Materials
&
Methods
MATERIAL AND METHODS

A. STUDY SAMPLE
40 patients, outdoor & those admitted in Shree Sayaji General Hospital (S.S.G.Hospital), Vadodara, from NOV 2008 to NOV 2010, comprised the sample for the present study were studied.

B. SOURCE
Apart from Vadodara city, S.S.G.Hospital, Vadodara also attracts large cross section of population from Vadodara district and other adjoining districts of Gujarat like Kheda, Bharuch, Narmada, Panchmahal and section of population from the adjoining states like Madhya Pradesh, Maharashtra and Rajastan.

C. SELECTION OF PATIENTS

➢ Inclusion criteria
   ❖ Patients already infected with HIV having cardiac and renal manifestations were included in the study.
   ❖ Patients of more than 12 years and both sexes were selected.
   ❖ Patients of renal manifestations were included based on urinary proteinuria, raised serum creatinine, and USG findings s/o enlarged or normal kidney with raised echogenicity were included.

➢ Exclusion criteria
   ❖ Patients under the age of 12 years.
   ❖ Patients who were k/c/o diabetes and hypertension for long.
   ❖ Patients diagnosed with cardiac illness and renal disease prior to diagnosis of HIV.
D. METHODS

Clinical

Preliminary data like name, age, sex, education, income, socio-economic class, occupation, marital status and address was collected. Each patient under study was subjected to detailed clinical history regarding duration and severity of symptoms of HIV infection/AIDS, particularly any symptom related to cardiac and renal disease like dyspnea, chest pain, pedal edema and facial puffiness. Along with that the other common clinical features of HIV/AIDS such weight loss, constitutional symptoms, etc, have also been taken into account.

They were also asked about symptoms related to anemia, CNS symptoms like convulsions, altered behavior or altered sensorium. Past history of tuberculosis, diabetes, jaundice, sexual promiscuity, blood transfusion, sexually transmitted diseases, IV drug abuse, any other invasive procedures were also obtained.

Family, personal, menstrual and obstetric histories were looked into along with history of treatment and risk factors predisposing to exposure to HIV were taken. Detailed marital history was elicited duration, spouse HIV status, cohabits as well as use of contraceptive was noted.

Patients level of consciousness, orientation to time, place and person and co-operation noted along with nutrition, built, vital signs, pallor, skin lesions, oral ulcers, oral candidiasi, pedal edema, clubbing etc.
Also respiratory, cardiovascular, CNS and alimentary systems were properly examined to find their pathology such as lung consolidation, pleural effusion, hepatomegaly, splenomegaly, signs of meningeal irritation or focal neurological signs, etc.

**Investigations**

The following investigations were carried out in all the cases:

- Complete haemogram
- Urine analysis, urinary protein by dipstick more than 1+ and enlarged kidneys on USG.
- Biochemical investigations like random blood sugar, serum creatinine and liver function tests.
- Chest x-ray, sputum gram and AFB staining and culture sensitivity as and when required.
- Pleural fluid and pericardial fluid analysis was done as when required.
- Electrocardiogram was done and when found abnormal or in patients with cardiac symptoms trans thoracic 2D-Echo was done.
- USG of abdomen with KUB was done in all the patients.
- In patients with CNS symptoms on sos basis CSF analysis was done.
- Serological tests: HBsAg, VDRL tests were done in all patients.
- CD4 cell count in every patient was done and classified them according to WHO immunological classification for established HIV infection. Value of CD4 counts below 200/µL were further subdivided into 100-199, 50-99 and below 50/µL.