

Health Care Provider Support for Physical Activity in Women, Aged 20-44 Years, in Georgia: A Qualitative Study

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Abstract

Background: Despite the benefits of physical activity, only 12.1% of women in rural Georgia aged 20-44 years, fully adhere to the recommended amount of physical activity. According to previous research studies, health care provider support is an important factor in promoting physical activity among patients.

Methods: The purpose of this qualitative study was to understand the presence and importance of the health care provider support for physical activity in women aged 20-44 years. A semi-structured question guide directed by a Critical Theory of Medical Discourse was utilized for twenty in-depth interviews. To answer qualitative questions of the study, an intensity sampling was used to identify excellent examples of the phenomenon of interest. The participants were interviewed until theoretical saturation was reached.

Results: The majority of the participants felt more comfortable having a woman as their primary health care provider. Most participants utilized the Obstetrician-Gynecologist (OBGYN) for the primary care, physical activity information was provided mostly to patients who were overweight, provided physical activity information wasn't sufficient nor tailored to each patient.

Conclusion: Primary care setting could be a powerful outlet for the promotion of physical activity. However, health care providers might need to expand the range of expertise and collaborate with other community members to increase the physical activity level among women aged 20-44 years.

Keywords: Physical activity; Health care; Women's health; Primary care; Obesity

Introduction

It is well recognized that physical activity has numerous health benefits, including decreases in all-cause mortality, total cardiovascular disease, obesity, Type 2 Diabetes Mellitus, Colon cancer, and Osteoporosis [1]. Physical activity can also have a positive impact on mental health, psychological well-being, muscle and bone strength, daily functioning, and possibly prolonged life [2]. Despite the benefits of physical activity, research suggests only 12.1% of women in rural Georgia between the ages of 20 and 44 fully adhere to the recommended amount of physical activity [3]. It was also reported that during the transition from adolescence to young adulthood, the overall percentage of inactive people increased from 2.8% to 23.4%. In addition, physical activity in adults may decline from 70.0% during the adolescent period to as little as 17.0% by the time the individual's first child is born. By the time participants marry, 60.1% were physically inactive [4]. According to Nazaruk et al. the importance of health care provider's support for physical activity among women ages 20 to 44 years living in Georgia was weak in comparison to husband, family, and friend support [3]. A possible explanation for this finding is that health care providers do not stress the importance of being physically active [3]. There is also a possibility that health care provider support for physical activity is not considered an important source of advice to women in this age category. However, according to Leijon et al. three

out of four women thought that health care providers had a great responsibility in promoting physical activity levels among patients [5]. Furthermore, over 25.0% of women studied considered increased physical activity to be the most critical health-related behavior needing immediate change. Researchers reported increased levels of physical activity was more important than losing weight, making healthier eating selections, tobacco cessation, or reducing alcohol consumption [5]. Another study also suggested that patients not only seek lifestyle advice from their healthcare providers but they also anticipate discussion of such issues as part of their medical care [6]. Johansson et al. found that patients who receive support for health behavior change are more satisfied with their consultation than patients who are not offered this type of information [7]. Similarly, Gabrys et al. reported overall counseling rates provided by primary health care physicians were low, but adults who received counseling were significantly more likely to have participated in a physical activity promotion program [8]. Although, men were more likely to be counseled than women, women were more likely to engage in physical activity [8]. Randomized controlled trials also provided evidence to support the fact that adults can increase their physical activity level after receiving counseling in primary healthcare settings [9,10]. The reported limitation of the previous findings was that this study only focused on the short-term effect of a primary care provider's advice and increased physical activity level [11,12].

According to Florindo et al. primary care providers reported high physical activity counseling rates with correspondingly low levels of

knowledge [13]. While it is essential to understand if the primary care providers possess the necessary knowledge when it comes to the recommended amount of physical activity, skills, and beliefs, no studies conducted in the United States (US) that focused on this topic were identified. Because physical activity is recommended for every person who resides in the United States, it would be important to investigate if the primary care providers' physical activity counseling varies according to one's weight status. Gabrys et al. found that the counseling prevalence was significantly higher in people with obesity as compared to people without [8]. The purpose of this qualitative study was to understand the presence and importance of health care provider support for physical activity in women between the ages of 20 and 44 years living in select areas of Georgia.

Methods

For the purposes of this research, the health care provider's social support was defined as providing any information and motivation for physical activity. Specifically, this research investigated women's perceptions of provider support and the role such support had in motivating increased physical activity. In addition to aspects of motivation, the relationship between patient and provider was examined in the context of the availability of educational materials and other forms of support in the practice setting. Qualitative measures addressed the following research question based on the ideological concepts of A Critical Theory of Medical Discourse [14] and previous research [3]: "*How do women aged 20 to 44 years describe their health care provider support for physical activity?*" Additional sub-questions were also included in the study, and they are as follows:

- "*How do these women describe their relationship with the primary health care provider?*"
- "*What types of physical activity information do health care providers make available to these women?*"
- "*How do health care providers motivate these women to participate in physical activity?*"
- "*How important is the health care provider support for physical activity among these women?*"

A critical theory of medical discourse

A Critical Theory of Medical Discourse was utilized in this study to better understand the communication between the health care provider and patient [14]. According to this theory, medical encounters are influenced by "micro-level" processes and "macro-level" structures in society. "Micro-level" processes are based exclusively on provider-patient interaction in the context of a particular medical problem. "Macro-level" structure takes into consideration the context of broader social problems that cause individual difficulties [14]. According to Waitzkin, "Micro-level" problems of distinct pathophysiology and personality are often the primary focus of the medical encounter, and "Macro-level" problems of social relationships are often ignored by the provider [14] thereby reducing the overall effectiveness of medical interaction.

When applying this theory, a second essential element to consider in the doctor-patient relationship is the difference in power between the two parties. Waitzkin suggests that medical interactions indicate features of distorted communication [14]. For example, medical specialists utilize medical jargon that reinforces professional dominance. This dominance could lead to serious negative consequences on health and safety of patients. According to Graham

and Brookey, medical professionals are responsible for ensuring a psychologically safe environment for their patients; making sure to utilize appropriate strategies for low health literacy patients; and always have an open channel of communication for their patients [15]. The third essential element that was considered in this study is social class and the doctor-patient relationship. According to Waitzkin, gender, race, and age are other crucial factors that affect medical discourse [14]. The question is not if these contextual elements change doctor-patient interaction but how this change happens. Ideologies of race have begun to influence the interaction whenever societies have encountered the disparity between various racial groups. In addition, ideologies of gender depend primarily on roles that women and men play in our community. This norm regulates what can and cannot be said in the provider-patient relationship which plays a significant role in medical interaction as a whole [15].

Design and approach

As previously mentioned, health care provider support for physical activity in women (ages 20-44 years) was investigated using a qualitative research approach. This qualitative process involved inductive reasoning working from particular findings to general themes and then making interpretations about these themes. To answer qualitative questions of this study, an intensity sampling was utilized to identify excellent examples of the phenomenon of interest, but not highly unusual cases [16]. The first author obtained contact information and location of community representatives through an internet search. All contacts were located in Chatham County, Georgia. They represented local schools, businesses, daycare, fitness facilities, churches, and shopping centers. The first author contacted community representatives by phone or in person to ask for their assistance with the recruitment of participants. The first author contacted each participant identified by the community representative by phone to confirm their willingness to participate. The researcher then scheduled an interview with the individuals that expressed their desire to participate in the study. All in-depth interviews were conducted in person, and the interview lasted approximately 20-30 min. Data collection was initiated during the second week of November, 2017 and completed by first week of March, 2018. The Institutional Review Board (IRB) approved this study. Participants taking part in this study signed the informed consent document prior to the interview after the researcher explained the purpose of the study, contact information, benefits and risks, and ensured confidentiality. It was made clear to participants that participation in this research is voluntary and that they may withdraw at any time.

Instrumentation

Qualitative research leads to different kinds of knowledge when compared to quantitative research. Therefore, the transferability (*vs.* external validity) of this study was established by the extensive description of the participants, the context, and process. The credibility of the researcher is taken into consideration instead of internal validity. The dependability (*vs.* reliability) of the study depends on the consistency of the process recreation by future researchers [17]. A semi-structured question guide was utilized for in-depth interviews to obtain qualitative information, and all interviews were conducted in person. The interview guide was based on research queries and the ideological concepts of the Critical Theory of Medical Discourse described earlier. To better understand the nature of the doctor-patient relationship, questions addressed concepts such as patient's social

relationships, the power difference, and the influence of demographic characteristics on the medical encounter. The questions were pre-tested with five university students between the ages of 20 to 44 years from Chatham County, Georgia. Based on the results of the pre-test, the final version of a semi-structured guide was finalized. The guide can be found in Appendix A.

Data Analysis

For the qualitative data examination, thematic analysis was performed. The in-depth interviews were recorded with a digital voice recorder. In the process of analyzing data, it became apparent that the results had to be separated into two distinct groups to highlight the differences in the relationship between health care provider and their patients. The first group consisted of women who identified themselves as “Normal Weight” (NW) based on their Body Mass Index (BMI), and women that identified themselves as “Overweight” (OW) were placed into the second group. The analysis of data involved discovering themes in the interview transcript and attempting to verify and confirm these themes by searching through the data, repeating the process, and identifying other themes and categories. All the interviews were transcribed verbatim and coded by using the qualitative software NVivo [11]. The researcher first read each transcript and made notes. Then, the researcher aggregated all of the

words and phrases from all the interviews. Once the list was created, the researcher looked for overlapping or similar categories. Utilizing A Critical Theory of Medical Discourse, these categories were further refined and reduced. Finally, all the data were entered in the Microsoft Word document and it is from this file that the report of the findings was written.

Results

The qualitative analysis and results of in-depth interviews are presented in this section. A total of twenty women between the ages of 20 and 44 years from Chatham County, Georgia were interviewed. In the NW group, a total of eleven in-depth interviews were conducted. The average age of women in the NW group was 26 years old. Five of the eleven women identified as White, four women African American, one woman Hispanic, and one woman as Brown. Five participants reported having a full-time job, three were working part-time, two were students, and one identified herself as a “Housewife” (Table 1). In the OW group, nine in-depth interviews were conducted among women ages 20 to 44 years old. The average age of women in this group was 32 years. Six of the nine participants were White, and three participants were African- American. Four women in this group were employed full-time, three were students, one was working part-time, and one was unemployed.

Variables	Normal Weight (NW) Group (N)	Overweight (OW)
		Group (N)
Age		
20-31	8	4
32-44	3	5
Total	11	9
Race		
White, Non-Hispanic	5	6
Black/African-American,	4	3
Non-Hispanic		
Hispanic	1	0
Brown	1	0
Total	11	9
Employment status/Occupation		
Full-time	5	4
Part-time	3	1
Unemployed	1	1
Student	2	3
Total	11	9

Table 1: Demographic characteristics.

Eleven participants reported that their health care provider was female and nine reported their health care provider was male.

According to participants, six providers were in their 40s, five providers were in their 60s, four providers were in their 50s, and two providers were in their 30s.

Almost all of the healthcare providers were whites (Table 2).

Variables	(N)
Age	
30-39	2
40-49	6
50-59	4
60-69	5
Unknown	3
Total	20
Gender	
Female	11
Male	9
Total	20
Race/Ethnicity	
White	19
African-American	0
Other	1
Total	20

Table 2: Demographic characteristics of health care provider.

In-depth interview results were divided into two categories:

- Relationship with a health care provider
- Health care provider support for physical activity

These categories were developed based on the theoretical framework and the analysis of the in-depth interviews. Multiple themes were identified within each, and the results are presented below:

Relationship with health care provider

The first part of the interview focused on the relationship between the health care provider and the patients. The answers did not vary between the NW and OW groups. Therefore, the results are reported concurrently.

Theme: Clarity of medical information

When asked to describe the clarity of medical information provided by the primary health care provider, most of the participants said that their health care providers do utilize medical jargon. However, they provide explanation so the patient can have a better understanding. One woman said:

“They use complicated words and then they...they always ask me again ...did you get it or do you need me to explain it again? But yeah...they always ask if I understood.”

Another participant said:

“...anything that I don't understand, he would kind of “dumbing down” for me so I can understand.”

Theme: Effective communication strategies used by health care provider

The next set of questions focused on the effective strategies that primary health care provider use to communicate with their patients. The most frequently mentioned strategies were spending time with the patients, being transparent, writing information on the paper and utilizing the web Portal.

“Um, I guess just seeming like he has a minute to sit down and like friendly listen to me...like not be occupied with anything else while he is asking me.”

Another woman said:

“It is definitely communication and sitting down and actually listening to the patients which will definitely help.”

One woman said the following about the web portal utilization in primary care practice:

“And they have liked a web Portal online. It is really easy to use. If there is any information that I don't understand, I can look it up. And she sends like a little emails to me with the handouts like you know about like, you know like I had a shoulder issue before and she referred

me to another doctor but also send me information about that. Yeah, always being helpful.”

Another woman mentioned:

“Sometimes he would write things down especially when it is something like medical terminology, he would write things down so I can look it up later. So that is pretty helpful and they also have things on my portal that has all the information which is also very helpful.”

Women also talked about the importance of the nursing staff and receptionists in the office.

One woman said the following:

“She is pretty straight forward and her nursing stuff is pretty great as well. So between her and like the staff, everything is pretty great.”

Another participant explained:

“So I think...one, nice receptionists that are kind and welcoming. Especially, if you are a patient that has health concerns...luckily for me, I don't...but having one that is also available.”

Theme: Characteristics important for healthcare provider selection

Women were asked what characteristics are important when choosing their health care provider. The majority of the participants stated that they feel more comfortable having a woman as their primary health care provider. Moreover, most of the women utilize their OBGYN for the primary care.

“So I use my OBGYN as my primary health care provider. I have primary health care provider, but I am not comfortable with him.”

Another woman stated:

“I have a female doctor who I really enjoy. She is also a gynecologist so she has got everything in her primary care.”

One woman added:

Participant: “So with her, I only have been seeing her for about two years. I have been seeing my primary health care provider for about 15, and I don't feel comfortable with him so I go to her.”

Interviewer: “Are you using your OBGYN as your primary health care provider?”

Participant: “Yeah...She asks about my family and my son. She delivered him and...yeah...she does reach out.”

Another woman said:

“I am more comfortable talking to females.”

Participants also mentioned that positive feedback from other people is extremely important when choosing their primary health care provider.

“I would say, I like to know other individuals that go to that doctor. So I would talk to other people before going.”

The age of the health care provider seemed to be one of the determining factors for many participants when choosing a health care provider. One woman explains:

“I really want someone younger so I can go to him for a long time. I do not want to pick someone older because then I will deal with him for only 10-15 years.”

Short waiting time, being friendly and personable are other frequently mentioned factors:

“So if I have to choose my primary health care provider, I would choose someone who can get me in and out of the office pretty quickly. Time is really important to me. What kind of person is really important to me like my primary health care provider, because I like her a lot and I can talk to her. So that is pretty much what is important.”

Another woman added:

“Um, well now that I am older...I have had him since I was like a teenager. If I would pick another doctor, definitely somebody that personal, personable, has time for me...um, and just cares about their patients life...knowing their patient.”

Theme: The nature of the patient and primary health care provider relationships

When asked to describe the relationship with the health care provider, participants once more mentioned that gender of their provider plays an important role in determining the nature of the relationship.

One woman explains:

“He is a male doctor. So if it was a female, I would feel a little bit more comfortable. But the majority of primary care physicians are males so it is harder to discuss some things with them.”

Another woman added:

“He was a little different so I was very standoffish about how much I told him but that is why I want to switch to my Gynecologist because she makes me feel comfortable.”

According to the participants, the length of the relationship with the health care provider is also an important factor.

One participant explained:

“So it is going to take some time to establish relationship but I am a pretty open person. I am pretty comfortable talking but it is not like I have this long going relationship with my health care provider.”

Another woman mentioned:

“No because...um...I just started seeing this provider and I see him about once every 3 months so I am not comfortable talking to him about my life basically.”

One woman said:

“Very comfortable because she has been like my doctor ever since I was like in 9 grade so very comfortable.”

Theme: Recommendations for health care provider

When asked about recommendations for the health care provider, a majority of participants mentioned electronic communication, staying current with the generation, and the provision of take-home information that focuses on physical activity.

One woman said:

“Yeah, maybe find a way to communicate with me electronically...whether it is portal or something like that.”

Another woman mentioned:

“Um, let me think. You know he is an older doctor. He is very old fashioned. He was more...um, may be if he would keep up more with our generation and how we are. He is like 60, 65 years old.”

One participant said the following about the physical activity information:

“Hm, yeah...may be they can give us like...like at the end of the visit...she can give us a packet with things that you can do...can may be explain to us how you can get active ...you can do other things like play sports, going to clubs...but she can incorporate exercising....physical activity you know.”

Health care provider support for physical activity

The second part of the interview focused on health care provider support for physical activity. Women were asked if they identify themselves as being normal weight, underweight, or overweight. During the analysis it became apparent that answers varied significantly between women who considered themselves normal weight and women who were overweight. Therefore, the information was divided into two categories:

Overweight group (OW) and Normal Weight group (NW).

Theme: Physical activity level

When asked to describe their physical activity level, no apparent difference was found in structured exercise. However, the overall physical activity level varied among two groups. Most women from the NW described themselves as “constantly going” and “always moving”

One woman from NW said:

“Um, I am constantly going...whether it is to school or with friends or with yeah...my Internship or work .I don't have much down time.”

One woman from OW explained:

“Um...I can definitely do a little better. I do walk my dog twice a day. Um, I do about a mile a day. I do that kind of a job that makes me sit at the desk most of the time so, definitely could do better.”

Theme: Importance of physical activity

When asked about the importance of physical activity, women from both groups said that it was important to them. However, the reasons for engaging in physical activity differ. The NW women talked about prevention and lifestyle, while the OW group mentioned health-related issues.

One woman from NW explained:

“Staying active is extremely important to me. I have been an athlete my whole life. So being from a child to getting a competitive scholarship in college and having that lifestyle in my early 30' has been very important.”

Another woman from NW added:

“I think staying active is extremely important. I mean I always liked to work out...but it is not just about working out...lying in bed all day or sitting all day... but I think you have to get up and go...being active...whatever it is...it can be your job, fun, whatever. I think it is extremely important.”

A participant from OW said:

“Very important. I want to be healthy. Um, I have high cholesterol. I want to try lower that. Then...yeah, it is important.”

Theme: importance of health care provider support for physical activity

When talking about the importance of health care provider support for physical activity, some women from the NW group mentioned that they would like more specific recommendations and some felt like it was not as important because they are already active.

One NW woman said:

“Yeah, so I would much rather than give me like more specific like this is what you need to do and these are options for you to...these are roads that you can take when you are trying to get better rather than be just like you need to work out...it would be better for them to give me more specific answers and specific options and roads to take.”

Another NW participant stated:

“I think it is important to bring up physical activity with me. If he sees a woman who is 25, it would still be great to know that physical activity is important and you should keep up the good work to maintain weight... or there is more that you can do.”

One participant mentioned:

“I would say it is not important to me because I am at age when I am physically active but I think it will be very important especially when I get older or even after having kids to stay healthy and support a healthy lifestyle for my children...I think it is very important.”

Some women from OW group mentioned that support from their health care provide for physical activity is more important than their family and friends.

One woman said:

“I think it is actually very important. Family and friends are not going to say “oh, you need to exercise” so I prefer talking to my doctor.”

Another woman stated:

“I come from a family that is like not active or anything like that... (Not clear)...so, yeah, I think it is important.”

However, some woman from OW group felt that they are responsible for increasing physical activity level and seeking the information. One woman said:

“I think I know what I need to do to lose weight so I feel like I am responsible for that. I feel like I know exactly what to do.”

Theme: physical activity information provided by health care provider

The last set of questions focused on physical activity information provided by the health care provider. There was a distinctive difference in the responses between the two groups. The NW group hardly receive any information on physical activity despite their physical activity level.

One NW woman said:

“Um, honestly I did not receive any which is, I do not know, staying active is what my occupation or may be because they know I am in the medical field, or because I am young and within the normal range of

BMI percentage. He did not bring up any physical activity information.”

Another NW woman explained:

“I don't really receive any rather than when I was pregnant with my son. They just told me to try to stay active and clean the house that would be it. Rather than that I didn't really talk to him about physical activity.”

One woman explained that she stopped receiving physical activity information as soon as she lost extra weight:

“No, the only thing she said...you are going to work out and lose this weight so you will be healthier but right now when I lost all the weight, she does not mention like “hey, are you working out? Or what are you doing with your life or whatever? No.”

Most women from the OW group said that their health care provider did mention physical activity but the information was not specific and it was weight-related.

One OW group woman said:

“Yeah, she does...she does. Especially because I have known her for so long...she has seen my weight fluctuates up and down. So you know, she has definitely brought it up before.”

Another OW group participant stated:

“He didn't try to go in depth about anything. I guess he was real generic about it when he was mentioning what. I feel like it was one of those topic where he didn't wanna really talk about it. Kind of like the elephant in the room. “I know she needs to get healthy but I don't want to tell her that and her get offended by it.”

Woman from OW group added:

“He...cause I asked him before to be on diet pills and he was like...um, just exercise a little bit like 30 min a week or something...kind of told me just...recommended like really light exercise.”

Here is what another woman from OW group said about the recommendations for physical activity:

“Yeah, just try 30 min a week...may be um, see if you can get your membership or find somebody to work out with. So he gave me, he helped me; he painted the picture for me kind of...”

Discussion

This qualitative study explored the nature of the relationship between primary health care providers and their patients. The results indicated that the majority of women utilized their OBGYN doctor for primary care. In addition, participants felt more comfortable visiting a female doctor compared to a male doctor. According to the results, female doctors were more understanding of the female health issues and more compassionate of personal problems and social struggles. According to the third element of A Critical Theory of Medical Discourse, ideologies of gender depend primarily on roles that women and men play in our society. This becomes a determining factor in what can and cannot be said which influence a medical interaction [15]. Previous research findings are consistent with our results. Women physicians see more female patients than their male counterparts [18,19] and patients of female doctors are more satisfied [20].

The second element of A Critical Theory of Medical Discourse posits the utilization of medical jargon by health care specialists that

reinforces professional dominance [15] which could lead to adverse health consequences. According to our results, health care providers do utilize medical terminology. However, they also provide clarification when communicating with the patient. Overall women were satisfied with the relationship with their medical specialist. They believed that spending time with the patients, active listening, being transparent, and writing information on the paper are essential for the establishment of effective communication between the provider and the patient. Previous research also found that listening to the patient influence the level of patient's satisfaction with their health care provider [21].

Participants also talked about the importance of “keeping up with the generation,” specifically the utilization of Web Portal and electronic communication. Women explained that they utilize the web portal to access the lab results, to receive health-related information, and to communicate with their medical specialist. Being accessible and providing information promptly might be some of the determining factors for effective communication. Taking into consideration that our sample consisted of women between the ages 20-44 years, it makes sense that the use of modern technology is a vital part of a provider-patient relationship. Moreover, technology might also be used in primary care to implement physical activity interventions. Previous research also supports the effectiveness of technology-assisted interventions in primary care setting [22]. According to the qualitative results, medical specialists should not underestimate the importance of friendly nursing personnel and administrative staff. Also, internet reviews and recommendations from friends/family are some of the most frequently mentioned methods of provider selection [23].

Most importantly, this study explored the healthcare provider support for physical activity. No apparent difference was found in the level of structured physical activity, but women from the NW group described their overall physical activity level as high and as “always going.” This can be explained by the fact that physical activity/inactivity is estimated to be 46.0 to 57.0% heritable [24]. It is apparent though that this topic should be explored further. According to the qualitative results, staying active was important to women from both groups. Both groups mentioned weight loss and maintenance as their motivator to remain physically active which is consistent with the previous research [25]. Women from the NW group explained that staying active is their lifestyle, and they acknowledged the role of physical activity in the prevention of health-related issues. Whereas, women from the OW group spoke about physical activity as a means to eliminate some current health issues.

This study also found that women who considered themselves normal weight rarely received any physical activity information from their medical provider despite the fact that guidelines for physical activity should be applied to all people regardless of weight status [26]. This finding is consistent with a previous study [8]. Women who considered themselves overweight did receive physical activity information from their health care provider, but the information was limited and not tailored to individual requirements. In fact, several women mentioned that their medical provider told them to exercise 30 min per week which is inconsistent with the ACSM guidelines of 150 min per week. It is unclear if the medical specialist provided the incorrect information or if the women did not recall the conversation accurately. It is important to note that ACSM manages a global health initiative called Exercise is Medicine. The initiative targets health care providers to promote physical activity as part of patient treatment [27].

According to previous research, health care provider support for physical activity was less critical compared to other forms of social support [3]. This study attempted to explain that finding. According to our participants, women who considered themselves normal weight did not consider medical provider support for physical activity important because they were already active, the information provided by their health care provider was vague, or because they did not wish to lose weight. Women from the overweight group believed that medical provider support is significant, especially if their family and friends networks were not active. Women from this group also stated that it is mostly a personal responsibility. Lastly, women who considered themselves overweight were more likely to associate physical activity with the strict method of losing weight rather than lifestyle modifications.

Limitations

Only one researcher coded and analyzed in-depth interviews that may have introduced error. Another limitation is that the results cannot be extended to the wider population due to a small sample size and the nature of the qualitative research. Lastly, the findings of this qualitative study cannot be analyzed objectively by the researcher because they are based on the perceptions of the participants.

Public Health Implications

According to the results of this study, the female doctor's communication style might be a decisive factor in health care provider selection for women between the ages of 20 and 44 years. The utilization of female medical professionals to deliver tailored physical activity information to women in this age group may be beneficial. However, this finding should be investigated further. Another significant result is that the women interviewed prefer electronic delivery of health information, so a public health recommendation may be the application of technology to promote physical activity in the primary care setting. The importance of physical activity in women's health is well established [1]. In addition, ACSM recommendations with respect to physical activity should be applied to all women, regardless of their weight status [26]. Our study suggests that women of all sizes consider active lifestyle as an essential part of their life. Women who find themselves overweight would like to receive more support from their health care provider as it relates to increasing their physical activity level. However, the current study indicates that the women interviewed didn't receive any information, only received information concerning weight loss, or retained incorrect physical activity information. In conclusion, the primary care setting could be an essential outlet for education and the promotion of physical activity among women [9-12]. However, technological innovations available to the provider and collaborative relationships between health care providers and other experts in the field should be considered and leveraged in order to successfully increase the level of physical activity in women ages 20 to 44 years.

References

1. Kesaniemi Y, Danforth E, Kopelman P, Lefebvre P, Reeder B (2001) Dose-response issues concerning physical activity and health: an evidence-based symptoms. *Med Sci Sports Exerc* 33: S351-S358.
2. Centers for Disease Control and Prevention. Physical activity: measuring physical activity intensity (2011).
3. Nazaruk D, Tedders S, Alfonso M, Vogel R (2017) The determinants of physical activity in rural women aged 20-44 years, in Georgia. *Family and Community Health* 40: 11-17.
4. Larouche R, Laurencelle L, Shephard RJ, Trudeau F (2012) Life transitions in the waning of physical activity from childhood to adult life in the Trois-Rivières study. *J Physical Activity Health* 9: 516-524.
5. Leijon ME, Ekman D, Nilsen P, Ekberg K, Walter L, et al. (2010) Is there a demand for physical activity interventions provided by the health care sector? Findings from a population survey. *BMC Public Health* 10: 34.
6. Abright CL, Cohen S, Gibbons L, Miller S, Sallis J, et al. (2000) Incorporating physical activity advice into primary care: physician-delivered advice within the activity counseling trial. *Am J Preventive Medicine* 18: 225-234.
7. Johansson K, Bendtsen P, Akerlind I (2005) Advice to patients in Swedish primary care regarding alcohol and other lifestyle habits: how patients report the actions of GPs in relation to their own expectations and satisfaction with the consultation. *European Journal of Public Health* 15: 615-620.
8. Gabrys L, Jordan S, Schlaud M (2015) Prevalence and temporal trends of physical activity counseling in primary health care in Germany from 1997-1999 to 2008-2011. *Int J Behav Nutr Physical Activity* 12: 136.
9. Hirvensalo M, Heikkinen E, Lintunen T, Rantanen T (2003) The effect of advice by health care professionals on increasing physical activity of older people. *Scand J Med Sci Sports* 13: 231-236.
10. Eden KBC, Mulrow TO, Pender CD, Teutsch SM (2002) Does counseling by clinicians improve physical activity? A summary of the evidence for the U.S. preventive services task force. *Ann Intern Med* 137: 208-215.
11. Spink KS, Reeder B, Chad K, Wilson K, Nickel D (2008) Examining physician counseling to promote the adoption of physical activity. *Can J Public Health* 99: 26-30.
12. Medina D, Wilcox S, Salinas J, Addy C, Fore E, et al. (2011) Results of the heart healthy and ethnically relevant lifestyle trial: A cardiovascular risk reduction intervention for African American women attending community health centers. *Am J Public Health* 101: 1914-1921.
13. Florindo AA, Mielke GI, Gomes GA, Ramos LR, Bracco M, et al. (2013) Physical activity counseling in primary health care in Brazil: A national study on prevalence and associated factors. *BMC Public Health* 13: 794.
14. Waitzkin H (1989) A critical theory of medical discourse: Ideology, social control, and the processing of social context in medical encounters. *J Health Social Behav* 30: 220-239.
15. Graham S, Brookey J (2008) Do Patients Understand? *Perm J* 12: 67-69.
16. Patton M (2002) *Qualitative research & evaluation methods*. SAGE Publications P: 234.
17. Morrow (2005) Quality and trustworthiness in qualitative research in counseling psychology.
18. Fang MC, McCarthy EP, Singer D (2004) Are patients more likely to see physicians of the same sex? Recent national trends in primary care medicine. *Am J Med* 117: 575-581.
19. Franks P, Bertakis KD (2003) Physician gender, patient gender, and primary care. *J Women's Health* 12: 73-80.
20. Bertakis K (2009) The influence of gender on the doctor-patient interaction. *Patient Educ Couns* 76: 356-360.
21. Kee J, Khoo H, Lim I, Koh M (2018) Communication skills in patient-doctor interactions: Learning from patient complaints. *health professions education* 4: 97-106.
22. Levine D, Savarimuthu S, Squires A, Nicholson J, Jay M (2015) Technology-assisted weight loss interventions in primary care: a systematic review. *J General Intern Med* 30: 107-117.
23. Mercado F, Mercado M, Myers N, Hewit M, Haller NA (2012) Patient preferences in choosing a primary care physician. *J Prim Care Community Health* 3: 125-131.
24. Bary MS, Hagberg JM, Perusse L, Rankinen T, Roth SM, et al. (2009) The human gene map for performance and health-related fitness phenotypes: The 2006-2007 update. *Medicine and Science in Sports and Exercise* 41: 35-73.

25. Hoare E, Stavreski B, Jennings G, Kingwell B (2017) Exploring motivation and barriers to physical activity among active and inactive Australian adults. *Sports (2075-4663)* 5: 1.
26. Centers for Disease Control and Prevention. Physical activity: Physical Activity Guidelines (2018).
27. American college of sports medicine. Exercise is Medicine: A global health initiative (2018).