Published in final edited form as:

Patient Educ Couns. 2011 April ; 83(1): 139–141. doi:10.1016/j.pec.2010.06.036.

Technicalities: Getting and staying connected to people living with HIV/AIDS in the southern United States

Leah Farrell Carnahan^{*}, Stefania Fabbri, and Karen Ingersoll

Department of Psychiatry and Neurobehavioral Sciences, University of Virginia, Charlottesville, USA

Dear Sirs,

We read with interest the article by Konkle-Parker, Erlen, and Dubbert in which the authors describe feasibility of conducting a remote telephone-delivered HIV medication adherence intervention study in the southern United States [1]. We are most interested in Konkle-Parker et al.'s discussion of the feasibility of using telephones as a format for intervention delivery. In this study, the two intervention sessions conducted in-clinic were more often completed than the six intervention sessions by telephone. Participants were often unreachable for their telephone intervention sessions despite researchers' request that participants provide three telephone numbers and the fact that researchers made up to nine call attempts and sent letters in attempt to complete the scheduled telephone intervention sessions.

Konkle-Parker et al. posited reasons for difficulty making telephone contact with participants included participants' inconsistent telephone access and providing incentives for in-clinic interventions but not telephone interventions. It is certainly likely that incentivizing participants would have led to a greater number of telephone intervention contacts and Konkle-Parker et al. suggest future researchers do this. Konkle-Parker et al. also suggest future researchers take into consideration participants' inconsistent access to telephones, a poignant fact of life for many rural, poor patients living with HIV.

It is this point that we address in this letter—the issue of access to telephones among southern people living with HIV/AIDS. As Konkle-Parker et al. noted, the HIV/AIDS epidemic disproportionately affects people living in the southern United States [2,3]. In our research studies, it has also been our experience that inconsistent access to telephones, as well as inadequate transportation associated with pervasive poverty and geographic dispersal, has been a barrier to scheduling, confirming, and conducting in-clinic intervention sessions. So, like Konkle-Parker et al., we are currently developing ways to reach this mostly rural and impoverished southern sub-group with efficacious adherence interventions that could be provided remotely.

Studies have found technology-based HIV medication adherence interventions are promising including those using: telephones [4], the Internet [4], and videos delivered on personal digital assistants [5] and traditional television/video players [6,7]. Further, the National Institutes of Health is advocating for more studies testing the use and integration of technology into HIV medication adherence promotion interventions [8]. However, most technology-based intervention studies have provided the technological devices (such as mobile telephones) to the research participants, thus eliminating the problem of access. There is no doubt that these approaches are highly innovative but may not be sustainable or taken to scale in clinical programs after research projects end.

We propose that using technological formats that the target population already has and uses may be more practical. To this end, we conducted a formative, pragmatic, mailed survey assessment of: demographic characteristics, access to, and use of specific technologies we are considering using (e.g., mobile telephones, landline telephones, televisions with video players). Not surprisingly, as Konkle-Parker et al. describe, our respondents reported inconsistent access to and use of mobile and landline telephones. In contrast, most had consistent access to and used televisions with DVD players, or less commonly, VCRs. Consistent with the only published study about technology access and use among people living with HIV/AIDS in the United States [9], we found the employed respondents, with at least some college, and income over \$10,000 per year were significantly more likely than all others to have access to and use both landline and mobile telephones; however, almost all respondents reported having access to a television with a video player. It is understandable that respondents with the resources to pay monthly bills would be able to maintain access to and use technologies, such as telephones, requiring payment of monthly fees. In comparison, access to and use of televisions with video players requires purchase costs rather than ongoing bills. Our findings suggest we could feasibly reach this group with a flexible combination of mailed DVDs and contact via mobile and or landline telephones. But, clearly, flexible procedures for telephone contact are needed to account for inconsistent telephone access associated with the ability to pay monthly bills. Additionally, interventions should be prepared on several video formats (e.g. VHS tapes or DVDs) to fit the type of video player each participant has.

We believe using technologies that most people in the target population already have and use, as Konkle-Parker et al. did appears to be a good use of research dollars and importantly, is more likely to be sustainable than providing devices for each participant in a research study or patient in a clinic. Though, to achieve an efficacious “dose” of remote-delivered interventions, such as the one described in Konkle-Parker et al., research participants must have ongoing access to the format. Inadequate access to telephones while in a telephone-delivered intervention study is like inadequate access to transportation while in a clinic-based intervention. We recommend that other researchers investigate access to high and low technology devices as a preliminary formative research step. By doing so, we will be able to anticipate and employ the most appropriate technologies that southern people living with HIV/AIDS in rural catchment areas already have and use, leading to more rapid testing of sustainable interventions that could be taken to scale if found efficacious.

Acknowledgments

Funding source: This research was supported by a National Institutes of Health grant R01 DA01655 to Dr. Karen Ingersoll.

References

1. Konkle-Parker DJ, Erlen JA, Dubbert PM. Lessons learned from an HIV adherence pilot study in the deep south. *Patient Educ Couns*. 2010 Jan;78:91–96. [PubMed: 19560307]
2. HIV in the United States: an overview [homepage on the Internet]. 2010. Available from: http://www.cdc.gov/hiv/topics/surveillance/resources/factsheets/us_overview.htm [14.05.10].
3. Reif S, Geonnotti KL, Whetten K. HIV infection and AIDS in the deep south. *Am J Public Health*. 2006 Jun;96:970–973. [PubMed: 16670228]
4. Ybarra ML, Bull SS. Current trends in Internet- and cell phone-based HIV prevention and intervention programs. *Curr HIV/AIDS Rep*. 2007 Dec;4:201–207. [PubMed: 18366952]
5. Brock TP, Smith SR. Using digital videos displayed on personal digital assistants (PDAs) to enhance patient education in clinical settings. *Int J Med Inform*. 2007 Nov-Dec;76:829–835. [PubMed: 17113345]
6. Sampaio-Sa M, Page-Shafer K, Bangsberg DR, Evans J, Dourado Mde L, Teixeira C, et al. 100% adherence study: educational workshops vs. video sessions to improve adherence among ART-naïve patients in Salvador, Brazil. *AIDS Behav*. 2008 Jul; 12(Suppl. 4):S54–S62. [PubMed: 18512141]
7. Purcell DW, Latka MH, Metsch LR, Latkin CA, Gomez CA, Mizuno Y, et al. Results from a randomized controlled trial of a peer-mentoring intervention to reduce HIV transmission and increase access to care and adherence to HIV medications among HIV-seropositive injection drug users. *J Acquir Immune Defic Syndr*. 2007 Nov; 46(Suppl. 2):S35–S47. [PubMed: 18089983]
8. National Institute on Drug Abuse. Conference: The intersection of technology, HAART adherence, and drug abuse treatment; 2010.
9. Shacham E, Stamm K, Overton ET. Can you hear me now? Limited use of technology among an urban HIV-infected cohort. *AIDS Care*. 2009 Aug;21:1000–1006. [PubMed: 20024756]