Summary and Conclusions
In the new emerging context, the joint family is losing its productive function with its members becoming increasingly mobile. Hence the elderly people are left alone for themselves due to economic migration and breaking up of family set-up. The elderly people are likely to become more vulnerable in the absence of familial support network; hence they need a strong social security system. Migration has increased loneliness of the elderly by fifty percent. About 231,000 elderly people are living alone in Kerala. Life is becoming miserable-due to emptiness, neglect, change in roles, depression and chronic ailments. Life expectancy is increasing, but it does not mean that the quality of life is better. Quality of life is the degree to which a person enjoys the important possibilities of his or her life. Possibilities result from the opportunities and limitations each person has in their life and reflect the interaction of personal and environmental factors.
Quality of life is the product of the interplay among social, health, economic, physical, psychological, nutritional and living conditions which affect human and social development. The care and well being of the elderly should be given utmost priority in order to have improved quality of life.

The main aim of the present study was to find out the quality of life of the elderly people in the capital city of Kerala, Thiruvananthapuram district.

Objectives

The objectives of the present study are:

1. To elicit the socio-economic background of the elderly.
2. To find out the health and nutritional intake of the elderly.
3. To assess the quality of life of the elderly.
4. To identify the major problems faced by the elderly.

Major Hypothesis

The null hypotheses formulated for the study are:

\( H_1 \): Gender does not have any influence on the health of the elderly.

\( H_2 \): Quality of life of elderly is not related to age.

\( H_3 \): Quality of life of elderly is not related to gender.

\( H_4 \): Problems of the elderly are not related to age.

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Methodology

The present study entitled "Quality of life of the elderly" was done on Thiruvananthapuram district of Kerala State. A total of eight hundred elderly people were selected as the sample for the study using systematic random sampling method. Equal considerations were given to both the genders, which includes 400 elderly men and 400 elderly women. Proportionate sampling method was used to locate the samples for the study, and thus 208 samples from urban area and 592 samples from rural area were identified for the study.

Interview method was used to collect the data for the study. Interview schedule, checklist and quality of life assessment scale were the tools used for the study. The tools were prepared, pre tested and developed by the investigator. The reliability and validity of the tools were also tested.

After collecting the data, the responses were coded, edited, classified, tabulated and analyzed to find out the significance of differences among the study groups with regard to the different variables of the study and also to identify the level and degree of relationship among different variables with regard to the present study groups. Appropriate statistical tools were used to analyze the data.

A cohort study has been carried out in the present research work in order to understand whether any improvements can be made possible in
the quality of life of the elderly. Hence, a group of five elderly, comprising three elderly women and two elderly men were randomly selected from the sub samples, who were interested in becoming a cohort.

Findings

The major findings of the study are the following

5.1 Socio economic profile of the elderly

- 58.6 percent of the respondents belongs to the age group of 60-69; thirty one percent of the respondents fall in the age group of 70-79 years and about ten percent of the sample belongs to the age group of 80 years and above.

- 80 percent of the respondents were Hindus, 10.3 percent were Muslims and 9.7 percent were Christians.

- 67.3 percent of the respondents were married; 1.4 percent were unmarried. Widowhood comprises of twenty nine percent of the respondents and is found to be high among elderly women.

- 85.2 percent of the respondents were literate and 14.8 percent were illiterate. Illiteracy is found to be higher among the elderly women.

- 49.8 percent of the elderly were unemployed and have never worked in their life time. The rate of unemployment was found
to be higher among the elderly women (76.8 percent) when compared to the elderly men (22.8 percent).

➢ 84.5 percent of the elderly have some source of monthly income, in which only 60.5 percent of the elderly have a regular personal income.

➢ 45.8 percent of the elderly is eligible to get pension. It can was either own pension (35.3 percent), family pension (6.4 percent) or widow pension (4.1 percent).

➢ 36.5 percent of the elderly live with their spouse, 27.5 percent live with their children; 25.9 percent live along with their spouse and children together.

➢ 66.9 percent of the elderly enjoys the company of friends, of which 8.3 percent of them are having more than 7 friends who are in close contact with them. Friendship is enjoyed mainly by the male elderly (79.2 percent) than the elderly women (54.5 percent).

➢ 51 percent of the elderly depend on their kins financially. 31 percent of the elderly fully depend their children; either sons or daughters for buying their medicines, 31.1 percent for treatment, 31.5 percent for meeting their daily expenses and 31.4 percent were fully dependent on their children for their personal needs.
Among the respondents, 41.6 percent of the elderly have the habit of savings, and is found to be high among elderly men (51 percent).

87.6 percent of the elderly had participation in decision making in their family. About 57 percent of the elderly had full participation on household issues, and the rest of the samples raise their voice in children's career, the education of their grand children, family matters of their children, and on any other family issues.

5.1.1 Activities of the elderly

Quite a number of elderly, especially the elderly women, participates in doing the household activities, helping their daughters or daughters -in-law in cooking (85.5 percent), and participating in various household activities (84.8 percent) such as cutting vegetables, cleaning the house and looking after the grandchildren (38.5 percent), where as men engages themselves in going to markets (76.3 percent), going for paying the bills (73 percent) and gardening (30.8 percent).

On comparing the activities of the elderly based on their age, it was found that more number of activities was carried out by those in the age group of 60-69 years of age, when
compared to the other two age groups such as 70-79 years and above 80 years of age.

- Result shows that more number of activities was carried out by elderly people residing in rural areas, when compared to those in urban areas.

- Data from the survey revealed that sitting or relaxing, watching television, reading books/newspapers/magazines, sitting and gossiping with friends, playing with grand children, participating in spiritual activities and day sleeping were found to be the major leisure time activities of the elderly.

- 95.1 percent of the elderly have more than two rooms in their home, and majority of them responded that, they have adequate facilities in their home.

- 84.3 percent of the elderly attends in social events like marriages; 80.4 percent attends in birthday parties; 83.1 percent in funerals; and 81.7 percent attends in house warming ceremonies etc. The participation of the elderly in welfare activities is found to be high among the elderly men than elderly women.

5.2 Health status of the elderly

- It is seen that the health of the elderly in general is found to
be an average level (58.4 percent), of which 59.25 percent were women and 57.5 percent were men. Elderly women were experiencing poor health (21 percent) when compared to the male counterparts (13 percent).

➢ The common chronic morbidities identified among the elderly were hypertension (33.37 percent), diabetes (33.25 percent), poor vision (23 percent), asthma (11.12 percent), arthritis (8.62 percent), rheumatism (8.25 percent) and cardiac problems (8.12 percent). It was also found that elderly women are having more chronic morbidities than elderly men. Some of the common old age morbidities like alzheimer's and kidney failure were reported "nil" among elderly women. The null hypothesis (H₁); "Gender does not have any influence on the health of the elderly" is rejected.

➢ Certain illnesses like poor vision ($\chi^2 = 17.82$) and cardiac problems (11.86) were found to be high among the age group 70-79 years of age, where as incidents like loss of hearing (24.17) and dementia (19.23) were high among the age group above 80 years of age.

➢ The capability of the sense organs of the elderly were found to be normal for both the male and female respondents. Moderate problem is with the visual ability, where only
54.8 percent of the elderly women were having normal vision, when compared to the elderly men (67.8 percent).

- Forty nine percent of the elderly have high morbidity pattern, especially among elderly men (61.75 percent) when compared to their female counterparts (37 percent). Medium level of mobility was reported among elderly women (51.5 percent).

- 91.62 percent prefer allopathy system of medicine, and also prefers private practitioners (52 percent), than Government doctors or hospitals (33.6 percent).

- Seventy percent of the elderly consults a doctor when ever they feel necessary. About twenty four percent of the elderly go for periodical health check ups once in a month, even though they don’t have any specific ailments, or discomforts or illness.

- Only 18.5 percent of the elderly were using any sort of intoxicants such as smoking (8 percent), usage of tobacco (7.4 percent), chewing of heal leaves (5.0 percent) without any concrete reason.

- 87.3 percent of the elderly follow the usual three time meal pattern in a day. Regarding the appetite of the elderly, about
56.3 percent have good appetite. It was found that about eighty five percent of the elderly men were fully satisfied with their meals, where as it was 76.5 percent among elderly women.

➢ About 9.1 percent of the elderly had some preference in choosing food. The choice of preference includes fish (3.4 percent) and sweets (2.8 percent).

➢ 40.8 percent of the elderly had the company of their family while eating. About 29.6 percent of them had the company of their spouse while eating, where as 20.9 percent eats alone. Another 8.4 percent of the samples used to take food alone, but there was some one to serve them.

➢ 30.3 percent of the elderly were following a specific diet, and was found to be slightly high among elderly women (30.7 percent), when compared to elderly men (29.7 percent). Usually diabetic diet (22.8 percent) was being followed by both the genders alike.

5.3 Nutritional intake of the elderly

➢ The nutritional intake of the elderly was assessed among a group of sub samples (80 numbers).

➢ The mean calorie intake of elderly women was higher than
that of elderly men when compared to their recommended daily intake. The mean intake of protein, vitamin A, and vitamin C was higher than that of the RDA for elderly male and elderly women were as the mean intake of calcium, thiamine and riboflavin was found to be lower than the RDA. The mean intake of iron is found to be very low among both the genders.

➢ There is no significant difference in the nutrient intake of the elderly based on age.

➢ There is no significant difference in the nutrient intake of the elderly based on their locale, except on thiamine. The intake of thiamine was found to be high among those elderly residing in urban areas than those in rural areas.

➢ It was interesting to note that no sub samples were having low level of quality of life. There is no significant difference in the nutrient intake of the elderly based on their quality of life.

5.3.1 Bio clinical assessment of the elderly:

➢ Bio clinical assessment of the elderly among the sub samples shows that 42.5 percent of the elderly female and thirty percent of the elderly male had their glucose level in between the normal ranges.
The glucose levels were found to be higher among elderly women when compared to elderly men, which is a direct indicator for higher number of diabetes mellitus among the sub samples.

High level of cholesterol was found among elderly men than elderly women.

High blood pressure level was found among elderly women, than elderly men.

5.4 Quality of life of the elderly

There is significant variation in the quality of life of the elderly among different age groups, and was found to be high among the age group 60-69 years of age. The null hypothesis \( (H_2) \); "Quality of life of the elderly is not related to age" is rejected.

Quality of life was found to be high among elderly men (44 percent) than elderly women (21.3 percent). The null hypothesis \( (H_3) \); "Quality of life of the elderly is not related to gender" is rejected.

As age increases the quality of life decreases and this is found to be statistically significant (F value = 13.37) at one percent level.
There is significant variation in the quality of life of the elderly based on place of residence. Elderly people living in urban areas (Mean value 318.6) were having high quality of life, than those living in rural areas (Mean value 297.0).

There is significant variation in the quality of life of the elderly based on their educational level. It was found that when educational level of the sample increases, quality of life enjoyed by them also increases. Illiterates were having low quality of life.

Employment status have a better impact on the quality of life of the elderly. There is significant difference in the quality of life of the elderly among the employed and unemployed elderly.

There is significant variation in the quality of life of the elderly based on their family income. Better quality of life was found among those having higher income and this difference is found to be statistically significant.

There is significant variation in the quality of life of the elderly based on the person with whom the elderly lives. Better quality of life was found among those who live with their spouse.
There is significant variation in the quality of life of the elderly based on the number of friends they have. When the number of friends increases, quality of life also increases. Quality of life was found to be very low among those having no friends.

There is significant relation between the quality of life of the elderly and their health in general. Those who obtained medium quality of life had better health than the other groups under observation.

While comparing the mobility pattern of the elderly, it was found that those elderly who had medium mobility level had better quality of life.

There is significant variation in the quality of life of the elderly based on the problems faced by them. Quality of life was found to be high when there are less problems, especially when psychological problems are less, quality of life increases.

5.5 Problems faced by the elderly

Physical problems were found to be high among elderly women (4 percent), when compared to elderly men (1.5 percent). About 58 percent of the elderly men and 40.5 percent of the elderly women have less problems.
Loss of teeth, joint pain, physical tiredness, difficulty in walking, poor vision and back pain were the major problems faced by the elderly.

There is significant difference (t value = 3.72) in the psychological problems faced by the elderly based on gender.

Death of the spouse, depression, loneliness, feeling useless, depending others for day to day activities, continuous diseases and rigidity were the major psychological problems faced by the elderly.

Majority, 70.8 percent, of the elderly does not have any financial problems.

There is no significant difference in the financial problems of the elderly based on age.

Taking in to account the overall problems faced by the elderly, only four percent of the elderly does not have any type of problems. Majority, ninety six, percent of the elderly were facing problems in their life. It can be either physical, psychological or financial, but there level was very low. Hence it can be concluded that the elderly people in the district have lesser problems. The null hypothesis ($H_0$); "Problems of the elderly are not related to age" is rejected.
Conclusion

An older person’s quality of life improves when he or she is productive and feels that he or she is not treated as a burden to society. Quality of life comprises of several attributes like physical well-being, family life satisfaction, friendship, living arrangements, economic well-being, psychological well-being, recreational activities, religious activities, social network, health and decision making. Even though Kerala State in India claimed to have high literacy rate, today the elderly face the miserable conditions in their life, as they are family bonded and not ready to live in old age homes. From the present study, it was found that socio economic variables such as the place of residence, education, employment status, income status, companionship and participation in social welfare activities were found to be significantly influencing the quality of life of elderly. There is no significant difference in the nutrient intake of the elderly based on their quality of life. The high level of quality of life was found among the elderly men than their female counterparts. Psychological problems like depression, isolation, loneliness and irritation were found to be prevalent among them. Problems of the ageing are largely due to psychosocial environment, diminishing supports and changes in life situations and psychological stress.
Recommendations

Care of the elderly is a challenge, faced by the societies around the world. The average life expectancy is increasing over decades. Kerala stands first in having the highest number of elderly people among the states of India. The longevity explosion is a triumph and a treatment to human problem solving. Keeping this in view and also from the light of the study following recommendations were put forward to improve the quality of life of the elderly and this can be carried out at different levels.

At the family level

1. With the changing social situations, the chances of transitions in family support are very high. The youth should be encouraged and educated to strengthen the family support.

2. Value education should be given to the young from childhood in order to develop a favourable disposition, better attitude towards elders and respect for the aged.

3. Living together with the family is the most important aspect, as far as quality of life of the elderly is considered. Family members including the spouse and the children should permit them to live together for a healthy aging.

4. Poor life style quality index indicates the need for life style modification. Good food, exercise, strong social relationship,
mental happiness and family relationship were found to be important components of a healthy life. Their level of exercise, the adequacy of food and other adjustment areas are to be probed into. Suitable environment should be created to have better physical and mental health.

5. The experience of the elderly should be considered and their voices should be acknowledged with due respect. The family members should make them feel that they are also part of the family.

6. All houses should be designed to be elderly friendly. Doing simple makeovers for home can be beneficial for senior people and may prevent unfortunate incidents and can make life easier for them.

7. The kitchen and bathroom needs to be user-friendly. Adjusting the heights of the counter tops, installing lower level dish washers and cabinets reduces the stress of the elderly. Lowering the bathroom sinks and adding handrails on both sides of the toilet are few options that can be made in the toilets.

8. Elderly should be encouraged to do exercise and building physical competence accompanied by medication and
relaxation techniques as it is essential for autonomy and self dependence of the aged.

At the community level

1. Public should be alerted to initiate steps to adopt the elderly and to give them physical and psychological care. This can be made possible in initiation with the local or voluntary organizations.

2. Mass education should be initiated to introduce the concept of healthy aging.

3. The elderly people should be encouraged to mingle in the society which may enhance their friendship circle, which was found to be an important criterion for the better quality of life.

4. Psychological counseling from early years to, prepare for contingencies of old age and for building personal competence and appropriate social relationship is advocated.

5. New living arrangements for older adults, emerging in other developed countries like residential care settings, retirement life care centers, community hostels and adult day care centers should be introduced in our country.
6. The elderly people should be made aware of their socio-economic, physical, psychological and health problems so that they can boost themselves to explore and utilize the resources to the maximum.

7. Women elderly should be empowered. They should be given more care and attention, since the findings in the present study reveals that they are weaker than men in all areas of life.

8. Health insurance policy for the elderly in rural areas has to be formulated and rehabilitation of the elderly should be done through integrated community development programmes.

9. Geriatric help lines and call centers can be introduced to meet the emergency situations of the elderly, especially to those living alone. This can be made possible with both public and private initiatives.

At the National and State level

1. Resource centers for recreation activities for elderly with minimum inputs of material should be introduced.

2. Income generating activities should be identified for the elderly and should be organized at village level by Panchayat raj institutions or Non Government Organization's or Self Help Groups.
3. Health camps on the day of pension distribution for screening of chronic diseases and its management there of should be implemented.

4. Mobile medical facilities for equipping the primary health centers for dealing with the problem of the aged could be recommended.

5. Opening up geriatric wards and palliative care units in every hospital and training man power for geriatric care is highly recommended.

6. Older person living alone should be encouraged to register with the local police stations and a separate cell should be set up at police stations to keep a vigil on such older persons in their jurisdiction.

7. Extension of old age pension to all those elderly who are destitute, incapable of doing any work, poor, frail or disabled and also to those from high income families with no resources of their own.

8. Physical aids should be made available to the elderly who are below the poverty line. Day care centres and senior citizen’s club, organizations with recreation facilities should be established in every panchayat and their utilization should be made free of cost.
9. Immunizations and health check ups should be provided free of cost to all the elderly through primary health centers or Government hospitals.

10. The Government must set up a State level commission for senior citizens in order to understand all the problems and issues of the aged. It must also provide grievance redressal machinery for them.

11. A fifty percent concession should be introduced in all public transport also to the elderly.

12. Diet counseling, yoga and meditation and stress management should be made easily accessible to all the elderly people of the State in order to improve their quality of life. Family therapy and counseling should be given to the care takers also.

13. All unemployed persons of the State, who attains 60 years of age, should be made eligible for Old age pension, irrespective of their family status.

14. As women out number men, welfare interventions need to be planned and implemented with special focus on the issues of women elderly.
Fig. 24  
Towards better quality of life
Suggestions for further studies

1. A comparative study on the quality of life of the elderly in Kochi, Kozhikode and Thiruvananthapuram can be done.

2. A study on the mental health of the women elderly can be done.

3. A study on the quality of life of the elderly in old age homes in Kerala.

4. An indepth comparative study on the quality of life of the elderly among the three age groups- young- old, old -old and very old can be done.

5. A comparison of the elderly with the neighbouring States of Kerala can be done.