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Motivational Interviewing among HIV Health Care Providers: Challenges and opportunities to enhance engagement and retention in care in Buenos Aires, Argentina

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Abstract

Providers' response to Motivational Interviewing (MI) to improve engagement and retention in care among challenging patients with HIV in Argentina were evaluated. 12 HIV care physicians participated and video recordings pre- and post-MI training were obtained. One week post-training 11/12 participants were committed to using MI strategies during consult session. 9/12 participants demonstrated appropriate utilization of MI techniques and increased adherence focused discussion and care (t = 3.59, p = .006). MI appears to be a viable strategy to enhance engagement and retention in challenging HIV patients.

Introduction

Since the development of combination antiretroviral therapy (cART) to inhibit viral replication (Crum, et al., 2006), individuals living with human immunodeficiency virus (HIV) infection have the opportunity to control their illness and live longer, healthier, and productive lives. However, in order to obtain the maximum benefit of cART and to prevent the development of drug-resistant viral strains, medication adherence needs to be strictly maintained (Patterson et al., 2000). Unfortunately, not all HIV-infected patients achieve the high levels of adherence necessary to maintain treatment success. Adherence to medication is a complex issue that involves multiple factors such as patient-related factors (health beliefs, depression, substance abuse, literacy, stigma, non-disclosure of HIV status), (Parsons, JT et al., 2007) and provider-related factors (communication skills, length of appointments) (Rivero-Mendez, et al., 2010; Langebeek, N et al., 2014). Other important factors include structural, economic and environmental factors such as health care facility accessibility, clinic hours, transportation, income and employment (e.g., Serration et al., 2012).
To overcome barriers to engagement, adherence and retention in care, interventions have been developed to increase patients’ motivation to engage in health behavior. Motivational interviewing (MI; Miller & Rollnick, 1983) is an example of an effective counseling strategy designed to promote health behavior and achieve optimal health outcomes that has been utilized with individuals with HIV to reduce risk behavior, substance abuse and to enhance medication adherence (e.g., Parsons, Rosof, Punzalan, & Di Maria, 2005; Lavoie et al., 2011; Konkle-Parker et al., 2012, Hill et al., 2012).

MI is a collaborative, person-centered form of guiding to elicit and strengthen motivation for change, as behavior change is not the sole responsibility of the patient, but a shared endeavor. MI involves a client-centered approach to consultation whereby the patient presents reasons for change while the facilitator provides support. MI techniques are used to identify ambivalence within the individual to facilitate behavior change from the patient's perspective (Burke, Arkowitz, & Menchola, 2003), eliciting barriers to adherence and assisting in overcoming those barriers. Studies suggest that health care providers using this method of interaction can often work wonders, encouraging patients with chronic conditions to follow their medication regimen, reduce unhealthy habits, and to take constructive action on their own behalf (e.g., Colby et al., 2005; Ogedegbe et al., 2008). Physicians utilizing MI engage with patients in an empathic, nonjudgmental manner and pose simple, but strategic questions to motivate change; when patients resist change, the physician “rolls” with it, instead of fighting against it. If and when the patient is ready to initiate a change, the physician supports their decision (Miller & Rollnick, 2002).

The demand for professional training in MI has grown in recent years (e.g., Konkle-Parker et al., 2012), and most MI training for health care practitioners has been provided in the form of workshops. Such workshops typically include an introduction of the philosophy and principles of MI followed by demonstration of the method, and guided practice in learning the skills. The median length of training for health care providers is variable, but the mean time has been 9 hours (Söderlund et al., 2010). The training elements typically include the basic MI skills, the MI spirit, recognizing and reinforcing change talk, and rolling with resistance.

The HIV/AIDS national program in Argentina provides universal access to antiretroviral (ARV) therapy for the estimated 110,000 HIV positive patients (HIV prevalence 0.4% among adults). Despite this universal access program, around 30% of those on ARV treatment do not achieve an undetectable viral load (VL) and 25% have poor appointment attendance, and inadequate engagement and retention in health care services (National Ministry of Health, 2013). While MI has been used in Spanish-speaking populations for chronic conditions as a client-centered strategy (Freixa, 2000; García Pérez et al., 2004) MI has not previously been utilized in Argentina among physicians providing HIV health care to non-adherent and disengaged patients. This study examined the impact of MI training on uptake and utilization of MI strategies and adherence targeted strategies during routine consultations by private and public HIV health care physicians in Buenos Aires, Argentina. In addition, we examined providers’ perceptions of the feasibility and acceptability of using MI to improve patient engagement and retention in care. We theorized that MI would be an
acceptable and feasible strategy for Argentine health care providers in clinical settings in both public and private health care.

**Methods**

This article presents data that was derived from a larger study conducted in Buenos Aires, COPA; data presented was collected from April, 2013 to December, 2013. Prior to study onset, IRB and ethics committee approval was obtained from the US site and the two Buenos Aires sites. HIV health care physicians at both sites were invited to participate in the study, and twelve (n = 6 each site) were enrolled. Following provision of informed consent, physicians provided a video recording of a routine medical consultation with a patient who had provided consent for video recording. Providers then participated in a motivational interviewing workshop, completed an assessment and provided a second video recording of a patient consultation and after 2 weeks, provided a second acceptability and feasibility assessment (see Figure 1).

**Assessments**

Baseline video recordings were made by participants of one of their routine medical consultations with an HIV positive non-adherent patient. All videos were reviewed and coded by the US team for the use of MI techniques targeting adherence and engagement in care. In addition, videos were scored using a standard of care (SOC) checklist. The video recordings provided the foundation for the development of the workshop on MI techniques, and enabled the team to tailor to the workshop to the needs of the local physicians.

Follow-up videos were made by participants one to two months following the workshop training. Participants videotaped a new session with a different HIV positive non-adherent patient. Videos were coded for MI techniques and scored against the SOC Checklist.

A Standard of Care Quality Checklist (SOC) (De Bruin et al., 2009) was administered to the 12 physicians pre and post MI video recordings (see Table 3). The SOC Quality checklist contains 34 items (“Yes, No, Don’t Know”) designed to assess the existing standard of care delivered at the site. Clinicians in the clinical setting typically utilize techniques to increase knowledge about disease and treatment options, persuasive communication about treatment adherence and collaborative problem solving to deal with anticipated problems. Thirty-four items were coded from the videos and scored to indicate whether the standard care item was applied during the video. The resulting five subscales, education systematically provided (e.g., HIV, treatment, side effects information, range = 0-9), method of provision of information (e.g., charts, verbal, range = 0-3), systematic planning of medication intake (tailoring, daily dosing, range = 0 −12), standard support in consecutive visits (adherence problem solving, feedback on lab results, range = 0-6), general support services (telephone support, deliveries, referrals, range = 0-5) and other types of standard care (e.g., adherence monitoring, feedback, self-monitoring, range = 0-1).

A Feasibility and Acceptability of MI questionnaire of 9 items (see Table 2, English translation) was completed immediately after finishing the workshop sessions. The post-workshop questionnaire was designed to collect information about the acceptability of the
MI workshop, MI principles and willingness to include MI with non-adherent or difficult patients. Participants were asked to score the questionnaire statement using a Likert scale of 1 to 7, 1, “strongly disagree” to 7, “strongly agree.” A similar second questionnaire of 6 items was completed 1-2 weeks post workshop to evaluate the acceptability and feasibility of using MI techniques with their difficult patients (see Table 3, English translation).

Training the trainers

The initial training for MI trainers was designed to provide experienced HIV clinical psychologists and psychiatrists with an overview of MI techniques. The incorporation of MI into clinical practice was based on the principles of collaboration, evocation, and honoring the patient’s autonomy described by Rollnick and Miller (2008). The training began as review and conference call discussion of the training manual among the team members. The trainer workshop was then conducted in the Buenos Aires clinics, as two 3.5-hour sessions, and included additional revision as required.

Health care provider workshop

Four HIV/AIDS experienced clinical psychologists working on public hospital (2) and private organization (2) provided the training. The health care provider workshop was two half-day sessions. The first session was focused on the principles of MI and incorporation of MI techniques into regular patient visits. Providers were taught to use patients’ motivation, energy and commitment to elicit motivation to change rather than imposing it. A sample video produced by the team, illustrating a session utilizing MI techniques between a health care physician and a HIV positive patient, was presented in segments. Each segment presented different MI techniques, including open-ended questions, active listening and summaries, recognizing ambivalence, eliciting change talk. In addition, segments include illustration of the spirit of MI, using patients’ desires, abilities, reasons and needs for change to honor the patients’ autonomy. At the conclusion of the first session, providers were asked to take home their own pre-workshop video recording, and to view and evaluate the videos, considering the feasibility of introducing MI techniques into their typical consultations.

During the second session, participants shared briefly their experiences with viewing their own consultations, and their opinions with regard to incorporating MI into their consults. Participants were grouped in pairs and practiced the MI techniques reviewed in Session 1. Participants interchanged roles several times, either acting as a non-adherent HIV patient or as a physician, to incorporate the MI skills into their existing techniques.

Results

Participants

Infectious Diseases (ID) physicians (n = 12) specialized in HIV care from public and private practice participated in the workshop intervention. All participants reported that MI was a technique well suited to working with difficult patients, and that MI would be helpful for understanding how to guide patients rather than imposing, to use open ended questions rather than closed questions, how to practice active listening and summarize, recognize ambivalence towards change and to evoke commitment from patients. In addition,
participants felt comfortable using the techniques during the practice session and expressed the willingness to use MI with their difficult patients. However, only 7 of the 12 participants thought MI would fit in their practice or would have enough time to use the techniques in their time schedule.

At 2 weeks post workshop intervention, of the 12 participants, 11 responded to the questionnaire. Ten participants agreed or strongly endorsed using MI skills. Nine participants felt comfortable using MI skills with their difficult patients, practicing active listening and summarizing, used empowerment to evoke commitment and perceived having enough time using MI during their regular visit. Two participants reported they were not able to use guiding patient skills; one participant was unable to use empowerment to evoke commitment, one participant was not comfortable using MI skills and one participant stated they did not have enough time to include MI during a routine visit.

**Video coding**

Nine participants illustrated appropriate utilization of at least one of the MI techniques following training. The use of open-ended questions and active listening illustrated by all participants and the application of short summaries and positive feedback were observed in 6 of the nine recordings. Six participants were able to introduce teaching and guiding more than directing, four participants gave positive feedback, and empowerment and teach back was practiced once. At the end of the consult, two participants used the MI scales technique as a method of quantifying patient willingness to be adherent. The remaining two participants did not apply MI techniques and one participant’s video recording was unreadable.

**Standard of care (SOC)**

At baseline, participants provided an average of one element of each of the standard of care subscales (education mean = 1.6, type of education provided mean = 1.0, systematic planning mean = 1.6, support in consecutive visits mean = 1.1, and general support mean = 0. At post-intervention workshop follow-up, pairwise comparison indicated that the number of elements of the standard of care provided significantly increased for the education and support in consecutive visits subscales (mean = 3.6, t = 3.59, \( p = .006 \), mean = 3.4, t = 3.29, \( p = .009 \)), and showed an increasing trend in systematic planning (mean = 2.9), and general support (mean = 0.6) subscales. For example, after MI training, physicians inquired about possible difficulties with adherence, determined the underlying causes of non-adherence and patient and provider generated solutions, and the providers inquired about side effects and gave feedback about effectiveness of the treatment using viral load and CD4 results.

**Discussion**

This study examined the uptake of MI techniques following a training workshop designed for routine physician consultations with challenging patients in Buenos Aires, Argentina. Overall, MI was well received among HIV health care providers and reactions were generally favorable and consistent with results of other studies (Boers S, et.al, 2005).
hypothesized, MI was found to be an acceptable and feasible strategy for Argentine health care providers in clinical settings in both public and private health care.

This is the first time that MI has been introduced among HIV physicians at public and private facilities in Buenos Aires, Argentina. Previous MI research has shown that workshops may produce some immediate gains in MI competence (Carpenter KM, et al, 2012). For busy physicians with limited time for both formal training and interaction with patients, MI can provide positive results in as little as 5 minutes (Lavoie K, et al [2011], Chesanow N [2014], Benarous X, et al [2014]). However, these gains do not always endure (Martino, et.al, 2008). The current study found that the majority of providers found MI to be feasible in the time frame allowed, and short term follow up suggests that many providers were able to maintain the use of the techniques. MI is not a simple counseling approach to master and research suggests that it may be difficult to suppress prior counseling habits. In addition, there is a tendency for training to decay over time unless there is a systematic post-training support, supervision and training (Miller, et.al, 2001). Future studies should provide longer term follow up and emphasize the availability and utility of support services in maintaining MI.

The present study was developed to explore and addressed the feasibility of HIV health care providers integrating MI skills as an additional tool in the already complex management of non-adherent, disengaged HIV patients. In contrast with previous studies designed to improve provider adherence counseling (Beach M.C. et al (2010) this study found the use of MI to include improvement in the provision of adherence counseling strategies, e.g., planning of medication intake, exploring difficulties with adherence, generating solutions, discussion of side effects and providing feedback about effectiveness of treatment and adherence.

The primary limitations of this research are associated with the small sample size and brevity of follow up for this pilot study. Although MI was well received by the providers participating, the process of HIV management is lengthy and providers may need more intensive training and practice using MI techniques to fully incorporate their routine use in care.

In conclusion, MI appears to be an acceptable and feasible strategy, which can enhance the provision of adherence consultation in the delivery of more comprehensive clinical care for challenging patients. Large scale, long term studies addressing provider skill maintenance in the engagement and retention in care of challenging patients are needed to evaluate the usefulness of MI as tool in the HIV care armamentarium in Argentina.

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Figure 1.
Study Flowchart
### Table 1

**Standard of Care Quality Checklist.**

|   |   |
|---|---|
| **1. The healthcare provider delivered the following education about HIV and the medication systematically to the patient** |   |
| a. | What HIV is and what it does in the body |
| b. | The meaning of viral load and CD4 |
| c. | What the medicines do to fight HIV |
| d. | The importance of adherence and the consequences of non-adherence |
| e. | Common side-effects and how to deal with them |
| f. | Drug interactions |
| g. | Drug storage recommendations |
| **2. How was this education provided?** |   |
| a. | Verbal explanation |
| b. | Used of illustrative materials (e.g. Pictures, videos) |
| c. | Handed out brochures |
| **3. The healthcare provider assisted the patient systematically and consequently in planning medication intake by:** |   |
| a. | Encouraged patient to adhere to the treatment |
| b. | Developed a medication intake schedule for the patient |
| c. | Tailored the medication intake schedule to the patient’s lifestyle |
| d. | Encouraged the patient to identify daily cues (brushing teeth) and plan medication intake at these times |
| e. | Encouraged the patient to use alarm devices to remember to take the medication |
| f. | Encouraged the patient to use a 7-day pill box |
| g. | Encouraged the patient to store spare doses of medication in different places (e.g. car, work, purse) |
| h. | Encouraged the patient to plan ahead for holidays and weekends |
| i. | Encouraged the patient to organize social support |
| j. | Discussed general barriers to adherence and ways to overcome them |
| k. | Wrote down the patient’s dosing schedule (time, name of meds, number of pills) |
| l. | You designed a new medication regime in case the patient finds their present regime too complex |
| **4. During consecutive visits, it was standard care that:** |   |
| a. | The healthcare provider inquired about (possible difficulties with) adherence |
| b. | The healthcare provider and the patient determined underlying causes of non-adherence and generated solutions for these problems |
| c. | The healthcare provider inquired about side effects. If necessary, appropriate steps were taken |
| d. | The healthcare provider gave feedback about the effectiveness of the treatment using viral load and CD4 results |
| **5. General** |   |
| a. | Patients were always given a telephone number or beeper number and were told to contact your healthcare provider when experiencing problems with side-effects |
| b. | Patients were always given a telephone number or beeper number and were told to contact your healthcare provider when experiencing problems with adherence |
c. Patients were always given a telephone number or beeper number and were told to contact your healthcare provider if you ran out of medicines

d. Patients with adherence problems had to return more frequently to your healthcare provider than patients who did not have adherence problems

e. Medication of patients was delivered at their homes

f. Social worker or other personnel are available to support patient’s in dealing with unemployment, legal issues, housing, etc.
Table 2
Acceptability and Feasibility Questionnaire I.

| 1. The program sessions on MI were suited to working with difficult patients |
| 2. I would like to try MI with my patients |
| 3. I feel comfortable using MI skills with difficult patients |
| 4. The program sessions helped me understand how to use “active listening” with difficult patients |
| 5. I plan to use the skills of “active listening” with difficult patients and summarize |
| 6. I plan to use the “active listening skill” and summarize with difficult patients |
| 7. The program sessions helped me understand patient’s ambivalence about change |
| 8. The program sessions helped me understand how to guide my patient |
| 9. I plan to use the skills for guiding patients who are “ambivalent” |
Table 3

Feasibility and Acceptability Questionnaire 2.

| 1. I have tried MI skills with my patients |
| 2. I feel comfortable using MI skills with difficult patients |
| 3. I have used the skills of listening and summarizing with difficult patients |
| 4. I have used empowerment to evoke commitment from my difficult patients |
| 5. I have enough time to use MI skills in my patient consultations |
| 6. I have made a commitment to use MI with difficult patients |