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Motivational Interviewing

Motivational interviewing by HIV care providers is associated with patient intentions to reduce unsafe sexual behavior☆

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ABSTRACT

Objective: Motivational interviewing (MI) can promote behavior change, but HIV care providers rarely have training in MI. Little is known about the use of MI-consistent behavior among untrained providers. This study examines the prevalence of such behaviors and their association with patient intentions to reduce high-risk sexual behavior.

Methods: Audio-recorded visits between HIV-infected patients and their healthcare providers were searched for counseling dialog regarding sexual behavior. The association of providers' MI-consistence with patients' statements about behavior change was assessed.

Results: Of 417 total encounters, 27 met inclusion criteria. The odds of patient commitment to change were higher when providers used more reflections ($p = 0.017$), used more MI consistent utterances ($p = 0.044$), demonstrated more empathy ($p = 0.049$), and spent more time discussing sexual behavior ($p = 0.023$). Patients gave more statements in favor of change (change talk) when providers used more reflections ($p < 0.001$) and more empathy ($p < 0.001$), even after adjusting for length of relevant dialog.

Conclusion: Untrained HIV providers do not consistently use MI techniques when counseling patients about sexual risk reduction. However, when they do, their patients are more likely to express intentions to reduce sexual risk behavior.

Practice implications: MI holds promise as one strategy to reduce transmission of HIV and other sexually transmitted infections.

1. Introduction

Motivational interviewing (MI) is a client-centered, directive counseling style that has been used successfully to promote behavior change by exploring ambivalence and eliciting the client's own motivation to change [1]. The evidence for MI's effectiveness is strongest in the realm of addictive behaviors [2–5]. More recently, MI techniques have been applied to other behaviors beyond substance abuse, such as diet [6], weight loss [7], palliative care decisions [8], chronic illness management [9] and screening behaviors [10]. So far, few studies have looked at sexual behavior. SafeTalk, a MI-based intervention for people living with HIV/AIDS (PLWHA) to promote safer sex, has demonstrated reductions in unprotected sex acts with at-risk partners [11–13].

MI is proposed to work by evoking and strengthening the patient's own arguments in favor of change. If the patients, rather than their practitioners, articulate the motivation to change, they may be more likely to follow through on modifying their behavior. In addition, practitioners using MI are trained to respond to client's resistance to change in an empathic, non-judgmental manner [14]. Empirical studies have supported this conceptual framework. Patient expressions of intention to change during counseling encounters are associated with improved outcomes, such as

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reductions in substance abuse [15,16]. MI-consistent behaviors used by practitioners elicit more patient expressions in favor of change (change talk) while MI-inconsistent behaviors favor patient intention to continue unhealthy behaviors (counter-change or sustain talk) [16–20]. An emerging theory of MI mechanisms of action has proposed a causal chain between practitioner speech, patient speech, and subsequent patient behavior change [14,21].

Most studies of MI, including the SafeTalk intervention, have examined MI delivery by trained counselors or psychologists. There is growing interest in adapting MI to the clinical setting for use by physicians [6,7]. HIV care providers are concerned about patients' risky sexual behaviors but may be unsure how to incorporate counseling into clinic visits [22,23]. MI consists of both techniques to employ, and techniques to avoid, and little is known about the rates at which physicians not trained in MI use MI-consistent and MI-inconsistent techniques in their sexual risk reduction behavior change counseling. This study therefore addresses the following questions: (1) To what extent do HIV providers use MI-consistent techniques when counseling patients about sexual risk reduction? (2) When HIV providers do use MI-consistent techniques, are they associated with (a) patient expressions of commitment to safer sex practices, or (b) higher change talk from patients regarding sexual risk behavior?

2. Methods

2.1. Study participants

We analyzed data gathered by the enhancing communication and HIV outcomes (ECHO) study [24–28], a cross-sectional observational study of patient–provider communication. Recruitment for the ECHO study is described in detail elsewhere [24]. Briefly, the setting was four urban, academic, outpatient clinic sites in Baltimore, MD; New York, NY; Detroit, MI; and Portland, OR. IRB approval was obtained at each study site. Patients were 19 years or older, English-speaking, living with HIV, and had had at least one prior visit with their provider. Providers were physicians, physician assistants, and nurse practitioners delivering care to patients at the study sites.

2.2. Data collection

With patient and provider consent, routine follow-up visits were audio-recorded, transcribed, and searched for dialog relevant to sexual behavior. The current study included only dialog in which the patient reported unsafe sexual behavior and received counseling by the provider. Of the 417 encounters available in the data set, 27 met these inclusion criteria.

2.3. Coding of audio recordings

Segments of dialog relevant to sexual behavior in the 27 included encounters were coded using two previously established systems for analyzing MI-based counseling. Coding was performed by two independent raters trained in the use of these methods (TF and MM) with inter-rater agreement (kappa) of 0.75. Coding was checked by a third rater, a clinical psychologist and MI trainer (GR), and disagreements resolved through consensus.

Patient speech was coded using the client language assessment in motivational interviewing (CLAMI) [29]. The CLAMI assigned patient utterances to the following mutually exclusive categories: commitment to change, reasons to change (including desire, need, or ability to change), taking steps toward change, and other statements regarding change. These utterances were either positive or negative (for example, reasons in favor of change or reasons against change). The investigators added a code for patient questions about sexual behavior, because we believed that these questions suggested patient engagement in considering change.

Provider speech was coded using the motivational interviewing treatment integrity (MITI), originally developed to evaluate trained counselors' adherence to MI principles [30]. The MITI has two components: behavior counts and global scores. The behavior counts capture the technical elements of MI, while the global scores assess an overall impression of the relational aspect of MI. To code behavior counts, provider utterances were assigned to the following mutually exclusive categories: MI-adherent (advising with permission, affirming the patient, emphasizing the patient's control, or supporting the patient); MI-nonadherent (advising without permission, confronting the patient, or directing the patient); reflections (simple or complex); questions (open or closed); and giving information. A summary score of MI balance was calculated using MI-consistent talk (reflections and MI-adherent behaviors) minus MI-nonadherent behaviors.

To assess global scores, coders rated each dialog in the following dimensions: evocation (the extent to which providers elicited the patients' own motivations for change); collaboration (the extent to which providers worked with patients as equal partners); autonomy/support (the extent to which providers supported and actively fostered patients' sense of choice and control); and empathy (the extent to which providers understood patients' perspectives). Each dimension was scored on a scale from 1 (low) to 5 (high). Consistent with the MITI, a summary score of MI spirit was calculated using the mean of scores on evocation, collaboration, and autonomy/support.

When used to evaluate psychologists or mental health counselors, the MITI assigns global scores to random 20-min segments within counseling sessions [30]. Such segments were not available in this study. Only portions of dialog relevant to sexual behavior were included, which varied in length and occurred within the context of medical clinic visits. This adaptation of the MITI, applied only to sexual behavior counseling, is consistent with methods used in other studies of physician adherence to MI principles in weight loss counseling [7].

2.4. Independent variables

Independent variables in our analysis were provider behavior counts in the following categories: MI-adherent, MI-nonadherent, reflections, asking questions, giving information; the summary score of MI balance; and providers' global scores of empathy and MI spirit. Length of relevant dialog was also derived from the audio-recordings.

2.5. Outcome measures

Two outcomes measures were used in our analysis: patient commitment to change and total change talk from the patient. Change talk consisted of all positive patient utterances in the following categories: commitment to change, reasons to change, taking steps toward change, and other statements in favor of change. Change talk excluded patient questions about sexual behavior and negative patient utterances in favor of sustaining high-risk behavior.

2.6. Statistical analyses

We performed *t*-tests and Chi-squared tests to assess for differences between the 27 encounters included in the analysis and the total 417 encounters on patient age, gender, and race; provider age, gender, and race; patient–provider concordance on age, gender, and race; total time of the encounter; and length of patient–provider relationship (longer or shorter than 5 years).