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**FACTORS INFLUENCING IMMUNOLOGICAL RECOVERY TO
ANTIRETROVIRAL THERAPY IN UGANDA. A CASE OF HIV
POSITIVE PATIENTS AT KAYUNGA DISTRICT HOSPITAL**

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ABSTRACT

The use of Antiretroviral Therapy (ART) results in an improvement in immunologic function. This study sought to investigate the factors associated with immunologic recovery among HIV positive patients receiving ART in Uganda.

Even after several months on ART, some patients receiving ART at Kayunga Hospital continue to have very low CD4 cell count and a high rate of morbidities. Some patients die barely a few months from ART initiation. Retrospective ART initiation CD4, and follow-up CD4 data of five hundred and fifty patients who were initiated on ART between 2009 and 2010 at Kayunga District Hospital were analyzed using time to event approach comprising a Log-rank Chi square test and Cox regression model to assess the factors that influence time to immunologic recovery to reach at least 350 CD4 cells/ml (immunologic recovery).

Results from this study show that; the median time to recovery was 9 months range (1-48 months). The factors influencing immunologic recovery were age of patient ($p < 0.05$), CD4 count at ART initiation ($p < 0.05$) and timing of ART initiation ($P < 0.05$). Particularly the rate of recovery was higher among children compared to adults, among patients initiating ART early compared to those who initiate late and among those whose CD4 cell counts were higher at ART initiation.

In conclusion, gender, marital status, functional status, TB status, weight, clinical stage, district of residence and adherence were found to have no influence on immunologic recovery of HIV positive clients on ART. Efforts should be made to initiate HIV positive patients on ART early before CD4 fall below 350 to avoid immunologic suppression, and more attention should be paid to adult patients in line with early ART initiation.