2. REVIEW OF LITERATURE

Literature on different aspects related to the present study entitled ‘Health and Nutrition Profile: A study in old age homes at Ernakulam, Kerala’ is furnished under the following heads.

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2.1 AGEING
2.1.1 Definition

The definition of term elderly or aged varies from society to society. There is no fixed age at which a person begins to age. It varies widely from one
individual to another. Singh (2004) defined ageing as those changes in structure and function that occur, following the attainment of reproductive maturity, resulting in a decreased ability to do the work necessary to overcome environmental or internal challenges and result in an increased probability of death with time. Moody (2000) defines ageing as a time dependent series of cumulative, progressive, intrinsic and harmful changes that begin to manifest themselves at reproductive maturity and eventually end in death.

According to Pankajam (2004), ageing is natural, universal and inevitable with the passage of time. It is a developmental phase in the life process which begins at conception and ends with death and it is the last stage in the life journey and the closing period in the life span of a man with decreased capacity for adaptation. Barnabas (2001) said that ageing is a natural and irreversible process of human life. It is not a disease, nor a disintegrative force.

Ageing as given by Bagchi (2000) is a slow process through which an adult individual passes after a certain age and this process is always associated with some visible changes like graying hair and wrinkling of skin as well as internal changes in the physiological organs, collectively known as ageing process or biological ageing.

But according to Saraswathy (1999), ageing refers to the regular changes that occur in matured genetically representative organisms, living under representative environmental conditions, as they advance in chronological age. It
is more of a cultural process than a biological one. Jayakumar (1992) opined that ageing is a toilsome treadmill grinding to a tragic halt as the years pile up. Ageing is a life spanning process of growth and development running from birth to death.

National Institute of Nutrition (1992) rightly pointed out that ageing is basically a biophysical and neural phenomenon characterized by a slowing down of reflexes and a decrease in physical and mental abilities over time. Physical ageing is not a uniform process for all individuals in all societies, related only to the number of years a person has lived and that it is subject to modification depending on social, environmental, psychological and lifestyle factors.

The age of 60 years is taken as a cut off point, above which all individuals are known as elderly person. Anand (2004) and Pankajam (2004) were also of the opinion that in India the persons above sixty years of age are classified as aged persons. This age group is referred as ‘Geriatric Age Group’. Due to dependence for personal requirements, old age is sometimes called the ‘Second Childhood’. The aged may be regarded as those who are in the age group of 60 and above, have retired from employment or disengaged from business after having had their innings (Swaminadhan, 1996).

2.1.2. Demography

The population of the world stood at 6.1 billion in 2000 and it is expected to reach 9.3 billion by 2050. Between 1950 and 2150, the world
population would have increased fourfold. Among the elderly the number of the oldest old, those aged 80 and above will increase more rapidly compared to other segments of the elderly (Rajan, 2004).

According to Reilly (2007) the number of persons 60 years or above in the world is expected almost to triple, increasing from 673 million in 2005 to 2 billion by 2050. Over the same period, the share of older persons living in developing countries is expected to rise from 64 percent to nearly 80 percent in 2050.

Ageing of the population, according to Rajagopalan (2000) is one of the most important development of the 20th century all over the world and will be one of the major challenges for the next millennium. Population projection indicates that old age population will be over 1100 million by 2025. By 2020 there will be 700 million old people in the developing world.

In the developing countries, one in every 12 persons is now elderly; the ratio is expected to become one in five by 2050 equaling that in the developed countries. The two most populous countries in the world, China and India will share the major proportion of the world’s elderly.

In India Projections on the basis of 2001 census showed that the population consisting of 28 states and 8 Union territories had a total elderly population of 71 million (Rajan, 2004). Singh (2004) also reported that India’s
elderly population, which was 55 million in 1991, is expected to reach 76 million by the year 2001 and 124 million by the year 2020. It is likely to touch 177.4 million by the year 2025.

As per the World Bank Projection, old age population in India is likely to increase from 70 million in 1995 to 141 million by 2020 and 508 million by 2100 (Rajagopalan, 2000).

According to Liebeg et al. (2003) India is the second largest country in the world, with 72 million elderly persons above 60 years of age as of 2001. It is expected to increase from 72 million in 2001 to 179 million in 2031 and further to 301 million in 2051. In the case of those 70 years and older, they are projected to increase from 27 million in 2001 to 132 million in 2051. Among the elderly persons 80 and above, they are likely to increase from 5.4 million in 2021 to 32 million in 2051. The increasing number and proportion of elderly will have a direct impact on the demand for health services and pension and social security payments.

The ageing of a population is defined in terms of the proportion of persons aged 60 and over in the total population. The two states that already have more than 7 percent of the population above the age of 60 years are Punjab and Kerala. The rate of growth of older women is even more pronounced for Kerala indicating a faster growth of women at older ages as compared to India (Luthra, 1991). Moli (2004) reported that among the Indian states, Kerala has the largest
proportion of elderly population and the growth rate among the aged is increasing higher and higher. Therefore one of the main challenges facing Kerala is its growing elderly population. It is growing much faster than the overall population itself.

An extensive work on Kerala commissioned by the Population and Development Section, United Nations, New York, carried out at the Centre for Development Studies, Trivandrum, indicated that one of the major disadvantages of Kerala’s demographic transition is population ageing. The study noted that Kerala took 20 years to increase the share of the elderly in its population from 6 to 8 percent whereas the same increment is expected every 10 years in the immediate future (Rajan et al., 1999).

The available research on ageing suggests that fertility plays a predominant role in inducing the ageing process as compared to mortality. As far as India is concerned, there has been a substantial improvement in mortality compared to fertility since 1950. India is expected to have a faster decline in fertility in the immediate future compared to mortality because the latter is already at a low level. Hence the ageing process in India will be faster than certain other developing countries (Liebig et al., 2003) and Luthra (1991).

WHO (2002) also reported a virtual decline of mortality rates in all countries due to progress in preventing infectious diseases and improving
hygiene, sanitation and overall social development and living standards. As a result average life expectancy at birth in low income countries rose from around 45 years in the early 1950s to 64 years in the 1990s. The average life expectancy throughout the world is projected to reach 73 years in 2020 which will also augment the elderly population in the world over.

Thus the demographic transition, which is popularly known as, ‘graying population’ with fewer babies born and more elderly surviving to later age were the result of advanced technology (Kumar, 1995). While the recent emphasis on studies pertaining to the elderly in the developing world is attributed to demographic transition, the deteriorating conditions for the elderly are a result of the fast-eroding traditional family system in the wake of rapid modernization, migration and urbanization (Liebig et al., 2003).

Some studies on the elderly in tribal communities showed that the aged were secure and enjoyed better status as these communities were perhaps free from the forces of modernization and industrialization (Jamuna, 1998).

2.1.3 Physical and physiological changes

As reported by Rosenberg (1996) some of the physical and physiological changes that occur during the ageing processes are visible. The changes in skin texture, hair colour and body posture and shape are the most obvious. Pankajam (2004) was also of the opinion that surface signs of ageing are obvious in their appearance. The skin wrinkles, hair loses colour, muscle strength
diminishes, the shoulders become stooped and a reduction in height characterizes
the elderly persons. The wrinkling of the skin as given by Rosenberg (1999),
results due to the loss of fat and other changes.

Rosenberg (1999) also remarked that some of the physiologic
differences that occur during ageing and that influence requirements for nutrients
include changes in body composition which may result in changes in
requirements for calories, changes in the skin that may influence requirements for
Vitamin D and change in the intestinal tract that may influence requirements for
some vitamins.

WHO (2002) reported that the most dramatic physiological
transformation that occurs over the decades of aging is the change of the
composition of the body. As lean or muscle mass decreases along with decreasing
mass and mineralization of bone, fat increases as a percentage of body weight.
These changes can result in weaker bodies, less mobility and some risks
associated with excessive body fat including diabetes and heart disease. Lean
body mass declines over the adult age span and accelerates beyond the age of 80
years.

Another physiological change that occur with ageing that influences
nutritional requirements is changes in the stomach that result in decreased
production of stomach acid which is important for certain digestive processes
including the normal absorption of dietary Vitamin B12, folic acid and iron (Rosenburg, 1996).

The author further stated that much of the natural Vitamin D comes from synthesis in the skin in the presence of sunlight. Because, the efficiency of this process diminishes with age, the older person increasingly depends on diet for enough Vitamin D to maintain the absorption of sufficient calcium. Since these needs are not usually met by diet, the blood levels of Vitamin D decline with age. With this decline the efficiency of calcium absorption also decreases. This in turn leads to the loss of calcium from the skeleton and to osteoporosis.

As stated by Bagchi (2000), during ageing, a significant portion of the lungs is fibrosed and they are unable to offer oxygenation of blood in the lungs. The two kidneys get smaller in size and the power of the kidney to filter out the unwanted waste products from the body is diminished. With ageing, the water balance in the body is disturbed. Elderly person’s body is already dehydrated and they are vulnerable to high temperature as in sunstroke and it is therefore extremely important for an older person to drink as much of fluids as possible, in the form of liquid foods like soup or plain water.

Stomach becomes smaller in size, foods take a long time to pass on to duodenum and thus causing a sense of heaviness and uncomfortable feeling, if the diet is not appropriately altered. The brain cells and its fibres which carry impulses from brain to the system and upwards get degenerated.
The most glaring manifestation of ageing affecting the brain is forgetfulness or the inability of the brain to recall past experience, which is common in all elderly persons (Bagchi, 2000). He further reported that the heart muscles get weaker and power to send blood to all parts of the body through the circulatory system gets progressively reduced. As a result, most organs in the body do not get sufficient amount of blood leading to undesirable consequences. Physical activity is therefore regarded as a very important step to ensure adequate supply of blood and delay the process of ageing. The small muscles, which are necessary for quick reflex action, get gradually atrophied with age. So quick movements, which need small muscles for quick reflex movements are impaired, causing accidents. The commonest is slipping on wet floor of the bathroom, unable to stop the slipping.

Inadequate dentition, diminished sensitivity to taste and smell, diminished secretion of hydrochloric acid in the stomach and digestive enzymes, biliary impairment, if any, which interfere with fat digestion, irregular bowel evacuation, general ill health, economic or emotional insecurity and feeling of unwantedness are some of the problems pointed out by Beegum (2001) as common among old people.

WHO (2002) reported that approximately 25 percent of adults over age 65 have a reduced ability to detect one or more of the four basic tastes (sweet,
sour, salty and bitter) due to a reduction in the number and function of the tongue’s taste papillae. Bagchi (2000) also opined that with increasing age, the taste buds on the tongue responsible for sweet and sour taste get atrophied and as a result the preferences for food alters significantly with age. There is a craving for sweet foods in general.

As regard to physical health and mental activity, as Pankajam (2004) opined that persons over 60 may lose 50 percent of their power, which forces them to lose interest in personal life and family responsibility.

The ageing process is accelerated by many factors. Bagchi (1999) pointed out that a widely accepted theory of ageing is the ‘free radical theory’ which explains the various manifestations of the ageing process. The theory is based on the chemical nature of free radical reactions and their ubiquitous presence in the living system, and the ageing process greatly affected by these reactions. Oxygen is the main source of these damaging reactions. Free radicals generated the human body as a result of the routine enzymatic process or due to environmental influences have various damaging effects, the combination of which accelerates the ageing process.

2.2 PROBLEMS OF ELDERLY

The problems of elderly as remarked by Sarala and Kusuma (2003) begins with the fast changing Indian scenario which leads to the degeneration of the joint family system, dislocation of cultural and familial bonds. Failure on the part of the sons to look after the aged was considered as a serious demerit and
earned social opprobrium. Kumar (1995) also pointed that due to modernization, urbanization and industrialization the joint family system is witnessing a gradual breaking down. The present day younger generation is showing much interest towards nuclear family set up and the elderly in the existing joint family system are not enjoying either authority or security as they used to have earlier. This is mainly because of growing individualism among the younger generation.

Specifically the needs and problems of elderly vary according to their age, family background, health, economic status, living environment etc. as they are by no means a homogenous group (Swaminadhan, 1996). The problems of elderly as identified by Pankajam (2004) are physiological, personal, social, psychological and economic problems. Problems of inadequate food, lack of proper housing and care are very common among the aged. According to Moli (2004) the generally expressed primary needs of the elderly were reported to be food, clothing, housing, social and emotional security, attention and recognition. Need patterns vary among special populations viz., childless elderly, widowed, disabled and destitutes.

2.2.1 Socio economic problems

One of the major problems confronting the aged as reported by Mathew (1999) was withdrawal from control over economy and lack of income. This financial backwardness of elderly was also highlighted by Singh (2004). According to the author most of the older people have no personal income.
Unemployment adds to their financial backwardness. The main problem with the elderly in India is poverty and majority of the older people still live in or on the margins of poverty.

The Chronic Poverty Research Centre has identified the elderly as one of the groups that are likely to be vulnerable to chronic poverty (Rajan, 2004). According to Liebig et al. (2003), inadequate financial resources were the major problems of Indian elderly in general and this seems to be of a higher degree among female elderly compared to their male counterparts. A nationwide survey (National Sample Survey, 1986-87) found that 34.2 percent of the rural elderly were financially independent as against 28.94 percent of their urban counterparts. Only 23 percent of men and 4 percent of women received pension in Kerala. The highest number of women pensioners was found in TamilNadu. Jamuna (1998) also reported that more than half of the elderly live in poverty are dependent and have no independent income. More than 80 percent of the elderly who spent their early years in the bygone era were found to be poorly educated and unskilled. In rural areas most of the elderly depend on income from agricultural labour. The phenomenon of out migration is growing, leaving the elderly to lend for themselves.

The well being of the elderly is intimately linked to their education. Education, apart from providing economic stability also enables smooth adaptability towards the socio-economic transition in the society. Having a low
level of literacy in India on the whole, the literacy levels among elderly persons are pretty low and it is extremely low in rural areas and especially among women (Rajan et al. 1999).

Elderly women form a sizeable portion of the aged population. As reported by Jamuna (1998) majority of the elderly are women and most of whom are widows. In Kerala also majority of the elderly females are widows (Moli, 2004). She further emphasized that as widowhood is the main factor that influences one’s adjustment and mental health, elder widows must be considered as a special group to get priority in the National Policy for the elderly.

An examination of intra-family relations of urban elderly by Shah (1993) found that satisfactory intra-family relations are higher among the widows than the widowers and somewhat lower among those living in joint families compared to those living in nuclear families. Elderly having no substantial assets or a fairly good source of income and who are economically dependants, find the attitude and behaviour of their family members as unsatisfactory (Rajan et al., 1999).

Other related psychosocial problems of elderly such as loss of prestige and status, alienation and loneliness, neglect and lack of attention and care, alcoholism and disengagement among the aged also need special attention. Further disadvantaged sections of the aged such as disabled aged, aged women or
destitutes, aged landless labourers, chronically sick-aged, the homeless street aged particularly call for immediate attention of planners and policy makers (Sudhir, 1998).

2.2.2 Psychological Problems

Psychological well being is the basic requisite for the healthy life of elderly. They should be in a sound status both physically and mentally. But the actual state is different. Durairaj et al. (1999) specially highlighted on the mental problems of old people.

Mental health of the elderly, according to Sangeetha et al. (2005) is an area in which very little research has been done compared to that in the developed world. It is only in recent years that the prevalence of depression and dementias of various grades are being assessed in the elderly population (Bagchi, 1998).

The process of psychological ageing acquires importance in this context. As given by Shankar (1999) the individual worth, attitudes and his behaviour play significant roles in this ageing process. The old memories, major achievements in life and the respect bestowed on a person all these renew his faith in his own competence even in the old age.

At the same time a sense of loss of power, prestige and social status leads to insecurity. Loneliness, economic uncertainty, general unhappiness or distress, despair, meaninglessness and instability are symptoms which indicate anxiety conditions among the aged. All these are inevitable elements that aggravate the psychological depression (Shankar, 1999).
Khanna (1997) pointed out loss of authoritative status which the elderly had enjoyed during the prime years of their life coupled with intense loneliness makes the matter worse and hence a large percentage of the aged suffer from depression. Durairaj \textit{et al.} (1999) were of the opinion that old people suffer from mental tension because of ill health of self or their life partners and feel their loneliness very strongly. They are disturbed by the feeling that they are helpless and not useful to their house and society. The sense of lack of usefulness and the resultant mental depression among elderly was also reported by Anand (2004). As given by Dube (1999) loss of earning power coupled with loss of social recognition leads to feeling of uselessness.

Thus depression is found to be one of the most common expressions of emotional distress among elderly and it is one of the major health problems faced by the old age population today (Anand, 2004 and Shankar, 1999). Community survey based studies are also there to support the high prevalence of depression in the later years of life (Durairaj \textit{et al.} 1999). When the ability to exercise is impaired then the body and mind are affected and depression may result. Getting exposure to sunlight also can affect some people by changing their mood. For the homebound elderly this may be a problem (Anderson \textit{et al.}, 1999).

Women in general are more prone to develop major depression and depressive disorders (Jamuna, 1998). Bagchi (1999) also pointed out that a substantial segment of the elderly population especially elderly females are
victims of depression and various types of dementia leading to poor appetite and lack of interest in food.

According to the Epidemiologic Catchment Area Study, depressive symptoms occur in approximately 15 percent of the elderly population and rates are even higher for elderly in nursing homes. The common symptoms of depression as stated by Anand (2004) include loss of appetite, fitful sleep, early morning wakening, weight loss, lack of energy and motivation and sometimes even thoughts of suicide. Reduced appetite and inability to sleep are the indications of depression mentioned by Jamuna, 1998).

However, depression during old age not only affects the adjustment of the elderly to their living environment but also affects their food intake. In some cases depression may result in over eating as the food becomes a means to achieve emotional security. This may result in obesity and other related disturbances. In other cases, depression may lead to rejection of food and thus under nutrition.

But the effect of poor diet on the development of depression was highlighted by Anderson et al. (1999). Many older people have poor nutritional intake due to a variety of psychological and physical factors such as poor denture fit, cost of nutritious foods, changes in taste sensations and eating alone (Anderson et al., 1999).
So in depression both loss of appetite and malnutrition are often diagnostic and at the same time are a difficult therapeutic problem. Indeed, one of the most difficult situations in geriatric medicine is to decide if food refusal is due to curable depression or voluntary desire to give up in a mentally healthy individual (Steen, 1992).

Depressive illness in the elderly is responsible for more hospitalizations than any other disorder except cardiovascular disease. It leads to decreased functioning, increased morbidity and mortality, increased health care utilization and institutionalization (Steen, 1992).

Anderson et al. (1999) were also of the opinion that elderly individuals who are depressed are in a high risk category for institutionalization because they are less motivated to care for their personal hygiene and nutrition. This increases their vulnerability to disease. Depression is linked to the amount of the neurotransmitters serotonin and norepinephrine present in the nerve synapses. Lower serotonin and norepinephrine levels seem to be associated with depression.

Even though the institutions or old age home are called ‘home’ or ‘home away from home’ the elderly face problems of adjustment with the tight and rigid schedule, total or near total separation from the familial or social milieu, anxiety over entrusting oneself to an unknown and new environment, lack of mental stimulation, diminishing physical faculties and closer and more frequent
encounters with deaths and ailments in the institution. All these may create for
the elderly the problems of depression, apathy and a process of resignation to fate
(Mandal, 1998).

These problems which may lend itself to the psychological disturbances
in elderly and in due course it affects their mental health. Prevalence of
depression and dementia in the later age of life is mostly attributed to the
emotional distress and mental tension of the individual.

2.2.3 Health problems

Health status is an important factor that decides the quality of life of
any individual. Of the three implications of the demographic transition such as
social, economic and health, health care is possibly an area which is most
essential for every individual. The World Health Organization defined health as a
state of physical, mental and social well being.

Health according to Vijayakumar (1996) is not only a biological or
medical concern but it is also a significant personal or social concern. In general
with declining health, individuals can lose their independence, lose social roles,
become isolated, experience economic hardship, be labeled or stigmatized,
change their perception and some of them may be institutionalized. Therefore the
number one priority of the future should be the health care of the aged.

Even in Kerala the health care of the aged population is considered as
one of the biggest challenges to be feed in the next millenium. (Shanmukhadas,
1999 and Bagchi, 1998).
Factors that are often used to define health, in more measurable terms, include physical signs, symptoms and functional disability. Physical signs are the directly observable or measurable changes in an individual’s organs or systems. Symptoms are the more subjective reactions to the changes experienced by the individual (O’Sullivan et al., 1994). With improving life expectancy and the resultant increase in the proportion of the aged population, there would be worldwide increase in the burden of chronic diseases and disabilities.

The health problems according to Subrahmanya (2002) and Mehta (2001) tend to increase with advancing age and very often the problems aggravate due to neglect, poor economic status, social deprivation and inappropriate dietary intake which often result in multiple nutritional deficiencies.

Khana (1997) was also of the opinion that many factors like poor income, decreased mobility, social isolation and depression are known to affect the health and well-being of the elderly.

Pasricha et al. (1992) presented a wide range of factors which have a negative influence on the health and nutrition of the elderly including lack of family support in terms of need, feeling of unwantedness, economic constraints, lack of value system among the members in the family, stressful conditions leading to tensions and loneliness leading to disinterestedness in living and eating, resulting in malnutrition.

The National Policy for older persons recognizes that with advancing age, old persons have to cope with health related problems, some of which may
be chronic, of a multiple nature, requiring constant attention and carry the risk of
disability.

Thomas (2003), Prakash (2001) and Shah and Prabhakar (1997) ascertained this fact by stating that elderly in India showed considerable
morbidity. As indicated by surveys 45 to 55 percent of older people had chronic
illnesses. This coupled with the fact that geriatric medicine has not yet taken
proper roots in the country and existing health system is not geared to the needs
of a large group of elderly.

In a Delhi based study prevalence rate of morbidity was reputed to be
229 and 210 per 1000 in old men and women respectively (Shah and Prabhakar,
1997). In Kerala the morbidity levels in elderly population is higher than any of
the major states in India. The average life expectancy in Kerala has reached 68.8
years for males and 74.4 years for females and this kind of longer life span is
associated with worsening health condition. The life expectancy has increased to
this level mainly because of progressive decline in death rate at all ages brought
about by the control of communicable diseases (Dilip, 2001). He further added
that the medical technology has seen more progress in the management of
chronic diseases than cure. Therefore, the individuals who would have died
during the previous mortality regime are still living with those conditions,
resulting in a higher prevalence of these conditions in the population. As a result,
more and more frail persons survive until old age and the aged population as such
becomes frail and prone to diseases.
As far as the type of morbidity is concerned Liebig et al. (2003) reported that age-related disorders include life-threatening diseases such as heart disease, stroke, cancer, diabetes and infections as well as certain chronic disabling conditions affecting vision, mobility, hearing and cognition. Older persons also complain about various symptoms that may appear non-specific and unrelated to any classic disorder including general weakness, sleeplessness, constipation, flatulence, diminished appetite, decreased libido and so forth. Khanna (1997) also identified obesity, diabetes, cardiovascular diseases and osteoporosis as the most important and commonly prevalent nutrition related health problems among elderly.

According to Kasthuri (1999) the major diseases of old age are blood pressure, diabetes, heart diseases, arthritis etc. Coronary heart disease and stroke have become the major causes of death and disability among both ageing women and men. Sreeramulu et al. (1999) also stated that cardiovascular diseases like hypertension and coronary heart disease account for high morbidity in elderly.

The prevalence rate of Coronary Heart Disease (CHD) was nearly three times higher in the urban than in the rural population. In 1996, there were around 9 million CHD cases with males outnumbering females (Shah and Prabhakar, 1997).

Moody (2000) also opined that the leading cause of death for people over age 65 remains cardiovascular disease, which includes stroke and heart disease. Risk factors for cardiovascular disease in the elderly includes ageing, positive family history, cigarette smoking, hypertension, obesity, hyperlipidemia and diabetes mellitus.
Hypertension among the urban elderly however was reported to be twice as high as that among the rural elderly. Older subjects had nearly 20 times higher prevalence of hypertension compared to total population. Other health problems in elderly are degenerative disorders like diabetes and cancers.

In industrialized countries, about 75 percent of deaths in people over the age of 65 are now from heart disease, cancer and cerebrovascular disease (WHO, 2002). The population based cancer registries initiated in some large cities reported 35 million detected cases among elderly in 1996 alone. Tobacco related cancer is common among males while in females cancers of uterine cervix and breast are more common (Shah et al., 1997).

With ageing, the walls of the intestines get atrophied and weak and the motility is markedly reduced. The enzymes needed for digestion and secreted by the intestine are also reduced. The partly digested food stays in the intestine for a longer period. As a result, gas formation or fluctulance and constipation occurs (Bagchi, 2000).

Constipation as stated by Dodd (1999) is one of the most common gastrointestinal complaints in the elderly. General symptoms caused by constipation are pain in abdomen, heaviness in stomach, gas formation, coated tongue, headache, loss of appetite, pain in lower legs, hypertension, drowsiness etc. Immobility, decreased exercise, and a lack of fibre and water in the diet are all common problems in the older population and these factors tend to exacerbate the tendency to become constipated (Anderson et al., 1999).
Natarajan (2001) suggested that a high fluid intake must be maintained and an older person should consume at least a minimum of two to 2.5 litres of fluids per day. Physical activity should be encouraged and the elderly should include in their diet 40gms of dietary fibre per day.

Moody (2000) stated that arthritis is the most familiar and most prevalent chronic disease of later life, it afflicts nearly half of all persons over age 65. Arthritis is basically an inflammation of the joints, also commonly known as rheumatism, and it is the most important cause of physical disability. Symptoms include pain and red, swollen joints and muscles. The cause of arthritis is not known and there is no cure, but treatment of the disease to reduce symptoms can be effective.

Osteoarthritis is yet another chronic degenerative disease of joints progressive in nature occurring mainly in the middle half of life affecting one or many joints and is the leading cause of disability in the older persons. Many people have mild aching and soreness in their joints, especially when they move. The risk factors to osteoarthritis are obesity, genetic factors, bone density and occupation (Anand, 2001).

The health problem often referred as a specific malady in old age is osteoporosis and fractures which can seriously interfere with movement and productivity (Sreeramulu et al., 1999).
WHO (2002) also reported that osteoporosis and associated bone fractures are one of the major causes of disability and death that result in enormous medical expense the world over. It is estimated that the number of hip fractures worldwide will rise from 1.7 million in 1990 to around 6.3 million by 2050. As given by Moody (2000) osteoporosis is a condition involving deterioration or disappearance of bone tissue leading to loss of strength and often to fracture.

The bones get porous and fragile as the age advances, especially in elderly females which leads to osteoporosis (Bagchi, 2000). Women are more prone because their bone loss accelerates after menopause (WHO, 2002). Higher prevalence of osteoporosis among women (four times common than in men) especially beyond the age of menopause was also highlighted by Moody (2000).

Factors such as diet, physical activity and smoking are closely associated with osteoporosis. Lifestyle modifications, particularly increased calcium intake and physical activity have an important preventive impact on fracture rates (WHO, 2002). Improved blood circulation to bones through physical activity and proper diet with adequate calcium were also suggested by Bagchi (2000) as two best preventive measures of osteoporosis.

Bagchi (2000) further reported that with increase in age, the valve in the bladder, which controls the exit of urine from the bladder to urethra, gets atrophied and weak. Involuntary leakage of urine occurs in case the bladder is full or due to increased pressure on bladder as in sneezing or even in laughing, a condition known as urinary incontinence. Incontinence is a common complaint of elderly females.
The prevalence of blindness mainly due to cataracts, hearing problems and mental problems (70 percent due to depression) among the elderly was almost ten, eight and two times higher, respectively, than the prevalence in the total population (Liebig et al., 2003).

Compiling data from several studies initiated by the Indian Council of Medical Research, Shah et al. (1997) reported visual impairments in 11 million older population in India, while 38 million have hearing impairments.

Kasthuri (1999) also opined that in old people the occurrence of loss of memory, the difficulty for moving, impairment of hearing and seeing is also seen. In some older people forgetfulness is a serious problem and they may have difficulty in remembering things like where they are, their names, age, address etc. This is generally known as dementia and the most common forms of dementia are known as ‘Alzheimer’s diseases and vascular dementia’.

According to Moody (2000) dementia is an organic mental disorder involving progressive loss of the capacity to think and remember. Dementia is characterized by confusion and memory impairment and may manifest itself in a wide range of symptoms, such as wandering or losing things.

As stated by Sreeramalu et al. (1999) neurons get degenerated and are mostly not replaced resulting in dementia, Alzheimer’s disease etc. There is a progressive decline in a person’s ability to remember, learn, reason and think.

Muscle loss during old age leads to physical weakness. Immune
infections also get affected and results in increased risk of infections in old age (Sreeramalu et al., 1999). Thus elderly suffer from multiple health problems, apart from socioeconomic and other behavior problems which necessitates the need for giving special attention to their health care needs (Sreeramalu et al., 1999). The idea that health care of elderly is as essential as that of younger age group though theoretically accepted may not by translated readily into practice.

**Functional disability**

A functional limitation according to O'Sullivan et al. (1994) is the inability of an individual to perform a task or activity in the way it is done by most people, usually as the result of impairment. Three main categories of function have been delineated: physical function, psychological functional and social function. Physical function refers to those sensory motor skills necessary for the performance of usual daily activities. Getting out of bed, walking, climbing stairs and bathing are examples of physical functions. Tasks concerned with daily self care such as feeding, dressing, hygiene and physical mobility are called Basic Activities of Daily Living (BADL). Advanced skills that are considered vital to an individual’s independent living in the community are termed Instrumental Activities of Daily Living (IADL). These include a wide range of high level skills such as managing personal affairs, cooking and shopping, home chores and driving (O’Sullivan et al., 1994).

Psychological function has two components-mental and affective. Mental function refers to the intellectual or cognitive abilities of an individual.
Factors such as initiative, attention, concentration, memory, problem solving or judgement are important components of normal mental function. Affective function refers to the affective skills and coping strategies needed to deal with the everyday hassles as well as the more traumatic and stressful events each person encounters over the course of a lifetime. Factors such as self esteem, attitude towards body image, anxiety, depression and the ability to cope with changes are examples of affective functions.

Social function refers to an individual’s performance of social roles and obligations. Categories of roles and activities that are relevant to assessing and individual’s social function include social activity, including participation in recreational activities, social interaction such as telephoning or visiting relatives or friends and social role created and sustained through interpersonal relationships specific to one’s personal life and occupation (O’Sullivan et al., 1994).

People are regarded as dependent if they need help to perform basic daily tasks and their level of functioning is often assessed accordingly. As people age there tends to be a concomitant increase in the presence and number of chronic conditions together with a greater dependence on caretakers (WHO, 2002).

Functional assessment measures how a person does certain tasks or fulfills certain roles in the various dimensions of living (O’Sullivan et al., 1994).
The physiological and pathological changes that inevitably accompany ageing result in degenerative processes and lower functional capacity. These in turn influence nutritional status of old people (Pasricha et al., 1992).

### 2.2.4 Nutritional Problems

Since a majority of the health problems among the aged are diet related and nutritionally dependent, appropriate and adequate nutrition is essential for health and well being of the elderly (Arlappa et al., 2004). WHO (2002) also stressed that among the problems of old age, nutrition ranks as the major one.

The situation in 80’s was also reported to be the same. As per Gambert (1987) nutritional problems are common in both healthy, community dwelling elderly and hospitalized and institutionalized elderly. This indicated the fact that nutritional problems of elderly continues to be in the same tempo. According to Antony (1999), nutritional assessment plays a significant role in identifying those persons who are at nutritional risk. Thus under nutrition remains a serious problem in high-risk populations, including the frail elderly.

According to WHO (2002) under nutrition is a global problem usually caused by a lack of food or a limited range of foods that provide inadequate amounts of specific nutrients or other food components, example, protein, dietary fibre and micronutrients. Among older persons malnutrition can occur in economically disadvantaged groups even within privileged societies and in pockets of poverty or social isolation.
Nutritional requirements of aged will be different from normal adult requirements. The lowered metabolic rate reduces the calorie requirement by about 25 percent compared with normal adults.

According to Bagchi (2000) the elderly require and consume fewer total calories per day than younger adults. Carbohydrate intake may increase slightly (40% of total calories) whereas fat and protein intakes generally decline in older people. Lean body mass and total body protein decrease whereas the percentage of body fat increases with age. Reduced energy metabolism, lack of physical activity and lack of appetite leads to significantly reduced food intake and consequently energy deficiencies.

As reported by Steen (1992), many institutionalized elderly patients are physically inactive, which gives rise to low needs for energy and therefore difficulties in maintaining a sufficient intake of essential nutrients. Physical inactivity enhances bone mineral losses from the skeleton and several studies have shown that exercise can prevent or reverse some of the limiting change in cardiovascular function and work capacity and be able to improve glucose tolerance.

The sense of taste and smell diminishes with advancing age. The decline results in the lessening of appetite and reduction in the quantity of food consumed. Regular supplementation of vitamins and minerals is required for the vulnerable section of the elderly population (WHO, 2002).
According to Antony (1999), nutritional assessment plays a significant role in identifying those persons who are at nutritional risk. Many elderly persons experience a variety of physiological problems associated with the aging process. Nutrition assessment is of primary importance in helping to identify potential risks and solutions to many of these problems. Marginal or inadequate energy intake and vitamin status commonly occur among those who are homebound, disabled or institutionalized (Beck et al., 1999).

Since calcium and Vitamin D seem to play vital roles in the development of bone loss with ageing it is important to secure an adequate intake even in the old age- especially among those who are homebound and hence have an inadequate sunlight exposure (Beck et al., 1999).

Bagchi (1999) stated that several sociopsychological factors also affect the dietary pattern and food intake of the elderly. Those living with their own families and have someone to take care of them have an invariably better food intake and nutritional status. Those in old age homes are usually undernourished with various types of nutritional deficiencies. Most elderly individuals are socially isolated. Loneliness and lack of companionship may depress appetite and hence food intake.

In majority of the elderly people it is very difficult to change some of the already established food habits carried over from childhood. Food habits get influenced by several factors such as family, education, occupation, economic
status, life style and cultural norms. Also change in diet may occur in the late years for physiological reasons such as denture problems, diminished senses of taste and smell and problems in digesting certain foods.

Social factors like widowhood and poor income may also intervene to change the diet of the elderly thereby leading to potential health problems (Vijayakumar, 1996). Loss of teeth is a common feature in ageing. Even with dentures, the eating habits are considerably altered as chewing is avoided and the elderly individuals prefer to eat soft, mashed or liquid foods, which quite often lead to nutritional deficiencies (Bagchi, 2000). Further these factors not only regulate the absorption of several components of food but also regulate gastrointestinal function (Bagchi, 1999).

Absorption of nutrients is poor among old people due to changes in intestinal wall (Beegum, 2001). An appropriate diet composed of easily digestible food and with adequate amount of roughage or food fibres to stimulate the motility of the intestine will to a large extent overcome these complaints. Diet in ageing should receive high priority. Assimilation of minerals is poor in old people compared to a normal person.

Some of the common nutrition related problems among the elderly are diabetes, hypertension, other cardiovascular problems, gastrointestinal problems, kidney problems and arthritis (Pasricha et al., 1992).
Even fat digestion is difficult and delayed in old age. Cholesterol level could be high among old people and so it is better to avoid saturated fat from animal sources, coconut and palm oil. Vegetable oils reduce the blood cholesterol level and 40 to 50 grams of such fats or oils can be used (Beegum, 2001).

Poor absorption of minerals and hormonal imbalance, especially of androgen and oestrogen, produce osteoporosis in old people. Generally raw vegetables or fruits are consumed in fewer amounts by old people which produces signs and symptoms of various vitamin deficiencies. B complex vitamin deficiency is common (Beegum, 2001).

According to Gambert (1987), factors involved in the development of malnutrition in the elderly include physical impairments like poor vision, poor dentition/dentures, arthritis and immobility; physiological impairments like malabsorption and maldigestion, loss of taste and smell; pathological conditions like dementia, depression, disease states; social factors like poverty, alcoholism, poor dietary habits, isolation and latrogenic causes like drug interactions, prescribed diets.

Energy deficiency leading to emaciation, ascorbic acid and vitamin B complex deficiencies, anaemia and osteoporosis are frequently observed among older segment of the elderly individuals. Dietary anti-oxidants like vitamin C, E and beta-carotene are now being recognized as factors which might retard the process of ageing by scavenging ‘free radicals’. These anti-oxidants are
particularly useful in preventing the onset of pathological conditions which convert physiological ageing into pathological ageing. Vegetables and fruits are rich in these anti-oxidants and should be eaten liberally (Bagchi, 1999).

Sreeramulu et al. (1999) is also of the opinion that adequate micronutrient supplementation and calorie restriction may decrease free radical generation and may help in longevity. Studies conducted in various parts of the country have shown that most of the elderly people suffer from micronutrient deficiency diseases. They should therefore be encouraged to eat foods rich in micronutrients such as vitamins A, E and C and minerals such as calcium, zinc and selenium. Elderly people need more of Vitamin E compared to vitamin A as vitamin deficiency is more widespread among elderly.

Hasan (1998) opined that physiological changes associated with advancement in age have a potential impact on the diet and nutritional status of older persons. They are at risk of suffering from poor nutrition for a number of reasons, like poor dentition and ill-fitting dentures, economic pressures, depression, reduced mobility, loneliness, ageing tissues, inadequate food consumption, poor quality of diet and ignorance.

Malnutrition among older persons can occur in economically disadvantaged groups even within privileged societies and in pockets of poverty or social isolation. Reasons for under nutrition include decreased food availability and affordability, lack of interest or awareness affecting intake, malabsorption, or
increased nutrient requirements and traditional habits or beliefs whether of the elderly or their caretakers (WHO, 2002).

Increased intake of fruits and vegetables can dramatically reduce the risk of many degenerative diseases of ageing (Reddy et al., 1999). Studies from Kurichia, a tribal population of Kerala, India who enjoy longevity are relatively free from age associated chronic problems, reveal that consumption of leafy and root vegetables have beneficial influence on cardiac protection and retardation of ageing process.

WHO (2002) reported that there is substantial evidence that calcium and vitamin D protect against osteoporosis. During the later years, calcium together with vitamin D prevents negative calcium balance and reduces the rate of bone loss. Other minerals including boron, copper, magnesium, manganese and zinc appear to contribute to the maintenance of bone density with age. Sodium adversely affects calcium balance through the promotion of urinary calcium loss. Vitamin K and essential fatty acids also contribute to bone health. Dietary risk factors for osteoporosis include excess consumption of caffeine, protein and alcohol. An overall food pattern is likely to be more important for bone health among older persons than any single food factor taken alone.

Khanna (1997) pointed out that due to various physiological and socio-psychological changes, food intake of the elderly might decrease drastically resulting in under nutrition and malnutrition. Deficiencies of iron, folic acid and
vitamin C are common among the aged which manifest in the form of anaemias. Malnutrition may occur due to decreased intake, impaired absorption and poor utilization of various nutrients.

WHO (2002) reported that accumulating evidence suggests an important relationship between the incidence of age related cataract and nutritional status particularly where the antioxidant vitamins C and E are concerned. In two prospective randomized clinical trials conducted in China, supplementation with a multivitamin preparation or a riboflavin or niacin formula was found to significantly reduce the prevalence of nuclear cataract in older subjects. Significant correlations have also been reported between poor indices of thiamine, riboflavin and iron nutriture and impaired cognitive performance and electroencephalographic indices of neuropsychological function. High dose vitamin E supplementation appears to delay the progression of Alzheimer’s disease.

2.3 SPECIAL CARE AND SERVICES FOR ELDERLY

2.3.1 Service Programmes

The year 1999 has been declared by the United Nations as the International Year of the Older Persons. The Government of India constituted a National Council for the Elderly Persons called ‘AGEWELL’, to develop and provide several practical solutions to the problems faced by old age people in the country (Ram, 1999).
Also during the International Year of Older Persons, the Government has approved a National Policy for Elderly Persons aimed at helping them live their lives with dignity and peace. The National Policy for Elderly Persons includes proposals for tax breaks for the elderly in the form of a higher standard education and a standard annual rebate for medical treatment (FPAI Bulletin, 1999). However the Geriatric health care has risen as the National Health agenda only recently.

For the first time, in 1983-84 the Government of India decided to give grants to voluntary organization for services to the aged, for health care, income generation, subsistence training and old age homes. In 1992, The Ministry of Welfare started a scheme called Welfare of the Aged which provides financial assistance to voluntary organizations for running programmes like running of old age homes, day care centres and provision of mobile medicare services for older persons above the age of 60 years (Mandal, 1998).

While the government continues its efforts to introduce programmes for the elderly, the non-governmental organizations (NGOs) have played a key role in bringing to the forefront of the socioeconomic and health problems of older people in the society at large. Presently there are many national and international NGOs working for the cause of India’s elders. Most have concentrated their work among lower income groups and the disadvantage and unprivileged sections of the society (Liebig, 2003).
Thus both the Government and the Non-Governmental organizations are making efforts to promote the welfare of the elderly. Social security schemes have become very common among the developed as well as developing countries. Special concessions are being provided to people above 60 years of age. Old age pension to the destitute and to the poor has been introduced (Pankajam, 2004).

An Old Age Pension Scheme (OAP) which has been introduced to meet the needs of people who have no means to support themselves. But many states accord OAP a low priority and the monthly amount given is low. The Indian government formulated the long awaited National Policy on Older Persons in 1999. The national policy recognizes the need for affirmative action in favour of the elderly.

An Old Age Pension scheme (OAP) which has been introduced to meet the needs of people who have no means to support themselves was also reported by Liebig et al. (2003). According to them many states accord OAP a low priority and the monthly amount given is low. The Indian government formulated the long awaited National Policy on Older Persons in 1999. The National Policy recognizes the need for affirmative action in favour of the elderly.

Until 1995, there was no social assistance programme managed by the Government of India for its poor citizens. The announcement of a National Social Assistance Scheme (NSAS) on 1995, was a significant step towards the
fulfillment of the Directive Principles enshrined in Article 42 of the Indian Constitution, which talks about public assistance in old age. But Liebig et al. (2003) commented that National Social Assistance Programme launched in 1995 has not covered the entire section of needy destitutes. On 1999, the Government of India also announced another social assistance scheme called ‘Annapurna’ for its elderly destitutes who have no one to take care of them. Under this scheme, an elderly will be provided with 10 kilograms of rice or wheat per month free of cost through the existing public distributing system (Rajan, 2004).

Recently on December 2006 Lida Jacob, IAS announces welfare programmes for aged. However, the Government supported health programmes targeted for the elderly, in general, are quite inadequate due to economic constraints (Liebig et al., 2003).

It is in recent decades as stated by Mandal (1998) the NGOs or Voluntary organizations have intensified their activities for old age care. Eighty percent of the NGOs in the field of old age care emerged only after 1949. Many voluntary organizations are functioning in India for the care of the aged persons. Some of them registered at national levels, as given by Rajan et al.(1999) include the following:

- **Help Age India** initiated in the year 1948, with an aim to improve quality of life of the elderly in need of help. It is one of the premier NGOs that began to
work on the cause of India’s older population and which is secular non profit organization too (Liebig, 2003). The main objectives of this organization are to foster the welfare of the aged in India especially the needy, to raise funds for projects which assists the elderly irrespective of caste or creed and to create a social awareness about the problems of the elderly among the younger generation. The main activity of this organization is to consult, train and provide financial support to the voluntary agencies which are engaged in the welfare of the aged. It also has research and development centres to train personnel engaged in the care of the aged.

- **Bharat Pensioner’s Samaj** was established in 1960 which is an all-India pensioner’s association. The main aims include direct senior citizens into various fields of economic and social activities in the development plans of the country, arrange medical facilities etc.

- **Caritas India** was established in 1962 for the education and animation of society at all levels and its aim is to promote care to the sick, crippled, handicapped, destitute and the aged.

- **Indian Association of Retired Persons** was established in 1973 to approach the government for socio-economic assistance for aged persons, render medical aid by opening dispensaries, hospitals etc. It organizes regular talks and discussions and projects the problems faced by retired persons to the authorities.
• *Age-Care India* was established in the year 1980. The main objectives are to help elderly through domiciliary, residential and institutional services and provide them with educational, recreational, social, cultural and spiritual services; arrange medical services; conduct research and studies on the problems of the aged etc. (Rajan *et al.*, 1999).

### 2.3.2 Institutional care

The idea of institutionalization of the aged has been largely borrowed from the western societies, whose values and norms are quite different from that of India. Experts feel that the requirements of institutionalization cannot be denied for those aged people who are neither able to manage their own affairs nor do they have any person to look after them (Chopra *et al.*, 2001).

The first old age home in India is supposed to have been started in early 18\(^{th}\) century, but information is available from 1782 onwards (Rajan *et al.*, 1999). The Directory of the organizations engaged in the welfare of the aged in India published by the Centre for the Welfare of the Aged (CWEA) showed that the vast majority of homes were set up after the independence. But the oldest home was raised in 1782 in Chennai which functions even today under the name ‘Monegar and Rajah of Venkatagiri Choultries’ (Luthra, 1991).

A nationwide study of old age homes conducted by Rajan *et al.* (1999) reported that the growth of care homes for the elderly is seen to be high during the period 1951-75.
As of 1988, there were 71 old age homes in Tamil Nadu and 70 in Kerala. On the whole; the south Indian states (Tamil Nadu, Kerala, Karnataka and Andhra Pradesh) accommodate 57 percent of the old age homes. The survey also indicated that more than 60 percent of the institutions face heavy rush for getting accommodation. Specifically, the rush to acquire a seat in religious institutions is much higher (64.9 %) than any other institutions Rajan et al., (1999)

Voluntary organizations set up 212 old age homes, 31 mobile medicare units and many day care centers by the year 1995 under the scheme of welfare for the aged of the Ministry of welfare. During 1996-97 a scheme of assistance to Panchayatiraj institutions or voluntary organizations for the construction of old age homes was launched. This scheme aims at providing at least one old age home per district for at least 25 persons above the age of 65 years preferably destitute (Mandal, 1998). Thus despite the belief that children are the security of the aged, institutions for the aged started mushrooming since the late 1990’s (Luthra, 1991).

The number of institutions for elderly care in Kerala and Tamil Nadu are higher than any other state in India (Rajan et al.1999). They further reported that among the major states in India, Kerala has the highest number of aged persons (21.89%) in old age homes. Tamil Nadu follows with 20.28 percent and the next is Karnataka (13.93%).
Liebig et al. (2003) also observed a very high rate of institutionalization of elderly in Kerala, followed by Maharashtra and Karnataka. While children are replacing their role as caregivers to their parents by working outside the home, a new challenge for elderly care will be posed. Day care centers, geriatric hospitals and old age homes are likely to play a major role in the living arrangements for the elderly. They further added that there are homes exclusively for elderly women in Kerala, Maharashtra, Tamil Nadu and one or two homes in other states.

The institutional care for the aged according to Rajan et al. (1999) is mainly provided by the non-government, private, voluntary, non-profit and particularly the religious charitable organizations. The central and state governments still play a very negligible role in providing care to this deprived sections of society.

But in recent years, some private agencies are participating to establish old age homes, especially with a profit motive. Majority of the institutions (57.4%) are run by the Christians and the role of Government institutions is very limited. There are very few old age homes run by other religious groups. Very recently, Hindus belonging to various castes and Muslims are taking part in the creation of old age homes (Rajan et al., 1999).

In Kerala considering the rising need for old age homes in Kerala for the kinless and the abandoned, Social Welfare Department has established old age homes in the state. Many aged people even from well off families are waiting for admissions. The Department has initiated various steps by providing all basic
infrastructural facilities and necessary services in these institutions (Prabhakaran, 2004).

Regarding the type of services rendered by these institutions there observed variations. A country wide survey conducted by Help Age India (1995) reported that three types of facilities are available in old age homes. There are homes where the facilities are totally free of charge where the authorities take care of food, clothing and medical aid of their inmates free of charge. Shelter is given to the destitute aged till their death and these homes arrange for a decent funeral also. In purely pay and stay, where the payment for food, shelter and other facilities is on monthly basis. The amount varies depending upon the type of accommodation (more for single accommodation and less for double, more for bedridden and less for healthy) and the city status and there are homes with both free and pay and stay facility where payment is not compulsory. Payment depends upon the capacity and wish of the inmates.

Pankajam (2004) also made a mention about the paid services for the aged. As given by her, there are paid homes where senior citizens who are economically well off but have no relatives to take care of them, prefer to live till they leave the world. They have all the comforts but lack the affectionate care and touch of their children. There is also another category of the aged who prefer to live independently in a home for the aged away from their family whom they choose to visit with once in a while. Such ones feel that keeping a distance might
make the hearts grow fonder. But this is feasible only in the case of those who are financially independent and emotionally strong. Sons and daughters are ready to spend any amount on such elderly parents who live in old age homes without disturbing them by being away from them. This trend of leaving the responsibility of taking care of the aged to the government or to voluntary organizations is fast growing and the family bond is decreasing.

A survey conducted by Help Age India (1995) revealed that out of 258 homes 63 percent were destitute homes offering accommodation, food clothing and medical aid to their inmates free of charge. The others were ‘pay and stay homes’ run by NGOs or religious organizations. They admit the elderly regardless of their caste, gender and religion. There are also homes that provide care only for specific communities. The majority of these institutions are run by voluntary organizations with or without government assistance.

Ara (1995) classified the elderly approaching old age homes under four general categories:

- Some aged persons who are single, widow/widower or old couples are quite well to do and have regular income, but either they are childless or their children have settled down in distant countries. They feel lonely, frustrated and long for company. Due to failing health, they have to depend more upon servants. Some feel their life and money is not safe as long as they are in the clutches of the servants. Such aged persons are in immediate need of a place
where they can be safe, have persons to look after them with loving care and lead a peaceful life. Since these people are economically sound, they are quite in a position to pay for all the comforts that they enjoy.

- The second category of elderly comprises of single persons or couples without children who are no longer in a position to work and earn and their income through pension or some other source is too meagre to cover their needs. Such persons are in need of a place where they can get food, shelter and medical aid by paying whatever is possible from their side.

- There are some aged whose relationship with the family members is strained. They have either abandoned the family since they can no longer tolerate the humiliating behaviour from the family members or they have been discarded by the family members as an unmanageable burden. Such persons look around for a place where they will be in a position to spend the remaining years of life in peace and with dignity.

- The fourth category comprised of such aged persons who have no income and no relatives. They are very old and sick, mostly bedridden. They have neither children nor any relative to take care of them. People around them sometimes supply meals but nobody is prepared to attend upon them in bed.

Thus the needs and expectations of the elderly approaching old age homes are many and varied. For the destitutes old age homes are the only panacea. But for many others who were not destitutes the services available do not meet their expectations (Jamuna 1998).
A study of the existing institutions in India by Rajan et al. (1999) found that 88 percent provide residential care to the elderly, six percent offer day care services and the remaining institutions are engaged in health care and self-employment activities for the elderly. The existing institutions are admitting or providing care according to their objective with the available resources. Of the total old age homes in India 46 percent are for all types of old persons, 35 percent for the destitute elderly, 11 percent for poor elderly and 5 percent for sick and handicapped elderly.

However, the existing old age homes as per Ara (1995) are trying to serve the aged inmates to the best of their capacity. The inmates are treated with love and affection and efforts are being made to maintain a healthy and cordial atmosphere. The old age homes have already taken up the cause of the needy helpless aged and by providing love, shelter and care to them they are doing a great service to the society.

In the institution people live communally with a minimum of privacy and yet their relationships with each other are slender. Their mobility is restricted and they have little access to a general society. They are oriented toward a system in which they submit to orderly routine, non-creative occupation and cannot exercise much self determination. They have too little opportunity to develop the talents they possess and they atrophy through disuse. Occasionally they seem to withdraw into a private world of fantasy (Williams, 1984).
In this context as suggested by Mandal (1998) “Adopt A Granny Programme”, which is experimented successfully by several organizations, mainly inspired by Help Age India and Help Age International would to be a most viable solution for the problems of elderly.