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# **Food insecurity, ART adherence, and virologic failure among pregnant women living with HIV in Turkana, Kenya: a short report**

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c, h, i, e, n, g, ,, W, a, n, j, i, k, u, M, w, a, n, g, i

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## | Abstract

Food insecurity is a critical barrier to optimal HIV care in arid, resource-limited settings. Pregnant women living with HIV are a vulnerable group for whom maternal health and prevention of vertical transmission depend on sustained antiretroviral therapy adherence. The drought-prone Turkana region of Kenya presents a context of chronic food insecurity, but its specific impact on antiretroviral therapy outcomes for pregnant women living with HIV is not well understood. This short report explored the perceived impact of food insecurity on antiretroviral therapy adherence and assessed its association with virologic failure among pregnant women living with HIV attending antenatal care in Turkana County, Kenya. A mixed-methods, cross-sectional study was conducted at a major antenatal clinic. A structured questionnaire assessed food insecurity using a validated scale and self-reported antiretroviral therapy adherence. Virologic failure was defined as a viral load  $\geq 1000$  copies/mL. A subset of participants completed in-depth interviews to explore lived experiences. Among 150 participants, 68% reported severe food insecurity. This group had three times higher odds of sub-optimal antiretroviral therapy adherence compared to food-secure women. A key qualitative theme was the deliberate skipping of doses due to fears of increased hunger or adverse effects when taking antiretroviral therapy without food. Virologic failure was significantly more prevalent in the food-insecure group. Severe

food insecurity is highly prevalent and is a major barrier to antiretroviral therapy adherence, contributing to virologic failure in pregnant women living with HIV in Turkana. This underscores a critical intersection of nutritional and HIV care needs. Integrate routine food insecurity screening into antenatal HIV clinics. Strengthen linkages between HIV programmes and nutritional support services, including targeted food assistance for pregnant women living with HIV, to improve health outcomes and prevent vertical transmission. Food insecurity, HIV, antiretroviral therapy, adherence, pregnancy, Kenya. This report documents the specific impact of food insecurity on antiretroviral therapy outcomes among a vulnerable population in a drought-prone region, providing evidence to inform integrated service delivery.

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