### **CHAPTER II**

#### REVIEW OF LITERATURE

#### Introduction

To provide a comprehensive idea of the concept of ageing and factors that affect the living arrangements of the elderly, it is important to examine the studies that have already been carried out. Hence, an attempt has been made to review the recent relevant studies dealing with aspects pertaining to the present study. The aim of this chapter is to review earlier studies that focused on various dimensions of ageing and living arrangements and factors influencing it among elderly in India, so as to identify the research gaps in this field. This chapter is set into three parts viz.

- a) Socio-demographic and economic characteristics,
- b) Living arrangements and
- c) Health of the elderly.

Existing studies have paid attention to population ageing and its social and economic implications. A wide variety of literature is available on the elderly covering these aspects. Given the heterogeneity among the elderly in India, the varied published as well as unpublished literature, project reports and surveys on issues relating to them have been looked into.

### Studies on ageing in India

In most studies, a person aged 60 years and above is considered as elderly. In the Hindu Social Organization, human life cycle is divided into four life stages. The first is the life of a student (*Bramhacarya*) to be spent at the teacher's house (*Ashrama*). This is life of celibacy, to be spent in education and training. Once the education is complete, the next stage is life of a married man, the householder (*Grihastha*). This is the stage when a man fulfils his basic desires for love, marriage, parenthood, status, wealth, prestige, and physical and social needs. After fulfilling these, the next stage of life is that of retired life in the forest (*Vanaprastha*). A mature elderly man gives up his worldly pursuits. He abandons home, preparatory to complete renouncement of worldly relations. Then the fourth stage is the life of complete renunciations of worldly relations and attachments

(*Samnyasa*). It is assumed that wife will follow her husband faithfully in his moves through these stages of life (Prabhu, 1940). Ordinarily in social life also, a person is considered old when his children are married and he has grandchildren, regardless of his physical age. For all practical purposes, a person aged 60 years and above is considered as elderly or senior citizen (Prakash, 1999).

United Nations (UN), Indian Census, National Sample Survey Organisation (NSSO), National Family Health Survey (NFHS) and Central Statistical Organization (CSO), among others compile data on ageing-related issues like age-sex composition, residence, literacy, education, nuptiality, work and dependency status, health-disability and activities. But focused research pertaining to gerontology is still in its infancy in India (Raju, 2011). Only recently the elderly have been identified as a part of social policies and programme implementation for government interventions (Gokhale, 2005). In an annotated bibliography of research on the elderly, both published and unpublished literature was documented in two volumes (TISS, 1999). This bibliography though not exhaustive, compiled research works on ageing in India. It states, "There are various studies - most of them small micro studies conducted in different corners of the country and there are a few scholars who have published literature in the field". The two annotated bibliographies document studies from as early as 1972 till 2000. The studies cited in these bibliographies and subsequently reviewed by Bose and Shankardass (2006) were mostly conducted in different states - Bihar, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Punjab, Rajasthan and Uttar Pradesh. They suggested that, there is a limited theoretical and methodological focus, quite oblivious of the developments and debates in the field of gerontology. The investigators came mainly from the disciplines of psychology, sociology, social work and anthropology. The review of these articles shows that all aspects of ageing like problems of adjustment; post-retirement life; place of the elderly in family; care-giving; social support; attitudes; inter-generational interaction; leisure utilisation; techno-social changes and the family; elderly care across subcultures; impact of demographic changes; quality of life; and widowhood problems have not been studied (Raju, 2011).

### A) Socio-demographic and economic aspects of elderly

### **Elderly Population**

Age and sex composition of the household population are basic demographic characteristics which play an important role in the study of elderly population as they indicate the potential support systems within a family. The Census of India starting from 1901 to 2011 gives details of changes took place in the age structure of the population. The elderly population in the general population has increased from 5.1 per cent in 1901 to 7.7 per cent in 2001 census and further to 8.7 per cent in 2011 census.

Census data on the elderly in India show significant variations among the states. While all the states showed an increasing trend from 1961 to 2011, generally the southern states, Punjab and Himachal Pradesh have larger increases in the proportion of the elderly, with Kerala registering the greatest increase. Projections for the next 25 years show a similar pattern, with the largest proportion of the elderly in the southern states, Kerala in particular, along with West Bengal, Punjab and Himachal Pradesh. Northern states, UP in particular, and eastern states have the lowest proportion of elderly the in the country (Lekha and Bansod, 2011).

The NFHS-3 reported 8.5 per cent population which is aged 60 years and above. Among the elderly surveyed, 62 per cent belong to the 60-69 age group and only 2 per cent are 90 years and above. The share of the elderly population in the total population in Pune is 9.5% (IIPS, 2011). Though these surveys were not especially designed to elicit information from the elderly members of the households, they do give information about each member of the household.

# Gender Distribution

Gender is a very important variable that influences quality of life at all ages. India is one of the few countries in the world where men outnumber women at all ages till about 60 years. However, in the elderly population, the percentage of female population has always been higher (5.59% in 1901, 7.86% in 2001, and 8.5% in 2011) than male population in India (4.55% in 1901, 7.55% in 2001, and 8.7% in 2011). In very old age group of 80 years and above, there are more women than men (Dandekar, 1951, 1996;

UN, 1988, 2011). The sex ratio among elderly is favourable to males in the age group of 60 years and above. As the age advances, the sex ratio turns favourable to females (IIPS, 1995; IIPS and ORC Macro, 2000; IIPS and Macro International, 2007). In 2011 census data, the overall sex ratio among elderly households is 1,021 females per 1,000 males, i.e., more females than males. The sex ratio among the elderly aged 60 years and above is higher (1,092) females for 1000 males than younger age groups. There will be considerable regional variations in these patterns as different regions are at different phases of demographic transition. The Census, 2011 shows that only Kerala has a sex ratio that is favourable to females. Almost 60 per cent of the elderly are heads of the households that they live in. The headship rate, as expected, is substantially higher among the elderly men as with the elderly women (Lekha and Bansod, 2011).

### Place of Residence

India is a country of villages, and nearly three-quarters of its population is rural. Urban and rural areas provide a striking contrast in terms of living conditions and availability of facilities. Most rural folk work on their own land or as agricultural labourers. There is no income security or any systematic provision for old age for a majority of the population. According to the census, 75 per cent elderly live in rural areas and the rest of 25 per cent in urban areas in 2011, mirroring the distribution of the general population by place of residence. There are more elderly living in the rural areas than in urban areas (IIPS and Macro International, 2007). Not much difference is noticed between sex and place of residence. The distribution of the elderly by place of residence shows that the elderly are increasing in both rural and urban areas as a proportion of the total population.

In 1961, 5.8 per cent of the total population in rural areas was over 60 years of age, while the figure for their urban counterparts was 4.7 per cent. The corresponding figures had increased to 7.7 per cent and 6.7 per cent, respectively by 2011. This trend is similar for both male and female older persons (Prakash, 1997).

#### **Marital Status**

According to NSSO  $42^{nd}$  round, there were 654 widows and 238 widowers per 1000 old persons in rural areas. The respective figures were 687 and 200 respectively for

urban areas. More than 65 per cent Indian women live without spouse as compared with 29 per cent older men. According to the census, there were 33 million widows in India (Census, 1991). NFHS survey shows that 60 per cent of the elderly women are widows as against 18 per cent widowers (IIPS, 1995). Census of 2001 shows that, the differential in marital status by sex is more pronounced among the elderly. Among the elderly, 82 per cent of men and 47 per cent women were still married. About half of all elderly women were widowed, while only 15 per cent of elderly men were widowers. In the more advanced age of 80 years and above, 71 per cent were women widows and only 29 per cent of men were widowers. These differentials reflect the marriage and mortality patterns in which a majority of Indian men who survive to the age of 60 are still in a married state while more than half of the older women live without their spouse. Not having a spouse in the older ages is a cause for concern for both men and women. In 2011, around 60 per cent of the elderly were with spouse, while 38 per cent were widowed. Widowhood is as high as 59 per cent among elderly women ((Lekha and Bansod, 2011.).

In fact, studies of widows in India by Marty Chen (1998) and others indicate that there is a high level of poverty among women upon becoming widows in India. In most developed countries (DCs), women live longer than men by four to eight years. In India also life expectancy is more for women. In 1981, the percentage of widows was disproportionately higher than that of widowers due to cultural practice of men marrying younger women and widow remarriage being uncommon. The rate of divorce is negligible in this age group (MoHFW, Government of India, 1988; Prakash, 1999). For Indian women who have lost their spouse, financial security poses a problem since women generally do not own land or other assets and are dependent on their children, particularly sons (Chen, 1998).

## Education

Almost one-half of the elderly males and four-fifths of the elderly females are illiterate. Another 35 per cent males and 15 per cent females have education upto primary level (IIPS, 1995). Whereas, in 2001, 53 per cent elderly males were literate and the figure dropped to 20 per cent only among elderly females (Census, 2001). The profile of the individual elderly indicates a low level of educational attainment, particularly among women. Overall, half of the elderly report not having any formal education, with a higher

proportion (almost two-thirds) among women (UNFPA, 2011). High levels of illiteracy, particularly among older women in rural areas, are yet another aspect of vulnerability for elderly in India. Elderly women in rural areas have the lowest level of literacy compared with the general population as well as all other elderly (UNFPA, 2011). As a majority of the current elderly in India are illiterate, their living conditions mostly depend on their coresidence with children and their ability to work beyond the official designated retirement age (IIPS, 1995).

### Labour Force Participation

Over the last two decades, there has been a gradual decline in the elderly workforce. The elderly workforce constituted about 6.6 per cent of the total workforce in the country during 2004-05 which is very similar to the levels in 1983. Interestingly, the elderly employment was higher in the pre-reform years (1983 to 1994) at 2.41 per cent as against 1.89 per cent during the post-reform period (1994 to 2005). One of the reasons for this decline is the growing number of elderly population in higher age groups (the phenomenon of ageing of the older population) who have lower participation rates in labour markets. In fact, overall female work participation rate has increased in the post-liberalisation period, particularly since 1999-2000 (Selvaraj et al., 2011).

The various rounds of NSSO shows that, workforce participation rates among the elderly decreased from around 42 per cent in 1983 to about 39 per cent in 2004-05. This is a reflection of a declining trend in elderly workforce in urban India. In fact, the elderly workforce participation rates in urban areas have sharply decelerated from around 31 per cent in 1983 to 23 per cent in 2004-05, a decline of eight percentage point in 20 years. The development over the two decades is a decline in the percentage of male workers among elderly population from 64 per cent in 1983 to about 57 per cent in 2004-05 as against a stagnating trend among female elderly employment composition at 20 per cent. Considering that a significant share of this change is occurring among male urban workforce, one can conjecture that the possibility of retiring at a higher age exists. However, it could also be argued that this trend is due to the informalisation of the workforce as at this age the workers begin to officially retire, (especially the regular category of workers) and get absorbed in informal economic activities. Nearly three out of five elderly male appear to be engaged in some form of economic activity, as against

one out of five elderly female populations. This trend therefore, needs deeper investigation (NSSO, 1983, 1991, 2004).

According to the 1991 Census, 61 per cent of elderly male and 16 per cent of elderly female continue to work beyond the age of 60 years. Another 50 per cent of elderly females are involved in household activities which the Indian census considers as non-work (Rajan, 1989, 1999). Other surveys reveal similar findings (NSSO, 1991; Rajan et. al., 1996). Data on work status of the elderly (NSSO, 2006) revealed that 36 per cent of them are still in the labour force and two-thirds (64 per cent) are out of it. Over a quarter of the elderly (26.9 per cent) are self-employed and casual labourers among the older population are to the extent of 7.4 per cent. Only 1.5 per cent of them are in regular salaried employment. The survey found that the work participation rate among elderly males in India is as high as 39 per cent as against 11 per cent among women (NSSO, 2004). Although work participation is low among women, they would certainly be contributing to the family chores, enabling the other adult members to go to work. A majority of the elderly (71%) work due to economic necessity and not by choice. This is particularly true among women (Selvaraj, 2011). The concentration of elderly workers in rural areas is to some extent a result of increasing migration of adult workers to urban areas (Visaria, 1999; Deshingkar and Akter, 2009).

Workforce participation by senior citizens to a significant extent is an indication of economic compulsion. Though the number of years spent in the labour force is considerable, pension or retirement benefits are not available to a large majority of them. In fact, due to the informal nature of the work they are engaged in, less than 10 per cent elderly get employer's pension (3% women and 15% men) (NSSO, 2004; UNFPA, 2011). The NSSO data reveals that a significant proportion of the elderly population is economically active even at the age of 70 years or so. Approximately one fifth of all elderly workers are in the age group of 70 years or above. Even at the age of 80 years and above, as much as 2.2 per cent (approximately 675 thousand) elderly persons still work.

With increasing age, the number of female elderly workers declines faster than the number of male elderly workers. In urban areas, the percentage of female elderly workers is as high as that of male elderly workers till the age of 75 years. In rural areas, female elderly workers' participation in labour markets declines sharply after this age. Bloom

notes that "women (elderly workers) are less well-placed than Indian men (elderly workers) to rely on earnings during their working years to provide for old-age income security" (Bloom et al., 2010).

Difference in the work participation rates among men and women increases further when rural and urban areas are compared. The total elderly population and elderly workforce population are on the rise and are likely to increase at even faster rates than realised till now because of the ongoing demographic changes. The work participation rate declines with an increase in age among elderly. Even in the 80+ age group more than 11 per cent of the elderly participate in labour markets. A significant proportion (6 to 7%) of the elderly population is not able to participate in the labour markets only because of disability. Growth of women elderly workforce has been faster as compared to their male counterparts. Concentration of elderly workforce is prominently higher in younger age group (60-65 years), low educated and poor households. An overwhelming proportion of elderly workforce is self-employed and is concentrated in agriculture (NSSO, 2004-05).

#### Income

As far as the total household income is concerned, the elderly contribute up to 4.2 per cent to it. The contribution of the elderly to the total household income is lower as compared with their contribution to the total employment of households. This arises mainly because the 'per person' average wage/earning of the elderly is lower as compared with their younger counterparts. Nonetheless, the contribution of elderly labour income is more than 4 per cent to the total labour income of households. The elderly contribute approximately 6 per cent to the total household income from self-employment, while their contribution to the total wage earnings from casual employment is approximately 3.5 per cent on an average.

As pointed out earlier, work participation rate among the rural elderly is approximately twice that among the urban elderly. As a result, the contribution by the elderly to household income is also higher in rural areas to that in urban areas. However, since the higher work participation rate of elderly in rural areas is a result of their overwhelming participation in self-employed work, the difference in the contribution to household income across rural and urban settings is also reflected mainly in the self-

employed category. In general, elderly contribution to total household income comes from self-employment and casual wage work, both being significantly higher in rural areas than in urban areas. On the whole, the elderly contribute up to 5.5 per cent to the total rural household income as compared with up to 2.5 per cent in total urban household income (NSSO, 2004-05; Selvaraj, 2011, UNFPA, 2011).

# Dependency Ratio

Dependency ratio takes into account the working versus non-working population. Old age dependency ratio (number of elderly person of age 60 years and above/the working age group between 15 to 59 years) has consistently increased from 9.8 per cent in 1951 to 11.9 per cent in 1981 and upto 12.6 per cent in the year 2001. While in 1971, there were nearly 14.2 older persons for every 100 children, the ratio was 24.7:100 by 2001. That means smaller younger adult working group has to carry the burden of a larger group of elderly people (Sharma and Xenos, 1992).

Elderly males are more economically active as compared with elderly females. The data on old age dependency ratio revealed that it was higher in rural areas (125) than in urban areas (103) (NSSO, 2004). Further, a higher number of males in rural areas (313 per 1000) were fully dependent as compared with 297 per 1000 males in urban areas. For the elderly females, an opposite trend was observed (706 per 1000 females in rural areas as compared with 757 per 1000 females in urban areas). Overall, 75 per cent of the economically dependent elderly are supported by their children and grandchildren. As 90 per cent of the total workforce in India is employed in the unorganised sector, retirement from gainful employment precludes financial security like pension and other post-retirement benefits (NSSO, 2004; UNFPA, 2011). A recent study finds low levels of earning during prime working age and consequently low levels of saving as one of the important reasons for participation of the elderly in the labour market in India (Bloom et al., 2010). This is happening at a stage in the life of the elderly when the demand for health and medical care is likely to go up, increasing the old age dependency and, therefore, the economic burden of the ageing generation.

The ratio of the dependent population to that of the working age population is defined as the dependency ratio and is an important indicator of the economic burden

carried by each worker. The young age dependency ratio reflects the dependency burden from children below 15 years of age. Similarly, old age dependency is the ratio of persons aged 60 years and above to the working age population. The NSSO underscored the fact that nearly one half of the elderly are fully dependent economically on others. Of these, three-fourths are supported by their own children. Studies put dependency rate of 1:2 (Subrhmanya, 1994). In 2001, the total dependency ratio (from both the young and old age groups) was significantly high (73%) but is expected to fall to 56 per cent by 2026. The young age dependency ratio is generally much higher than the old age dependency ratio since the population age structure in India has been young. While the young age dependency ratio is expected to decrease by 25 percentage points to 36.3 by 2026, the old age dependency ratio shows an increasing trend and is expected to increase by about 7 percentage points during the same period (Rajan et al., 1991; Registrar General and Census Commissioner of India, 2001).

UNFPA, 2011 shows that overall, 23 per cent of the elderly are economically independent, half are fully dependent on others, and 26 per cent are partially dependent to meet their economic needs. The proportion of elderly who are economically independent is lower than the all-India rate using NSSO data for the period 2004-05 (34%) (Alam and Karan, 2011). However, the data are not strictly comparable as the NSSO includes all the states whereas this survey covers the seven states where the demographic transition has been more significant. As expected, more women (66%) than men (33%) are fully dependent on others economically. The dependency status does not vary greatly by place of residence because about half of all elderly in urban and rural areas are fully dependent on others.

# Children ever born and surviving

Gerontology literature has dealt extensively with filial obligation and responsibility. Filial responsibility is conceptualised as a societal attitude with regard to the duty of adult children to meet the needs of their ageing parents (Seelbach, 1981; Walker et al., 1990). Filial obligation to elderly parents and their care is an important cultural aspect in India and in many other countries. It includes provision of material and financial assistance as well as instrumental help (Linzer, 1986; Sapp, 1996). In many countries, the state has either taken over some of the traditional family roles or shares

these responsibilities when the family has difficulty in bearing the burden taking care of the elderly. However, in India, the financial support received by the elderly through social security schemes is meagre and the coverage poor. Traditionally it has been the family, especially the adult son, who provides financial and other material support to the elderly. Children are supposed to be the main source of support to the elderly in their advanced ages. On an average, four children are born to the ever-married elderly woman, of whom 3.5 survive at present. The children ever born to the elderly in urban areas is lower at 3.6 and the mean number of children surviving at present is 3.2 (UNFPA, 2011).

# B) Living arrangements of elderly

#### Importance of living arrangements

Population ageing is expected to have a major impact on many aspects of life in the twenty - first century. According to United Nations population estimates and projections prepared by the Population Division of the Department of Economic and Social Affairs (United Nations, 2012), globally persons aged 60 years or over are expected to more than triple by 2100, increasing from 841 million in 2013 to 2 billion in 2050 and close to 3 billion in 2100. Furthermore, already 66 per cent of the world's elderly persons live in the LDCs and by 2050, 79 per cent will do so. By 2100, this figure will reach up to 85 per cent. This transition will continue and there will be more elderly than the workers aged 15-59 years. Also, the historic crossover of an increasing share of older persons and a declining share of children will mark for the first time in that the number of older persons will be more than younger population aged 0-15 years. The number of older population is growing at a much faster rate in the DCs than anywhere else, but the pace of ageing in LDCs is more rapid. Increase in the number of older population at a higher rate in LDCs is the matter of concern for policy-makers (Rajan and Mathew, 2008; Bordia and Bhardwaj, 2003; Kinsella and Velkoff, 2001; World Bank, 2001). This demographic transformation is not occurring in isolation. On one hand, the pace of population ageing is higher in LDCs and, on the other hand, they are ill-equipped to face the rapid population growth of the elderly persons. The issues of older persons are many and complex. LDCs lack security, pension and public health systems and other facilities for the elderly.

As ageing is a silent process, the consequences of ageing are felt after some time lag. The United Nations took cognizance of the ageing phenomenon in the twentieth century. Realising the problem of ageing, it arranged two World Assemblies to discuss and prepare policy to face the social and economic burden of elderly population. First World Assembly on Ageing in Vienna was organized in 1982. Its aim was to encourage full participation by all ages on the basis of equitable distribution of resources. An important objective of socio-economic development is an age - integrated society, in which age discrimination and involuntary segregation are eliminated and solidarity and mutual support among generations are encouraged. In this assembly, International Plan of Action on Ageing was adopted including 62 recommendations regarding health and nutrition, income security, employment, family, social welfare and education environment. This provided a backdrop for developments in the United Nations Programme on Ageing. The Second World Assembly on Ageing was held in 2002 in Madrid. In this Assembly, 159 countries including India participated. The Madrid International Plan of Action on Ageing (MIPAA) was developed to guide international policy action on ageing for the twenty-first century and it identified three priority areas:

- a) Older persons and development,
- b) Advancing health and well being into old age, and
- c) Ensuring enabling and supportive environment.

The MIPAA also expected that the issues of aging should find a place in the national policies as well. While the first World Assembly emphasized the need of full social participation by all ages on the basis of an equitable distribution of resources based on the notion of 'age - integrated society', the second Assembly came up with the concept of 'society for all'. However, only DCs participated in policy discussion. There are other major differences between the two on account of the fast changing demographic situations in the LDCs and perspectives on aging that evolved in the span of twenty years in between the two assemblies. The differences have been highlighted in an interview of Dr. Sidornko by Sykes (member, Task Force, UN Programme on Ageing, 2004). According to him, the Vienna International Plan of Action was evolved with the DCs as the focus. While the first one had considered the issues from 'humanitarian needs of older persons', the priority of the Madrid Plan was the situation of LDCs and countries with economies in transition, 'from a development perspective'. The change was necessitated by two factors. Firstly, relocation of the aging population from DCs to LDCs', and

secondly need of the LDCs to address the issues of aging in the context of development. However, the MIPAA (United Nations, 2002) concentrated on living arrangements of older persons as one of the areas requiring more research attention (para. 44). But in the second World Assembly meetings there was just the mention about one of the priority area as ensuring enabling and supportive environment with no separate focus on the living arrangements as a measure of dealing with the ageing problem.

Concerned by population ageing and looming pension crisis, many Governments have promoted self-reliance in income security for older persons and greater family responsibility for providing care. Consequently, patterns of care giving and co-residence are emerging as pre-eminent issues relating to the well - being of older persons.

In response to these concerns, the United Nations Population Division, with the financial support from United States National Institute on Aging, organized the Technical Meeting on Population Ageing and Living Arrangements of Older Persons: Critical Issues and Policy Responses, at United Nations Headquarters in New York from February 8 to 10, 2000. The purpose of the meeting was to bring together experts from different regions of the World to address the most pressing issues concerning population ageing and living arrangements of older persons in their historical and cultural contexts, the social process through which the living arrangements of older persons influence the demand for formal and informal support systems, and Government's respond to these perceived needs. The meeting also aimed to improve the knowledge base, identify priorities for future research and raise the long-term visibility of ageing-related issues.

In the meeting some participants proposed that in preparing for an ageing society, perhaps the most important need was for an ideological change, in order to curb excessive individualism. There is a need for providing effective support to families, and this must include attention to the needs of the younger as well as oldest age groups. Secondly, more research is needed on morbidity, such as dementia and arthritis, to improve the quality of life of those surviving to older ages. Improvements such as this slowdown the ageing process, and reduce the burden on family budgets as well as on other persons. But ageing also creates problems for the young-adult generation, and attention should be directed to them as well (Golini, 2000). In this meeting the ageing and living arrangements for many

DCs and LDCs were discussed. However, no paper on India was presented in this meeting.

Increasing number of the elderly has been of concern in the DCs for many years, both from the individual and social policy perspectives and for effectively responding to the increasing costs of providing care. However, throughout the LDCs, households represent the main institutions responsible for the distribution of goods and services between generations, and they are also the principal venue through which age and kinship roles are expressed (Thornton, Chang, and Sun, 1984; Becker, 1991; Kuznets, 1978). Many cultures have imbedded within them norms about respect for the older adults and responsibility of the young to care for the old when a need arises (Martin, 1990; Nydegger, 1983). Policy-makers value these familial systems of care for the elderly and prefer to maintain them rather than introducing other potentially expensive government programmes (Knodel et al., 1992). As a result, it is primarily members of one's household who provide familial support to the older adults. During the past two decades researchers and policy-makers liked this idea of the familial system of care. They also started looking at living arrangements not only as one of the consequences of ageing, but only as an outcome subordinate to the broader issue of household and family organization. Understanding of the actual living conditions of the older population remains poor, especially in the LDCs (Palloni, 2001). Even a basic statistical description of the current living arrangements of older people and how those arrangements affect well - being, has not been attempted for many countries. As shown in the Table 2.1, only less than half of the countries or areas in Africa and Asia have published data from the 1990 census round on household characteristics and living arrangements (United Nations, 2004). Corresponding data from countries and areas on household characteristics and living arrangements have not been published from the 2000 Census round (Demographic Yearbook, 2004).

There has been upsurge in the analysis of living arrangements, which are part of demography and sociology of the family. For some years now (2000 onwards), a significant body of literature on ageing has already been devoted to the living arrangements of elderly, especially in LDCs, because of increasing availability of data and deployment of procedures to extract information from older resources and to analyse the new ones (Sokolovsky, 2001; Lamb, 2000; Hashimoto, 1991; Maerin, 1990).

Analysts have given particular attention to East and Southeast Asia, where reductions in family size make the availability of supporting family members a matter of concern and where the availability of necessary data has been greatest (Ahn et al., 1997; Asis et al., 1995; Cameron, 2000; Casterline et al., 1991; Chan, 1997; Chen, 1996; DaVanzo and Chan, 1994; Domingo and Casterline, 1992; Kim and Rhee, 1997; Knodel and Chayovan, 1997; Martin, 1989; Natividad and Cruz, 1997). Much of this literature signifies the primacy of multi - generational family living in most of these countries. During this period, many researchers have studied the reasons for fertility decline but very few have tried to look at the consequences of the increase in average age of the population. They neglected one of the important consequences of fertility decline as living arrangements. In this context, a study of living arrangements becomes important.

Table 2.1: Number and percentage of countries or areas by region which reported data on household characteristics and/or living arrangements*			
Region	Total number of countries or areas	Number of countries which reported data on household characteristics and/or living	
			arrangements
		Number	Percentage
Africa	56	24	43
North America	36	18	50
South America	14	11	79
Asia	50	23	46
Europe	46	31	67
Oceania	22	22	100
Total	225	129	57.5

Source: Demographic Yearbook, 2004.

Note: \*the Table includes countries or areas with data that been published in at least one table in at least one issue of the *Demographic Yearbook* for the 1990 round.

A generally held view among family sociologists is that the size and complexity of households and residential families decrease as a society industrializes and urbanizes (Goode, 1963; Burch, 1967; United Nations, 1973; McDonald, 1992). Many scholars have opined that according to Hindu organization a family is a joint family (Karve, 1953; Kapadia, 1955). Hence, so far we have believed that family is a joint family in India. But this is not so. It was found by Dandekar in the analysis of household data of 1951-61 censuses that only 35-46% of the families were joint households in Bihar and Assam. In her monograph, she has written this as follows, "much of the discussion in the sociological literature on joint family being prevalent in the past and its gradual break -

up in the recent years doesn't find substantial support from the census data" (Dandekar, 1961).

Some of the findings about the prevalence of joint family in various villages or regions surveyed in India are summarized by William Goode in his book 'World Revaluation and Family Patterns' (page 242) as follows (Goode, 1963) - (cited in Dandekar, 1961):

- Badalapur and Taluka Cities (from Morrison): Joint families, 6%; quasi joint families, 8%; nuclear families, 85%.
- Seta Raam (from Elder): Married sons stay in household until first child is born.
- Bangalore (from Ross): Of 207 brothers of 135 respondents, half live away from home.
- Shamirpet (from Dubey): In 120 families, 34% sons separated within two years after marriage; 36% in two to three years after marriage; only one fifth remained after 5 years.
- Navasari (from Kapadia): Of over 1200 secondary school students, 605 say their uncles live apart; 300 live separately in the same village.
- Daleke (Sikh) (from Singh): Report asserts not more than three joint families in village, though some families the soil co-operatively.
- Mahuwa (Saurashtra) (from Desai): 53% residentially nuclear, but author asserts 72% functionally joint, i.e., they operate as a joint family even when living apart.
- Gokak Taluka (Mysore) (from Kulkarni): Defining 'separate' families that have legally separated off and reside apart, only 9 to 29 are 'separate'; all the rest are called 'joint'. However, the largest single category of family type is 'nuclear', 32-39% of total.
- Poona (from Sovani et al., 1955): Two-thirds nuclear, about the same as in 1937.

In the data analysis of 1961 Census, Dandekar (1961) mentioned about the single member household. The single member households in West Bengal were compared with those in the United States. She mentioned that, the only common feature of these two groups of the lonely living was their appreciable proportion in the total population. But sex, age and marital status of the lonely living in the two areas were strikingly different. The rise of single - member families in both of them was due to entirely different reasons. The lonely living in the United States has its roots probably in the affluent society with

high triumphs of man over death or with growth of individualism. There, only three per cent of the married people lived without spouses. Similarly, it was the old age-groups, particularly widows that stayed alone. In West Bengal, those living alone probably did so because of the poor economic conditions. Hence, it was a large proportion of even the married that had to live alone. In West Bangle as well as the United States, the number of single - member households was growing. In the United States, it was a sign of economic strength but in West Bengal it was a sign of economic weakness (Dandekar, 1961).

Nationally conducted surveys (Census, NSSO and NFHS) also showed that nuclear families do exist in urban as well as rural India. The data for urban India (IIPS and ORC Macro, 1992) reveal that almost half of the urban populations live in nuclear families, 23 per cent and in joint families and 20 per cent in supplemented nuclear families. As compared with 1981 census, there has been a decline in the single member, broken nuclear and supplemented nuclear families in 1992-93 (Nagarajan et al., 1998). According to Beteille (1964), inspite of socio-economic and political changes, family life and structure have remained an integral part of Indian society with the 'spirit of family solidarity' as the sustaining owner. Gore (1968) says, "The fraternal or collateral joint family was never the most common form". Goode (1968) asserts that a large joint family was not common in India at any time. According to Cohen (1981), households have reputedly been shrinking in size for ten thousand years or more right up to the present and this is a result of an evolving technology that requires fewer co-operating people to secure food, rear children and look after the sick. This means that nuclear families were in existence and prevailed in India at all the time. The above review of literature indicates that nuclear families formed a tangible part of the family systems. Though it is generally felt that joint families dominated in the past, there are diverging views regarding the same.

Meanwhile, some demographers and family sociologists have predicted that industrialization will lead to a convergence of family systems to the conjugal type whereby the nuclear family becomes a more independent kinship unit (Goode, 1963; McDonald, 1992). According to them, one of the implications of this transition is weakening of ties with older generation, which in turn entails greater prevalence of separate living arrangements as countries develop. William J. Goode's best-known work was *World Revolution and Family Patterns* (Goode, 1963). The title has reference to the

industrial revolution, which Goode found was associated with predictable changes in family patterns. He documented the rise of the conjugal family unit. The nuclear family was becoming less embedded in the extended family, bringing a host of specific changes. These changes were compatible with industrial production, wherever that occurred (Goode, 1963).

### Definitions of living arrangements

While many authors note concerns about potential biases attributable to endogenous living arrangements, little evidence exists documenting how significant these biases may be. Various literatures show that there is no clear definition about the 'living arrangements'. It seems to be a simple term but multi-dimensional to understand. Many social scientists have offered interpretations regarding living arrangements and the forces that change them. The idea that economic development affects family living arrangements dates at least to 1855, the year in which Frederic Le Play declared that he "deplored the rise of the 'unstable' family, which he attributed to the rise of manufacturing in the West" (Ruggles, 1987). Le Play's unstable family is the type generally now described as nuclear in which a couple and its unmarried children form a separate household, instead of remaining with the older generation. Way back in 1960s, Iravati Karve has mentioned that family means joint family only (Karve, 1967). The concept of living arrangements is usually explained in terms of the type of family in which the elderly live, the headship they enjoy, the place they stay in, the people they stay with and the kind of relationship they maintain with their kith and kin, and on the whole, the extent to which they adjust to the changing environment (Rajan et al., 1995). The concept of living arrangements refers to the familial system of support and care of the elderly (Palloni, 2001). Some authors use the term "living arrangements" or "co-residential arrangements" interchangeably to refer to the household structure of the elderly. Others use the phrases "living arrangements" and "household composition" interchangeably. When living with at least one child (or other kin), the term "co-residence" is used. Also some use the term "living alone", when the elderly live with a spouse but no other kin or are unmarried and living with no other kin. At aggregate level, living arrangements at the best indicate 'co-residence' (Kumar, 2001).

Thus, living arrangements is a concept, which has been widely used in a number of countries and by many authors, for example, the U.S. Census Bureau, Statistics Canada, Statistics Sweden and Statistics Netherlands. According to them, the concept of living arrangements includes such topics as marriages, families, households, and living quarters. However, there is no definition of living arrangements in the 1998 Principles and Recommendations (United Nations, 1998). The US Census Bureau has, for example, recently published a report entitled America's Families and Living Arrangements, 2000. It presents a number of tables on households by characteristics, households by size, family groups by type, selected characteristics of the family, marital status and living arrangements of young adults (US Census Bureau, 2001). Another example is the Network for Living arrangements, Social Networks of Older Adults (LSN network) in the Netherlands stating that "living arrangements refer to housing, household composition and residential environment" (Knipscheer et al., 2001). As the paragraphs above show, the concepts of household characteristics and living arrangements are highly intertwined. The description of a household used in the latest Principles and Recommendations (United Nations, 1998), for example, touches upon living arrangements: The concept of household is based on the arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living (United Nations, 1998).

There are a number of reasons to be concerned about patterns of elderly persons' living arrangements. First, individual decisions about joint or separate living arrangements affect social and contextual characteristics, that is, living arrangements have spill over effects. Thus, they have an impact on aggregate demand for housing and housing services as well as on the size and type of demand for social services and caregiving for older persons. Secondly, it is widely believed that living arrangements are one factor, among many others, that influence older persons' well - being. Though studies on the elderly in India are just beginning to gain ground, access to good data continues to be an obstacle. Yet, ageing and issues concerned with care, support and security of the elderly persons in India have not been considered by the policy-makers as an area of priority.

The National Policy on Older Persons (NPOP), prepared by the Ministry of Social Justice and Empowerment, Government of India, New Delhi, mentioned about the 'ageless society'. In the NPOP it has been clearly stated, "The policy values an age - integrated society. It will endeavour to strengthen integration between generations,

facilitate two way flows and interactions, and strengthen bonds between the young and the old. It believes in the development of a social support system, informal as well as formal, so that the capacity of families to take care of older persons is strengthened and they can continue to live in their family". By implication there is mention about some areas of concern in the situation of older persons which will also emerge, the signs of which are already evident, resulting in pressures and fissures in the living arrangements of older persons. It is true that family ties in India are very strong and an overwhelming majority lives with their sons or is supported by them. Also, working couples find the presence of old parents emotionally bonding and of great help in managing the household and caring for children. However, due to several forces the position of a large number of older persons has become vulnerable and they cannot take for granted that their children will be able to look after them when they need care in old age, especially in view of the longer life span implying an extended period of dependency and higher costs to meet health and other needs (Government of India, 2012). Even if India is one of the signatories of MIPAA, and also the national policy mentions about 'living arrangements' as one of the working areas, few scholars have designed large scale studies especially focusing on living arrangements in India and the states.

### C) Health, morbidity and activity among elderly

A review of old age health and its various important dimensions are issues of importance for policy perspectives to meeting the health care needs of the increasing number of elderly. In India many of the elderly health issues started gaining attention and recognition only recently in literature on ageing and old age health (Alam and Mukherjee, 2005; Alam, 2006, 2009b; Sathyanarayana et al., 2010; Raju, 2002, 2000; Gupta et al., 2001). However, there are methodological issues in much of this literature owing to non-representativeness, smaller (purposive) samples and/or limited areas of more specific concerns like age-related diminution of capabilities, financial cost of diseases/disabilities or care-giving burden, etc. Because of the conceptualization and study-related data issues, a large variation occurs in the prevalence of diseases or disability over time and, hence, these studies fail to draw generalized conclusion for policy perspectives. Arguably, improper conceptualisation and inconsistencies in estimates of poor health and disabilities may impede attempts to plan for old age health in the country (Alam and Karan, 2011).

NSSO survey is the only major source for nationally representative data on old age health and disabilities at the household level. The three surveys conducted by NSSO (52<sup>nd</sup>, 58<sup>th</sup> and 60<sup>th</sup> rounds) on health, morbidity and disability used different sample frames. However, it clearly reveals significant differences in poor old age health and disability between the samples used for the 52<sup>nd</sup> and 60<sup>th</sup> rounds, despite major comparability issues between the three NSSO rounds (UNFPA, 2011). All the diseases and conditions are self-reported and the confirmation with clinical test may also be one of the issues that make old age health and disabilities a complex subject to examine and compare (Mitra and Sambamoorthi, 2006). One of the commonly used measures of health in the elderly is the self-rated conditions (current or relative) arranged on a hierarchical scale including excellent/very good, good/fair and poor. The 52<sup>nd</sup> round (1995-96) collected health and disability data on a five-point scale by separating choices into excellent, very good, good, fair, and poor. The 60<sup>th</sup> round (2004), however, made amendments and used only a three-point scale by combining the first two as 'excellent/very good' and the next two as 'good/fair'.

The 42<sup>nd</sup>, 52<sup>nd</sup> and 60<sup>th</sup> rounds of the NSSO collected data on health and morbidity and did not particularly focus on disability. The 47<sup>th</sup> and 58<sup>th</sup> rounds, on the other hand, focused exclusively on pathology triggered physical disorders. In the 60<sup>th</sup> round, the NSSO asked questions on disability along with other ailments. The 52<sup>nd</sup> round collected information on disabilities separately for the elderly population. The latest disability survey (NSSO 58<sup>th</sup> round , 2002), which was devoted entirely to collecting data on disability with a focus on five major disability conditions (mental, visual, hearing, speech and locomotors disability) adopted a different approach by asking each family member of every sample household to report on the status of disability, single or multiple. Obviously, these different approaches used cause serious comparability issues in disability data.

Morbidities included conditions arising due to a range of ailments such as gastro-intestinal, cardiovascular and respiratory problems, disorders of joints/bones, diseases of the kidney/urinary system, prostate, neurological and psychiatric disorders, all forms of cancer, eye ailments, diseases of skin, diabetes, under-nutrition, anorexia, STD, febrile illnesses, diseases of mouth/teeth/gum, tetanus, accident/injury/burns/fractures/poisoning and other diagnosed or undiagnosed diseases. There are also some important conceptual issues that need to be considered. For example, conditions that cause disability (heart

conditions, cancer, diabetes, etc.) include those that cause death. Disabilities could be anatomical, mental or occupationally crippling (Burkhauser et al., 2002). Many of these disabilities may lead to the functional dependency of the elderly for performing the activities of daily life (Nagi, 1965, 1976).

A study of middle class Brahmin women with age ranging from 50-96 years living in three old age homes of Pune was conducted by Bagga (1993). It was found that majority of women in these homes came from smaller families because either they were widows or barren or both. Children, if living, had migrated or the respondents had daughters only. Depression was more common in the under-engaged group, contrary to the others who were more active and alert. Another study also explored the impact of some socio-demographic factors and deteriorating health conditions on mental health of the elderly (Bagga, 1997). It concluded that socio-cultural factor such as widowhood, reduced or no income, educational level, childlessness, death or migration of children and living arrangements adversely affects mental health of the elderly women. Married women enjoy better mental health as compared with single or widowed women. Living arrangements were one of the most important factors affecting the mental health.

The NSSO also provides a subjective assessment of the health of the elderly by asking respondents to assess their current (i.e., at the time of the interview) and relative (i.e., compared with previous year) health conditions using multiple options ranging from excellent to worst or better to deteriorating health conditions. Clearly, this entire body of health-morbidity-disability data provided by the NSSO at regular intervals completely misses the classical functional model to distinguish between a clinical and a social approach to disability (Nagi, 1965, 1976; Alam, 2009b; World Bank, 2009). It also helps to draw inferences about the growing problems of functional dependencies and long-term care. Despite these issues, for most of the analysis, data from the health-disability surveys conducted by the NSSO had to be relied upon in the absence of a better option (UNFPA, 2011).

In general, the self-perceived health conditions of the elderly, whether current or relative, did not seem to have changed much over the years although reporting about poor health conditions marginally increased in 2004. However, the deteriorating health conditions with increase in age and high proportion of poor health conditions in rural

areas are evident from the NSSO surveys. In the recently conducted survey, analysis of self-rated health shows that about 55 per cent of the elderly rate their health as poor or fair on a five point scale. Both self-rated health and mental health have a strong socio-economic gradient (UNFPA, 2011). A large proportion of the elderly population appears to be vulnerable and faces the risks of consumption catastrophe, given the complex nature of old-age diseases, rising cost of treatment, dependence on private facilities and old age poverty (Alam, 2009).

In case of short-term outpatient ailments, reporting has increased from 16 per cent in 1995-96 to 31 per cent in 2004. In urban areas, the occurrence of ailments in the elderly is more than double for both males and females. Hospitalisation also increased from less than four per cent in 1995-96 to more than six per cent in 2004. Among elderly women it increased from about three per cent in 1995-96 to 5.5 per cent in 2004 (NSSO, 1995, 2004). The magnitude of reported ailments in rural areas is lower than in urban areas (29% and 38% respectively). The same trend is also true for hospitalisation. However, compared with younger ages, the magnitude and increase of reporting of ailments is considerably higher among older persons. The elderly in the age group of 70-79 years registered the highest increase in morbidity and hospitalisation between 1995-96 and 2004. Further, a 10-year age classification of the elderly population indicates that reporting of ailments and hospitalisations significantly increase after 70 years of age. A recent survey also shows that a significant percentage of the elderly have high levels of acute and chronic morbidities. Around 13 per cent of them reported having an ailment in 15 days prior to the survey. The gender differentials are more apparent in urban areas, with a prevalence rate of 13 per cent among elderly women compared with nine per cent among elderly men (UNFPA, 2011). Nearly two-thirds of the elderly report suffering from at least one chronic ailment with arthritis, hypertension, diabetes, asthma and heart disease as the most commonly reported ailments. Women have higher prevalence rates of chronic conditions than men on an average, and are much more likely to suffer from arthritis, hypertension and osteoporosis, while men are more likely to suffer from heart diseases, and skin and renal diseases. A majority of the elderly sought treatment for chronic ailments. Private hospitals are the predominant source of treatment for chronic conditions. Government hospitals account for only about a quarter of the treated cases of hypertension, diabetes and asthma, and for about 30 per cent of the reported cases of

arthritis. Overall, nearly 10 per cent of the elderly were hospitalised in the year prior to the survey.

Some studies have found that multiplicities of diseases are normal among the elderly and that a majority of them are often ill with chronic bronchitis, anaemia, hypertension, digestive troubles, rheumatism, scabies and fever (Mutharayappa and Bhat, 2008). In addition, an investigation carried out by Vasantha Devi and Premakumar (2000) has brought to light that elderly members are confronted with various nutritional, physiological and other general problems. A study based on hospital data found that 62.6 per cent of the elderly patients had cardiovascular ailments, 42.4 per cent gastrointestinal problems, 32.5 per cent uro-genital problems, 19.8 per cent nervous breakdowns, 19.2 per cent respiratory problems, 11.6 per cent lymphatic problems, 7 per cent high or low blood pressure, 11.2 per cent ear and eye problems, 4.8 per cent orthopaedic problems and 5.7 per cent surgical problems, while 37.3 per cent had problems with all their systems (Pathak, 1982). Another study carried in various slums in and around Hissar interviewed 85 subjects and of them 67.1 per cent were sick (Darshan et al., 1987). Gupta and Vohra (1987) observed that only a few elderly with psychiatric disorders were being cared for in the inpatient wards in hospitals or as residents of homes. In an epidemiological study on dementia in Maharashtra, with 2,145 randomly selected respondents, the prevalence of dementia in the community was seen to be 4.1 per cent and the risk of dementia increases more than five-fold in the oldest old (Saldanha et al., 2010). Some of studies have reported that there is a considerable difference in the perception of old people of their health status and the reality (Purohit and Sharma, 1972; Pathak, 1975; Mishra, 1987; Sati, 1988). A study examining morbidity among 206 sampled elderly in an urban slum in Chennai showed that 40.5 per cent of their ailments were not medically treated and the two most important reasons for it were financial problems and perception that the ailment was not serious (Balagopal, 2009). The author concluded that the social policy of developing countries like India underplays the healthcare requirements of the elderly, especially elderly women.

Among the 10 most common health conditions that affect the elderly population, circulatory system disorders topped the list in 2004. These diseases include ischemic heart conditions, heart attack, hypertension, and diseases classified as those related to the circulatory system (NSSO, 1995, 2004; UNFPA, 2011). In general, reporting of heart

diseases, disorders of the joints and diabetes is higher among women. However, hospitalisation is not always higher among the older women with these conditions. Further, there is a significant increase between 1995-96 and 2004 in the reporting of heart diseases, diseases of the joints, chronic obstetric pulmonary diseases (COPDs) which relates to difficulties in breathing or coughing up of mucus due to flaccid airways, diabetes caused by age-related glucose intolerance, etc. The incidence of these diseases has more than doubled during this period among the 60 plus population. Although most of these conditions are chronic, the rate of hospitalisation is abysmally low. Even in the case of cardiovascular diseases, hospitalisation rate was barely 0.63 per cent in 1995-96 which increased to only one per cent in 2004. The high and increasing incidence of chronic conditions coupled with the low rate of hospitalisation shows that a growing proportion of Indian elderly is living in pain with little access to health facilities.

The NSSO 60<sup>th</sup> round asked questions about the physical mobility of the aged and their responses have been recorded. Classifying these responses by sex and age group clearly indicates that physical immobility among the oldest-old (80 years and above) is as high as 22 per cent under the 'confined to home' category, with an additional 6.4 per cent bedridden. These percentages are high for women aged 80 years and above. In other words, data show that over a quarter of all the oldest old persons and a third of women in this age group are physically immobile. The percentage of immobile among the 70-79 years age group is also a challenge for the family and for the geriatric health care system. Taking both the types of immobility into consideration i.e., people confined to bed and confined to home, the percentage of physically immobile elderly women is approximately 3.5 percentage points higher than that of men. Physical immobility in later ages may also arise because of age-related frailties caused by degenerative diseases. Therefore, physical immobility may not be considered as the only factor in old age disabilities. A study of health indicates that a majority of the elderly suffer from curtailed functional abilities in physical (eating, bathing, dressing, walking, climbing stairs, getting-up from a sitting position, etc.,) as well as in sensory (hearing and vision) health domains (Alam, 2006).

According to the Census 2001, 2.13 per cent of the total population (21.9 million) was disabled in India. The prevalence of disability among the elderly was about five per cent. Females appear to suffer lower disability rates than males. The disability rates among the elderly are higher in rural areas than in urban areas. Approximately 5.4 per

cent of the elderly in rural areas reported single or multiple disabilities as against 4.0 per cent in urban areas. Further, reporting of disabilities among the older men is marginally higher than in women both in rural as well as urban areas. Comparing disability estimates drawn on the basis of different NSSO rounds, a wide margin of differences in disability estimates are observed. The prevalence rate of disability for all elderly persons varies from 39 per cent in 1995-96 to 6.2 per cent in 2002. Estimates from the 47<sup>th</sup> and 58<sup>th</sup> rounds, however, seem to be fairly close to the real situation. Commenting on this, NSSO underscores in its report based on the 52<sup>nd</sup> round (1995-96) of the Health Survey, "...perhaps, the procedures followed, particularly the probing, for identifying persons with disability were not the same. In this round, since multiple subjects were integrated in one schedule and the main focus of the survey was on morbidity in general, informants' perception about disability seems to have been recorded without deep probing - the reason why the estimate of prevalence rate of various disabilities among the elderly are found inexplicably high (NSSO, 1998; p. 21)"

Among the four disabilities, visual disorders appear to be most common and the percentage of visually challenged in the older population is high. During 2002, nearly 19 per cent men and 26 per cent women were visually challenged. The percentage of elderly with locomotor disability was approximately two to three per cent in 2002. Due to the reasons mentioned earlier, the 52nd round appears to overrate all types of disabilities. However, if the two surveys are compared, it seems that the over-estimation is more pronounced in 1995-96, especially in cases of visual and locomotor impairment. In cases of hearing and speech loss, the difference is much less (NSSO, 1995, 2004). In a recent survey the prevalence of locomotor limitations was much higher with nearly half of the elderly having problems of vision. At the same time, the use of aids and assistive devices to overcome the locomotor limitations is very limited. Over five per cent of the elderly have serious functionality issues with regard to basic functions, necessitating regular care and support (UNFPA, 2011).

Study of the Indian health system indicates that the poor have less access to health facilities in general, and public health facilities in particular, leading to their poor health conditions on the one hand and very high financial burden of health care utilisation on the other (Mahal et al., 2002). Similarly, a World Bank study indicated that incidence of disability is significantly higher among the elderly people in lower income social groups

(World Bank, 2001). In general, the socio-economic determinants of health in the elderly indicate that the elderly who have better living conditions and are economically independent have better health outcomes while those belonging to income/consumption groups, widows and those who are economically dependent, report poor health status. Education plays a marginally positive role, but living with a spouse has a strong positive impact on the elderly health. A negative impact on health is also associated with elderly women and an increase in age. Family support is an important factor for socio-psychological well-being of the elderly (Devi and Murugesan, 2006). Epidemiology, in general, studies the distribution of a particular health condition and examines factors that influence this distribution (Grundy, 1998). In a recently conducted survey also the socio-economic gradient was evident for ADL and IADL. But it was not so in the case of locomotor disability, which was mainly a function of age. Cognitive abilities are directly linked to the socio-economic background of the elderly indicating that education and upbringing have a direct link with the potential to contribute in the future. Higher prevalence rate in reporting ailment has a significant socio-economic gradient (UNFPA, 2011). A recently conducted medico-social study of the urban elderly in Mumbai (Raju, 2002) has revealed that the influence of factors such as educational status, economic status, age, marital status, perception on living status, addictions, degree of feeling idle, anxieties and worries, type of health centre visited and whether or not taking medicines is found to be significant on both the perceived and actual health status of the elderly and varies considerably across their different classes and sexes (Raju, 2011).

### **Summary:**

In India, a majority of the ageing studies conducted so far mostly pertain to a particular locality and are based on sample surveys on specific segments of elderly with a specific disciplinary focus.

The review of the earlier studies reveals that many studies view the elderly as only receivers of care. Using decennial population censuses, NFHS and health-morbidity-disability data from the earlier rounds of the National Sample Survey (52<sup>nd</sup>, 58<sup>th</sup> and 60<sup>th</sup> rounds), our analysis shows that ageing is an important emerging challenge in India, particularly among the poor with no asset holding. A majority of the elderly are

economically dependent. Because of feminization of ageing, we have more females in advanced age groups. These elderly women are mostly deprived due to many socioeconomic disadvantages, including those arising due to widowhood, rural residence, lack of education and dependence on children. In view of the higher longevity of women in general, elderly women from poor households need special care as their dependence on other family members increases significantly with age. Further, some of the studies reflect that the issues pertaining to socio-economic and demographic profiles, living arrangements, problems of and services to the elderly and, interpersonal relationships especially of the urban elderly are highlighted to a great extent. All these underscored issues mentioned by various studies in region or locality or discipline specific studies help in understanding the ageing issues in better ways. But as the elderly in India is a heterogeneous group so the diversity that has emerged in the ageing process necessitates proper stratification of groups and efforts to focus on different ageing issues in the society. Variations in living situations need to be viewed in the context of factors like age, gender, marital status, region and educational and occupational status of the elderly. The wide variation in levels of state-wise development and socio-economic status of people living in different geographical regions makes national level studies of the elderly essential.

It is clear from the above review of various Indian studies on health of the elderly that their health and wellbeing are affected by many inter-correlated factors. The health implications of population ageing are clearly emerging as a major challenge for the planners and providers of health services in the country. Over five per cent of the elderly in the country have serious functionality issues with regard to basic functions, necessitating regular care and support. The fact that most of the older patients rely on private medical facilities for treatment is a serious challenge for public health care services, besides being a potential source of economic catastrophe for older persons and their families.