

HEALTHCARE DISCRIMINATION AS A MEDIATOR EXPLAINING INTERVENTION EFFICACY ON VIRAL SUPPRESSION AMONG PEOPLE WITH HIV WHO INJECT DRUGS: RESULTS FROM THE LINC-II TRIAL

Authors

Pitpitan EV¹, Lunze K², Gnatienco N², Pines HA³, Smith LR⁴, Eaton LA⁵, Patterson T⁴, Raj A⁶, Krupitsky E⁷, Samet JH²

¹School of Social Work, San Diego State University, ²Department of Medicine, Boston University Chobanian & Avedisian School of Medicine, Boston Medical Center, ³School of Public Health, San Diego State University, ⁴School of Medicine, University of California San Diego, ⁵Human Development and Family Sciences, University of Connecticut, ⁶Celia Weatherhead School of Public Health and Tropical Medicine, Tulane University, ⁷Bekhterev National Medical Research Center for Psychiatry and Neurology, Saint Petersburg, Russia

Background

LINC-II was an open-label, two-arm randomized controlled trial evaluating a multicomponent intervention — 10-session strengths-based case management, rapid antiretroviral therapy (ART) initiation, and extended-release naltrexone — for people who inject drugs (PWID) with HIV in St. Petersburg, Russia. The intervention improved viral suppression compared to standard care, and we examine psychosocial mechanisms that may underlie this effect.

Methods

Participants (N=225) were randomized 1:1 to intervention (n=111) or standard care (n=114). We used linear regression to examine whether the intervention reduced four hypothesized psychosocial mediators during follow-up: (1) barriers to medical care, (2) experiences of discrimination in the healthcare setting, (3) HIV stigma, and (4) depressive symptoms. We then used logistic regression to assess whether these variables were associated with 6-month viral suppression (HIV RNA <40 copies/mL), adjusting for study arm.

Results

Compared to the control arm, intervention participants reported lower perceived barriers to care (B= -0.32, p=.029), healthcare discrimination (B= -0.23, p=.037), HIV stigma (B= -.20, p=.014), and depressive symptoms (B= -3.48, p=.038) at follow-up. Only healthcare discrimination reported at 6 months was associated with 6-month viral suppression (AOR=0.92, 95% CI: 0.85-0.98). Since the intervention integrated multiple components, we conducted a post hoc analysis to examine whether receipt of the naltrexone injection was associated with healthcare discrimination at 6 months, adjusting for baseline discrimination. Receipt of naltrexone was associated with lower healthcare discrimination at 6 months (B = -0.36, p < .001).

Conclusions

The LINC-II intervention improved psychosocial determinants of HIV care engagement. Healthcare discrimination emerged as a key predictor of viral suppression and may represent a critical mechanistic pathway. Receipt of medication for opioid use disorder may reduce perceptions of discrimination in the healthcare setting. Integrating rapid ART, medication for addiction treatment, and strategies to reduce healthcare discrimination may be pathways to improving HIV outcomes among PWID.

Disclosure of Interest Statement

The authors have no conflicts of interest to disclose.