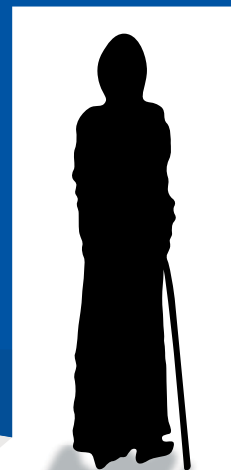


Building a Knowledge Base on
Population Ageing in India



The Status of Elderly in Kerala, 2011

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CONTRIBUTORS

K.S. James

T.S. Syamala

Supriya Verma

Sajini B. Nair

L. Shylaja

S. Sureshkumar

K.R. Anithakumari

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Both during the release ceremony of the report and thereafter, it was strongly felt by the Technical Advisory Committee (TAC) of the project and many other experts that a separate state level report be brought out for each of the seven states included in the report published in 2012. These experts have also advised that the reports be widely disseminated at state level so as to initiate a dialogue not only with civil society organizations but also with the state government and its officials. This volume is largely in response to those suggestions.

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Authors

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ACRONYMS

ADL	Activities of Daily Living
ADS	Atta Dal Scheme
APL	Above Poverty Line
ARC	Administrative Reform Commission
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BADL	Basic Activities of Daily Living
BKPAI	Building a Knowledge Base on Population Ageing in India
BPL	Below Poverty Line
COPD	Chronic Obstructive Pulmonary Disease
CHC	Community Health Centre
CHIAK	Comprehensive Health Insurance Agency
DMBF	District Military Benevolent Fund
DSO	District Social Officer
DSSF	Dedicated Social Security Fund
EBT	Electronic Benefit Transfer
GHQ	General Health Questionnaire
Gol	Government of India
HH	Household
HoF	Head of Family
IADL	Instrumental Activities of Daily Living
ICF	International Classification of Functioning, Disability and Health
ICIDH	International Classification of Impairments, Disabilities and Handicaps
ID	Identity Card
IEG	Institute of Economic Growth
IGNDPS	Indira Gandhi National Disabled Pension Scheme
IGNOAPS	Indira Gandhi National Old Age Pension Scheme
IGNWPS	Indira Gandhi National Widow Pension Scheme
IPOP	Integrated Programme for Older Persons
LPG	Liquified Petroleum Gas
MC	Municipal Corporation
ISEC	Institute for Social and Economic Change
KSSM	Kerala Social Security Mission
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MLA	Member of Legislative Assembly
MIPAA	Madrid International Plan of Action on Ageing
MOHFW	Ministry of Health and Family Welfare
MOSJE	Ministry of Social Justice and Empowerment

MPCE	Monthly Per Capita Consumer Expenditure
MWPSCA	Maintenance and Welfare of Parents and Senior Citizens Act
NCD	Non-communicable Diseases
NGO	Non-governmental Organization
NPHCE	The National Programme for Health Care of the Elderly
NPOP	National Policy on Older Persons
NPSC	National Policy for Senior Citizens
NRHM	National Rural Health Mission
NRI	Non-resident Indian
NSAP	National Social Assistance Plan
NSSO	National Sample Survey Organisation
OAPS	Old Age Pension Scheme
OBC	Other Backward Classes
OPD	Out-Patient Department
PHC	Primary Health Centre
PPS	Probability Proportional to Population Size
PRC	Population Research Centre
PRI	Panchayati Raj Institutions
PRS	Passenger Reservation System
PSU	Primary Sampling Unit
RMDF	Raksha Mantri's Discretionary Fund
RRPRS	Rapid Rural Police Response System
RSBY	Rashtriya Swasthya Bima Yojana
SC	Scheduled Caste
SCs	Sub-Centres
SDM	Sub-Divisional Magistrate
SHG	Self Help Group
SMBF	State Military Benevolent Fund
SRH	Self-rated Health
SSCC	State Senior Citizen Council
SSP	Senior Superintendent of Police
SSWD	Social Security and Women and Child Development
ST	Scheduled Tribe
SUBI	Subjective Well-being Inventory
SWB	Subjective Well-being
TAC	Technical Advisory Committee
TISS	Tata Institute of Social Sciences
TOR	Terms of Reference
UNFPA	The United Nations Population Fund

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1. Background

Population ageing is an inevitable consequence of the demographic transition experienced by all the countries across the world. Declining fertility and increasing longevity have resulted in an increasing proportion of elderly persons aged 60 years and above, concomitant with the demographic transition process traversed by most of the now developed countries. India has around 104 million elderly persons (8.6% of the population comprises 60 plus population, Census 2011) and the number is expected to increase to 296.6 million constituting 20 per cent of the total population by 2050 (United Nations, 2013). An overwhelming majority of elderly live in rural areas and there is an increasing proportion of old-oldest age category with feminization of ageing being more pronounced at this age. Nearly three out of five single older women are very poor and about two-thirds of them completely economically dependent.

Given the nature of demographic transition, such a huge increase in the population of the elderly is bound to create several societal issues, magnified by sheer volume. The demographic changes and more importantly the fertility transition have occurred without adequate changes in the living standard of the people. As a result, a majority of the people at 60+ are socially and economically poorer. In addition, there is also extreme heterogeneity in the demographic transition across states in India resulting in vast differences in the implications of demographic change across social, economic and spatial groups. Therefore, it is important to focus immediate attention to creating a cohesive environment and decent living for the elderly, particularly elderly women in the country.

The Government of India deserves recognition for its foresight in drafting the National Policy on Older Persons (NPOP) in 1999 way ahead of the Madrid International Plan of Action on Ageing (MIPAA), when less than 7 per cent of the population was aged 60 and above. Being a signatory to the MIPAA, it is committed to ensuring that people are able to age and live with dignity from a human-rights perspective. Hence, the government initiated and implemented several programmes and has also revised and updated the 1999 policy that is waiting for final vetting by the government. The United Nations Population Fund (UNFPA) globally and in India, has a specific focus on policy and research in emerging population issues of which population ageing is one. Thus, the policies and the programmes for ageing, require an evidence base for policy and programming and understanding of various aspects of the elderly given the rapid changes in the social and economic structures.

During the VII cycle of cooperation with the Government of India (2008-12), the Country Office embarked on a research project, "Building a Knowledge Base on Population Ageing in India (BKPAI)" with two main components: (i) research using secondary data; and (ii) collecting primary data

through sample surveys on socio-economic status, health and living conditions of the elderly that can be used for further research, advocacy and policy dialogue. This project was coordinated by the Population Research Centre (PRC) at the Institute for Social and Economic Change (ISEC), Bangalore and the Institute of Economic Growth (IEG), Delhi. Collaboration with the Tata Institute of Social Sciences (TISS), Mumbai was initiated at a later stage for developing an enabling environment through advocacy and networking with stakeholders. In order to fill the knowledge gaps identified by these papers, a primary survey was carried out in seven states – Himachal Pradesh, Kerala, Maharashtra, Odisha, Punjab, Tamil Nadu and West Bengal with a higher percentage of population in the age group 60 years and above compared to the national average.

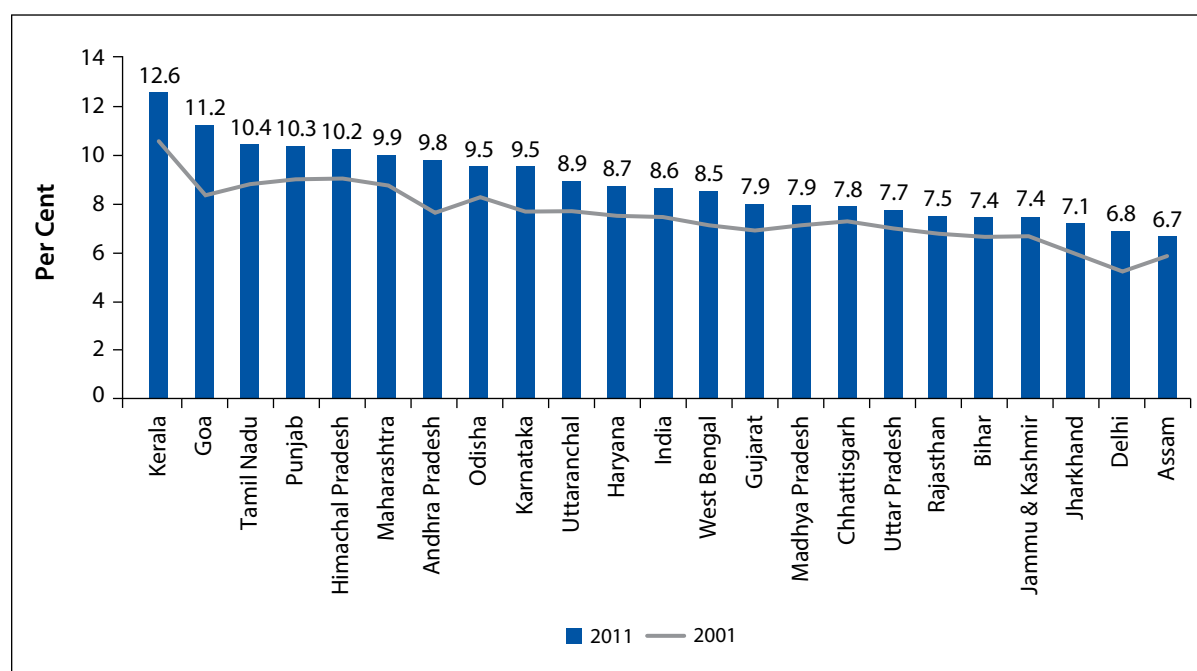
In this study, the sample for each state was fixed at 1280 elderly households. The sample size was equally split between urban and rural areas and 80 Primary Sampling Units (PSU) equally distributed between rural and urban areas selected using the Probability Proportion to the Population Size (PPS). The details about surveys like, sampling procedures, survey protocols, questionnaire contents and definitions and computations of different indicators are available in the “Report on the Status of Elderly in Select States of India, 2011”.

This report is the outcome of the survey carried out in Kerala from June to September 2011, as part of the seven state study by the Population Research Centre, Kerala. It consists of seven sections, where the first section provides a brief introduction, the second section discusses the profile of elderly households and individual elderly; the third section is on work, income and asset holdings among the elderly; the fourth section covers the living arrangements and family relations; the fifth deals with the health status including subjective and mental health, and morbidity and hospital utilization; the sixth section with social security in old age; and the last section is the way forward.

2. Sampled Households and Elderly Population

According to 2011 Census, there are 7.4 million people who are above 60 years of age in Kerala. Of these, 3.3 million are males and 4.1 million are females. The proportion of population aged 60 years and above is slightly higher in rural areas than in urban areas. Around 12.6 per cent of the population is above 60 years of age which is the highest in the country (Fig. 2.1). It grew from 10.5 per cent in 2001 at a rate of over 2 per cent per annum.

Figure 2.1: Population aged 60 years and above, 2001 and 2011



2.1 Household Characteristics

The survey covered a total of 1,365 elderly men and women from 1,214 households across the 14 districts of Kerala. On an average, the surveyed households in Kerala comprised approximately five members. Sixty three per cent of the households are headed by an elderly member – 40 per cent by elderly men and 23 per cent by elderly women. Around 22 per cent of the usual members in the sample households are below the age of 15 years, 51 per cent are in the age group 15-59 years and 26 per cent are 60 years and above. The overall sex ratio among selected households is 1,164 females per 1000 males. In every age group, except in the younger ones, there are more females than males in the surveyed population. More than half of the household heads (55%) are Hindu, one fourth are Muslim and 18 per cent are Christian. All the other religions together account for less than 1 per cent (0.2%) of the household heads. Seven per cent of the household heads

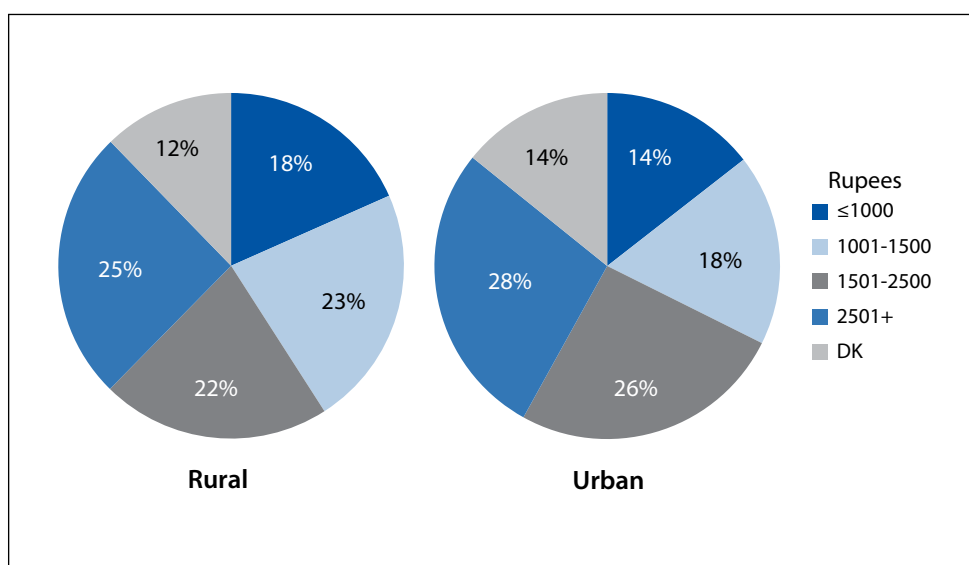
belong to Scheduled Castes (SC), 2 per cent belong to Scheduled Tribes (ST), and 58 per cent belong to other backward classes (OBC) while 33 per cent belong to other caste groups.

A little more than 60 per cent of the elderly in Kerala live in *pucca* houses, around one third live in semi *pucca* houses and around 7 per cent live in *kachha* houses. Ninety seven per cent of the households have electricity. A majority of the sampled households (86%) live in big houses with more than four rooms. Households with single rooms are only 1 per cent. The major source of drinking water for the sample households in Kerala is wells/bore wells, either private or public (57%). Thirty eight per cent of the households have piped drinking water (33% in rural areas and 50% in urban areas). More than 8 out of 10 households have a toilet facility with a septic tank/flush system. More than half (56%) of the surveyed households use fire wood as cooking fuel and less than one third of the households use LPG/natural gas (Appendix Table A 2.1). A little more than one-third of the households in Kerala possesses Below Poverty Line (BPL) cards and 66 per cent have Above Poverty Line (APL) cards.

The Monthly Per Capita Consumption Expenditure (MPCE) is generally used as a measure to assess the economic condition of the households and is calculated based on information on consumer expenditure during 30 days prior to the survey for some selected items, and during 365 days prior to the survey for some others.

Around 18 per cent of the households in rural areas and 15 per cent of the households in urban areas fall in the below poverty line (BPL) category with an MPCE of Rs. 1000 and below. Around one fourth of the households in rural areas and 28 per cent of the households in urban areas are in the MPCE category of Rs. 2501 and above (Fig. 2.2).

Figure 2.2: Monthly per capita consumption expenditure according to place of residence, Kerala 2011



To find out the indebtedness of the households, the survey collected information on outstanding loans. All sources of loans, whether formal ones like banks, co-operatives or informal ones like money lenders, relatives, friends were included. Overall, 47 per cent of the households in Kerala do not have any outstanding loan while more than half have some kind of loan. Eighteen per cent of the households have loans of more than Rs. 2,00,000. In 45 per cent of the cases, the loan is for buying a home or vehicle. Another important reason for taking a loan is for marriage expenses. In one in ten households, the loan was taken to meet the health needs of the elderly (Appendix Table A 2.2).

2.2 Profile of the Elderly

The survey interviewed 1365 elderly in Kerala of which 567 are males and 798 are females. Around 60 per cent of the elderly are below 70 years of age and another 12 per cent are 80 years and above. The sex ratio of the elderly indicates that it is favourable to women across all age groups. The highest sex ratio was found in the age group 80 years and above at 1656 elderly women for 1000 elderly men. Given the higher rate of widowhood among elderly women, they outnumber their male counterparts in the extreme ages. This group requires special attention especially in the context of Kerala (Fig. 2.3).

The educational status of the elderly shows that one fifth of the elderly in Kerala does not have any formal education, the proportion among elderly women being higher (29%). Forty five per cent of the elderly men and 24 per cent of the elderly women have more than eight years of

Figure 2.3: Sex ratio, Kerala 2011

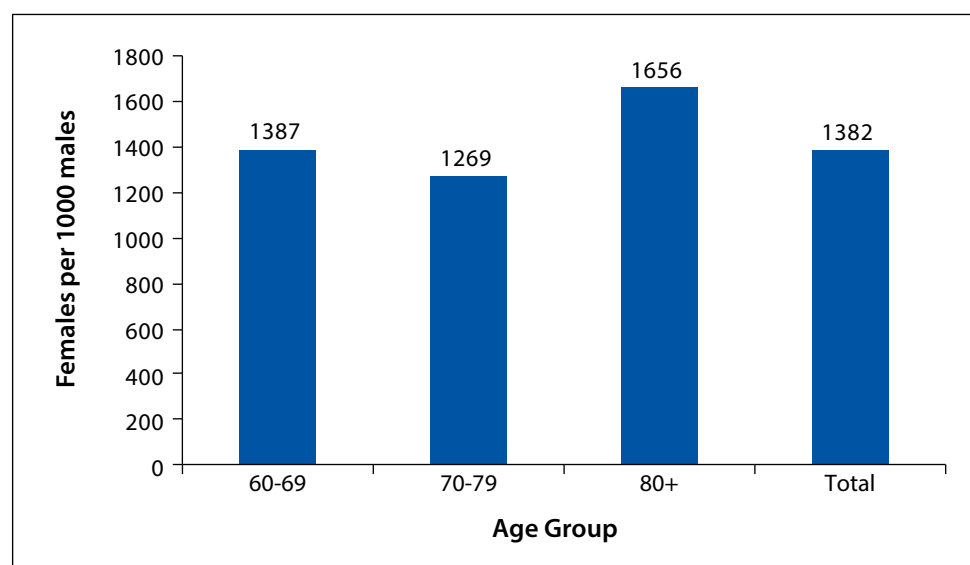
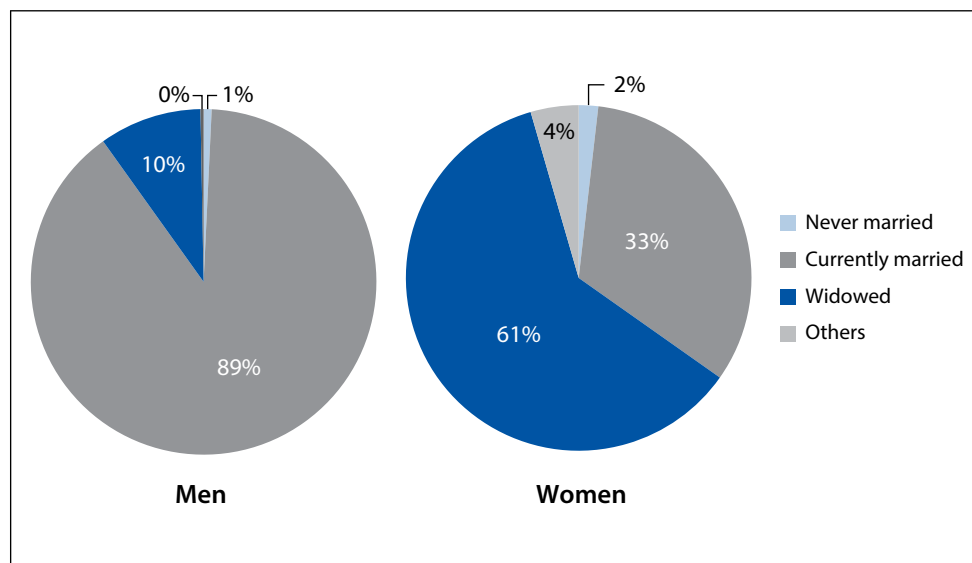


Figure 2.4: Elderly by marital status according to sex, Kerala 2011



education (Appendix Table A 2.3). Eighty nine per cent of the elderly men are currently married whereas this proportion is only 33 per cent for elderly women. The percentage of widowed is far higher among elderly women (61%) than elderly men (10%) (Fig. 2.4).

3. Work, Income and Assets

Work participation among the elderly is an important component of understanding the welfare of the elderly. If the elderly work out of choice, work participation can bring about positive outcomes in terms of a feeling of fulfilment and worthiness, whereas if they work due to poverty and compulsion it can have an adverse outcome on their well-being. This section discusses work participation, work intensity, the need for work, reasons for not working and work benefits. It also covers the personal income of the elderly, their economic contribution to the family, economic dependence and asset ownership.

3.1 Workforce participation rate and work intensity

Overall, in Kerala 16 per cent of the elderly above 60 years of age are currently in the labour force. This proportion is much lower compared to the seven state average of 24 per cent. The current workforce participation rates among elderly men and women are 26 per cent and 8 per cent respectively (Appendix Table A 3.1). Although workforce participation declines with age, 8 per cent of elderly men and 3 per cent of elderly women currently participate in the labour market even beyond 80 years (Fig. 3.1). In general, the work participation rate is much higher among the poor and less educated elderly than those belonging to the educated and wealthier groups. Similarly, the higher participation rate among the SCs/STs also indicates that the elderly participate in the workforce out of economic compulsion (Appendix Table A 3.2).

Figure 3.1: Currently working elderly by age and sex, Kerala 2011

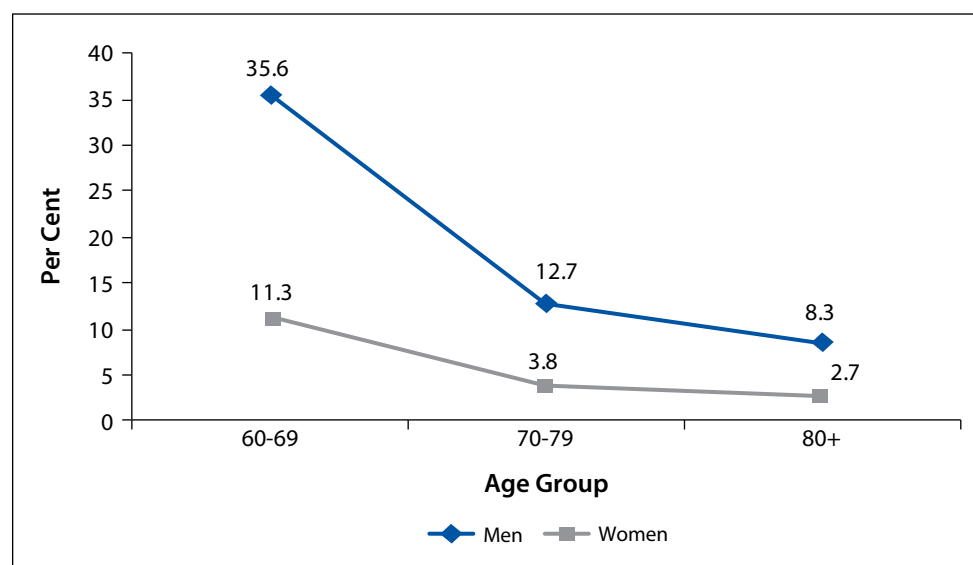
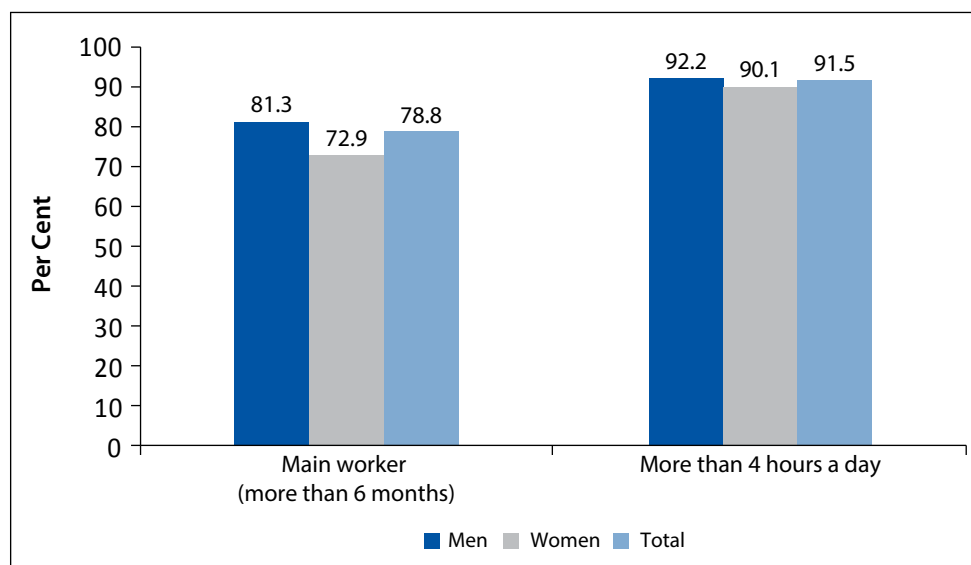


Figure 3.2: Main workers and those working more than 4 hours a day among the elderly, Kerala 2011



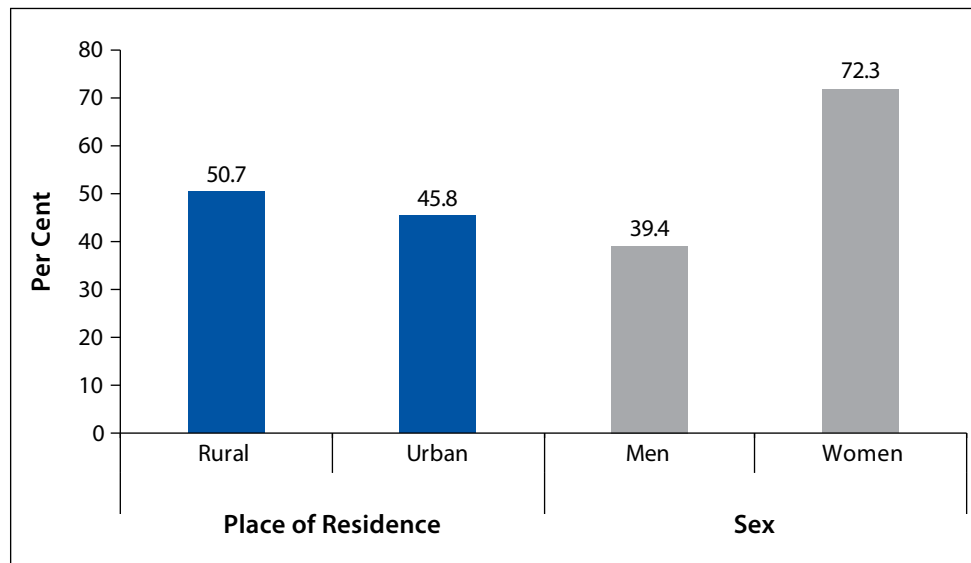
The work intensity of the elderly is fairly high. The elderly who are currently working work full time. Almost 80 per cent work for more than six months in a year and 92 per cent work for more than four hours per day. Work intensity is also more among men than women. Such intense work participation is an indication of economic necessity (Fig. 3.2). Work intensity of the elderly by select background characteristics indicates that intense work is seen more among SC/ST groups, the elderly from the poorer wealth quintiles and the elderly living with spouse (Appendix Table A 3.2).

The occupational structure indicates that many of the currently working elderly are engaged in unskilled, informal low paying occupations like agricultural labourers and other work which includes labourers in mining, construction and transport etc. This is again a manifestation of the economic necessity which pushes the elderly to work. The cultivators also constitute more than one third of the currently working elderly. Currently only 1 per cent of the elderly in Kerala work in the public sector and the rest work in the private sector, are self-employed or in informal employment (Appendix Table A 3.3). It also needs to be mentioned that the retirement age for the public sector employees in Kerala is 56 years the lowest among all Indian states.

3.2 Need for Current Work

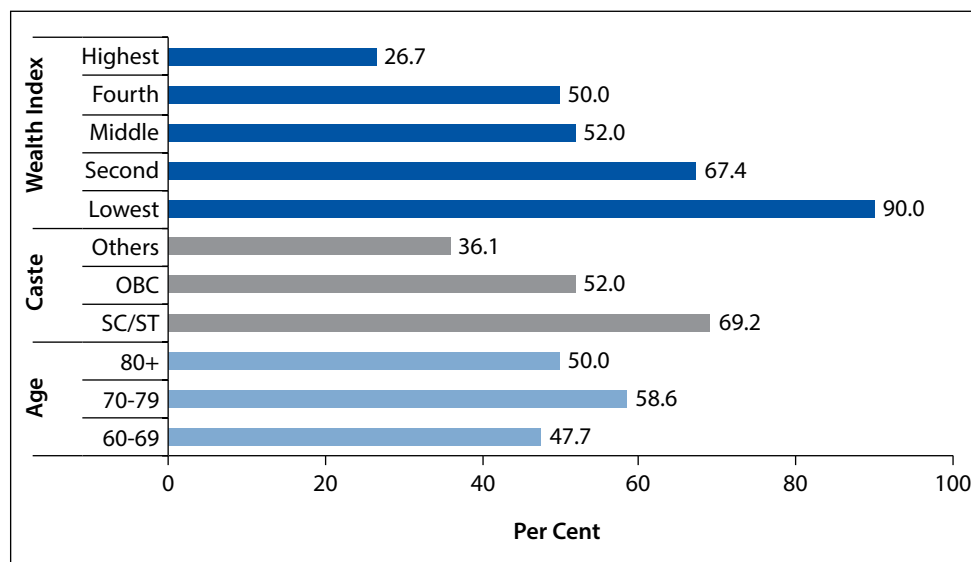
In Kerala, half the currently working elderly work out of choice and the other half work out of economic and other compulsions. Around three fourths of the women and 40 per cent of the men reported that they work due to economic compulsion indicating strong gender differentials in the need for current work. Similarly, half of the rural elderly and 46 per cent of the urban elderly also work due to economic and other compulsions (Fig. 3.3).

Figure 3.3: Elderly working due to compulsion by place of residence and sex, Kerala 2011



Motivation to work according to select background characteristics show that a much higher proportion of elderly belonging to poorer wealth quintiles, and those who belong to SC/ST groups work out of economic and other compulsions indicating that in Kerala the elderly mostly have to work because of poverty (Fig. 3.4).

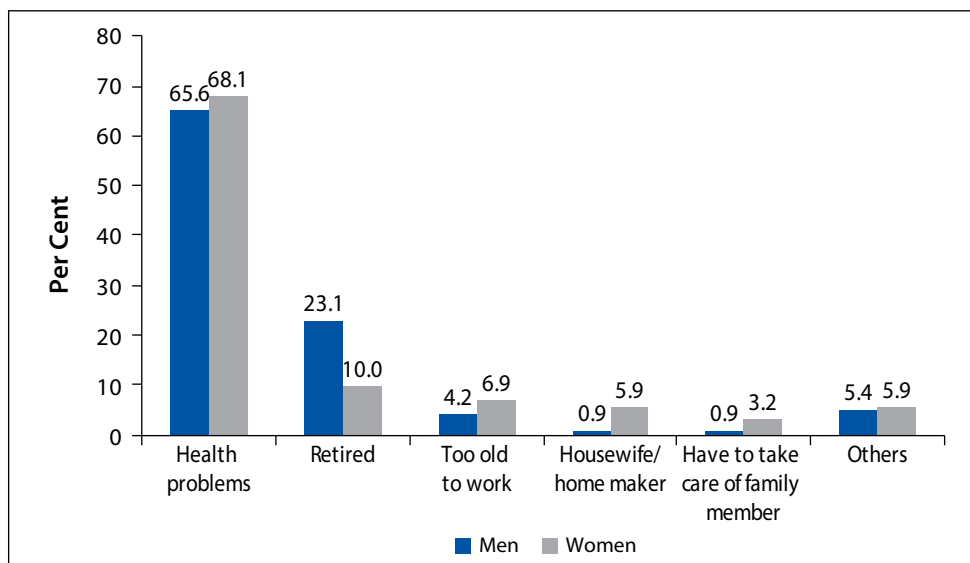
Figure 3.4: Elderly working due to compulsion by age, caste and wealth quintile, Kerala 2011



3.3 Reasons for Not Working Currently

In Kerala, 84 per cent of the elderly are currently not in the labour force. Health problems are the major reasons reported by the elderly for not working (66% for men and 68% for women). The second major reason for not currently working is retired from work. Nearly one out of four

Figure 3.5: Five major reasons for not currently working by sex, Kerala 2011

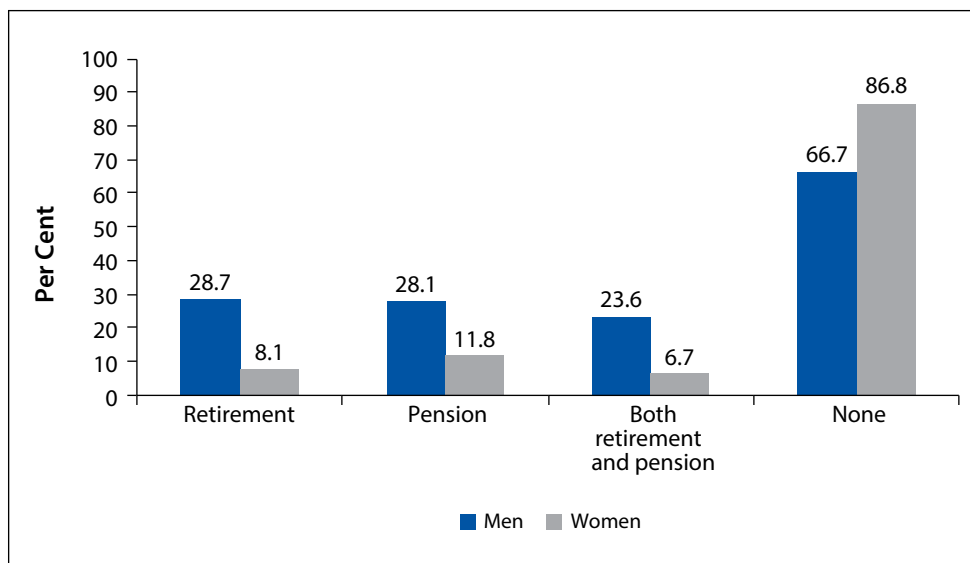


elderly men and one out of every 10 elderly women reported retirement as the reason for not working. Four per cent of men and 7 per cent of women also mentioned that they are too old to work (Fig. 3.5).

3.4 Work Benefits

In Kerala, around 67 per cent of the elderly men and 87 per cent of the elderly women do not receive any work benefits. The retirement benefits and pension benefits also vary significantly across males and females. Almost one third of the elderly men receive retirement benefits and pension benefits whereas this proportion is only 8 per cent in case of elderly women. Around one fourth of the elderly men receive both retirement and pension benefits (Fig. 3.6). Retirement and pension benefits are negligible for illiterates, those belonging to lower wealth quintiles and those from the socially backward sections (Appendix Table A 3.5).

Figure 3.6: Elderly by work benefits they receive according to sex, Kerala 2011



3.5 Personal Income of the Elderly

Personal income in general is an indicator of financial well-being, as those with more income are expected to be better off than those with less or no income. However, this need not be the case with the elderly when the major source of income is from their work and the work participation at older ages is mainly poverty driven. This section therefore discusses the sources of income, economic contribution of the elderly to their households and their economic dependency. Further, it also covers asset ownership among the elderly in Kerala.

Overall, three fourths of the elderly men and half the elderly women report receiving some personal income but sharp gender differentials can be observed with respect to income distribution. Thirty six per cent of the elderly women and one fourth of the elderly men fall in the lowest income category while 7 per cent of the elderly women and 27 per cent of the elderly men fall in the high income category (Fig. 3.7).

The implications of having a personal income are different for elderly men and women. Having no personal income for men may indicate economic vulnerability whereas this may not be the case for women. With increasing wealth quintiles, the proportion of women reporting no income increases whereas the opposite is true for men (Fig. 3.8). This indicates the gender dynamics involved in reporting personal income. Having an income and assets is generally associated with men since women's participation in the labour force is very low and usually assets are legally in the name of men. Therefore, women are less likely than men to have an income or own any assets. In fact, if elderly women do have an income, it is more likely to reflect their poor financial status that drives them to work in their old age.

Figure 3.7: Elderly by annual personal income according to sex, Kerala 2011

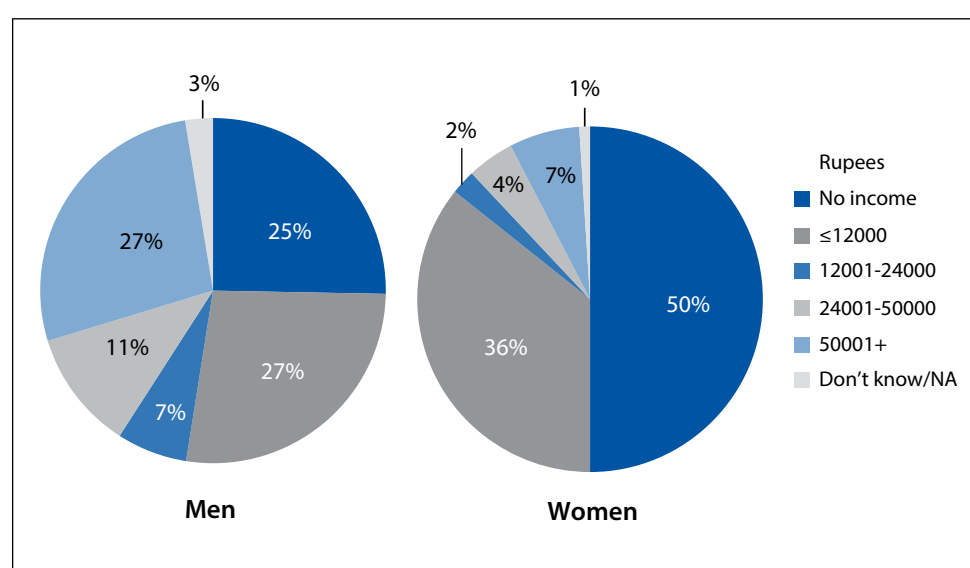
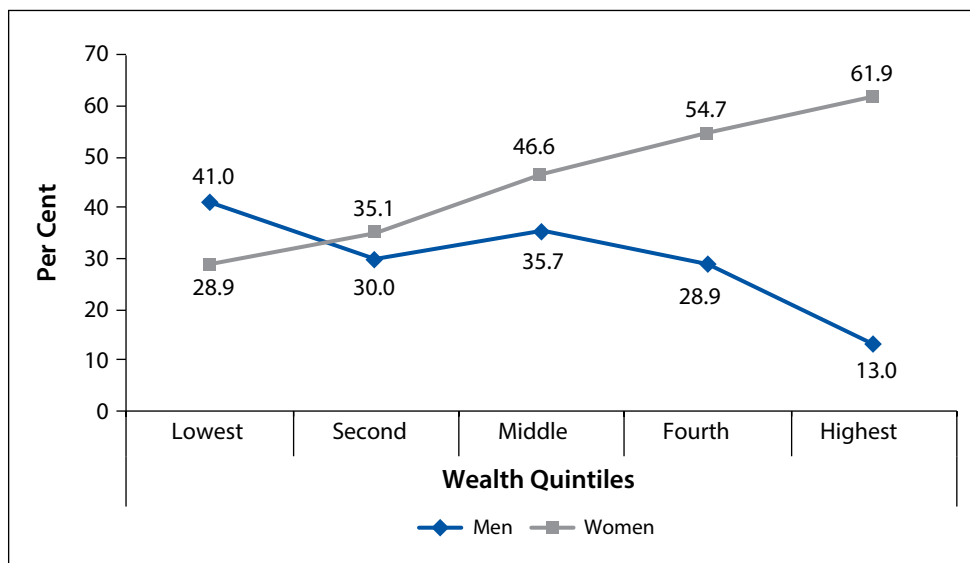


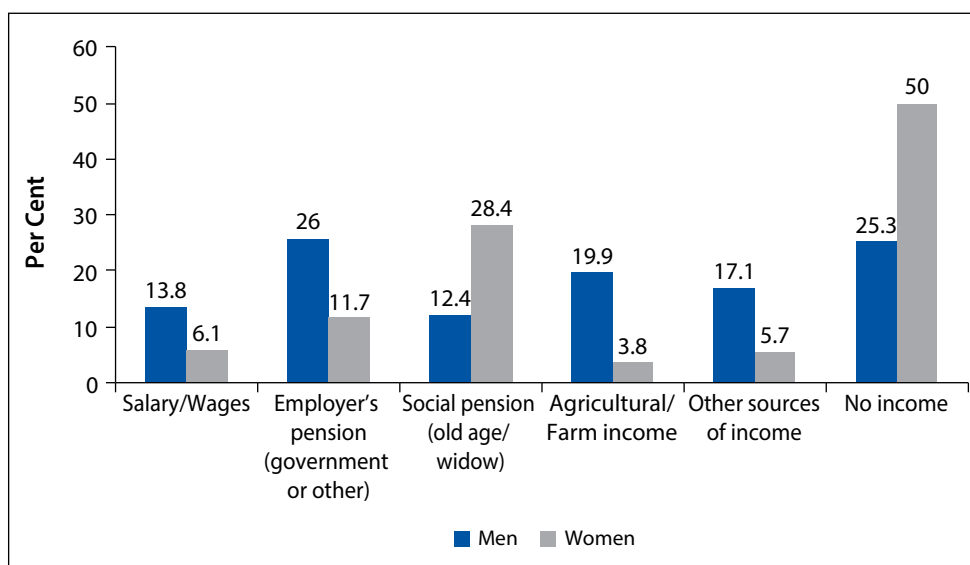
Figure 3.8: Elderly with no income by wealth quintile by sex, Kerala 2011



The sources of income data show that social pension is the major source of income for elderly women whereas employer’s pension is the major source of income in the case of elderly men. Around 14 per cent of the elderly men and 6 per cent of the elderly women reported salary and wages as their main source of income. In the case of men, income from agriculture/farms and income from other sources also forms a major component (Fig. 3.9).

The sources of income data show that transfer income (employers’ pension and social pension) is the major source of income in the case of elderly women whereas both transfer income and factor income (income from their own earnings) are important sources in the case of elderly men (Fig. 3.9). A greater dependence on factor income is seen especially in the case of elderly men from rural areas (Appendix Table A 3.7).

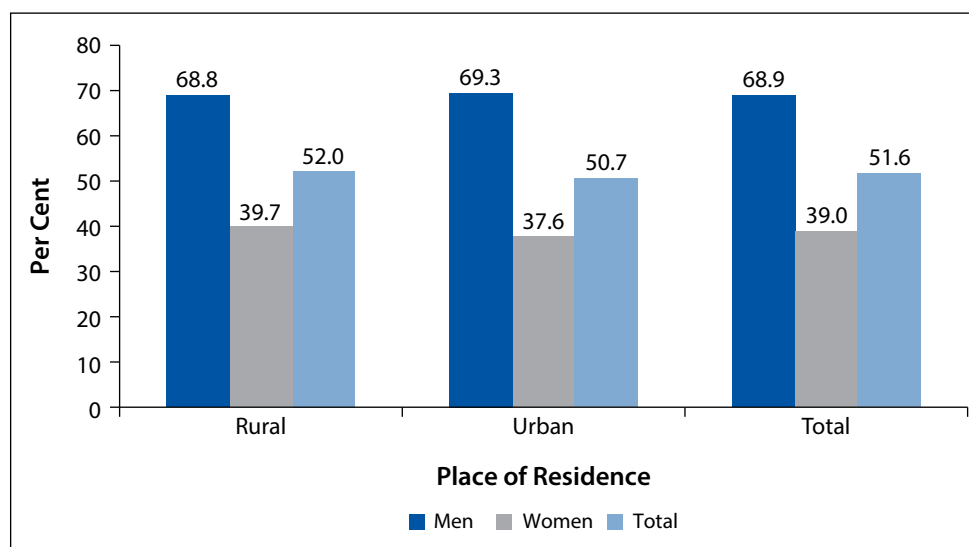
Figure 3.9: Elderly by sources of current personal income according to sex, Kerala 2011



3.6 Economic Contribution of the Elderly to the Family

In order to ascertain the economic contribution of the elderly, elderly men and women who reported receiving a personal income were asked whether they contribute financially to the total expenditure of the household. Overall, 52 per cent of the elderly reported that they contribute their personal income towards the household expenditure – more men (69%) than women (39%). Financial contribution by the elderly does not vary greatly across rural and urban areas (Fig. 3.10).

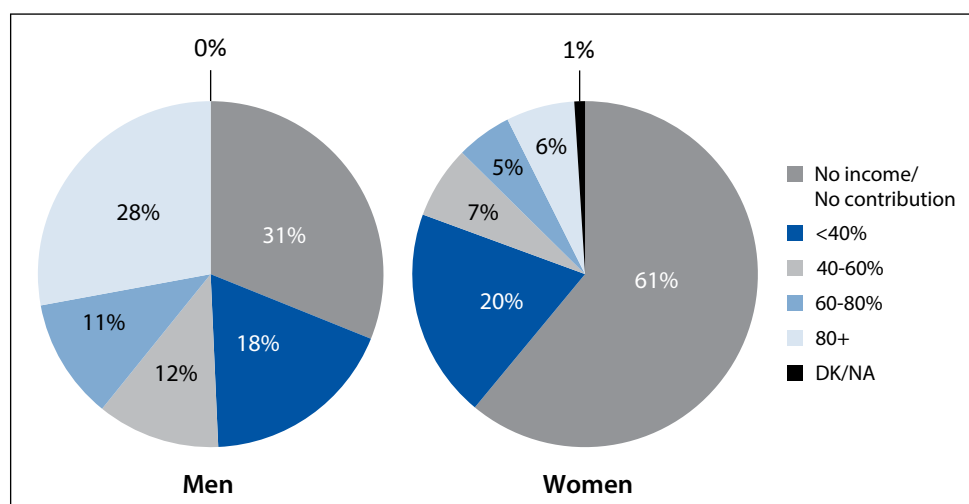
Figure 3.10: Elderly contributing to household expenditure by place of residence and sex, Kerala 2011



With respect to the magnitude of contribution, 20 per cent of the women and 18 per cent of the men reported that their contribution covers less than 40 per cent of the household budget.

A little more than one fourth of the elderly men reported that their contribution covers more than 80 per cent of the household budget whereas this proportion is only 6 per cent in the case of women. Overall, men perceive their contribution to be higher than women (Fig. 3.11). The magnitude of contribution did not vary significantly across place of residence (Appendix Table A 3.8).

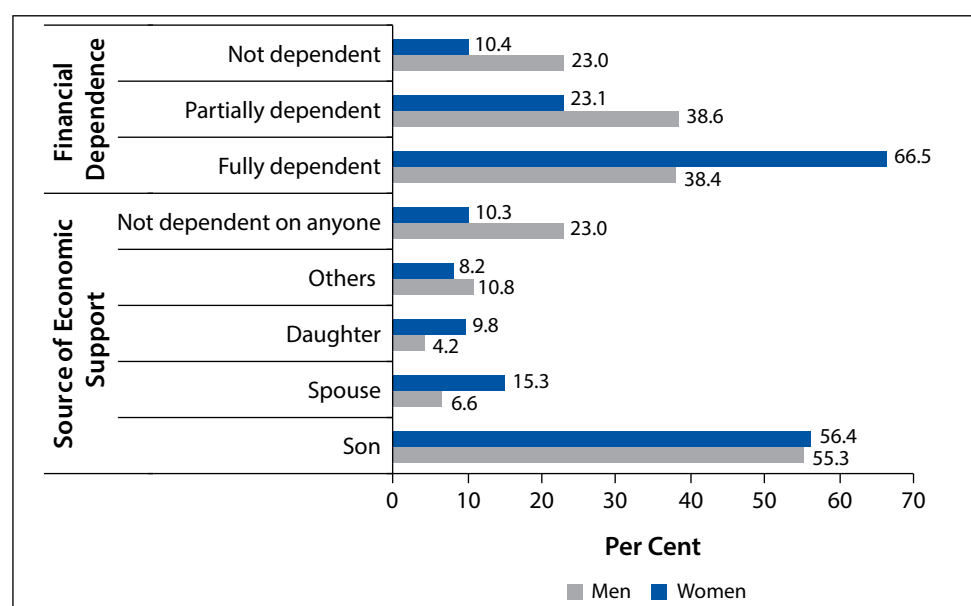
Figure 3.11: Elderly by their perceived magnitude of contribution towards household expenditure according to sex, Kerala, 2011



3.7 Economic Dependency

Vulnerability among the elderly can be understood by examining their economic dependency. In Kerala, around 50 per cent of the elderly have some personal income. However, it is also necessary to understand whether the income earned by the elderly is sufficient to fulfil their basic needs or whether they are economically dependent on others. As expected, more women (69%) than men are completely dependent on others economically (39%). Only 10 per cent of the elderly women and 23 per cent of the elderly men are economically independent. The economic dependency status varies significantly by place of residence. As expected, sons are the major source of economic support for both elderly men and women. Other sources of support reported by women are spouses (15%) and daughters (10%), whereas it is other relatives (11%) and spouse (7%) for men (Fig. 3.12 and Appendix Table A 3.9).

Figure 3.12: Elderly by their financial dependency status and main source of economic support according to sex, Kerala 2011



3.8 Asset Ownership

The ownership of assets such as land, housing, jewellery and bank savings is an important indicator of the financial well-being of the elderly as they can provide a source of income or act as collateral for loans. Owning assets may also endow the elderly with a status within the family as well as in society. In Kerala, two thirds of the elderly own some asset such as land, housing, jewellery or savings which is lower than the seven state average (77%). Land and housing are two major assets owned by the elderly in Kerala, with more than half of the elderly (57%) owning land

Table 3.1: Per cent distribution of elderly by asset ownership according to place of residence and sex, Kerala 2011

Type of Assets	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Inherited land	42.0	31.9	36.2	32.5	20.3	25.4	39.0	28.2	32.7
Self acquired land	42.2	11.0	24.2	39.8	11.9	23.4	41.5	11.3	24.0
Inherited house(s)	11.1	16.1	14.0	9.0	7.5	8.1	10.5	13.3	12.1
Self acquired house(s)	58.0	14.5	32.9	61.5	14.4	33.9	59.1	14.4	33.2
Housing plot(s)	7.5	5.0	6.1	3.0	2.2	2.5	6.1	4.1	4.9
Inherited gold or jewellery	1.7	15.0	9.3	3.3	16.1	10.8	2.2	15.3	9.8
Self acquired gold or jewellery	6.5	18.7	13.6	6.4	17.0	12.6	6.5	18.2	13.3
Savings in bank, post office, cash	12.4	6.3	8.9	22.9	16.4	19.1	15.7	9.5	12.1
Savings in bonds, shares, mutual funds	0.3	0.3	0.3	1.2	0.0	0.5	0.6	0.2	0.4
Life insurance	3.2	0.9	1.9	6.3	2.2	3.9	4.2	1.3	2.5
Don't own any asset	21.6	41.1	32.9	23.4	48.0	37.8	22.2	43.3	34.4
Number of elderly	292	398	690	275	400	675	567	798	1,365

(either inherited or self acquired) and another 45 per cent owning houses. The percentage of elderly owning other assets such as gold, savings in banks and post office etc., is comparatively lower. In general, asset ownership is higher among elderly men than elderly women except in the case of jewellery (Table 3.1).

4. Living Arrangement and Family Relations

In Kerala, the living arrangement of the elderly has not been a serious issue, as earlier the family, especially the children, were expected to take care of the elderly parents. However, with the decline in fertility and with nuclearization of families, changes were bound to take place in the existing co-residential pattern. Moreover, large scale migration of the adult population, in search of employment both within and outside the country, has had serious implications on the living arrangement pattern as well as the provision of care.

In this context, this section explores the pattern of living arrangements of the elderly, satisfaction level with the present living arrangements and their preferred living arrangements. This section also discusses family interaction including the monetary transactions between the elderly and their children, their engagement in both family and social activities and the role of decision making within the family. The important issue of elderly abuse has also been discussed.

4.1 Type of Living Arrangement and Reasons for Living Alone

The living arrangement patterns in Kerala show that the majority of the elderly (82% of men and 88% of women) live in the traditional co-residential pattern. Fifteen per cent of the elderly live independently (alone or with spouse only) and 4 per cent live alone. More women (5.2%) than men (1.3%) live alone (Fig. 4.1). Although Kerala had an early demographic transition and a significant proportion of migrants, the percentage of elderly living alone appears to be lower compared to the other states in the country. For instance, the percentage of elderly women living alone in Tamil Nadu is around 26 per cent and the seven state average is around 10 per cent.

Figure 4.1: Living arrangement of the elderly by sex, Kerala 2011

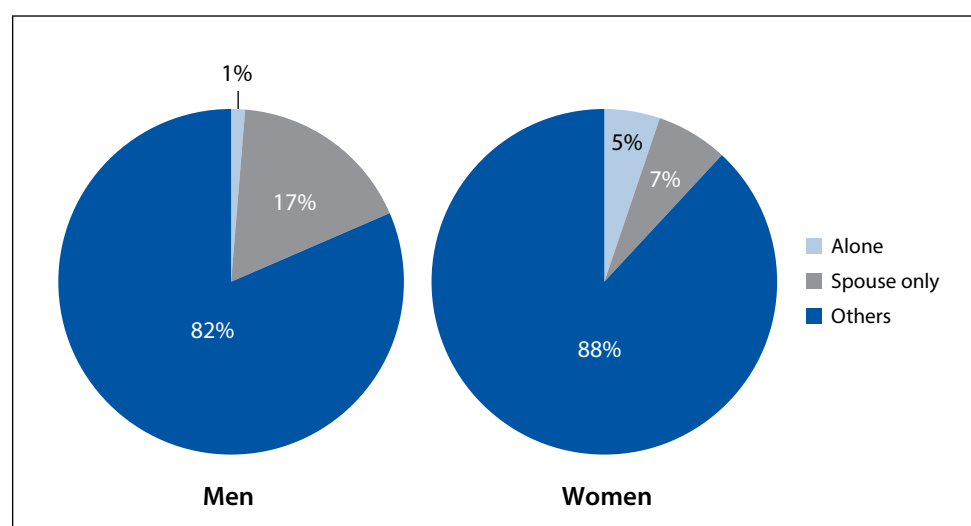
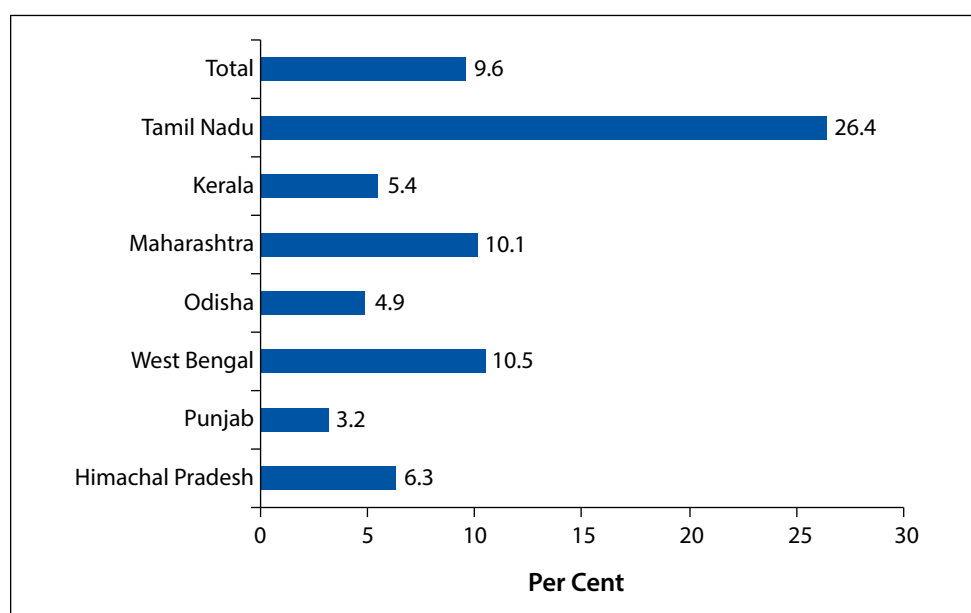


Figure 4.2: Elderly women living alone across seven select states, 2011

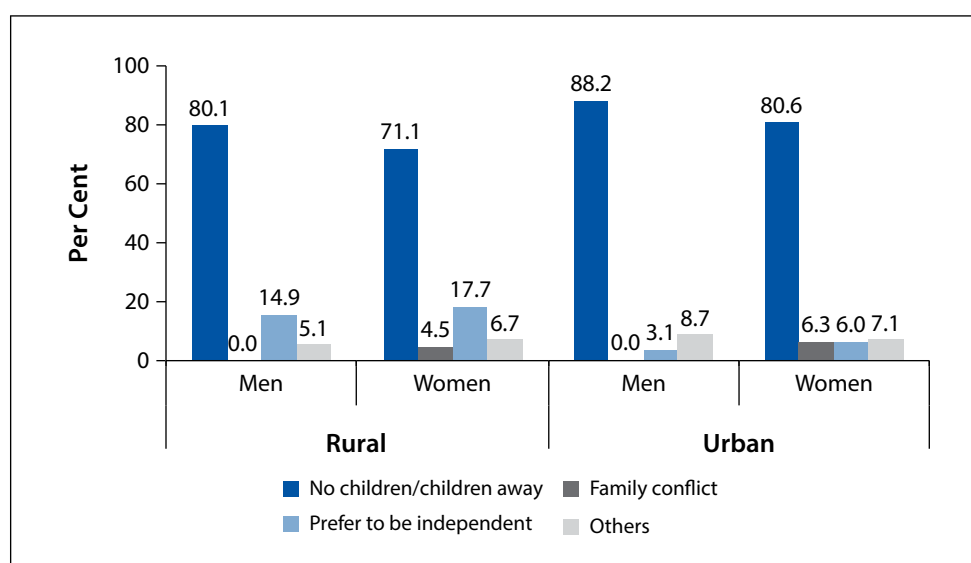


The data on the proportion of women living alone in the seven selected states shows that the proportion of elderly living alone is highest in Tamil Nadu (26.4%) and lowest in Punjab (3.2%) (Fig. 4.2).

Living alone often goes hand in hand with poverty. This is particularly true in the case of Kerala. Almost one fifth of the elderly belonging to the poorest wealth quintiles live alone as against 2 per cent from the richest quintiles (Appendix Table A 4.1). However, not much variation is observed with respect to other indicators.

The survey has also asked the elderly who live alone the reasons for doing so. It was found that the main reason was either not having children or children living elsewhere. Interestingly, preference for independence is one of the important reasons for living alone in rural areas (Fig. 4.3).

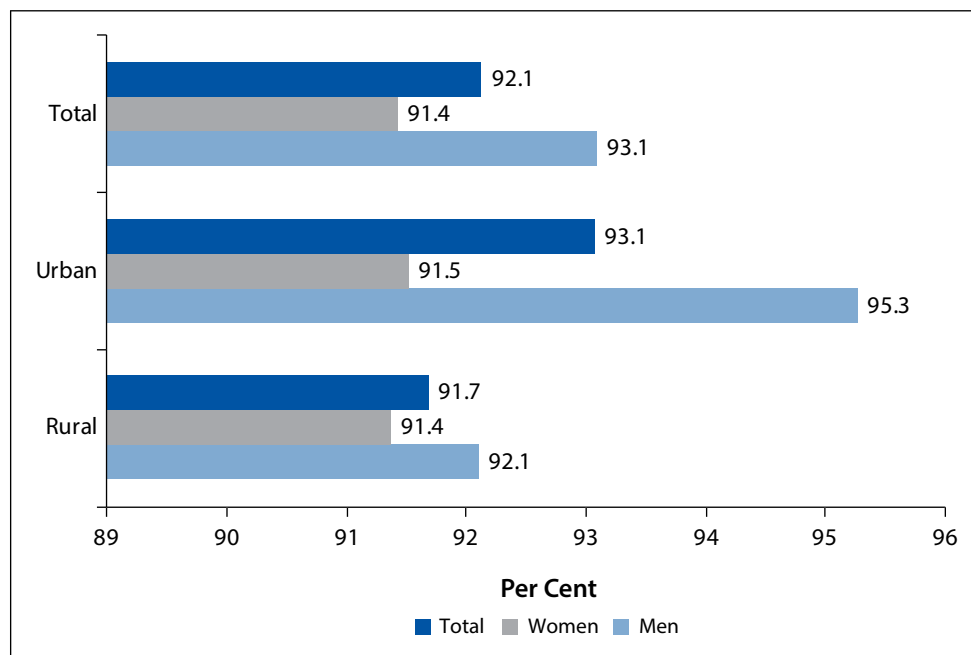
Figure 4.3: Main reasons for living alone or with spouse only, Kerala 2011



4.2 Level of Satisfaction with Present Living Arrangement

The majority of the elderly (92%) reported that they are satisfied with their current living arrangement. Satisfaction levels did not vary greatly by place of residence or by gender. However, in urban areas more men are satisfied with their living arrangements as compared to women (Fig. 4.4).

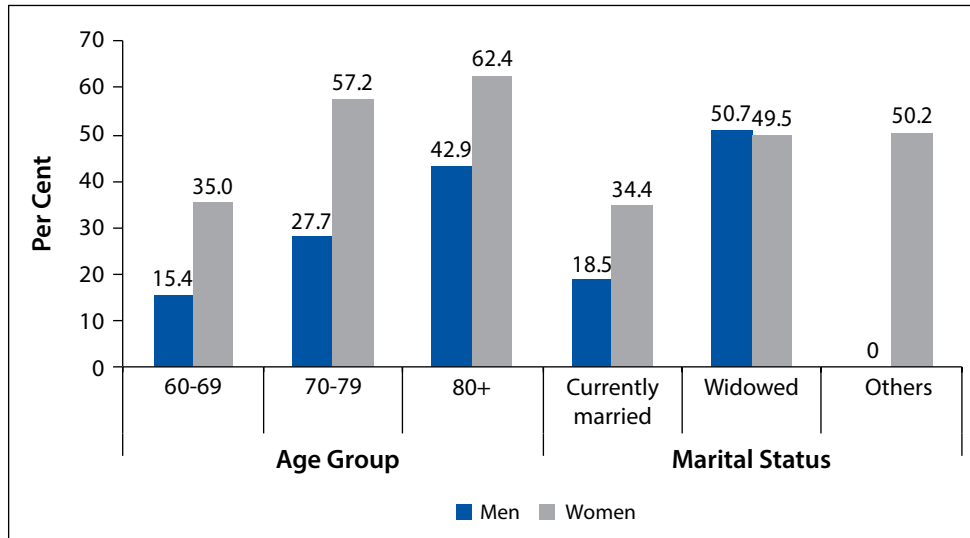
Figure 4.4: Elderly comfortable or satisfied with present living arrangement by place of residence and sex, Kerala 2011



Another way of assessing the level of satisfaction with the living arrangements of the elderly is by considering their perception about whether they live with their children or the children live with them. The survey asked the elderly whether they think they are living with their children or if the children are living with them. It was expected that the level of satisfaction would be higher among those who perceive that the children are living with them as it indicates their continued status within the family.

The data shows that with increase in age, the proportion that thinks they are living with their children goes up indicating a declining status within the family. A sharp difference in perception is observed between men and women across age groups. In the age group 60-69 years, 15 per cent of elderly men think they are living with their children as against 35 per cent for women. These differences exist in the other age groups as well. Differences in perception with respect to marital status indicate that a higher proportion of widowed elderly think that they are living with their children as compared to currently married elderly (Fig. 4.5).

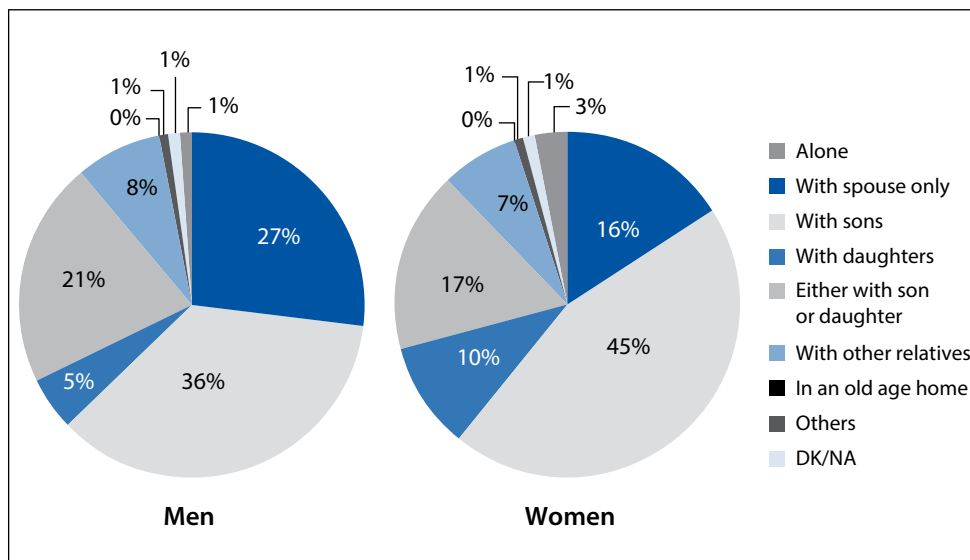
Figure 4.5: Elderly who perceive they are living with their children rather than children living with them by age and marital status, Kerala 2011



4.3 Preferred Living Arrangements

The preference of living arrangements provides an indication of the changes that are likely to take place in living arrangement patterns in the future. In general, the elderly in Kerala prefer to live with their sons (45% men and 36% women) while 5 per cent of elderly men and 10 per cent of elderly women preferred to stay with their daughters. A very small proportion of the elderly (less than 1% of the men and around 3% of women) prefer to live alone (Fig. 4.6).

Figure 4.6: Preferred living arrangement according to sex, Kerala 2011



When the present living arrangements are compared with the preferred living arrangements, it is found that in the majority of the cases, the preferred and present living arrangements correspond. More than 90 per cent of the elderly who preferred to live with their children are presently doing so. Further, for the elderly living alone, the match between preferred and present living arrangement is higher among men than women (81% and 63% respectively) (Appendix Table A 4.2).

4.4 Family Interaction and Monetary Transactions

Family interaction forms an important dimension contributing towards the overall happiness and well-being of the elderly. The survey, therefore, assessed the interactions in terms of meeting and communication of the elderly with their non co-residing children.

Among the elderly with non co-residing children, a little over 1 per cent never meets at least one of their non co-residing children. Similarly, 5 per cent never communicate with at least one of their non co-residing children. A higher proportion of elderly women report no communication or meeting than elderly men (Fig. 4.7).

The survey also examined the exchange of money between the elderly and their non co-residing children. It indicates the level of interaction between children and parents and mutual economic support. Overall, 38 per cent of the elderly reported that they received money from their children and around 7 per cent support their children financially, irrespective of the place of residence of the elderly (Fig. 4.8).

Figure 4.7: Elderly with no meeting or no communication with non co-residing children according to sex, Kerala 2011

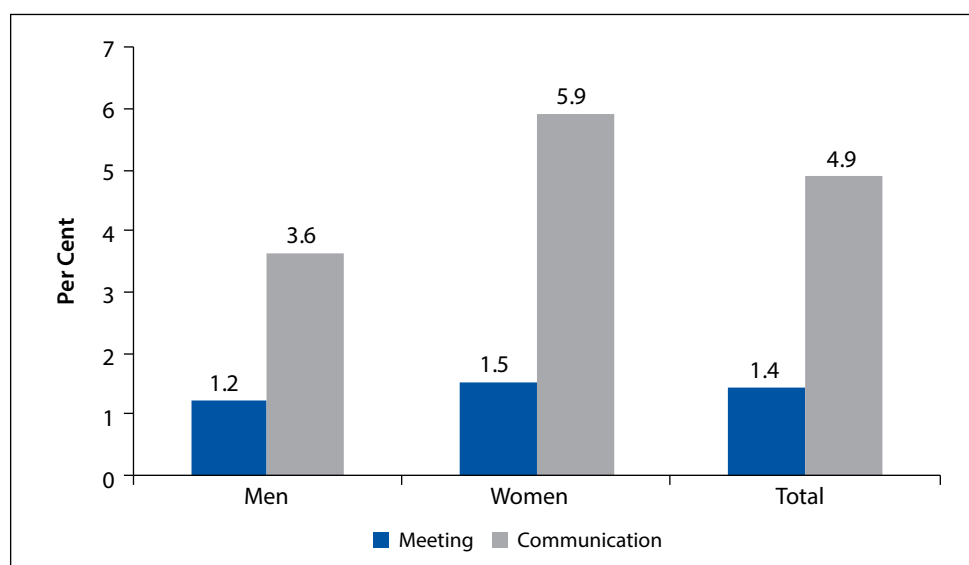
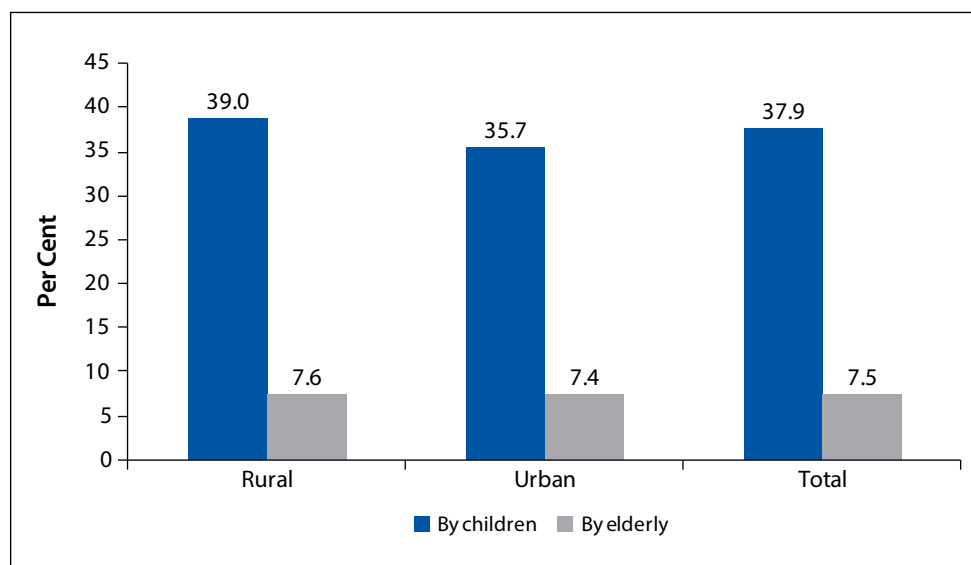


Figure 4.8: Elderly with monetary transfer between them and non co-residing children, Kerala 2011



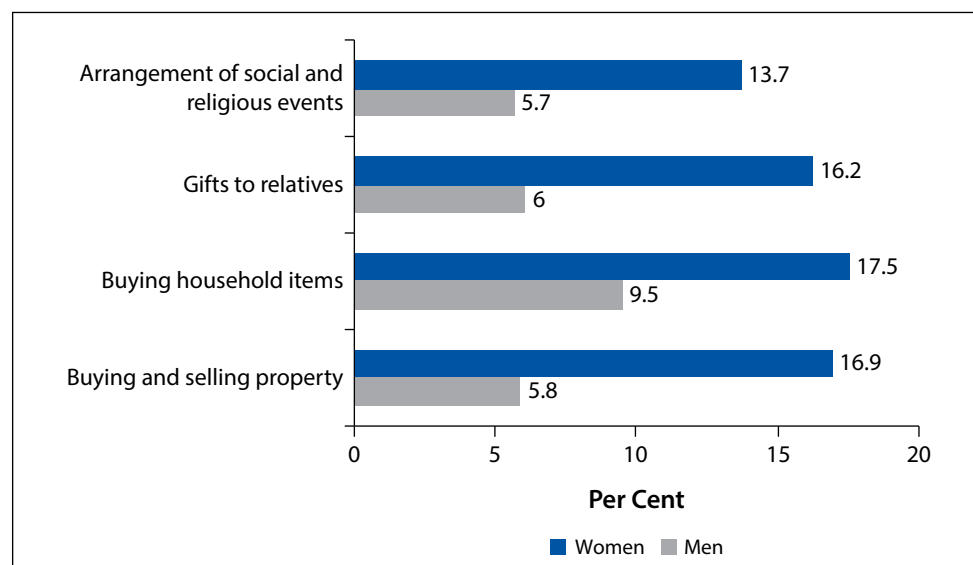
4.5 Engagement in Family Activities and Decision Making

The contribution of the elderly in various activities within the family has always been recognized although there has not been any systematic study to assess the magnitude of such contribution. The survey questioned all the elderly about the extent of their participation in seven important aspects of family activities. More than 84 per cent of the elderly members reported that they give advice to their children and are involved in settling disputes. Other prominent activities of the elderly are taking care of grandchildren and cooking and cleaning. Activities like payment of bills and shopping for the household are more often done by elderly men whereas cooking and cleaning, and taking care of grandchildren are more often done by elderly women (Table 4.1). The participation in activities also declines with age. For example, almost two third of the elderly who are 60-69 years of age reported that they participate in taking care of grandchildren whereas this proportion is only half in the case of the elderly who are 80 years and above (Appendix Table A 4.4).

Table 4.1: Percentage of elderly by participation in various activities according to place of residence and sex, Kerala 2011

	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Taking care of grandchildren	69.1	74.5	72.2	68.2	77.7	73.8	68.8	75.5	72.7
Cooking/Cleaning	36.3	73.9	58.0	34.7	74.4	58.0	35.8	74.0	58.0
Shopping for household	76.2	37.0	53.6	73.8	35.3	51.2	75.5	36.5	52.8
Payment of bills	70.2	22.2	42.5	69.3	21.7	41.4	69.9	22.1	42.2
Advice to children	86.1	81.6	83.5	85.1	85.6	85.4	85.8	82.9	84.1
Settling disputes	87.0	80.4	83.2	89.9	84.0	86.4	87.9	81.6	84.2

Figure 4.9: Elderly reporting no role in various decision-making activities, Kerala 2011



The role of decision making of elderly within the family determines their position and status. The data shows that around 15 per cent of the women do not have any role in decision making in the five selected activities while for men the percentage varies from 5 to 10. Both among men and women, the elderly are least involved in the decisions on buying of household items (Fig. 4.9).

4.6 Social Engagement

Social engagement and networking keeps the elderly active and connected with society which could enhance their well-being. The survey asked questions on the frequency of attendance in public meetings and religious programmes outside the home. Almost 80 per cent of the elderly reported no attendance in meetings. More men attended meetings outside the home than women (32% of men and 9% of women). The frequency of participation was also low (Table 4.2).

Table 4.2: Per cent distribution of elderly by the frequency (in the 12 months preceding the survey) with which they attended any public meeting in which there was discussion of local, community or political affairs according to place of residence and sex, Kerala 2011

Frequency	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Never	64.2	90.2	79.3	74.7	92.1	84.9	67.5	90.8	81.0
Rarely	22.0	5.8	12.6	13.4	4.1	7.9	19.3	5.2	11.1
Occasionally	5.9	1.8	3.6	8.5	2.2	4.8	6.7	1.9	4.0
Frequently	7.3	1.6	4.0	3.4	0.3	1.6	6.1	1.2	3.2
DK/NA	0.5	0.6	0.6	0.0	1.3	0.8	0.4	0.8	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table 4.3: Per cent distribution of elderly by the frequency (in the 12 months preceding the survey) with which they attended religious programmes or services excluding weddings and funerals according to place of residence and sex, Kerala 2011

Frequency	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Never	29.6	45.8	38.9	27	39.5	34.3	28.8	43.8	37.5
Once or twice per year	31.6	26.5	28.7	21.3	19.9	20.5	28.4	24.4	26.1
Once or twice per month	18.8	16.8	17.7	25.1	21.3	22.9	20.8	18.2	19.3
Once or twice per week	15.9	8.8	11.8	17.5	14.6	15.8	16.4	10.7	13.1
Daily	3.7	1.5	2.4	9.1	3.4	5.8	5.4	2.1	3.5
DK/NA	0.5	0.6	0.6	0	1.3	0.8	0.4	0.8	0.6
Total	100	100	100	100	100	100	100	100	100
Number of elderly	292	398	690	275	400	675	567	798	1,365

On the other hand, the participation in religious activities was much higher with around 56 per cent of women and 71 per cent of men participating in religious programmes. The frequency of participation has also been found to be higher in the case of religious programmes (Table 4.3).

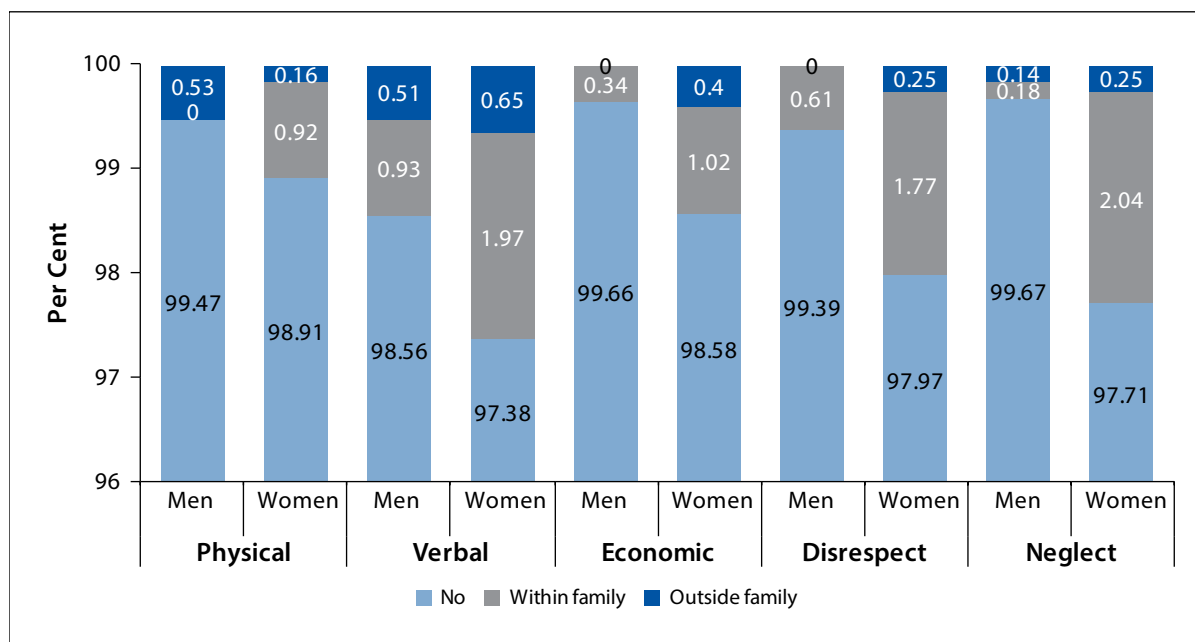
4.7 Elderly Abuse

Abuse of the elderly till recently remained a private matter, well hidden from public view. Today, it is increasingly being seen as an important problem that is likely to grow with rapidly ageing populations. Further, abuse among the elderly is considered a major violation of human rights. The survey asked questions to the elderly on the experience of various types of abuse both within and outside the family. The abuse has been classified into five categories – physical, verbal, economic, disrespect and neglect. Information on the experience of abuse since age 60 as well as during the one month preceding the survey was collected. Around 3 per cent of the elderly experienced any type of abuse after turning 60 years of age. This proportion is much lower than the seven state average of 11 per cent. The experience of abuse during the one month preceding the survey was around 1 per cent. More women than men reported abuse irrespective of the place of residence (Table 4.4). The experience of abuse during the previous one month was also higher among the urban elderly, the illiterate and those from the lowest wealth quintiles (Appendix Table A 4.6).

Table 4.4: Percentage of elderly by experience of abuse after turning 60 and in the month preceding the survey according to place of residence and sex, Kerala 2011

Experienced Abuse	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Yes, after age 60	1.6	3.5	2.7	3.4	4.1	3.8	2.2	3.7	3.1
Yes, last month	0.5	1.1	0.9	1.0	1.4	1.2	0.7	1.2	1.0
Number of elderly	291	396	687	275	391	666	566	787	1,353

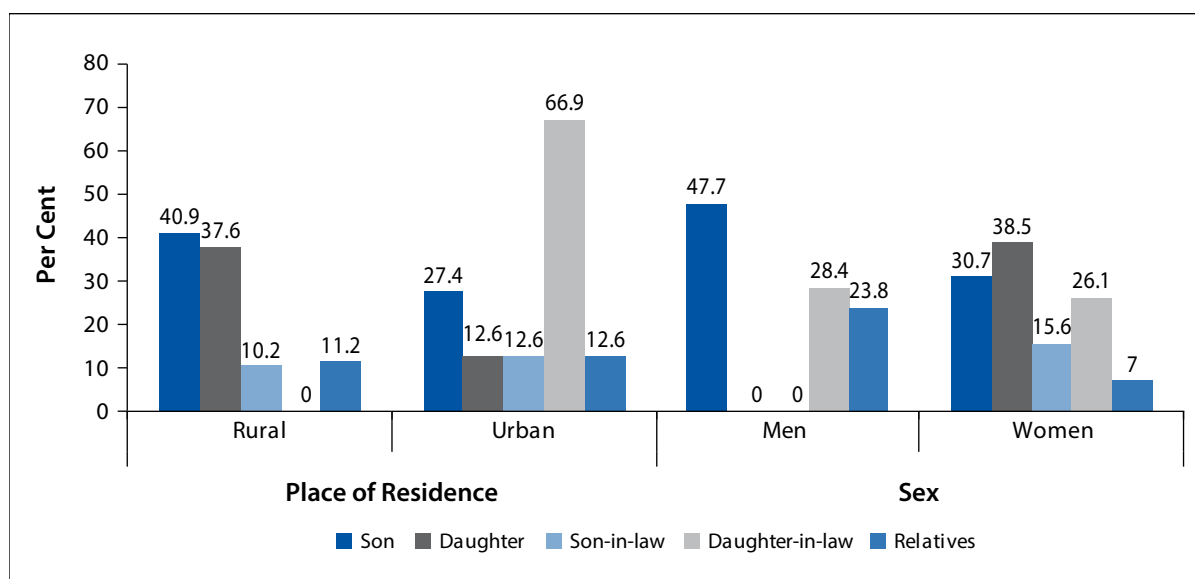
Figure 4.10: Forms and sources of abuse faced by the elderly after age 60, Kerala 2011



The most common form of abuse is verbal followed by disrespect. For women neglect was also one of the important forms of abuse. The extent of physical abuse was around 1 per cent for women and 0.5 per cent for men. Most of the abuse experienced is from within the family (Fig. 4.10).

The major perpetrators of violence among men are sons while for women it is daughters followed by sons. Daughters-in-law were also major perpetrators of violence among elderly men and women (Fig. 4.11).

Figure 4.11: Perpetrators of abuse or quarrels among elderly who reported any abuse in the month preceding the survey, Kerala 2011



5. Health and Subjective Well-being

The quality of life of the elderly depends greatly on their health status and functionality. As the health status is determined by a host of socio-economic and psychological factors, not only their physical health in terms of morbidity levels but also their mental health status, self-perceived health and disability levels are important parameters to determine their overall well-being. This section has two main sub-sections: self-rated health functionality and well-being and morbidity, and health care access and financing.

5.1 Self-Rated Health, Functionality and Well-being

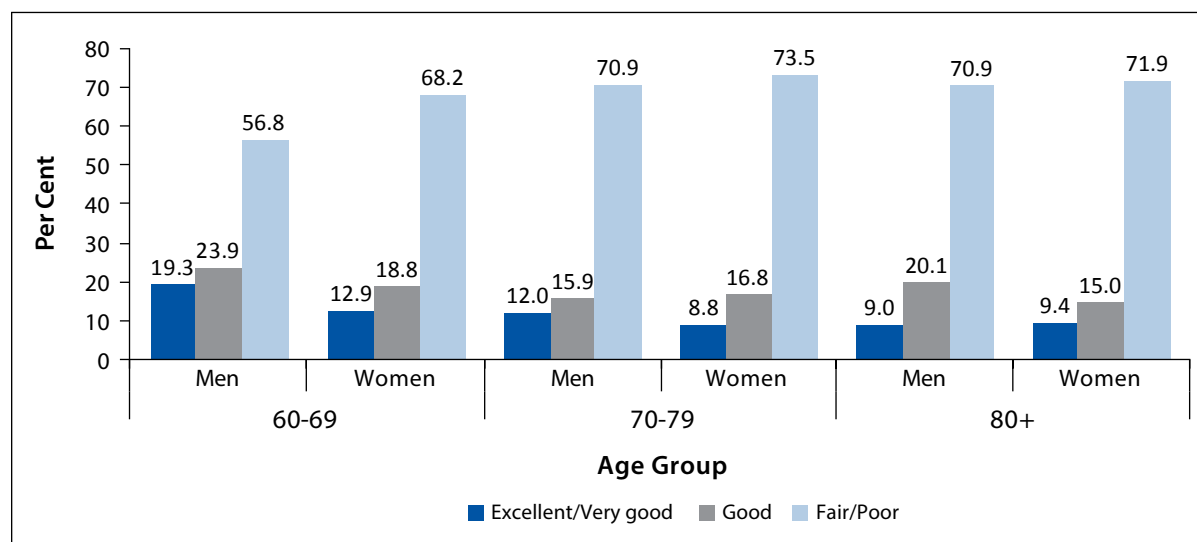
This sub-section discusses self-rated health, functionality, mental health and cognitive ability and risky health behaviour among the elderly.

5.1.1 Self-Rated Health

The self-rated current health status was assessed using a five point scale. The respondents were asked to rate their current health status as excellent, very good, good, fair and poor. In Kerala, overall, 13 per cent of the elderly rated their current health as excellent or very good. More elderly men than elderly women rated their health as excellent or very good while 33 per cent of rated their health as fair and 34 per cent rated their health as poor. The proportion of elderly who rated their current health as poor in the state is much higher than the national average of 18 per cent (Appendix Table A 5.1). Thus, the self-rated health status of the elderly in Kerala is relatively poor.

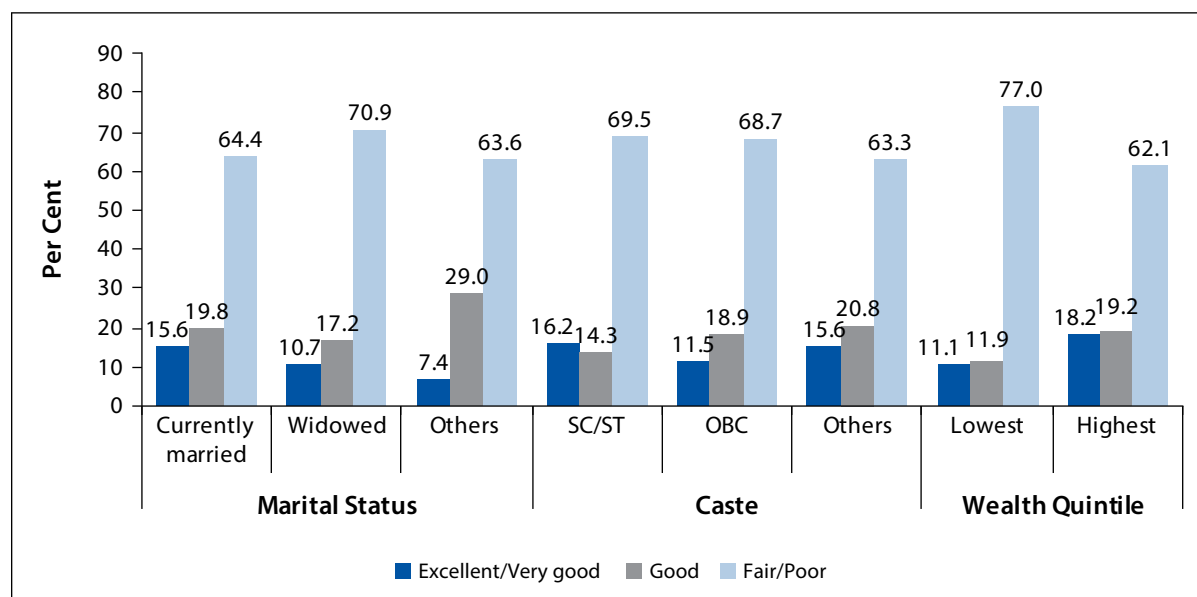
In general, self-rated health is better among elderly men than among elderly women. Self-rated health also worsens with age for both elderly men and women. Fifty seven per cent of the elderly men belonging to the age group of 60-69 years rated their health as poor while the corresponding figure for elderly men in the age group of 80 years and above was 71 per cent (Fig. 5.1).

Figure 5.1: Self-rated current health status by age and sex, Kerala 2011



Further, a higher proportion of widowed elderly, elderly belonging to SC/ST and OBC groups and the elderly from the lowest wealth quintiles rated their health as poor as compared to their counterparts (Fig. 5.2).

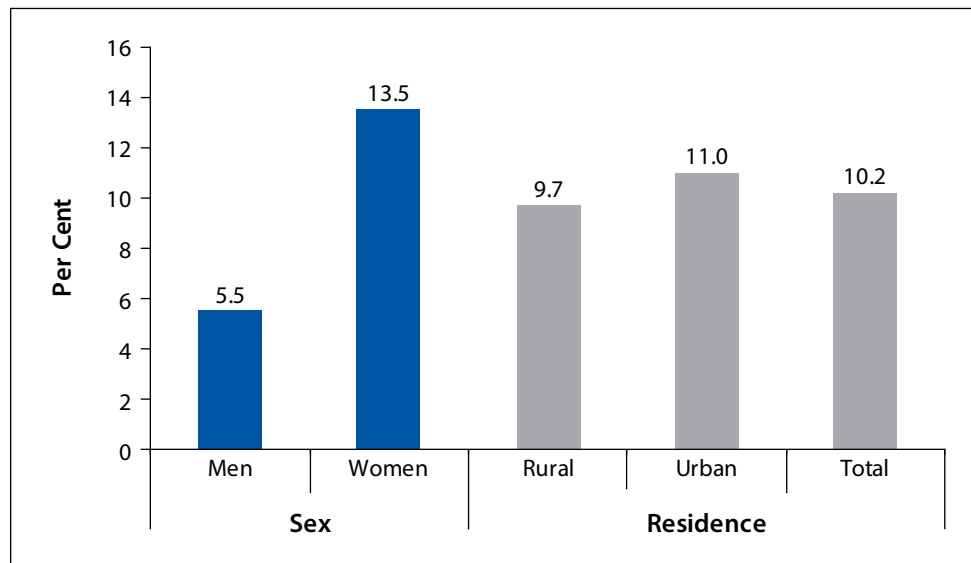
Figure 5.2: Self-rated health status by marital status, caste, and wealth quintile, Kerala 2011



5.1.2 Functionality

Functionality among the elderly indicates their ability to perform self-care, maintenance and physical activity and is measured by using two instruments namely Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Activities of Daily Living are basic tasks of everyday life such as feeding, bathing, dressing, and toilet use, mobility and continence. People who are unable to perform these activities need assistance. Instrumental Activities of Daily Living constitute

Figure 5.3: Elderly needing full/partial assistance for at least one ADL by sex and place of residence, Kerala 2011



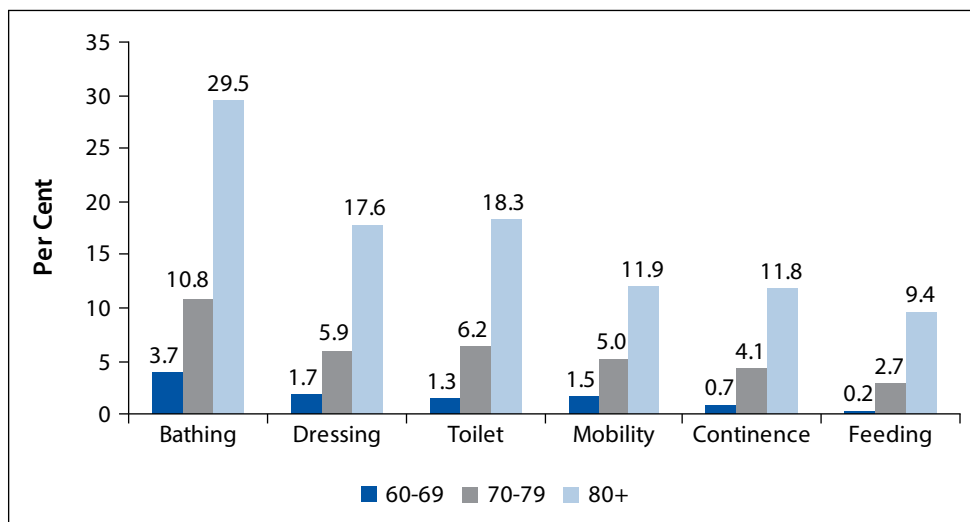
community activities or instrumental ADL, which determine the functional limitations or disability among the elderly.

The respondents were asked about their level of independence in carrying out six different types of ADL activities covering physical domains of functionality viz., feeding, bathing, dressing, using the toilet, mobility (i.e., getting in and out of bed or chair) and continence (controlling bladder and bowel movements). In Kerala, 10 per cent of the elderly need full or partial assistance in any of the ADL activities. This proportion is much higher than the national average of 7 per cent. With higher life expectancy in Kerala, it is quite possible that the proportion of elderly in the 80+ category may be much higher compared to the other states of India. As functional limitation increases with age, the proportion of elderly needing assistance would therefore be higher in Kerala. The proportion of elderly women needing full or partial assistance is nearly three times higher than that of elderly men (Fig. 5.3). The elderly needing full or partial assistance for ADL is marginally higher in urban areas than in rural areas.

Among ADLs, the highest percentage of elderly faces some difficulty in bathing. Dressing, toilet use and mobility are next in order of prominence. Invariably women perform more poorly than men in performing all the ADLs (Appendix Table A 5.3).

Functionality as measured by the ability to independently take care of activities of personal care declines with age with 30 per cent of the elderly in the age group 80 years and above requiring assistance for bathing and 18 per cent each needing assistance in dressing and toilet use. This indicates that age is a significant predictor in performing daily activities (Fig. 5.4).

Figure 5.4: Elderly needing full/partial assistance by ADL domains according to age groups, Kerala 2011



The IADLs involve a more complex set of functioning abilities including the ability to use the telephone, go shopping, prepare meals, do housekeeping, do laundry, travel, take responsibility for one’s own medication and ability to handle finances. In Kerala, IADL limitations are highest for doing shopping (45%) and preparation of meals (45%). However, compared to the seven states average, IADL limitations are lower for the elderly in Kerala. More than one third of the elderly could perform all the activities in Kerala whereas the seven states average is only 12 per cent. However, 5 per cent of the elderly could not perform any of the activities. Considerable variations in IADL activities can also be observed across age, sex and place of residence. IADL limitations increase with age; it is more among elderly women and also among rural residents (Fig. 5.5).

Functional ability among the elderly can also be affected by their disability status. Therefore, information on disability with respect to vision, speech, hearing, walking, chewing and memory

Figure 5.5: Elderly who cannot perform any IADL according to age, sex and place of residence, Kerala 2011

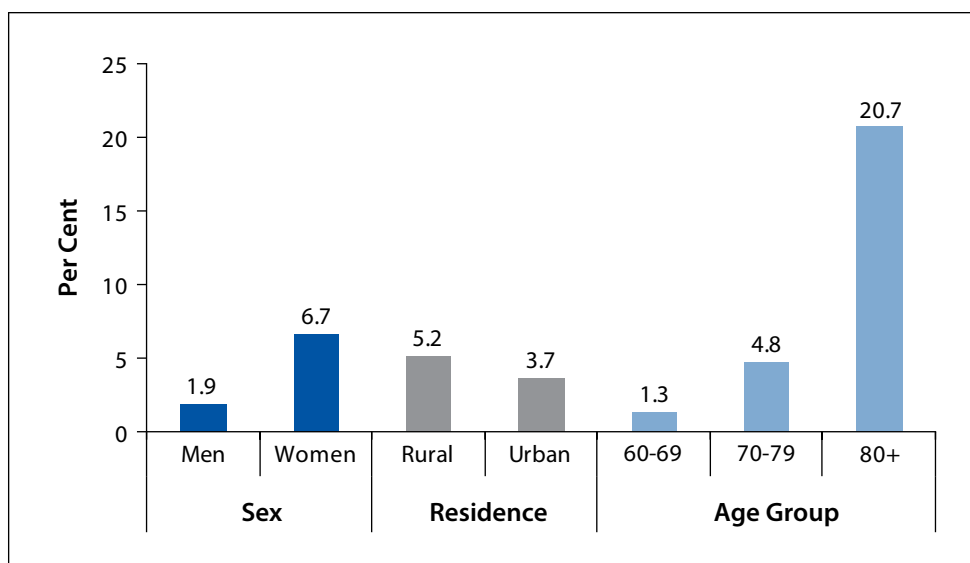
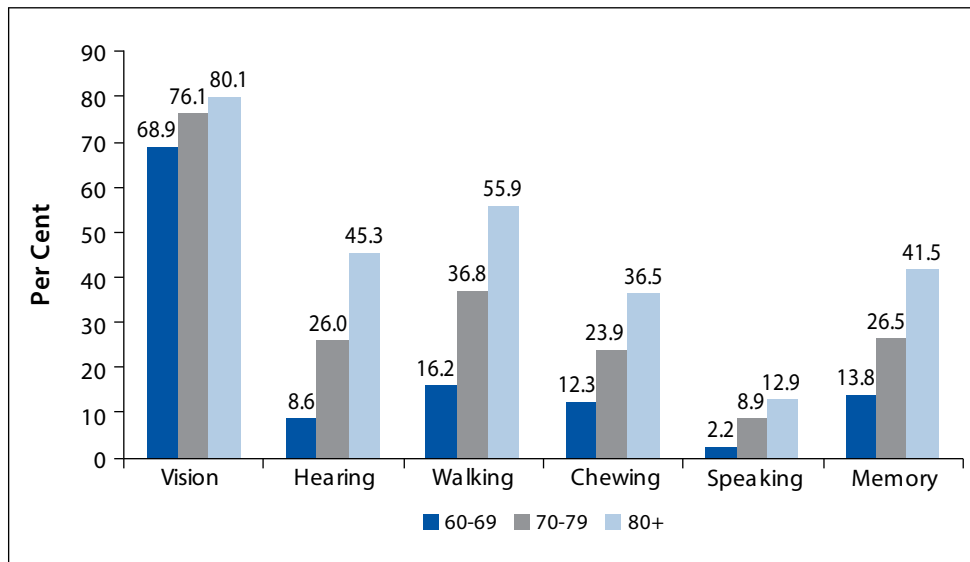


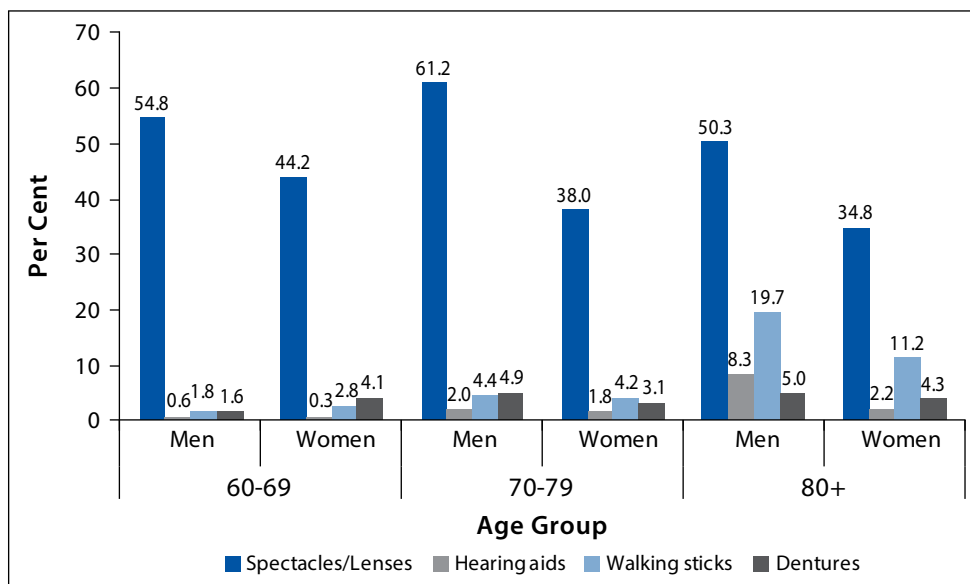
Figure 5.6: Elderly by type of disability if any and age, Kerala 2011



was also collected during the survey. The prevalence of disability (full or partial) in Kerala varies from 72 per cent for vision to 5 per cent for speech. The proportion of elderly having various disabilities is higher in Kerala than the seven states average. Most disabilities, except vision, seem to be higher among women than among men (Appendix Table A 5.7). Disabilities appear to be a function of age as all the disabilities seem to increase with age (Fig. 5.6).

The ill effects of disabilities can be minimized by using appropriate aids. Spectacles are the most widely used aid in Kerala with nearly 48 per cent of the elderly using spectacles. The 52 per cent of the elderly with visual disabilities who are not using spectacles is an indication of the unmet need for the aids. Less than 5 per cent of the elderly in Kerala uses other types of aids such hearing aids, walking sticks and dentures and the proportion of elderly men using aids is higher than their female counterparts (Fig. 5.7). Significant rural-urban variations have not been observed in the use of aids (Appendix Table A 5.8).

Figure 5.7: Elderly using disability aids according to sex and age, Kerala 2011



5.1.3 Mental Health and Cognitive Ability

The mental health of the elderly is measured using two instruments – the General Health Questionnaire (GHQ) 12 and the Subjective Well-being Inventory (SUBI) with nine questions which assess the subjective well-being of the elderly. The GHQ serves as an instrument for screening psychological distress. The scale asks whether the respondent has experienced a particular symptom or behaviour recently. Each item is rated on a four-point scale and the score ranges between 0-36. Higher scores indicate greater psychological distress. (The details of these instruments can be seen in the report *Status of Elderly in Selected States of India, 2011*).

The SUBI is designed to measure “feeling of well-being or ill-being as experienced by an individual or a group of individuals in various day to day life concerns”. It involves the evaluation of one’s life in terms of overall life satisfaction as well as one’s experience of pleasant and unpleasant emotions. The SUBI score ranges between 9 and 27. The lower the score, the better the mental health status.

Table 5.1 shows that in Kerala around 39 per cent of the elderly are above the threshold level in GHQ indicating a certain level of mental distress among them requiring further investigation into their mental health status. The proportion of elderly above the threshold level in Kerala is much lower than the seven state average of 48 per cent indicating better mental health status among the elderly in Kerala.

Elderly women and the rural elderly seem to have higher levels of psychological distress. Clearly age is a function of mental health status in Kerala. As age increases, the mental health status of the elderly appears to decrease. Almost 33 per cent of the elderly belonging to the age group 60-69 years suffer from certain levels of psychological distress whereas this proportion is 57 per cent for elderly

Table 5.1 : Percentage of elderly classified based on GHQ-12 and SUBI according to age, sex and place of residence, Kerala 2011

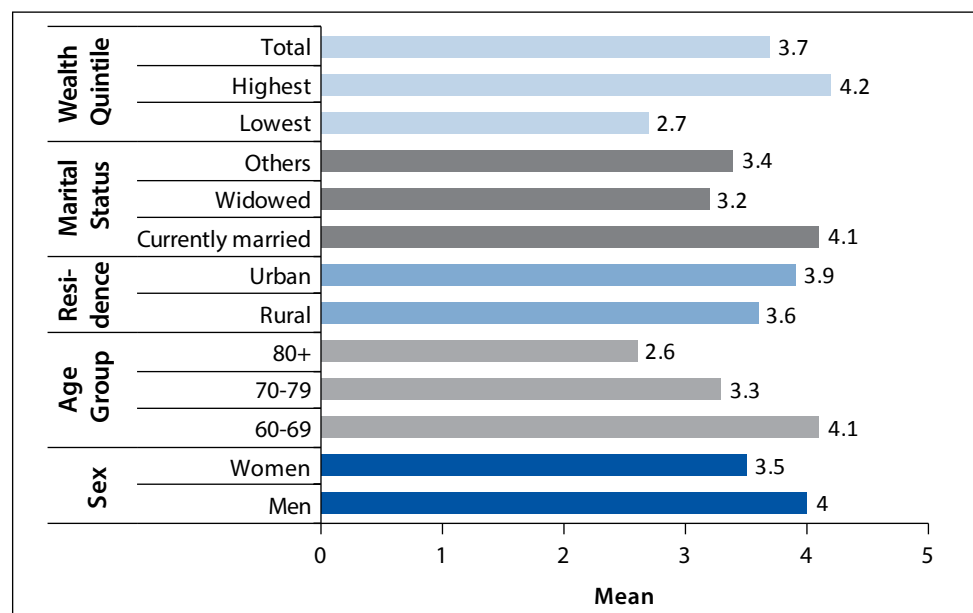
Background Characteristics	GHQ Score above Threshold Level (>12)	SUBI (All Negative)
Sex		
Men	28.3	0.9
Women	47.1	4.0
Place of Residence		
Rural	41.4	3.1
Urban	34.3	1.9
Age		
60-69	33.1	1.6
70-79	44.2	3.3
80+	57.3	6.7
Marital Status		
Currently married	31.1	1.4
Widowed	50.5	4.1
Others	44.4	7.4
Wealth Quintile		
Lowest	62.3	4.2
Highest	22.2	2.9
Total	39.2	2.7

who are above 80 years of age. Similarly, the widowed elderly seem to have greater psychological distress as compared to those who are currently married. Glaring differences in mental health status are also seen across wealth quintiles. The wealthier the elderly the better is the mental health status. Only 22 per cent of the elderly belonging to the lowest wealth quintile are above the threshold level of GHQ compared to 62 per cent of the elderly belonging to the richest quintile.

Table 5.1 also presents the percentage of elderly providing negative answers to all the nine questions of SUBI on various aspects of life satisfaction. This indicates serious mental health problems. Around 3 per cent of the elderly reported negatively to all the nine questions and it is relatively very high among women. Moreover, as age advances, life satisfaction also declines substantially. This is also true with reference to the poor and widows.

Cognitive ability can determine the productivity levels among the elderly and changes in cognitive abilities are expected with the ageing process. There are various measures to assess cognitive abilities among people. In this survey, the immediate recall method has been used. A list of ten commonly used words was read out to the respondents, allowing them to recall the words within two minutes. The data shows that in Kerala the mean number of words recalled by the elderly is 3.7 out of ten, slightly lower than the seven state average of 4.1. The number is slightly higher for men than women. Socio-economic background is found to be an important predictor of cognitive abilities. Although rural-urban differentials were not very marked in Kerala, differentials based on wealth quintiles indicate that cognitive abilities are much better among people belonging to the higher wealth quintiles. Similarly, cognitive abilities were poorer among widowed individuals compared to those who are currently married. Another important predictor is age; the cognitive abilities of the elderly who are above 80 years of age are considerably lower as compared to other younger groups (Fig. 5.8).

Figure 5.8: Mean number of words immediately recalled by the elderly according to sex, age, place of residence, marital status and wealth quintile, Kerala 2011

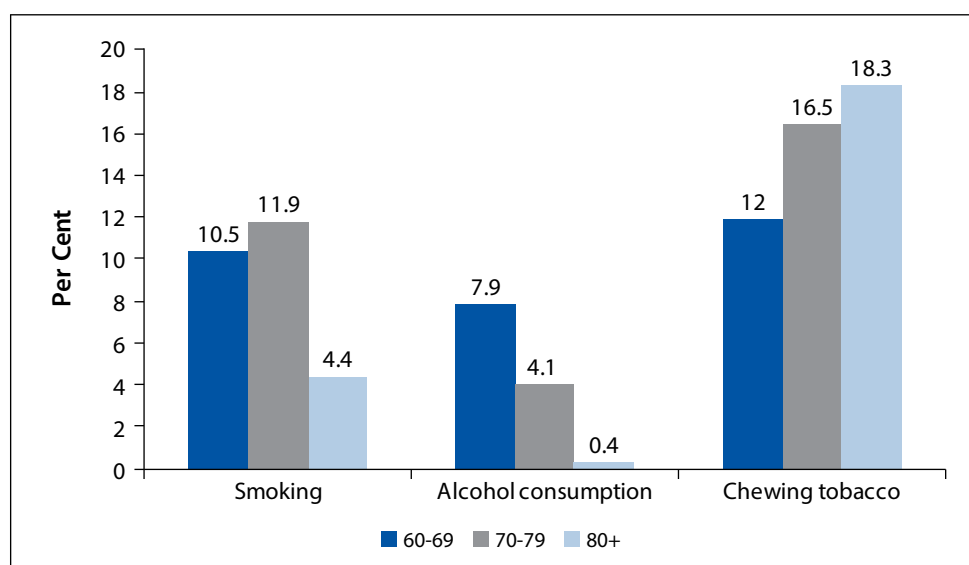


5.1.4 Risky Health Behaviours

The survey collected information on the use of any substance related to smoking, consumption of alcohol and chewing tobacco and these habits have found to have direct linkages with the health status. In Kerala, smoking and chewing tobacco were more common than alcohol consumption. Almost a quarter of the elderly smoked and also chewed tobacco while about 15 per cent consumed alcohol. However, the current use patterns show that all the three risk behaviours among the elderly have reduced. The current use of all the three risk behaviours was higher among men than women and also among rural elderly than urban elderly (Appendix Table A 5.12).

The age variations in smoking, drinking alcohol and chewing tobacco show that although alcohol consumption has clearly declined with increasing age, the tobacco consumption has increased. However, a much lower proportion of the elderly belonging to the category 80 years and above smokes as compared to those who in the age groups 60-69 years and 70 to 79 years (Fig. 5.9).

Figure 5.9: Current risky health habits among elderly by age group, Kerala 2011



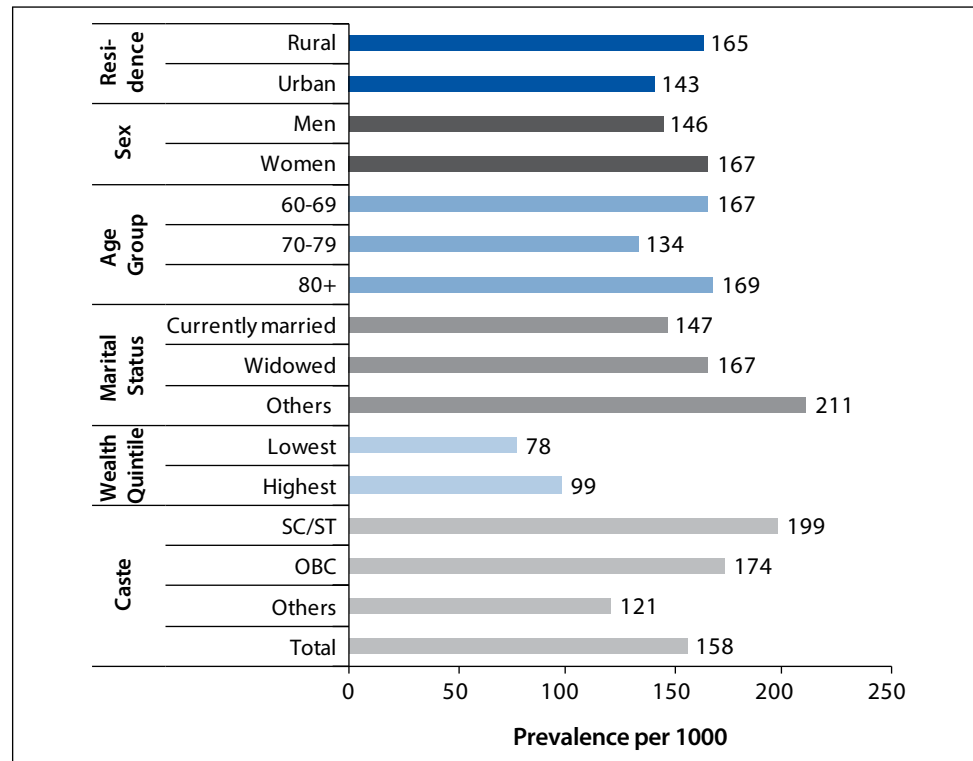
5.2 Morbidity, Health Care Access and Financing

The presence of acute and chronic morbidity or short and long standing illness is an important aspect of the health status of the elderly as morbidity increases with advancing age and both prevalence and incidence are likely to be high. Access to health care during illness therefore becomes a very important component which determines the well-being of the elderly. This section covers the prevalence of acute morbidity, chronic morbidity and access to health care and hospitalization.

5.2.1 Acute Morbidity

Acute morbidity is defined as any event of sickness or ill health reported during the 15 days prior to the survey. In Kerala, around 16 per cent of the elderly reported sick during the 15 days prior to

Figure 5.10: Prevalence rate of acute morbidity per 1000 elderly according to place of residence, sex, age, marital status, wealth quintile and caste, Kerala 2011

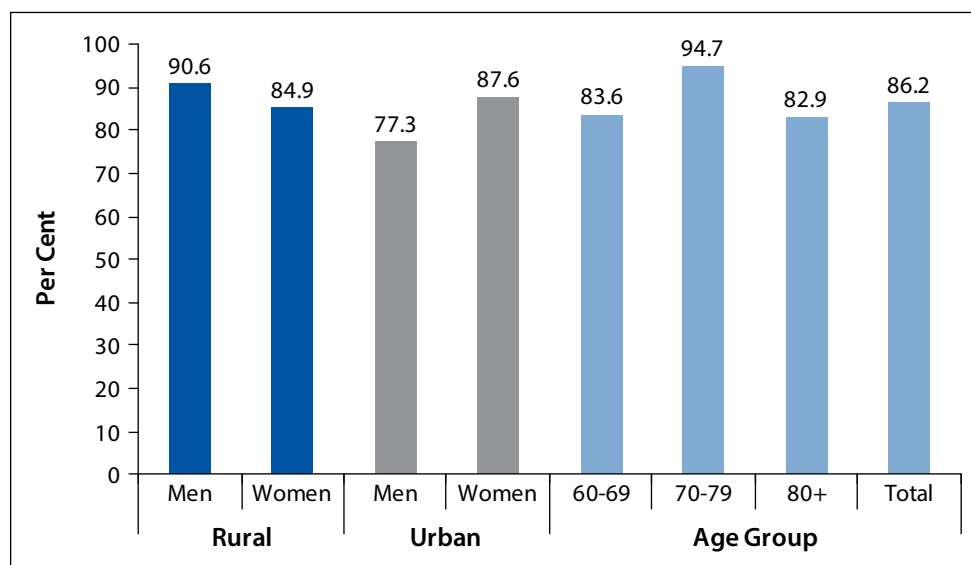


the survey. The morbidity prevalence rate in Kerala is found to be higher than the seven state average of 13 per cent (Appendix Table A 5.14). The morbidity prevalence rate across select background characteristics shows that a higher proportion of elderly women than elderly men reported sick during the 15 days prior to the survey with the prevalence rate for the rural elderly higher than for the urban elderly. The morbidity rate is also high among the elderly who are 80 years and above than for those who are below 80 years of age. High morbidity burden is seen among the widowed elderly and the elderly belonging to other marital categories (never married, separated and divorced) than those who are currently married. The prevalence rate is also high among SC/ST groups compared to all other caste groups. The relationship between morbidity prevalence rate and wealth quintiles shows a different picture compared to the situation of the seven states put together. In Kerala, the morbidity load is higher among those belonging to the highest wealth quintile whereas a higher morbidity load is observed among those belonging to the lowest wealth quintile in seven states (Fig. 5.10).

Fever (35.1%) is the most common illness reported by the elderly followed by respiratory disorders (12.5%) and asthma (12.3%). Other diseases such as disorders of the joints and pain, accidents and cardiovascular diseases were reported by less than 10 per cent of the elderly. Thus the morbidity load in Kerala consists more of non-communicable diseases than communicable diseases (Appendix Table A 5.16).

Overall, more than 86 per cent of the elderly received treatment for their acute morbidities. A higher proportion of elderly men received treatment in rural areas whereas in urban areas more women

Figure 5.11: Acute morbidity episodes for which treatment was sought according to place of residence and sex, age, Kerala 2011



received treatment. The age variations in treatment seeking behaviour show that the number of elderly who received treatment is lowest in the age group 80 years and above (Fig. 5.11).

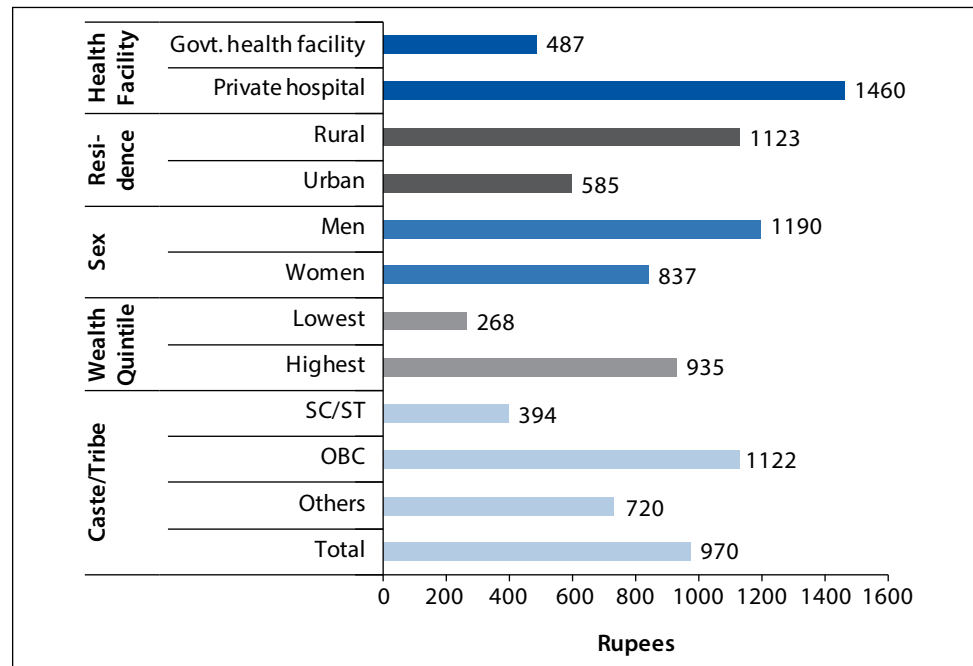
In Kerala, irrespective of the place of residence, the majority of the elderly preferred private health facilities for treatment (49%) than public health facilities (39%). Less than 10 per cent of the elderly preferred facilities such as AYUSH hospitals and clinics and other types of facilities such as non-governmental organizations and religious trusts (Appendix Table A 5.18).

On an average, the elderly had to spend 970 rupees for the treatment of acute morbidity. The average expenditure is considerably higher for those who sought treatment at private facilities (Rs. 1460) as compared to those who sought treatment at public facilities.

Of the total expenditure incurred, around half is for medicines. The money spent on medicines varies across facilities. The elderly who received treatment from public facilities spent 25 per cent of the total expenditure for medicines as against 51 per cent for those who received treatment from private facilities.

The overall treatment cost also varies across categories. In Kerala, the rural elderly spent almost double the amount for treatment as compared to the urban elderly. Similarly, the expenditure incurred by elderly men is also much higher than that by elderly women. The expenditure on treatment also increases across wealth quintiles. The elderly belonging to the lowest wealth quintile spent on an average 268 rupees whereas the elderly belonging to the richest quintile spent 935 rupees. The elderly belonging to SC/ST groups spent the least on treatment as compared to other caste groups (Fig. 5.12).

Figure 5.12: Average expenditure on treatment of last episode of acute morbidity by type of facility, sex, place of residence, wealth quintile and caste, Kerala 2011

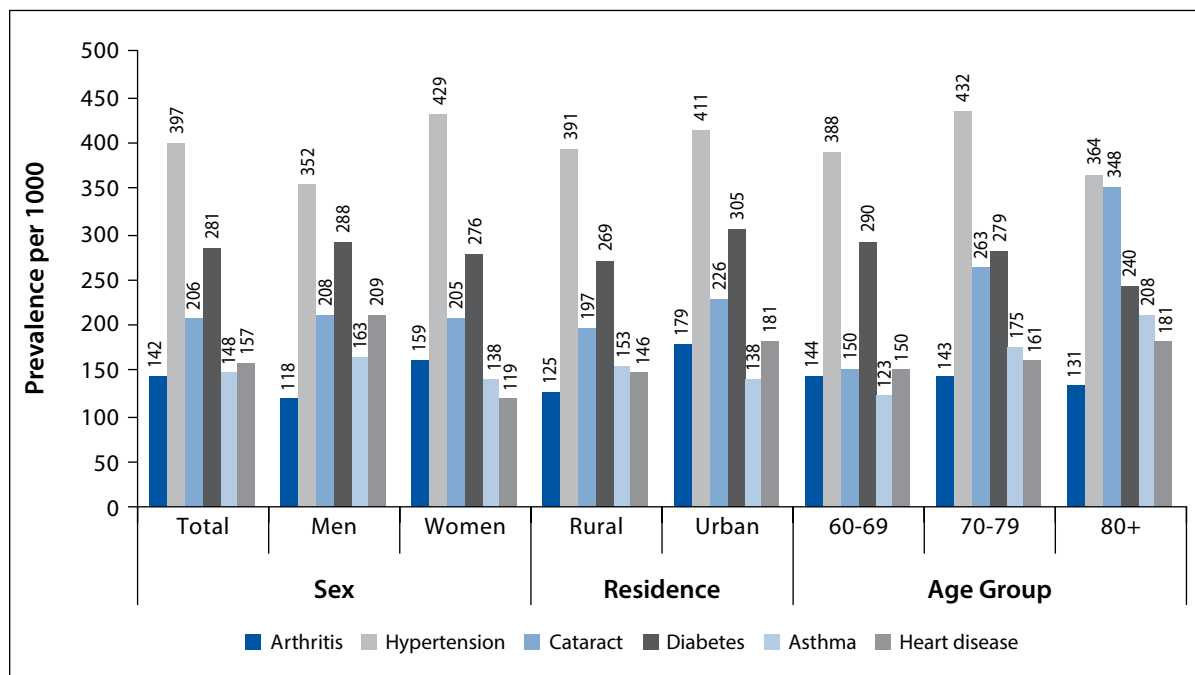


More than half of the elderly reported that the expenditure was taken care of by their children and 35 per cent spent from their own resources. The sources of expenditure varied for men and women. More than 60 per cent of the elderly women were supported by their children whereas for elderly men, expenses incurred were met mainly from their own resources (58%) [Appendix Table A 5.21].

5.2.2 Chronic Morbidity

Non-communicable diseases (NCDs) are being acknowledged as major contributors to the disease burden in India. With the increasing proportion of elderly in the population, the burden of chronic diseases has been rising in India. Chronic ailments are illnesses suffered over the long term and data on medically diagnosed chronic morbidities among the elderly was collected in the survey. In Kerala, hypertension was the most widely prevalent illness (397 out of 1000) followed by diabetes (281 out of 1000), cataract (206 out of 1000) and heart disease (158 out of 1000). The prevalence of hypertension was greater among women whereas cataract and heart disease was more among men (Fig. 5.13). Prevalence of all the illnesses, except asthma, was greater in urban areas than in rural areas (Appendix Table A 5.22). Age is also a predicting factor for chronic illnesses as the proportion of elderly with any one disease increases with age. The prevalence of cataract, asthma and heart disease is positively correlated with age whereas diabetes is negatively correlated with age (Appendix Table A 5.23).

Figure 5.13: Prevalence of six common chronic ailments by sex, age and place of residence, Kerala 2011



A majority of the elderly sought treatment for common chronic morbidities except for cataract. Well above 70 per cent of the elderly received treatment for arthritis, hypertension, diabetes, asthma and heart disease as against 34 per cent in the case of cataract. Private hospitals are the predominant source of treatment for almost all chronic ailments (Fig. 5.14).

The major reason for not taking treatment for chronic ailments is that the ailment has improved. In the case of heart disease, one fourth of the elderly reported that financial constraints are the major reason for not taking treatment. A substantial proportion also mentioned that their ailment was not considered serious and therefore they had not taken treatment.

Figure 5.14: Elderly by source of treatment of common chronic morbidities, Kerala 2011

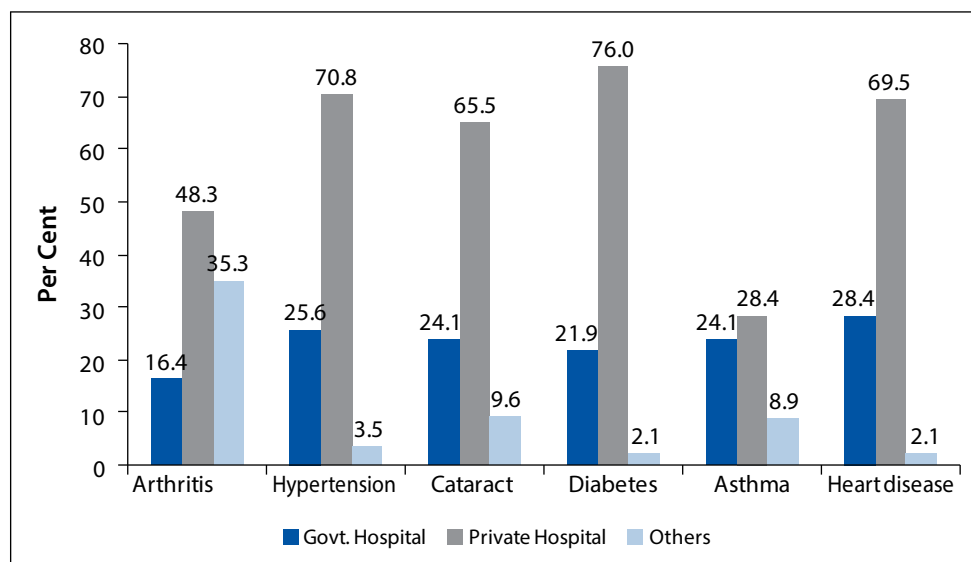
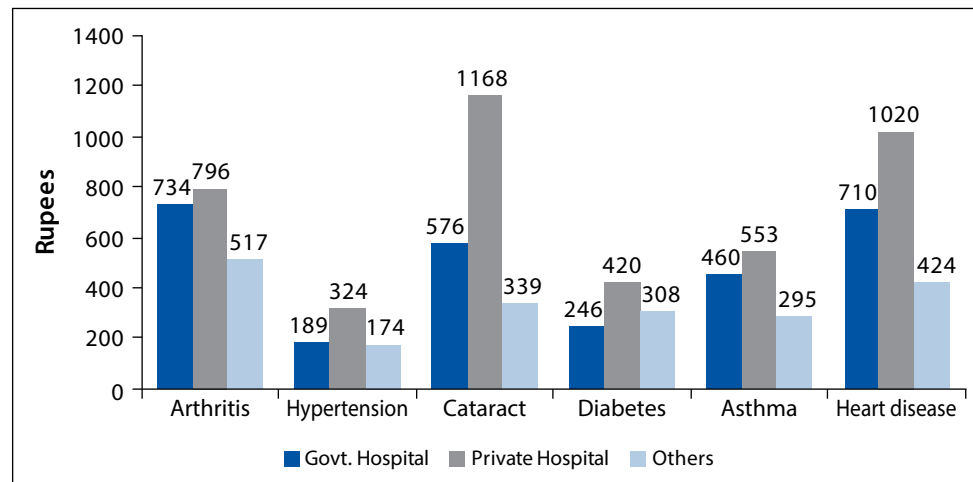


Figure 5.15: Monthly expenditure on treatment of common chronic morbidities by source of treatment, Kerala 2011



The monthly expenditure on treatment for chronic diseases shows that the expenditure for treatment of cataract was the highest followed by heart disease. Further, expenses on treatment are higher for those who sought treatment from private facilities for almost all diseases (Fig. 5.15).

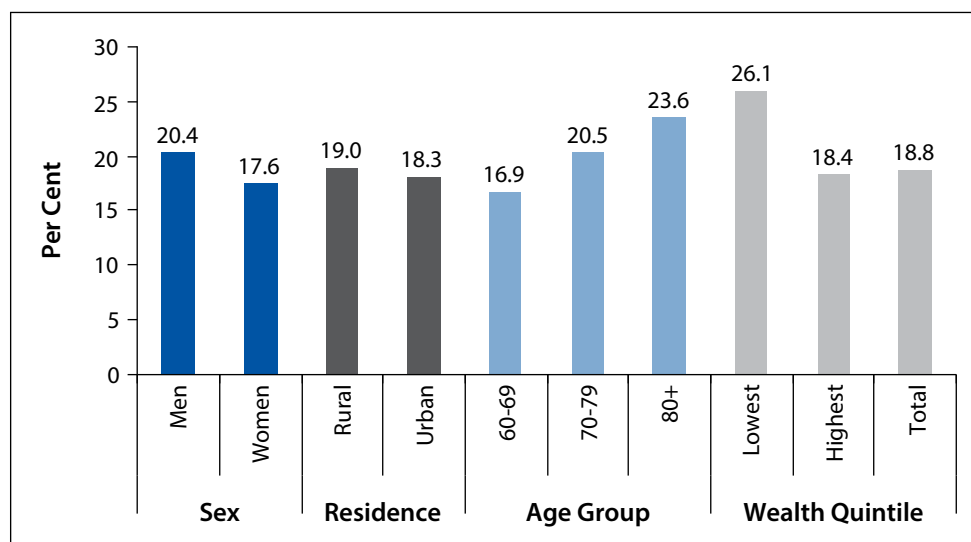
Similar to acute ailments, the source of payment for men and women differs for chronic ailments also. In the case of elderly men, self-financing is the predominant source for all the common ailments whereas children are the major source of financing for elderly women (Appendix Table A 5.26)

5.2.3 Hospitalization

The hospitalization rate provides an indirect approximation of the burden of more severe forms of illnesses suffered by the elderly. The hospitalization rate during the 365 days prior to the date of the survey shows that around 19 per cent of the elderly members were hospitalized in Kerala much higher than the seven state average of 10 per cent. Higher morbidity levels among the elderly in Kerala might explain the higher rate of hospitalization. Hospitalization levels also vary according to the background characteristics of the elderly. A higher proportion of elderly men (20.4%) reported being hospitalized than elderly women (17.6%). Hospitalization levels did not vary by place of residence. Age appears to be a major predicting factor for hospitalization as the hospitalization rate increases consistently with increase in age. A much higher proportion of elderly belonging to the lowest wealth quintiles (26.1%) were hospitalized during the one year prior to the survey compared to the elderly belonging to the richest wealth quintiles (18.4%) [Fig. 5.16].

The reason for hospitalization has been analyzed by looking at the last episode for which the elderly required hospitalization. The major reason for hospitalization of the elderly in Kerala is non-communicable diseases. One out of every five elderly persons was hospitalized due to cardiovascular problems. Asthma (16%) and accidents (12%) were the other important morbidities requiring hospitalization (Appendix Table A 5.27).

Figure 5.16: Elderly hospitalized in the one year preceding survey according to sex, place of residence, age and wealth quintile, Kerala 2011



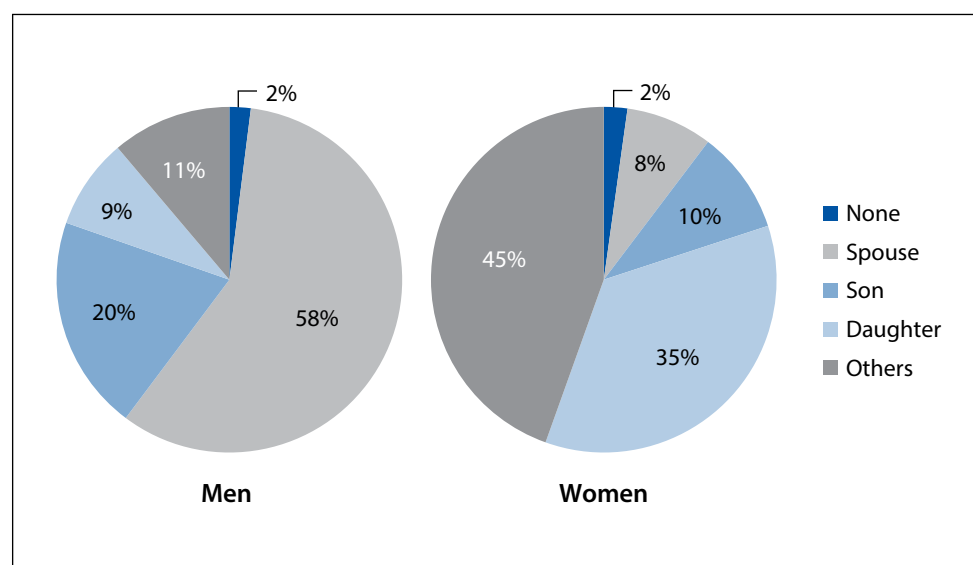
Gender differentials in the reasons for hospitalization show that for both men and women cardiovascular diseases emerged as the major reason for hospitalization. The proportion of men reporting asthma as a major reason for hospitalization is almost double than that of women. Disorders of the joints and pain, gastro-intestinal problems and diabetes were reported more by women than men. The reasons for hospitalization also vary across rural and urban areas. In rural areas, cardiovascular diseases, asthma and fevers were the three major reasons requiring hospitalization whereas accidents, cardiovascular diseases and disorders of the joints and pain were the major reasons for hospitalization in urban areas (Appendix Table A 5.27).

The preference for private hospitals was clearly visible with nearly 70 per cent of the elderly choosing private hospitals. Irrespective of gender and place of residence, the elderly preferred private hospitals for hospitalization. On an average, the elderly remained in the hospital for about 10 days (Appendix Table A 5.28).

In Kerala, the people accompanying the elderly during hospitalization differed for men and women. While the major care givers for men were their spouses (58%), for women the care givers were others (45%) or their daughters (36%). The role of sons in accompanying elderly parents during hospitalization appears to be minimal (Fig. 5.17).

The major part of the out-of-pocket health expenditure is for hospitalization. On an average, in Kerala, the cost of the last episode of hospitalization was Rs.14,647. Here again, the average expenditure was much higher for the elderly who utilized private facilities (Rs. 17,396 as compared to those who used government facilities (Rs.7,480). The major share goes for hospitalization charges, followed by medicines. Medicines account for a major share in hospitalization expenses in other facilities

Figure 5.17: Persons accompanying elderly during hospital stay (last episode) by sex, Kerala 2011



(NGOs, charitable and trust hospitals) and also in government facilities (Table 5.2 and Appendix Table A 5.29).

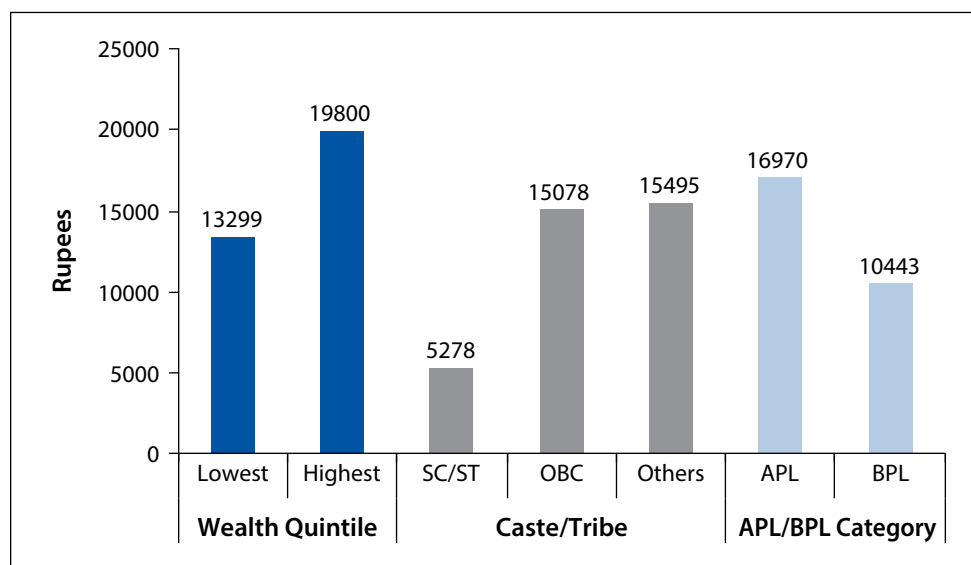
The expenditure on hospitalization also differs substantially, across the categories of socio-economic status. The wealthier households, APL households and households belonging to other caste groups spent more on hospitalization as compared to poorer households, BPL households and SC/ST households. However, it is to be noted that even the elderly belonging to vulnerable sections (from SC/ST and BPL households) are paying substantial amounts towards hospitalization (Fig. 5.18).

Table 5.2: Average expenditure on hospitalization by type of hospitals according to major heads, Kerala 2011

Major Heads	Govt. Hospitals	Private Hospitals	Others	Total
Total	7,480	17,396	16,588	14,647
Based on valid cases for which component wise details are available				
Consultation	14	392	319	286
Medicines	822	912	1,916	918
Diagnostic tests	172	951	639	728
Hospitalization	37	1,596	1,277	1,159
Transportation	317	295	479	307
Food	614	277	479	375
Others	64	124	0	104
Total	2,836	4,955	5,109	4,379
Others (indirect cost)	795	408	0	502

Note: Out of total 175 spells of hospitalization, expenditure was provided for only 142. For item wise expenses, there were only 62 valid cases, hence average expenditure has been worked out only for these valid cases.

Figure 5.18: Average expenditure (per year) on hospitalization by wealth quintile, caste and BPL/APL category, Kerala 2011



Although the persons accompanying the elderly during hospitalization were mostly spouses or other relatives, the payment was mainly made by the children, with more than 60 per cent of the elderly reporting that the hospitalization charges were borne by their children. Around 16 per cent of the elderly spent money from their own resources. A higher proportion of elderly women received support from their children than elderly men whereas self-payment was higher in the case of men.

6. Social Security

6.1 Introduction

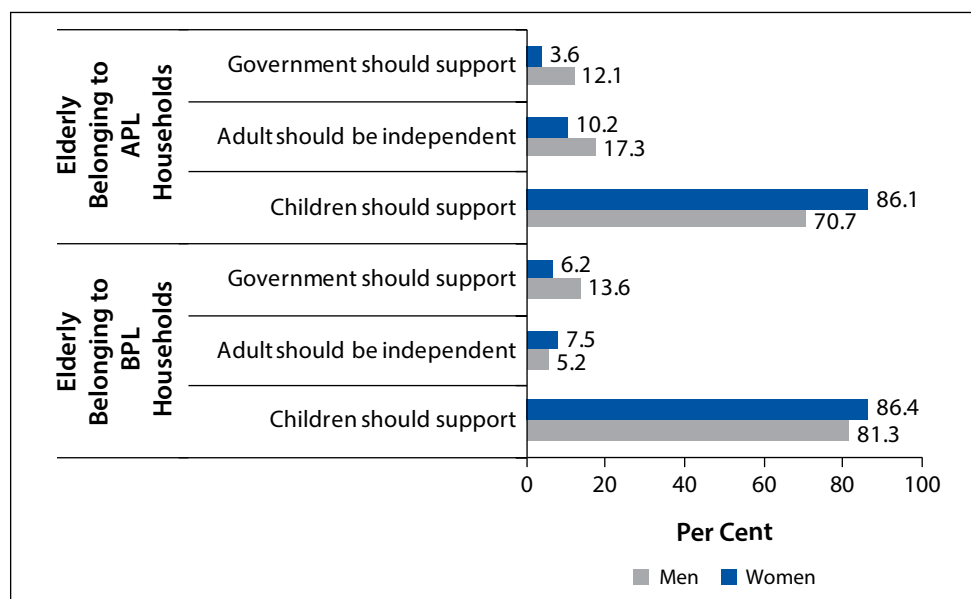
The State of Kerala with the highest proportion of elderly persons in the country has recognized the challenge of taking care of various needs of the older persons such as their social, economic, health, living arrangements and security. With decreasing household size, increasing nuclearization of families and large scale migration of the adult population, the traditional family care system is likely to dwindle in the state. Coupled with increasing longevity, the major challenge for the state is to provide social security for the growing elderly population. With this in view, the Government of Kerala has formulated the State Old Age Policy and amended the Kerala Maintenance and Welfare of Parents and Senior Citizens Act of 2007.

The thrust of the Kerala State Old Age Policy, 2013 is the well-being of senior citizens in the state. The document lays stress on the welfare of the vulnerable groups – widows, women in rural areas, those without family support, childless, disabled and those with chronic illnesses. The policy states that special care homes for those with chronic degenerative illnesses such as dementia or movement disorders are needed for the future. A basic criterion will be fixed that is to be fulfilled by all old age care homes. A palliative care network for giving home care to house-bound, bedridden elderly will be set up with the help of NGOs. The Government of Kerala has taken steps for the implementation of the Act by coordinating with various departments.

The central government's Maintenance and Welfare of Parents and Senior Citizens Act, 2007 was implemented in Kerala in August 2009. According to the amendment of the Kerala Maintenance and Welfare of Parents and Senior Citizens Act of 2009 heirs are legally bound to take care of their aged parents. Specific instructions have been given to old age homes not to take senior citizens who have relatives. To implement the provisions of the Act, the Commissioners of Police/Superintendents of Police are entitled to take necessary steps to protect the life and property of senior citizens. Each police station has to maintain a Register of Senior Citizens, promptly attend to complaints or problems of senior citizens, keep a record of the offences committed against senior citizens and send monthly reports to the authorities concerned. Efforts are being made to implement the Act in the state.

If the conditions laid down in the Kerala State Old Age Policy and the amended Kerala Maintenance and Welfare of Parents and Senior Citizens Act are implemented strictly, the state can ensure the welfare of its senior citizens. Although the government is making efforts to ensure support for the

Figure 6.1: Elderly by preferred support system in old age according to sex, APL and BPL households, Kerala 2011



elderly, it is essential to assess the perceptions of the elderly regarding who should care for them during their old age. The responses to the question on the elderly person's preferred support system during old age confirms the fact that the elderly still rely on children to support them. Irrespective of gender or economic status, more than 70 per cent of the elderly preferred that their children support them in their old age. A higher proportion of elderly belonging to APL households (17% men and 10% women) reported that adults should be independent as compared to the elderly belonging to BPL households (5% men and 7% woman). However, a higher proportion of elderly belonging to BPL households reported that the government should support them during old age as compared to the elderly belonging to APL households (Fig. 6.1).

The data on the preferred support system by the elderly in the state indicates a strong view on the dependence on children during old age.

6.2 Overview of the Social Security Schemes

The Social Justice Department, Government of Kerala, coordinates the social welfare measures that provide social security to the elderly population in the state and implements schemes sponsored by the central and state government. The Social Justice Department is the nodal agency which implements the Maintenance and Welfare of Parents and Senior Citizens Act, 2007 and the State Old Age Policy, 2013. The major social security schemes for the elderly are listed in Table 6.1. Some are exclusively for the elderly while in other schemes, the elderly also benefit.

Table 6.1: Major social security schemes for the elderly in Kerala

Name of the Scheme	Implementing Agency	Year of Implementation	Eligibility Criteria	Type of Scheme	State/Central Scheme
Schemes Exclusively for Elderly					
Vayomithram	Kerala Social Security Mission (KSSM)	2011	Senior citizens aged 65+ years	Health Care	State
Institutional services to aged people	Social Justice Department		Senior citizens aged 60+ years	Residential and Day Care Services	State
Janamaithri Suraksha Project	Kerala Police	2008	Senior citizens 60+ years	Physical Security	State
Kerala Agriculture Workers Welfare Pension	Kerala Agricultural Workers Welfare Fund Board	1990	Agricultural labourers aged 60 years and a member of Kerala Agricultural Workers Welfare Fund Board not receiving any other pension	Income Security	State
Travel concession	KSRTC		Senior citizens aged 60+ years	Physical Security	State
Kerala Unorganized Retired Workers Pension	Labour Department	1986	Workers in the unorganized sector who attained the age of 60 as on the date of implementation of the scheme and those workers covered under the definition of workers in the artisans skilled workers welfare scheme 1991	Income Security	Welfare Fund Board (State)
Kerala Handloom Workers Welfare Pension	Kerala Handloom Workers Welfare Fund Board	1989	Workers aged 58+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Toddy Workers Welfare Pension	Kerala Toddy Workers Welfare Fund Board	1969	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Bamboo, Kattuvally and Pandanus Leaf Workers Welfare Pension	Kerala Bamboo, Kattuvally and Pandanus Leaf Workers Welfare Fund Board	1998	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Cashew Workers Relief and Welfare Pension	Kerala Cashew Workers Relief and Welfare Fund Board	1988	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Tailoring Workers Welfare Pension	Kerala Tailoring Workers Welfare Fund Board	1995	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)

Name of the Scheme	Implementing Agency	Year of Implementation	Eligibility Criteria	Type of Scheme	State/ Central Scheme
Kerala Beedi and Cigar Workers Welfare Pension	Kerala Beedi and Cigar Workers Welfare Fund Board	1996	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Coir Workers Welfare Pension	Kerala Coir Workers Welfare Fund Board	1989	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Abkari Workers Welfare Pension	Kerala Abkari Workers Welfare Fund Board	1990	Senior citizens aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Headload Workers Welfare Pension	Kerala Headload Workers Welfare Fund Board	1981	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Kerala Building & Other Construction Workers' Welfare Pension	Kerala Building & Other Construction Workers' Welfare Board	1995	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State) and Central
Kerala Motor Transport Workers Welfare Fund Pension	Kerala Motor Transport Workers Welfare Fund Board	1986	Workers aged 60+ years and who are members of the Board	Income Security	Welfare Fund Board (State)
Integrated Programme for Older Persons (IPOP)	Central Social Welfare Board	1992	Senior citizens aged 65+ years	Residential and Day Care Services	Central with State share
Pension to World War II veterans	Department of Sainik Welfare		World War II veterans	Income Security.	Central and State
Grant to old age homes providing shelter to aged Ex-Servicemen/ widows	Department of Sainik Welfare		Old age homes that provide shelter to aged ex-servicemen/widows aged 65+ years	Income Security. Residential Services	Central and State
Indira Gandhi National Old Age Pension Scheme	Ministry of Rural Development	1995	BPL persons aged 60 years or above	Income Security	Central
Annapurna Scheme	Civil Supplies Department	2000	Senior Citizens who are not covered under the National Old Age Pension Scheme	Food Security	Central
National Programme for the Health Care of the Elderly (NPHCE)	Ministry of Health and Family Welfare	2010	Senior citizens aged 60+ years	Health Security	Central
Travel concession	Railways		Male senior citizens aged 60+ years and female senior citizens aged 58+ years	Physical Security	Central

Contd...

Name of the Scheme	Implementing Agency	Year of Implementation	Eligibility Criteria	Type of Scheme	State/Central Scheme
Travel concession	Civil Aviation		Male senior citizens aged 65+ years and female senior citizens aged 63+ years	Physical Security	Central
Income tax rebate	Finance Ministry		Senior citizens aged 60+ years	Income security	Central
Schemes in which the Elderly also Benefit					
Aswasakiranam	Kerala Social Security Mission	2011	Physically and mentally challenged bedridden patients	Income Security	State
Snehapoorvam	Kerala Social Security Mission	2012	Grandparents caring for children who have lost one or both parents and are living under their care	Income Security	State
Pension for unmarried women above 50 years	Ministry of Rural Development	2001	Unmarried women above 50 years receiving no other pension	Income Security	State
Indira Gandhi National Disability Pension Scheme	Ministry of Rural Development	2009	Disabled destitute persons, receiving no other pension	Income Security	Central with State share
Indira Gandhi National Widow Pension Scheme	Ministry of Rural Development	2009	Destitute widows/divorced receiving no other pension	Income Security	Central with State share
Mahatma Gandhi National Rural Employment Guarantee Scheme	Ministry of Rural Development	2005	BPL Households	Health Security Income Security	Central
Rashtriya Swasthya Bhima Yojana and Comprehensive Health Insurance Scheme	Ministry of Labour	2008	BPL Households	Health Security Income Security	Central

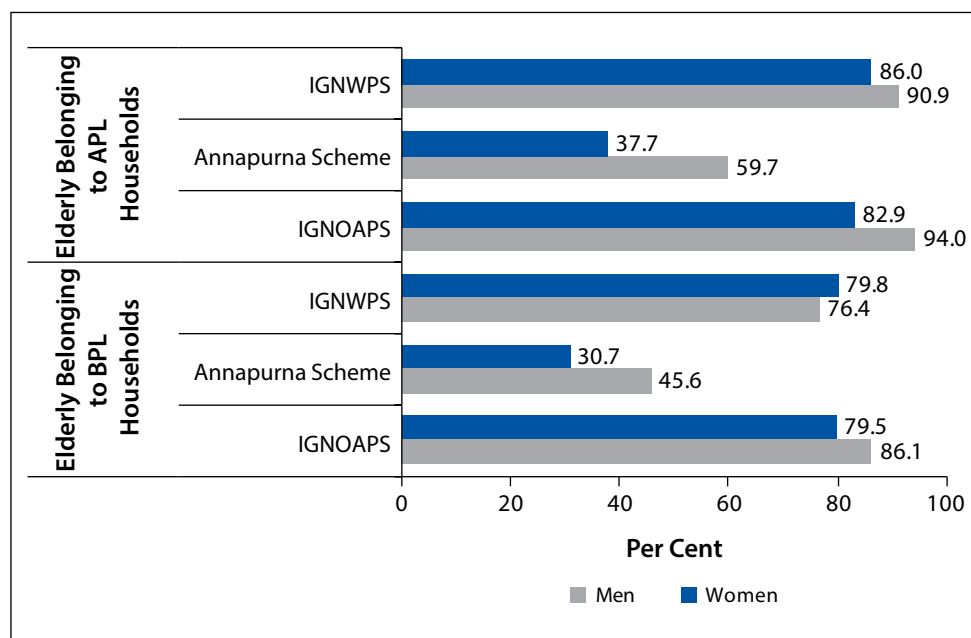
Source: Compiled from Various Reports of Government of Kerala.

6.3 Awareness of Major Social Security Schemes

The survey included questions to determine the extent of awareness and utilization of the following three national social security schemes: Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Indira Gandhi National Widow Pension Scheme (IGNWPS) and Annapurna Scheme. In addition, questions were asked regarding the awareness and utilization of special government facilities/schemes for the elderly and health insurance schemes.

In Kerala, overall, awareness about IGNOAPS (86%) and IGNWPS schemes (85%) was much higher than awareness about the Annapurna Scheme (44%). Awareness levels for each of the schemes were also higher in Kerala compared to the seven state average. Overall, awareness levels were higher for men than that for women. Awareness in general was higher for the elderly belonging to APL households than those from BPL households (Fig. 6.2).

Figure 6.2: Elderly aware of national social security schemes according to sex, BPL and non-BPL households, Kerala 2011



6.4 Coverage and Financing of Major Social Security Schemes

The coverage or utilization of national social security schemes in the state is poor in spite of good levels of awareness. The coverage of elderly under major schemes for the welfare of the elderly, both central and state sponsored are presented in Table 6.2.

Table 6.2: Coverage of various social security schemes for elderly in Kerala in recent years

Schemes	Year	No. of Beneficiaries	Amount Per Beneficiary	Total Outlay Per Year (in Lakhs)	Total Expenditure Per Year (in Lakhs)
Elderly Schemes					
Vayomithram	2010-11	447	-	-	5.41
	2011-12	35127	-	-	103.0
	2012-13	85576	-	400	330
	2013-14	-	-	500	-
Institutional services to aged people	2013-14	770	-	150	-
Special programme for old age (state assistance)	2009-10	-	-	22.79	16.87
	2010-11	-	-	26.95	15.83
	2011-12	-	-	30.82	21.78
Agricultural Labour Pension	2009-10	396857 (2009)	250	116.3	106.5
	2010-11	519964 (2010)	250	199.2	186.4
	2011-12	537832 (2011)	300	274	264.9
	2012-13	531276 (2012)	400	267.5	265.1
	2013	505511 (2013)	500	-	-

Contd...

Schemes	Year	No. of Beneficiaries	Amount Per Beneficiary	Total Outlay Per Year (in Lakhs)	Total Expenditure Per Year (in Lakhs)
Kerala Agriculture Workers Welfare Pension	2012-13	2716	500	-	251.6
Kerala Unorganized Retired Workers Pension	2012-13		500	-	-
Kerala Handloom Worker's Welfare Pension	2012-13	9500	500	-	
Kerala Toddy Workers Welfare Pension	2012-13	3725	500	-	
Kerala Bamboo, Kattuvally and Pandanus Leaf Workers Welfare Pension	2012-13	3686	400	-	
Kerala Cashew Workers Relief and Welfare Pension	2012-13	57796	400	-	3472.6
Kerala Tailoring Workers Welfare Pension	2012-13	19537	400	-	
Kerala Beedi and Cigar Workers Welfare Pension	2012-13	3755	400	-	
Kerala Coir Workers Welfare Pension	Upto Aug 2013	45521	500	-	99.5 (April-Aug 2013)
Kerala Abkari Workers Welfare Pension	2012-13	293	400	-	3.31
Kerala Headload Workers Welfare Pension	2012-13	1963	400	-	
Kerala Building & Other Construction Workers' Welfare Pension	2012-13	150100	600	-	9139.8
Kerala Motor Transport Workers Welfare Fund Pension	2012-13	104	500	-	0.9
Elderly Care Programme (State Programme in 14 districts, State Assistance)	2011-12	-	-	50	48.5
	2012-13	-	-	250	187.5
	2013-14	-	-	200	-

Contd...

Schemes	Year	No. of Beneficiaries	Amount Per Beneficiary		Total Outlay Per Year (in Lakhs)	Total Expenditure Per Year (in Lakhs)	
IGNOAP (state share)	2009-10	142588 (2009)	60+	250	38.8	34.1	
	2010-11	194526 (2010)	60+	300	88.2	79.4	
	2011-12	252315 (2011)	60+	400	107.9	102.1	
	2012-13	378365 (2012)	80+	900	243.7	225.2	
	2013	353418 (2013)	<80	400	-	-	
			80+	1100	-	-	
		<80	500				
Annapurna Scheme	2012-13	257189	-	-	-	1117.31	
Pension to World War II veterans	2011-12		1000				
	2012-13		1000				
National Programme for the Health Care of the Elderly (Central Assistance in 5 districts)	2010-11	-	-	-	139.94	142.39	
	2011-12	-	-	-	268.82		
	2012-13	-	-	-	470.72		
Aswasakiranam	2010-11	386	525			43.84	
	2011-12	16048	525			805	
	2012-13	40468	525		1500	2329	
	2013-14	-	525		2000	-	
Snehapoorvam	2012-13	1507	300 to 1000			50	
	2013-14		300 to 1000		225	-	
Indira Gandhi National Disability Pension	2009-10	152970 (2009)	250		38.9	37.9	
	2010-11	210647 (2010)	300		86.9	81.5	
	2011-12	246491 (2011)	400		114.6	111.7	
	2012-13	276743 (2012)	Disability >80%	700		201.1	188.3
			Disability <80%	525			
	2013	280292 (2013)	Disability >80%	1000		-	-
Disability <80%			700				
Indira Gandhi National Widow Pension	2009-10	352555 (2009)	250		87.3	83.6	
	2010-11	552083 (2010)	300		237.8	226.5	
	2011-12	680141 (2011)	400		289.6	284	
	2012-13	806986 (2012)	525		548.3	535.5	
	2013	561276 (2013)	700		-	-	
Pension for unmarried women above 50 years	2009-10	33133 (2009)	250		8.8	8.2	
	2010-11	44407 (2010)	300		20.1	18.1	
	2011-12	50099 (2011)	400		23.4	22.7	
	2012-13	55854 (2012)	525		39.7	37.3	
	2013	57041 (2013)	700		-	-	
Grant to old age homes providing shelter to aged Ex-Servicemen/ widows	2011-12	11			-	0.6	

Schemes	Year	No. of Beneficiaries	Amount Per Beneficiary	Total Outlay Per Year (in Lakhs)	Total Expenditure Per Year (in Lakhs)
Pension to World War II veterans	2011-12	2326		-	169.9
Integrated Programme for Older Persons (Central Assistance)	2009-10	-	-	0	0
	2010-11	-	-	21.07	-
	2011-12	-	-	6.90	-
	2012-13	-	-	0	-
Mahatma Gandhi National Rural Employment Guarantee Scheme	Elderly (60+) Registered since Beginning	647348	-	-	-
	Elderly Employed 2012-13	269691	-	131117.8 (C) 2102.03 (S)	141660.20 (Total for all age groups)
	2013-14	210992	-	98710.93 (C) 1512.8 (S)	62006.12 (Total for all age groups as on Nov'13)
Rashtriya Swasthya Bhima Yojana and Comprehensive Health Insurance Scheme	2011-12 (No. of patients of all ages covered)	700033	-	1500 (RSBY) 2000 (CHIS) (as 25% state share)	24411
	Total families enrolled until 2013-14	2550025	-	-	-

Source: Compiled from Various Reports of Government of Kerala

The **Kerala Social Security Mission (KSSM)** was set up in October 2008 and is registered as a Charitable Society under the Government of Kerala with its headquarters at Thiruvananthapuram. The mission organizes social security programmes all over the state to extend service and support to the destitute, poor, aged, children, women, chronically ill cancer patients and other sections of population which deserve and demand care and protection. The three important programmes under the KSSM that benefit the elderly population in the state are *Vayomithram*, *Aswasakiranam* and *Snehapoorvam*.

The KSSM launched *Vayomithram* in 2011 to provide welfare services such as free medicine and health care through mobile clinics at the ward level, palliative home care, and help desk facilities to persons above 65 years. *Vayomithram* has emerged as a helpline for hundreds of elderly citizens for accessing medical care and palliative care services. At present there are 25 projects spanning five corporations and 20 municipalities and covering all the 14 districts in the state. Under the projects, palliative care is regularly provided to the elderly and destitute senior citizens are taken to the safety of care homes. The programme offers welfare services to over one lakh beneficiaries. As part of the

programmes, an initiative called '*Sallapam*' organized by KSSM provides entertainment to senior citizens by taking the inmates from the confinement of the four walls of old age homes to visit tourist destinations and cultural centres for their pleasure, giving them a chance to interact with the outside world.

Aswasakiranam is a project implemented through KSSM that provides financial support to the bedridden and mentally challenged patients. The beneficiaries include care givers of bed ridden patients, the mentally challenged, blind patients and bedridden patients who are suffering from cancer and old age diseases. The care giver gets Rs. 525 per month. At present, about 49,000 beneficiaries receive assistance in caring for the bedridden and mentally challenged persons. Among the beneficiaries, about 40 per cent are reported to be elderly persons.

Snehapoorvam, a new initiative, provides financial support to orphans or those who have lost one parent and are living with the support of their family. Aged grandparents who are often the care givers receive financial assistance for such children's education ranging from Rs. 300 per month (Class 1 to 5) to Rs. 1000 per month (graduate level). During 2012-13, about 1507 children received assistance incurring an expenditure of Rs. 50 lakhs.

Institutional Services to Aged People

There are 15 government sponsored old age homes in the state. The sanctioned strength varies from 25 to 100 inmates. As per the statistics provided by the Social Justice Department, by July 2013 about 770 inmates had been provided shelter in these homes with a few homes accommodating more than the sanctioned strength while most of the homes fall short of the sanctioned strength. Aged females outnumber males in these homes. Based on the statistics provided by the Orphanage Control Board in the state, 492 old age homes run by private agencies, NGOs or individuals have been registered as on 31 March 2013 under the Orphanage Control Board. In these old age homes spread all over the state in the 14 districts, approximately 13,000 elderly men and women have been provided shelter. The state government has taken the initiative of monitoring and scrutinizing these homes to ensure better facilities for the elderly, especially with the enactment of the Old Age Policy in the state.

Ministry of Labour and Employment

Department of Labour

Under the Labour Department there are 16 Welfare Boards in the state. The welfare schemes are implemented by these Boards and over 3 lakh beneficiaries receive retirement/family/disability pensions. The amount of pension, which is financed outside the state budget and disbursed by the respective Boards, varies from Rs. 400 to Rs. 1000 per month.

Among these Welfare Boards, the Kerala Building and Other Construction Workers Welfare Board receives central assistance. Members with at least one year of active membership and who have paid 12 instalments of contribution during the period are given pension on completion of 60 years. Presently there are 150,100 beneficiaries of this scheme in the state. The Board has established an old age home 'Snehasadanam' in Thiruvananthapuram District that provides shelter and care to the elderly destitute construction workers. At present there are 15 people in this home.

Kerala Agriculture Workers Welfare Pension

This is one of the major welfare schemes implemented by the Government of Kerala since 1980. Agricultural labourers who have attained the age of 60 years and worked as agricultural labourers and hold membership in the Kerala Agricultural Workers Welfare Fund Board can avail this pension. The amount of pension is Rs. 500 per month and about 5.6 lakh beneficiaries receive this pension at present. The maximum number of beneficiaries is from Palakkad District followed by Kozhikode (60,000 approx. beneficiaries), Thiruvananthapuram, Thrissur and Alappuzha Districts all with over 50,000 beneficiaries each.

Kerala Unorganized Retired Workers Pension Fund Scheme

The Kerala Unorganized Retired Workers Pension Fund Scheme was launched in the year 2008. This scheme is applicable to unorganized workers who have attained the age of 60 years as on the date of implementation of the scheme and those workers covered by the definition of workers under the Artisans, Skilled Workers Welfare Scheme, 1991. This scheme excludes those who receive a pension either from the government in the form of Welfare Pension or from a Statutory Board made for the welfare of workers. The amount of pension is Rs. 400 to 500 per month.

Schemes Funded by Central Government

Integrated Programme for Older Persons (IPOP)

Among the centrally sponsored schemes in the state the Integrated Programme for Older Persons envisages improvement in the quality of life of older persons. The scheme provides support for capacity building of government/non-governmental organizations/Panchayati Raj Institutions/local bodies and the community at large to set up or maintain old age homes, mobile medical units, day care centres etc. Up to 90 per cent of the cost of the project indicated in the scheme will be provided by the Government of India and the remainder is to be borne by the organization/institution concerned. At present the cost is shared equally by the state and central government.

Ministry of Rural Development

Indira Gandhi National Old Age Pension Scheme

This is a monthly pension scheme shared by both the state and centre for BPL persons aged 60 years or above. The revised amount of pension is Rs. 500 per month. For those aged 80 years and above the amount of pension is Rs. 900. This scheme is now handled by the local self government institutions such as the gram panchayats, municipalities and corporations who have been entrusted with the task of distributing the pension. Under the Information Kerala Mission, the Government of Kerala's e-governance programme, the Social Security Pension or *Sevana* is executed efficiently and transparently.

Indira Gandhi National Widow Pension Scheme

The Indira Gandhi National Widow Pension Scheme (IGNWPS) was launched in February 2009 under the National Social Assistance Programme (NSAP). The IGNWPS provides a pension of Rs. 700 per month including the central share of Rs. 300. At present the number of beneficiaries is 8.3 lakh women with the highest number of beneficiaries (almost one lakh beneficiaries each) in the Malappuram and Thiruvananthapuram Districts. The elderly benefit the most from this pension scheme.

Indira Gandhi National Disability Pension Scheme

The Indira Gandhi National Disability Pension Scheme (IGNDPS) was introduced under the National Social Assistance Programme by the Ministry of Rural Development in February 2009. The IGNDPS provides a pension of Rs. 700 per month including the central share of Rs. 300. It is disbursed through the local bodies and the present number of beneficiaries in the state is about 2.8 lakh. Malappuram District has about 35,000 beneficiaries followed by Thiruvananthapuram, Kollam and Kozhikode Districts. Idukki has the least number of beneficiaries (about 6,500).

Pension to Unmarried Women above 50 Years

This is a new pension scheme implemented by the state government. The elderly women in the state benefit from this scheme. At present the local bodies have been entrusted with the task of receiving the application processing it, and granting and disbursing the pension. The amount of pension is Rs. 700 per month and about 57, 000 women benefit from this scheme with the elderly claiming a major share.

Department of Civil Supplies

Annapurna Scheme

The Annapurna Scheme aims at providing food security to meet the requirements of senior citizens who are not covered under the National Old Age Pension Scheme. Food grains (10 kg per month) are provided free of cost. Under this scheme, the number of beneficiaries covered in 2012-13 in Kerala, was about 26 lakh.

Mahatma Gandhi National Rural Employment Guarantee Act

The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) aims at enhancing the livelihood security of people in rural areas by guaranteeing 100 days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work. The elderly population in the state benefit from this scheme. About 6.31 lakh people (both men and women) aged 60 years and above have registered for employment, of which about 1.75 lakh have been employed until September 2013. Of those employed, 24,000 are from Thiruvananthapuram District, 19,000 from Thrissur District and about 18,000 from Palakkad District. The least number of elderly employed under the MNREGA scheme is from Kasaragod District.

Ministry of Health and Family Welfare: Directorate of Health Services

The National Programme for the Health Care of the Elderly (NPHCE)

In Kerala, the National Programme for Health Care of the Elderly (NPHCE) has been implemented in five districts under the supervision of District Nodal Officers, NCD. At the state level, the state NCD Division of NRHM coordinates the activities of NPHCE. Setting up of District Geriatric Units in all the five districts has been completed and outpatient (OP) facilities are functional for the elderly population. Under NPHCE, 215,390 persons have benefited in the state. Training has been given to doctors and staff nurses appointed under NPHCE. Separate special geriatric OPDs are functioning in all the CHCs and PHCs (two days in a week) and the NCD contractual doctors from the district are deputed to the OPDs. Free treatment and medicines are provided at the PHCs, CHCs and District Hospitals in Kerala. The Government General Hospital, Thiruvananthapuram has a geriatric ward with 14 beds. Free treatment is provided to old people whose income is below Rs. 300 per month. The Medical College Hospital, Thiruvananthapuram has an Out Patient Clinic every Monday from 10.30 am to 12.00 noon for senior citizens. At the state level, a separate fund is reserved from all plan funds for geriatric care.

Palliative Care

About 973 PHCs in Kerala provide palliative care for beneficiaries including elderly persons. Doctors from the District Hospital and nurses from panchayats provide palliative care. The beneficiaries get primary care at the home level under this programme. The best ongoing palliative care at the primary level was '*Parireksha*' in Malappuram District. More than 700 other NGOs are working in this field. Paliyam is one of the best NGOs working in the state. These NGOs are supported by NRHM with funds for the purchase of instruments and equipments. Secondary and tertiary care is also provided to the elderly.

Rashtriya Swasthya Bhima Yojana and Comprehensive Health Insurance Scheme

Rashtriya Swasthya Bhima Yojana (RSBY) is one of the welfare schemes launched by the Government of India under the Unorganized Workers Security Act, 2008 to provide quality medical services to

those in the BPL list through hospitals in the government and private sector. The Kerala Government has launched the Comprehensive Health Insurance Scheme (CHIS) on the same lines as the RSBY, since October 2008, to benefit 10 lakh poor families. The RSBY and CHIS are implemented in the state through a separate agency, namely the Comprehensive Health Insurance Agency, Kerala (CHIAK) under the Labour and Rehabilitation Department in collaboration with the Health and Family Welfare Department and Local Self Government Department. The scheme provides coverage for meeting hospitalization expenses for medical and/or surgical procedures of the beneficiary members up to a limit of Rs. 30,000 per family per year subject, in any of the network hospitals. The benefit for the family will be on floater basis, i.e., the total reimbursement of Rs. 30,000 per year can be availed individually or collectively by members of the family. The elderly benefit from this scheme.

In Kerala, 85 per cent of the registered families have been enrolled under the RSBY/CHIS scheme for the year 2013-14 and 287 hospitals covering all the districts have been empanelled for treatment. These include hospitals in the government, private and co-operative sectors.

Department of Sainik Welfare

Grant to Old Age Homes Providing Shelter to Aged ex-Servicemen/Widows

The Department of Sainik Welfare under the Government of Kerala has been formed to look after the welfare of all Armed Forces personnel from the state, both serving and retired. The grant-in-aid scheme is implemented to extend support to the poor and aged ex-servicemen admitted in recognized old age homes in the state. Those who have attained the age of 65 years are eligible under this scheme. Some other grants available under different schemes are: grant to ex-servicemen/widows with a family income less than Rs. 30,000 per annum from State Military Benevolent Fund (SMBF) ranging from Rs. 2000 to Rs. 2500; District Military Benevolent Fund (DMBF) grant ranging from Rs. 1500 to Rs. 1750; grant of Rs. 600 per month to the Second World War Veterans; Penury Grant (for those above 65 years) of Rs. 1000 per month for lifetime for non-pensioners up to havildar rank from the Raksha Mantri's Discretionary Fund (RMDF).

6.4.1 Other Schemes and Facilities

Kerala State Road Transport Corporation

The Kerala State Road Transport Corporation reserves 20 per cent of the seats in all the buses for senior citizens in the state. Passes are given to the elderly freedom fighters to travel free in fast and express buses. Free travel is also accorded to widows of freedom fighters who receive pension from the central/state government.

Railways

Indian Railways provides 40 per cent concession in fares for males aged 60 years and above and 50 per cent concession in fares for female senior citizens aged 58 years and above in all Mail/Express trains. Separate counters are provided for senior citizens for the purchase/booking/cancellation of tickets and wheelchairs are available for the convenience and use of older people at all junctions, District Headquarters and other important stations.

Civil Aviation

Indian Airlines provides 50 per cent Senior Citizen Discount on normal economy class fare for all domestic flights to Indian citizens who have completed the age of 65 years in the case of male senior citizens and 63 years in the case of female citizens subject to certain conditions.

Ministry of Finance

Income tax rebate is accorded to senior citizens whose income is up to Rs. 1.85 lakh per annum. Higher rates of interest are offered on saving schemes for senior citizens. A Senior Citizens Savings Scheme has been introduced by the government offering an interest rate of 9 per cent per annum on deposits made by senior citizens in post offices which have savings bank facilities.

Department of Telecommunications

Under the Department of Telecommunications, the complaints registered by senior citizens are given priority and are addressed quickly under the VIP flag. Senior citizens are allowed to register for telephone connections under the N-OYT Special Category, which is also a priority category.

Kerala Police

Janamaithri Suraksha Project

The Government of Kerala launched the *Janamaithri Suraksha Project* in 20 select police stations in March, 2008. As on date the Janamaithri Suraksha Project is being implemented in 248 select police stations covering all the 14 districts. The scheme is a prestigious community policing initiative of the Government of Kerala, which aims to provide opportunities for the general public to join hands with the police to fight crime as well as to improve the security of the neighbourhood. The Project has made a tremendous impact on Kerala society. A Senior Citizens Cell has been formed in all the districts under the Police Department in the state. This cell coordinates the safety and security of senior citizens with the help of the area police, monitors the registered senior citizens by interacting

with them on the telephone on a regular basis, organizes field visits for senior citizens giving them a better sense of security and confidence, provides regular advice to the area police with respect to the safety concerns of the senior citizens residing in their jurisdiction, helps the senior citizens with their personal problems, regularly advises them on the induction of security and safety measures required in the physical ambience and life style and also encourages regular social interaction of senior citizens in the neighbourhood.

6.4.2 Utilization of National Schemes

Among the major centrally sponsored schemes for the elderly such as IGNOAPS, IGWPS and the Annapurna scheme the survey provided information on not only the awareness levels among the elderly but also the utilization levels (Fig. 6.3).

Although awareness levels were quite high, the utilization of each of these schemes is very limited in the state. The utilization levels were highest for IGWPS with nearly one third of the elderly women availing it. The utilization levels of the other two schemes were comparatively lower (Fig. 6.3). In each of the schemes, higher utilization levels were observed among the elderly belonging to higher wealth quintiles than those belonging to lower wealth quintiles. The lowest utilization levels were observed among the elderly belonging to the SC/ST category (Fig. 6.4).

Figure 6.3: Elderly utilizing national social security schemes according to sex for BPL households, Kerala 2011

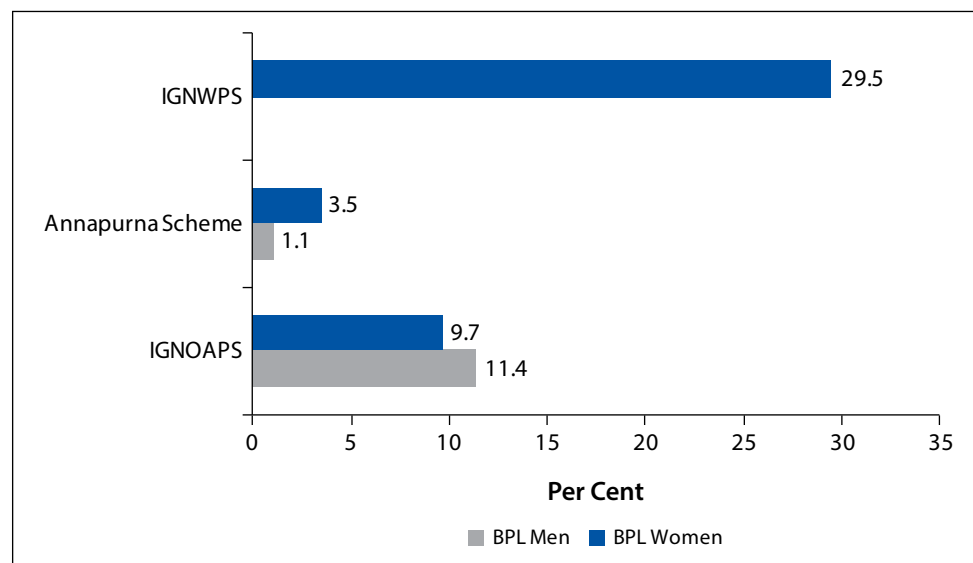
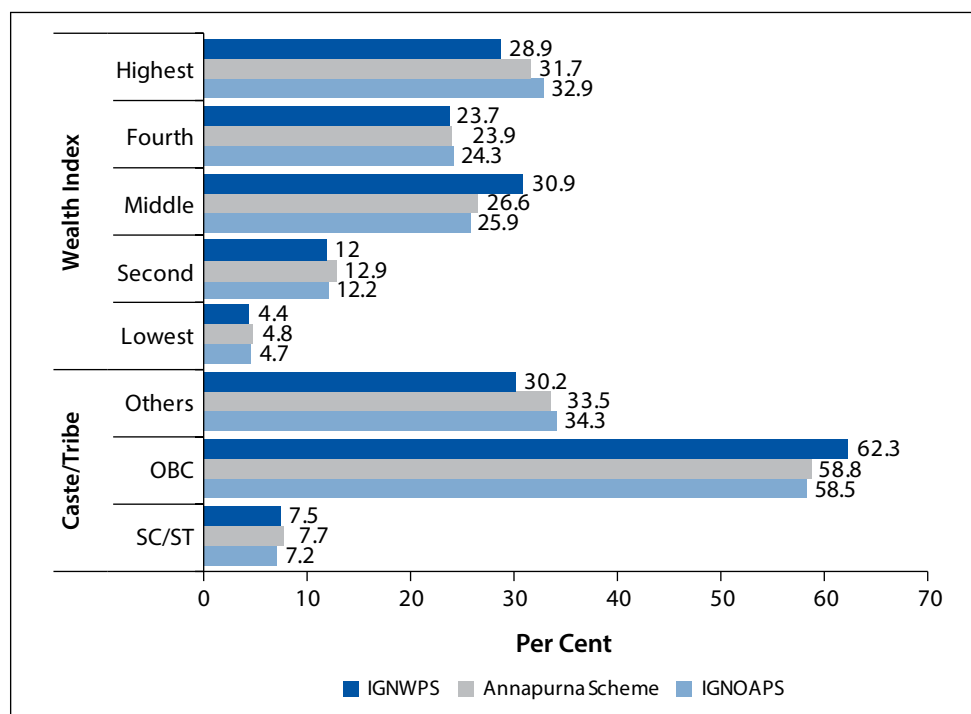


Figure 6.4: Elderly utilizing national social security schemes according to wealth quintile and caste/tribe based on BKPAI Survey, Kerala 2011

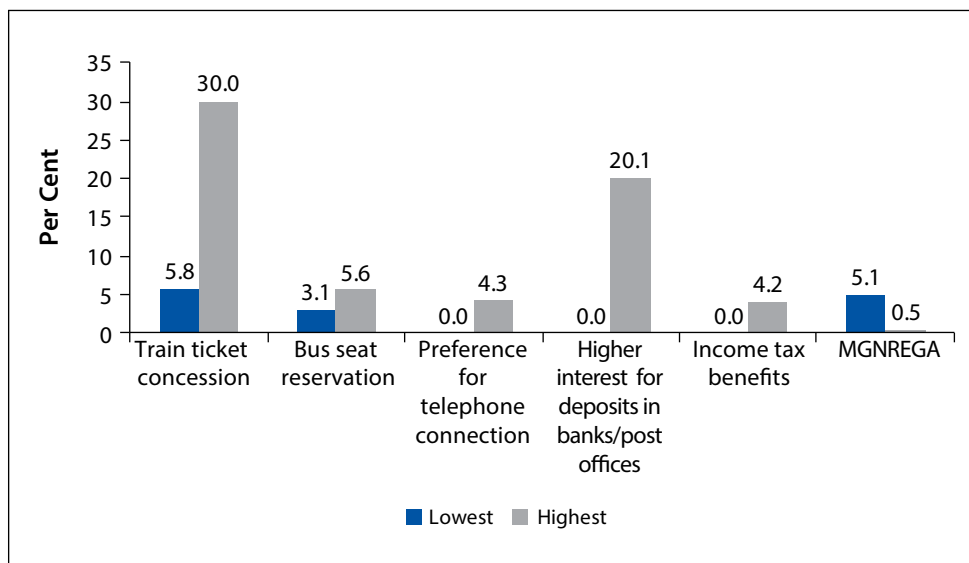


Elderly persons are also eligible for some special facilities/schemes such as concession in train travel, reservation of seats in buses, facilities in getting telephone connection, higher interest rates for deposits in banks and post offices, income tax benefits, and employment related facilities under the MGNREGA.

Awareness about MGNREGA (66%), train ticket concession (59%) and bus seat reservation (56%) were the much higher than awareness of preference for telephone connections (39%), higher interest rates (30%) on bank deposits (39%) and income tax benefits (27%). Awareness levels in general were higher among men and among the urban elderly except in the case of MGNREGA (Appendix Table A 6.2).

Compared to the awareness levels, the utilization of these facilities by older persons in the state was quite low. The utilization of train ticket concessions is comparatively higher (14.4%) than utilization of other facilities such as higher interest for deposits in bank/post offices (8.3%) and bus ticket reservations (7.5%). The facilities least availed of by the elderly are getting telephone connections, income tax benefits, and employment related facilities under MGNREGA. All these facilities/concessions were availed by a higher proportion of elderly from the highest wealth quintile than those from the lowest wealth quintile, except for MGNREGA (Fig. 6.5).

Figure 6.5: Elderly utilizing the facilities/schemes by lowest and highest wealth quintile, Kerala 2011



6.4.3 Health Insurance Schemes

Health insurance as a source of meeting the medical expenses of elderly men and women is a recent phenomenon. Only a small proportion of the elderly in Kerala are covered by health insurance. The proportion of the elderly covered under government-assisted health schemes, private and other health insurance schemes is 4.4, 0.9 and 0.3 per cent respectively. Substantial gender differentials are not observed in the coverage of health insurance policies among the elderly in Kerala (Fig. 6.6).

In addition to health insurance policies, the survey asked questions about the awareness and coverage of the Rashtriya Swasthya Bima Yojana that is meant to provide health insurance to a maximum of five members from each BPL household. The awareness of RSBY in the state is quite

Figure 6.6: Elderly covered by a health insurance policy by sex, Kerala 2011

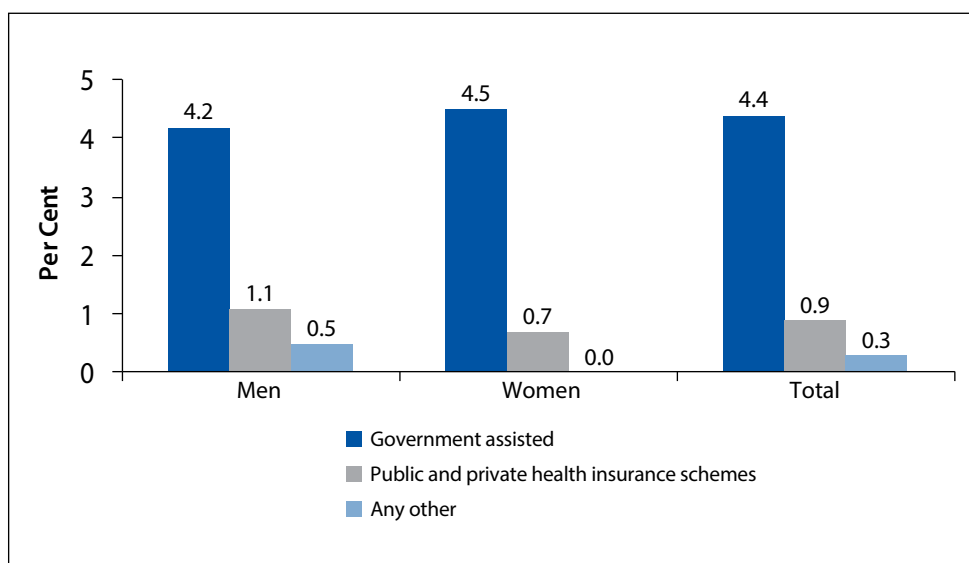


Table 6.3: Per cent distribution of elderly awareness and coverage under Rashtriya Swastha Bima Yojana (RSBY) by place of residence and sex, Kerala 2011

	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
BPL Families									
Awareness of RSBY	84.1	80.3	81.7	89.6	76.1	80.4	85.3	79.2	81.4
Registered under RSBY	56.3	60.3	58.9	62.1	48.5	52.8	57.6	57.2	57.4
Number	92	156	248	50	111	161	142	267	409
Non-BPL Families									
Awareness of RSBY	80.3	65.0	72.0	76.8	62.7	69.0	79.1	64.2	71.0
Registered under RSBY	22.0	24.2	23.2	14.1	13.8	13.9	19.3	20.5	20.0
Number	200	242	442	225	289	514	425	531	956
All									
Awareness of RSBY	81.5	71.2	75.5	79.3	66.7	71.9	80.8	69.7	74.4
Registered under RSBY	32.7	38.6	36.1	23.4	24.1	23.8	29.8	34.0	32.2
Number	292	398	690	275	400	675	567	798	1,365

high with nearly three fourth of the elderly having heard about the scheme. The knowledge levels of RSBY are quite high in comparison to the seven state average of 14 per cent. As expected, the awareness about the programme was higher for the elderly belonging to BPL households mainly because the programme is targeted at them. Although significant variations in the awareness levels were not observed, across rural and urban areas, a higher proportion of the men were aware of the RSBY in comparison to women.

Although three fourth of the elderly were aware about the schemes only one third were registered under the scheme. The registration levels were higher in rural areas and also among women. Further, one fifth of the elderly belonging to non-BPL households were also covered under the scheme (Table 6.3).

6.5 Emerging Issues of Social Security Schemes for the Elderly

Kerala is in the forefront in implementing social security programmes for senior citizens. The State Old Age Policy and the amendment of the Kerala Maintenance and Welfare of Parents and Senior Citizens Act, 2007 lays emphasis on the family supporting the elderly which is the most preferred support of the elderly as found from the survey. 'Vayomithram' a programme under the Kerala Social Security Mission, the first in the country, has emerged as a helpline for hundreds of elderly citizens to access medical care and palliative care services. The pension schemes for the agricultural labourers and for the senior citizens in the unorganized sector instituted by the Welfare Fund Boards in the state support a significant proportion of the workers. The NPHCE under the Health Services Department

is running successfully in the state and the Prevention and Control of Non Communicable Diseases Programme has seen good representation of the elderly population even at the CHC and PHC level. The Department of Sainik Welfare supports ex-servicemen that include senior citizens in the state who receive no other pension from central or state sponsored schemes. Apart from the special government facilities/schemes, the Kerala Police Department has also adopted stringent measures to provide security to the elderly population in the state.

The findings of the study show that awareness among the elderly population in Kerala regarding the national social security schemes is high. Yet the utilization of these welfare services is limited. Similarly, though the elderly are aware of the special government facilities/schemes like train/bus travel concessions, higher rates of interests on savings etc., the utilization rate is low especially among the BPL households. The urban residents use the services more than the rural residents. Utilization of social security programmes specifically targeted at the rural population like the MNREGA has a good response among the rural residents.

The Social Justice Department in the state implements welfare programmes and services for the needy and those in distress through a network of organizations. In most of these schemes, the elderly account for a significant proportion. However, data are often not compiled separately for elderly when the scheme is meant for all age groups. Statistics on programmes implemented exclusively for the aged are available but if the proportion of senior citizens that benefit from the other schemes was also documented, getting a clear picture of social security programmes for the elderly would be possible. The role of Information Kerala Mission, a Government of Kerala undertaking, in the state in accounting for some of the social security schemes in the state is highly commendable. The Government of Kerala's Health and Family Welfare Department has already undertaken the initiative of an e-health project to create a health data base of all citizens across the state. This would definitely help in tracking the welfare of the senior citizens in the state. A concerted effort has been made by various departments to work in coordination with the Social Justice Department in the state to create awareness among the elderly regarding the social security measures for senior citizens. Monitoring and proper implementation of the schemes so that they reach every senior citizen in need should help the elderly population in Kerala lead a healthy and graceful old age.

7. The Way Forward

Although the state of Kerala has the distinction of having the highest proportion of the elderly in the country, the socio-economic and health condition of the elderly in the state brought out by the BKPAI study throws up several issues and challenges which require immediate attention. The findings of the survey also help in drawing some directions and suggestions for framing and improving the policies and programmes for the elderly in Kerala.

- Although Kerala is an advanced state in terms of the education levels, one third of the elderly women in the state have no formal education. A large proportion of the elderly households have issues with respect to basic amenities such as not having *pucca* houses, living in small houses with one or two rooms and no access to clean fuels for cooking.
- Around one out of every four elderly men in Kerala continues to work. Economic compulsions are the major reason for the elderly working. The occupational structure also shows that they are engaged in unskilled, informal, low paying occupations. The current work participation in the state is a clear indication of the lack of any social and economic support. Although the coverage of pension and retirement benefits are better in Kerala compared to other states, a majority of the elderly in the state are still not covered by this safety net. This necessitates an immediate need for extending the benefits of social security schemes to the elderly in the state.
- There is a preponderance of females in Kerala's elderly population and with the increasing male-female gap in longevity, the proportion of elderly females in the state is expected to increase in the future. This also indicates that most of the elderly women have to spend a considerable amount of their lives as widows. This may increase the vulnerability among women. Further, the decreasing household size, increasing nuclearization of families and large scale migration of adult population may pose serious challenges to the care giving needs of the elderly in the state. The state may have to meet the increasing demand for care provision either through institutional care or through home based care.
- The future care giving needs of the elderly are also confirmed by their higher functionality limitations. One out of every 10 elderly in the state requires some assistance to carry out their daily activities such as feeding, bathing, dressing, toilet use etc. The disabilities with respect to vision, hearing, walking are also high, especially among the oldest old. This is also an indication of the need for assistance either through aids or through care givers.
- The morbidity levels among the elderly in the state are also quite high. The morbidity load is more for non-communicable diseases such as arthritis, hypertension, cataract, asthma, heart

disease etc. This poses a serious challenge to the public health care system in the state. Kerala may have to ensure adequate geriatric care services even at the PHC level in order to take care of the growing health needs of the elderly population.

- The out-of-pocket expenditure on health care among the elderly is also quite high as financial constraints are the major reason reported by the elderly for accessing health care. The treatment cost is also mostly borne by the family and this may turn out to be a huge burden for the family. The government may therefore have to consider possible options for health insurance coverage among the elderly as well as some subsidies for geriatric care medicines as they account for a large share of the treatment costs.
- Although Kerala has the distinction of having the maximum number of old age homes in the country, the elderly in the state still prefer that the family takes care of them during old age. This is clearly visible from the BKPAI survey results. However, paradoxically, the demand for old age homes in the state may also rise in the future because of the large scale migration of adult children. This might pose serious challenges for the well-being of the elderly as the residents of the old age homes may be seriously compromising on their happiness because of not being able to live with their family which is their preferred place of stay during old age.
- The BKPAI survey data also indicates that the elderly are not only the recipients of care and support but that they also actively contribute to the family by actively participating in various family activities. However, the participation of the elderly in various social activities is rather limited. Therefore, at the family level, stronger inter-generational bonding needs to be encouraged and at the community level, greater participation of the elderly has to be ensured by having age-friendly environments which will ensure harmony.
- The efforts of Kerala government at providing various social security schemes for senior citizens are commendable. At the same time, the major challenge for the government will be to improve awareness and coverage of these schemes among the needy people. In addition, efforts are also needed to ensure that the benefits are reaching the right intended beneficiaries.
- Overall, the Kerala Government has to take strong initiatives to improve the socio-economic status and access to affordable health care. It is also important to ensure coverage of social pension and health insurance among the people who need them. The future care giving demands will be yet another challenge for the state to face.

Appendices

Appendix Tables

Table A 2.1: Per cent distribution of elderly households by select household and housing characteristics according to place of residence, BKPAI survey and census, Kerala 2011

Housing Characteristics	BKPAI			Census 2011
	Rural	Urban	Total	Total
Number of Usual Members				
1	4.4	3.7	4.2	3.7
2	14.8	12.9	14.2	10.6
3-5	48.1	54.7	50.2	65.9
6+	32.7	28.7	31.5	19.9
Total	100.0	100.0	100.0	
Mean HH size	4.7	4.8	4.7	5.0
Head of the Household				
Elderly men headed HHs	40.0	40.9	40.3	
Elderly women headed HHs	23.2	21.4	22.6	NA
Non-elderly headed HHs	36.8	37.7	37.0	
Age Group				
<15	22.6	22.6	22.6	
15-59	50.7	51.8	51.1	NA
60+	26.6	25.6	26.3	
Sex Ratio (Females per 1,000 Males)				
<15	876	852	868	
15-59	1,298	1,194	1,263	NA
60+	1,291	1,259	1,281	
Total	1,185	1,121	1,164	1084
Religion of the HH head				
Hindu	57.5	49.9	55.1	
Muslim	26.9	25.2	26.4	NA
Christian	15.4	24.7	18.4	
Others	0.2	0.3	0.2	
Caste/Tribe of the HH head				
SC	8.6	2.6	6.7	
ST	3.1	0.4	2.2	NA
OBC	57.9	58.2	58.0	
Others	30.4	38.8	33.1	
Main Source of Drinking Water				
Piped water public	10.7	12.8	11.4	29.4
Piped water private	22.2	37.1	26.9	
Well/bore well (public)	9.6	3.6	7.7	65.7
Well/bore well (private)	51.8	44.9	49.6	
Others	5.7	1.6	4.4	4.9

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Housing Characteristics	BKPAI			Census 2011
	Rural	Urban	Total	Total
Sanitation Facility				
Septic tank/Flush system	82.7	91.6	85.5	66.7
Pit latrine	14.0	7.3	11.9	28.3
Public latrine	0.3	0.0	0.2	1.0
No facility (open space)	3.0	1.1	2.4	4.0
Type of House				
<i>Kachha</i>	8.3	5.3	7.4	
<i>Semi-pucca</i>	33.0	26.8	31.0	NA
<i>Pucca</i>	58.7	67.9	61.6	
No. of Rooms				
1	1.5	0.5	1.2	7.3
2	3.2	1.7	2.7	25.1
3	10.3	9.2	9.9	32.2
4+	85.1	88.6	86.2	34.3
Cooking Fuel				
Electricity	0.0	0.0	0.0	0.0
LPG/natural gas	20.1	51.1	29.9	35.8
Biogas	1.7	2.5	2.0	0.6
Kerosene	0.0	0.9	0.3	0.4
Coal/lignite	0.0	0.0	0.0	0.1
Charcoal	0.0	0.0	0.0	
Wood	64.6	37.6	56.0	61.9
Straw/shrubs/grass	0.2	0.2	0.2	0.8
Agricultural crop waste	13.2	7.2	11.3	
Dung cakes	0.0	0.0	0.0	0.1
Others	0.2	0.4	0.3	0.0
Total	100.0	100.0	100.0	
No. of Elderly HHs	620	594	1,214	

Table A 2.2: Percentage of elderly households with various possessions, loan and support system according to place of residence, BKPAI survey and census, Kerala 2011

Household Possessions	BKPAI			Census 2011
	Rural	Urban	Total	Total
Household Goods				
Electricity	96.1	99.5	97.2	94.4
Mattress	84.7	92.2	87.1	
Pressure cooker	58.2	77.3	64.2	
Chair	96.4	99.4	97.4	
Cot or bed	94.1	97.1	95.1	NA
Table	85.6	91.5	87.5	
Electric fan	82.8	95.0	86.7	
Radio or transistor	22.0	26.1	23.3	29.7

Contd...

Household Possessions	BKPAI			Census 2011
	Rural	Urban	Total	Total
Black and white television	6.1	5.5	5.9	76.8
Colour television	77.2	90.2	81.3	
Sewing machine	27.5	35.1	29.9	NA
Mobile phone	81.5	88.8	83.8	46.8
Any landline phone	49.5	47.9	49.0	11.6
Computer	11.8	22.9	15.3	15.8
Internet facility	7.4	14.8	9.8	6.3
Refrigerator	44.3	65.4	51.1	
Watch or wall/alarm clock	87.7	93.0	89.4	
Water pump	15.9	30.1	20.4	NA
Thresher	26.2	38.5	30.1	
Tractor	0.9	1.8	1.2	
Bicycle	11.9	16.6	13.4	20.4
Motorcycle or scooter	40.4	49.8	43.4	24.1
Animal-drawn cart	0.5	0.8	0.6	NA
Car/Jeep	0.3	0.3	0.3	10.2
Account in bank/Post office	68.5	73.4	70.1	74.2
Households Possessing Card				
APL	61.9	72.2	65.2	
BPL	36.4	24.7	32.7	
Antyodaya	0.7	0.7	0.7	NA
Not in possession of any card	1.0	2.5	1.5	
Don't know/No response	0.0	0.0	0.0	
Own Any Agriculture Land				
No land	63.1	82.3	69.2	
Only irrigated land	17.9	6.3	14.2	
Only non-irrigated land	12.7	9.3	11.6	NA
Both	6.1	1.9	4.8	
Don't know/no answer	0.2	0.2	0.2	
Monthly Per Capita Consumption Expenditure (MPCE)				
≤1000	18.4	14.5	17.1	
1001-1500	22.6	17.9	21.1	
1501-2500	21.5	25.7	22.8	NA
2501+	25.4	27.7	26.1	
Don't know/no answer	12.3	14.2	12.9	
Wealth Quintile				
Lowest	7.1	1.4	5.3	
Second	16.5	8.1	13.8	
Middle	29.6	23.0	27.5	NA
Fourth	22.9	24.9	23.5	
Highest	24.0	42.6	29.9	

Contd...

Household Possessions	BKPAI			Census 2011
	Rural	Urban	Total	Total
Amount of Outstanding Loan (Rs.)				
None	47.3	46.9	47.2	
<15000	4.0	3.3	3.7	
15000-30000	4.9	4.2	4.7	
30000-60000	8.4	6.7	7.8	
60000-100000	5.1	2.9	4.4	NA
100000 – 150000	6.2	5.7	6.0	
150000 – 200000	3.4	4.0	3.6	
200000+	16.4	21.5	18.1	
DK/No answer	4.3	4.9	4.5	
No. of Elderly HHs	620	594	1,214	
Purpose of Loan				
Expenditure on health of elderly	13.8	7.1	11.7	
Expenditure on health of others	7.7	8.8	8.1	
Agriculture	9.9	2.4	7.5	
Business	4.8	9.9	6.5	
Education	9.7	8.7	9.4	
Marriage	22.0	22.4	22.1	
Home/Vehicle loan	41.9	50.7	44.8	
Others	12.8	9.2	11.6	
No. of Elderly HHs	318	302	620	

Table A 2.3: Per cent of elderly by select background characteristics, Kerala 2011

Background Characteristics	BKPAI		
	Male	Female	Total
Age Groups (Years)			
60-64	36.1	32.0	33.8
65-69	23.4	27.7	25.9
70-74	17.6	13.9	15.4
75-79	11.7	13.0	12.5
80-84	7.1	6.2	6.6
85-89	3.2	5.3	4.4
90+	0.9	2.0	1.5
Education			
No formal education	10.7	28.6	21.1
<5 years completed	22.8	28.9	26.4
5-7 years completed	21.3	18.6	19.8
8 years and above	45.1	23.8	32.7
Don't know/No response	0.1	0.1	0.1
Marital Status			
Never married	0.8	1.8	1.4
Currently married	89.4	33.0	56.6
Widowed	9.6	60.7	39.3

Contd...

Background Characteristics	BKPAI		
	Male	Female	Total
Others	0.3	4.5	2.7
Don't know/No response			
Mean children ever born	3.5	4.2	3.9
Re-marriage among Ever Married			
Rural	9.3	9.4	9.4
Urban	3.2	4.7	4.1
Total	7.4	7.9	7.7
Migration Status			
Migrated before 60 years of age	42.4	61.9	53.7
Migrated after 60 years of age	8.4	10.3	9.5
Did not migrate	48.3	25.6	35.1
Don't know/No response	1.0	2.2	1.7
Number of Elderly	567	798	1,365

Table A 3.1: Percentage of elderly currently working or ever worked according to place of residence and sex, Kerala 2011

Work Status	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Ever worked	99.0	46.5	68.7	98.3	38.2	63.0	98.8	43.8	66.9
Currently working	27.6	9.1	16.9	22.3	6.3	12.9	25.8	8.1	15.5
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 3.2: Percentage of elderly according to their work status and intensity of work by background characteristics, Kerala 2011

Background Characteristics	Currently Working	Main Worker (More than 6 Months Per Year)	More than Four Hours a Day	Number of Elderly
Age				
60-69	21.5	16.6	19.8	813
70-79	7.9	6.8	7.1	378
80+	4.7	4.1	4.1	174
Sex				
Male	25.8	20.9	23.9	567
Female	8.1	5.9	7.3	798
Residence				
Rural	16.8	13.1	15.7	690
Urban	12.7	10.6	11.1	675
Marital Status				
Married	20.5	16.4	19.2	763
Widowed	8.6	6.2	7.3	547
Others	13.3	13.6	13.6	55

Contd...

Background Characteristics	Currently Working	Main Worker (More than 6 Months Per Year)	More than Four Hours a Day	Number of Elderly
Education				
None	12.5	9.0	11.1	271
1-4 years	14.1	10.0	12.8	339
5-7 years	20.4	16.7	18.5	266
8+ years	15.9	13.7	15.0	485
Religion				
Hindu	18.5	14.3	17.2	797
Muslim	11.6	9.8	9.5	310
Christian	12.3	9.4	88.2	255
Others	0.0	0.0	100.0	3
Caste				
SC/ST	24.1	16.7	21.3	111
OBC	15.6	12.4	14.4	766
Others	13.6	10.9	12.3	488
Wealth Index				
Lowest	15.1	9.7	12.5	61
Second	25.1	19.0	24.6	174
Middle	13.9	10.8	12.5	329
Fourth	14.1	10.4	12.3	317
Highest	14.3	12.4	13.3	484
Living Arrangement				
Living alone	11.8	11.8	9.8	52
With spouse	16.6	15.9	15.9	167
Others	15.6	11.8	14.3	1,146
Total	15.5	12.2	14.3	1,365

Table A 3.3: Per cent distribution of currently working elderly by type of occupation and sector of employment according to place of residence and sex, Kerala 2011

Employment Status	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Type of Occupation									
Technician/Professional				1.4	0.8	1.2	0.4	0.2	0.3
Executive/Clerical	0.4	0.0	0.3	9.3	0.0	5.9	2.7	0.0	1.7
Cultivator	52.2	19.6	40.0	9.6	8.4	9.1	41.2	16.8	32.1
Petty trader/Worker	12.7	0.8	8.2	43.6	34.6	40.3	20.7	9.3	16.5
Agricultural labourer	27.2	65.0	41.4	6.1	10.3	7.7	21.8	51.2	32.8
Other work	7.4	14.6	10.1	30.0	45.9	35.8	13.3	22.5	16.7
Sector of Employment									
Public sector	0.4	0.0	0.3	4.8	0.0	3.1	1.6	0.0	1.0
Private organized	0.0	0.8	0.3	9.5	2.9	7.1	2.5	1.4	2.0
Self-employed	57.3	19.5	43.1	48.4	34.0	43.1	55.0	23.1	43.1
Informal employment	36.3	62.8	46.3	35.3	48.3	40.1	36.1	59.2	44.7
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of elderly	197	121	318	131	65	196	328	186	514

Table A 3.4: Per cent distribution of currently working elderly by the need to work according to background characteristics, Kerala 2011

Background Characteristics	By Choice	By Economic/Other Compulsion	Total	No. of Elderly
Age				
60-69	52.3	47.7	100.0	165
70-79	41.4	58.6	100.0	25
80+	50.0	50.0	100.0	6
Sex				
Men	60.8	39.2	100.0	136
Women	27.7	72.3	100.0	60
Residence				
Rural	49.4	50.6	100.0	119
Urban	54.5	45.5	100.0	77
Marital Status				
Married	57.6	42.4	100.0	146
Widowed	28.3	71.7	100.0	44
Others	37.5	62.5	100.0	6
Education				
None	27.8	72.2	100.0	34
1-4 years	43.1	56.9	100.0	45
5-7 years	54.5	45.5	100.0	49
8+ years	64.8	35.2	100.0	68
Religion				
Hindu	50.8	49.2	100.0	130
Muslim	52.8	47.2	100.0	35
Christian	46.6	53.4	100.0	31
Others	0.0	0.0	0.0	0
Caste				
ST/SC	30.8	69.2	100.0	22
OBC	48.0	52.0	100.0	113
Others	63.9	36.1	100.0	61
Living Arrangement				
Living alone		100.0	100.0	5
With spouse	61.5	38.5	100.0	23
Others	50.8	49.2	100.0	168
Wealth Index				
Lowest	10.0	90.0	100.0	9
Second	32.6	67.4	100.0	39
Middle	48.0	52.0	100.0	48
Fourth	50.0	50.0	100.0	40
Highest	73.3	26.7	100.0	60
Total	50.5	49.5	100.0	196

Table A 3.5: Percentage of elderly receiving work benefits by background characteristics, Kerala 2011

Background Characteristics	Retirement	Pension	Both Retirement and Pension	None	Number of Elderly
Age					
60-69	17.0	18.3	14.2	78.9	813
70-79	18.8	21.4	15.1	74.8	378
80+	10.9	14.0	8.9	84.0	174
Sex					
Male	28.7	28.1	23.6	66.7	567
Female	8.1	11.8	6.7	86.8	798
Residence					
Rural	14.1	17.1	11.7	80.5	690
Urban	22.3	21.9	18.2	73.9	675
Marital Status					
Married	23.5	23.5	19.4	72.4	763
Widowed	8.0	12.4	6.5	86.1	547
Others	7.3	12.4	6.2	86.5	55
Education					
None	1.5	13.2	1.3	86.6	271
1-4 years	3.3	6.2	1.2	91.7	339
5-7 years	10.5	12.0	8.3	85.8	266
8+ years	41.0	36.1	35.1	58.0	485
Religion					
Hindu	17.2	21.5	14.9	76.3	797
Muslim	9.5	9.8	6.1	86.7	310
Christian	24.9	21.4	20.4	74.1	255
Others	0.0	46.5	0.0	53.5	3
Caste					
SC/ST	8.6	18.9	7.0	79.5	111
OBC	12.5	14.7	9.9	82.7	766
Others	26.2	25.5	22.1	70.5	488
Wealth Index					
Lowest	7.3	17.7	2.9	77.9	61
Second	1.3	2.9	0.0	95.7	174
Middle	7.6	13.4	6.4	85.4	329
Fourth	14.5	17.8	11.1	78.8	317
Highest	34.2	30.4	29.6	65.0	484
Living Arrangement					
Living alone	10.7	15.5	10.7	84.5	52
With spouse	40.6	37.8	36.4	58.1	167
Others	13.9	16.3	10.9	80.8	1,146
Total	16.7	18.6	13.8	78.4	1,365

Table A 3.6: Per cent distribution of elderly by annual personal income according to place of residence and sex, Kerala 2011

Income (in Rupees)	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
No income	25.7	48.9	39.1	24.6	52.4	40.9	25.3	50.0	39.6
≤12,000	29.0	39.6	35.1	23.5	27.6	25.9	27.2	35.7	32.2
12,001–24,000	6.9	1.7	3.9	5.6	3.5	4.4	6.6	2.3	4.1
24,001–50,000	11.7	4.6	7.6	10.1	3.9	6.5	11.2	4.4	7.3
50,001 +	24.7	4.3	12.9	32.4	11.4	20.1	27.1	6.6	15.2
Don't know/NA	2.0	0.9	1.4	3.9	1.2	2.3	2.6	1.0	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	41,222	7,994	21,960	56,123	16,966	32,876	45,815	10,871	25,404
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 3.7: Percentage of elderly by sources of current personal income according to place of residence and sex, Kerala 2011

Sources of Income*	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Salary/Wages	13.7	6.9	9.8	14.0	4.3	8.3	13.8	6.1	9.3
Employer's pension (government or other)	24.6	9.3	15.8	29.6	17.3	22.4	26.0	11.7	17.7
Social pension (old age/widow)	12.9	31.4	23.6	11.2	22.4	17.7	12.4	28.4	21.7
Agricultural/Farm income	24.6	4.8	13.2	8.9	1.6	4.6	19.9	3.8	10.5
Other sources of income	16.0	4.8	9.5	20.1	7.5	12.7	17.1	5.7	10.5
No income	25.6	48.9	39.1	24.6	52.2	40.8	25.3	50.0	39.6
Number of elderly	292	398	690	275	400	675	567	798	1,365

*Multiple sources of Income

Table A 3.8: Per cent distribution of elderly by their perceived magnitude of contribution towards household expenditure according to place of residence and sex, Kerala 2011

Proportion of Contribution	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
No income/No contribution	31.2	60.3	48.0	30.7	62.4	49.3	31.1	61.0	48.4
<40%	19.0	20.1	19.7	16.2	18.4	17.5	18.2	19.6	19.0
40-60%	10.7	7.1	8.6	13.4	6.3	9.2	11.5	6.8	8.8
60-80%	10.9	5.2	7.6	12.3	5.1	8.1	11.3	5.2	7.8
80+	28.2	6.2	15.5	27.4	7.1	15.4	27.9	6.4	15.5
DK/NA	0.0	1.1	0.6	0.0	0.8	0.5	0.0	1.0	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 3.9: Per cent distribution of elderly by their financial dependency status and main source of economic support according to place of residence and sex, Kerala 2011

	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Financial Dependence									
Fully dependent	40.4	67.1	55.8	34.1	65.5	52.5	38.4	66.5	54.7
Partially dependent	39.1	23.8	30.3	37.4	21.6	28.1	38.6	23.1	29.6
Not dependent	20.6	9.1	13.9	28.5	12.9	19.4	23.0	10.4	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source of Economic Support									
Son	55.5	57.1	56.4	55.3	55.1	55.2	55.3	56.4	55.9
Spouse	8.1	15.8	12.6	2.8	13.8	9.2	6.6	15.3	11.6
Daughter	3.8	10.0	7.4	5.0	9.4	7.6	4.2	9.8	7.5
Others	12.0	8.0	9.7	8.4	8.7	8.5	10.8	8.2	9.3
Not dependent on anyone	20.6	9.1	14.0	28.5	13.0	19.4	23.0	10.3	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 4.1: Per cent distribution of elderly by type of living arrangement according to select background characteristics, Kerala 2011

Background Characteristic	Alone	Spouse Only	Spouse, Children and Grandchildren	Children and Grandchildren	Others	Total	Number of Elderly
Age							
60-69	2.7	12.4	46.1	26.2	12.7	100.0	813
70-79	5.3	11.1	32.6	39.2	11.8	100.0	378
80+	4.1	4.7	15.9	64.1	11.2	100.0	174
Sex							
Men	1.4	17.1	60.4	8.4	12.7	100.0	567
Women	5.3	6.7	22.8	53.2	12.0	100.0	798
Residence							
Rural	4.0	12.0	39.5	33.0	11.5	100.0	690
Urban	2.8	9.0	36.5	37.6	14.1	100.0	675
Marital Status							
Married	0.0	19.6	68.4	0.0	12.0	100.0	763
Widowed	7.6	0.0	0.0	83.0	9.3	100.0	547
Others	13.6	0.0	0.0	44.1	42.4	100.0	55
Education							
None	3.5	2.1	30.4	51.6	12.5	100.0	271
1-4 years	3.1	5.6	34.0	46.0	11.4	100.0	339
5-7 years	5.6	6.7	44.4	29.6	13.7	100.0	266
8+ years	2.9	23.8	44.2	17.0	12.1	100.0	485

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Background Characteristic	Alone	Spouse Only	Spouse, Children and Grandchildren	Children and Grandchildren	Others	Total	Number of Elderly
Employment							
Never worked	4.2	7.7	24.7	49.7	13.7	100.0	458
Previously worked	3.6	13.0	42.6	29.5	11.3	100.0	711
Currently working	2.4	11.8	54.7	18.4	12.7	100.0	196
Religion							
Hindu	4.0	11.6	39.7	35.3	9.5	100.0	797
Muslim	1.0	4.0	35.8	38.4	20.9	100.0	310
Christian	6.0	19.0	38.6	26.8	9.6	100.0	255
Others	0.0	0.0	46.5	53.5	0.0	100.0	3
Caste/Tribe							
SC/ST	5.5	4.6	40.4	45.9	3.7	100.0	111
OBC	2.7	6.9	40.2	37.1	13.1	100.0	766
Others	4.8	20.1	35.0	27.1	12.9	100.0	488
Wealth Index							
Lowest	19.4	11.1	33.3	27.8	8.3	100.0	61
Second	6.7	9.6	29.8	42.7	11.2	100.0	174
Middle	3.1	6.9	38.1	40.6	11.4	100.0	329
Fourth	0.9	8.6	42.8	33.3	14.4	100.0	317
Highest	2.3	16.8	40.4	27.8	12.6	100.0	484
Total	3.7	11.0	38.6	34.4	12.3	100.0	1,365

Table A 4.2: Per cent distribution of elderly by preferred living arrangement in old age according to present living arrangement and sex, Kerala 2011

Present Living Arrangement	Preferred Living Arrangement					
		Alone	Spouse Only	Children and Others	Total	
Men	Alone	81.0	0.1	1.0	1.4	
	Spouse only	0.0	41.7	8.3	17.2	
	Children and others	19.0	58.3	90.7	81.5	
	Total	100.0	100.0	100.0	100.0	
	Women	Alone	62.3	2.5	3.8	5.3
		Spouse only	0.0	28.6	2.6	6.7
		Children and others	37.7	68.9	93.6	88.1
		Total	100.0	100.0	100.0	100.0
	Total	Alone	65.4	1.2	2.7	3.6
		Spouse only	0.0	35.8	4.8	11.1
Children and others		34.6	63.1	92.5	85.3	
Total		100.0	100.0	100.0	100.0	

Table A 4.3: Percentage of elderly with no meeting and no communication between elderly and non co-residing children according to background characteristics, Kerala 2011

Background Characteristic	No Meeting	No Communication	No. of Elderly
Age			
60-69	1.3	4.1	675
70-79	1.5	4.8	343
80+	1.5	9.2	154
Sex			
Men	1.2	3.6	476
Women	1.5	5.9	696
Residence			
Rural	1.2	5.9	595
Urban	1.8	2.9	577
Marital Status			
Married	1.0	3.4	662
Widowed	1.7	6.2	484
Others	6.7	22.7	26
Education			
None	1.0	5.3	235
1-4 years	1.4	8.5	300
5-7 years	3.8	5.9	232
8+ years	0.2	1.2	401
Employment			
Never worked	1.7	4.5	408
Previously worked	1.3	6.1	601
Currently working	0.9	2.3	163
Religion			
Hindu	1.6	6.7	663
Muslim	1.7	3.9	275
Christian	0.4	1.4	231
Others	0.0	0.0	3
Caste/Tribe			
SC/ST	0.0	10.6	95
OBC	1.5	5.1	665
Others	1.6	3.4	412
Wealth Index			
Lowest	2.5	22.2	47
Second	1.2	11.3	145
Middle	3.3	4.5	286
Fourth	0.0	3.9	280
Highest	0.8	1.0	414
Total	1.4	4.9	1,172

Table A 4.4: Percentage of elderly by participation in various activities according to age, Kerala 2011

	Age Group			Total
	60-69	70-79	80+	
Taking care of Grandchildren	75.9	73.9	54.4	72.7
Cooking/cleaning	70.0	47.5	23.5	57.9
Shopping for Household	67.2	38.2	17.1	52.9
Payment of Bills	53.7	31.2	11.2	42.1
Advice to Children	89.6	82.4	61.8	84.1
Settling Disputes	91.2	81.8	56.1	84.2

Table A 4.5: Per cent distribution of elderly by their main reason for not going out more, according to place of residence and sex, Kerala 2011

Main Reason for Not Going Out More	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Health problems	75.0	82.9	79.9	73.1	78.7	76.4	74.4	81.5	78.7
Safety concerns	3.9	5.4	4.8	1.9	2.7	2.4	3.3	4.6	4.1
Financial problems	12.5	7.8	9.6	17.3	10.7	13.4	13.9	8.5	10.6
Not allowed by family	1.6	0.5	0.9	1.9	2.7	2.4	1.7	1.1	1.3
Nobody to accompany		1.5	0.9	1.9	1.3	1.6	0.6	1.8	1.3
Others	7.0	2.0	3.9	3.8	4.0	3.9	6.1	2.5	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	97	150	247	76	118	194	173	268	441

Table A 4.6: Per cent distribution of elderly by experience of abuse after turning 60 and in the month preceding the survey according to background characteristics, Kerala 2011

Background Characteristics	Experience of Abuse		
	After Age 60	Last One Month	Number of Elderly
Age			
60-69	2.8	1.1	812
70-79	3.7	0.8	375
80+	2.4	0.6	166
Sex			
Male	2.1	0.7	566
Female	3.7	1.1	787
Residence			
Rural	2.7	0.9	687
Urban	3.7	1.2	666
Marital Status			
Married	2.1	0.7	762
Widowed	4.5	1.5	536
Others	3.3	1.7	55

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Background Characteristics	Experience of Abuse		
	After Age 60	Last One Month	Number of Elderly
Education			
None	3.5	1.8	268
1-4 years	3.9	0.8	336
5-7 years	3.0	1.1	264
8+ years	2.0	0.5	483
Employment			
Never worked	0.9	0.2	451
Previously worked	4.0	1.2	706
Currently working	4.2	1.9	196
Religion			
Hindu	3.8	1.5	789
Muslim	0.6	0.0	308
Sikh	3.4	0.6	254
Others	58.6	0.0	2
Caste/Tribe			
SC/ST	4.6	0.9	111
OBC	2.5	0.8	758
Others	3.5	1.3	484
Wealth Index			
Lowest	6.9	2.8	61
Second	4.5	1.7	172
Middle	3.9	1.1	327
Fourth	1.5	0.6	314
Highest	2.1	0.9	479
Living Arrangement			
Alone	14.3	4.1	48
Spouse only	2.6	0.0	167
Spouse, children and grandchildren	1.5	0.4	508
Children and grandchildren	3.4	1.3	465
Others	3.6	1.8	165
Total	3.0	1.0	1,353

Table A 5.1: Percentage of elderly by self rated health status according to place of residence and sex, Kerala 2011

Self Rated Health	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Current Health									
Excellent	5.1	1.9	3.2	6.7	3.9	5.1	5.6	2.5	3.8
Very good	10.7	10.0	10.3	10.1	6.3	7.9	10.5	8.8	9.5
Good	20.1	16.5	18.0	23.5	20.1	21.5	21.1	17.8	19.2
Fair	35.8	31.0	33.0	30.2	35.4	33.3	34.0	32.3	33.0
Poor	27.9	40.0	34.9	29.6	33.1	31.6	28.4	37.7	33.8
DK/NA	0.5	0.6	0.5		1.2	0.7	0.3	0.9	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current Health Compared to One Year Before									
Better	8.6	7.4	7.9	14.5	10.2	12.0	10.5	8.3	9.2
Same	38.6	33.7	35.8	38.5	32.3	34.9	38.6	33.2	35.5
Worse	51.0	55.5	53.6	46.4	53.9	50.8	49.6	55.1	52.7
DK/NA	1.8	3.4	2.7	0.6	3.5	2.3	1.4	3.4	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current Health Compared to People of Same Age									
Better	42.9	29.4	35.1	48.0	36.9	41.5	44.4	31.8	37.1
Same	26.1	27.5	26.9	22.9	22.4	22.6	25.2	25.9	25.6
Worse	28.7	37.4	33.7	27.9	35.3	32.3	28.5	36.7	33.3
DK/NA	2.3	5.8	4.3	1.1	5.5	3.7	1.9	5.7	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Elderly	292	398	690	275	400	675	567	798	1,365

Table A 5.2: Percentage of elderly by self rated health according to background characteristics, Kerala 2011

Characteristics	Current Health: Excellent/Very Good	Current Health Compared to One Year Before: Better or Same	Current Health Compared to People of Same Age: Better or Same	Number of Elderly
Age				
60-69	15.6	49.6	65.1	813
70-79	10.3	41.1	58.3	378
80+	9.4	28.8	60.2	174
Sex				
Men	16.1	49.0	69.6	567
Women	11.2	41.5	57.6	798
Residence				
Rural	13.4	43.7	62.1	690
Urban	12.9	46.8	64.0	675
Marital Status				
Currently married	15.6	48.2	66.4	763
Widowed	10.6	38.8	57.2	547
Others	6.8	53.3	62.7	55

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Characteristics	Current Health: Excellent/Very Good	Current Health Compared to One Year Before: Better or Same	Current Health Compared to People of Same Age: Better or Same	Number of Elderly
Education				
None	9.8	33.7	52.8	271
1-4 years	10.6	38.4	58.8	339
5-7 years	14.1	47.4	59.1	266
8+ years	17.0	55.4	74.2	485
Employment				
Never	9.5	45.9	57.1	458
Previously worked	13.9	40.7	61.4	711
Currently working	19.3	55.2	78.8	196
Religion				
Hindu	11.5	43.3	61.4	797
Muslim	13.4	44.2	61.5	310
Christian	17.5	49.0	67.7	255
Others	79.4	79.4	79.4	3
Caste				
SC/ST	16.5	33.3	54.6	111
OBC	11.5	42.5	60.8	766
Others	15.5	51.4	67.8	488
Wealth Index				
Lowest	11.1	33.3	49.3	61
Second	14.5	40.2	50.3	174
Middle	7.8	40.3	60.1	329
Fourth	12.6	43.4	61.7	317
Highest	18.3	53.0	72.9	484
Living Arrangement				
Living alone	9.6	54.9	59.6	52
Living with spouse	15.9	58.9	77.3	167
Living with all others	13.0	42.5	60.9	1,146
Total	13.2	44.8	62.7	1,365

Table A 5.3: Percentage of elderly needing full/partial assistance in ADL according to sex and residence, Kerala 2011

Type of ADL	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Bathing	4.6	11.7	8.7	5.6	12.2	9.5	4.9	11.9	8.9
Dressing	0.8	6.9	4.3	3.4	7.5	5.8	1.7	7.2	4.9
Toilet	1.8	6.5	4.5	2.8	6.7	5.1	2.3	6.7	4.8
Mobility	0.8	5.0	3.2	2.2	7.1	5.1	1.2	5.7	3.8
Continenence	1.0	4.5	3.0	2.2	3.9	3.2	1.2	4.3	3.0
Feeding	0.3	3.3	2.0	1.7	2.7	2.3	0.7	3.2	2.1
Needs at least one assistance	5.3	13.0	9.8	6.1	14.5	11.1	5.6	13.5	10.2
Needs full assistance	0.3	2.6	1.6	1.1	2.4	1.8	0.5	2.5	1.7
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 5.4: Percentage of elderly by IADL limitations according to sex and residence, Kerala 2011

Type of Activity	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Use of phone	9.6	26.4	19.3	9.5	17.3	14.1	9.6	23.4	17.6
Shopping	24.1	62.3	46.1	25.1	57.3	44.0	24.4	60.6	45.4
Preparation of meals	58.4	35.9	45.4	61.5	33.9	45.3	59.3	35.2	45.3
Housekeeping tasks	31.1	18.9	24.1	28.4	15.3	20.7	30.2	17.7	22.9
Laundry	39.7	24.5	30.9	40.8	22.4	30.0	40.1	23.7	30.6
Travel independently	14.5	26.4	21.4	14.5	24.4	20.3	14.5	25.7	21.0
Dispensing own medicines	16.5	24.5	21.1	12.8	18.1	15.9	15.4	22.4	19.5
Handling finances	10.4	27.3	20.2	10.1	18.5	15.0	10.5	24.5	18.6
Can perform none	1.5	7.8	5.2	2.8	4.3	3.7	1.9	6.7	4.7
1-3	15.7	14.3	14.9	10.1	12.6	11.6	14.0	13.8	13.8
4-5	18.0	13.0	15.1	21.2	14.6	17.4	19.0	13.5	15.8
6-7	29.9	36.8	33.9	34.1	31.2	32.4	31.2	35.1	33.5
Can perform all	34.3	27.5	30.4	31.8	36.0	34.3	33.5	30.1	31.5
Don't know /NA	0.5	0.6	0.5	0.0	1.2	0.7	0.3	0.9	0.7
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 5.5: Percentage of elderly by ADL and IADL limitations according to background characteristics, Kerala 2011

Background Characteristics	ADL			IADL				Number of Elderly
	Needs Assistance in at Least One Activity	Needs Assistance in at Least Three Activities	Need Assistance in All Activities	Can Perform No Activity	Can Perform All Activities	Can Perform 1-3 Activities	Can Perform 4-7 Activities	
Age								
60-69	4.9	0.9	0.1	1.3	43.6	5.8	49.2	813
70-79	12.1	5.8	2.6	4.7	18.2	19.7	56.3	378
80+	31.2	18.1	7.0	20.7	3.6	39.6	33.7	174
Sex								
Men	5.6	1.7	0.5	1.9	33.5	14.0	50.3	567
Women	13.5	6.2	2.5	6.7	30.1	13.8	48.6	798
Residence								
Rural	9.8	4.0	1.6	5.2	30.4	14.8	49.1	690
Urban	11.1	5.1	1.6	3.7	34.1	11.8	49.8	675
Marital Status								
Married	6.2	2.1	0.8	1.2	38.0	11.2	49.4	763
Widowed	16.4	7.6	3.2	10.1	22.0	16.8	49.8	547
Others	6.7	3.4		1.7	33.3	21.7	43.3	55

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Background Characteristics	ADL			IADL				Number of Elderly
	Needs Assistance in at Least One Activity	Needs Assistance in at Least Three Activities	Need Assistance in All Activities	Can Perform No Activity	Can Perform All Activities	Can Perform 1-3 Activities	Can Perform 4-7 Activities	
Wealth Index								
Lowest	6.9	4.2	4.2	11.1	18.1	20.8	50.0	61
Second	12.3	5.6	0.0	7.8	26.1	10.6	54.4	174
Middle	11.4	4.2	2.2	6.1	28.8	15.2	49.3	329
Fourth	13.2	4.0	1.5	3.7	27.6	16.6	51.2	317
Highest	6.6	4.2	1.6	2.1	41.4	11.0	45.1	484
Living Arrangement								
Alone	2.0	2.0	2.0	2.0	43.1	7.8	45.1	52
Spouse only	2.0	0.7		1.3	45.0	5.3	48.3	167
Children and others	11.5	5.0	1.9	5.2	29.3	15.2	49.6	1,146
Total	10.1	4.4	1.7	4.6	31.6	13.9	49.3	1,365

Table A 5.6: Percentage of elderly by full/partial disability according to sex and residence, Kerala 2011

Types of Disability	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Vision									
Full	4.3	2.2	3.1	0.0	2.0	1.2	3.0	2.0	2.4
Partial	70.4	66.9	68.4	75.8	71.7	73.4	72.1	68.4	70.0
Hearing									
Full	2.8	1.7	2.1	2.2	3.9	3.2	2.4	2.4	2.4
Partial	13.2	18.0	16.0	13.4	15.7	14.7	13.3	17.2	15.5
Walking									
Full	1.0	3.7	2.6	2.2	3.9	3.2	1.4	3.8	2.8
Partial	18.3	26.6	23.1	23.5	28.7	26.6	19.9	27.3	24.2
Chewing									
Full	4.3	4.5	4.4	2.2	3.5	3.0	3.7	4.2	4.0
Partial	14.5	16.5	15.7	11.1	13.3	12.4	13.4	15.5	14.6
Speaking									
Full	1.8	0.7	1.2	1.1	1.2	1.2	1.4	1.0	1.2
Partial	3.8	5.4	4.7	3.4	3.1	3.2	3.5	4.7	4.2
Memory									
Full	0.5	0.7	0.6	1.1	1.2	1.2	0.7	0.9	0.8
Partial	19.8	22.7	21.5	16.2	17.3	16.9	18.7	20.8	19.9
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 5.7: Percentage of elderly by full/partial locomotor disability according to background characteristics, Kerala 2011

Background Characteristics	Vision	Hearing	Walking	Chewing	Speaking	Memory	Number of Elderly
Age							
60-69	68.9	8.6	16.2	12.3	2.2	13.8	813
70-79	76.1	26.0	36.8	23.9	8.9	26.5	378
80+	80.1	45.3	55.9	36.5	12.9	41.5	174
Sex							
Men	75.0	15.9	21.1	17.1	5.1	19.4	567
Women	70.5	19.6	31.1	19.7	5.7	21.7	798
Residence							
Rural	71.4	18.1	25.9	20.1	5.9	22.0	690
Urban	74.4	17.8	29.8	15.2	4.4	18.0	675
Marital Status							
Married	74.3	12.9	20.8	15.6	4.7	16.8	763
Widowed	70.1	26.3	36.2	23.1	6.3	26.1	547
Others	67.8	10.2	23.3	16.7	5.0	25.0	55
Caste							
SC/ST	68.5	22.2	20.4	13.9	4.6	22.2	111
OBC	70.9	18.3	27.3	18.3	6.9	21.4	766
Others	75.9	16.6	27.8	20.1	2.8	19.3	488
Wealth Index							
Lowest	68.1	27.8	27.8	12.5	2.8	22.2	61
Second	66.9	16.2	30.2	21.8	5.6	18.4	174
Middle	67.9	20.2	28.0	19.4	6.9	25.2	329
Fourth	75.8	18.4	26.1	18.3	5.5	21.2	317
Highest	76.6	15.2	25.5	17.6	4.4	17.6	484
Total	72.4	18.1	27.0	18.5	5.4	20.8	1,365

Table A 5.8: Percentage of elderly using disability aids according to sex and place of residence, Kerala 2011

Form of Assistance	Sex		Residence		Total	Number of Elderly
	Men	Women	Rural	Urban		
Spectacles/lenses	56.2	41.3	46.6	49.7	47.5	656
Hearing aids	1.9	1.0	1.2	1.8	1.4	18
Walking sticks	4.5	4.3	4.3	4.4	4.5	58
Denture	3.0	3.8	3.9	2.8	3.5	43

Table A 5.9: Percentage of elderly classified based on General Health Questionnaire (GHQ-12) and 9 items Subjective Well-Being Inventory (SUBI) according to place of residence and sex, Kerala 2011

Mental Health Status	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
GHQ-12 (Score 0-36)									
Scores below the threshold level of ≤ 12	69.3	50.6	58.6	76.9	57.7	65.7	71.7	52.9	60.8
Mean score	11.0	13.8	12.6	10.4	12.7	11.7	10.8	13.5	12.4
Number of elderly	291	392	683	274	388	662	565	780	1,345
Subjective Well-being Inventory (SUBI- 9 Items) (Score 9-27)									
Mean score	15.7	17.6	16.8	15.9	17.0	16.6	15.8	17.4	16.7
Number of elderly	291	392	683	273	387	660	564	779	1,343

Note: GHQ-12 varies from a score of 0-36 and lower the score the better is the mental health. The threshold score of 12 or below indicate good mental health status. For SUBI the score varies from 9 to 27 and lower the mean score indicate better the mental health status.

Table A 5.10: Percentage of elderly classified based on 9 items in SUBI according to age and sex, Kerala 2011

SUBI- 9 Items (Well-being/ Ill Being)	Age Group 60-69			Age Group 70-79			Aged 80 Years and Above		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
At least one negative	30.2	42.6	37.4	38.2	46.2	42.6	45.3	55.9	51.8
All negative	0.9	2.1	1.6	1.2	4.8	3.2	0.0	10.8	6.7
All positive	12.0	4.1	7.4	9.1	2.4	5.4	3.2	2.9	3.0
Mean score	15.4	16.9	16.3	15.9	17.7	16.9	17.4	18.9	18.4
Number of elderly	339	469	808	166	205	371	59	105	164

Table A 5.11: Percentage of elderly by ability to immediate recall of words (out of ten words) according to sex and place of residence, Kerala 2011

Number of Words	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
None to 2	22.2	28.7	25.9	19.6	25.5	23.0	21.4	27.6	25.0
3 to 5	54.3	61.0	58.2	56.4	52.6	54.2	55.0	58.3	56.9
6 to 8	22.7	10.3	15.6	24.0	21.1	22.3	23.1	13.8	17.7
More than 8	0.8	0.0	0.3	0.0	0.8	0.5	0.5	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean number of immediately recalled words	4.0	3.3	3.6	4.0	3.9	3.9	4.0	3.5	3.7
Number of elderly	291	396	687	275	391	666	566	787	1,353

Table A 5.12: Percentage of elderly by personal health habits or risky health behaviours according to place of residence and sex, Kerala 2011

Type of Substance	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Current Use									
Smoking	27.7	0.6	12.0	14.7	0.0	6.0	23.7	0.4	10.1
Alcohol consumption	13.7	1.0	6.4	12.0	0.0	5.0	13.2	0.7	5.9
Chewing tobacco	9.7	20.7	16.1	7.5	11.4	9.8	9.0	17.7	14.1
Any of the three risk behaviours	37.4	21.2	28.0	29.8	11.4	19.0	35.0	18.1	25.2
Ever Use									
Smoking	67.5	0.9	29.1	50.4	0.0	20.8	62.2	0.6	26.4
Alcohol consumption	34.1	1.6	15.4	31.5	0.0	13.0	33.3	1.1	14.6
Chewing tobacco	21.1	32.5	27.7	13.0	17.7	15.8	18.6	27.8	23.9
Number of elderly	292	398	690	275	400	675	567	798	1,365

Table A 5.13: Percentage of elderly undergoing routine medical check-ups with the frequency and per cent presently under medical care, according to place of residence and sex, Kerala 2011

Health Check-Ups	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Undergoes Routine Check-up									
	39.9	40.6	40.3	42.3	37.6	39.5	40.7	39.6	40.1
No. of elderly	292	398	690	275	400	675	567	798	1,365
Frequency for Medical Check-Ups									
Weekly/Fortnightly	8.8	19.8	15.2	11.0	16.5	14.1	9.5	18.8	14.8
Monthly	60.9	58.1	59.3	56.7	64.8	61.2	59.5	60.1	59.9
Half-Yearly and more	26.7	20.6	23.1	27.0	15.2	20.4	26.8	18.9	22.3
Others	3.7	1.6	2.4	5.3	3.6	4.3	4.2	2.2	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Elderly	114	155	269	121	151	272	235	306	541

Table A 5.14: Percentage of elderly reporting any acute morbidity according to place of residence and sex, Kerala 2011

Acute Morbidity	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Prevalence rate	15.2	17.4	16.5	13.2	15.1	14.3	14.6	16.7	15.8
Number of elderly	291	396	687	275	391	666	566	787	1,353
Mean number of episode per sick person	1.1	1.2	1.1	1.0	1.1	1.0	1.1	1.1	1.1
Number of elderly reporting acute morbidity	44	72	116	33	57	90	77	129	206

Table A 5.15: Percentage of elderly reporting any acute morbidity according to background characteristics, Kerala 2011 (per 1000 elderly)

Background Characteristics	Prevalence Rate	Number of Elderly
Age		
60-69	167	813
70-79	134	378
80+	169	174
Sex		
Men	146	567
Women	167	798
Residence		
Rural	165	690
Urban	143	675
Marital Status		
Married	147	763
Widowed	167	547
Others	211	55
Caste		
SC/ST	199	111
OBC	174	766
Others	121	488
Wealth Index		
Lowest	78	61
Second	169	174
Middle	250	329
Fourth	145	317
Highest	99	484
Living Arrangement		
Alone	68	52
Spouse only	118	167
Children and others	167	1,146
Total	158	1,365

Table A 5.16: Per cent distribution of last episode of acute morbidities pattern among elderly by sex and place of residence, Kerala 2011

Morbidities	Sex		Place of Residence		Total
	Men	Women	Rural	Urban	
Fever	38.2	33.1	35.0	35.2	35.1
Respiratory ailment	12.0	12.8	13.0	11.4	12.5
Asthma	15.3	10.4	13.9	8.2	12.3
Disorder of joints and pain	4.0	10.7	7.5	9.6	8.1
Accidents	8.1	7.0	5.0	13.5	7.5
Cardiovascular disease	8.9	5.6	7.9	4.4	6.9
Gastro-intestinal	7.7	3.2	5.6	3.2	4.9
Others	5.8	15.1	10.3	14.5	11.5
Don't know/No response	0.0	2.1	1.8	0.0	1.3
Total	100.0	100.0	100.0	100.0	100.0
Number of elderly	77	129	116	90	206

Table A 5.17: Percentage of acute morbidity episodes for which treatment was sought according to place of residence and sex, Kerala 2011

Place of Residence	Men	Women	Total	Number of Episode
Rural	90.6	84.9	97.2	118
Urban	77.3	87.6	83.7	90
Total	86.9	85.7	86.2	208
Number of episodes	78	130	208	

Table A 5.18: Per cent distribution of elderly by source of treatment for the last episode of acute morbidity according to place of residence and sex, Kerala 2011

Source of Treatment	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Government health facilities	34.7	41.6	38.8	30.5	26.4	27.9	33.6	37.1	35.8
Private Physicians	49.0	49.6	49.4	31.7	54.0	46.2	44.6	50.9	48.5
AYUSH Hospital/ Clinic	8.4	5.8	6.8	18.2	4.7	9.5	10.9	5.5	7.6
Others	7.8	3.1	5.0	19.7	14.8	16.5	10.8	6.5	8.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly sought treatment	39	62	101	25	48	73	64	110	174

Table A 5.19: Per cent distribution of elderly seeking treatment for last episode of acute morbidity according to select background characteristics, Kerala 2011

Background Characteristics	Source of Treatment					Number of Elderly
	Government Health Facilities	Private Physicians	AYUSH Hospital/ Clinic	Others	Total	
Age						
60-69	32.6	47.8	9.2	10.4	100.0	108
70-79	38.9	49.5	7.4	4.2	100.0	42
80+	44.9	49.5	0.0	5.6	100.0	24
Sex						
Men	33.6	44.6	10.9	10.8	100.0	64
Women	37.1	50.9	5.5	6.5	100.0	110
Residence						
Rural	38.8	49.4	6.8	5.0	100.0	101
Urban	27.9	46.2	9.5	16.5	100.0	73
Caste						
SC/ST	64.1	29.9	0.0	6.1	100.0	17
OBC	34.4	51.3	6.0	8.2	100.0	115
Others	31.4	45.6	14.2	8.8	100.0	42
Wealth Index						
Lowest	100.0	0.0	0.0	0.0	100.0	2
Second	53.5	46.5	0.0	0.0	100.0	24
Middle	39.5	49.0	3.1	8.4	100.0	70
Fourth	33.7	46.9	8.8	10.7	100.0	35
Highest	17.0	52.2	20.0	10.8	100.0	43

Table A 5.20: Average expenditure made for treatment of acute morbidities and per cent distribution according to major heads and source of treatment, Kerala 2011

Average Expenditure by Major Heads	For Last 15 Days Expenditure				No. of Episodes
	Govt. Health Facility	Private Physicians	Others	Total	
Total Average Expenses	487	1,460	581	970	142
% distribution by item of expenses (based on the valid cases for which component wise details were available)					
Consultation	14.9	11.5	12.4	12.0	62
Medicines	26.7	50.8	47.0	48.6	62
Diagnostic tests	14.9	12.2	26.4	16.0	62
Transportation	16.8	15.6	7.7	13.5	62
Others	26.7	9.9	6.5	9.9	62

Note: Out of 175 episodes of acute morbidity accessing health care only for 142 episodes were responded for the expenditure part. For item wise expenses, there were 62 valid cases, hence percentages have been worked out only for these valid cases.

Table A 5.21: Per cent distribution of elderly by source of payment for last episode of acute morbidity according to sex, Kerala 2011

Source of Payment	Men	Women	Total
Self	57.7	21.8	35.2
Spouse	0.0	7.4	4.6
Children	40.4	60.9	53.3
Relatives/Friends/Insurance/Others	1.9	9.9	6.9
Total	100.0	100.0	100.0
Number of elderly sought treatment	58	102	160

Table A 5.22: Prevalence rate (per 1,000) of chronic morbidities according to place of residence and sex, Kerala 2011

Chronic Ailments	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Arthritis	102	142	125	156	196	180	119	159	142
Hypertension	335	431	391	391	425	411	353	429	397
Cataract	213	186	197	196	247	226	208	205	206
Diabetes	272	270	270	324	290	304	288	275	281
Asthma	165	143	153	156	125	138	162	138	148
Heart diseases	201	106	146	223	150	180	209	120	158
Osteoporosis	18	45	33	34	79	60	23	56	42
Skin disease	61	54	57	50	27	37	58	45	51
Renal diseases	81	39	57	78	35	53	82	38	56
Paralysis	15	7	11	6	12	9	12	8	10
Liver diseases	25	7	15	6	4	5	19	6	12
Chronic lung diseases	51	26	36	22	20	21	42	23	31
Depression	8	13	11	11	4	7	7	10	9
Alzheimer	0	2	1	0	0	0	0	1	1
Cerebral stroke	18	19	18	45	20	30	26	19	22
Dementia	5	7	6	11	16	14	9	10	10
Cancer	13	6	9	6	4	5	9	4	6
No chronic ailments	183	184	183	162	196	182	176	188	183
One or more chronic ailments	817	816	817	838	804	818	824	812	817
Average number of chronic ailments per elderly	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7
Number of elderly	291	396	687	275	391	666	566	787	1,353

Table A 5.23: Prevalence rate (per 1,000) of common chronic morbidities according to background characteristics, Kerala 2011

Background Characteristics	Arthritis	Hypertension	Cataract	Diabetes	Asthma	Heart Disease	At Least One	Number of Elderly
Age								
60-69	144	388	150	290	123	150	784	813
70-79	143	432	263	279	175	162	852	378
80+	131	364	348	240	208	182	897	174
Sex								
Men	119	352	208	288	163	209	824	567
Women	159	429	205	276	138	119	812	798
Residence								
Rural	125	391	198	269	153	146	817	690
Urban	179	411	226	304	138	181	818	675
Marital Status								
Married	161	372	179	295	138	174	809	763
Widowed	122	445	244	268	162	141	839	547
Others	77	295	222	209	154	92	723	55

Table A 5.24: Percentage of elderly seeking treatment for common chronic ailments during last 3 months according to place of residence and sex, Kerala 2011

Chronic Morbidities	Sex		Residence		Total	Number of Elderly
	Men	Women	Rural	Urban		
Arthritis	72.9	71.8	79.6	61.3	72.3	209
Hypertension	90.7	90.8	91.1	90.4	90.8	550
Cataract	29.2	37.6	35.4	31.5	34.1	289
Diabetes	86.9	91.8	90.4	88.4	89.7	397
Asthma	86.1	81.2	85.8	77.6	83.4	193
Heart disease	88.6	81.2	87.2	82.1	85.3	220

Table A 5.25: Per cent distribution of elderly by reason for not seeking any treatment for common chronic morbidities, Kerala 2011

Chronic Morbidities	Reasons for Not Receiving Any Treatment							Total	Number of Elderly
	Condition Improved	No Medical Facility Available in Neighborhood	Facilities Available but Lack of Faith	Long Waiting Time	Financial Reasons	Ailment not Considered Serious	Others		
Arthritis	44.0	1.2	11.8	2.7	9.6	22.6	8.2	100.0	65
Hypertension	48.0	6.1	1.8	3.2	5.8	35.2	0.0	100.0	55
Cataract	59.2	1.9	3.9	0.4	10.9	18.6	5.1	100.0	189
Diabetes	44.7	3.7	0.0	0.0	5.7	37.3	8.6	100.0	41
Asthma	50.5	4.1	6.1	10.2	6.2	22.9	0.0	100.0	35
Heart diseases	48.4	0.0	5.3	0.0	24.8	21.6	0.0	100.0	34

Table A 5.26: Per cent distribution of elderly by source of payment for treatment of common chronic morbidities according to sex, Kerala 2011

Source of Payment	Arthritis		Hypertension		Cataract		Diabetes		Asthma		Heart Diseases	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Self	64.4	25.7	63.3	26.5	58.2	30.1	66.6	20.1	32.8	18.3	45.2	25.1
Spouse	3.4	26.1	3.8	10.8	5.5	3.4	3.6	16.7	3.8	10.0	6.1	6.4
Children	30.2	44.3	27.9	57.6	27.3	58.9	26.5	58.6	53.6	66.4	44.0	63.6
Relatives/ Friends/ Insurance/ Others	2.0	3.9	5.0	5.2	9.0	7.7	3.4	4.6	9.8	5.3	4.8	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	44	92	163	294	32	58	142	193	66	81	100	80

Table A 5.27: Per cent distribution of diseases as the reason for hospitalization (last episode) among elderly according to sex and place of residence, Kerala 2011

Morbidities	Sex		Place of Residence		Total
	Men	Women	Rural	Urban	
Cardiovascular disease	22.2	20.1	21.9	19.0	21.0
Asthma	20.7	11.7	18.8	9.2	15.8
Accidents	11.2	12.1	8.3	19.2	11.7
Fever	6.1	10.9	9.6	6.7	8.7
Disorder of joints and pain	1.9	8.2	3.1	10.2	5.3
Gastro-intestinal	3.7	9.6	7.3	5.9	6.9
Diabetes	2.6	6.1	3.3	7.2	4.5
Neurological disorder	2.8	5.6	3.6	5.8	4.3
Conjunctivitis	4.9	3.6	5.6	1.0	4.2
Others	22.8	12.2	17.6	15.9	17.1
Do not know/Non-response	1.1	0.0	0.7	0.0	0.5
Total	100.0	100.0	100.0	100.0	100.0
Number of elderly	112	136	132	116	248

Table A 5.28: Per cent distribution of elderly by source of hospitalization care according to place of residence and sex, Kerala 2011

Type of Hospitals	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Government	36.7	26.1	31.0	18.1	30.0	24.7	31.2	27.3	29.1
Private	61.7	70.8	66.6	81.9	67.4	73.9	67.7	69.7	68.8
AYUSH Hospital/ Clinic	1.6	1.2	1.4	0.0	2.6	1.4	1.1	1.6	1.4
Others*	0.0	1.9	1.0	0.0	0.0	0.0	0.0	1.3	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean length of stay	10.1	9.3	9.7	10.0	10.2	10.1	10.0	9.5	9.8
Number of hospitalization cases	76	85	161	61	79	140	137	164	301

*Others include charitable/missionary, NGO-run hospital, and others

Table A 5.29: Average expenditure made for hospitalization care by type of hospitals for one year preceding the survey according to major heads, Kerala 2011

Average Expenditure by Major Heads	Govt. Hospitals	Private Hospitals	Others	Total	No. of Spells
Total	7,480	17,396	16,589	14,647	279
<i>Based on valid cases for which component wise details are followed</i>					
Consultation	14	392	319	286	70
Medicines	822	912	1,916	918	70
Diagnostic tests	172	951	639	728	70
Hospitalization	37	1,596	1,277	1,159	70
Transportation	317	295	479	307	70
Food	614	277	479	375	70
Others	64	124	0	104	70
Total	2,836	4,955	5,109	4,379	70
Others (indirect cost)	795	408	0	502	70

Note: Out of 301 spells of hospitalization, expenditure was provided only for 279 spells. For item wise expenses, there were only 70 valid cases, hence average expenditure have been worked out only for these valid cases.

Table A 5.30: Per cent distribution of elderly by source of payment for last hospitalization according to place of residence and sex, Kerala 2011

Source of Payment	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Self	22.1	6.5	13.8	30.6	12.7	20.4	24.6	8.5	15.8
Spouse	7.7	12.0	10.0	4.2	8.0	6.4	6.7	10.7	8.9
Children	55.2	70.4	63.3	47.3	64.7	57.2	52.9	68.6	61.4
Relatives/ Friends/ Insurance/ Others	15.0	11.1	12.9	17.9	14.7	16.1	15.8	12.3	13.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of elderly	63	69	132	49	67	116	112	136	248

Table A 6.1: Percentage of elderly aware of national social security schemes according to place of residence, sex and BPL and non-BPL status, Kerala 2011

Schemes	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Elderly Belonging to BPL Households									
IGNOAPS	82.7	77.5	79.4	98.1	85.4	89.5	86.1	79.5	81.8
Annapurna Scheme	46.2	31.4	36.8	43.3	28.9	33.4	45.6	30.7	35.9
IGNWPS	75.4	76.7	76.2	80.1	88.5	85.8	76.4	79.8	78.6
Number	92	156	248	50	111	161	142	267	409
Elderly Belonging to Non-BPL Households									
IGNOAPS	94.6	83.0	88.3	92.8	82.7	87.3	94.0	82.9	87.9
Annapurna Scheme	62.6	41.4	51.1	54.5	30.9	41.4	59.8	37.7	47.6
IGNWPS	90.6	84.9	87.5	91.6	87.9	89.6	90.9	86.4	88.3
Number	200	242	442	225	289	514	425	531	956
All									
IGNOAPS	90.9	80.8	85.1	93.9	83.6	87.8	91.8	81.7	85.9
Annapurna Scheme	57.5	37.4	45.9	52.3	30.3	39.4	55.9	35.1	43.8
IGNWPS	85.9	81.7	83.4	89.4	88.1	88.6	86.9	83.7	85.1
Number	292	398	690	275	400	675	567	798	1,365

Table A 6.2: Percentage of elderly utilizing national social security schemes according to place of residence, sex and by BPL and non-BPL status, Kerala 2011

Schemes	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Elderly Belonging to BPL Households									
IGNOAPS	11.1	10.1	10.5	12.4	8.6	9.8	11.4	9.7	10.3
Annapurna Scheme	0.0	2.8	1.8	4.9	5.6	5.4	1.1	3.5	2.7
Number	92	156	248	50	111	161	142	267	409
IGNWPS	NA	30.7	30.7	NA	26.5	26.5	NA	29.5	29.5
Number	NA	100	100	NA	77	77	NA	177	177
Elderly Belonging to Non-BPL Households									
IGNOAPS	3.3	4.8	4.1	0.9	1.0	0.9	2.5	3.4	3.0
Annapurna Scheme	1.6	0.4	0.9	0.0	0.0	0.0	1.0	0.2	0.6
Number	200	242	442	225	289	514	425	531	956
IGNWPS	NA	15.2	15.2	NA	9.1	9.1	NA	12.8	12.8
Number	NA	138	138	NA	178	178	NA	316	316
All									
IGNOAPS	5.7	6.9	6.4	3.2	3.2	3.2	4.9	5.7	5.4
Annapurna Scheme	1.1	1.3	1.2	0.9	1.6	1.4	1.0	1.4	1.2
Number	292	398	690	275	400	675	567	798	1,365
IGNWPS	NA	21.9	21.9	NA	14.5	14.5	NA	19.4	19.4
Number	NA	238	238	NA	255	255	NA	493	493

Table A 6.3: Percentage of elderly by awareness and utilization of special government facilities/schemes according to place of residence and sex, Kerala 2011

Special Government Facilities/Schemes	Rural			Urban			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Awareness of Facilities/Schemes									
Train ticket concession	72.9	42.5	55.4	82.7	54.6	66.2	76.0	46.4	58.8
Bus seat reservation	74.2	39.2	53.9	80.9	45.6	60.2	76.2	41.2	55.9
Preference for telephone connection	55.8	26.0	38.6	57.3	26.2	39.0	56.3	26.1	38.7
Higher interest for deposits in banks/Post offices	55.3	25.1	37.8	62.7	30.0	43.5	57.6	26.7	39.7
Income tax benefits	42.1	14.2	25.9	49.5	16.8	30.3	44.4	15.0	27.3
MGNREGA	74.3	64.1	68.4	71.7	52.9	60.7	73.5	60.5	65.9
Utilization of Facilities/Schemes									
Train ticket concession	21.4	10.2	14.9	27.8	19.2	22.7	23.4	12.1	14.4
Bus seat reservation	12.1	4.7	7.8	10.8	4.2	6.9	11.7	4.5	7.5
Preference for telephone connection	5.4	1.9	3.4	3.2	2.4	2.7	4.7	2.1	3.2
Higher interest for deposits in banks/Post offices	8.7	3.5	5.7	20.9	8.6	13.7	12.6	5.2	8.3
Income tax benefits	2.4	0.0	1.0	3.2	1.8	2.4	2.6	0.6	1.5
MGNREGA	1.6	4.9	3.6	0.0	0.8	0.5	1.2	3.6	2.6
Number	292	398	690	275	400	675	567	798	1,365

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Details of Contributors

K.S. James: Professor and Head, Population Research Centre, Institute for Social and Economic Change, Bangalore

T.S. Syamala: Associate Professor, Population Research Centre, Institute for Social and Economic Change, Bangalore

Supriya Verma: Assistant Professor (Projects), Population Research Centre, Institute for Social and Economic Change, Bangalore

Sajini B. Nair: Social Scientist, Population Research Centre, University of Kerala, Thiruvananthapuram

L. Shylaja: Research Officer, Population Research Centre, University of Kerala, Thiruvananthapuram

S. Sureshkumar: Field Investigator, Population Research Centre, University of Kerala, Thiruvananthapuram

K.R. Anithakumari: Field Investigator, Population Research Centre, University of Kerala, Thiruvananthapuram

BKPAI Coordinators

Moneer Alam

K.S. James

G. Giridhar

K.M. Sathyanarayana

Sanjay Kumar

S. Siva Raju



For further information, please contact:
United Nations Population Fund
55, Lodi Estate, New Delhi - 110 003. INDIA
E-mail: india.office@unfpa.org
india.unfpa.org