

## **ABSTRACT**

**Background:** The global increase in adolescent HIV-related deaths between 2005 and 2012 has been attributed to lack of prioritization of adolescents in national HIV programmes. In 2013, the Kenya Ministry of Health (MOH) developed and piloted a standardized adolescent package of care (APOC) for adolescents living with HIV/AIDS (ALHIV). Although the MOH has not rolled out the APOC, Kenyatta National Hospital (KNH) fully rolled out APOC in February 2014. We evaluated quality of care of ALHIV following the implementation of the package of care at KNH. **Methods:** We analysed data from a clinical care database of HIV positive adolescents on follow up at a national teaching and referral centre (KNH), before and after implementation of APOC (October 2012 to September 2014). The care components included provision of antiretroviral therapy, health education, Tanner staging, reproductive health services, facilitated disclosure, and adherence, mental health and family social assessment. Paired comparisons were analysed using McNemar test on SPSS. **Results:** Data on 495 HIV positive adolescents (10-19 years) was analysed. Mean age was 13.6 years (Standard Deviation 2.2 years), and males were 51.8%. The proportion on ART in the current period was 93.5%, median treatment duration of 68.5 months (Inter Quartile Range 38-87 months). After implementation of the standardised APOC, adherence assessment increased from 32.6% to 54.0% ( $p < 0.001$ ). Self-reported adherence did not increase significantly ( $p = 0.100$ ). There was improved documentation of key clinical care indicators including family and social status (84.6% to 95.1%,  $p < 0.001$ ), Tanner staging (0.2% to 16%,  $p < 0.001$ ), mental status (27.7% to 55.7%,  $p < 0.001$ ) and health information provision (0.4% to 52.2%,  $p < 0.001$ ). Condom provision improved from 5.7% to 9.1%,  $p = 0.047$  for all adolescents. Incremental disclosure assessment increased from 22.3% to 84.4% ( $p < 0.001$ ). The proportion of adolescents with completed disclosure increased from 10.9% to 55.3% ( $p < 0.001$ ) after controlling for baseline age and stage of disclosure. **Conclusions:** Implementation of a comprehensive package of care with optimization of adolescent focussed components can contribute to improved quality of care and outcomes. Long term impact on treatment outcomes and quality of life of HIV infected adolescents require further evaluation.