

HealthMPowerment (HMP) Stigma: Digital Intervention Increases Undetectable Viral Load among Young Black and Latinx MSM and Transgender Women living with HIV

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Introduction

- HealthMPowerment Stigma (HMP) is an app-based intervention designed to reduce intersectional stigma and improve HIV-related outcomes among young Black and Latinx men who have sex with men and transgender women who have sex with men (YBLMT).
- Our primary goal was to test whether participants randomized to the HMP app reported improvements in HIV prevention and care continuum outcomes compared with an information-only control arm.

Methods

- We enrolled 750 participants in a 12-month online randomized controlled trial to increase HIV testing and viral suppression. Eligible participants resided in the United States, were 15 to 29 years old, identified as YBLMT, and reported condomless anal sex with men or transgender women.
- Using an HIV-status stratified, randomized trial design, participants were randomized to one of three HMP conditions: information-only control arm (Arm 1), researcher-created network intervention (Arm 2), or peer-referred network intervention (Arm 3).
- We recruited 230 participants living with HIV (PLHIV). 74 (32.2%) were randomized to Arm 1, 75 (32.6%) to Arm 2, and 81 (35.2%) to Arm 3.
- Successful engagement in care was operationalized as maintaining a consistent undetectable viral load (CUVL).

Results

- We observed statistical differences between treatment arms ($\chi^2 = 7.1$, $p = 0.029$) in participants' successful engagement in care:
 - Arm 1: 60.8% achieved CUVL.
 - Arm 2: 80% achieved CUVL.
 - Arm 3: 74.1% achieved CUVL.
- Participants in Arm 2 were 2.5 (95% CI:1.2-5.3) times more likely to achieve a CUVL as compared to Arm 1.
- In exploratory analyses, we combined Arms 2 and 3 and compared them to Arm 1. Participants in the combined intervention arm were 2.1 (95% CI:1.2-3.9) times more likely to achieve CUVL than the control arm.

Likelihood of achieving a consistent undetectable viral load among PLHIV during the 12-month trial

| Comparison Groups | Odds Ratio | 95% CI | p-value |
|---|------------|----------|---------|
| Arm 2 vs Arm 1 | 2.5 | 1.2, 5.3 | 0.011 |
| Arm 3 vs Arm 1 | 1.8 | 0.9, 3.6 | 0.079 |
| Arm 2 vs Arm 3 | 1.4 | 0.6, 2.9 | 0.381 |
| Intervention (Arm 2 and Arm 3) vs Control (Arm 1) | 2.1 | 1.2, 3.9 | 0.012 |

Discussion

- YBLMT living with HIV who had access to the HMP intervention were more likely to achieve and maintain viral suppression over a 12-month period.
- HMP Stigma has the potential to significantly impact the disproportionate burden of HIV among YBLMT in the United States.

HealthMPowerment Stigma (HMP) app significantly improved HIV care outcomes for young Black and Latinx men and transgender women who have sex with men. HMP users were more likely to achieve and maintain viral suppression over 12 months.



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