

## ABSTRACT

**Background:** Mother to child transmission of HIV is the second leading mode of transmission contributing to the HIV burden, and leads to approximately 90% of all paediatric HIV infections globally. However, nearly all such infections can be averted by elimination of mother to child transmission (eMTCT) programs in presence of proper retention of clients in HIV care. Retention however remains a global challenge. According to Uganda AIDs commission the country retention rates for mothers on the eMTCT program were as low as 56% at 6 months in 2016. Different interventions such as family support groups, and health facility level support such as provision of health education and ensuring proper clinical assessments have the potential to play an important role in HIV treatment programs as they positively impact key health outcomes including retaining HIV-infected persons in care, their implementation however remains low in Uganda.

**Main objective:** The purpose of the study was to assess the factors that influence retention of mothers on option B+ in HIV care at Bugono HC IV, Iganga district.

**Methods:** A retrospective cohort study was employed, involving both qualitative and quantitative data collection. A census of all clients who were enrolled on the eMTCT program between August 2016- February 2017 was done and data was abstracted from records in the health facility. Data for 96 mothers was collected including, 51 FSG participants (exposed group) and 45 non FSG participants (non-exposed group). Focus group discussions and key informant interviews were conducted for qualitative data. Analysis for quantitative data was done using SPSS version 20.

**Results:** Data analyzed revealed; Mothers in family support group were 16 times more likely to be retained in HIV care than those who were not in the family support group. The data further revealed that disclosure among FSG mothers (AOR=8.02, 95% CI 3.66-22.64), keeping <6 appointments among FSG mothers (AOR= 0.44, 95% CI 0.12-0.73), health education (AOR= 7.0, 95% CI 4.57-9.45) among FSG mothers; no formal education (AOR=0.14, 95% CI 0.01-0.74), and having no viral load assessments (AOR= 0.68, 95% CI 0.32-0.89) among non FSG mothers were independently associated with retention on option B+ among mothers.

**Conclusion:** Being in the family support group, keeping less than six appointments, health education, disclosure among FSG mothers; performing no viral load assessment, and education level among non FSG members influenced retention of mothers in HIV care. Therefore, the study recommends that the Family support group implementation in health facilities should be strengthened by the ministry of health; clinical assessments and monitoring in HIV care should be strengthened by health facility teams, encouraging of appointment keeping for clients, provision of continuous health education, and strengthening of disclosure support in all eMTCT programs