HEALTH EDUCATION RESEARCH Vol.33 no.2 2018
Pages 145–154
Advance Access published 8 February 2018

Physical activity and masculinity in rural men: a qualitative study of men recruited from churches

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Received on June 20, 2017; editorial decision on January 10, 2018; accepted on February 1, 2018

Abstract

The majority of rural US men fail to meet physical activity (PA) guidelines and are at risk for chronic diseases. This study sought to understand rural men's perceptions about PA and PA engagement and the influence of masculinity and social norms. From 2011 to 2014, 12 focus groups were conducted with men prior to a church-based health promotion intervention. Men were recruited from Illinois' rural, southernmost seven counties, where 40% of men report no exercise in the past 30 days. We used inductive content analysis methods to identify PA-related themes, and subsequently used elements of the Health, Illness, Men, and Masculinities framework as a lens to explore subthemes. We identified four themes: (i) knowledge of the positive impact of PA on health, (ii) perceptions of appropriate types of PA for men, (iii) the importance of purposeful PA and (iv) the desire to remain strong and active, particularly during aging. These findings can inform strategies for messaging and interventions to promote PA among rural men. Health promotion efforts should consider the intersections between rurality and masculinity as it relates to rural men's perceptions of PA, include information about purposeful PA and encourage them to engage in PA with a support person.

Introduction

Urban–rural disparities exist in men's health behaviors and health outcomes. Only 53% of US men meet the 2008 national physical activity (PA) guidelines ($\geq$150 min per week moderate or $\geq$75 min per week vigorous) [1]. Further, rural residents are less likely to meet 2008 PA guidelines than their urban counterparts (42% versus 51%), and this trend is replicated among rural men [1, 2]. This may contribute to the life expectancy gap between rural and urban men (74.1 years versus 76.2 years) [3], as increasing PA and decreasing sedentary behavior (e.g. watching television, prolonged sitting) can reduce chronic disease-related morbidity and mortality [4, 5]. Relatively, little has been done to understand the particularly wide health differences between urban and rural men in regards to social determinants of health. One underlying social determinant of health may be differences in gender norms and values, in that attempting to achieve masculine ideals places males at high risk for illness and injury [6–8].

Rural PA disparities among men may be influenced gender-based socialization and norms that result in health-aversive perceptions and behaviors [9–11]. Gender is a social determinant of health, and for men, attempting to achieve masculine ideals places them at high risk for illness and

doi:10.1093/her/cyy002

injury [6–8]. In Western culture, the hegemonic construction of masculinity is typically associated with being White, heterosexual, middle-class, and possessing stereotypical masculine traits, such as assertiveness, aggression, control, dominance and physical strength [7, 12,13]. Rurality is associated with higher adherence to traditional masculine gender identities and this may underlie urban-rural disparities in men's health behaviors and outcomes [9–11, 14].

A well-established body of literature describes the impact of cultural constructions of masculinity on men's health and care-seeking behaviors [7, 15]. Men are less likely to utilize health care, such as physician office visits, preventive care and dental care; and men are more likely to engage in high-risk behaviors, such as alcohol, tobacco and non-medical illicit drug use, and risky sexual behaviors, when compared with women [16, 17]. There is a small, but growing body of primarily European-based literature about men's engagement in and perceptions of healthy lifestyle behaviors, including PA [18–21].

The Health, Illness, Men, and Masculinities (HIMM) framework is a particularly useful lens through which to examine how masculine gender identity manifests in particularly poor health for rural men [7]. Drawing from feminist scholarship and the concept of intersectionality, the HIMM Framework considers the ways in which masculinities intersect with other social determinants of health, such as geography, race and ethnicity, and socio-economic status, creating health disparities among men [7, 22]. The HIMM posits that men's demonstration of masculinity varies across the life-course and in response to life events, aging and historical contexts [7]. For example, midlife men may construct their masculinity in relation to 'the physicality of their work and/or the level of income their labor produces', (p.12) and older men are categorized as 'invisible men in contemporary society' (p.12) as they are unable to maintain hegemonic masculine ideals [7, 23]. In brief, the HIMM provides an ecological framework to examine health behaviors within the context of gender and can strengthen theory development for men's health research, although it should be noted that the HIMM might not be inclusive of all men's experiences. The HIMM has been cited in over 50 studies, but we are aware of just three studies that have examined the relationship between PA and masculinity (i.e. competitive fitness and sports, engagement of PA in the workplace and a structured walking program) [18, 20, 21], although none explicitly in rural settings. To our knowledge, the HIMM has not been specifically applied as a theoretical lens to research focused on US rural men's perceptions of health promotion behaviors including PA, despite its particularly strong implications for rural men. [18, 20, 21]. The purpose of this study was to examine the ways in which rural men frame perceptions of and engagement in PA around masculinity by situating our findings in the HIMM framework domains specifically related to rurality and gender. Thus, our aims were to: (i) describe the intersections of masculinity and rural men's perceptions of PA at various points in men's lives; (ii) understand the role of social and gender norms on rural men's beliefs about and engagement in PA; and (iii) identify PA promotion strategies specifically for rural men that address gender norms. To do so, we examined qualitative data from focus groups with men from Illinois' rural, southernmost seven (S7) counties, where nearly 40% of men reported no PA in the past 30 days [24].

Materials and methods

We used a qualitative exploratory design and inductive content analysis methods. Focus group methods were used to collect the data [25, 26].

Setting and participants

Participants resided in the Southern Seven (S7) region of Illinois. The S7 has an estimated population of nearly 66 000 spread over approximately 2000 square miles [27]. The Southern Seven Health Department, which serves the S7 counties, identified obesity, diabetes, cardiovascular disease, and cancer as priority health areas in its 2015 community health assessment [28]. With higher rates

than Illinois men overall, 36% of men in the S7 counties report no exercise in the past 30 days (versus 24% for IL men), 79% are overweight or obese (versus 64% for IL men), 10% had told by a physician they had a heart attack (versus 6% for IL men), 11% were told by a that they have diabetes (versus 10% for IL men), and 29% are current smokers (versus 18% for IL men) [24]. The focus groups were conducted in 12 churches.

Focus group description and procedures

Between December 2011 and August 2014, the research team conducted 12 focus groups with men in Illinois' rural S7 counties prior to a church-based cardiovascular health promotion intervention aimed at reducing chronic disease risk and encouraging and maintaining healthy behavior change in women and their families (K. Zimmermann, in preparation). We conducted the focus groups in 12 churches that were intervention partners, with the purpose of exploring men's attitudes toward health and health behavior, barriers to being healthy, health resources in the community and perspectives on how churches should support health in the region. We recruited participants using flyers, announcements in church and community newsletters and newspaper advertisements. Interested individuals contacted study staff, were screened for eligibility and invited to attend focus groups at a community church. Eligibility criteria included residence in the S7 region, self-identification as a male and age 18 years or older. Participants provided written informed consent prior to each focus group. Participants received a US$15 gift card as an incentive for participating in the focus groups.

Three trained male facilitators conducted the focus groups using a semi-structured guide (Supplementary File 1: Focus Group Guide), using probes as needed. Respondents were asked to describe important community health issues and barriers to engaging in healthy behaviors; then they were probed about differences between men and women due to roles they play in the family, work and community.

Focus groups ranged in time from 30 to 72 min, with a mean time of 46 (±14.7) minutes. The mean number of participants per focus group was 5 (±2). Participants completed a demographic questionnaire prior to the start of the focus groups. The University of Illinois at Chicago and the Southern Illinois University Institutional Review Boards approved this research.

Qualitative data analysis procedures

Focus group audio files were transcribed verbatim and checked for accuracy. All files were uploaded into ATLAS.ti version 7 (Berlin, Germany) for data management and analyses. Three authors (LC, KZ and EP) led the primary analysis and interpretation of focus group data. Although the original focus group aims did not specify the investigation of men's perceptions of PA as it related to masculinity, the recurrence of this theme guided our subsequent analyses. Thus, we initially used inductive content analysis methods to explore themes in the men's narratives [25, 26].

The research team met regularly to discuss transcripts, review notes and reach consensus around areas of disagreement. We adapted a previously created codebook developed for a similar focus group analysis and tailored specifically for this analysis [29]. Three members of the research team (LC, KZ and EP) read each transcript and applied codes, met to discuss code applications and definitions and modified the codebook as necessary. We repeated this process to create a final codebook consisting of 30 codes in 5 coding families, including attitudes and beliefs, demographics, environment, health and PA. We used the final codebook to code all 12 transcripts, and met in-person to discuss and resolve all coding discrepancies. As a thematic framework around men's perceptions of and engagement in PA related to masculine constructs emerged in the narrative, we explored extant literature to situate our findings, and subsequently used the HIMM framework to explore specific subthemes related to rurality, PA and masculinity [7]. The HIMM framework explores additional social determinants of health; however, given that this was a

secondary analysis, we were not able to explore the other determinants in depth.

Results

Focus group participants ($n = 57$) were primarily non-Latino White ($n = 44$, 77.2%), had a mean age of 55.0 ± 17.8 years, had a high school education or greater ($n = 39$, 68.4%), were married ($n = 38$, 66.7%) and had an annual household income over US$35 000 (80.8%). Most participants were either employed full time (44.2%) or retired (36.6%; Table I).

Our analyses revealed four themes about rural men's perceptions of and engagement in PA and how this may be influenced by masculinity and gendered social norms: (i) knowledge of the positive impact of PA on health, (ii) perceptions of appropriate types of PA for men, (iii) the importance of purposive PA for rural men and (iv) the desire to remain strong and active, particularly during aging. In the following sections, participants' responses are identified by an assigned church number, 1–12.

Table I. *Demographic characteristics of focus group participants (*n = *57), study among rural men on perceptions of physical activity in the 7 Southernmost Counties of Illinois, 2011–14*

Characteristic	*n* (%)
Age, years (mean ± SD)	55.0 ± 17.8
18–39	10 (17.5)
40–69	31 (54.4)
70+	11 (19.3)
Missing	5 (8.8)
Race	
White	44 (77.2)
African American	8 (14.0)
Missing	5 (8.8)
Educational attainment	
≤High school	13 (22.8)
>High school	39 (68.4)
Missing	5 (8.8)
Marital status	
Married	38 (66.7)
Other	14 (24.5)
Missing	5 (8.8)
Employment status	
Working full-time	23 (40.4)
Working part-time	4 (7.0)
Retired	19 (33.3)
Unemployed/Other	6 (10.5)
Missing	5 (8.8)
Annual household income	
≤US$35 000	10 (17.5)
>US$35 000	42 (73.7)
Missing	5 (8.8)

Knowledge of the positive impact of PA on health

As expected, focus group participants recognized PA as a mechanism to prevent chronic disease and obesity. They discussed the physiological and psychological benefits of PA engagement:

> *I used to teach fitness instructing, kickboxing. . .I'm not a total slob now or anything. . .that was when I was in really, really good shape. And when you're in really, really good shape. . .you're more positive. . . more upbeat, you think a lot quicker. . . I mean there's just so many awesome effects that just come with. . .being fit physically*, (Church 1).

Despite the recognized benefits of PA on health, participants noted their lack of motivation towards PA engagement. Specifically, focus group respondents stated that norms about masculinity give more leeway for men's physical appearance:

> *Respondent 1: I'm assuming many women go to the gym because they're. . .kind of expected to have the slender bodies, whereas men can say, okay, I can get away with being a little fat and little overweight. Respondent 2: Men can have potbellies. (Church 11)*

Appropriate physical activity for men

Respondents described the appropriateness of PA for men in both broad terms and in regards to particular types of PA:

> *In the little city park down here, you see a lot of women [walking], [but] very few*

men. . .Men don't think, that's not highly acceptable. . . for men around here. . . (Church 7).

Another participant indicated that there was social stigma associated with men being too physically active:

People don't make fun of me for my running, but if one of these guys went out and started walking or started a vigorous exercise program, they may, they might, I don't know whether you guys would, but I think several people, at their coffee group or their circle of friends that aren't willing to do it then I think there's a social stigma or a social pressure to put on them, making fun of them, (Church 7).

One respondent described his rural community as lacking a PA-promoting culture:

One thing I've noticed when I visit my parents in Colorado is that. . .people tend to be fitter out there because they got the mountain trails and I've noticed seniors walking on the mountain trails, the air's cleaner, and it seems like it's more of a culture there that kind of encourages going out, hiking. It's hard to explain, but it just seems people look healthier out there. And here, we just, I mean, there are pretty places to go hike and stuff, but we just don't have that culture like they have out there, (Church 11).

Although respondents described stigma associated with particular types of PA, they also described various ways to be physically active in their community. Some described PA involved with hunting and fishing:

Respondent: [We do] . . . biking, and hunting, and fishing, and. . .I got a dog I walk every day. . .

Moderator: That's great. . .

Respondent: I ride that bike, and I, I fish, and I hunt deer season. . . I wanna get moving around.

M: Yeah. . . moving through these hills, yeah, it's a lot of work.

R: Yeah, and the deer are everywhere. . ., (Church 10).

Another described participating in a group sports league with other men:

. . .You get about 10, 12 guys out there and uh, we each rotated a different position, and. . . we just played ball and we had a good time, and nobody won or lost, and we were all running and doing things, and that's. . . and we had a great time, and we got lots of good exercise (Church 11).

Some also discussed engaging in PA with their partners:

My wife and I ride our bicycle. We ride five miles in the evening or morning, (Church 5).

Purposeful physical activity

When focus group participants discussed PA, it was often described as a purposeful activity that was done during the work day or during another activity and not something that was done for health benefits. Several participants described work as their source of PA and that having an active job gave them permission to worry less about being physically active. Specifically, participation in blue-collar jobs, construction and farming was a way for rural men to be sufficiently active due to the nature of their work:

Go out there and pick up hay in the summertime. . . Cut firewood and split it. That's exercise, (Church 2).

Participants also discussed men's active jobs as a means to prevent obesity:

There's a lot of blue-collar people [men] who have kinda active work jobs, you know, and they're moving around. They may not eat well, but they might not be as obese as. . . as some of the women, (Church 11).

Some participants described that labor mechanization has made it more challenging to be physically active during the work day:

> *Things have changed so much... We done everything we possibly can to work ourselves out of having to work...Now we have to... figure out ways to exercise to stay healthy. The old agrarian society...you stayed healthy because...you were physically active... Now you know we've done everything we can to automate everything and you know to mechanize things and you know for heaven's sakes, we don't even sweat! (Church 7).*

Strong and active aging

Participants recognized PA as healthy and described their motivation to engage in PA as a mechanism to stay healthy, slow the aging process, and live high-quality lives as older adults. Specifically, participants indicated the importance of an active lifestyle in living a long life, as described by this participant:

Respondent: I play tennis and I wanna keep going 'til I'm a hundred and fifteen.

Moderator: So yeah, staying active, you wanna *keep your lifestyle.*

Respondent: Well, you *declare yourself* a *failure if* you *don't*. (Church *11)*

Similarly, another participant described past participation in sports and recent weight loss as a motivator to be active so he can live longer:

> *[Because of weight loss] I just feel like I can live longer and do more things... I played ball growing up so I wanted to get back to that, and actually, to be honest, I feel like I'm in better shape now...Simple tasks became hard. Y'know I'd get out and maybe run on the court a little bit, and I'd be breathing hard, and we'd be playing half-court and I was breathing hard! And I'm like...this is not how it used to be. So, I just kinda felt the physical fatigue quicker. (Church 1)*

Participants also expressed that a healthy body would allow them to maintain independence and avoid needing caretaking as they age:

> *One thing that impresses me more every year [is] not the length of time that we're going to spend on this earth, but the quality of the time...I work out 3 days week...but I do that so that I can probably avoid some of the disabling illnesses. In other words, I don't want to go down and have somebody waiting on me (Church 5).*

Another participant described aging as a motivator for resuming regular PA:

> *I got a treadmill I'm supposed to be walking on, and I need to- need to start- I always say I'm gonna get on and exercise... and I look at it...I look at it. (Laughter). But I'm gonna start, I'm gonna get back on it. I told my wife the other day, "I need to get back on it and start back to walking again." Y'know I'm getting older now. (Church 1)*

Discussion

In an effort to broaden our understanding of the rural–urban differences in men's PA levels, we examined the ways in which masculinity constructs and social norms influence rural men's perceptions about PA and PA engagement. Focus group participants identified the importance of PA and its impact on health and well-being and described the appropriateness of PA for rural men. Further, respondents were motivated to engage in PA as a means to maintain strength, particularly during aging. However, they described a tension between wanting to engage in purposeful PA, such as outdoor work and manual labor and limited or diminishing opportunities in rural environments. Our findings suggest masculinity intersects with other critical factors to influence rural men's perceptions of and engagement in PA. These factors, which may vary across men's life course, include men's perceptions about their bodies, social norms about PA, employment

and life events: (e.g. physical aging, health care diagnosis and retirement).

Based on our findings, we have identified public health implications and recommendations for promoting PA among rural men. Our findings suggest rural men may be more amenable to engage in PA when they perceive the activity as purposeful, such as physical labor or a sports league, instead of exercising simply for health benefits. Disseminating information about ways to add PA to daily activities and work may encourage rural men to increase activity levels.

Recent publications have explored the reframing of health promoting behaviors to masculine ideals and norms, such as engaging in rational choices to promote health [30–33]. The findings from the present study support this approach, in that the men described wanting to be healthy in order to contribute to the health and well-being of their families, to be able to be productive and work, and to maintain independence with aging. Health promotion approaches that are consistent with masculine norms, if situated within a gender-sensitive or transformative intervention, have the potential to increase PA among rural men, although there should be efforts to avoid reinforcing hegemonic masculine norms that are detrimental to health [33].

Further, clinical providers and public health practitioners that work with rural men can consider the following questions when providing clinical services or developing health promotion strategies: How does PA fit into rural men's day-to-day lives? What are appropriate exercises for rural men? How do changing economic opportunities in rural settings impact rural men's ability to engage in PA? Rural men may also be motivated to engage in PA when they do so with a support person, such as a spouse. This replicates findings from other research suggesting that men's partners provide support to engage in PA [21, 34]. Gast and Peak) found that men overcame the stigma of engaging in healthy behaviors by allowing their wives to make decisions about their health and related behaviors [35]. In our study, men expressed the importance of spousal support for PA, but the theme of engaging in PA with their wives as a means to overcome stigma did not emerge. Further, a focus group study in the United Kingdom found that men were motivated to participate in sports and PA for enjoyment and social camaraderie and not necessarily only for the health benefits [21].

Rural men might also be motivated to engage in PA when they do so with a support with a group of other men. Male participants in a gender-sensitized walking program in the United Kingdom were encouraged to increase their PA and daily steps via a prescription for steps and goal-setting [20]. This strategy, to our knowledge, has yet to be explored with rural men. Future research may consider strategies that address PA within the context of purposeful PA, as this may be particularly important for rural men who work in manual labor or blue-collar jobs, as they may not have engaged in regular PA outside of the workday. Other research has demonstrated that rural men may be motivated to make behavioral changes in an effort to reduce aging-associated functional decline [36]. Thus, future research should explore interventions for rural retired men, as this time period can allow them to engage in new leisure activities, including PA [37].

There are limitations of this study that should be considered. First, the participants were a self-selected sample of mostly White, middle-aged men. Thus, participants may not represent the diversity in rural, southernmost Illinois and the results may not be generalizable to rural men elsewhere. Second, participants were recruited from churches that were partners in a health promotion intervention, and this may have influenced respondents' perceptions of health issues and community needs. Third, the focus groups were conducted to understand men's broad perceptions about health and not their perceptions about masculinity and PA specifically. Fourth, due to limitations in the transcription, we were not able to match specific quotes to specific individuals. Finally, we did not assess participants' level of PA or perceptions of masculinity and are therefore unable to triangulate multiple data sources to better understand this relationship.

Despite these limitations, our study offers several important insights. In order to effectively promote

PA among rural men, mechanisms to encourage PA should consider the intersections of masculinity and rurality, given that men's perceptions of masculinity are related to their health behaviors [7, 38]. This may be particularly relevant in rural populations that have unique challenges to being physically active, including a scarcity of PA resources, dispersed populations and land use, and great geographic distances to town centers [39, 40]. Additional qualitative and quantitative research can further our knowledge of sex differences related to PA engagement and outcomes in rural populations. Specifically, further research might include samples that are more representative in regards of age and race, as well as samples that are recruited from varied community sites, and not only churches. This may be particularly important in rural populations, due to the prior research that has demonstrated strong adherence to gender norms in rural populations [10, 11].

Understanding rural men's PA behaviors and outcomes in terms of masculinity and gender are important, but social determinants of health, such as geography, employment, community and race, must also be considered in intervention and policy research [7, 41, 42]. This may lead to a better evidence-base from which to draw from to improve rural men's health outcomes.

Conclusion

Rural men in the United States are not engaging in sufficient PA and thus are at an increased risk for chronic diseases and poor health outcomes. Our study has identified intersections between rural men's perceptions of and engagement in PA and masculinity. Although rural men identify a relationship between PA and health, they may perceive that some forms of PA are more appropriate for rural men than others. Further, they expressed a desire to engage in purposive PA instead of PA for health benefits, but they are motivated to engage in PA in order to remain strong and active, especially during aging.

Our findings can inform public health messaging strategies, intervention designs and future research promotes PA among rural men. We recommend health promotion efforts consider the intersections between rurality and masculinity as it relates to rural men's perceptions of PA and PA engagement, include information about purposeful PA and encourage rural men to engage in PA with a support person.

Supplementary data

Supplementary data are available at *HEAL* online.

Acknowledgement

We wish to thank the Southern Seven Coalition for Women's Health, the Southern Seven Health Department, and the community members of the Southern Seven region in Illinois for their contributions to this research.

Funding

This work was made possible by grant number 1CCEWH111024-01-00 (PI: Stacie Geller, PhD) from the Office on Women's Health (OWH). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the OWH, the Office of the Assistant Secretary for Health, or the Department of Health and Human Services.

Conflict of interest statement

None declared.

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