Patient Education and Counseling xxx (2018) xxx–xxx

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

Adaptation and delivery of a motivational interviewing-based counseling program for persons acutely infected with HIV in Malawi: Implementation and lessons learned

Catherine A. Grodensky[a,b,c], Carol E. Golin[b,c,d,*], Allison P. Pack[c,d], Audrey Pettifor[f], Michele Demers[g], Cecelia Massa[e], Gift Kamanga[e], Kevin McKenna[h,i], Amy Corneli[h,i]

[a] Department of Medicine, Institute of Global Health and Infectious Disease, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
[b] Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
[c] Center for AIDS Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
[d] Department of Health Behavior, Gillings School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
[e] UNC Project Lilongwe, Lilongwe, Malawi
[f] Department of Epidemiology, Gillings School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
[g] Center for Sexuality and Health Disparities, University of Michigan, Ann Arbor, MI, United States
[h] Department of Social, Behavioral, and Health Sciences, FHI 360, Durham, NC, United States[1]
[i] Department of Population Health Sciences, Duke University School of Medicine, Durham, NC, United States

ARTICLE INFO

Article history:
Received 15 September 2017
Received in revised form 30 January 2018
Accepted 5 February 2018

Keywords:
HIV
Acute infection
Motivational interviewing
Sub-Saharan Africa
Counseling
Adaptation

ABSTRACT

Objective: Individuals diagnosed with acute HIV infection (AHI) are highly infectious and require immediate HIV prevention efforts to minimize their likelihood of transmitting HIV to others. We sought to explore the relevance of Motivational Interviewing (MI), an evidence-based counseling method, for Malawians with AHI.
Methods: We designed a MI-based intervention called "Uphungu Wanga" to support risk reduction efforts immediately after AHI diagnosis. It was adapted from Options and SafeTalk interventions, and refined through formative research and input from Malawian team members and training participants. We conducted qualitative interviews with counselors and participants to explore the relevance of MI in this context.
Results: Intervention adaptation required careful consideration of Malawian cultural context and the needs of people with AHI. Uphungu Wanga's content was relevant and key MI techniques of topic selection and goal setting were viewed positively by counselors and participants. However, rating levels of importance and confidence did not appear to help participants to explore behavior change as intended.
Conclusion: Uphungu Wanga may have provided some added benefits beyond "brief education" standard of care counseling for Malawians with AHI.
Practice implications: MI techniques of topic selection and goal setting may enhance prevention education and counseling for Malawians with AHI.

1. Introduction

Worldwide, approximately 2.5 million individuals become newly infected with the HIV-1 virus each year, with the largest burden of disease occurring in sub-Saharan Africa [1]. Newly infected individuals experience a period of acute HIV infection (AHI), a highly contagious phase that occurs before their body has mounted HIV antibodies. This period generally lasts approximately two months post-viral acquisition [2–5]. Symptoms during this acute phase are non-specific and time-limited, and although the concentration of HIV in blood and genital secretions is extremely high, standard HIV antibody tests show negative or indeterminate results due to the lack of an antibody response. Individuals with AHI are usually unaware they have been infected and often continue the risk behaviors by which they acquired HIV; therefore, they are likely to pass it on to others [6]. Indeed, the probability of transmission among those with AHI is estimated to be as much as 26 times that of chronically infected persons [7].

Previous studies have shown that when individuals are informed of their HIV-positive status, they are likely to reduce

* Corresponding author at: 310 Rosenau Hall CB #7440 Chapel Hill, NC 27599 USA.
E-mail address: carol_golin@med.unc.edu (C.E. Golin).
[1] At time of study.

https://doi.org/10.1016/j.pec.2018.02.004
0738-3991/

sexual risk behaviors [8–11], and although data are limited, similar trends appear to exist for individuals with AHI [5,12–14]. In a mixed methods study of acutely infected individuals in Malawi (n = 37), participants also described several significant barriers to abstinence and condom use, and some reported continuing to have experiences with unprotected sex [14]. The high transmission risk that AHI poses, combined with the development of new methods for identifying individuals with AHI [3,15], presents a critical opportunity for HIV prevention, particularly in sub-Saharan Africa where HIV prevalence and incidence remain high.

Motivational Interviewing (MI) is an evidence-based approach to behavior change that holds promise for use in behavioral interventions addressing risk behavior among individuals with AHI. MI is a participant-centered, directive counseling style designed to elicit and enhance a participant's sense of importance and confidence for behavior change [16,17]. It employs active techniques, such as open-ended questions, reflective listening, and "elicit-provide-elicit" to encourage participants to explore personalized strategies for behavior change; in so doing, the MI counselor seeks to avoid counseling in which participants become passive recipients of knowledge without contributing their own ideas [18]. MI-based interventions have effectively reduced HIV risk behavior and improved medication adherence among individuals living with HIV in the US and in Europe [19–23], and been used for those same behaviors among individuals living with HIV in several sub-Saharan African settings [24–30]. Many studies testing MI-based interventions in African settings, however, reported significant implementation challenges, including lack of fidelity [26], poor session attendance [29], inadequate counselor MI proficiency [30], and a lack of change in measures of counselors' empathy and 'MI spirit' [27]. Moreover, none of these studies specifically targeted individuals with AHI.

In 2008, as part of the HIV Prevention Trials Network (HPTN) 062 pilot randomized controlled trial (RCT) [31,32], we integrated and adapted two existing evidence-based interventions that utilized MI, Options [33–35] and SafeTalk [21], to create Uphungu Wanga (or "My Counseling") to address secondary HIV prevention among individuals with AHI in Malawi. Principles from the Information-Motivation-Behavior Model (IMB) were used to guide its adaptation and implementation. Formative research from CHAVI 001, a clinical trial that examined host immune response to AHI, was also used to inform Uphungu Wanga [14]. From February 2010 to December 2011, we implemented Uphungu Wanga and tested its feasibility and acceptability in a two-arm randomized controlled trial among individuals with AHI enrolled in CHAVI 001 at a clinical site in Lilongwe. Results from the primary and secondary analyses have been reported elsewhere [31,32]. In brief, although the overall MI intervention was feasible and acceptable, most participants in both arms reported a sustained reduction in risky sexual behaviors after diagnosis [31,32].

HPTN 062 represents the first time MI has been modified for individuals with AHI and implemented in Malawi. In this manuscript, we describe 1) how Options and SafeTalk interventions were adapted for Uphungu Wanga's population and setting, and 2) the relevance and feasibility of the three key aspects of MI when modified in Uphungu Wanga—topic selection and flexibility, rating importance and confidence, and goal setting.

2. Methods

2.1. HPTN 062

A detailed description of the purpose and data collection activities for HPTN 062 can be found elsewhere [31,32]. Briefly, HPTN 062 was conducted in partnership with the Lilongwe, Malawi site of the Center for HIV/AIDS Vaccine Immunology 001 study [14]. Participants diagnosed with AHI at a sexually transmitted infection (STI) clinic located in the Kamuzu Central Hospital were enrolled in CHAVI 001 and then invited to participate in the HPTN 062 study.

The final HPTN 062 sample included 27 participants who were randomized 1:1 to receive either "brief education" counseling or the "brief education" counseling and the Uphungu Wanga intervention. Participants who were randomized to the Uphungu Wanga intervention arm received the brief educational counseling (weekly at weeks 1–4, then again at 8, 12, 16, and 24 weeks), as well as the MI counseling on the day of AHI diagnosis, three days after diagnosis, and at weeks 1, 2 and 8 after diagnosis. All participants were followed for 24 weeks of data collection. The Protection of Human Subjects Committee (PHSC) at FHI 360 and the National Health Science Research Committee in Malawi approved the study.

2.2. Development of Uphungu Wanga

We adapted Uphungu Wanga from two MI interventions, Options and SafeTalk. Options is an MI-based intervention originally developed for physician delivery during regularly scheduled HIV care appointments in U.S. clinical settings, and later tested and delivered in HIV clinical sites in Kwazulu Natal, South Africa [33]. SafeTalk is a multi-component MI-based intervention provided in four monthly sessions by Master's-level counselors in U.S. clinical settings for individuals with chronic HIV infection [21]. Session guides for SafeTalk provide sample language illustrating key points to discuss with participants, but, to preserve counselor responsiveness to clients, were not meant to be used verbatim. Both interventions were designed to reduce risky sexual behaviors among HIV-positive individuals.

Together with two MI experts from the University of North Carolina at Chapel Hill Center for AIDS Research, the U.S. study team initially adapted counseling session guides from Options and SafeTalk to create standardized guides for the Uphungu Wanga program. The draft intervention guides were then revised in collaboration with Malawian members of the HPTN 062 study team to: 1) address specific needs of participants acutely infected with HIV and 2) improve cultural competence and ensure feasibility for the Malawian setting. Key components of each source intervention and a description of how they were adapted for use in Uphungu Wanga are listed in Table 1.

Several key changes were made to account for the AHI and Malawian context. First, facilitator expertise was different. Compared to Options and SafeTalk, which respectively relied on physicians [33] and Master's-level counselors [21] to deliver MI, Uphungu Wanga was adapted to be delivered by experienced Malawian counselors. The counselors had certificates of education training in HIV voluntary counseling and testing, supplemental HIV training from the Ministry of Health, and intensive training and practice on MI specifically, but they did not have advanced degrees as in Options and SafeTalk.

Second, the short duration and high infectiousness of the AHI period influenced the timing and duration of Uphungu Wanga counseling sessions, the information covered in each session, and the degree of flexibility participants had in choosing their session topics and behavior change goals. Compared to a longer duration in Options and SafeTalk, Uphungu Wanga was designed to occur in a more condensed time frame to coincide with the AHI period, including five sessions spanning the first eight weeks after AHI diagnosis. Options and SafeTalk interventions include some flexibility in topic selection, based on the client-centered nature of MI. However, for the first three sessions of Uphungu Wanga, topics were pre-specified. We choose this approach so we could focus on topics critical to AHI given the period to intervene is very short. Yet, to follow the client-centered nature of MI, Uphungu

Please cite this article in press as: C.A. Grodensky, et al., Adaptation and delivery of a motivational interviewing-based counseling program for persons acutely infected with HIV in Malawi: Implementation and lessons learned, Patient Educ Couns (2018), https://doi.org/10.1016/j.pec.2018.02.004