CHAPTER VI

SUMMARY & CONCLUSION

This chapter deals with summary of the study. Implementation of self management training program on Type II diabetes mellitus is to strengthen the knowledge, to create the positive attitude and improve practice level regarding self management training program among type II diabetes mellitus patients. Limitations are stated, Explanations are based on the objectives and findings are presented followed by recommendations.

Summary of study

The primary aim of study was to evaluate the effectiveness of self management training program on type II diabetes mellitus among diabetic patients in terms of knowledge, attitude and Practice.

Objectives of study were:

1. Assess the existing level of knowledge, attitude & Practice regarding self management of type 2 diabetic patients among experimental and control group.

2. Evaluate the effectiveness of self management training program on type 2 diabetes mellitus in terms of knowledge, attitude & Practice among experimental and control group.

3. Find out the association between the Pre test knowledge, attitude & Practice scores with their selected socio-demographic variables.

4. Correlate the post test knowledge scores with post test attitude scores & Post test practice scores regarding self management of type 2 diabetes mellitus.
HYPOTHESES: -

• H₁: Mean post-test knowledge, attitude and practice score of patients in experimental group will be significantly higher than the mean post-test knowledge attitude and practice score of patients in Control group.
• H₂: There will be significant association between pre test knowledge, attitude & practice score with their selected socio demographic variables.
• H₃: There will be a significant correlation between post test knowledge score and post test attitude score of experimental group regarding self management of type 2 diabetes mellitus.
• H₄: There will be a significant correlation between post test knowledge score and post test practice score of experimental group regarding self management of type 2 diabetes mellitus.

Review of literature was organized as follows:

• The History, Definition and Classification of Diabetes Mellitus.
• Current Scenario on Diabetes Mellitus.
• Literature related to diabetes and its knowledge.
• Diabetes and diabetes diet.
• Diabetes and exercise.
• Diabetes and foot care practice.
• Literature related to self Monitoring blood glucose level.
• Literature related to Self administration of insulin.
• Literature related to diabetes and recognizing complication

The research approach selected for the study was Evaluative Approach. Research design included pre test and post-test with both the experimental group and control group. Independent variable in the study was structured training program on self management of type II diabetes program and dependent variables were knowledge, attitude and practice scores.

The tools developed and used for data collection were structured cafeteria questionnaire to assess the knowledge, structured Likert scale to assess the attitude &
structured criteria checklist to assess the practice on self management of type II diabetes mellitus among diabetic patients.

The content validity of the tool was established by experts in medical surgical nursing department. The tool was found to be valid, reliable and feasible. The reliability of the tool was established by “Split half method” and by using “Spearman browns prophecy formula”. The co-efficient of correlation of knowledge questionnaire, attitude scale and practice checklist was found to be statistically significant.

The self structured cafeteria questionnaire was prepared that focuses on subjective knowledge using interview schedule on self-management of type II diabetes mellitus. The tool consists of 20 items that would help to screen the knowledge regarding self-management of type II Diabetes mellitus.

Pilot study was conducted from 15th October 2015 to 30th October, 2015. Sample size for pilot study was 25. Purpose of the study was:

- To evaluate the effectiveness of self management training program on knowledge, attitude and practice.
- To find out the feasibility of conducting the final study.
- To determine the method of statistical analysis.

Pre-testing of the tool was done to check the clarity of the items, their feasibility and practicability. It was administered to 25 samples from Waghodia. The sample chosen were similar in characteristics to those of the population under study.

Data collection for the main study was conducted in rural areas of Waghodia Taluka. Simple random sampling was adopted to select the Type II diabetes mellitus patients. Total sample size was 711 out of which 360 patients were assigned to experimental group & 351 were assigned to control group.

Data was collected from 15th November 2015 to 30th September 2016 at rural areas of Waghodia Taluka. The self management training program was tested for its effectiveness by pre-test & post-test. On day One, the pretest was administered, followed by administration of self management training program. The average duration of pre-test was 25 mts. On the same day self-management training was administered. The post-test was conducted after 2 weeks by using the same interview schedule. The average duration was taken to complete the pre-test was 25 minutes, individual training session was about
45 mts and average time taken for the post-test was 20 mts. The investigator selected 12 volunteers, trained them in the intended subject and collected data from various parts of Waghodia taluka.

The data gathered were analyzed and interpreted according to the objectives of study. The descriptive and inferential statistics were used for the data analysis.

**Findings of the study**

**Major findings of the study are summarized as follows:**

“Majority of samples in both experimental & control groups (174 & 170) were aged between 55-63 whereas less number of samples in both groups (15 & 25) were aged between 31-39.

Majority of the samples in both groups (183 & 195) were female.
Majority of the samples in either groups (307 & 279) were married.
Majority of respondents in experimental & control groups (347 & 323) were residing in rural area.
Majority of samples from both groups (180 & 151) had primary education.
Majority of the samples in experimental & control groups (138 & 157) were farmers by their occupation.
Majority of the samples in experimental group (157) had family income between Rs 5001 - 10000 & less than 5000 Rs in control group (124).
Majority of the samples both in experimental group & control group (269 & 229) did not had any family history of diabetes.
Majority of the samples in both experimental group (119) & control group (128) were suffering from DM, duration of which ranges between 1-5 years.
Majority of the samples in experimental & control group (268 & 305 respectively) were on oral hypoglycemic treatment.
Majority of the samples in both groups (172 in experimental & 233 in control group respectively) are having vascular diseases along with Diabetes.
Majority of the samples in experimental & control group (181 & 173) do not have any bad life style habits.
Majority of the information in both groups related to the management of Diabetes was provided by health care professionals (204 in experimental & 170 in control).
Majority of the samples in both groups (247 & 303) had poor self assessment regarding management of DM.

Findings of pre-test knowledge scores had shown that, out of 360 participants in experimental group 126 falls under poor, 225 in moderate, and 09 in good category. Similarly in control group, out of 351 participants, 135 belong to poor, 208 belong to average and 08 in good knowledge category.

It was observed from the pre-test attitude scores that out of 360 participants in experimental group, 41 falls in poor, 259 in moderate, and 60 in good category. Similarly in control group out of 351 participants, 38 belong to poor, 218 belong to average and 95 in good attitude category.

Overall pre-test practice scores of groups’ shown that, out of 360 participants in experimental group 246 falls under poor, 109 in moderate, and 05 in good category. Similarly in control group out of 351 participants, 233 belong to poor, 96 belong to average and 22 in good attitude category.

It was evident that the median post test KAP scores of experimental group was higher than the control group. P value was less than at 0.01 level of significance. Hence there was a significant difference exists between median values of experimental & control group with respect to knowledge, attitude & practice scores. Hence the research hypothesis was failed to reject.

Analysis with the pre-test knowledge scores of demographic variables shown that the obtained chi square value was less than the table value at 0.05 level of significance. There was no significant association between pre test knowledge scores with demographic variables such as age, gender, and marital status, area of residence, Education status, occupation, family income, life style habits & family history of DM. Hence the research hypothesis was rejected.
It was evident from the pre-test attitude scores of demographic variables that the obtained chi square value was more than the table value in selected variables such as area of residence, Education status & family income at 0.05 level of significance. There was significant association in above 3 variables & hence the research hypothesis was failed to reject. Obtained chi square value was less than the table value in selected variables such as age, gender, marital status, occupation, life style habits & family history of DM & there was no significant association in those variables & hence the research hypothesis was rejected.

Pre test practice scores of demographic variables shows that the obtained chi square was more than the table value in selected variables such as marital status, Education status, Occupation & family income at 0.05 level of significance. There was significant association in above variables & hence the research hypothesis was failed to reject. Obtained chi square is less than the table value in selected variables such as age, gender, area of residence, life style habits & family history of DM & there was no significant association in those variables hence the research hypothesis was rejected.

It was observed that mild positive correlation exists between post test knowledge & attitude scores (0.06) as well as moderate positive correlation exists between post test knowledge & practice scores (0.66). Further the researcher felt the need of developing long term strategies to bring impact on society in terms of improving knowledge, positive attitude & improve practice levels in health care services.

CONCLUSION

The study was conducted to enhance the Knowledge, Attitude and Practice regarding self management of type 2 diabetes among the community people of Waghodia through self management training programme.

Highlights of the study were:

1. The demographic survey conducted door to door at all over Waghodia in order to find the diabetic population which was herculean & laborious task to move to the entire dimension of Waghodia & to meet diabetic patients.
2. Developed the knowledge, attitude & practice questionnaire.
3. Compiled a self management training module.
4. Developed a mobile application on diabetic education.
5. Conducted individual self management training session for 711 samples at their door steps.
6. Evaluated the sample’s knowledge attitude and practice level 15 days after individual training programme.
7. Supported the samples for medical consultation in Dhiraj Hospital at concessional or free of cost.

The study revealed that even though the diabetic patients had moderate knowledge, less attitude and practice on self management of type 2 diabetes mellitus, they had keen interest to learn about all aspects of self management training programme.

The pre-test conducted to identify the knowledge, attitude and practice of type 2 diabetes mellitus on self management training programme showed that, the type 2 diabetes mellitus patients had minimum knowledge, attitude and Practice regarding self management training programme.

Analysis of the findings indicated that, self management training programme is an effective means to increase the knowledge and to change the attitude and practice of type 2 diabetes patients on self management training programme in a positive direction, as the computed Mann Whitney ‘U’ test was significant at 1% level of significance.

The post-test was conducted on the experimental group- shown that there is a very minimal difference as compared to post-test of control group indicating that the self management training programme is effective and there is a need for reinforcement.

Results of the study will enable the medical, Nursing or other health care providers to utilize the self management training program to educate the diabetic patients on management of type 2 DM in the community settings as an additional intervention in preventing diabetes related complications by improving the knowledge, having positive attitude and good practice regarding self management of their diabetic condition.
Self management training program (individual or small group) is one of the effective teaching methods in imparting the knowledge and practice on self care of diabetes patients. Nurses play a vital role by creating awareness among the diabetes patients and their care giver to opt for quality services.

Hence it is concluded that the Self management training program is an effective strategy where type 2 diabetic patients could be helped to enhance the knowledge and change of attitude & practice in a positive direction. In further the researcher would like to continue the same service both in the hospital & community either as a service or as part of the research in future too.

**NURSING IMPLICATIONS:**

“Nurses working in different areas of clinical & community setting initially assesses implements and coordinates care for diabetes patents in all settings. Nurses educate the diabetes patients for adapting healthier life style in order to improve self care abilities. Nurses play a vital role by creating awareness among the diabetes patients and their care giver to opt for quality services. This gives opportunities and time to the nurses to accomplish evidence based practice to fulfill their demands which will help them to achieve quality care. The investigator is of the opinion that knowledge and practice of self care will bring about awareness among diabetes patients. With advancement in Nursing and medical field nurses are occupying the Diabetic Specialist role and providing education, counseling to diabetic Patients”.

Findings of this study have implications in various areas of nursing namely: nursing practice, nursing education nursing administration and nursing research.

**Nursing Practice**

1. Self management Training on type 2 diabetes can be made an ongoing continuing education in inpatient and outpatient department.
2. Tool will be helpful to patients in understanding the importance of pathophysiology, clinical manifestation, and complication of diabetes.
3. There are modules in two languages, i.e. English and Gujarati. Further it can be used by the Patients or students for getting training.

Nursing Education

1. Self care management pamphlet can be used in educating the diabetic population & their family members regarding diabetic care.
2. A short term course regarding self care management on DM will be helpful to nursing students as a guide on diabetic education.
3. Arrange in service education for nurses working in clinical areas on Self management on Type 2 diabetic Mellitus.
4. Training module can be adopted in the nursing curriculum to train the student nurses in educating diabetes patients on life style modification.

Nursing administration

1. The researcher can arrange for continuing education programme for nursing personnel working in clinical areas regarding self management of Type 2 Diabetes Mellitus.
2. The researcher can plan for educating diabetic self help group like alcoholic anonymous group. Here the patients can interact with each other, discuss their problems and way to overcome in health care set up.
3. Training material will provide information about the nongovernmental organization and other agencies which will financially support the patients for diabetic care.

Nursing research

1. Tool can be used by other researchers to assess the knowledge, attitude & practice of other health care professionals who are involved in diabetic education in the community.
2. This study implicates that the research is required in different domains such as diabetic diet, exercise, medication, foot care, eye care, SMBG, Self administration of insulin etc which help us to maintain the standard of care and prevent diabetes related complications.
3. Findings of this study can motivate nurse researchers to conduct more studies related to self management training program on type 2 diabetes mellitus.

**Recommendations**

1. Similar study can be done using mixed method research.
2. Similar training module can be developed using other educative materials.
3. Training can be given to other health care professionals such as home nurses, anganwadi workers, multipurpose workers who are directly involved in education of diabetic population in the community.
4. A similar study can be replicated on a subject with different demographic characteristics in different settings.
5. An extensive protocol may be developed including all aspects in management of type 2 diabetes mellitus.
6. A comparative study can be done on rural and urban patients.
7. Each domain wise diabetes self care management can be conducted.
8. Similar study can be conducted with larger sample in other district.

This chapter has dealt with conclusion, implications in nursing fields and recommendations.