Chapter 1
Introduction

Ageing is a process. Old age is referred to as the penultimate stage in the biological process of conception, growth, maturity, decline and death. The period of decline due to ageing is known as senescence. But the rate of decline varies from individual to individual. The exact age at which old age starts is controversial. Similarly there is little agreement on the physiological characteristics of old age. Their appearance, frequency and severity vary from person to person.

Old age is perhaps easily understood than defined. Chronologically it is after a certain age. But no specific age in the life span of an individual can be fixed as the starting point of old age. Benson (1971) says that the erroneous idea that old age begins at sixty five is slowly being moved out. Instead, seventy five is the dividing line because a person's sensory abilities of taste, smell, sight, hearing and probably touch decline most noticeably at this stage. This period is also the beginning of many chronic health problems.

Ageing is a natural process; whereas old age is arbitrary. Determination of old age differs from society to society depending on the social organization, level of economy, standard of living and health services on the one hand and the socio-cultural beliefs on the other. Again, socially popular concept of old age need not coincide with the personal experience or acceptance of it. Yet, determination of who are the old is necessary for the formulation of social policies

and programmes. Age of retirement from organised employment is often taken as the starting point of old age. Where age of retirement is determined from the point of providing jobs to the growing number of unemployed youth, the determination of old age from that point in time in human life becomes untenable. For instance, the age of retirement of most categories of employees in India is either 55 or 58 and there is demand in some quarters to further decrease the age to meet the massive challenge of unemployment.

Old age, according to the working definition of this study, starts from the sixtieth year. Traditionally, the sixtieth year has been considered to be the beginning of old age in India. Completion of 60 years, "Shastiabdipoorthi", is an important milestone in the life of an individual, which not many are lucky to reach. Depending on the caste affiliation, family status and income, it is celebrated. This is mainly because most people seldom survive into the sixtieth year. The expectation of life at birth in India is much less than 60 and the age of retirement of most categories of employees is either 55 or 58. Psychologically too most Indians appear to consider themselves old earlier than the chronological age of sixty. And the Indian woman perceives herself to be old much earlier than the man. The moment one becomes a grandparent, one is automatically viewed as old.

Whatever be the difficulties in defining old age, the older people are, by and large, distinguishable from the young because of certain physical characteristics. The wrinkling skin, the greying hair and the shrinking in the stature are some. Bergmann, (1972) adds that the pattern of illness may also change; in old age as people grow older there is a greater

likelihood of several illnesses to be present together. Medical opinion associates old age with sensory impairments, particularly vision and hearing, glandular and metabolic changes, slow responses, chronic ailments, diminished energy, increased fatigue and decreased capacity to do different physical tasks independently. On the other hand, Lang (1961) categorically states that there are probably no diseases caused by growing old. It is Lang's contention that there is no scientific evidence in support of the popular view that old age is a period of poor health, mental deterioration and loneliness.

Despite the controversies on the physiological features of old age, it is a period of change in employment status, income level and family composition. It is also characterised by unpleasant and even traumatic emotional experiences like death of peers, loss of spouse and separation from children.

It is true that in rural areas, cessation of work is not abrupt and retirement not sudden as most of the workers are outside the organised sector and people can work as long as they can or as long as they want to, provided there are adequate opportunities for work. Among those who have land to cultivate or who are self-employed in other occupations, there is a gradual change over from heavy to light tasks and transfer of responsibility to younger members of the household. Yet, at some point of time, people give up work, some earlier and some later. Those who do not retire at all are a very small minority. Transition from employment to retirement is a critical phase in one's life. Retirement from work normally brings about deprivation and hardships. Employment means income (however, meagre it may be),

participation in productive activity, independence and status; retirement often implies the reduction or opposite of all these. Retirement marks a break from the life centering around a definite purpose to one of uncertainty. It means a reordering of life economically, socially, and psychologically. Retirement and dependence operate together. Those who do not earn and depend on others normally lose status in the family as well as in the community and experience feeling of uselessness. Men, Cavan (1952) says, are more severely affected by retirement because they "secure their primary status and feeling of worth from their jobs, while most women receive it from their roles as wife, homemaker and mother". With retirement, time becomes surplus and boredom sets in. The utilisation of free time needs a reorganisation of daily routine, which many are hardly able to do it. Retirement, thus, marks the final stage of the family life cycle according to Duvall (1967). With reduction in economic roles there may be loss in community roles too. The process of being pushed from the centre of action to the fringe is painful. Bergmann (1972) says that both retirement and old age represent a loss of social position and prestige for most persons. For the individual it could be an extremely disturbing experience to reconcile to a completely changed personal situation.

Old Age in Hindu Scriptures

The Hindu scriptures divide the life of a man into four stages or Asramas: Brahmacharya, Grihastha, Vanaprastha and Sanyasa. The first is the stage of study, discipline and celibacy, and the second that of the householder. The third stage is the semi-retirement period which starts when the

hair of the householder turns white and he sees his son's son. He relinquishes his major responsibilities to his son and retires from the active pursuit of material life. He lives away from home either with his wife or leaving her to the care of his sons. This is the preparatory stage for the final separation from the pains and pleasures of human life. In the final stage, the individual leads the life of a recluse striving for the attainment of the spiritual goals and the final salvation. A staff, a begging bowl, and a few rags of clothing are his only belongings (Prabhu, 1961). This has been the scriptural ideal, but not the social practice. Though the scriptural prescription for the old is disengagement (Cumming & Henry, 1961) from society and renunciation of material life, only a negligibly small number, probably belonging to the higher castes, might have completely observed the sacred law in the remote past.

Aged and the Joint Family

The traditional family in India is the joint family. In the joint family system, cultivation or occupation was carried on jointly by the members of the household and the produce or income pooled together and utilized for the whole family's benefit. Caste, family, services and land were the chief characteristics of the traditional Indian rural society. Caste determined the services to be rendered by the families which in turn decided the control of land. Within the family, the senior most man was the head. He was responsible for the management of property, care for all persons in the household, and education and marriage of younger members. The aged, who were the heads of families, were also the leaders of the kin group, caste and village. Srinivas

(1956) observes, "The elders of the dominant peasant caste in Rampura administer justice not only to members of their own caste group but also to all persons of other castes who seek their invention. Even now, in rural areas, taking disputes to the local elders is considered to be better than taking them to the urban law courts".

Gore (1968) says that the "principle of seniority" in a joint family "is generally supported by the cultural system characteristic of peasant societies. In a society where change is slow, the solutions of yesterday for the problems of life are still valid today. The man who has had to face these problems in his life time and find solutions to them is therefore a man who can give leadership. The older man has therefore higher rank. In the joint family this principle is institutionalized…… The eldest male member therefore becomes the centre of authority in the joint family". He wielded great power and was endowed with great authority. The younger members paid great deference to him. The veneration of the aged in the joint family was perfected by the practice of ancestor worship. "Within each patrilineal extended family all submit to the oldest man" (Gough, 1956). Even grown up married men, themselves the fathers of children, are expected to act in accordance with their father's advice and wishes. As members of a joint family they are not in control of property as long as their father is alive, and submissiveness and deference to elders are more highly valued virtues than initiative and independence of spirit"(Haimendorf, 1963).

The traditional rural society thus conferred a pre-eminent position to the aged. The more one ages the greater is his responsibility, the more are his roles and higher is his status.

Experience is a requisite of the agricultural society. As experience grows with age, the elders commanded greater respect and position. They were the reservoirs of wisdom and keepers of tradition and folklore. They were considered the repositories of wisdom, knowledge, experience and skills, and were treated with deference and veneration. Even today, the younger person is expected to place his head on the elder's feet on marriage and other ceremonial occasions.

Most of the elderly persons interviewed for the present study (92 per cent) support the view that the aged enjoyed higher status in the early days. They say that the words of the elders were final, when they were young. They are unhappy with the present younger generation because they seldom listen to the advice of the older persons. But the joint family and the socio-cultural-economic context which conferred a pre-eminent position to the aged in the family, the kin group and the village community have been changing in structure and functions. Political democracy, universal franchise, socialist orientation, spread of social reform, political and social movements, democratisation of education, elected village panchayats, land reform, legislations on marriage, divorce, succession, inheritance and right to property, monetisation of the economy, improved communication, impact of mass media, exodus of the young to the towns and cities, pressure of urbanisation, development programmes, particularly family planning and development of women and weaker sections, constitutional and legislative measures to abolish inequalities like untouchability are the major forces that have contributed to the structural and institutional changes in Indian society. In this process of change, the solidarity of

the traditional joint family is weakened. Concomitantly, the roles and status of the aged are changing. Hereditary leadership is being replaced by elected leadership. Experience as the sole criterion of roles of responsibility is giving way to the criteria of efficiency and effectiveness. Consequently, the leadership of the elderly is under pressure. The economic and social support, once enjoyed by the aged from the family and the community, is on the decline.

Devanandam and Thomas 1966 are of the view that there is a change from kin-oriented to an interest-oriented outlook because of the influence of technology, money economy, education and the national development programmes. This change in outlook undermines the traditional joint family as a social security institution. Though the aged and other dependants are taken care of, there is a change in the general atmosphere. "They are looked upon sometimes as people who do not have legitimate claims for their support by the family. It affects the emotional and psychological security they need".

The findings of Marulasiddaiah (1969) based on his study in a Karnataka village are gloomy. Most of the older people in the village are in poverty; the existence of the joint family is an exceptional feature; and there is neglect by relatives as the elderly grow older. He writes: "No sooner-do-you get your son married than you make arrangements for the breaking up of your family: this is how the people put it." He adds that of the nearly 300 families "there are hardly 10 joint families, and that too, ridden with quarrels." He observes the loss of respect of the elders in the family, the ineffective role played by them in the wider kin group, caste and village affairs, and their declining authority in social

and political life, though they are consulted on matters involving ritual complexities.

The Study

"The basic pre-occupation of social gerontology as it has emerged within the last two decades may be categorized as being concerned with integration versus segregation. Are old people integrated into society or are they separated from it? This is perhaps not only the most important theoretical question in social gerontology today but also the key question affecting all social policies concerning the aged" (Friis,et al., 1968). The danger arises when the central theme of segregation and integration is lost in the observability of the problems of the older people or when there is the tendency for generalisation from problems. The outstanding cross-national study on the aged in the USA. the UK and Denmark by Shanas and associates (1968) show that the aged are more integrated than segregated, though there are problems of diverse nature in varying degrees. The study on older people in Madras city by Nair (1972) on the lines of the cross-national study also comes to the same conclusion. He observes that the family "still remains the strong integrating social unit in form and function, mutuality and interdependence. Instead of separation between children and parents, we find nearness and close contact. The living arrangement of the elderly and their proximity to children, patterns of contact, and help between old people, and their children, grandchildren, siblings and other relatives, the care and services they receive from family are definite indicators of family solidarity ——— The totally isolated individual is a rarity." Nair adds that "while

segregative forces like widowhood, ill-health, incapacity, low or no income and reduced opportunities for labour force participation align against the ageing individual, the integrating process is far more overpowering".

Not only do the elderly increase in number and proportion, but there are also growing economic and social consequences; and the growing visibility of the increasing older population has recently brought about greater awareness among planners, administrators, social workers, social scientists, medical personnel and journalists that the older people in our society deserve more attention than they have been given hitherto. But scientifically obtained information on the life of the aged in India has been quite inadequate to help formulate social policy regarding the elderly, to introduce new welfare programmes and to modify the existing services. This study covers the rural aged in general in one of the Indian states and perhaps no such study of this magnitude has so far been attempted in India. This study on the problems of the aged in 200 villages in Tamilnadu is perhaps the first large scale study on thisissue in India.

The objectives of the survey were to study the conditions and to ascertain the problems of the elderly with special reference to their health condition and health care, living arrangement, family and social relationships, employment and retirement, economic situation,and leisure time activities.

The study covered persons aged sixty and over living in private households in the villages of Tamilnadu. Aged persons living in institutions were not included for the study.

Method of Study

Pilot Study

Before the actual survey plan was finalised, a pilot study was conducted in three purposively selected villages to test the sampling procedures suggested, to canvas the draft schedule and to finalise the organizational design of the study.

Sample Size

From a study of the work load involved in a survey of this type in Madras city and the data regarding the aged available from the 1961 and 1971 Censuses, it was estimated that a sample of the order of 2000 aged persons selected from about 200 villages may be adequate to provide estimates at the State level on each of the objectives of the study.

Sampling Plan

The socio-economic unit of a village is a household, the average size of which is around 5 (4.6 in 1971). The average size of a village, as per the 1971 Census, was 1,826. On the average, a village, therefore, comprised around 376 households and contained about 110 aged persons. For administrative purposes, continguous villages are grouped into taluks and these taluks are further grouped into thirteen districts, excluding the city of Madras which itself is a district, the only totally urban district. With the creation of the State Planning Commission, planning in the state has been decentralised to the district levels. Hence it was decided to extend the survey to all the districts.

A stratified two-stage area sample was selected, villages

being the first stage units and households having at least one aged person the second stage units. The sample villages were selected with probability proportional to their population sizes and within each sampled village, a systematic sample of households was selected for the survey from among those containing at least one aged person. The sample was selected in the form of two independent sub-samples of 100 villages each to enable easy estimation of sampling and non-sampling errors.

Sampling Frame

For the first stage sample, the list of the 15,735 villages in Tamil Nadu state compiled by the 1971 Census was used. For the second stage sample, the Research Assistants compiled a list of households during their visits to the villages for the survey.

Selection of Villages

Each district was treated as a stratum except Nilgiris and Kanyakumari which were merged with Coimbatore and Tirunelveli, respectively because individually they were too small districts to merit any sampling. Thus the thirteen districts became eleven strata and the taluks within the strata were arranged by geographical contiguity. Within the arranged taluks, the villages were arranged as per the Census list. The total sample size of 200 villages was allocated to the strata in proportion to the number of inhabited villages in them. A circular systematic sample of villages was selected in each stratum with two independent random starts for each stratum.

Second Stage Sampling Design

An up-to-date, complete lists of all the households in the villages were prepared by the Research Assistants to identify households having at least one aged person.

Selection of Households

From the list of households having at least one aged person, one in eleven households was selected in a circular systematic manner. The sampling interval of eleven was same for all the villages. It was so fixed as to ensure a self – weighting design. All the elderly persons in the sampled households formed the study sample.

Final Sample

In all, 18,400 households with at least one aged person were identified from among the 77,317 households in the villages. Most of the households had only one elderly person; 1973 households had two older persons, 30 households had three, and 4 households had four. In all, 1941 older persons aged 60 and above were selected: 1,004 men and 937 women, of which 200 men and 138 women could not be interviewed, and 2 men and 1 woman refused. Two interviews were partial (one man and one woman). Thus, the final sample was 1,598 : 801 men and 797 women.

Non - Contacts

The non - contacts were those who had gone out of the village (a) to their children or other relations to attend to marriage, death, puberty, birth and other ceremonies, or (b) to participate in religious functions, or (c) to attend to matters connected with work, or village or household.

The number of non-contacts would have been much less but for the nature of data collection with a pre-determined time schedule for the entire state. The research team was on the move continuously. After the completion of work in a particular village they proceeded to the next village after waiting for a reasonable time for the selected persons, who were not available earlier. Once they left a village, they never returned to that place as it would have cost the project heavily in terms of time and money.

Thirty four aged persons (16 men and 18 women) were interviewed with the help of proxies: 22 were deaf, 4 paralytic, 3 mentally ill, 2 dumb, one deaf and mute, one giddy, and one who 'could not understand' anything. A proxy was one who looked after the subject (subject's spouse, child or any other member of the household) and who knew the subject intimately.

Non-Sampling Errors

The following steps were adopted to control non-sampling errors: training of investigators, detailed written instructions to investigators, supervised field work, complete scrutiny of all schedules and immediate rectification of mistakes, if any.

Field Work

The teams each comprising one Research Supervisor and four Research Assistants collected the data. All preliminary arrangements such as contacting officials for help in the villages and their accommodation were gone into, prior to their departure, by the project office at Madras. So also, a complete route chart of all the villages was made in advance.

To successfully complete the tour, two cars were pressed into use. Keeping the vehicles at the disposal of the teams was mainly to facilitate quick movement from village to village in order to complete the data collection within the time schedule. But this was not to be, owing to many unforeseen circumstances experienced in the villages. To save fuel, often the shortest route was taken. But this proved to be a costly affair, because roads were either badly maintained or were mere foot paths cutting across fields. Added to this, the hamlets were scattered. In some villages, the distance between clusters of households was around 20 kilometres. In these places, the research personnel had to resort to either walking or cycling. Some regions were hilly. Mannalur, which lies in Dindugul taluk of Madurai district, is surrounded by coffee, cocoa and tea estates; they were 116 in number, and each estate had living quarters for those employed by it. Similarly, Kottaramadugu is on one side of the hill and its extended hamlet on the other side.

Another handicap was the names of the villages. Often the popular name of the village was different from the official name, causing difficulties in location. Pudur was an example of misidentification. There being two Pudurs officially, the village we required was commonly known by the name Kondampalli.

Throughout the tour, the teams found their accommodation mainly in nearby travellers' bungalows, block development offices, chatrams, temple devasthanam cottages, schools, panchayat buildings, lodges and even private houses. The research teams avoided staying at the Primary Health Centres, for fear of being considered as visiting family planning campaigners.

In most of the villages, food was a problem. As far as possible, the teams made use of the way side hotels and ate whatever food was available. Many a time they had to contend with snacks and tea or coffee. There were some villages where food was not available and the teams had to travel anywhere from eleven to twenty kilometres to get some food. At times, the teams were hosted by the villagers.

General Reception in Villages

The entry of the team into a village made the people curious and they were all agog to know the reason for the visit. It gave rise to assumptions, fears and hopes. Most of the officials, particularly village munsiffs, whom the teams contacted with regard to the field work, were very co-operative, though in most of the villages the officials were busy with rice procurement and levy. But the experience with village presidents was varied. Some were hospitable, while others were not.

In one village, the 69-year old munsiff helped even in listing, whereas in another village the president, after listening to all the explanations of the work the team would be doing, just went off, without offering any help. Here the research team encountered difficulty both in work and food.

Some villages took the team to be people visiting relatives. But when they asked for the village munsiff, their curiosity was aroused. In most of the villages, after having contacted the village munsiff, the karnam or the panchayat president and explaining the objectives of the study, the teams were accepted and allowed to complete the work. Unless the village officials and leaders were met, co-operation was difficult.

Interestingly, the reception in a village also depended on the size of the village. In smaller villages, the people were far more friendly than those in large villages. The reception at Kombankulam was most memorable. The villagers on hearing that the team was going to the village the next day made arrangements to receive them in the "Chavadi". A table and some chairs were arranged there and refreshing tender coconut water was served. The supervisor was garlanded and crackers were bursted. Not having had such a warm welcome in any village till then, it was indeed a very pleasant surprise for the research team. For a moment, the team was nonplussed. The supervisor thanked the villagers on behalf of the team and expressed gratitude for the warmest welcome. Petitions regarding the amenities the village needed were then handed over to the team. But the supervisor made it clear that the team had gone there expressly to collect information on the aged persons and beyond handing over the petitions to the concerned authorities, the team would not be able to do anything. The work in that village was done in a spirit of cordiality and the team left with regret that on their part there was nothing they could give the villagers in return for their generous hospitality.

In another village, the team experienced something hitherto unknown. One of the Research Assistants was misunderstood while interviewing a widow. The misunderstood question was "Do you agree or disagree with the statement that on the whole, I am satisfied with what I have accomplished in life". She accused that knowing she was a widow, the question should not have been asked, because the Tamil translation of "life" had reference to

marital life. This she felt was a slur on her character and took offence. Within a short time, she mustered her neighbours and relatives numbering about 50 and went to the panchayat union office to complain against the Research Assistant. All the members of the research team were summoned and the complaint was discussed. The elderly woman was fully convinced of the implication of the question. She finally co-operated in completing the interview.

In some villages, the people thought that the teams had gone for rice procurement and so criticised the procurement policy of the government. In some villages, the people blamed the research team for price increase. They remarked that every day some officer went to take census. But no steps had been taken to curb the pricerise. In certain places, people remarked, "There is no water for drinking. But they have come for enumeration". "They cannot bring down the prices for those who live, but they want to ask unnecessary questions to those who are going to die". But in some other villages, the reception was different. In one village, the people commended the government for sanctioning money for drought relief, "The government has done many good things for the people. Now the government is going to help the old people". In some villages the complaints were against the "eye camps" and "family planning operations".

In some villages, the young persons teased the older people by saying that the government was going to take all of them to be killed since they were useless or that they were going to be recruited to offer as human sacrifice for building bridges. In one village, when a Research Assistant was talking to a group of young men, an older man on hearing

the conversation, wanted to know what the former was doing, to which the others shouted at him, "You keep quiet, you don't know anything". After the others had gone away, the elderly man said: "You tell me what information you want and I will give it to you. Was I born earlier or they?".

In some places, people thought that listing of households was done to issue ration cards, and hence increased the number of households in a dwelling. In some other places, they thought that listing was done with regard to house tax and so the number of households was reduced. In some instances, people were under the impression that the listing was done for giving old age pension, and as a result, the under-aged became 60 and above. In contrast, in some cases, the persons who were 60 and above mentioned the age as below 60 merely out of fear because of the rumours that the government wanted to get rid of all the old people by putting them in institutions or by giving some injections.

In one village, the team was told that the person who figured in the sample had gone out of the village, but would be back in the evening. The Research Assistant waited for him. But on seeing the Research Assistant, he ran away thinking that he had gone there to force him for "family planning operation".

Husband's Name

Getting the husband's name is an art by itself in our villages. Women seldom utter the name of their husbands. In one case, the name was got in this manner.

Q. What is your husband's name?

A. How can I mention my husband's name? It is the name of the twin gods.

Q. You mean Rama and Lakshmana?
A. Yes, it is the first name you mentioned.

Q. Oh! Is it Raman?
A. But you must add 'swami' to it.

Q. Is it Ramaswami?
A. Yes

Missing Daughters

Older people often mixed up the names of the children living outside the house. There was a tendency to omit the names of daughters who were given in marriage. They said after marriage the girls did not belong to their houses.

Determination of Age

Determination of the age of the elderly was not an easy task in many instances. Some, of course, knew their date of birth correctly. Many had their horoscopes or astrological charts. Some interesting counter questions to the investigators were: "You are an educated person. Don't you know my age more accurately than I do?", "Can't you make out my age by looking at my face.'' Some even became angry because of the inability of the Research Assistants to determine their age. For old persons who were not sure of their age, many methods had to be resorted to. When the ages of contemporaries were known, the ages of the respondents were fixed by finding out whether they were born more or less during the same period of birth of the contemporaries, if they were younger or older by how many

years, and the like. Important milestones in the lives of individuals like the age of puberty (or coming of age) of women, age at marriage, age at the birth of the first child, grandchild or great grandchild, and age at which one lost the spouse. The supportive details were the ages of children and sometimes grandchildren. Important landmarks in the history of the village and neighbourhood like flood, famine and major festivals that occurred once in certain years were also used to determine the age of the elderly. Between elderly men and women, more difficulties were experienced in determining the age of the latter as many came to the villages after marriage, thus missing the valuable corroborative data from the villagers unlike most men who were in the villages since birth. Senior most elders, village officials and other better-informed or knowledgeable people were helpful in determining the age of the elderly persons. The National Malaria Eradication Programme records were also helpful in cross-verification. Relatives and neighbours around, though they were a hindrance for the interview, were helpful in determining the age of the elderly.

Courtesy to the Elderly

It is a customary practice not to go empty handed when one visits a family with young children or elderly persons. The Research Assistants, therefore, carried fruits, sweets, pan (betel leaf, areca nut and tobacco), and flowers at the time of interview depending on the age, sex and marital status of the elderly respondents. This gesture of good will was highly appreciated by the elders and others in the villages.

Brief Profile of the Aged Interviewed

Eighty five per cent of the aged interviewed were Tamils, twelve per cent Telugu-speaking and two percent Kannada-speaking. Others were Marathis, Malayalis and others. Ninety five per cent were Hindus and 3 per cent Muslims. Others were Christians barring one Jain. Twenty per cent of the elderly interviewed belonged to Scheduled Castes. Three-fourths (73 per cent) were illiterates: 93 per cent women and 53 percent men. Twenty per cent were literates without schooling or had primary school education: 38 per cent men and 6 percent women. Slightly more than 3 per cent were middle school educated and almost all of them were men. The high school and college educated were slightly more than one per cent, women were negligible among them.

Chapter 2
Health Status of the Aged

Old age is often considered the synonym for disease. It is more so in the villages where "old age" is commonly referred to as the cause of death among the elderly. Diseases occur at all stages of human life and are not peculiar to old age. But the incidence of morbidity may be higher and the severity of illnesses may be more marked among the elderly than among people in the younger age groups. The medical explanation for this is the low resistance to fight diseases and the declining changes that normally occur in the systems of the body which contribute to easy susceptibility to diseases. The diseases of the circulatory system are cited as examples of this decline which, according to them, is an inevitable consequence of the ageing process. The diversity of the health-functioning of the elderly is seen from the following instances.

Chinnappa is 85 and he lives alone. He has difficulty in seeing as well as in hearing. But he can do all the personal tasks without difficulty including going outside and climbing steps.

Eighty-year old Kulandai is a symbol of robust health. He has a good vision and hearing capacity. He has absolutely no incapacity to do any personal task.

Muthu karuppa Nadar is another example. He is 82. His eyesight is good with glasses. His hearing capacity is also good. Except his dependence on the barber for cutting toe nails, he is quite independent in doing various tasks.

But 66-year old Murugesa Reddy has more health problems. His eyesight is not good, though he can hear without any difficulty. He has no difficulty in dressing, going to lavatory and getting about the house. But he needs help for bathing, going up and down steps, and going outdoors.

Perumalakka is now 82. She is deaf and has difficulty to see. She is not suffering from any disease. But, for the past five years, she has been staying indoors most of the time, though not in bed always.

She says it is due to old age. She goes to the toilet with difficulty. She has also difficulty in dressing herself.

Muthamma is living with her mother. She is 60. Her eyesight and hearing capacity are good. But she cannot do any personal task by herself. Her 80-year old mother helps her. Her mother is doing all the light and heavy household tasks.

The health status of the elderly was measured by (a) mobility status, (b) sensory impairments, (c) an incapacity index based on the ability to manage certain personal tasks by themselves, (d) self-perception of health, (e) illness during a reference period of twelve months preceding the date of interview, and (f) physician utilisation.

Mobility Status

Seven in hundred old persons in rural Tamil Nadu are housebound or bedridden. At the same time, three–fourths are ambulatory without any difficulty. A fifth of the aged are mobile with minor or major difficulty. The housebound constitute one in twenty and the bedridden one in fifty. Thus a quarter of the older people have difficulty in movement ranging from mild to complete restriction. Old women are

more restricted than old men. For every old man, who is housebound or bedridden, there are two old women. And the elderly women who can move about without any difficulty are slightly fewer than the elderly men.

Table 2.1
Mobility Status of Old People
(Percentage Distribution)

Mobility Status	Men	Women	All
Ambulatory	95.38	90.97	93.18
Without difficulty	75.91	72.27	74.09
With difficulty	19.48	18.70	19.09
Housebound	3.50	6.78	5.13
Bedridden	1.12	2.26	1.69
Total	100	100	100
N	801	797	1598

Eyesight

Nearly a third of the old people report good eyesight without glasses: 35 per cent men and 30 per cent women. The blind or almost blind aged are around six per cent (5 per cent men and 7 per cent women). Sixty per cent of the elderly men and women have difficulty in seeing; but only about five per cent use spectacles. A very small percentage (1.7) reports good eye sight with glasses. Eyesight dims as age advances. The elderly claiming good eyesight decrease from 42 per cent among those aged 60-64 years to 20 per cent among those aged eighty and over. And the percentage with total or near blindness increases from 3 in the 60–64 age group to 14 in the last two advanced age cohorts.

Hearing

Unlike eyesight, more than three-quarters (77 per cent) of the elderly claim good hearing ability and the men and women differ only slightly: 78 and 76 per cent. While a fifth have hearing difficulty, only one in forty is almost or totally deaf. Age appears to have a direct bearing on the hearing capacity. Of great significance is the range of decline which is more drastic for elderly women (from 85 per cent in the 60 – 64 age group to 43 per cent aged 80 and above) than for elderly men (from 88 to 58 per cent).

Giddiness and Falls

Forty four per cent of the old people say that they had never felt like falling. An eighth report that they had experienced vertigo the day or the previous day of the interview and slightly less proportion (11 per cent) within the last seven days. Thus, the old reporting giddiness within the past week are nearly a fourth (23 per cent). Though the majority of the elderly have experienced feeling of giddiness sometime or the other, those who report falls are comparatively fewer: 30 per cent–24 per cent men and 35 per cent women. Those who fell within the past week are fewer still: 6 per cent (5 per cent men and 6 per cent women). With advance in age, more and more old persons report giddiness as well as falls recently. The proportions of old people who felt giddy and who fell last week almost double between the ages 60-64 and 75 and above. Old women more often have vertigo and falls than old men.

Difficulty with Common Tasks

Bathing, going to the toilet, dressing, cutting toe nails, getting about the house, going up and down steps or stairs,

and going outdoors are important personal tasks that a person will have to perform himself or herself every day or often. Of these, the first four are tasks associated with personal care and the other three with free movement. Ability to do these tasks without any difficulty enables an individual to function independently and incapacity to do all these tasks makes the person completely dependent on others. In between this independence–dependence continuum are the aged who strive to maintain independence even with difficulty to perform the different tasks and who depend on others for one or more tasks because of inability. Some may manage to go to the toilet even with difficulty but would depend on others for bathing. Some may not have any difficulty at all in dressing but would need other's assistance in going to the toilet. The cumulative capacity to perform each of the seven tasks of daily life is, therefore, taken as the indicator of the level of incapacity of the elderly. The aged have a variety of difficulties restricting both personal care and social activities. Negotiating steps is a difficult task for the maximum number of elderly with nearly nine in twenty reporting this task difficult. Following close on its heels are nearly a fourth of the aged who find going outdoors difficult. A substantial percentage has difficulty even in moving about the house: one in nine. More than a half of these old people are housebound.

Among the intimate personal tasks, one in five has difficulty in bathing, one in nine in going to the toilet, and one in thirteen in dressing. As bathing and going to the toilet also require going outdoors in many cases, the proportions reporting these inconveniences might have also been increased by the difficulty in going outdoors. More

than a third report hardship in cutting toe nails. Many who have no difficulty in cutting toe nails or who manage to cut even with difficulty peel the nails off or rub them with stone.

Slightly more elderly women than men have difficulty with the different physical tasks except that of cutting toe nails in which fewer women figure, and that of moving about the house in which old men and women are in equal proportions.

The elderly with difficulty in doing the common physical tasks consist of two groups: those who manage the tasks even with difficulty and those who have inability to perform the tasks by themselves. The latter seek the help of others either in the household or outside the household. Barring cutting toe nails, more old people manage their personal activities even with difficulty than depending on others. The vast majority move outdoors, climb steps and get about the house on their own rather than waiting for others' help. So also is the independence seen in the performance of intimate personal tasks, particularly dressing and going to the toilet. Quite significantly, one in eleven has to depend on others for bathing and one in four finds it impossible to cut toe nails. While one in twenty needs someone to accompany to go outdoors, one in eleven cannot climb steps without support.

In performing personal tasks with difficulty, independence is demonstrated equally by elderly men and women in all tasks, with the exception of cutting toe nails. More men cut toe nails on their own even with difficulty. But among the elderly with inability to perform personal tasks without external assistance, women exceed men (ranging from 1 to 5 per cent) particularly in bathing and

going up and down steps. The cultural pattern prevailing in the villages is such that where the wife is living, the water is collected and the husband bathed by her so long as she is healthy. This is observed faithfully and is seldom considered as dependence. This may be the reason for fewer men expressing inability to bathe themselves. Inability to cut toe nails is expressed by slightly fewer women than men.

It is natural to anticipate association between increase in age and difficulty with the common physical activities. The more aged a person is the greater is the exertion or difficulty to perform the personal tasks. Among those in the eighties, nearly five times more than those in the youngest age cohort of 60-64 years report difficulty in bathing, about seven times more have difficulty in going to the toilet, seven times more express difficulty in dressing, approximately six times more have restriction in getting about the house, nearly two and a half times more have difficulty in manoeuvring themselves in climbing steps, about four times more are in difficulty in going outdoors, and around three times more find difficulty in cutting toe nails. Age thus seems to have a telling effect on the mobility and capacity for personal care of the old people.

The physical stresses and strains associated with ageing are more striking when we look at the percentage of elderly with capacity to do various common tasks. Nearly three quarters have to surmount difficulty in walking up and down steps and three–fifths are put to hardship in cutting toe nails. A half find it difficult to go outdoors and an almost equal proportion to bathe themselves. A fourth have difficulty in dressing and more than that proportion has to exert

themselves in going to the toilet. More than three in ten feel strenuous even to get about the house.

Analysis of the old men and women in the different age groups reporting difficulty yields interesting findings. Higher proportions of the old women than men in the eighties have difficulty in bathing themselves and climbing steps, whereas a greater proportion of men as against women in the eighties has difficulty in cutting toe nails.

Incapacity Score

We have discussed the varying levels of difficulty of the elderly in performing the seven personal tasks of day-to-day living. The ability to perform all the seven tasks is measured using the incapacity index. The index was developed on the lines of the incapacity index used for the study for the old people in three industrial societies (Shanas, et al, 1968) with necessary adaptations. For the computation of the index, the capacity of the individual to perform each task is quantified as follows: 0 for ability to do the task without any difficulty, 1 for performance of the task with difficulty and 2 for total incapacity to perform the task. The total score on the incapacity index ranges from 0 to 14, with 0 meaning complete independence or freedom from any difficulty to perform all the common physical tasks and 14 implying incapacity to perform even a single task or total dependence.

More than two in five of the rural old have no incapacity to perform any personal task. Those who have no incapacity or have only minimal incapacity (with an incapacity score of 1 or 2) are nearly three quarters. The severely

incapacitated with score of 8 or more are one in fourteen. One in five is moderately (with an incapacity score of 3 or 4) or markedly incapacitated (with incapacity scores between 5 and 7).

There does not appear significant difference between men and women in their incapacity levels, though slightly more men are in the no incapacity group and slightly fewer are in the highly incapacitated group.

Table 2.2
Elderly Men and Women by Incapacity Score
(Percentage Distribution)

Incapacity Score	Men	Women	All
0	45.29	42.30	43.81
1 -2	27.74	28.33	28.03
3 - 4	13.87	12.66	13.27
5 - 7	7.89	8.36	8.12
8 +	5.22	8.36	6.77
Total	100	100	100
N +	786	766	1552

+ Excludes bedridden and those who do not cut toe nails with incapacity score below 8

Age and incapacity register significant association. The younger a person is the more likely is he or she to have no or marginal incapacity. While three in five people in the age group 60- 64 years have no incapacity, only one in fifty in that age group is highly incapacitated. The proportion of the highly incapacitated older people increases drastically from age–group to age–group: 2 to 23 per cent. Similarly, the proportion of old persons with no or minimal incapacity

decreases with age registering significant reduction as age advances (86 to 42 per cent) from 60–64 to 80 years and above. The change in incapacity status with age is more striking among women. While one in ten older women in the eighties is free of any incapacity, three in ten in that group are handicapped with high incapacity. In contrast, among men aged 80 and above, those who have no capacity as well as those who have high incapacity are equal in proportion. The fall in proportion of older women without any incapacity is concomitant with increase in age. So also is the rise in percentage with high incapacity. This is not so in the case of elderly men. Though the highly incapacitated old men show consistently increasing trend like women, the older men with no incapacity show distinct variation. Their decline in proportion is not steady from the youngest to the most advanced age group; those in the eighties exceed significantly those between 75 and 79 years. A closer analysis shows that for men, marked decline in capacity or increase in serious incapacity (with incapacity scores of 5 or more) starts from 75 years onwards.

What characteristics distinguish between those who are incapacitated and those who are well? We have already seen the direct association between age and high incapacity. Further analysis shows that aged who are 75 and over increase steadily in proportion with increase in the level of incapacity. But not the proportions of women and the widowed, though the association between widowhood and high incapacity is marked. Women are in almost equal proportion from the no incapacity category to the marked incapacity group. But, as the level of incapacity reaches the maximum, there is a sudden increase in the proportion of

women. Similar is the pattern of decline of the proportion of the married; but among them, the swift reduction in proportion takes place after the moderate incapacity stage.

Income and incapacity are inversely related. The proportion of the elderly with no income of their own trebles between those in the no incapacity category and those who are extremely incapacitated. The more incapacitated a person is the greater is the likelihood that he or she is among the very poor.

In sum, nearly a half of the severely incapacitated are 75 years and above, about three- fourths have no income, nearly three-quarters are widows and widowers, and three–fifths are women. The highly incapacitated are, therefore, more likely to be the widowed, who in turn are also the poorest. A widow, who has crossed seventy five, is most likely to be highly incapacitated: she is also without any means of her own.

The correlation between poor vision and incapacity is strikingly pronounced. Restricted mobility is a corollary of incapacity. While three–fourths of the ambulatory have no incapacity or only marginal incapacity, nearly the same proportion of the house bound is severely incapacitated. Significantly, only three in four housebound are extremely incapacitated. The proportion of the ambulatory falls strikingly with increase in the level of incapacity while that of the house bound rises drastically. Higher level of incapacity is an indicator of the greater likelihood of falling sick. This is clearly borne out by the data, though there is a slight drop in the trend of proportions of the elderly, who fell ill during the past twelve months, in the highly incapacitated category.

Self –Assessment of Health

Health has two dimensions–physiological and psychological. While the former refers to the state of physical health as determined by a physician, the latter signifies what the individual feels about his or her health condition. Thus a person who is healthy based on objective assessment by a physician may consider himself to be in poor health, whereas another person who suffers from a serious ailment may feel that he is "fit as a fiddle". And in between falls those whose self–assessment of health may well coincide with the real physical condition. Thus the aged will fall into the categories of health realists, health optimists and health pessimists. (These terms are adapted from the studies of self–assessment of health made by Maddox and others at Duke University. These are quoted in Ethel Shanas, et al, op.cit)

Madathi Ammal is in poor health, though she is only 62. Her incapacity score is 10. She has difficulty in seeing. She needs help in bathing and going to the toilet. During the past twelve months she was in bed for twelve days.

But 75 year old Veerammal is quite different. She says that she is in good health. She is almost blind, and yet she moves around the house and even outside, with the help of others. Her incapacity score is twelve. Except for dressing, she needs the help of others for all personal tasks.

Sixty five–year old Narayanan is a health realist He reports that he is in fair health. He feels that his health condition is similar to that of the elderly of his age. His eyesight is good. His hearing capacity is sound. Within the last twelve months, he was in bed for twenty days.

Although 80 years of age, Ramaswamy is working in an estate. He works eight hours a day on all the seven days of the week. He experiences some difficulty in seeing. But his hearing capacity is good. He does all the personal tasks by himself. He not only rates his health as good but also feels that he is in better health than others of his age. He says proudly that he had never seen a doctor.

Raghavan is another optimistic octogenarian. He is 80. Despite his difficulty in seeing and hearing, a fall on account of dizziness during the previous week of the interview and some restrictions in doing personal tasks, he claims that he is in good health and when compared with those of others of his age, he feels that his health is better.

But seventy–year old Pichai is in sharp contrast to Ramaswamy and Raghavan. He is employed. But he says that his health is in poor state and when compared to others of his age, he feels that his health is worse. He works only because he has no one to support him financially. His eyesight and hearing are in good condition. His incapacity score is nil.

As large number of old people have no incapacity, large number of them were expected to rate their health as good. But the data belie the expectation. The vast majority of the elderly (more than four in five) do not rate themselves as in good health. Health pessimism thus appears to be a predominant characteristic of the old people in rural Tamil Nadu. The difference between men and women in their self-perception of health is not significant among those who rate their health as good. But, more older women than men view their health as poor.

Table 2.3
Self–Estimate of Health of Old People
(Percentage Distribution)

Self – Estimate of Health	Men	Women	All
Good	18.09	15.28	16.69
Fair	41.78	36.84	39.32
Poor	40.13	47.88	43.99
Total	100	100	100
N +	785	779	1564

+ Excludes proxy

Only a fourth of the old people with no incapacity rate their health as poor while nearly a half rate as fair. Though not substantial, more elderly in the no incapacity group consider themselves in poor health than in good health. However, the old people in the severely incapacitated group are health realists. Self–rating of health is convincingly influenced by the level of incapacity. The higher the level of incapacity the greater is the likelihood of the elderly assessing his or her health as poor or the least likely to assess it as good. The proportion of good health raters falls from more than a fourth in the non-incapacitated group to negligible in the highly incapacitated category. The proportion of poor raters almost trebles between no incapacity and severe incapacity. Similar is the decline of the proportion of fair raters. Having established significant association between incapacity status and self–evaluation of health, and earlier between mobility status and incapacity level, the relationship between state of mobility and self–perception of health is a direct derivative. The greater the restriction on one's mobility, the greater is the tendency to

rate the health as poor. If an old person is able to move about freely he or she is most likely to say that his or her health is good or fair. The old men and women who report that they are in good health condition decline with more and more difficulty of movement.

Poor self-rating of health is influenced by the marital status of the elderly. This is highly perceptible among elderly women. Marital status does not seem to influence the pattern of self-evaluation of health by elderly men. More widowed, divorced and separated than married women evaluated their health as poor. But among men, the proportions of the married and unmarried do not differ significantly in their assessment of health. Widowhood and separation from husband seem to influence the psychological functioning of health of older women.

The activity status of a person has a direct bearing on the self-evaluation of health. The contrast between the employed and the retired in the pattern of self reporting of health is revealing. The more active the aged, the less is the likelihood of his rating his or her health as poor. The proportion of the retired reporting their health as poor is more than double that of the employed. Those who are employed should normally be in better physical health while many of those who are retired might have done so due to health reasons. Further, the very fact that a person is employed gives a positive self-perception than one who is retired. Work often is an antidote to ill-health, particularly in the perceptional realm.

Loneliness and psychological state of health are related. More of the old people who report their health as good seldom report loneliness often, while more of those who

view their health as poor are also those who are often lonely than those who rate as fair or good. The more sick a person feels the more likely is he or she to feel lonely often. The percentage of old people who are often lonely registers nearly a four-fold increase (12 to 43 per cent) between good and poor rating of health. The often lonely elderly among the poor health raters are three and a half times more than those among the good health raters. The association between loneliness and self-rating of health is more pronounced among elderly women than men. The proportion of older women who are often lonely among those who rate their health as poor is nearly five times more than that of those among the good raters. The difference between old men and women is high. While 11 per cent of the good raters among women are often lonely, 50 per cent of the poor raters report loneliness often. At the same time, among men, 13 per cent of the good raters report that they are often lonely as against 34 per cent of the poor raters. For elderly women, we have already seen the association between widowhood and self-rating of health. This explains the high degree of association between loneliness and health rating among them. Loneliness is not explained solely by the health condition or self-perception of it by the elderly. A fifth of the poor health raters are never lonely. Though they are only a half of those who assess their health as good, they are quite substantial in proportion. Further, they are nearer to the proportion of never lonely elderly among the fair raters.

Only less than a fifth think that their health is better than that of old people of their age. And nearly a half think that their health is worse than their counterparts. On the whole, slightly more than a half view that their health is better than

or about the same as people of their age. Men outnumber women in comparing their health better than that of the elderly of their age.

The elderly who rate their own health as good are most likely to rate their health better in comparison with other older people. More than three in five who rate their health as good think that they are in a better health condition than others. Only three per cent of the elderly who assess their health as good rate it as worse than their counterparts. Old women in contrast to old men underestimate their health status in comparison with others of their age. Seventy per cent of the old men who rate their health as good also think that they are in a better state of health than other old people as against 50 per cent women. Most of the older people who view that their health is poor also think that they are in a worse condition than their contemporaries. This tendency is more or less similar among elderly men and women, though women are in slightly greater proportion than men. Quite expectedly, the majority of the elderly who assess their health as fair think that they are in a similar state of health as other old people of their age are.

We have already seen that more than four in five of the elderly do not rate their health as good. But the majority of those who rate their health as good do think that their health is better than that of the old people of their age. Thus one should expect this optimism to grow with age. More elderly who survive into higher and higher age levels should feel that their health is better than that of elderly of their age. But our data do not indicate this both among elderly men and women. The only significant feature is that more old men and women in the youngest age group of 60-64 than

the elderly men and women in the other age groups think that their health is better than that of others of their age. One possible reason for the reversal of the expected response pattern is that those in advanced ages may be comparing their health with people younger to them or persons who are more agile or healthier than them. More elderly women tend to do so than men. An equally justifiable anticipation is that those who rate health as worse than their counterparts must increase with age. This to a great extent is borne out by the study though the elderly in the eighties defy the rising trend of percentage. Among them, more than a half of the men (55 per cent) consider that their health is better than or about the same as that of old people of their age. But not the women.

Illness

More than a half of the elderly were ill in bed during the past twelve months. The difference in proportions between men and women reporting illness is not significant. Four in hundred old men and women (excluding bedridden) were never in bed in their life time. There is no association between illness and age for older women. But among men, there is association, though the trend is upset by the aged in the eighties.

Nearly a fifth of the sick elderly were confined to bed over a month, and more than a fourth between a fortnight and a month. Those who were in bed for a fortnight or less are a half of the aged reporting illness during the past twelve months. Among the short-term sick, men and women are in equal proportions. But more elderly women than men were ill in bed for a longer period. That is more than a month.

Of the 884 elderly who were sick in bed during the past

twelve months, 12 per cent did not receive any treatment; more of them were women (14 per cent as against 9 per cent men). Nearly a fifty (19 per cent) were satisfied with some home remedies. However the majority (seven in ten) received medical treatment.

Contrary to the popular notion, 87 per cent of those who received medical treatment got so from allopathic physicians. Homeopaths came next with 8 per cent. Ayurveda or siddha treatment was resorted to by only 4 per cent. The remaining had approached others including the National Malaria Eradication Programme staff. The establishment of primary health centres in villages, the nearness to towns and the availability of private practitioners (though not often fully qualified professionally) may be the reasons for the predominant use of allopathic medicine.

About a seventh of the old people who were ill in bed during the past twelve months had to be hospitalized. More men than women were hospitalized. A fifth of those who were hospitalized were long-term patients of more than four weeks and nearly a fourth were in the hospital for a long period of two to four weeks. The duration of hospitalization does not differ significantly between older men and women. Among the non-bedridden aged population, the hospitalized constitute one in thirteen.

Normally one may expect association between advanced age and hospitalization. But this study does not support the anticipation that with increase in age mere old people are likely to be hospitalized. On the other hand, among men the lowest proportion of the aged who were hospitalized belongs to those in the eighties.