Abstract:

Low body mass index (BMI) at the time of enrollment into HIV care has been shown to be a strong predictor of mortality independent of CD4 count. This study investigated socio-demographic associations with underweight (BMI < 18.5) among adults in Nyanza Province, Kenya, upon enrollment into HIV care. BMI, socio-demographic, and health data from a cross-sectional sample of 8254 women and 3533 men were gathered upon enrollment in the Family AIDS Care and Education Services (FACES) program in Nyanza Province, Kenya, between January 2005 and March 2010. Overall, 27.4% of adults were underweight upon enrollment in HIV care. Among each women [W] and men [M], being underweight was associated with younger age (W: adjusted odds ratio [AOR], 2.90; 95% confidence interval [CI], 1.85-4.55; M: AOR, 5.87; 95% CI, 2.80-12.32 for those aged 15-19 compared to ≥50 years old), less education (W: AOR, 2.92; 95% CI, 1.83-4.65; M: AOR, 1.55; 95% CI, 1.04-2.31 for primary education compared to some college/university), low CD4 count (W: AOR, 2.13; 95% CI, 1.50-3.03; M: AOR, 1.43; 95% CI, 0.76-2.70 for 0-250 compared to ≥750 cells/mm3), and poor self-reported health status (W: AOR, 1.72; 95% CI, 0.89-3.33; M: AOR, 9.78; 95% CI, 1.26-75.73 for poor compared to excellent). Among all enrollees to HIV care, low BMI was associated with male gender, lower educational attainment, younger age, and poor self-reported health. HIV care and treatment programs should consider using socio-demographic and health risk factors associated with low BMI to target and recruit patients with the goal of preventing late enrollment into care.