer to stay in old age home ? 1.No 2.Yes

75. Do you prefer day care centres ? 1.No 2.Yes

b. Health Services

76. Are you utilising the service of PHC / Subcentre/Govt. hosptials? 1.No 2.Yes

77. If no, reason
    1. Lack of doctors 2. Lack of medicine
    3. Staff not co-operation 4. Far from home
    5. Not body cares 6. Not aware

78. Does any health workers visit you ? : 1.No 2.Yes

79. Do you think that the services of PHC / Sub centre/ Govt. Hospitals can be improved ? : 1.No 2.Yes

80. Is there any geriatric clinic in your area ? : 1.No 2.Yes

81. If no, do your think that geriatric wards should be urgently operated in the hospitals ? : 1.No 2.Yes

82. System of medicine you prefer
    1. Modern medicine 2. Ayurveda 3. Homoea
    4. M & A 5. A & H 6. M & H 7. All

83. Where you go if you become sick ?
    1. PHC / Subcentre 2. Govt. Hospitals
    3. Private hospitals 4. Private Medical Practitioner

84. Is there any health care services in your locality such as
    1. Home care 2. Physiotherapy 3. Provision of dental care
    4. Provision of dentures 5. Walking sticks 6. Spectacles

85. Medical expenses for one month Rs…….
    (Including cost of medicine, doctor fees, travelling, others)
    1. below Rs. 250 2. > 251 3. No medical expense

DATA SHEET

1. Respondent No.		
2. War No.		
3. Panchayat No.		
4. Age	1. 60-69	2. 70-79 3. 80+
5. Religion	1. Hindu	2. Christian 3. Muslims
6. Marital status	1. Married	2. Widowed 3. Others
7. Education	1. Illiterate, primary 2. Secondary, PDC 3. Degree / above	
8. Previous occupation	1. Household, unskilled 2. Agriculture, petty business 3. Office work, professional	
9. Present occupation	1. Household, unskilled 2. Agriculture, petty business 3. Social service	
10. Personal income	1. No income, < 500 RS 2. 501-1000 3. > 1001 & above	
11. Type of family	1 Nuclear family 2. Extended family/Joint family	
12. Family composition	1. Stays alone 2. Stays with others	
13. Percapita income	1. <1000	2. 1001-3000 3. 3001 and above
14. Ownership of the house	1. Rented house, Children's house 2. Own house	
15. Type of house	1. Katcha	2. Semipukka / pukka
16. Location (transport)	1.No 2. Yes	
17. No. of rooms	1 <2 2. >2	
18. Separate room	1. No 2. Yes	
19. Inadequate space	1. No 2. Yes	
20. Ventilation	1. Inadequate 2. Adequate	
21. Lighting	1. Inadequate 2. Adequate	

22. Cleanliness	1. Poor	2. Satisfactory
23. Water supply	1. Well	2. Pipe
24. Pipe water	1. Outside	2. Inside the house
25. Latrine	1. Away	2. Attached
26. Personal hygiene	1. Poor	2. Satisfactory

Socio Economic Status (total score) 39

27. SES	1 Lower	2. Middle	3. Upper

28. Listen most when in need
1. Spouse, Children, Inlaws, Grand children
2. Relations,Friends, Neighbours
3. Others, None

29. Help in crisis situation
1. Spouse, Children, Inlaws, Grand children
2. Relations,Friends, Neighbours
3. Others, None

30. Spend most time
1. Spouse, Children, Inlaws, Grand children
2. Relations,Friends, Neighbours
3. Others, None

31. Comfort when need it
1. Spouse, Children, Inlaws, Grand children
2. Relations,Friends, Neighbours
3. Others, None

Total score for social relations / interactions = 16 (SRIN)

32. Social relations / iteraction (SRIN)	1. Good	2. Satisfactory	3. Poor

33. Head of the family	1.No	2. Yes
34. Role in family	1.No	2. Yes
35. Anybody depend on you?	1.No	2. Yes
36. Domestic responsibility	1.No	2. Yes
37. Believe in GOD	1.No	2. Yes
38. Pray regularly	1.No	2. Yes
39. Have savings	1.No	2. Yes
40. Leisure time activities	1.No	2. Yes

Social interactions Total score = 16

41. Personal habits 3. Chewing 4. None

42. General morbidity

Ability in conversation	1. Poor	2.With difficulty	3.Good
Ability in hearing	1. Poor	2.With difficulty	3.Good
Ability in vision	1. Poor	2.With difficulty	3.Good

Morbidity general total score - 9

43. (morb general) 1. Poor 2.With difficulty 3.Good

44. Chronic disease 1-15 (disease conditions), 16 – more than two, disease condition, 0 – No illness.

45. Admitted in hospital within one year 1. Yes 2. No

46. Acute disease 1. Yes 2. No

47. If yes frequency of occurrence 1. (1, 2, 3, 4) 2. More than 5

48. Self-rating of health 1. Good 2.Average 3.Poor

Physiological

49. Frustration 1. Yes 2. No

50. Loneliness 1. Yes 2. No

51. Isolated 1. Yes 2. No

52. Abused 1. Yes 2. No

Mob 1 (psychological) total score 8

53. Psychological morbidity 1. Present 2. Not present

54. ADL – Feed	1. Depended	2. Partially depended	3. Not depended
Bath	1. Depended	2. Partially depended	3. Not depended
Bed	1. Depended	2. Partially depended	3. Not depended
Move about	1. Depended	2. Partially depended	3. Not depended
Toilet	1. Depended	2. Partially depended	3. Not depended
Dress and undress	1. Depended	2. Partially depended	3. Not depended
Bladder/bower control	1. Depended	2. Partially depended	3. Not depended
Household works	1. Depended	2. Partially depended	3. Not depended
Washing clothes	1. Depended	2. Partially depended	3. Not depended
Manage money/ Possessions	1. Depended	2. Partially depended	3. Not depended

ADL Maximum score 30

ADL 1. Depended 2. Partially depended 3. Not depended

55. P-support (physical support) 1. None 2. Relatives, friends, neighbours 3. Spouse, children, inlaws.

56. Economic support 1. None 2. Relatives, friends, neighbours 3. Spouse, children, inlaws.

57. Likes to stay with 1. None 2. Relatives, friends, neighbours 3. Spouse, children, inlaws.

Social support I (socio 1) Total score – 9

58. Social support 1. Poor 2. Satisfactory 3. Good

59. Aged mother (visit by children) 1. Never 2. Rarely 3. Regularly

60. Visit by relatives 1. Never 2. Rarely 3. Regularly

61. Visit by neighbours 1. Never 2. Rarely 3. Regularly

62. Visit places of workshop 1. Never 2. Rarely 3. Regularly

63. Participate in social gathering 1. Never 2. Rarely 3. Regularly

Socio 2 (Social support) Total score – 15

64. Visit (social support) 1. Poor 2. Satisfactory 3. Good

65. Community support (member) of any organization 1.No 2. Yes

66. Financial assistance from government 1.No 2. Yes

67. Should be some organization for the elderly 1.No 2. Yes

68. Old age homes/daycare centre in the locality 1.No 2. Yes

69.Prefer oldage homes 1.No 2. Yes

70. Prefer day care centre 1.No 2. Yes

Socio 3 Total score – 12

71. Community support 1. No support 2. Have support

72. PHC (utilising the services of PHC) 1.No 2. Yes

73. Reason 1. Lack of doctors 2. Lack of medicines
3. Staff not co-operative 4. Far from home
5. No body cares 6. Not aware

74. Health workers visit 1.No 2. Yes

75. Services of PHC can be improved 1.No 2. Yes

76. Geriatric clinic in the area 1.No 2. Yes
*

77. Preference of (system) of medicine 1. Modern medicine 2. Ayurveda
3. Homeo

78. Where do you go if you become sick ? 1. PHC, subcentre, government hospitals
2. Private medical practitioners, Private hospitals.

79. Any free health care services in the locality 1.No 2. Yes

Total score of health available

80. Health support available 1.No 2. Yes

81. Medical expenses 1. <Rs. 250 2.>251
3. No medical expense.