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Physical Activity-Related Experiences, Counseling Expectations, Personal Responsibility, and Altruism among Urban African American Women with Type 2 Diabetes

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Abstract

Purpose—The purpose of this study was to explore physical activity-related experiences, perceptions, and counseling expectations among urban, underactive, African American women with type 2 diabetes.

Methods—Participants were recruited via flyers and endocrinologist referral. A professional, African American female moderator led two focus groups among 11 participants. Focus groups were conducted in a video- and audio-equipped focus group room in the evening hours. Using a content-based stepped analytic approach, two raters independently analyzed data and collaborated to compare results and finalize themes.

Results—Competing priorities and lack of motivation were perceived as significant barriers to physical activity. Physical activity-related counseling expectations (i.e. physician encouragement) and experiences (physician advice giving) were inconsistent. Participants expressed a high degree of physical activity-related health responsibility. Altruistic intentions were high relative to helping others incorporate healthy lifestyle changes.

Conclusions—When counseling women about physical activity, diabetes educators should acknowledge and provide support and resources to help women incorporate more physical activity into their regular routines and enhance motivation for physical activity. Educators should also couple physical activity-related advice with encouragement and support. Due to high levels of altruism, educators should consider implementing group- and/or peer-based physical activity interventions in this patient group.

Type 2 diabetes is among the leading cause of death for African American women.¹ Optimal diabetes self-care requires that an individual prioritize a variety of self-care behaviors each day. These behaviors include glucose self-monitoring, monitoring dietary intake, and incorporating a regular plan of physical activity.² While managing multiple self-care behaviors may be challenging for all persons with diabetes³, the extant literature suggests that, among African American and White US adults, African American women are the least physically active subgroup.⁴ Given the known benefits of physical activity on glycemic control⁵, this trend of inactivity among African American women places those with diabetes at high risk for diabetes-related complications and morbidity. This underscores the need for widespread and ongoing efforts to increase physical activity in this patient group and, subsequently, increase the likelihood of improved diabetes outcomes.

The extant literature describes many interventions designed to increase physical activity among African American women and many address factors that impact physical activity behaviors, including neighborhood safety and personal motivation.^{6,7} Moreover, in recent years, more attention has been given to the role of the physicians in physical activity promotion.^{8,9} Physicians and diabetes care professionals are advised to counsel diabetes patients about the importance of physical activity in self-care management.¹⁰ However, many physicians report that they are not confident in their ability to provide physical activity counseling¹¹ and that the brevity of most clinical encounters makes it difficult to provide physical activity counseling.¹² Moreover, previous research suggests that discussions about physical activity between healthcare providers and African American women have been negatively associated with physical activity behaviors in African American women.¹³ Therefore, to the extent that physical activity counseling can be an important strategy to promote physical activity behaviors and improve diabetes outcomes among African American women, it is important to gain an understanding of factors that might contribute to negative associations between physical activity behaviors and healthcare provider counseling. The purpose of this study was to explore physical activity-related experiences, perceptions, and counseling expectations among urban, underactive, African American women with type 2 diabetes.

Methods

Research Design

We implemented focus groups in order to examine physical activity-related experiences, perceptions, and counseling expectations. Focus group methodology is a qualitative research approach in which a group of people are asked to share their views about a particular topic. Under the direction of a moderator, the participants respond to a series of prepared open-ended questions. The focus group participants typically share common characteristics (e.g., gender) and/ or have a mutual interest in the focus group topic.¹⁴ One of the benefits of utilizing focus group methodology is that it fosters the expression of thoughts and feelings that may not have been revealed using quantitative measures.¹⁵

Participant Selection/Setting. A clinical research nurse recruited participants at an academically-affiliated and community-based outpatient clinic. Participant eligibility criteria included: 1) African American; 2) female; 3) 21–50 years old; 4) clinical diagnosis of type 2 diabetes for at least 6 months; and 5) physically underactive as defined by Center for Disease Control and Prevention and the American College of Sports Medicine.¹⁶

The clinical research nurse recruited participants using flyers placed in the elevators in the outpatient clinic area and referral by a collaborating outpatient clinic endocrinologist. For the latter method, the endocrinologist informed women about the study during clinic visits. If the patient expressed interest, the endocrinologist provided them with the clinical research nurse's contact information. The clinical research nurse screened all women, either face-to-face or via telephone, using a study screening form prepared by the Principal Investigator (STM).

Data Collection Procedures

Women who met the study eligibility criteria were invited to participate in one of two focus groups. For those who were available during one of the two focus group time allotments and accepted the invitation, reminder phone calls were made two days before the scheduled focus group. Each focus group took place during evening hours and both were video- and audio-recorded. In addition, a complimentary evening meal was provided at each focus group. The facilitator was an African American female with over 10 years of professional

moderator experience, including facilitation of focus groups among mixed gender African Americans groups and African American females alone, and a member of The International Association of Facilitators.

Following greetings, written informed consent procedures, explanation of focus group ground rules, and meal service, the moderator asked participants a series of open-ended questions from a prepared guide (See next section and Table 1). The study research assistant or the Principal Investigator viewed each session through a one-way mirror and served as observer and note-taker. The clinical research nurse gave each patient a \$20 general use gift card at the conclusion of each focus group to offset participation-related expenses. Within one week of each focus group, the study research assistant transcribed each focus group verbatim. The Meharry Medical College Institutional Review Board approved the study protocol and informed consent procedures.

Focus Group Questions

The first two focus group questions (Table 1) were designed to introduce and encourage participants to begin thinking about physical activity and assess general perceptions. The most significant enabler/barrier questions evaluated physical activity-related experiences and further evaluated perceptions. The “expectations” question explored dissonance between participants’ expectations of physician-delivered physical activity counseling and what they experienced. The inclusion of this question is supported by evidence of strong correlations between patients’ expectations and health-related outcomes and behaviors.^{17,18}

Analysis

Using the focus group transcripts prepared by the study research assistant, two trained independent raters (STM, KM) conducted a content-based, stepped analytic approach. First, raters independently performed an initial review of each transcript (10 to 15 minutes/rater/transcript) to evaluate the discussion flow. During this phase, each rater made general notes about the content of the discussion, including the type of interjected comments made from other participants as such comments often signify levels of affirmation, rebuttal, or clarification.¹⁹ During this process, raters assigned descriptive codes to each participant response (1.0 to 1.5 hours/rater/transcript). For example, many women expressed physical activity-related health responsibility and the related responses were assigned the same descriptive code. Similar descriptive codes were grouped into separate themes. The raters independently identified seven of the final themes (78%) presented here. Third, the raters compared, discussed, and reached consensus on all final themes (2.5 hours). The process for reaching consensus involved a detailed examination and discussion of participants’ quotes relative to descriptive codes and identified themes. Next, one of the raters (STM) compiled all identified themes in a list (30 minutes) for review by the other rater. Lastly, the raters had an additional meeting to finalize the themes (10 minutes).

Results

Participant Profile

Table 2 summarizes demographic, clinical, and behavioral characteristics of the participant group (n=11). A middle age, obese, and educated participant group is represented. Approximately one-third of the women reported engaging in planned physical activity within the last week and the average duration of Type 2 diabetes was 9.1±7.3 years.

General Physical Activity/Exercise Perceptions

Participants viewed physical activity as synonymous to exercise, in general (Theme 1). For example, 64% of participants responded with one word, “exercise”, when asked what came

to mind when hearing the word “physical activity”. However, they associated the word “exercise” with specific activities (i.e. walking, jogging) (Theme 2). Participants’ expressed an awareness of the association between weight loss and physical activity (Theme 3). One participant acknowledged the association this way, “...if you don’t move, you gain weight.”

Barriers to Physical Activity

Competing priorities were identified as barriers to physical activity (Theme 4). Many women stated that multiple demands on their time (i.e. work, family,) made it hard for them to incorporate regular physical activity. Lack of motivation was also a pervasive theme (Theme 5). Many participants described themselves as being “lazy”. One participant said, “I have the time to exercise...I work from 5 till 10 am in the morning. So I’m just sitting around. I have no excuse not to exercise. I’m just being lazy and I need to get motivated...” Another participant expressed her general lack of motivation by stating, “I just can’t motivate myself to do it [exercise]”. Although many women stated lack of motivation as a barrier, all expressed a desire to be more physically active.

Enablers to Physical Activity

Enablers were generally discussed in terms of removal or management of previously stated barriers. For instance, participants felt that if they had more time (absence or management of competing priorities), they would be more physically active. Social support for physical activity (Theme 6), however, was identified as a specific enabler among participants. For example, one participant said, “If I had a positive person in my life that’s going to say ‘Come on, let’s get more exercise and let’s do it’...”

Comparison of Physical Activity Counseling Expectations and Experiences

In general, there was a discrepancy between what participants expected or desired and what they actually experienced during physical activity counseling. Most patients reported getting regimen advice when what they expected or wanted was acknowledgement for behavioral efforts to reach clinical targets-even if targets had yet to be reached (Theme 7). One participant stated, “...He [physician] read them [lab values] but it was like he wasn’t really concerned about them. He was concerned about putting me on a regimen that he had designed to put me on. So it was really not any encouraging of what I had done.”

Physical activity-related health responsibility

During the discussion of physical activity-related counseling expectations and experiences, many participants voiced the belief that, regardless of their physician’s counseling advice, they were ultimately responsible for finding ways to become more physically active. This “health responsibility” (Theme 8) was expressed by one patient in this way, “I know the benefits and that exercising is something I should do and probably if the doctor where to say that then I would say okay. But as far as that being the motivator for me to it, not completely. That’s something I know I need to do; and then just actually doing it would be left totally up to me.” Another participant voiced her autonomy by saying, “That’s his [physician] job. That’s his responsibility to tell you what’s good for you as the patient. But the one motivating factor is more or less going to come from me realizing that I need to do this...”

Greater Concern for Healthcare-Related Needs of Others

An “altruistic intentions” theme emerged (Theme 9). Many participants were highly empathetic towards others with diabetes or other health conditions. Participants were able to brainstorm ways to adjust their personal priorities to accommodate others but not for themselves. For instance, one participant stated, “If a family member or friend came up to

me and they were sick and said ‘honey, if I don’t exercise, then I’m going to die. I would exercise with that person if it kills me. I’ll do it for somebody else quicker than I’ll do it for me.’ This same participant reflected on her own exercise patterns by stating, “I know it’s going to take an act of Congress to get me on that track.” Another participant endorsed these sentiments of altruism by saying, “I need to exercise with them [other person with a health concern] and make sure they get better. I’m not even worried about what I feel like...Just as long as they are better.”

Discussion

The goal of this study was to explore physical activity-related experiences, perceptions, and counseling expectations among underactive, urban African American women with Type 2 diabetes. Our work confirmed previous work and revealed some new caveats that, together, may be beneficial during physical activity-related interventions and/or counseling among this patient group.

Exploring barriers to physical activity revealed relevant needs. The most pervasive barriers to physical activity were competing priorities and lack of motivation. These results were not novel and have been reported previously.^{13,18} For example, in our previous work among rural African American women, competing priorities were viewed as a major barrier to physical activity and lack of motivation was associated with low levels of exercise readiness¹⁸. The fact that these barriers are common and persist, is helpful from an intervention perspective. For instance, it is known that one’s level of motivation for any behavior change is tightly linked to the likelihood of action¹⁴. Therefore, interventions that include methods for assessing and cultivating motivation, such as motivational interviewing²⁰ may be useful. After motivation has been addressed, strategies for managing competing priorities can be introduced. This temporal ordering of intervention strategies is supported by the theory that people who lack motivation will be less receptive to discussing strategies for behavior change.²¹ Though participants in this study expressed a lack of motivation for physical activity, they all expressed a desire to be more physically active. This further underscores the need for systematically addressing motivation.

A significant enabler, social support, emerged. This finding is consistent with previous research that highlights the importance but also the complexity of social support in diabetes self-care management.²² For example, social support encompasses many behaviors such as advice giving, task assistance, listening.²³ Moreover, for women, there is often a high relational cost associated with seeking support from adults for whom they may provide support.²⁴ Therefore, in planning physical activity interventions involving African American women with Type 2 diabetes, it will be useful to identify the types and potential sources of social support that women desire (i.e. healthcare provider, family member).

Relative to physical activity counseling, participants reported a desire for praise or encouragement for their behavioral efforts in lieu of advice that they reported so often receiving. Discussions about physical activity with healthcare providers have been negatively associated physical activity behaviors in African American women.¹³ Though it was beyond the scope of this study to evaluate the effect of physical activity counseling on participants’ subsequent physical activity behaviors, this discrepancy in counseling expectations and actual experiences raises relevant questions. Many physicians, though encouraged to counsel patients about physical activity,¹⁰ acknowledge a need for training in this area.²⁵ In this scenario, is it possible that advice giving becomes the default counseling strategy during physical activity consultations? For a patient who lacks motivation for sustained physical activity but has made some efforts, how might this default counseling strategy influence his/her future physical activity behaviors? These questions require

additional research but both underscore the importance of providing counseling that is relevant for patients and supports them in efforts to initiate or maintain physical activity behaviors.

Participants in this study were physically underactive but many of their comments reflected a strong sense of health responsibility, the belief that individuals should accept and take control of their own health outcomes.²⁶ Perhaps, a strong sense of health responsibility suggests that participants may not be struggling with the “why” of being more physically active, but rather the “how”. Consistent with the The Transtheoretical Model of Behavior Change,²¹ it may require different strategies to encourage individuals with low health responsibility versus high. Future research is needed to assess the degree to which physical activity-related health responsibility influences or mediates physical activity initiation and maintenance among African American women with type 2 diabetes.

Altruistic intentions were high in this group of African American women with type 2 diabetes. Previous research suggests that high levels of altruism are associated with poorer glycemic control in patients with Type 2 diabetes.²⁷ The authors of this previous work speculate that highly altruistic patients are more likely to put the needs of others above their own diabetes self-care management. For African American women with type 2 diabetes, altruism, in the form of multi-caregiver roles, was a previously reported barrier to diabetes self-care, in general,²⁸ and physical activity.¹⁸ African American women with type 2 diabetes also experienced positive emotions and health outcomes when participating in group-based diabetes and health interventions.²⁹ Collectively, these data suggest that group- and/or peer-based interventions may positively serve African American with type 2 diabetes in two ways. First, the opportunity to help others may appeal to their altruistic intentions. Second, if women are also the recipients of altruistic intentions, as would be the case in a peer-based support intervention per say, they might experience positive emotional and health outcomes. Therefore, group- and/or peer-based interventions are reasonable and relevant strategies for supporting physical activity behaviors in African American women, particularly those who are often caregivers to others.

Methodological Considerations

One of the major strengths of this study was its focus on African American women with type 2 diabetes, a patient group that continues to carry a disproportionate diabetes burden. Given the persistence of this burden in recent years, research aimed at improving patient outcomes remains vital. Using focus groups facilitated a richer evaluation of physical activity-related concepts than would be possible using quantitative methods. For example, exploring altruism was not an objective of our study. However, the related findings undergird our endorsement of group- and/or peer support-based interventions among African American women with type 2 diabetes. Our choice of a professional moderator of the same race and gender of the participants also enhanced the quality of our study methodology.

Theoretically, researchers should implement focus groups on a single topic until no new themes emerge.³⁰ It was beyond our resource capacity to implement more than two focus groups. However, these two focus groups revealed important and potentially impactful findings in a high-risk patient group who is under represented in the research literature. Lastly, though important, our findings are not generalizable to other patient groups.

Conclusions and Implications

Diabetes educators should include strategies for addressing competing priorities and lack of motivation when providing counseling to urban African American women with type 2

diabetes. In addition, physical activity counseling sessions may be more beneficial for patients when it goes beyond advice giving by offering encouragement and focusing on the needs of the patient. Due to high levels of altruistic intentions, diabetes educators and other diabetes care professionals should consider group- and/or peer-based interventions in this patient group.

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Table 1

Focus Group Questions

When you hear the phrase “physical activity”, what comes to your mind?
When you hear the phrase “exercise”, what comes to your mind?
When people are trying to exercise more, sometimes there are different things in their life that keep them from doing so and other things that help them. If you could name just one thing/situation that makes it harder for you to exercise on a regular basis, what would that be and why?
Alternatively, if you could name just one/thing situation that makes it easier for you to exercise on a regular basis, what would that be and why?
Compare what you expect/desire from physical activity counseling (from your physician) to what has actually occurred in the past.

Table 2

Patient Profile

n	11
41–50 years old (%)	63.6
Some college or above (%)	63.6
Average Body Mass Index	39.1 ± 8.1
Average Duration of Type 2 diabetes (years)	9.1±.3
Any amount of planned physical activity over past 7 days (%)	36.3

Table 3

Focus Group Themes

Perceptions of Physical Activity/Exercise-Related Themes	
Theme 1	The words “physical activity” was viewed as synonymous to the word “exercise”.
Theme 2	The word “exercise” elicited thoughts about specific exercises (i.e. walking).
Theme 3	Both “physical activity” and “exercise” were viewed as weight loss strategies.
Barriers to Physical Activity-Related Themes	
Theme 4	Competing priorities (i.e. caregiver roles)
Theme 5	Lack of motivation
Enablers to Physical Activity-Related Themes	
Theme 6	Social support
Physical Activity Counseling Expectation/Desires Versus Experience-Related Theme	
Theme 7	Participants expect and desire praise or acknowledgement of efforts but often get advice only
Miscellaneous Themes	
Theme 8	Participants acknowledgement and acceptance of the need to make changes themselves, regardless of the nature of physician input (health responsibility)
Theme 9	Strong altruistic intentions towards others in need of behavioral support