1. INTRODUCTION

Ageing of the population has been one of the most important developments of this century all over the world and will be one of the major challenges for the next millennium. In 1950 there were approximately 200 million aged people of 60 years and above through out the world, according to United Nation estimates. By 1975 this number had increased to 350 million. Currently there are almost 580 million elderly people in the world representing around 20 percent of total population, of whom 355 million live in developing countries (Arlappa et al., 2004).

Population projection as per WHO (2002), Europe will retain its title as the World’s oldest region. Japan and Switzerland will take the lead to have the highest proportion of older persons (35%) by 2025 followed by Italy, Germany, Greece and Spain (less than 30% each), Northern America (25%) and Eastern Asia (21%).

Among low income countries, the population projection shows that during the next 25 years many of them will be among the ten countries with the largest population of older persons in the world. For example, China (287 million), India (168 million), Indonesia (35 million), Brazil (33 million) and Pakistan (18 million). So the developed as well as developing countries are in the process of population ageing, with India becoming the second largest country with respect to elderly population.
According to 2001 census, in India, there are about 75 million (7.3%) elderly people. It is expected to be 179 million by 2031, 301 million by 2051 and 340 million (26%) in 2061 (Liebig et al., 2003). At present one in every 12 Indians is elderly and this ratio is likely to be one in every five in 2050. This means that while the total population over the period climbs to five times, the increase in the number of elderly would be 13 times.

The state wise population density as per the 2001 census further revealed that among the 28 states and 8 union territories in India, Kerala ranked first with the highest percentage of elderly people forming about 9.79 percent of the total population (Rajan, 2004).

An increase in longevity and decline in fertility have contributed to people living much longer today than ever before in the last 50 years. Mortality rates have declined virtually in all the countries due to progress in preventing infectious diseases and improving hygiene and sanitation and over all 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 1990. The average life expectancy throughout the world is projected to reach 73 years in 2020. In India, life expectancy at the time of independence was 32 years and today it is 62 years.
This decline in mortality accompanied by an equally sharp fall in birth rates (more recently) contributed to the steady and fast increase in aged population, which has become a matter of great concern.

The children and older persons are often referred as the main dependent groups in a society with a relative weightage given to children. But with the present epidemiological transition and the fast growth rate of elderly population, there is a shifting of weightage from children to older persons.

Ageing, in fact is not a disease, or a negative condition that develops all on a sudden. As stated by Venkaraman (1998) it is a gradual developmental process that effects biological, psychological, sociological and behavioural changes which begins at the moment an individual is born. Ageing process also signifies the progression of changes in the biochemical process which determine the structural and functional alteration with age in the cells and noncellular tissues.

As defined by Natarajan (1998) old age is the age of retirement, for it is at that time that the combined effect of ageing, social changes and diseases are likely to cause a break down in health. The World Health Organisation describes the persons who have attained the age of 60 years as old, for the purpose of identifying their specific health needs and medical attention (Tuli, 1996).
As people age there tend to be a concomitant increase in the presence and number of chronic conditions and complications of both physiological and psychological nature. There will be a great dependency on the caretakers. Infections and illnesses, which are common problems of elderly, add to the severity of the condition. The reasons include impaired defense system of the body, late diagnosis and malnutrition. Besides older people are prone to chronic diseases of heart, blood vessels, brain, kidney, liver etc. and also have complications of diseases like diabetes.

Elderly people are also seen to suffer from physical disabilities, financial insecurity and loneliness resulting from ostracism by the family and society. Owing to their economic dependency, social deprivation and change in behaviour towards diet and health care, they become more vulnerable to malnutrition and ill health.

Studies have shown that diet and nutrition play a crucial role in maintaining good health and functional status of elderly. But the data collected by National Nutrition Monitoring Bureau (NNMB) over a period of time on total population including elderly, found that under nutrition in India continues to be a public health problem (Brahmam, 2007).
Recent NNMB survey (1996-97) on diet and nutritional status of elderly population reported that the proportion of elderly who were meeting 100 percent of Recommended Dietary Allowances (RDA) for all the nutrients was as low as 2.8 percent, and only in 4 percent of the elderly, the intakes of macronutrients like energy, protein and the micronutrients, iron and calcium were equal to or more than the RDA. The survey also indicated that the prevalence of Chronic Energy Deficiency (CED) was significantly higher among the elderly than their adult counterparts (18-59 years) as reported by Arlappa et al. (2004).

So the extreme under nutrition along with poor income, social isolation, depression and decreased mobility are the factors known to affect the health and well being of the elderly in India (Khanna, 1997).

The utmost need of people in old age is often overlooked, which includes proper care and support in terms of health and nutrition, social, economic and psychological needs. They are also not provided with the comfort and support at the time of anxiety, loneliness and helplessness, by listening and intervening appropriately and effectively.

Family is the most important institution which can provide succour to the elderly. There was a time when aged persons were looked upon with reverence. But recent upheavals in the structure of the society and family, have
considerably changed their status and living conditions. For example, urbanization and the resultant changes in family structure, women employment, high cost of living, increasing materialism and individual orientation, all these lead to problems with accommodation and care of the elderly in a family environment.

Old age homes were established in urban and rural areas under the initiative of both Governmental and Non-Governmental agencies, to provide shelter and support to the old destitutes. At present such institutional care is a source of relief to the aged in our society. As Sreevals and Nair (2001) pointed out, in the absence of joint family system, the old parents are sometimes left with no other alternative than joining the old age homes. Studies conducted by Rajan (1999) and Dandekar (1996) in Kerala and Maharashtra state respectively also found that most of the inmates ended up in old age homes because of no one to take care at home.

As far as number of old age homes are concerned, Kerala ranked first by having the highest number of institutions for aged although the state’s population shares only 3.4 percent of the Indian population. (Sreevals and Nair, 2001). Further the two districts of central Kerala namely Kottayam and Ernakulam have the highest number of old age homes (Rajan, 1999).

Even though old age homes have been in existence for about 300 years, only recently have they caught the attention of researchers. The
problems of inquiry also have been exacerbated by the level of accurate information about the facilities (Liebeg et al., 2003). People accommodated here require a wide range of preventive, curative and rehabilitative care.

Often institutionalization itself becomes the underlying cause of ill health and malnutrition among aged. The extent of impact depends on the specific environment in the old age homes, care and services offered and support provided to the inmates.

So with adequate nutrition and a well balanced diet during old age, coupled with appropriate health care and psychological support it is possible to prevent and control the common hazards of ageing and the process of ageing could be made healthy and enjoyable.

Comprehensive information on the diet and nutritional status of the elderly in general and institutionalized in particular with respect to Kerala state, is scanty. There is a need to develop a strong database on these lines so as to plan appropriate and timely intervention strategies to tackle the problems of elderly and to ensure a better quality of life.

Due to lack of published information in this regard, it was considered necessary to study the health and nutrition status of the elderly particularly those living in institutions.
Hence the present study entitled “Health and Nutrition profile of the Elderly: A study in Old Age Homes at Ernakulam, Kerala” was embarked with the following objectives.

1. To study the infrastructural facilities and quality of services rendered by the old age homes.
2. To find out the socio-economic and life style pattern of the institutionalized elderly.
3. To appraise the health status of the institutionalized elderly.
4. To study the nutritional status of the institutionalized elderly.
5. To examine the association between infrastructural facilities and quality of services in old age homes and Health/Nutrition profile of the inmates.