Perceived Stress as a Mediator Between Self-Efficacy and Depression in Persons Living with HIV
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Introduction

In 2009, the Center for Disease Control and Prevention estimated that 1,106,611 persons are living with HIV (PLH) in the United States, with 34,247 Americans newly diagnosed each year (CDC).

Living with a chronic illness is stressful. Lazarus and Folkman’s Theory of Stress and Coping (1984), define stress as an individual’s appraisal that a taxing environment exceeds their ability to cope effectively (Folkman, 1984).

Stress is a negative psychological state that damages the immune system, and creates physiological dysfunction (Wiedenfeld et al., 1995). Cursing stress can be immunenhancing, making it a critical issue for well-being in PLH (Wiedenfeld et al., 1990).

Almost 10% of Americans suffer from depression (CDC, 2009). Not surprisingly, major depressive disorder rates are almost twice as high in PLH (Kraus et al., 2008), than in the general population, and about 80% of individuals also have a recurrent episode (Lee et al., 2007).

Bandura’s Social Cognitive Theory (1986), states that thought regulates action through a reciprocal interplay between cognitive, behavioral, and environmental factors.

Self-efficacy, or PLHs confidence in their ability to execute psychologically and physiologically enhancing behaviors, facilitates the adaptive management of stress (Wiedenfeld et al., 1990), thus reducing psychological impairment (Scott-Sheldon, Fielder & Kalichman, 2008).

Self-regulatory mechanisms, such as self-efficacy beliefs, determine how resilient PLH will be when persevering through obstacles (such as HIV+ status), and how quickly they recover (Pajares, 2003). Higher self-efficacy is associated with more active efforts to reduce stress, and a higher probability for success (Wiedenfeld et al., 1990).

Theoretical Model

Behavior (Self-Regulation)  
Perceived Stress  
HIV+ Status  
Environmental Factors

Self-efficacy  
Cognition

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Hypotheses

1. Self-efficacy is negatively associated with depression.
2. Self-efficacy is negatively associated with perceived stress.
3. Perceived stress is positively associated with depression.
4. Stress mediates the relationship between self-efficacy and depression.

Procedure

Project F orgave received Institutional Review Board approval. We recruited participants using flyers posted outside HIV/AIDS service organizations in the Dallas-Fort Worth metroplex. Only individuals who were 18 or over, and HIV+ were asked to complete the survey. Interested consent was obtained and received from all participants before beginning. Data was collected on a computer using the Questionnaire Design Studio (QDS) computer program. Research incentives of 15 dollars were given to all participants for their time.

Measures

Self-Efficacy for Managing Chronic Disease Scale (Lorig et al., 1998)
-6 item self-report measure
*Items were on a 5 point Likert-type scale ranging from 1 (not at all confident) to 5 (totally confident).
*Higher scores reflected higher self-efficacy.
*Good internal consistency/reliability (α = .87)
*“How confident are you that you can keep the physical discomfort or pain of your disease from interfering with the things you want to do?”

Data were collected via self-report. A cross-sectional, correlational design means causality cannot be inferred. Generalizability is limited due to a single sample in one geographical location.

Discussion

Results from our mediation analysis suggest a significant negative relationship between self-efficacy, stress, and depression. Stress reactions are low when PLH manage stressors in their perceived range of coping, but once an encounter exceeds this range, it is deemed stressful.

We recommend future research include other stressors, such as discrimination, and complete different activities needed to maintain health care. Our study emphasizes the relevance of self-efficacy in maintaining overall health. PLH must persevere through both psychological and physiological stress reactions. Therefore, managing the two is essential to long term care. Confidence in PLH’s ability to manage stress efficiently may decrease depression. Clinicians should be aware that personal efficacy beliefs may impact long term health in PLH.

References and Acknowledgements

See handout