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## Rural healthcare providers question the practicality of motivational interviewing and report varied physical activity counseling experience<sup>★</sup>

Stephania T. Miller<sup>a,\*</sup> and Bettina M. Beech<sup>b</sup>

<sup>a</sup> Meharry Medical College, Department of Surgery, Nashville, TN, USA

<sup>b</sup> Vanderbilt University School of Medicine, Division of General Internal Medicine and Public Health, USA

### Abstract

**Objective**—To evaluate rural healthcare providers (HCP) physical activity (PA) counseling experiences and perceptions of motivational interviewing (MI), a behavioral counseling style, prior to MI training.

**Methods**—Four moderator-led focus groups were conducted among rural HCPs providing care to rural African American women with Type 2 diabetes. Questions about experiences with PA counseling in this patient population were asked. Following a DVD demonstration of a MI patient/provider consultation, MI impressions were solicited. Focus groups data were transcribed verbatim. Content-based analysis was conducted using qualitative data analysis software, Atlas.ti., and thematic coding by two analysts.

**Results**—Thirty-three HCPs (64% nurses) participated. Fifty-five percent reported little or no PA counseling comfort due to either the lack of knowledge of PA recommendations or individual challenges in being physically active. MI was viewed as a potentially effective communication approach (positive impression theme). However, HCPs voiced concern about the limited input of the provider during the MI consultation (disadvantage theme) and the feasibility of implementing MI in healthcare settings (disadvantage theme).

**Conclusion**—Future studies should evaluate whether integrating, into MI training, information about previous PA counseling experiences and impressions of MI from rural HCPs truly increases the effectiveness of MI training and subsequent PA interventions.

### Keywords

Healthcare provider; Physical activity; Motivational interviewing; African American; Diabetes; Rural

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<sup>\*</sup>Corresponding author at: Meharry Medical College, Department of Surgery, 1005 Dr. D.B. Todd Blvd., Nashville, TN 37208, USA. Tel.: +1 615 327 5666; fax: +1 615 327 5579. smiller@mmc.edu (S.T. Miller).

## 1. Introduction

Previous research suggests that motivational interviewing (MI), a behavioral counseling style, outperforms traditional physical activity (PA) counseling styles in increasing PA among patients, including those with Type 2 diabetes [1–5].

We conducted focus groups among rural healthcare providers (HCP)s in order to gather their perceptions of MI as a PA counseling approach and their previous PA counseling experiences. This was an initial step in training rural HCPs to serve as MI interventionists in future studies to promote PA among rural African American (AA) women with Type 2 diabetes.

## 2. Methods

### 2.1. Participants

A research coordinator recruited HCPs from two rural community health centers (CHC)s. Eligibility criteria included: (1) at least 6 months working in rural CHC; (2) AA women account for majority of Type 2 diabetes patients; (3) weekly care to members of this patient group; and (4) PA counseling to members of this patient group within the previous 6 months.

### 2.2. Design

Focus groups are planned, moderator-led, group discussions designed to elicit topic-specific views of a defined population [6].

Four Institutional Review Board-approved focus groups were conducted; two at each rural CHC. One AA, female with previous focus group experience served as moderator for each CHC. Focus groups took place in CHC conference rooms after clinic hours, were audio and video recorded, and lasted 1.5–2 h.

### 2.3. Focus group questions

The first specific question category (PA counseling experience) (Table 1) captured HCPs' experiences and comfort with PA counseling rural AA women with Type 2 diabetes about PA. Question content validity was supported by research suggesting that HCPs use variable PA counseling methods [7–9] and some are uncomfortable with PA counseling [10].

Before the second question category, HCPs viewed two excerpts from a MI training DVD [11]; one depicting a patient–physician consultation without MI principles (non-MI consultation) and one demonstrating MI principles (MI consultation). The non-MI consultation portrays the physician dominating the conversation by asking the patient numerous closed-ended questions about lifestyle modification. In the MI consultation, the physician asks the patient several open-ended questions about lifestyle modification, allowing the patient self-expression about lifestyle modifications. The second category of questions (perceptions of non-MI/MI consultations) was asked following the DVD excerpts.

### 2.4. Analysis

Data were transcribed and imported into Atlas.ti (Scientific Software Development, Berlin). Coding consisted of (1) assigning individual codes for HCP responses to the “perceptions of non-MI/MI consultations” (5 h), (2) thematic grouping of related codes by 2 independent analysts (2 h), and (3) comparison of analysts' code/theme groupings. For the latter step, analysts discussed coding differences until resolution (1 h). Since only 2 analysts participated in coding and HCP responses to questions were clear, interrater agreement was

used as the reliability index [12]. Interrater agreement, 82%, was calculated by dividing the number of coding agreements (before resolution) by the total number of codes rated.

Responses to PA counseling comfort questions (not very comfortable to very comfortable) were expressed as percentages of total question responses. This quantitative step allowed an otherwise immeasurable PA counseling comfort profile to emerge.

### 3. Results

#### 3.1. Demographics

Most HCPs were nurses with considerable rural healthcare experience (Table 2). Other HCPs included dietitians and certified diabetes educators and one physician.

#### 3.2. Physical activity counseling experience

Low and moderate comfort levels (Table 3) were related to reported limited knowledge about PA recommendations and/or feeling like a “hypocrite” for offering advice to which they did not personally adhere. Complete counseling comfort was related to HCPs’ own successes in maintaining regular PA and counseling experience.

Giving praise to patients and using handouts and video demonstrations were identified as effective counseling methods. The least effective was prescribing strict PA goals.

#### 3.3. Impressions of non-MI consultation/MI consultation

The first theme describing the non-MI consultation was “poor communication” (Table 4). One HCP stated, “...I would say that wasn’t a conversation at all...”. Others described it as “assembly line health care” and a “missed opportunity” for effective counseling. The second was the “impersonal nature of the consultation”. Healthcare providers expressed that the physician didn’t treat the patient as an individual. One stated, “...It was like the person was a number instead of a human...”.

The single negative theme related to the MI consultation was the “passive demeanor of the physician” (Table 4). In sum, HCPs disapproved of the physician’s emphasis on patient control in behavioral goal setting.

The first and second positive MI consultation themes were the “positive disposition of the physician” and the “positive disposition of the patient”, respectively (Table 4). “Relaxed”, “energetic”, and “involved” were words used to describe the patient. The third theme was “positive communication”. One HCP expressed that “... they [provider and patient] were able to get a lot more from each other, [unlike] in a hyped up, negative situation...”.

#### 3.4. Advantages/disadvantages of MI

The first theme representing perceived advantages of MI was a “relaxed consultation” environment (Table 5). One HCP stated that the “...provider was approachable”. The second was “active patient involvement”. One HCP commented that, “...the advantage is in getting the patient to talk...”. Another stated that the physician “...gave the patient a role to play in counseling...”. The third was “emphasis on patient autonomy”. One HCP voiced that the physician “...gave the patient an agreed role to play in their health...”.

Disadvantages of the MI consultation (Table 5) were captured by the quote that there is “... not enough time to implement MI style...” in regular clinical encounters (theme 1-takes too much time). Representative quotes for the second theme (limited provider input) were “...

provider's input is too limited..." and "...the provider really didn't give any information to the patient. He just went along with him [the patient] ....".

## 4. Discussion and conclusion

### 4.1. Discussion

This study shows that HCPs' experiences with PA counseling were varied and their impressions of MI were mixed. Findings offer some insight into potential methods for maximizing the effectiveness of MI training and underscore the need for training HCPs to deliver PA counseling.

**4.1.1. Physical activity counseling experience**—Healthcare providers that were completely comfortable with PA counseling attributed this comfort to being physically active themselves. This is consistent with other research including the finding that physicians and nurses that counseled most frequently were more likely to be trained in PA counseling [13]. The latter finding raises two questions. Were the physicians and nurses more likely to be trained because they were physically active and, thus, had an appreciation of behavioral challenges? Were their PA successes related to applying counseling strategies in their own PA efforts? Regardless of whether a relationship between training and individual PA practices exists, training HCP in MI may increase the likelihood that counseling is attempted. This is especially important given that HCPs do not consistently provide PA counseling to their patients [14] and, consistent with other research [10], most of the HCPs in this focus group study were not completely comfortable with counseling.

**4.1.2. Impressions of MI consultation**—The positive impressions of MI by HCPs in this study are consistent with other studies [15,16] and a systematic review concluding that MI outperforms traditional consultation across a number of health-related behaviors [17]. Collectively, these findings suggest that some of the challenges in MI training go beyond HCPs simply not understanding benefits of the approach.

**4.1.3. Advantages/disadvantages of MI**—The expressed advantages of MI (i.e. active patient involvement) were not surprising. Introducing them in pre-MI training activities might foster trainee appreciation of the approach, particularly when its effectiveness is questioned [18].

One of the perceived disadvantages of MI consultation, "takes too much time" is not a new issue [17,19,20]. Previous research has shown that, with training, HCPs can implement MI in approximately 10 min [19], underscoring that applying MI-based strategies is possible during brief clinical encounters.

The other perceived disadvantage of MI was limited provider input. This is an important observation related to training HCPs in MI. During training, it should be acknowledged that unsolicited HCP provider is indeed limited in MI but that the ultimate goal is to engage patients in a way that supports behavioral change.

**4.1.4. Methodological considerations**—The major study strength is its focus on HCP impressions of MI prior to training. An understanding of HCP impressions of MI at this time point may help maximize training effectiveness.

Most of our participants were nurses. Gaining input from nurses is important since many MI studies have successfully used nurses as MI interventionists [21]. However, since focus groups are not typically designed to identify the source of different verbal contributions, we were not able to identify categorize comments by HCP type. Therefore, conducting

additional studies with homogenous groups of HCPs would aid in insuring theme saturation by different HCP groups and increase generalizability of findings.

## 5. Conclusion

This study fills a gap in our current understanding of how to train HCP to deliver PA counseling using MI. Future studies should evaluate whether integrating, into MI training, information about previous PA counseling experiences and impressions of MI from rural HCPs increases the effectiveness of MI training and subsequent PA interventions.

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**Table 1**

Focus group questions.

<b>Question</b>	<b>Category of question</b>
When you hear the phrase “physical activity”, what comes to your mind?	General
When you hear the phrase “exercise”, what comes to your mind?	General
On a scale from 1 to 5, with 1 being not at all comfortable, 3 being somewhat comfortable, and 5 being completely comfortable, how comfortable are you in providing exercise counseling to African American women with Type 2 diabetes and why?	Physical activity counseling experience
Describe the most common method(s) you use to provide exercise counseling to African American women with Type 2 diabetes.	Physical activity counseling experience
Which methods do you feel are most effective and why? Least effective and why?	Physical activity counseling experience
What are your impressions of this DVD excerpt (for non-MI and MI consultation)?	Perceptions of non-MI/MI consultation
What do you consider the advantages of applying MI in consultation with your own patients? Disadvantages?	Perceptions of MI consultation
If you were asked to provide three helpful hints to other HCPs for providing exercise behavioral support to African American women with Type 2 diabetes, what would they be?	General
Closing remarks?	General

**Table 2**

Healthcare provider group profile.

<i>N</i>	33
Nurses (%)	64
Female (%)	94
Length of time working with African American women with Type 2 diabetes patient population (years)	14.5 ± 19.4
Length of time working in rural healthcare setting (years)	15.1 ± 20.1



**Table 3**

Healthcare provider ratings of physical activity counseling comfort.

Not at all comfortable or mostly not comfortable (%)	55
Somewhat comfortable (%)	14
Completely comfortable (%)	31

**Table 4**

Themes characterizing healthcare provider impressions of non-MI and MI consultations.

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Non-MI Consultation	
Theme 1	Poor communication
Theme 2	Impersonal nature of the consultation
MI Consultation	
Theme 1	Passive demeanor of the healthcare provider
Theme 2	Positive disposition of the healthcare provider
Theme 3	Positive disposition of the patient
Theme 4	Positive communication

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**Table 5**

Themes characterizing healthcare provider perceived advantages and disadvantages of MI consultation.

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Advantages	
Theme 1	Relaxed consultation environment
Theme 2	Active patient involvement
Theme 3	Emphasis on patient autonomy
Disadvantages	
Theme 1	Takes too much time
Theme 2	Limited provider input

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