

A Mobile Video Information Provider (VIP) for Dissemination of Evidence from Patient-Centered Outcomes Research for Improving Symptom Management

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1. Research objective

The goal of this study was to facilitate the dissemination of an evidence based manual using mobile health (mHealth) technology to improve self-management of adverse symptoms in persons living with HIV/AIDS (PLWH).

2. Study design

We used participatory design methods to incorporate a paper-based HIV symptom management manual into a mHealth application for use in patient self-care. The mHealth application, mobile Video Information Provider (mVIP), incorporated 151 self-care strategies for 13 symptoms that are frequently experienced by PLWH. Following the development of mVIP, we tested the application in a randomized feasibility trial. Linear regression, controlling for age, sex, and race, was used to assess the difference in both symptom experience and average symptom score from week 1 to week 12.

3. Principal findings

Our study sample included 80 PLWH, who were all smartphone owners and living in the New York City metropolitan area. At week 1, fatigue was the most frequently (76%) reported symptom followed by difficulty sleeping which was reported by 75% of participants. Vomiting (19%), weight loss (25%), and dizziness (25%) were the least frequently reported symptoms. At twelve weeks, the intervention group reported improvement in symptom frequency for 12 of 13 symptoms and symptom intensity for all 13 symptoms. Improvement in symptom experience was significant for depression ($\alpha=.05$), and the improvement in symptom intensity was significant for weight loss ($\alpha=.05$).

4. Conclusions

We found preliminary evidence to support the use of a mobile based self-management tool to improve the symptom experience of PLWH

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