Chapter V

SUMMARY AND CONCLUSION

5.1 Summary
5.2 Objectives of the study
5.3 Hypotheses
5.4 Methodology in brief
5.5 Major findings
5.6 Tenability of hypotheses
5.7 Conclusion and suggestion
5.8 Implication of the study
5.9 Scope and limitation
SUMMARY AND CONCLUSION

5.1 SUMMARY

Dementia is a progressive disorder that occurs in old age people. As the decline of the memory is the major feature, the disease makes the life of the patient and caregiver miserable. The caregiver and family members are not usually aware of the reasons for the sudden change of behaviour in patients. This factor leads to increased burden manifested by despair, loss of interest and various forms of psychological and psychiatric problems for the caregiver.

In depth investigations about the measures to reduce the burden by different interventions is an essential activity for any researcher who is keen on this problem. The present study has been designed to find out the effectiveness of a structured teaching and counselling to reduce the burden of caregivers of patients with dementia. So this study titled EFFECTIVENESS OF STRUCTURED TEACHING AND COUNSELLING IN REDUCING THE BURDEN OF CARE GIVERS OF PERSONS WITH DEMENTIA was done with the following objectives.
5.2 OBJECTIVES OF THE STUDY

1. To study the burden of caregivers of persons with mild, moderate and severe dementia.

2. To study the general health of caregivers of persons with mild, moderate and severe dementia.

3. To prepare a structured teaching module.

4. To study the effect of structured teaching and counselling, together on the burden of caregivers.

5. To study the effect of structured teaching and counselling, together on the general health of caregiver.

6. To study the influence of selected demographic variables on burden of caregivers.

7. To study the influence of selected demographic variables on general health of caregivers.

Based on the objectives, the following null hypotheses were formulated.
5.3. HYPOTHESES

1. There will be no significant difference in burden among the primary care givers of persons with mild, moderate and severe dementia in the pre intervention visit, first, second and third post intervention visits.

2. There will be no significant difference in general health among the primary care givers of persons with mild, moderate and severe dementia in the pre intervention visit, first, second and third post intervention visits.

3. There will be no significant difference in the burden of caregivers in the pre intervention visit, first, second and third post intervention visits after structured teaching and counselling in relation to selected demographic variables.

4. There will be no significant difference in the general health of caregivers in the pre intervention visit, first, second and third post intervention visits after structured teaching and counselling in relation to selected demographic variable.

5. There will be no significant difference between the burden of caregivers in relation to the selected demographic variables.
6. There will be no significant difference between the general health of caregivers in relation to the selected demographic variables.

5.4 METHODOLOGY IN BRIEF

The present study was conducted in a suburban Panchayat called Kadakampally in Thiruvananthapuram district. All identified cases (36 nos.) of dementia and 36 primary caregivers in Kadakampally Panchayat constituted the sample. Pre test post test design was used for the study.

Patients with dementia were screened using CSID-A & CSID-B. Data for study were collected using Client Service Receipt Inventory, Burden interview and General Health Questionnaire.

Cases with dementia were identified with the help of Anganwadi workers. Patients were screened and later diagnosed with the help of a psychiatrist. The primary caregivers were identified by direct questioning. Burden and general health of primary caregivers were assessed. Then the structured education and counselling was given as intervention. The burden and general health of caregivers were again measured 3 times in the post intervention period, after 1 month, 6 months and 1 year.
The data collected were analysed on the basis of objectives using appropriate statistical techniques. The statistical techniques like Anova, t-test and post hoc tests were used for this purpose.

5.5 MAJOR FINDINGS

The major findings of the study are described under the following headings:

5.5.1 The prevalence of dementia in the studied community was 1.10 per thousand populations. The total number of patients with dementia identified from the panchayat having a population of 32456 was 36.

5.5.2 There was a statistically significant difference between the mean scores of burden of caregivers who were taking care of patients with mild, moderate and severe dementia in the first and second post intervention visit.

The mean score of caregiver burden during the first post intervention visit was found to be the highest among the caregivers of patients with severe dementia and the lowest among the caregivers of patients with moderate dementia. The difference in the scores was found to be significant. The mean score of caregiver burden during the second post intervention visit was found to be highest among the caregivers of
patients with severe dementia followed by caregivers of patients with mild and moderate dementia respectively. The difference in the scores was found to be statistically significant.

The post hoc test results revealed that the scores of burden of caregivers who were taking care of severely demented patients differ significantly than other groups in the first and second post intervention visits.

5.5.3 The difference between the mean scores of burden of caregivers who are taking care of patients with mild, moderate and severe dementia was not statistically significant in the pre intervention visit and in the third post intervention visit.

5.5.4 There was a statistically significant difference between the mean GHQ scores of caregivers who were taking care of patients with mild, moderate and severe dementia in the pre intervention visit, first, second and third post intervention visit.

The GHQ score was found to be highest among the caregivers of patients with mild dementia followed by moderate and severe dementia respectively in the pre intervention visit, first and second post intervention visit. The GHQ score of caregivers of patients with
moderate dementia was found to be highest in the third post intervention visit followed by caregivers of patients with mild and severe dementia.

The post hoc test results revealed that the GHQ scores of caregivers who were taking care of severely demented patients differ significantly than other groups in the pre intervention, first, second and third post intervention visits.

5.5.5 Structured teaching & counselling were found to be effective in reducing the burden of caregivers when the selected demographic variables of patients with dementia were considered.

Reduction in the mean scores of caregivers burden was observed from the baseline score of 38.2 in the pre-intervention period to 31 in 1st post intervention visit (P < 0.01), 30.3 in 2nd post intervention visit (P <0.01) & 28.4 in the 3rd post intervention visit (P <0.01) for the caregivers of patients in the age group 80 years and above.

A statistically significant reduction was observed in the scores of caregivers’ burden who were taking care of patients in the age group 60-69 years, after the initial structured teaching & counselling (P<0.05).
There was no statistically significant reduction in the burden of caregivers who are taking care of patients in the age group 70-79 years in all the post intervention visits.

Statistically significant reduction was observed after all the interventions in the scores of caregivers’ burden of female patients and of male patients.

Burden of caregivers who were taking care of married & widowed patients with dementia were found to be reduced significantly when their three post intervention scores were compared with pre-intervention score (P<0.01, P<0.05 & P <0.05 for married group and P<0.01, P<0.01 & P <0.01 for widowed group respectively).

Statistically significant reduction in the scores of caregivers’ burden was observed after each intervention, when the pre-intervention visit score was compared with the 1st, 2nd and 3rd post intervention score of caregivers who were taking care of patients with no education, primary education and for the group whose education status is unknown. The scores were found to be reduced significantly only in the pre-intervention & 1st post intervention comparison for the caregivers who were taking care of patients studied up to high school.
Reduction in the scores of burden was significant after each intervention for all groups of caregivers when they take care of patients with previous occupation like part time job (P < 0.05), housewives (P < 0.05) and unemployed (P < 0.01). The scores were found to be reduced significantly only in the pre-intervention & 1st post intervention comparison for the patients retired from Government jobs.

5.5.6. **Structured teaching and counselling were not found to be effective in reducing the burden of caregivers during second and/or third post intervention visit when some selected demographic variables of patients are considered.**

The reduction in the mean score of burden of caregivers of patients in the age group 60-69 years during the second and third post intervention visit in comparison to pre intervention scores was not found to be statistically significant. The difference between the pre intervention score with each post intervention score of the caregivers of patients in the age group 70-79 years were not found to be statistically significant. The difference between the pre intervention score with each post intervention score of the caregivers of patients with high school education were not found to be statistically significant. The reduction in the mean score of burden of caregivers of patients who retired from
government job during the second and third post intervention visit in comparison to pre intervention scores was not found to be statistically significant.

5.5.7 Structured teaching & counselling was found to be effective in reducing the burden of caregivers when the selected demographic variables of caregivers were studied.

Age of the caregivers was found to be a significant factor in the reduction of burden. A statistically significant reduction of burden was observed among the caregivers in the age group 25-39 years & 60 – 79 years in all the post intervention visits. Significant reduction of scores of caregiver’s burden was observed only in the 1st & 2nd post intervention visits in the age group 40 – 59 years.

A statistically significant reduction in the scores of caregivers’ burden in each post intervention visits was observed only for female caregivers. The reduction in burden among male caregivers was not statistically significant.

Relationship of caregivers with the patient with dementia was found to be a significant variable in the reduction of burden. A statistically significant reduction in the burden was observed in the caregivers who
were spouses or son/daughter in each post intervention visits. Reduction in the scores of caregivers’ burden was found to be significant only in the 1st and 3rd post intervention visits in comparison to pre intervention score for the caregivers who were sons-in-law/daughters-in-law.

The reduction in the scores of caregivers’ burden was found to be significant in all post intervention visits of married caregivers (P<0.01) and the other group (P<0.05).

A statistically significant reduction in the scores of caregivers’ burden was observed in the caregivers who had Primary education and High School education (P<0.01) and the difference in the score was not statistically significant for the caregivers who received collegiate education and PG/Professional education.

The reduction in the post intervention scores of caregivers who have no occupation was found to be highly significant (P<0.01). The difference in the score was not statistically significant for the caregivers who have some occupation.
5.5.8 Structured teaching & counselling was found to be effective in increasing the general health of caregivers when the selected demographic variable of patient with dementia was studied.

A statistically significant increase was observed in the scores of caregivers general health who were taking care of patients in the age group 70-79 years ($P<0.01$) and 80 years & above ($P<0.01$) in each post intervention visits. The comparison of general health of caregivers between the post intervention visits scores were also found to be significant statistically ($P<0.05$). The difference between the pre intervention score with each post intervention score of the caregivers of patients in the age group 60-69 years were not found to be statistically significant.

Significant improvement in the general health of caregivers was observed after all three interventions in the scores of caregivers of female patient ($P<0.01$) and of male patients.

General health of caregivers who were taking care of married & widowed patients with dementia were found to be increased significantly when their pre-intervention scores were compared with
the three post intervention scores (P<0.01) and in the comparison between post intervention scores.

Statistically significant increase in the general health scores of caregivers was observed after each interventions when the pre-intervention visit score was compared with the 1\textsuperscript{st}, 2\textsuperscript{nd} & 3\textsuperscript{rd} post intervention scores of caregivers who were taking care of patients with no education (P<0.05), Primary education (P<0.01) and High School education (P <0.05).

Increase in the general health scores was significant after all the three interventions for the caregivers when they take care of patients with previous occupation like part time job (P<0.05, P<0.01 & P<0.01 respectively) unemployed (P<0.05, P<0.05 & P<0.01 respectively) and house wives (P<0.01 for all the interventions). The difference between the pre intervention score with each post intervention score of the caregivers of patients who retired from government job were not found to be statistically significant.

5.5.9 **Structured teaching & counselling was found to be effective in improving the general health of caregivers when the selected demographic variable of caregivers was studied.**
Age of the caregiver was found to be a significant factor for the increase of general health. A statistically significant increase of general health was observed in each post intervention visits among the caregivers in the age group 25-39 years (P<0.05, P<0.01 & P<0.01 respectively), 40–59 years (P<0.01, P<0.05 & P<0.05 respectively) and 60-79 years (P<0.05, P<0.01 & P<0.01 respectively).

A statistically significant increase in the general health score of caregivers in all post intervention visits was observed for female caregivers (P<0.01) and male caregivers (P<0.05).

Relationship of caregivers with the patient with dementia was found to be a significant factor in the improvement of general health. A statistically significant increase in the general health was observed in the caregivers who were spouses, son/daughter and son-in-law / daughter-in-law in all post intervention visit.

The reduction in the scores of caregivers’ burden was found to be significant in all post intervention visits of married caregivers (P <0.01) and the other group (P <0.05).

A statistically significant increase in general health score was observed in each post intervention visits for the caregivers who had Primary
education (P<0.05, P<0.01 & P<0.01 respectively) and High School education (P<0.01 for all visits). The difference in the score was not statistically significant for the caregivers who received collegiate education and in the 1st Post intervention visit for PG/Professionally educated caregivers.

There was no statistically significant increase in general health scores of caregivers doing different occupation. The increase in post intervention scores of caregivers who had no occupation was found to be highly significant (P<0.01).

5.5.10 The difference in the scores of caregiver burden in relation to different demographic variables such as age, gender, marital status, education & previous occupation of patient with dementia were not statistically significant.

This is supported by the following findings. The difference in the mean score of caregivers burden of patients in the age group 60 -69 years, 70-79 years and 80 & above in the Pre-visit, 1st, 2nd and 3rd post intervention visit was not statistically significant. There was no statistically significant difference in the scores of caregivers’ burden
when the care of female & male patients in the pre intervention, 1\textsuperscript{st}, 2\textsuperscript{nd} and 3\textsuperscript{rd} post intervention visits.

The difference in the mean scores of caregivers’ burden was not statistically significant when they take care of patients who were married & widowed. The same finding was true for all caregivers who were taking care of patients with different educational status and different occupational status.

5.5.11 There was no statistically significant difference between the scores of caregivers’ burden in relation to selected variables of caregivers such as age, gender, relationship with patient, marital status, education and occupation.

The difference in the mean scores of burden of care givers in the age group 25-39, 40-59, 60-79 was not statistically significant in the pre-intervention visit (F= 0.83), 1\textsuperscript{st} post intervention visit (F=1.23), 2\textsuperscript{nd} post intervention visit (F=1.78) and in the third post intervention visit (F=1.66).

There was no statistically significant difference in the mean scores of burden of female caregivers & male caregivers in the pre-intervention visit (F=1.83), 1\textsuperscript{st} Post intervention visit (F=1.45), 2\textsuperscript{nd} post intervention
visit (F=1.62) and 3\textsuperscript{rd} post intervention visit (F=1.005). The difference in the mean scores of burden of caregivers according to their relationship with patient, marital status, education and occupation in the pre-intervention visit, 1\textsuperscript{st}, 2\textsuperscript{nd} & 3\textsuperscript{rd} Post intervention visits were not significant.

5.5.12 The difference in the general health scores of caregiver in relation to different demographic variables like age, gender, marital status, education & previous occupation of patient with dementia were not statistically significant.

5.5.13 There was no statistically significant difference between the general health scores of caregivers in relation to selected variables of caregivers such as age, gender, relationship with patient, marital status, education and occupation.

Given above are the major findings of the study and all the objectives are achieved with the findings given above.

5.6 Tenability of the hypothesis.

Computation of one-way analysis of variance was used to test the difference in the burden among the primary caregivers of persons with mild, moderate & severe dementia.
A statistically significant difference was found in the mean scores of burden of caregivers’ who were taking care patients with mild, moderate & severe dementia in the 1st & 2nd post intervention visits. But there was no statistically significant difference in the scores of caregivers’ burden with respect to degree of dementia in the pre intervention visit and in 3rd post intervention visit.

The above findings substantiate the first hypothesis.

Degree of dementia is found to have influenced significantly the general health of caregivers. A statistically significant difference was observed in the mean general health of caregivers in the pre intervention score, 1st, 2nd & 3rd post intervention scores with respect to degree of dementia. The above evidence verified the second hypothesis.

Computation of ‘t’ value was done to test the significant difference in the scores of burden of caregivers before and after structured teaching.

A statistically significant difference was found in the comparison of pre-intervention score of caregivers’ burden with at least one of the post intervention scores with respect to all studied variables of caregivers. The difference in the comparison of score of burden of caregivers with respect to all studied variables of patients was also found to be significantly different.
The above findings substantiate the third hypothesis.

The improvement in general health of caregivers was studied by comparing the pre-intervention score with post intervention score and by comparing between 1st, 2nd & 3rd Post intervention scores. The difference in the GHQ score was found to be statistically significant in the comparison with respect to all studied variables of patients with dementia & studied variables of caregivers.

The above evidence substantiates the fourth hypothesis.

The selected demographic variables of patients with dementia such as age, gender, marital status, education and previous occupation are found to play no significant role in deciding the burden of caregivers. The difference in the score of caregivers’ burden in relation to selected variables of caregivers like age, gender, relationship with patient, marital status, education and occupation was found to be not significant. Hence, the 5th hypothesis is rejected.

The difference in the general health (GHQ) score of caregivers in relation to selected variables of caregiver and demographic variables of patients were found to be not significant. Hence, the sixth hypothesis is rejected.
5.7 CONCLUSION & SUGGESTIONS

Based on the findings of the study, the following conclusions were drawn and the suggestions are offered.

1. **Burden of caregiver of patients with mild, moderate and severe dementia.**
   - Caregivers of patients with severe dementia experienced higher burden than caregivers of patients with moderate and mild dementia in the first and second post intervention visit.
   - The general health score of caregivers who were taking care of patients with severe dementia was found to be the lowest. Highest general health was observed in the caregivers of patients with mild dementia in the pre intervention visit and in the first post intervention visit.

2. **Effect of structured teaching and counselling on burden of caregivers**
   - Reduction in the scores of caregiver’s burden was observed for all groups of caregivers after each intervention without the consideration of the socio economic variables studied.
   - Consistent reduction in burden was observed in each post intervention visit in comparison to pre intervention visit for the caregivers who were taking care of patients in the age group 80 years and above.
- The burden of caregivers who were taking care of patients in the age group 70-79 years was not reduced after each structured teaching and counselling.

- Caregivers who were taking care of female patients reported significant reduction in burden in all comparisons. Reduction in burden was observed for caregivers of male patients only in the comparison of pre intervention score with first, second and third post intervention scores alone.

- Structured teaching and counselling were found to be more effective in reducing the burden of caregivers of widowed patients than caregivers of married patients.

- Caregivers of patients with primary education have reported more consistent reduction in burden in each post intervention visits. Reduction in burden for the caregivers of patients with high school education was not significant in each post intervention visits.

- Caregivers of patients who were unemployed have reported more number of significant reduction in burden in the comparisons followed by caregivers of patients who were housewives and the caregivers who did part time job respectively. The caregivers of patients retired from
government job reported only one significant reduction in the comparison of scores between pre intervention and first post intervention.

- Caregivers in all age group reported reduction in burden after each structured teaching and counselling. The highest number of reduction was observed among the caregivers in the age group 25-29 years, followed by 60-79 years and 40-59 years respectively.

- Female caregivers have more consistent reduction in burden after each session of intervention than male caregivers.

- Comparison of caregiver burden based on relationship of caregiver with patient revealed more number of reduction among son/daughter followed by spouses and then son-in laws/daughter-in-laws respectively.

- Married caregivers reported more number of significant reductions in burden in the post intervention visits than other groups compared.

- Comparison of burden between different groups based on education of caregiver revealed that maximum number of significant reduction in burden have occurred for high school educated, followed by those who
have primary education. The change in burden of caregivers who have collegiate education and professional education were not significant.

- Caregivers who have no occupation reported more number of significant reductions in burden in each comparison. The caregivers who are labourers reported reduction in burden only in the comparison of scores between pre intervention and second post intervention visit. The changes in the burden of caregivers who are managers/professionals were not significant.

- General health of all caregivers has improved after each structured teaching and counselling. This is evidenced by the increased general health score of caregivers after each structured teaching and counselling. So the structured teaching and counselling was found to be effective in improving the general health of all caregivers studied.

3. **Influence of selected demographic variable on burden of caregiver.**

- Observable reduction in burden was noticed in the caregivers from the pre intervention visit to first, second and third post intervention visit.

- The mean score of caregiver’s burden was found to be highest for those taking care of patients in the age group 80 and above, followed by 60-69 years and 70-79 years in the pre intervention visit.
• Caregivers of female patients reported higher burden than the caregivers of male patients in the pre intervention visit and in each post intervention visits.

• Higher burden was observed among the caregivers of patients who are widowed than the caregivers of married patients.

• Highest burden was observed among the caregivers of patients with collegiate education, followed by primary education, illiterate and high school education respectively in each visit.

• Caregivers of patients who were housewives reported higher burden, followed by caregivers of patients who were unemployed, retired and who had part time job.

• The scores for caregiver burden were highest for the caregiver in the age group 40-49 years. This was found to be lowest among the caregivers in the age group 25-39 years.

• Male caregivers have higher score for burden than female caregivers in the pre intervention and post intervention visits.

• The son-in-laws/Daughter –in-laws group reported highest burden, followed by son/daughter. Caregivers who were spouses of patients reported lowest burden.
- The divorced caregivers reported highest burden, followed by widowed, married and unmarried caregivers during the pre intervention and post intervention visits.

- The caregivers who have high school education experienced highest burden followed by those who have primary education, P.G./Professional education, no education and collegiate education in the pre intervention visit. Reported reduction in burden in the successive post intervention visit was found to be highest among caregivers who are illiterate.

- Burden was found to be reducing from the caregivers who were labourers to unemployed followed by managers, professionals, agricultural workers and clerks.

- Successive increase in general health of caregivers was observed from the pre intervention visit to first, second and third post intervention visit.

- The mean general health score of caregivers was found to be highest for those taking care of patients in the age group 70-79 years, followed by 60-69 years and then 80 years and above in the pre intervention visit. Maximum improvement in general health was observed among
the caregivers of patients in the age group 60-69 years in the post intervention visits.

- Caregivers of female patients reported higher GHQ score than the caregivers of male patients in the pre intervention visit and in each post intervention visits.

- Higher scores for general health were observed among the caregivers of patients who are married than the caregivers of patients who are widowed.

- Highest general health was observed among the caregivers of patients with high school education, followed by primary education, illiterate and collegiate education in each visit.

- Caregivers of patients who were unemployed reported higher GHQ score, followed by caregivers of patients who were retired, housewives and who had part time job.

- The general health scores of caregiver were highest in the age group 25-39 years. The GHQ score was found to be lowest among the caregivers in the age group 40-59 years in the pre intervention visit and in each post intervention visits.
Female caregivers have higher score for general health than male caregivers in the pre intervention and post intervention visits.

The son/Daughter group reported highest general health, followed by spouses. Caregivers who are son-in-laws/daughter-in-laws of patients reported lowest general health.

The unmarried caregivers reported highest general health, followed by widowed, married and divorced caregivers during the pre intervention and post intervention visits.

The caregivers who have collegiate education experienced highest general health followed by those who have P.G./Professional education, primary education, no education and high school education respectively in the pre intervention visit.

Highest burden was observed among the caregivers who were doing clerical job, followed by agricultural workers, labourers, professionals, unemployed and managers. Caregivers who were professionals showed maximum improvement in general health in the post intervention visits.

On the basis of the findings of the present study and interaction with caregivers, the following suggestions are given:
1. Presence of an old age person with dementia in the family causes burden for caregiver. The intensity of burden can be reduced significantly by continuous teaching & counselling. Supportive networks including the help of non-governmental organizations shall be useful to caregivers.

2. All family members have burden of varying severity due to the presence of a demented old age person. So, education & counselling is needed for all family members.

3. Adequate training of caregivers, especially primary caregivers, is one of the important aspects to be considered. Need based training & counselling in their own environment, with the knowledge of the resources present in their home situation, is needed. Teaching in the actual situation with audio visual aids & demonstrations will empower them with necessary knowledge & skills.

4. The importance of improving the general health of caregiver by different measures and budgeting for this should be emphasized in the teaching & counselling modules.
5. Burden of the caregiver increases with progress of dementia. Frequent counselling and constant support are needed for the caregivers expressing more burden.

6. Behavioural problems of the patients are the most important cause of burden for the caregivers in the initial period when the patients have mild dementia. The caregivers who are caring patients with mild dementia need adequate training to tackle all behavioural problems. The sexual problems of patients may cause severe embarrassment in caregivers especially those who are not spouses. More emphasis should be given in this area as it is not revealed by majority of caregivers in the teaching & counselling sessions.

7. Problems related to activities of daily living remain as a major threat for the caregivers who are caring patients having severe dementia. Need based demonstration of nursing techniques, to care patient and to solve problems in activities of daily living, is important for the reduction of burden.

8. Family members of demented patients are reluctant to mingle with others and afraid to take patient outside home. Awareness programmes will help to change the attitude of community towards demented patients and their family members. Society will get more insight about
the problems of patients & families and thus they can help in alleviating their problems.

9. Professionally trained counsellors should be available in the community to help caregivers. Strengthening the community workers like Anganwadi teachers with counselling skill is also an alternative to provide continuous teaching & counselling for the caregivers.

5.8 IMPLICATIONS OF THE STUDY

The major implications of the present study are

1. Study results indicate the need for continuous counselling and education of caregiver and family members. So, more training programmes need to be started to train more counselors. Based on the results, more agencies in the government or private sector can be started to ensure continuous counselling and education for all caregivers according to their needs.

2. The results of this study may initiate government and concerned others to think more about the disease with needed seriousness. Based on that, more facilities and resources to take care of patients with dementia and caregivers with burden could be started either in the existing institutions or by starting new institutions.
3. Study results may lead to the formulation of more policies related to caring persons with dementia. More emphasis on education and counselling may be given in the newly formulated policies.

4. This study may initiate the development of more day care centre and trained caregivers to take care of patients with dementia, so that the burden on the primary caregivers is reduced.

5. More researchers become interested in studies related to different aspects of the disease. So, the quality of care received by the patients and caregivers shall be increased. More literature related to the multiple aspects of dementia in different perspective will be published secondary to this.

6. The physical and mental health of caregivers will improve because of the service based on the intervention of the study.

7. The clients will get more quality care based on better understanding.

8. Good teaching will be possible based on the developed module. More modules can be developed and tested in future.

9. More health personnel, especially nurses, will be attracted to dementia care and dementia research.
5.9 SCOPE AND LIMITATION

5.9.1 Scope

1. This is a first of its kind study in a suburban area of Kerala.

2. The Government and concerned others may give more attention to dementia caring based on the finding.

3. There is a widened scope for future studies related to this topic.

5.9.2 Limitations

All efforts were made to make this study as scientific as possible by avoiding all bias. Even though, certain limitations could not be avoided. The limitations of the present study are

1. The testing of the effectiveness of structured teaching and counselling separately was not done in the study, even though intended. It was not possible to separate counselling from teaching during the course of this study.

2. Continuity of education and counselling was not possible for the caregivers included in the study after the study period.

3. It was not possible to conduct a house to house survey for the identification of dementia patients, even though it is more effective, due to the financial and other constraints of the researcher.
4. More time was taken for the identification of patients with dementia and caregivers from the panchayat area, even though the study was on effectiveness of structured teaching and counselling. As the prevalence of dementia in the general population is less, the sample size of the study was limited to 36. Difficulty in the identification of cases from general population became an obstacle for conducting an experimental study by selecting a control group from other panchayat.

5. The sample selected was limited to only one panchayat. Wider generalization of the findings could be made by a larger sample selected from all districts of the state.

6. The present study was conducted only on primary caregivers of patients with dementia. The study can be done on the burden and general health of all caregivers of patient with dementia.

7. A study shall be conducted to find out the burden of family members where the demented patients are cared in a day care centre.

8. Studies to identify different causes of burden in the caregivers can be conducted.

9. Studies may be conducted in large population in the state.
10. Studies of experimental design can be conducted to study the effect of education and counselling separately.

11. Study can be conducted using comparative samples from other Panchayats.

12. Study focusing on different aspects of dementia and different aspect of caring can be done.

13. A study to develop a theoretical framework for care and counselling can be done.

14. Studies seeking alternate models for reducing the burden of caregivers can be done.