

FACTORS ASSOCIATED WITH VIRAL NON-SUPPRESSION IN PEOPLE LIVING WITH HIV INITIATED ON ANTI-RETROVIRAL THERAPY DURING TEST & START ERA IN ESWATINI



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INTRODUCTION

- Eswatini has achieved the UNAIDS HIV Epidemic Control (95-95-95).
- However, achievements are not uniform across subpopulations.
- Strategies now include identifying and closing these gaps.
- The 3rd 95 mainly depends on adherence to antiretroviral therapy (ART) and other factors.
- With a relatively mature program, data allows for exploration of these factors to aid the design of targeted interventions.
- We hypothesize that some sociodemographic and clinical factors determine achievement of the 3rd 95 – suppressed viral load (VL).
- This poster presents factors associated with viral suppression status amongst the PLHIV initiated on ART during the Test & Start era in the four regions of Eswatini.

METHODOLOGY

- Data were extracted from the Client Management Information System (CMIS) in August 2023.
- Clients sociodemographic, clinical and follow-up data was included.
- Study outcome was “unsuppressed” viral load; defined as VL≥1000 copies/ml. VL<50 was undetectable and VL 50 - <1000 suppressed.
- Duration on ART was calculated using the documented ART start date and the last visit date.
- Descriptive analysis, Univariate and multivariate logistic regression analyses were used to determine odds ratio (OR) for independent predictors of viral Suppression at p<0.05
- Hosmer-Lemeshow test was used to assess model fitness.

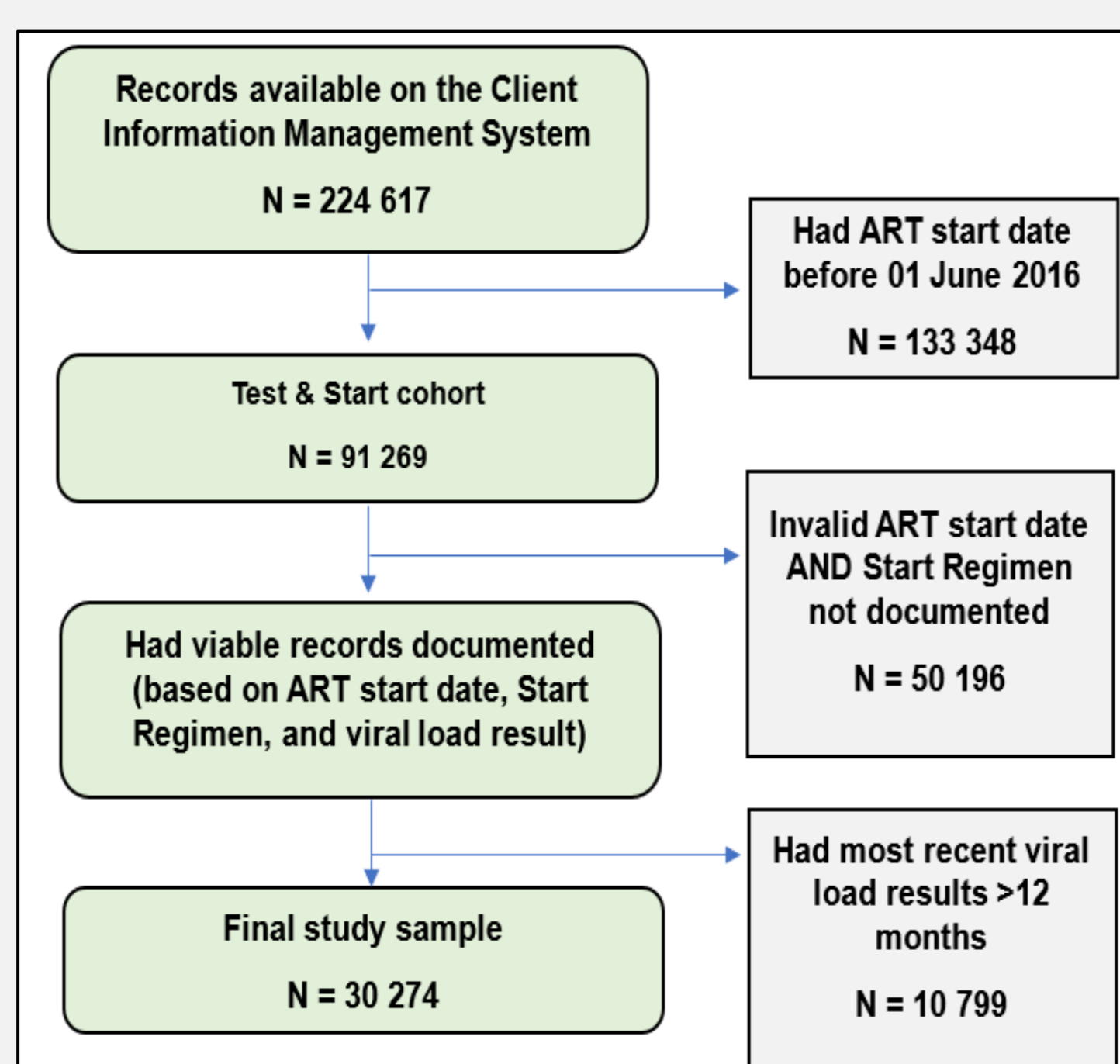


Figure 1: Inclusion/exclusion flow chart

RESULTS

- 30 274 clients were included in the analysis (Figure 1).
- 61% (n=18,350) were females and 68% (n=19,358) of all clients were aged 25-44 years.
- Mean age was higher in those with a suppressed VL (36 SD11 vs 30 SD10)
- Dispensing type: <3 months 17.6%; 3-5 months 44.6%; 6 months 37.2%
- 93% (n=28,124) of all clients were on Dolutegravir-based regimen
- Non-suppression was similar between the regions – Shiselweni 3.6%, Hhohho 3.1%, Lubombo 2.9% and Manzini 2.5%
- 6.8% (16/235) not on DTG vs 2.9% (811/28120) on DTG are not suppressed (p=0.0004)
- 2.3% (n=255) males and 3.3% (n=572) females were unsuppressed (p<0.001)
- Older age 20-29 (OR 0.5, p<0.001), 30-39 (OR 0.46, p<0.0001), 40-49 (OR 0.33, p<0.0001), ≥50 (OR 0.16, p<0.0001) had lower odds of non-suppression compared to those aged <20 years
- Duration on ART 1-3 year (OR 0.46, p<0.001) & 3-5 years (OR 0.33, p<0.001) had lower odds of non-suppression compared to <1 year
- 3-5 months (OR 2.6, p<0.0001) had higher odds of non-suppression vs 6 mths

REFERENCES

The Global Fund. *Eswatini Meets Global 95-95-95 HIV Target* (2020). Available from: <https://www.theglobalfund.org/en/blog/2020-09-14-eswatini-meets-global-95-95-95-hiv-target/> (Accessed October 20, 2023).

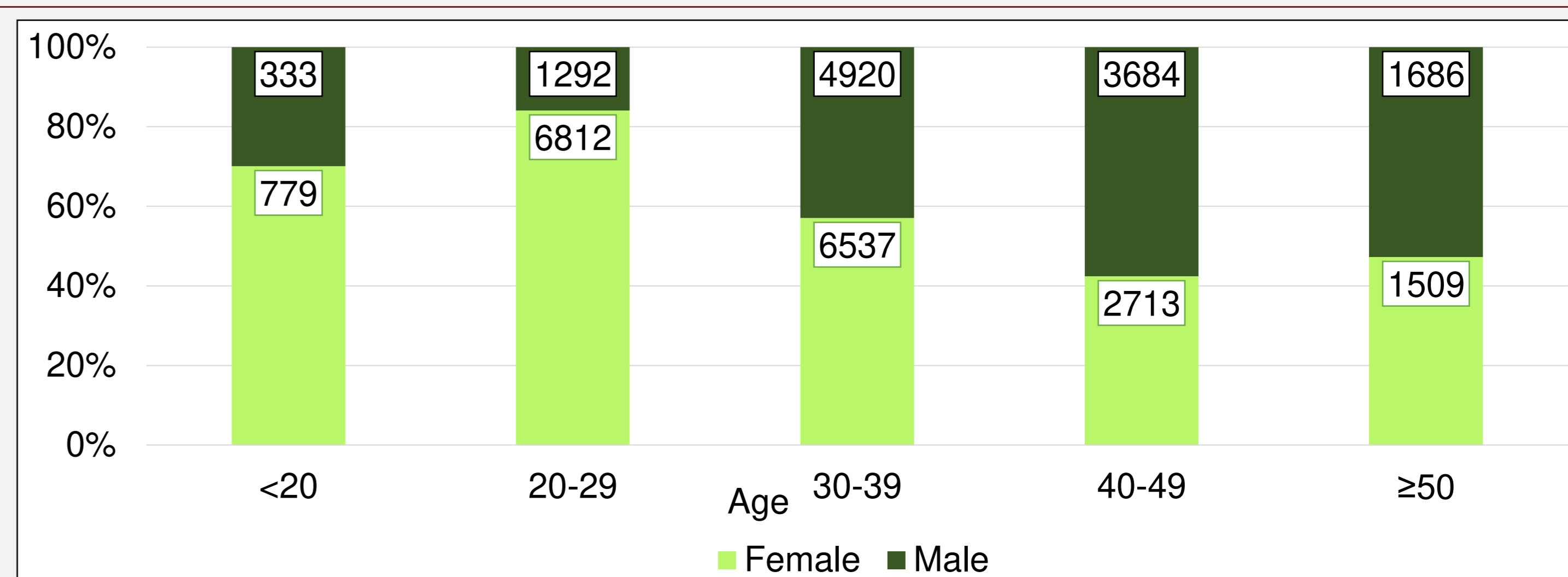


Figure 2: Sociodemographic characteristics of clients

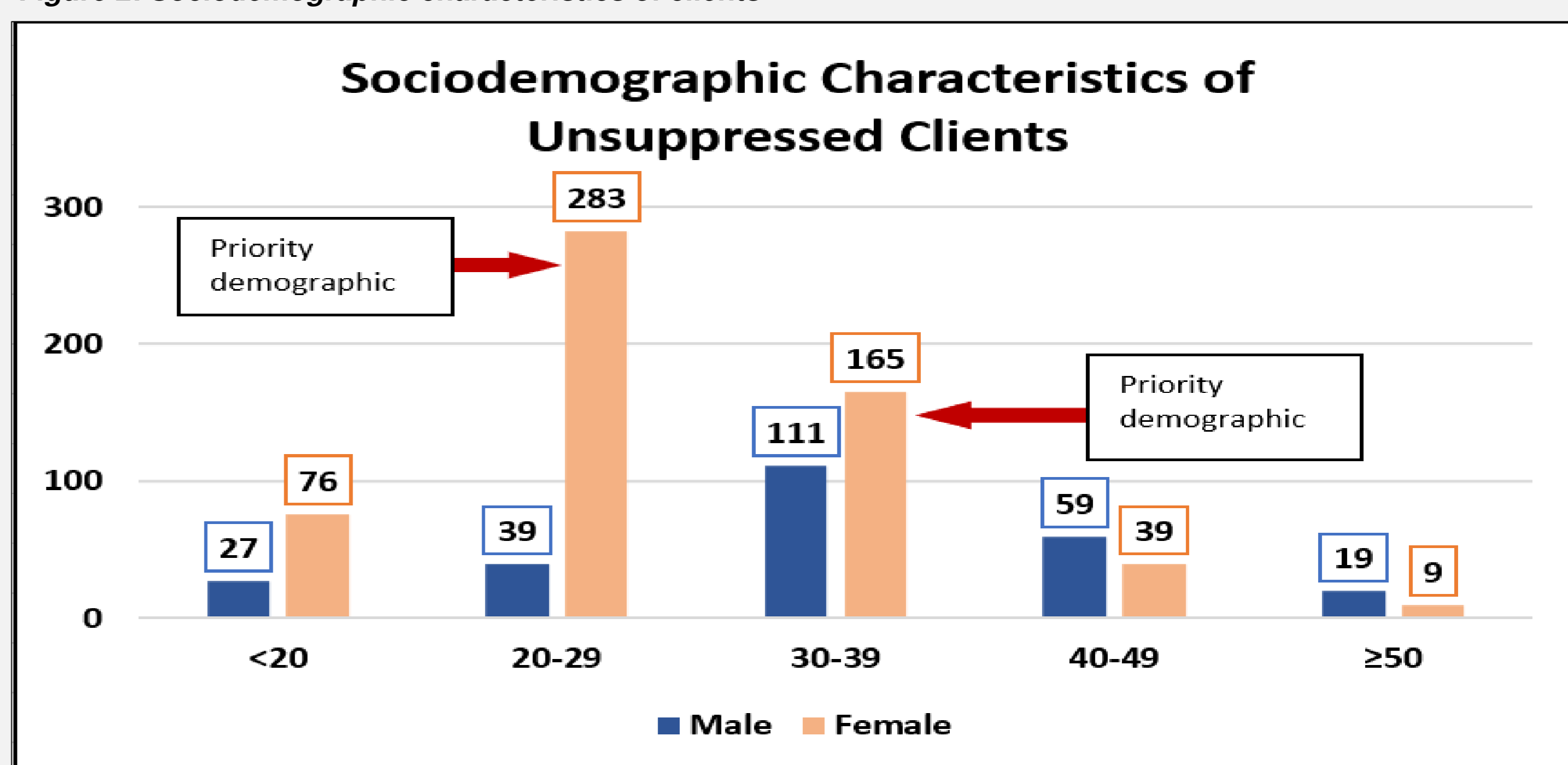


Figure 3: Sociodemographic characteristics of non-suppressed clients

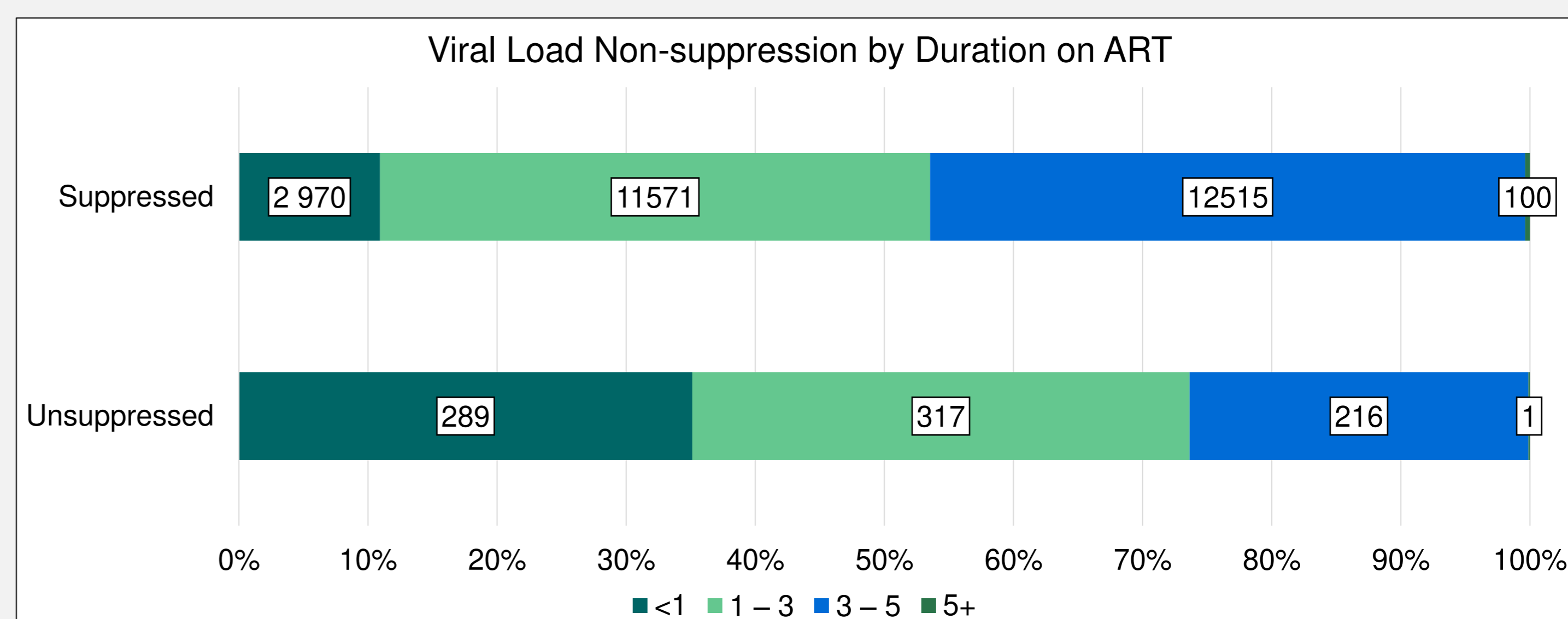


Figure 4: Viral load non-suppression by duration on ART

CONCLUSIONS

- Our findings suggests that:
 - more females are non-suppressed compared to males
 - younger clients and those who have been on ART for shorter periods of time are at greater risk of being unsuppressed.
 - Being on a DTG-based regimen is protective
- Although insignificant in our study, the type of ART regimen and the ART Care Model are factors that should be closely monitored.
- Context specific ART adherence interventions should target young people aged <20 years and females aged 20 – 39 years.
- Clients on non-DTG regimen should be monitored closely or transitioned to DTG-based regimen
- This study provides useful information that should be used to support program implementation.

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