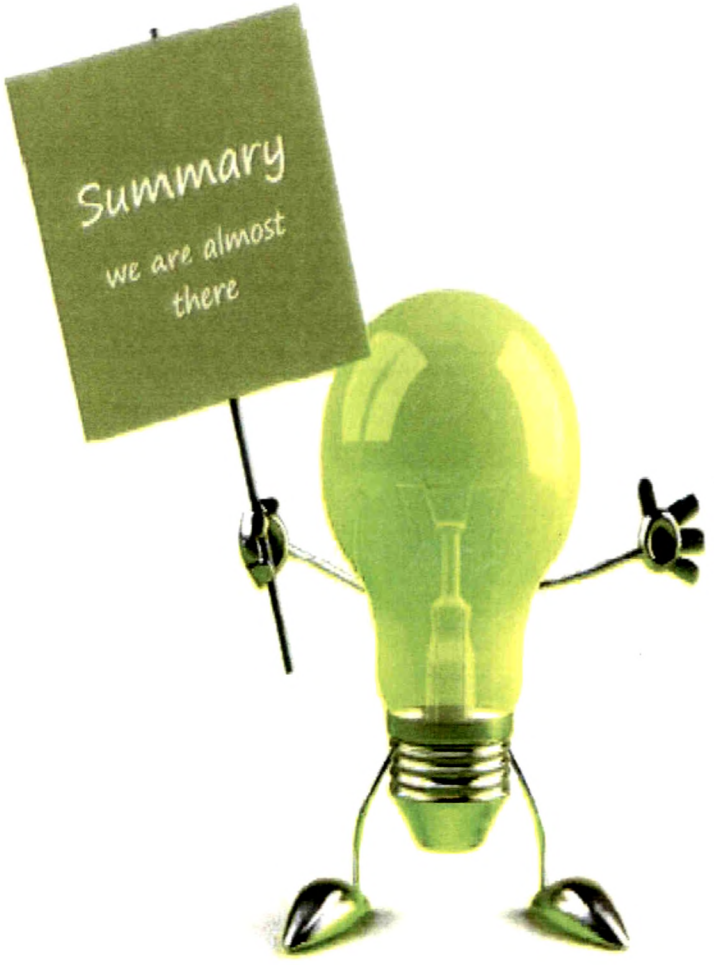
CHAPTER -VII



SUMMARY

The present study was conducted to identify the adherence problem in patients with hyperlipidemia. Prevalence of non-adherence was documented and attempt was made to identify the factors to develop a pragmatic and feasible solution to tackle the problem. Based on the findings, a patient counselling center was established to provide a setting to deliver the multi-factorial patient education and it was found that this mode of pharmacist intervention improved patient's medication adherence and clinical outcomes.

The Study design was a prospective, intervention clinical study in a tertiary care teaching hospital, Rajiv Gandhi Institute of Medical Sciences (RIMS) Hospital, Putlampalli, Kadapa - 516004, Andhra Pradesh. The study group included 853 hyperlipidemic patients, according to National Cholesterol Education Programme (NCEP) and accomplice inclusion and exclusion criteria. All the patients were out-patients. Ethical clearance from the Institutional Human Ethics committee of RIMS Hospital was taken for the study. Each participant's hospital identification number was recorded at the time of presentation, and patient's data were subsequently abstracted from their hospital prescription notes and entered into standard data collection form designed for the study.

A total of 853 patients (516 from referral center group, 337 from paid clinic group) (age, 61±12 years: male, 42.5% hyperlipidemia duration, 7.9±7.1years) were included in the patient survey. The overall adherence rate was 80.4% Patients attending referral center and paid clinic did not demonstrate difference in the adherence rate. However, patients who attended referral center were found to have more complex adherence problem than paid clinic group. Medication adherence was found to be determined by patient demographics and healthcare setting, physician-patient relationship, and patient psycho-cognitive factors. Besides, there were close interactions amongst these latent factors.

In the second part of the study, 200 hyperlipidemic patients (age, 63±10 years: male 43%, females 57%: hyperlipidemia duration, 6.2±2.2 years) were included in the pharmacist intervention programme referred by physicians of referral center to study the effect of pharmacist intervention at counselling center on patient adherence and clinical outcomes. This mode of intervention has resulted in improvement in patient adherence

level and clinical outcomes. The percentage of non-adherent patients decreased from 100% to 3% after the third pharmacist education session. Patients' blood LDL cholesterol level during one year prior to attending education and one year after improved significantly (TC 6.3±1.7 vs 5.2±0.2 mmol/L, p=0,001: LDL-C 3.9±0.7 vs 2.9±0.6 mmol/L p=0.001). Similar improvement patterns were also observed in patients' diabetic and blood pressure control (FBS 8.7 mmol/L ±1.9 mmol/L vs 8.2 mmol/L ±1.3 mmol/L, p<0.001: systolic BP 155.7±22.9 vs 144.9±26.6 mmHg, p<0.001: diastolic BP 79.1±11.2 vs 74.4±13.9 mmHg, p<0,001). Other endpoints including. hospitalization rate (0.8%±1.1% vs 0.4%±0.6%, p=0.03), duration of hospital stay (3.6±2.3 vs 2.5±3.0 days per admission, p=0.3) and causality attendance rate (1.3%±0.9% vs 0.8%±0.5%, p=0.002) were also improved.

Result of the study states that a successfully practical model was developed for patient education and counseling to improve medication adherence. Outcome of the study can be utilized in set up of patient counseling center at different health care settings to improve medication adherence of patients in India.