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THE KENYA POLYTECHNIC UNIVERSITY COLLEGE
DEPARTMENT OF HEALTH SCIENCES AND BIOTECHNOLOGY
PHARMACEUTICAL TECHNOLOGY

TRADE PROJECT

TITLE: EFFECTIVENESS OF ANTIRETROVIRAL THERAPY IN
BOOSTING THE IMMUNITY OF HIV/AIDS PATIENTS IN
KISUMU DISTRICT HOSPITAL.

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ABSTRACT

Human Immunodeficiency virus is a phenotype virus that require the DNA Material for its replication. In the host, it fuses the DNA materials and uses it to synthesize its RNA. HIV is spread through unprotected sexual intercourse with infected individual, breastfeeding in nursing mothers and use of unsterilized equipment that has been used in HIV infected persons. Antiretroviral therapy (ART) is used to manage HIV/AIDS by stabilizing the immunity of the infected patients. Thus enabling it to fight opportunistic infections e.g *pneumocystic carinii*, mycobacterium tuberculosis among others. HIV/AIDS affect and infect indiscriminately within a population, eliminating the most productive individuals within a population, creating orphans of the infected individuals. It has already shown some generation gap in the most effected communities.

Therefore, ARV therapy is the only hope available for HIV infected individuals for prolonged productive life and hence the effectiveness of the therapy is of profound necessity. This study established the effectiveness of ART in boosting the immunity of HIV patients in Kisumu district hospital. Various parameter, e.g. CD4 cells counts, viral load and weight of the patients were focused on. It will extend to establish the prevalence of HIV infection in the region. Determination of efficacy of ARV depending on clinical stage will also be paramount. Patients adherence will also be observed as a factor which affect the therapy since near perfect pill taking (> 95% - patterson et al 200) is required to achieve maximal viral suppression- anything less than this leads rapidly to the development of viral resistance and hence to much earlier treatment failure.