

PEER SUPPORT

Good Evidence – Medication Adherence

INTERVENTION DESCRIPTION

Target Population

- HIV-positive clinic patients who are antiretroviral treatment-experienced or -naïve

Goals of Intervention

- Improve adherence to antiretroviral therapy
- Improve clinical outcomes (HIV viral load and CD4 cell count)

Brief Description

The *Peer Support* intervention (i.e., peer support only or peer support with pager messaging) is an individual- and group-level intervention. Clinic patients who are HIV-positive and currently on HAART serve as “peers” who provide medication-related social support through group meetings and weekly individual telephone calls. Group meetings, led by the peers and research staff with graduate training in psychology, are designed to give patients an opportunity to interact face-to-face with their assigned peer, meet other peers and patients, and share experiences with the group. Meeting discussions center on the identification of barriers to HAART adherence, problem-solving strategies to overcome barriers, and other life issues that impact adherence, including HIV status disclosure, dating, substance use, and struggles with mental health issues. Weekly peer phone calls provide more in-depth one-on-one attention and feedback. Peers do not initiate contact with patients outside of the intervention schedule but respond to requests for contact from the patients at their own discretion.

Theoretical Basis

- Social Cognitive Theory
- Social Support Theory

Intervention Duration

- Six twice-monthly 1-hour group meetings and weekly phone calls over 3 months

Intervention Setting

- Public HIV primary care outpatient clinic

Deliverer

- Peer and research staff

Delivery Methods

- Group discussion
- Pager reminder
- Phone calls

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Jane Simoni**, University of Washington, Department of Psychology, Box 351525, Seattle WA 98195-1525.

Email: jsimoni@uw.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS

The original evaluation was conducted in Seattle, Washington between 2003 and 2007.

Key Intervention Effects

- Increased medication adherence

Study Sample

The baseline study sample of 226 men and women is characterized by the following:

- 47% white, 30% black or African American, 12% other or mixed race, 11% Hispanic/Latino
- 76% male, 24% female
- Mean age of 40 years, range: 19-60 years
- 71% completed high school or GED
- 62% treatment-naïve, 38% switching or restarting treatment
- Mean viral load = 25,000, range: 1,250-500,000

Recruitment Settings

Public HIV primary care outpatient clinic

Eligibility Criteria

Men and women were eligible if they were HIV-positive, at least 18 years of age, proficient in English, and initiating or changing at least 2 medications of a HAART regimen.

Assignment Method

Participants (N = 226) were randomly assigned to 1 of 4 groups: peer support only (n = 57), pager messaging only (n = 56), peer support & pager messaging (n = 56), or usual care (n = 57). The intervention group consisted of participants from the peer support only and peer support with pager messaging arms (n = 113). The comparison group consisted of participants from the pager messaging only and usual care arms (n = 113).

Comparison Group

Comparison participants received usual care, which included education regarding HAART and adherence, meetings with their medical provider, referrals to social and mental health services as appropriate, and 3 separate appointments with a pharmacist, nutritionist, and case manager. Participants from the pager messaging comparison arm also received a 2-way pager and a message schedule customized to the participant's daily medication regimen for 3 months. None of the comparison participants received peer support.

Relevant Outcomes Measured and Follow-up Time

- Medication adherence behaviors were measured by 2 methods and assessed at 3, 6, and 9 months post-initiation of intervention:
 - Self-reported 100% medication adherence in the past 7 days defined as missing 0 doses of prescribed medicine.
 - Percentage of prescribed doses taken in the past 7 days recorded by electronic drug monitors (EDM).
- Viral load was measured at 3, 6 and 9 months post-initiation of intervention and was assessed as log₁₀ copies/mL and as undetectable (< 1000 copies/mL).

Participant Retention

- Peer Support Intervention
 - 88% retained at 3 months post-initiation of intervention
 - 87% retained at 6 months post-initiation of intervention
 - 87% retained at 9 months post-initiation of intervention
- No Peer Comparison
 - 93% retained at 3 months post-initiation of intervention
 - 86% retained at 6 months post-initiation of intervention
 - 92% retained at 9 months post-initiation of intervention

Significant Findings

- Participants in the peer support intervention arms (i.e., peer support only and peer support with pager messaging) were significantly more likely than participants in the comparison without peer support to report 100% adherence over time between baseline and 3 months post-initiation of intervention (OR = 2.10, 95% CI = 1.10 to 4.01, $p = 0.02$; missing data imputed).

Considerations

- This study did not meet the best-evidence criteria because the significant effect was at an assessment time point < 6 months post-initiation of intervention. Also the study did not find a significant positive intervention effect on viral load.
- The evidence of intervention effect on medication adherence behaviors was based on the self-report measure only and was not supported by EDM data.
- The significant effect of 100% self-reported medication adherence at the 3-month assessment was not sustained at 6 or 9 months post-initiation of intervention.
- There were no significant intervention effects on CD4 cell counts at any assessment.
- Among intervention participants only, dose response analyses indicated that greater attendance at peer meetings was associated with significant reductions in log₁₀ viral load ($p = .01$) at 9 months post-initiation of intervention, after controlling for baseline adherence.
- Each study participant received an electronic drug monitor (EDM) to use with the most frequently dosed antiretroviral.

REFERENCES AND CONTACT INFORMATION

Simoni, J. M., Huh, D., Frick, P. A., Pearson, C. R., Andrasik, M. P., Dunbar, P. J., & Hooton, T. M. (2009). [Peer support and pager messaging to promote antiretroviral modifying therapy in Seattle: A randomized controlled trial](#). *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 52, 465-473.

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