METHODOLOGY

Study Site: - The study is to be carried out at the inpatient setting of a private tertiary care referral hospital at the Malabar region of Kerala. The KIMS Al-Shifa hospital is a 550 bedded, multidisciplinary tertiary level referral hospital situated in Perinthalmanna, Malappuram District of Kerala. The various departments hospital include general medicine, obstetrics and gynaecology, paediatrics and neonatal, neurosciences, orthopaedics, neurosurgery, etc.

Study Design: - A prospective interventional study will be carried out among the geriatric inpatients of various department of the hospital in order to evaluate the effectiveness of pharmaceutical care Programme and thereby enhancing the medication adherence of patients which help to improve patient safety and quality of life.

Inclusion Criteria: The inpatients with age above 60 years and Inpatients on medication therapy with admission of more than 2 days.

Exclusion Criteria: The inpatients below 60 years of age and not receiving medication therapy are excluded from this study.

Study Tools: The following study tools are using in the present research work, they are

1. Data collection form.
   This form is designed to collect the details of patient. The form consist of details like, Patient demographics like name, age, sex, no. of hospital days, reason for admission, past medical and medication history, family history, social history, medication chart and discharge medications. The details are to be obtained from the medication chart of patient as well as by direct interview with the patient.

2. Medical Outcome Short Form (36) Health Survey:
   The SF-36 is suitable for self-administration, computerized administration, or administration by a trained interviewer in person or by telephone, to persons aged 14 years and older. Medical Outcome Short Form (36) Health Survey scored electronically.

3. Pharmaceutical care documentation Form.
   Pharmaceutical care documentation form will prepared for documenting pharmaceutical care provided to the patients like patient counselling about disease and drugs, patients adherence to therapy and for documenting drug related
problems

4. Modified MYM Questionnaire.
A well-defined questionnaire will be developed based on the MYM questionnaire, which was modified and validated. The questionnaire will cover aspects like: Medication Regimen and Patient Knowledge: Medication Name and Directions, Knowledge gaps identified, general comments relating to issues identified, advice given and action taken.

5. Morinsky Medication adherence scales. MMAS-8
Adherence and patient counseling about the entire therapy will be assessed using MMAS 8 score. Based on scoring the adherence will be categorized as High Adherence: 0, Medium Adherence: 1-2, Low Adherence: 3-

Counseling about the disease, Counseling about lifestyle modifications, counselling about dietary regulations and counselling about health problems will be provided by using ‘patient counselling book’.

7. Discharge Medication list.
Counselling about administration of drugs, Counselling about use of drug, Counselling about actual or potential adverse drug reaction will be provided to the patients in intervention phase by using ‘discharge medication letter’ during their discharge.

Statistical Techniques: - All the statistical analysis will be carried out using Statistical Package for Social Sciences (SPSS) software. Numerical data will be express as mean and standard deviation. Continuous variables will be analyzed using the mean, percentage and standard deviation. Discrete variables will be analyzed using proportions. For comparison of pre and post interventions t test will be used.

**WORK PLAN**

The research work is to be carried out in different steps as follows,

1. Assessment of perception of health care providers about clinical pharmacy services.
2. Identification of drug related problem and measurement of HRQOL.

Using different types of data collection forms designed during the study, data will be collected. The data collected will be evaluated and drug related problem will be identified and Health related quality of life will be evaluated in the pre interventional phase. During the interventional phase, pharmaceutical care interventions like educational intervention, drug therapy intervention are to be provided. To prevent DRP, strategies like counselling about disease, drug and life style modification will be provided. Inorder to improve the medication adherence, misconceptions about drug therapy and benefits of adherence to therapy will be explained.

Then in the post interventional phase, adherence to drug therapy and HRQOL will be evaluated. Then a Comparison of the data collected in the pre and post interventional period will be done to assess the impact of pharmaceutical care on HRQOL. The data include strength of population selected, sex distribution, age distribution and categorization, distribution of disease among patients, medication categories prescribed and comorbidities of each patient. It also include educational and drug therapy intervention like number of ADR, error, Drug interactions etc. Finally, evaluation of effectiveness of the pharmaceutical care programme on health outcome of patients will be done. The compared data of each strategies and parameters will be evaluated using appropriate statistical tool.