

# **ABSTRACT**

## **Background**

Despite Lesotho achieving ANC ART coverage of >90%, mother to child transmission rate at 9% in 2019. The aim of the study was therefore, to describe factors contributing to viral load suppression amongst HIV infected pregnant and breast-feeding women in Maseru and association of maternal viral load suppression to infant DNA PCR positivity in Maseru, Lesotho.

## **Methodology**

A descriptive, cross-sectional study on HIV positive pregnant and breastfeeding women using secondary data analysis was employed to identify patients' files and cards so as to retrieve detailed information. At bivariate analysis level was used to assess the existence of associations between different exposures and virological suppression. Multivariate analysis conditional logistic regression model with virological suppression as the response variable.

## **Results**

Two thousand two hundred and sixty-six (94.7%) of those breastfeeding and 492 (96.1%) of those pregnant were virally suppressed. Marital status, age and partner's HIV status were socio-demographic variables that were statistically associated with viral load suppression. Duration of ART, adherence (%) and completion, ever defaulted, transfer in from other facilities, total drugs taken and dosage, knowledge of HIV status timing and type of regimen all were statistically associated with viral load.

Women aged above 25 were more likely to be virally suppressed than those below 25 years. Women whose partner's HIV status was known were respectively 4.8 (95% CI 1.9-11.9) for negative status and 4.1 (95% CI 2.1-7.7) for positive status times more likely to be viral load suppressed than those with partners of unknown status. Transfer in and women who knew their HIV status during pregnancy were more likely to be virally suppressed. This study has also shown that the higher the VL the higher the risk of HIV transmission.

## **Conclusion and Recommendations**

Lack of viral load suppression in some women is concerning and signifies a threat to the aim of eliminating mother to child transmission in the country. Lesotho can intensify support provided by VHW's and peer support groups to postpartum women to improve their adherence and improve their viral load suppression. Women who have been on ART prior to their pregnancy should also receive intensified counselling emphasizing on MTCT as knowledge enhances adherence. Lesotho has to adopt a one-month viral load monitoring interval after the 1<sup>st</sup> encounter of high viral load in pregnant and breast-feeding women for prompt decision making in management.