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## A Qualitative Assessment of Weight Control Among Rural Kansas Women

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### Abstract

**Objective**—To explore weight control beliefs, attitudes, knowledge, and practices among rural Kansas women, and to characterize the relationship of these women with their primary care providers around weight control.

**Design**—Qualitative research using focus groups.

**Setting and Participants**—Six focus groups among 31 women from 3 separate communities of rural Kansas during the fall, 2006.

**Intervention**—Two focus groups in each community, each of two-hour duration. A focus group moderator's guide was used to explore the roles of individuals, primary care practice teams, and communities around weight control.

**Main Outcome Measures and Analysis**—This study used a qualitative analysis with an iterative process and standard techniques. The analysis team summarized central findings, descriptive topic areas, and general themes.

**Results**—There were five broad themes that emerged from these focus groups. These are lack of support from primary care providers, primary care offices as community resources, lack of resources for promoting dietary change but adequate resources for physical activity, the importance of group support and inclusiveness, and a need for more intensive interventions for weight control.

**Conclusions and Implications**—Rural populations have an above-average prevalence of obesity and related comorbidities. Rural communities need better approaches for addressing the obesity epidemic.

### Keywords

rural women; obesity; primary care

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## INTRODUCTION

Obesity is a leading preventable cause of death in the US, second only to tobacco smoking.<sup>1,2</sup> Rural populations suffer disproportionately from obesity, physical inactivity, and obesity-related comorbidities compared to their urban counterparts.<sup>3,4</sup> This is felt in part to be due to a “later adoption” of new technologies and treatment compared with their urban counterparts.<sup>5</sup> Nonetheless, there are relatively few studies exploring weight control beliefs and practices among rural communities, rendering a thorough understanding of these rural-urban differences in obesity and obesity-related complications difficult.

In the general US population, women have a higher prevalence of obesity than men.<sup>6</sup> This gender disparity in obesity risk has also been demonstrated for rural populations.<sup>7</sup> Furthermore, gender-based differences in weight management and beliefs have been identified for rural populations.<sup>8</sup> Compared with men, women are more likely to demonstrate weight-related concerns, and to be involved in a weight control attempt at any given time.<sup>9</sup> Women have a more extensive history of weight cycling, and tend to engage in different weight control strategies than men.<sup>10,11</sup> Obese women are more likely to suffer social stigma related to weight compared to their male counterparts, and have greater psychological burden as a result.<sup>10,12</sup> This disparity is thought in part to be due to societal discrimination against obese individuals, especially against women.<sup>12</sup> Nonetheless, gender differences in weight control experiences have been understudied among rural populations. This is important, given that over 20% of the US population resides in a rural community.<sup>13</sup>

This study used a qualitative approach to explore weight control beliefs, attitudes, and knowledge among rural Kansas women, with a special focus on characterizing the relationship of these women with their primary care providers and practices around weight control. Improving the recognition and treatment of overweight and obesity in primary care settings is a critical initiative.<sup>14</sup> Lack of attention by clinicians has been identified as a contributing factor to the escalating obesity epidemic.<sup>15</sup> Furthermore, because this project represented the developmental phase of a pilot trial for weight control in rural primary care, community and social activation around weight control were explored.

## DESCRIPTION OF EVALUATION

This project completed six focus groups to explore weight control among women from 3 separate communities of rural Kansas during the fall of 2006. Two focus groups in each community were held to ensure adequate representation from each community, and to have some scheduling flexibility for recruitment purposes. Patients were recruited from three primary care practices in three separate rural Kansas counties.

Two study sites were in frontier rural counties in western Kansas, with overall populations of 1,534 and 3,068 (2000 Census), respectively, and population densities of less than 3 persons per square mile. The third study site was a primary care practice in a more densely populated rural county in northeastern Kansas (overall population greater than 35,000 in 2000 Census), but with a population density that is classified as rural (i.e., fewer than 40 persons per square mile).<sup>13</sup>

Eligible participants were 18 years of age or older, obese (i.e., have a body mass index of 30 or greater), English-speaking, able to give informed consent for study participation, and had a home address and telephone. Study site physicians were debriefed on the study objectives and procedures during a one-hour meeting prior to recruitment. Participants were recruited during the course of clinical care by their physician or nurse. Participants were enrolled until a maximum of 10 participants per group was reached. Eligibility was determined at the time of recruitment. Focus group dates were prearranged secondary to travel schedules. Records were

not kept on those who refused participation in the study, but most refusals were secondary to scheduling conflicts. Informed consent was taken in full at the beginning of each focus group. During the focus groups, each participant was reimbursed \$40 for their time and effort, and served a healthy and light meal. This protocol was approved by the Human Subjects Committee at the University of Kansas Medical Center, Kansas City, KS.

A focus group moderator's guide was developed based on the chronic care model constructs that needed exploration.<sup>16</sup> These were patient activation, primary care provider and practice team activation, and community activation. The unique role of women in rural communities and how that might intersect with weight control was explored. The women's experience with weight control was the focus, and women were encouraged to share weight control stories, solutions, frustrations, and knowledge. The primary questions from the moderator's guide are shown in the Table.

At the end of the focus groups, participants self-administered a 17-item survey querying sociodemographics, self-reported weight and height, obesity-related comorbidities, and health status measured by the Short Form 12 (SF-12).<sup>17</sup> These questions were asked to characterize the study participants.

Focus groups were scheduled for 2 hours, including informed consent, survey administration, and a brief intermission. Discussions lasted on average for about one and a half hours. The same focus group facilitator conducted all groups, which were audiotaped. A research assistant kept notes, assisted with survey administration and informed consent, and helped participants as needed. The study was completed when data saturation had been reached for the majority of topic areas, or that new information would not have been uncovered by conducting further focus groups.

For the qualitative component, an experienced and qualified transcriptionist produced transcripts of all focus groups, which were then verified by the two coauthors who were present at all groups. A qualitative analysis was conducted using an iterative process and following standard techniques. The analysis team was comprised of three investigators, a physician, psychology PhD student, and psychologist with qualitative research training. First, each analysis team member read through all transcripts and summarized the central findings. At an initial analysis meeting, these findings were grouped into descriptive topic areas, or categories. Secondly, the analysis team reanalyzed the transcripts using these descriptive categories, and identified new descriptive topic areas. At a second analysis meeting, these descriptive topic areas were grouped into general themes. The analysis team used consensus at all analysis phases to maximize reliability of the findings. To assess the relative importance of each theme, team members evaluated themes in relation to each other, and in relation to the qualitative weight reflected by participant comments.

For the survey component, participant characteristics were summarized with means with standard deviations for continuous variables, and frequencies with percentages for categorical data. These analyses were conducted using SAS v. 9.1, SAS Institute, Cary, North Carolina.

## LESSONS LEARNED

Six focus groups were conducted in 3 separate communities in rural Kansas between September, 2006 and December, 2006. There were 31 women overall, with focus group sizes being on average between 4 and 9 women. The pre-focus group 17-item survey identified that participant mean  $\pm$  SD age was  $60 \pm 14$  years, and their mean  $\pm$  SD body mass index was  $33 \pm 5$ . All of the women were white, and most reported at least one obesity-related comorbidity. Hypertension was most commonly self-reported (62%). Their mean  $\pm$  SD SF-12 Physical Component Summary (PCS) score was  $44 \pm 12$ , and their mean  $\pm$  SD SF-12 Mental Component

Summary (MCS) score was  $52 \pm 9$ . PCS and MCS scores are standardized and normed with a mean of 50 and a SD of 10 using US population estimates.

There were five broad themes that emerged from these focus groups: 1) lack of support from primary care providers, 2) primary care offices as community resources, 3) lack of resources for promoting dietary change but adequate resources for physical activity, 4) the importance of group support and inclusiveness, and 5) a need for more intensive interventions for weight control. Each of these themes is described further below.

### **Lack of support from primary care providers**

Participants reported wanting more encouragement and directive support on weight control from their primary care providers (PCP). One woman said, “The only time he’s (i.e., PCP) ever said anything to me about my weight is he came in one day and he said, “Do you really weigh that much?” I said, “Yeah.” He said, “Oh. You might want to lose some weight.” And that was it.” Participants stated that their primary care providers do not typically address weight until it is accompanied by comorbid medical conditions. One woman stated, “It’s maybe on your way out after you changed your medicine or checked your blood pressure and everything which I take blood pressure medicine, that he may say, “Well, it may come down a little if you lose 10 pounds.” That’s the only thing I’ve gotten out of him.” Furthermore, these participants felt strongly that their PCP should raise the issue of weight control more often, and should help them set specific weight control goals. One woman shared, “I’ve often thought that if he (i.e., PCP) would say to me, “Before you come in again, I would like to see three pounds.” I mean I need to set a goal. But if he (i.e., PCP) sets a goal, I think I might be more apt to strive for that because I wouldn’t want to let him down.” Another woman said, “That’s what my perception is, and they should really just say, “You’re overweight” and don’t be bashful about it.” Overall, participants recognized that time pressures and the complexity of chronic disease care are barriers to diagnosing and treating obesity in primary care. These women felt that while obesity care could be effectively delivered by other professionals at the primary care office, their PCP needs to be involved regularly in weight control treatment.

### **Primary care offices as community resources**

Participants felt that primary care offices are critical community locations where weight control initiatives should be located. This was especially emphasized in our two frontier rural locations, although this theme was woven throughout the groups. Participants stated that they were looking for low cost or free weight control programs involving group support, accountability with weight assessments, and exercise opportunities located at the primary care office or local hospital. One woman said, “I think if the doctor’s office had a place with their patients where you can get together like this as a group, and we had to weigh in and [we got] a little reward like a tennis shoe or something. Kind of like a Weight Watcher’s that is free.” Another woman said that they are “looking to the health centers as an important leader in the community around information exchange and places where people can gather to support each other and link to the community.” Another woman shared, “I would like to see the hospital exercise room opened up to employees. I think if they would offer it to say certain departments or maybe even outside people during different times.” Participants saw the primary care office as more than a place to visit with their PCP, but also as a community resource that should be more open to providing group weight loss programs.

### **Lack of community resources for promoting dietary change but adequate resources for physical activity**

Overall, participants felt that community resources for dietary change were largely lacking, whereas resources for encouraging physical activity were more available. Physical activity resources included school, church, and hospital exercise programs, community centers, senior

centers, and safe walking areas. Resources for dietary guidance were lacking, and distance to commercial weight control programs was a significant barrier for participants living in the frontier rural communities. For two communities, the nearest commercial weight control programs were 30 to 50 miles away. In one town, several women formed a self-directed weight control group and boasted significant collective weight loss, however, they did express regret that they did not have specific guidance from weight control professionals. As one woman noted, "Some people just don't have the [nutrition] knowledge of, this is what's good for you, this is what's bad, how much is good for you, and how much isn't." Participants expressed a desire for more help with weight loss from resources like the county health departments. Participants also noted that healthy options at restaurants were lacking in their communities. As one woman stated, "Some of the restaurants could change their menus. Like how when we came out here, how everything just gets gravy. We're not used to biscuits and gravy in the morning. And you just can't go in, well there's really no [other] restaurants around."

### **Importance of group support**

Participants identified group support and inclusiveness as critical to the success of weight control initiatives. One woman said, "You're working with people that are in your group of weight loss, so you're constantly saying, we can't eat that." Another woman said, "I decided to take matters into my own hands, and went back to the office. I said, Gals, is anybody interested in losing weight and we'll all get together and we'll do this together? They all said yes." Another participant shared, "Everybody looked forward to all these people getting together...if there was a place that you could always go to and there would always be other people, I think more people would do it."

Several women felt that there were weight control challenges that were unique to women in rural communities, and that group support could help deal with these challenges. Participants spoke about their roles as caregiver, home manager, and cook even though many were working outside of the home. Several women felt that sharing these experiences in groups might be very helpful in facilitating weight control success. One woman said, "Well, it's the whole support system. Like with me, I don't have a lot of friends. I'm a busy person. I'm busy with my kids. I'm busy with whatever. So I don't have a huge support system. Groups are good to me because then you do know that, 'Hey, you know what? I am having a really bad day, and I want to eat like a full package of candy bars right now'...I could call somebody."

Another unique aspect of small rural communities is the difficulty with usual care control arms, largely due to the importance of inclusiveness. These women shared that they wanted to know who else was participating in weight control projects so that they could develop support networks. Although maintaining confidential recruitment was important due to the stigmatizing nature of obesity, several participants expressed that they valued inclusiveness more than confidentiality, in part because personal relationships with medical providers and patients are typical in rural communities.

### **Need for more intensive interventions**

Participants universally stated that they needed more intensive weight control interventions that provided regular support, encouragement, expertise, and accountability. One woman said, "That's a big thing to me. Accountability to somebody, and you ought to have some of that to yourself I know. But when I have to go and weigh in, it's easier." Another woman said, "I think one of my ideas was to form small groups...being accountable to each other, weighing in front of each other, committing to each other, helping, encouraging, all that." One woman shared, "Nobody ever said to me, 'Why don't you get on a program,' except my husband. It wasn't until I was diagnosed with diabetes that I went into shock, and ate broccoli for a week or

something like that.” Finally, one woman stated it concisely when she said, “I felt like I needed more to motivate me.”

## IMPLICATIONS FOR RESEARCH AND PRACTICE

This study used focus groups to explore weight control beliefs, attitudes, and experiences among a group of women from 3 rural Kansas primary care practices. These women had long experience with weight control attempts, and had specific thoughts and ideas about how to improve weight control in rural communities. Similar to non-rural environments, these women felt a lack of support for weight control from primary care providers. The women shared that accountability and guidance from their primary care provider are critical to facilitating weight control success. This is similar to the findings of others.<sup>18–20</sup> Furthermore, these participants felt strongly that primary care offices could be an excellent place for community health initiatives. This finding may be unique to rural settings, where the primary care office is central to dissemination of public health projects, and the primary care provider often serves as the county public health officer.

Two of the themes that emerged from this work were closely related, although distinct enough to warrant separate discussion. These were lack of community resources for promoting dietary change, and need for more intensive interventions. Participants described varied opportunities in their rural environments to engage in regular physical activity, although they highlighted the commonly reported barriers of time and financial constraints to using these resources. Participants strongly underscored the need for more dietary resources focused on weight control in rural environments. Furthermore, participants expressed a desire for more intensive weight control interventions in their primary care offices and communities. These women outlined a myriad of ideas about how to leverage existing community resources for weight control, and how to augment weight control aids that are less developed, i.e., dietary resources and support, intensive medical management, group support networks for accountability and collegiality. To our knowledge, these themes have not been explored among rural women previously, and need further examination in future work. Nonetheless, these are important findings that will inform future weight control interventions for rural communities.

These women felt that there were characteristics specific to their Midwest rural environment that may render weight control more difficult. For example, they highlighted the concept of large, family meals including friends and community, the emphasis on politeness, and the importance of sharing meals as part of hospitality. This concept of tradition, and cultural expectations surrounding food has been well described in qualitative studies of obese, urban African American women.<sup>21–23</sup> To our knowledge, this is one of the first studies to explore the impact of tradition on weight control among rural Midwesterners. Future work needs to focus on the impact of rural environments on the design and conduct of weight control programs for rural settings.

There are several limitations to this work. First, the small sample size renders generalizability to Midwestern women difficult. Nonetheless, qualitative studies are characterized by rich, in-depth topic exploration among small samples. Furthermore, women from three rural Kansas communities were studied, which renders generalizability to the rural Midwest and the rural US more generally difficult. Nonetheless, two of the three communities are characteristic of many frontier rural communities (i.e., less than 7 persons per square mile) in the rural Midwest, and the third is a typical rural community (i.e., less than 20 persons per square mile, within 100 miles of a metropolitan area). Findings from this work are hypothesis-generating, and will inform future, larger studies of weight control among women in the rural Midwest. Second, the focus group process does not allow for comparison of individual beliefs and attitudes, and that participant comments may have been influenced by social desirability bias.<sup>18</sup> Although

these are limitations inherent in focus group research, the strengths of group dynamics in exchange of ideas are important to note.

In summary, obesity is a national epidemic of critical proportions. Rural populations suffer with higher prevalence of obesity and related comorbidities compared with non-rural populations. Rural women are at particularly high risk for obesity and related chronic disease. In this qualitative study, the experiences of rural Midwestern women around weight control in general and in relation to primary care were explored. Five themes emerged from this work that will be essential in designing future interventions for this at-risk population. Among these, primary care practices in rural environments function uniquely as community centers and public health hubs. Rural primary care needs better approaches for clinically addressing the obesity epidemic, and can serve uniquely as an activating hub for rural communities around management of this significant chronic disease.

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**Table**  
Primary Questions from Focus Group Moderator's Guide

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- 1 I would like for you to think back to the last few visits with your primary care doctor. Please describe the conversations that you have had with your doctor, other staff, or anyone about weight and your health.
  - 2 What do you think that your doctor should be doing and saying about your weight?
  - 3 What are some of the reasons your doctor may not talk to you about your weight?
  - 4 What are some things about your community that might make it easier to lose weight?
  - 5 If you wanted to engage in weight control behaviors such as making dietary and physical activity changes, what kind of help would be available in your community?
  - 6 You're the expert on what works for you, so we'd like to know, what kind of activities do you do when you are trying to control your weight?
  - 7 Please describe how your role as a woman might impact weight control behaviors.
  - 8 How do you feel about weight control in your community?
  - 9 What is it about rural communities that might lead to higher rates of overweight and obesity?
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