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Physical Activity Promotion in a Safety-net Clinic: Does the Provider Make a Difference? A Pilot Study

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Abstract

Background.—Despite the long-term health benefits of physical activity, many Americans across the lifespan do not meet the recommended levels. However, physical activity discussions in the clinic setting may hold promise. The ***purpose*** of this study aimed to understand health care providers' beliefs and practices about physical activity discussions being a part of patients' healthcare treatment.

Methods.—Semi-structured, audiotaped interviews were conducted to elicit narratives from ten health care providers. Interview data were transcribed verbatim, then coded and analyzed by two qualitative researchers using NVivo12.

Results: Three major themes emerged: *importance of regular PA counseling for vulnerable populations, patients' lack of regular physical activity*, including subthemes of lack of time, current health conditions, and social determinants of health, and healthcare provider's *reflections about their own physical activity.*

Conclusion: Healthcare providers have an important role when it comes to promoting good health. Having physical activity discussions with patients at every clinic visit is a great opportunity to encourage patients to engage in healthy lifestyle behaviors such as regular physical activity.

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From this pilot study, implications for practice may include increased awareness of the healthcare providers to discuss physical activity at every visit, which may lead to improved provider-patient communications related to the benefits of daily physical activity behaviors. These discussions may even have a secondary gain of encouraging the providers themselves to adopt the healthy behavior and thereby serve as a role model for their patients.

Keywords

physical activity discussions; healthcare provider beliefs and practices; Exercise is Medicine; primary care

Introduction/Background

Physical inactivity is a global health concern and the fourth leading cause of global death [1]. Annually, physical inactivity is responsible for more than five million deaths worldwide, with an overall healthcare cost estimated at 53.8 billion U.S dollars [2]. To continue ongoing efforts to address this public health concern, in 2018, the Department of Health and Human Services issued the *Physical Activity Guidelines for Americans* to promote life-long health benefits. These science-based guidelines were proposed to provide policymakers, clinicians, public health practitioners and the general public with comprehensive information regarding achievable physical activity **(PA)** goals to manage chronic conditions, including hypertension, type 2 diabetes, obesity, heart disease, stroke, dementia, selected cancers, and depression [3–5].

National guidelines recommend that adults perform at least 150 minutes of moderate aerobic activity, or 75 minutes of vigorous aerobic activity, or a combination of moderate and vigorous activity weekly [5]. Despite the long-term health benefits of PA, many Americans across the lifespan do not meet the recommended levels [5]. The global initiative “Exercise is Medicine” was developed in 2007 by the American Medical Association and the American College of Sports Medicine [6]. The principal goal of the initiative calls for healthcare providers to include PA assessments and promotion as a standard in clinical care, connecting health care with evidence-based PA resources for people everywhere and of all abilities [6]. Since then, the U.S. Department of Health and Human Services’ *Healthy People 2020* Initiative established their goal for 85% of healthcare providers to counsel patients on the importance of regular PA. Yet, according to U.S. national sample surveys, only 33% of adults received counseling on PA activity from their healthcare provider [7].

PA discussions in the clinic setting may actually hold promise because the majority of adults visit their health care providers **(HCPs)** annually [8–11]. The HCPs’ role in delivering PA counseling has been advocated in various reports with established recommendations, and it is well documented that patients want PA advice from their HCPs [9,12–14]. While the role of the HCP in promoting PA reflects an upward trend since 2010, there is much work to be done to meet *Healthy People 2030* goals. A vast amount of evidence confirms that counseling on regular PA is one of the most powerful recommendations HCPs can offer their patients [4,14,15]. In fact, the healthcare system and clinicians have an important role promoting regular PA. The beliefs and attitudes of clinicians are significantly influential

when discussing health related issues such as PA as a lifestyle behavior [16]. Moreover, HCPs at healthcare clinics have frequent contact with large numbers of patients who are older, have a lower social economic status, and/or have multiple comorbidities; these groups would benefit the greatest from lifestyle discussions to improve health outcomes [16,17].

Although PA is an effective strategy to manage and prevent many chronic illnesses, research suggests that there are barriers and facilitators to offering PA discussions with patients [18–20]. Clinicians with a positive attitude towards regular PA are more likely to provide PA counseling to their patients [18]. However, HCPs cite barriers to physical activity counseling, such as inadequate time and lack of training and reimbursement [21]. Establishing policies within a healthcare organization is a promising strategy to encourage HCPs to promote physical activity participation at each clinic encounter, which could subsequently improve overall health among vulnerable adults. The purpose of this pilot study was to understand HCPs' beliefs and practices regarding PA discussions as part of patients' healthcare regime.

Methods

The University of Alabama at Birmingham Institutional Review Board approved this study. Cooper Green Mercy Health Services (CGMHS) was the study site. CGMHS is an ambulatory safety-net clinic located in Jefferson County, Alabama, that serves residents regardless of their ability to pay and provides services including primary and specialty care, urgent care, and occupational and speech therapy. Researchers developed a PA policy study that encouraged HCPs to discuss PA with their patients during clinic visits. Post intervention, we obtained evaluative feedback and perspectives about the PA policy from the HCPs. The overall pilot study had three collection periods [22]. Period 1 included identifying policies (or the lack thereof) that promote PA discussions during patients' clinical visits with HCPs to assess baseline data from African American **(AA)** patients about whether physical activities were discussed during their visit. We achieved this by first reviewing policy manuals of the clinic. We also conducted baseline assessments of patients' perceptions of PA discussions during their clinic visit. We accomplished this by administering surveys to patients immediately after their clinic visit to assess if PA discussions occurred. Period 2 involved the development and implementation of the policy to promote PA discussion during patients' clinical visits with their HCPs. Modifications to the clinic's electronic medical record (EMR) were made to facilitate documentation and HCPs were provided an educational PA brochure to help facilitate their discussions [23]. The final period, which is the focus of this paper, was to conduct a qualitative descriptive pilot study to explore HCPs' perceptions and feedback about discussing PA with patients after the conclusion of the PA policy intervention.

Purposeful and snowball sampling strategies were used to recruit HCPs who provided direct patient care within CGMHS. Ten HCPs expressed interest and were screened to ensure that they provided direct patient care to AA patients in primary care [24–26]. Once participants were entered into the study, informed written consent was obtained, and each participant was compensated $50.00 for their time.

Descriptive Qualitative Research

Descriptive phenomenological approach was used to obtain rich data from HCPs. With this approach, the researcher (PB) presumed the task of active listening to the participants' lived experiences expressed in their own words as it related to their beliefs and practices of PA as a strategy to manage and prevent chronic health conditions [27,28]. The assumption of phenomenology applied to this study was that HCPs would be self-aware of the importance of regular PA as part of their medical regime, while the researcher must set aside any assumptions regarding regular PA in order to understand the HCPs' perspective in an unbiased manner [28–30].

To better understand HCPs' perceptions about discussing PA with their patients, a semi-structured interview was used, which was audiotaped. Interviews were professionally transcribed verbatim, and two qualitative researchers (PB and NW) used NVivo12 to analyze the data. The researchers began by using structural coding to index data such as demographic characteristics and answers to questions about participants' own exercise habits; they then employed basic descriptive coding to organize key concepts and ideas identified across interviews[31]. The researchers then used the constant comparison method[32], working iteratively through transcripts to generate codes describing HCPs' perceptions. After coding independently, the researchers met bi-weekly to discuss their data analysis and gain consensus about themes emerging from the coding process.

Rigor

Lincoln YS. & Guba EG outlined four criteria to assess rigor in qualitative research: 1) *credibility*, the believability of the findings based on research design and methods; 2) *dependability*, the quality of the data based on the researcher's approaches to data collection and analysis 3) *confirmability*, the ability of others to corroborate the findings, and 4) *transferability*, the idea that the research could be conducted in similar situations or contexts with similar, though not generalizable, results [33]. To ensure credibility, we used a diverse team of expert researchers to design and analyze the study, including one researcher who is skilled in qualitative research but who is not an HCP. Dependability and confirmability were enhanced by an audit trail documenting each step of the study; HCPs on the team also practiced reflexivity, discussing their potential biases with each other and the non-HCP to ensure that they were not influencing the research. Finally, we have incorporated ' thick, rich description' [34] to describe the research design and results, ensuring that the study could be transferred to a similar context if desired.

Results

Characteristics of Sample

Sample demographics are presented in Table 1. Ten HCPs were recruited with an average age of 59 (SD=9.3) ranging from 46 to 72 years. Most of the participants (60%) were physicians and employed full-time. The number of years in primary care ranged from 3 years to over 30 years. Approximately half of all providers in this study were Black, and 60% were male. On average, nurse practitioners were younger (53) in age (range, 46–56) compared to physicians 63 (range, 49–72).

Major Themes

After researchers completed the data analysis process, three major themes emerged about HCPs' perceptions related to PA discussions with patients. The first theme was *the importance of regular PA counseling for vulnerable populations*. The second theme addressed *patients' lack of regular physical activity*, including subthemes of lack of time, current health conditions, and social determinants of health. The third theme emerged from HCPs' *reflections about their own physical activity*, including barriers and facilitators. Table 2 illustrates representative quotes for each theme and subtheme.

Theme 1. Importance of Regular Physical Activity Counseling

All HCPs agreed that vulnerable populations need to understand the importance of regular physical activity and its impact on their health. Many providers acknowledged that their patients suffered from conditions such as hypertension and diabetes that could be controlled better with regular programs of exercise. Some providers claimed they were "always conscious about it" (NP 3) or that they "talk about it a lot" (NP 2) with patients. Eight of the providers explained that they discuss physical activity more with patients who are overweight; in fact, NP3 noted that the topic of exercise was discussed "probably [with] 90 percent of them [patients], because most of them are obese." NP 3 explained further:

> I mean, not that I don't talk to all my other patients, but for those people I really key in and tellin' them that weight loss – I mean, eating right and physical activity helps. Because we could prescribe you all the medication that you want but part of it is if you get more active, you lose some weight.

Some providers stressed the importance of exercise by using positive reinforcement techniques. For example, NP 4 explained that showing patients their lab results for cholesterol levels could indicate whether they had been changing their exercise habits: "We'll look at the labs and it shows yeah, you did slip up, so now you need to work on this next time. It reinforces, so eventually they make the change." NP4 also stressed, "You don't wait 'til they're sick to start talking about changing. You start now, and then they can eventually prevent themselves from becoming full-blown sick."

Yet even as HCPs emphasized the need for regular counseling about physical activity, they acknowledged that they were rarely able to spend enough time on the topic with their patients. Most noted a lack of time in scheduled appointments as the reason they did not go into detail about exercise or failed to mention it at all. Dr. B explained, "I'd love to be able to sit down and talk to every patient however long I feel like we need to cover everything that's pertinent to them. But you can't do that when every 15 minutes they're loading in another one." Dr. B was discouraged by the time issue because "to sit down and talk to somebody about exercise and lifestyle changes is not something that you can do in five minutes and expect it to really take a hold." Dr. C suggested that nurse practitioners might have more time to address the issue. Dr. B also believed patients should be referred to other providers for exercise counseling:

> I think if we're really looking at trying to get patients more physically active, and most of our patients definitely would benefit from it and stuff, that's probably something that needs to be set up as something besides a primary care thing to

> where there would be some structural program we could make a referral. Then at least an adequate amount of time could be spent.

In general, HCPs expressed a desire to address issues about physical activity with their patients, but they struggled to be able to do so due to the number of topics they needed to cover during short appointment times.

Theme 2. Patients' Lack of Physical Activity

HCPs made various observations about why patients might not exercise, including a) lack of time, b) current health conditions, and c) effects of social determinants of health.

Lack of Time—Providers noted that some patients claimed they could not work exercise into their busy lifestyles, and many sympathized with this claim. NP 1 expressed that patients from vulnerable populations "struggled to get by [in] life," and Dr. F claimed that African American male patients, in particular, just wanted to "work and put food on the table." Many HCPs hesitated about prescribing exercise in terms of time, as Dr. B stated, "I don't think patients benefit a whole bunch … we just sit down and say 'Well, you need to exercise…5 times a week for at least 30 minutes.' They've got to have something that works in their time frame." NP 2 expressed a common answer from patients:

> When you ask, "Do you exercise?" the patient will tell you, "I'm too busy. I don't have time. I work all day." Ask them, "How is your physical activity?' They'll tell you, "Oh, chasing behind my kids. I pick up heavy stuff. I'm walking around, upstairs, downstairs, all day long at my work."

Providers' responses illustrated that the burden of patients' daily lives made it difficult for them to find the time or muster the energy to participate in leisure time physical activity for their health.

Current Health Conditions—Many HCPs pointed out that the very health conditions that brought patients to their clinics were ones that hindered them from exercising. For example, Dr. A stated, "We've got little old ladies who are twisted up from arthritis… Some of those ladies aren't willing to get outta their chair to get to the exam table." NP 1 said that patients were stuck in a "vicious cycle" of wanting to use pills or ice for aching joints instead of exercising, but NP 1 told these patients, "If you don't exercise because of pain, then because of no activity to the joint, it gets even worse." NP 4 described the problems of sedentary patients:

> They have to be ready [to exercise] 'cause most people are not flexible. And they think that when you say go exercise – they think of exercise as go out there walking – even walking can be challenging for muscles that have just been sitting down all the time, because then their muscles are tight. You go out to walk, and then you get cramps, and your legs are hurting you, and then you think that there's something wrong with you. Your back is hurting 'cause you're just so stiff.

Inevitably, lack of exercise can lead to obesity, which compounds the problem even more. Dr. A admitted, "It's hard to talk to the pain patients about exercise. Sometimes I try to tell them, 'Your knees would hurt less if you lost some weight,' but they just feel like they

cannot exercise because their knees hurt." Similarly, Dr. E said, "I tell them the reason you have back pain and knee pain and foot pain is because you were never meant to carry around 300 pounds." Dr. A claimed that patients who were only slightly overweight had the best outcomes with exercise programs, because they could see results faster. However, despite their encouraging patients to exercise to lose weight, most HCPs were pessimistic about outcomes, claiming that patients were not exercising to lose weight because they were "self-conscious" (Dr. A), "not motivated" (Dr. B), or even "lazy" (Dr. C). Their bleak outlook was summed up by NP 1: "One situation complicates the other, and the condition overall gets worse. I help them to realize that there's really no…escape from this. The only way you can fix that is just to keep going, even when it's hard."

Social Determinants of Health—HCPs in this study were well aware of the effects of social determinants of health on the vulnerable populations they served, and they discussed how low income and inadequate education played a major role in their patients' lack of physical activity. Various providers noted that their patients did not have access to resources such as gyms or parks to exercise and that they might not live in safe neighborhoods to walk. NP 1 suggested, "Hey, I can understand your neighborhood may not be very safe. If you have some means of transportation, just jump into your car and just drive to a safe place, park it, and just do it." Dr. E quoted a patient as saying, "Oh, I get plenty of exercise. I walk up and down the stairs. I walk around my yard." Some providers claimed that schools were not filling the gap; NP 1 pointed out that many schools "eliminated the PE program… and now, with all the computers and all that kids aren't exercising." NP 1 also observed:

> I think the education entities…may have to look at the curriculum and begin to realize that it's not serving us well. Because inasmuch as we're generating a group of people who may be able to do different things and different professions, but it doesn't help the nation to be able to raise generations of people who would be professionals and yet their health is collapsing.

Most providers recognized that these systemic issues they identified were barriers that hindered patients with low socioeconomic levels from participating in regular PA.

Theme 3. Healthcare Providers' Physical Activity

When asked, "Do you engage in regular physical activity?" eight HCPs answered that they exercised at least 30 minutes per day each week; one HCP answered "sometimes," and the other simply answered "no" to the question (see Table 3). However, providers also gave various explanations about how and when they were able or unable to engage in regular physical activity.

Barriers—HCPs cited many of the same barriers to their own regular PA that they noted for their patients. Many acknowledged that a lack of time kept them from exercising as much as they would like. Dr. C exclaimed, "Busy doc, busy doc, busy doc…" when asked about finding time to exercise and explained that "morning, we have no time, we are to come to work." NP 2 explained that an exercise schedule "depends [on] how late I got home and how is the weather." The busy workday also made it "not convenient to go" to the gym, according to Dr. D. In some cases, HCPs also struggled with their own health conditions.

Dr. C noted that "I had a little bit [of] arthritis here…" so they went to a doctor regularly to get injections to be able to exercise. However, Dr. C admitted that lack of exercise was due to "basic laziness… When I go home, I get tired, I sit and watch on the TV series." When reflecting on the value of HCPs exercising, NP 2 noted:

> I think the thing with providers is providers themselves—most of providers have been trained, we are here to tell people what to do, but we rarely do it ourselves. Yes, we can't do all of this, but we're going to recommend this to somebody.

Facilitators—Although HCPs had many of the same barriers as patients, some also took advantage of opportunities to exercise. Some were able to work PA into their daily routine, as NP 2explained, "Well, on the workday, I usually like to take stairs if I can." Others found time to exercise (mainly by walking) after work or on the weekends. Dr. C claimed that "evening is the best time [to walk], so we try to break… after we finish work, take a little tea or something, do the walking, and then come back and eat." NP 2 walked regularly "probably two or three times [per week]" but also enthusiastically explained:

> Then the weekend, I can walk maybe an hour or two. I live in a golf community, so I walk the nine holes. Then on the short day, I might walk 3 or 4 [miles], from 14 to 17 and come home or walk around 14 to 18 [golf course holes].

In contrast to the provider who claimed that most HCPs do not practice what they preach, some providers were motivated to exercise so that they did not suffer from the same conditions they saw in their patients. For example, Dr. A explained, "It's important to me that I don't become diabetic. Plus, it [PA] just helps me with my energy. If I don't exercise, I just feel tired." Dr. A further stressed the importance of PA for HCPs:

> As a doctor, I will always know it's necessary, but I think it's just different for me 'cause I know how it makes me feel. I know that a lot of… just the things I see my patients struggle with, I don't want those for me, so I'm very mindful to getting my, keeping my exercise up.

Discussion

PA advice from HCPs can be a powerful catalyst to start and sustain PA [10,14], and many vulnerable populations need healthy lifestyle behavior advice the most [16]. The majority of participants in our study believed that PA counseling is an important part of a patient's plan of care. This finding supports the current literature because most HCPs have a positive attitude towards PA counseling and believe that PA is an important provision for patients [18]. However, it was interesting that most of our providers immediately quoted the national PA recommendations during their interviews, but when pressed to talk about their own PA behavior, their reality was complicated and challenging, even with having access to additional resources such as wearable activity monitors such as FitBits or living in a high resource (e.g., golfing) community.

Even though all the HCPs acknowledged that PA is an important component to manage and prevent chronic diseases, many providers voiced factors that would hinder their ability to provide regular PA counseling to this population. Our HCPs mentioned barriers such

as time restraints, limited resources, and the perceptions that vulnerable and marginalized populations would not adhere to PA advice, confirming many barriers identified in the literature [16,18].

Although HCPs in our study cited “a lack of time” as a barrier, some researchers have found that PA counseling did not increase the length of the appointment and, in fact, was an asset to their practice because their patient’s health benefited [35]. One solution towards vulnerable populations adhering to PA counseling might incorporate more personalized recommendations centered on the patient’s health needs. Tailored healthy lifestyle counseling is more acceptable and more effective in motivating behavior change [36,37]. Several of the HCPs in our study mentioned time restraints or expressed the need for someone else to provide the PA counseling. Another strategy may be to implement guidelines to assist clinicians and health care systems with how to adopt the exercise is medicine (EIM) initiative into busy primary care clinics [38].

Consistent with our findings, HCPs should not make pre-conceived perceptions about PA counseling to vulnerable and marginalized populations. Moreover, HCPs should not solely use their judgement and underestimate the importance of collaborating with patients to include their preferences when prescribing treatment plans [39]. Routine and consistent PA counseling with each health care visit should be offered to improve health care outcomes, and HCPs are well positioned to positively influence behavior change, such as increased PA. Implementing policies to encourage HCPs to counsel their patients on PA at each encounter could increase the likelihood of sustaining healthy behavioral changes for patients. The promotion of PA by HCPs should become integrated into routine health care practice and be tailored to the needs of patients.

Implications

This study provides several implications for research, practice, and policy. First, the study provides insights to policymakers, researchers, and practice managers on the effects of PA discussion on patient health outcomes, especially among vulnerable population. Findings suggest that HCPs want to engage in regular PA counseling, but a lack of time to spend with patients is a barrier. As such, policymakers both at electoral and management levels can develop policies to encourage or mandate PA discussion by HCPs with patients at every encounter. Second, our research informs practice managers about the need to make strategic decisions to provide resources for and to allow HCPs enough time to have PA discussion with their patients. For example, managers could provide preprinted EIM materials to communicate quickly with patients, while having designated personnel to assist with overcoming barriers that low-resourced patients may face (e.g., safety or need for social support) in adhering to PA guidelines. Third, findings from this research provide areas for future research for academics. More research is needed to understand why HCPs understand the benefits of and the need for vulnerable population to engage in regular PA but do not regularly prescribe PA to all patients, especially older patients. A more targeted approach may be helpful to explore what types of healthy lifestyle counseling and resources are more acceptable to HCPs to ensure that PA discussions will occur and be a sustained part of primary care.

Limitations

We would like to acknowledge the limitations of our study. First our findings will not be considered generalizable because of our small sample size at a single safety net clinic. Second, limited resources available to implement PA discussions at this safety net clinic may differ from other clinics such as private pay clinics. Third, most HCPs self-reported engaging in regular PA, which we anticipated (selection bias) because HCPs' education and clinical practice experiences could make them more aware of the benefits of PA. However, it is unclear from this pilot why the patient population at this safety net clinic are still less likely to engage in regular PA. Lastly, the mean age of the HCPs was 59. We acknowledge that younger HCPs may have offered a different perspective on the acceptability and feasibility of implementing PA discussions at every visit.

Conclusion

Given the important role HCPs have in the lives of patients, PA counseling at every clinic visit regardless of barriers is a promising strategy for all HCPs to utilize to improve health outcomes. The goal of this pilot study was to assess the HCP's perceptions and to understand HCPs' beliefs and practices regarding PA discussions as part of patients' healthcare regime. This study also sought input from HCPs to inform future strategies that might help safety-net facilities or any clinical setting that serves vulnerable populations provide PA discussions at every visits. Further research is needed in larger sample sizes to test interventions that encourage meaningful PA discussions and to assess the impact on patient health outcomes. Results of this study also suggests that HCPs may need additional resources and training on how to integrate PA counseling into their clinical practices [38,40]. Institutional policies that support HCPs in the delivery of PA counseling may improve patient motivation and sustainability to engage in regular PA.

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References

1. World Health Organization. Health topics: Physical activity. World Health Organization,. Global strategy on diet, physical activity and health Web site. http://www.who.int/topics/en/. Published 2020. Accessed 2020.
2. Ding D, Lawson KD, Kolbe-Alexander TL, et al. The economic burden of physical inactivity: A global analysis of major non-communicable diseases. Lancet. 2016;388(10051):1311–1324. [PubMed: 27475266]
3. U.S. Department of Health and Human Services, ed 2008 Physical Activity Guidelines for Americans: Be active, healthy, and happy. U.S. Department of Health and Human Services; 2008.
4. Kraus WE, Bittner V, Appel L, et al. The national physical activity plan: A call to action from the American Heart Association. Circulation. 2015;131(21):1932–1940. [PubMed: 25918126]

5. U.S. Department of Health and Human Services. Physical activity guidelines for Americans. Washington, DC: U.S. Department of Health and Human Services;2018.
6. American College of Sports Medicine. Exercise is medicine http://www.exerciseismedicine.org/. Published 2020. Accessed.
7. Crump C, Sundquist K, Sundquist J, Winkleby MA. Exercise is medicine: Primary care counseling on aerobic fitness and muscle strengthening. J Am Board Fam Med. 2019;32(1):103–107. [PubMed: 30610148]
8. Costello E, Leone JE, Ellzy M, Miller TA. Older adult perceptions of the physicians' role in promoting physical activity. Disabil Rehabil. 2013;35(14):1191–1198. [PubMed: 23072684]
9. Weiss DR, Wolfson C, Yaffe MJ, Shrier I, Puts MTE. Physician counseling of older adults about physical activity: The importance of context. Am J Health Promot. 2012;27(2):71–74. [PubMed: 23113775]
10. Jacobson DM, Strohecker L, Compton MT, Katz DL. Physical activity counseling in the adult primary care setting: Position statement of the American College of Preventive Medicine. Am J Prev Med. 2005;29(2):158–162.
11. Meriwether RA, Lee JA, Lafleur AS, Wiseman P. Physical activity counseling. Am Fam Physician. 2008;77(8):1029–1136, 1138.
12. Booth ML, Bauman A, Owen N, Gore CJ. Physical activity preferences, preferred sources of assistance, and perceived barriers to increased activity among physically inactive Australians. Prev Med. 1997;26(1):131–137. [PubMed: 9010908]
13. Costello E, Leone JE, Ellzy M, Miller TA. Older adult perceptions of the physicians' role in promoting physical activity. Disabil Rehabil. 2013;35(14):1191–1198. [PubMed: 23072684]
14. Lobelo F, de Quevedo IG. The evidence in support of physicians and health care providers as physical activity role models. Am J Lifestyle Med. 2014;10(1):36–52. [PubMed: 26213523]
15. Berra K, Rippe J, Manson JE. Making physical activity counseling a priority in clinical practice: The time for action is now. JAMA. 2015;314(24):2617–2618. [PubMed: 26662069]
16. Vuori IM, Lavie CJ, Blair SN. Physical activity promotion in the health care system. Mayo Clin Proc. 2013;88(12):1446–1461. [PubMed: 24290119]
17. U.S. Department of Health & Human Services. Healthy People 2020. U.S. Department of Health and Human Services 2020 Topics & objectives: Physical activity Web site. https://www.healthypeople.gov/2020/About-Healthy-People. Published 2020. Accessed.
18. Hébert ET, Caughy MO, Shuval K. Primary care providers perceptions of physical activity counselling in a clinical setting: A systematic review. Br J Sports Med. 2012;46(9):625. [PubMed: 22711796]
19. Shin C-N, Lee Y-S, Belyea M. Physical activity, benefits, and barriers across the aging continuum. Appl Nurs Res. 2018;44:107–112. [PubMed: 30389054]
20. Warburton DER, Bredin SSD. Reflections on physical activity and health: What should we recommend? Can J Cardiol. 2016;32(4):495–504. [PubMed: 26995692]
21. AuYoung M, Linke SE, Pagoto S, et al. Integrating physical activity in primary care practice. Am J Med. 2016;129(10):1022–1029. [PubMed: 26953063]
22. Bowen PG, Opoku-Agyeman W, Clay OJ, et al. Promoting physical activity through policy at a single safety net clinic: A pilot study. Translational Journal of the American College of Sports Medicine. 2020.
23. Bowen PG, Opoku-Agyeman W, Clay OJ, et al. Promoting physical activity through policy at a single safety net clinic: A pilot study. . Translational Journal of the American College of Sports Medicine. in press.
24. Morse J. Designing funded qualitative research. In: Denzin NK, Lincoln YS, eds. Handbook of qualitative research. Thousand Oak, CA: Sage; 1994:220–235.
25. Polit D, Beck C. Nursing research: Generating and assessing evidence for nursing practice. 8th ed. Philadelphia: Lippincott; 2008.
26. Sandelowski M. Focus on qualitative methods: Sample size in qualitative research. Res Nurs Health. 1995(18):179–183. [PubMed: 7899572]
27. Kleiman S. Phenomenology: To wonder and search for meanings. Nurse Res. 2004;11(4):7–19.

28. Bowen PG, Eaves YD, Vance DE, Moneyham LD. A phenomenological study of obesity and physical activity in southern African American older women. Journal of Aging and Physical Activity. 2015.
29. Laverty SM. Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological consideration. International Institute of Qualitative Methodology. 2003;2:1–29.
30. Hamill C, Sinclair HA. Bracketing - practical considerations in Husserlian phenomenological research. Nurse Res. 2010;17(2):16–24. [PubMed: 20222275]
31. Saldana J. (2016). The coding manual for qualitative researchers (3rd ed.) SAGE.
32. Glaser B. (1965) The constant comparative method of qualitative analysis. Social Problems, 12, 436–445. doi:10.2307/798843
33. Lincoln YS. & Guba EG. (1985). Naturalistic Inquiry. Newbury Park, CA: Sage Publications.
34. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five approaches. 4th ed. Thousand Oaks, CA.: SAGE Publication; 2018.
35. Albright CL, Cohen S, Gibbons L, et al. Incorporating physical activity advice into primary care: Physician-delivered advice within the activity counseling trial. Am J Prev Med. 2000;18(3):225–234. [PubMed: 10722989]
36. Kreuter M, Chheda S, Bull F. How does physician advice influence patient behavior? Evidence for a priming effect. Arch Fam Med. 2000;9(5):426–433. [PubMed: 10810947]
37. Reddeman L, Bourgeois N, Angl EN, et al. How should family physicians provide physical activity advice? Qualitative study to inform the design of an e-health intervention. Canadian family physician Medecin de famille canadien. 2019;65(9):e411–e419. [PubMed: 31515329]
38. Bowen PG, Mankowski RT, Harper SA, Buford TW. Exercise is medicine as a vital sign: Challenges and opportunities. Translational Journal American College of Sports Medicine. 2019;4(1):1–7.
39. Mühlbacher AC, Juhnke C. Patient preferences versus physicians' judgement: Does it make a difference in healthcare decision making? Applied Health Economics and Health Policy. 2013;11(3):163–180. [PubMed: 23529716]
40. Lobelo F, Rohm Young D, Sallis R, et al. Routine assessment and promotion of physical activity in healthcare settings: A scientific statement from the American Heart Association. Circulation. 2018;137(18):e495. [PubMed: 29618598]

Table 1.

Demographic Information of Participants

Variables	Statistic
Age (M/SD)	59(9.29)
Provider (F/%)	
Physicians	6(60%)
Nurse Practitioners	4(40%)
Gender (F/%)	
Male	6(60%)
Female	4(40%)
Race (F/%)	
Black	5(50%)
White	3(30%)
Asian	2(20%)

Table 2.

Illustrative Quotes

Importance of Regular Physical Activity Counseling	Patients' Lack of Regular Physical Activity	HCP's Physical Activity
Regular discussions	**Lack of time**	**Facilitators**
"I always tell them that it has to be exercise. 'Cause a lotta them will say, 'Oh I walked at work.' No, it has to be exercise, and you have to get your heart rate up." (Dr. A)	"For somebody that is struggling in a complicated world, and their concerns are about eating and safety and employment and pain pills and the kids, and you add another thing, it's just a lot." (Dr. F)	"Well, I am motivated because I'm going fly fishing with my son out of the country. I need to exercise so I can walk." (Dr. D)
"I'm always conscious about it, and I talk about it a lot with my patients…especially the ones who have hypertension and who have diabetes." (NP 3)	"When you ask, "Do you exercise?" The patient will tell you, "I'm too busy. I don't have time. I work all day. I don't have time for exercise."" (NP 2)	"The way I will—when I get home, I go out and walk around the neighborhood. We can walk three miles, four miles." (NP 2)
"When you're sitting there and, like I said, you're covering all those other things and then you're also talking about are they up to date on their Pap smears, their colonoscopies, their mammograms. It's just there's not enough—sufficient time. I'd love to be able to sit down and talk to every patient however long I feel like we need to to cover everything that's pertinent to them, but you can't do that when every 15 minutes they're loading in another one." (Dr. B)		**Barriers** "The bad thing about it, I did it intentionally, but I set everything up to where I drive far away. That way I don't have to worry about doing any non-competes or anything like that. Every place that I work at right now, I literally drive three hours a day on top of that." (Dr. B)
"There was one couple I know they were talking about dancing every day. I know that people dance a lot, so you guys all love dancing. You should be doing it together. They said, 'Yeah, we can do that.' I thought, 'Alright. Let's see. I'm gonna ask you guys about that when you come back.'" (NP 4)		"I broke my ankle a year ago. I used to walk on a treadmill, but I sold it. It hurt to walk." (Dr. C.)
	Current health conditions"The patients who already have established chronic conditions, especially the ones who are very overweight, I think they feel like it won't work. I think some of them feel self-conscious about going out and exercising. Going out in the park and seein'—people seeing them sweating. I think that's part of the problem." (Dr. A)	
	"A good portion of our—or a good chunk of our population have pain—arthritis in knees and hips and all that. Again, you bring up exercise, and it's like, 'Well, you know, I'm dealing with all this severe pain here and there.'" (NP 1)	
	Social Determinants of Health "I think for both White and Black, mainly poor people, they've been conditioned to live a certain way, passed down from grandfather to father to father and mother and so on. We're still hung up on we love our grease, and our salt, and our tobacco, and we have the highest rate of stroke and heart attack. I have never seen so many young people have MIs down here. When I was up north, it was ten years older. You didn't see this disease until people were 10, 15 years older in the north compared to here." (Dr. E)	
	"When I ask people—when I talk to folks about exercise, it's the whole complicated thing of, 'Where do you do it?" 'Well, can you walk around?' 'No. My block's not safe enough.' Can you go to the [local park]?' 'I don't have a way to get there.' It becomes those kinds of things." (Dr. F)	
	"I don't think patients benefit a whole bunch from if we just sit down and say, 'Well, you need to exercise 150 minutes a week, 5 times a day—or 5 times a week at least for 30 minutes'" and stuff.	

Importance of Regular Physical Activity Counseling	Patients' Lack of Regular Physical Activity	HCP's Physical Activity
	Because the whole thing for exercise—I mean, if you really look at it, our goal is we're wanting them to do this long-term, they've got to pick out something that's affordable, which that's a limitation with our group that we end up having." (Dr. B)	

Table 3:

Regular PA by Providers

Participant	Regular PA?	Days per week	Minutes per day
Dr. A.	yes	5	30–35
Dr. B.	sometimes	3	30–45
Dr. C	yes	4–5	30
Dr. D.	no	0	0
Dr. E.	yes	3	60+
Dr. F.	yes	5	40
NP 1.	yes	6	30
NP 2.	yes	2–3	45
NP 3.	yes	3+	45
NP 4.	yes	5	30

Note: Doctor's age ranges: 49–72; Nurse practitioner age ranges: 46–56; PA: physical activity