

# Loss to follow-up among HIV infected women in Option B+ in Moshi municipality, Tanzania: a retrospective cohort study

Festo Mazuguni<sup>1,2</sup>, Michael Johnson Mahande<sup>1</sup>, Jim Todd<sup>1,3</sup>, Jenny Renju<sup>1,3</sup>

<sup>1</sup> Department of Epidemiology & Biostatistics, Institute of Public Health, Kilimanjaro Christian Medical College, Moshi, Tanzania

<sup>2</sup> Ifakara Health Institute, Dar es Salaam, Tanzania

<sup>3</sup> London School of Hygiene & Tropical Medicine, London, UK

## ABSTRACT

**Aim:** This study aimed at determining the levels, timings and factors associated with both early and long term loss to follow-up (LTFU) in care among HIV infected women initiated on Option B+.

**Methods:** A retrospective cohort study was conducted among HIV positive women who initiated on Option B+ in Moshi municipality Tanzania between February 2014 and December 2015. Log-binomial regression analyzed factors for no follow-up (NFU). Survival analysis using Cox regression examined factors associated with LTFU.

**Results:** Of the 468 women who were initiated on ART under the option B+ programme, 109 (23.29%) had NFU visit after the initiation of ART and 359 (76.70%) returned for at least one refill for ART medications. Younger age at ART initiation (aRR; 1.70 (95% CI; (1.24-2.33)), starting ART at the hospital (aRR; 2.86 (95% CI; (2.07-3.95) and having no treatment support (aRR; 1.50 (95% CI; (1.07-2.11) were associated with the increased risk of NFU. LTFU for entire cohort was higher in younger women (aHR; 1.41 (95% CI: 1.07-1.87), and in those without treatment support (aHR; 1.81 (95% CI: 1.39-2.34).

**Conclusions:** Younger age at ART initiation and having no treatment support was associated with risks of both early and long term LTFU. Special attention to HIV infected women with limited treatment and social support and concerns about starting treatment for life in younger age may be crucial in improving engagement in care.