Last updated: May 28, 2025

HIV Risk Reduction Intervention for Transwomen with Intimate Partner Victimization: Statistical Analysis Plan

Descriptive statistics will be used to characterize the study sample and compare baseline differences between intervention conditions. Fidelity to intervention protocols will be assessed using adherence and competence ratings on approximately 5% of all completed sessions, balanced across peer counselors and study. Feasibility will be quantified based on retention and attrition rates, which will be visualized in a CONSORT diagram.

To explore the preliminary efficacy of the intervention, mean values for key study outcomes (i.e., empowerment, IPV frequency, PTSD symptoms, depressive symptoms, and HIV vulnerability) will be plotted across study time points (baseline, post- intervention, 4-month, and 6-month follow-ups). We additionally will test for intervention effects using intent-to-treat models with all available data. Linear mixed models (LMMs) with maximum likelihood estimation will be used for continuous outcomes (e.g., empowerment, PTSD symptoms, and depressive symptoms). Count-based outcomes (e.g., past-2-month frequency of IPV, past-60-day number of HIV-vulnerable sex acts) will be dichotomized to indicate any vs. no occurrence (0 = none, 1 = any instance). These binary outcomes will be modeled using GLMMs with a binomial distribution and logit link function. All models will include fixed effects for condition, time, and condition × time interactions. Any significant baseline demographic differences will be included as covariates in the final models. An unstructured covariance matrix will be used to account for within-participant correlations across time points.