

Abstract.

Background: The successful strengthening of antiretroviral therapy (ART) programmes globally has been reversed by loss to follow up (LTFU). The factors associated with LTFU still remain gainsay to many countries including Kenya, a critical barrier to effective scale-up of human immunodeficiency virus (HIV) services. Kenya is one of the four HIV high burden countries in Africa (alongside Mozambique and Uganda) with 29% adult HIV co-morbidities, overburdening the health care system and the country's economy. UNAIDS targeted to achieve 90% in three key areas of HIV: identification in HIV positive patients; prompt linkage to treatment; and viral suppression by the year 2020. The second and third have not been met in Nakuru West Sub-County. This study aimed at determining the incidence rate and health-care factors associated with LTFU, among adult patients initiated on ART in Nakuru West Sub-County health facilities. **Methods:** A retrospective cohort study design using mixed method of data collection was employed. Records of 1131 participants enrolled/initiated on ART within 1st January 2016 to 31st December 2018 in the County Referral Hospital, Kapkures and Rhonda health centers were examined for three years to determine their outcomes. Data was collected using abstraction form extracted from the standard ART cohort register and master facility register and from key informants. Recorded interviews were transcribed and analyzed using standard qualitative method, to identify content and themes. A total of 9 key informants working in the CCC/HIV clinics were interviewed upon consenting. Kaplan-Meier technique was used to estimate time to LTFU after initiation of ART. **Results:** The overall incidence rate of 1611 (95% CI: 114.7 - 179.2) per 1000 person-years was revealed. In addition, the following variables were identified in the qualitative findings to be associated with LTFU: wrong/poor documentation, long waiting time, approaches in the implementation of the HIV/AIDS management policies ("Test and Treat" and "defaulter tracing") and inadequate funds to support staffing and to manage support groups. **Conclusions and Recommendations:** In order to minimize LTFU and met UNAIDS targets, interventions should be geared towards close follow up supervision of all CCC patients by capturing correct contact addresses and updating patient records. In addition, this study recommends that, the Ministry of Health, Nakuru County Government, APHIA-PLUS and all other stakeholders should build capacity of health care personnel to improve provision of HIV care services, ensure availability of adequate resources and address challenges that impede the implementation of HIV and AIDS management policies, especially for newly enrolled patients who may not be prepared to start treatment or unwilling to disclose their status. This will, in turn, curb LTFU, enhance patient retention, patient survival and improve quality of life.