CHAPTER - 1

INTRODUCTION

The Human Immuno Deficiency Virus (HIV) is the etiological agent responsible for the development of the Acquired Immuno Deficiency Syndrome (AIDS), which is characterized by the progressive destruction of the body’s immune system, rendering the affected individuals susceptible to a number of serious and fatal diseases. One of the conspicuous features of the HIV infection is a selective depletion of CD4-bearing helper/inducer T lymphocytes, suggesting selective tropism and cytoplasmic effect of HIV for this population. HIV affects all segments of population, from children to adults, businessmen to homeless people, female sex workers to house wives and gay men to heterosexuals. It is acquired but it is not hereditary. When one gets HIV there will be wide range of symptoms all due to the bodies diminished ability to fight disease.

The main transmission routes of HIV are sexual contact, exposure to infected body fluids, or tissues and from mother to fetus during perinatal period. Once a human’s CD4 cells are infected with HIV, many types of pathological changes may ensure. It shows symptoms like fever, lymphnode enlargement, oral candidiasis, weight loss, malaise, head ache, cervical cancer, diarrhoeal disease, encephalopathy, herpes simplex and tuberculosis. It also affects central nervous system (CNS).

India is one of the largest and most populated countries in the world. HIV had now spread extensively throughout the country. Surveillance is observing a person very closely. The HIV surveillance survey helps monitor trends in HIV infection among selected groups in the population. This brings out the impact of the various interventions carried out to stall the progress of the infection. The current figures of people infected
with HIV in the country put their number at 2.47 million, as against the earlier figure of 5.2 million compiled by the National AIDS Control Organization (NACO) and supported by United Nations program-me on HIV – AIDS (UNAIDS) and the World Health Organization (WHO) these figures are said to be more accurate than those of the previous years (Vimalkumar, 2007).

TamilNadu is considered as one among the high prevalence states. As part of the TamilNadu Government’s initiative towards this area of concern, the Tamil Nadu States AIDS Control Society (TANSACS) was formed in 1994. The Government agency TANSACS is today spearheading the efforts taken to compact HIV/ AIDS and has emerged as the convergence of all HIV/AIDS services in the state. The people living with HIV/AIDS (PLHA) networks are the mirrors for TANSACS.

Despite the scientific and technological advances in the 21st century, HIV infection remains as a significant case of morbidity and mortality in both developed and developing countries. In present investigation was carried out to bring awareness among the public about the HIV infected patients so far no work has been done in surveillance of HIV infection in Tamilnadu. The following parameters under taken

- to analyze the different age group in 29 districts of Tamilnadu

- to examine the different sex

- to estimate the age vs sex

- to calculate the CD4 count with the effect of physical exercise in different age group and sex.

- to increase the CD4 count by medicinal plant extract.