ORIGINAL RESEARCH

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Understanding Primary Care Providers' Experience with Lifestyle Behavior Change Recommendations and Programs to Prevent Chronic Disease

Abstract: *Prescribing lifestyle behavior change is a recommended strategy for both primary and secondary prevention of disease. Programs that support and encourage lifestyle behavior change are available to patients but are underutilized. The purpose of this study was to understand primary care providers (PCPs) experiences and barriers they experience with referring patients to lifestyle behavior change programs at one academic health care system. In-depth semi-structured interviews were conducted with 7 academic PCPs between November 2020 and January 2021. Qualitative analysis identified major themes. Four themes emerged: (1) guideline awareness and adherence, (2) barriers to lifestyle behavior change recommendations, (3) provider role with respect to lifestyle behavior change recommendations, and (4) suggestions to improve utilization of behavior change support. Specific strategies for improvement include revising referral process, educating providers about programs already offered, integrating a team-based approach, and systemizing healthy lifestyle behaviors interventions. The lessons identified through this study highlight the need for systematic prioritization of lifestyle behavior change to decrease certain barriers that providers face when attempting to integrate lifestyle change consistently into their practice.*

Keywords: lifestyle medicine; chronic disease prevention; qualitative interviews; clinicians

"The health system in this study offers a variety of lifestyle behavior change programs for patients to engage in."

Introduction

Programs addressing health behavior change to prevent and treat chronic disease are frequently effective but underutilized. In the United States, 60% of adults have a chronic disease, with 40% having multiple conditions.[1] Chronic disease

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accounts for two thirds of deaths per year and 90% of annual healthcare spending.[1] However, an estimated 80% of cardiovascular deaths and 45% of cancer deaths are preventable with the modification of lifestyle behaviors such as increasing physical activity, improving nutrition, modifying alcohol consumption, and eliminating tobacco use.[1-3]

Primary care providers (PCPs) are key in recommending lifestyle behavior change to adults as most patient encounters occur in the primary care setting, primary care providers see patients throughout the patients' lifespans, and patients trust their providers.[4-7] Professional organizations like the American Medical Association (AMA), American College of Lifestyle Medicine (ACLM), and American Diabetes Association (ADA) to name a few, have published practice guidelines encouraging PCPs to educate and counsel patients about lifestyle behavior change or refer patients to lifestyle behavior change programs. However, few patients report that they receive such guidance.[2,8,9] Previous research has identified time, patient compliance, inadequate teaching materials, lack of training, lack of knowledge, and lack of adequate reimbursement as barriers to counseling patients in lifestyle behavior changes.[10-23] Previous research has provided information about commonly reported barriers to lifestyle counseling and referrals, however the purpose of this study was to understand the specific barriers that providers within a large academic healthcare system face to making lifestyle behavior change recommendations to their patients.

Methods

Setting

This study took place within a university health care system that includes five hospitals and twelve community clinics. The healthcare system provides care for 1.2 million residents of six states in a referral area encompassing more than 10% of the continental United States. The patient population includes both urban and rural residents with a mix of insurance types that include commercial insurance, Medicare and Medicaid. While the area is a frequent resettlement area for refugees and immigrants and has seen growth in people from Hispanic backgrounds, the overall population is predominantly white.

The healthcare system offers a variety of education and lifestyle behavior change programs that providers can refer patients to. Despite the available programs and vast reach of the healthcare system, the main work queue for wellness programs received less than 1000 referrals from providers in 2019. In a healthcare system that boasts over 5000 healthcare professionals, just 27 of them made over 10 referrals each in 2019.[24]

Data Collection

We collected qualitative data from semi-structured in-depth interviews. Data were collected from November 2020 to January 2021. Inclusion criteria for participants included being a primary care provider within the university system, either physicians (MD), physician assistants (PA), or nurse practitioners (NP). This study was approved by the University of Utah IRB (IRB_00136955). One team member (MM) conducted 7 in-depth semi structured interviews via Zoom. Participants were recruited through an email sent to all providers by their supervisors. Prior to each interview, the participant received a reminder email with a brief introduction to the interview topic, a consent statement, and link to a demographic survey. The interviewer followed an interview guide with pre-determined questions and probes. The guide was developed using findings from previous research and was tested prior to data collection.

Data Analysis

Data analysis for the in-depth interviews followed the recommendation for mixed methods research by Halcomb and Davidson.[25] All interviews were recorded. Throughout the interview, the interviewer took notes, specifically documenting impressions of the interaction. Immediately following the interview, the interviewer reviewed the notes and expanded upon them with reflections, major ideas, concepts, or issues raised in the interview. Next, the notes were reviewed alongside the recording to ensure that the notes provide a thorough and accurate description of the interaction. A codebook was developed prior to data collection with additional codes added based on the data. The interviewer coded each interview and re-coded 30% of interviews three weeks later to ensure intra-reliability. If inconsistencies were identified, the interviewer reflected on the meaning of the code and consulted with another member of the research team for an outside perspective. The vast majority of coding was consistent during re-coding and any appropriate changes were made after reflection and consultation. Codes were organized into categories and themes based on the data and team discussion.

Results

Of 7 interview participants, 87% were female, most worked in Family Medicine (71%), were physicians (87%), and had been practicing for less than 10 years (87%). Four major themes emerged: (1) guideline awareness and adherence, (2) barriers to lifestyle behavior change recommendations, (3) provider role with respect to lifestyle behavior change recommendations, and (4)

suggestions to improve utilization of behavior change support. All names have been changed to maintain confidentiality.

Guideline Awareness and Adherence

Guideline awareness varied by the specific guideline, with providers more aware of American Heart Association and American Cancer Association guidelines and less aware of American Dietary Association guidelines. Some providers were not aware that certain guidelines were formal statements but pointed out that they followed the intent of the guidelines, to use lifestyle behavior changes as primary prevention of chronic disease and as a first line of treatment when appropriate. While some providers reported success with extensive use of the guidelines: "I've had a couple of cool stories of success with patients making dietary changes and improving their blood pressure and reducing how much medication they are taking for hypertension" (Ryan), others described their difficulty following the guidelines for various reasons. For example, it was often too late to prescribe lifestyle behavior changes alone by the time the patient saw the provider. Kayla explained that she uses "a synergistic approach…I'm probably going to start a medication just because I don't reasonably see them controlling blood pressure with just lifestyle." Finally, Ryan admitted that he is familiar with the recommendations but does not refer to programs as often as he should, particularly if a patient's BMI is very close to the threshold.

Barriers to Lifestyle Behavior Change Recommendations

Within this theme, providers discussed (1) patient barriers, (2) clinic structure, and (3) resources and support.

Providers reported patient barriers that made it difficult to recommend lifestyle behavior changes. Patient barriers included low health literacy, lack of finances, time, and resources for participants to engage in lifestyle behavior change, and lack of interest. Heather explained that "it is going to take a lot of time and energy that sometimes people feel like they don't have." Melissa, describing the population she works with, said, "it's not that they're not doing it because they are not willing to do it…it's for different reasons, you know they're working three jobs or they don't know English, or they simply don't have transportation.

Providers gave examples of patients who were not interested in making lifestyle behavior changes because they would prefer to take medication to manage their condition, they perceived that they were already sufficiently healthy, or they did not want to engage in a conversation about lifestyle behavior change. Jennifer told a story about reaching out to a patient in a way that she felt was thoughtful and validating and encouraged lifestyle behavior change. She noted that the patient response seemed more focused on medication instead of behavior change: "he was like, I want you to prescribe this medication that my friend takes for weight loss." Kayla similarly said, "most of my patients would take a medication for hypertension before dietary changes." Providers explained that sometimes patients do not seem ready to change or as Kayla put it, "they're just not ready to hear it."

Providers noted the clinic structure allotted little time to discuss lifestyle change. When asked about barriers, Heather said "Time is numbers 1-74, and then the next one [barrier on the list] is number 75." Or in other words, time is by far the most critical barrier faced. Specific issues identified included too little time in an appointment to assess lifestyle and make recommendations and more pressing medical issues or preventive care screenings or vaccinations. As Melissa put it, "Everything is a priority. That is the conundrum."

Providers defined support as the leadership, systems, and resources in place. The leadership, systems, and available resources were perceived as either a barrier or facilitator for providers. Most providers acknowledged they knew resources were available to assist in lifestyle behavior change, but they were not aware of the specifics, including how to refer patients or whether patients would incur out of pocket costs. While Ryan felt "there are a wealth of resources," Taylor expressed "I am not aware of a program…offered that most insurance will cover." Providers stated they felt supported to recommend lifestyle behavior changes to patients by the health system, however Taylor described systemic support as having "never been explicitly stated" though it was never explicitly discouraged either.

Providers had to take their own initiative to integrate behavior change into practice. Melissa said, "I am choosing this consciously…it is a priority for some people and for some people it is less." The other providers explained that they are only aware of resources and programs because individually they have sought out that knowledge. For example, Kayla's workspace was next to an endocrinologist, so she found out where to send patients with diabetes. Heather worked closely with the Diabetes Prevention Program on a research study, so she was aware of that program. Melissa has searched the health system's websites on her own to learn about what resources are available. Ryan has worked closely with people who offer lifestyle behavior change programs while working on his own lifestyle behavior change program, so his experience has allowed him to discover programs. Taylor asked around when she first started

working at this health system's to learn about programs and has found out about programs through public-facing advertisements.

Provider Role

The third barrier theme was the provider's specific role in lifestyle behavior change recommendations. Factors included how the providers defined their role, as well as how they recommended lifestyle behavior changes to their patients. One provider felt that "family medicine primary care should be all about primary prevention"(Melissa) while another suggested that her role was to be there as a supportive and encouraging person who is excited about the patient wanting to make a change in health behavior. Ultimately, "you can't go change their life" (Kayla).

Because of the perceived barrier of patient interest, most providers talked about a sense of balance they maintained between what the patients wanted and what they, as providers, wanted for their patients. Taylor said "It's been a balance because sometimes I'll be like, well, I still want to make sure we take some time to address your blood pressure." Most providers asked their patients what their priorities were to gauge patient interest. For patients who did not mention lifestyle behavior changes, providers may have recommended changes but acknowledged that they respect that patients may not have been ready to make those changes. Jennifer pointed out that "you don't want to be condescending to patients," so she highlighted the importance of keeping the patient and their needs in mind. Providers also pointed out that the manner in which they approached the conversation, by first simply assessing lifestyle behaviors or by using a strengths-based approach, impacted the interest of the patient to continue the conversation.

Suggestions for Improvement

Finally, providers discussed areas for improvement and potential solutions that would make it easier for them to recommend health behavior changes to patients, including adjustments to the referral process and modifying the clinic structure.

The referral process came up frequently, and was described as "clunky" (Heather) and "complicated" (Jennifer). One provider explained, "I feel like I try to stay in the loop on stuff, and even in the survey I was like, I don't know, are these like made up referrals? There are maybe a lot of resources, but then not like a streamlined referral process" (Jennifer). The providers explained that they tended to refer patients to whatever they remembered at the time, but that often the referrals were sent back because they were incorrect. Providers noted that referrals seemed to "fall through the cracks" (Melissa). One suggestion to make referrals easier for the providers was to include a list of referrals by category in the electronic medical record system that they could select from. Another suggestion was a "warm handoff," meaning that when a patient expressed interest in a particular program or service, the provider could immediately introduce them to the program coordinators and get them started. Finally, providers felt more communication throughout would make the process better. Providers mentioned wanting to hear back from the program leaders after a referral to know whether their patients enrolled in the program and how the program went.

Given the limited time providers have, most thought that having a team of people to encourage lifestyle behavior change would improve interest and create a more standard culture at the systemic level to establish lifestyle behavior changes as a priority. They suggested increasing the amount of time that providers are able to spend with their patients and utilizing a team-based approach. Providers felt that it would be helpful to have a health coach, or someone in a similar role, that shared patients with the physician and could talk to the patients more in-depth about lifestyle behavior changes.

Discussion

The results of this study identified similar barriers as previous work to recommending lifestyle behavior change to patients in addition to more nuanced details within those barriers. Time as a barrier has been extensively reported in research.[14,15,23] Participants in this study noted time dedicated towards health behavior change was impacted by both the length of the visit as well as competing demands during the visit. Competing demands included the need to address acute conditions and more pressing concerns, as has been reported, in addition to all the preventative screenings and standard care that must be addressed in a visit.[14] Interestingly, assessing lifestyle behaviors and making recommendations to improve lifestyle behavior to prevent chronic conditions were not included in the recommended electronic health record maintenance reminders that are addressed in a visit. This represents a key area for incorporating lifestyle behavior change as a priority within the healthcare system.

When lifestyle behavior change was prioritized, it was by individual providers. Because recommendations for health behavior change were not systemized nor automated, it was not consistently prioritized among providers. Instead, providers had to

make an extra effort to discuss lifestyle behavior changes with their patients, learn about resources to refer their patients to, and seek out their own continued education to further their expertise in lifestyle behavior change. The providers in this sample felt that their system supported them integrating lifestyle behavior change into their practice by offering extensive resources to refer patients to, which has not been the case in similar research.[14]

Despite having many resources available, providers had difficulty connecting patients to those resources because the referral process was complicated and communication with lifestyle programs was sparse. Providers felt that if they had a more streamlined referral system or a better understanding of programs available to their patients, they would be more apt to utilize these programs. This finding suggests that there is room for improvement at a systemic level to make accessing lifestyle change programs more intuitive for providers.

Although health behavior change was a priority to some providers, it was not always a priority for their patients. Unsuccessful attempts to work with unmotivated patients often leads to discouragement and potential burnout among providers, which has similarly been reported by others.[11] Strategies to support providers in this regard, such as further training in motivational interviewing or better understanding of how to offer support for various stages of change, may increase the likelihood for continued efforts to recommend lifestyle changes. With more systemic support for providers in training and efforts to increase lifestyle behavior change in patients, providers may be more inclined to recommend changes to patients, even when they express barriers and disinterest.

It should be noted that the data collection took place less than one year into the Covid-19 pandemic (November 2020–January 2021). Because of this, participation may have been lower and results could have been skewed due to providers being overburdened. Providers may have been less inclined to discuss lifestyle behaviors with patients due to prioritizing preventing and treating acute infection. One provider mentioned that the majority of her patient interactions had switched to telehealth, and she was more concerned with her patients' well-being than their current health behaviors. Despite the healthcare system shift in focus to Covid-19, providers shared meaningful insights regarding the barriers they face in recommending lifestyle behavior changes to their patients that likely translate beyond the pandemic time period.

As health systems offer lifestyle behavior change programs for patients, it is important to consider whether providers are aware of the programs and whether they can connect patients to them. The health system in this study offers a variety of lifestyle behavior change programs for patients to engage in. These efforts are futile unless providers can motivate and empower their patients to engage with the programs and make lasting behavior changes. These results bring to light actionable steps that may provide guidance to other systems seeking to improve the utilization of lifestyle behavior change programs.

Limitations

This study had a small sample size and participants self-selected. It is likely those who prioritize lifestyle behavior change and are interested in it were more likely to participate. Because of this, the findings may not represent all providers, but rather those who were interested in and already prioritized lifestyle behavior change.

Future Research

Although this study focused on the experience of the provider with respect to lifestyle behavior change, the patient experience came up frequently. Further exploration was beyond the scope of this project; however, it is an important next step in optimizing behavior change. Future research might focus on the patient experience in order to understand expectations, interest and barriers.

Additionally, while study participants were aware of and generally followed lifestyle behavior change guidelines, barriers to consistently following guidelines were also identified. This discrepancy raised a need for an objective measure of lifestyle behavior change guideline adherence. Future research might focus on actual guideline adherence as well as which guidelines are more frequently used and why some are used more than others.

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