INTRODUCTION: Research suggests the interacting epidemics of substance abuse, violence, HIV/AIDS and related health and psychosocial factors create an excess burden in marginalized communities (the SAVA syndemic). This study examines the relationships between SAVA syndemic-related factors and viral suppression among HIV-positive women of color (WoC) who have received recent HIV care.

METHODS: Data are from the cross-site evaluation of the Health Resources and Services Administration-funded Special Programs of National Significance initiative designed to engage and retain WoC in HIV care. A standardized multi-site baseline survey was employed and matched with chart abstraction data. Women were included if they had a viral load test within 90 days of the baseline survey (implying the receipt of some level of HIV care). Generalized estimating equations were used to explore associations between the psychosocial/health variables on viral suppression (y/n) while accounting for covariates and clustering of women by site. Models included the dichotomous predictor variables frequent mental distress (≥14 days of symptoms/month), substance abuse, binge alcohol use, sexual risk-taking behaviors, and intimate partner violence, controlling for demographic variables.

RESULTS: Data for 563 HIV+ WoC were analyzed and just under half (n = 260) were virally suppressed. Higher values on the SAVA score (0 to 6) were associated with reduced risk of viral suppression; risk ratio (RR) = 0.88, 95% confidence interval (95% CI): 0.81, 0.96. The observed association was slightly attenuated following adjustment for covariates. Results from models including SAVA variable interactions indicate several of the relationships are on the multiplicative scale (P < 0.10).

CONCLUSIONS: SAVA-related factors, in isolation and as part of a syndemic scale, were negatively associated with viral suppression. The presence of multiplicative/synergistic effects suggest that the syndemic approach may be a viable framework for predicting HIV clinical outcomes among this population.