






Short Communication



Patient and primary care perspectives on hypertension management: short report of a qualitative study in a tribal health system

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ABSTRACT

The prevalence of self-reported hypertension is higher among Alaska Native and American Indian (ANAI) individuals than in the majority USA population. Although hypertension is the primary modifiable risk factor for cardiovascular disease and stroke, it can be difficult to manage successfully. The objective of this study was to explore patients' and providers' perspectives about hypertension, hypertension management strategies, and patient-provider communication strategies within a tribally-owned and operated health system in Alaska. We conducted four focus groups that included 16 ANAI patients and five primary care providers. Patient participants tended to consider hypertension a transient state, in contrast with providers' understanding of hypertension as a chronic condition. Differences were noted in participants' perceptions regarding providers' counselling and education efforts, with providers feeling that current strategies are effective and patients desiring a more personalised discussion about hypertension. Patients expressed preferences for behaviour change approaches compared with pharmacotherapy; providers often resorted to medication as a first step towards controlling blood pressure. Our findings suggest areas of potentially promising future research with respect to patient-provider communication and treatment of hypertension.

ARTICLE HISTORY

Received 4 November 2021
Revised 18 February 2022
Accepted 28 February 2022

KEYWORDS

Alaska Native; hypertension;
blood pressure; self-
management

Introduction

Hypertension is a primary risk factor for cardiovascular disease and is the most significant modifiable risk factor for stroke [1-4]. While hypertension is pervasive among USA (US) adults [3,5,6], the Behavioural Risk Factor Surveillance System (BRFSS) and other studies demonstrate a higher prevalence of self-reported hypertension (27% – 35%) among Alaska Native and American Indian (ANAI) people compared with other, predominately White populations (22% – 27%) [7-9]. In addition, rates of obesity and tobacco use, which also increase cardiovascular disease risk, are higher among ANAI people [10,11]. These disparities, as well as social, cultural, and environmental factors [11-13] such as diet changes, stress, and trauma [14,15] impacting hypertension management and resultant cardiovascular outcomes among ANAI people, call attention to the need to tailor education and care for ANAI patients.

Tailoring hypertension management involves communication between providers and patients. Prior studies have identified gaps between what providers believe are the

important conversation points and what patients may gain from these discussions [16-20] and a divide between the provider's clinical perspective and the patient's everyday life [21]. We are unaware of other qualitative studies regarding hypertension management among ANAI people.

In a 2018 needs assessment at Southcentral Foundation (SCF), a large tribal health organisation in Anchorage, Alaska, ANAI community members identified chronic conditions including cardiovascular disease (CVD) as the second-highest ranked health need [22]. The objective of the present study was to explore SCF patients' and providers' perspectives about hypertension, hypertension management strategies, and patient-provider communication strategies.

Materials and methods

Human subjects protections

This study was approved by the Alaska Area Institutional Review Board and local tribal leadership. Verbal consent was provided by all participants.

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Study design

We used an iterative process of gathering and analysing qualitative focus group data to explore both patient and provider perspectives about hypertension management. Focus groups were selected as the optimal data collection approach because they are an effective means of eliciting perceptions and opinions from multiple people at once, which was appropriate for this exploratory study [23]. In addition, focus groups can also elicit potentially negative feedback, as participants may feel less social pressure than they might in an individual interview [24]. Finally, focus groups have much in common with talking circles and other forms of group interaction that are commonly used in Indigenous settings [25].

Setting

SCF is a tribally-owned and operated health care organisation in Anchorage, Alaska. Through its relationship-based Nuka System of Care, SCF provides primary care and behavioural health services to more than 65,000 ANAI people living in urban and rural communities of southcentral Alaska [26,27]. Each patient is empanelled to an integrated primary care team which includes a primary care provider, a nurse case manager, and a certified medical assistant. Patients also have access to other providers such as dietitians, pharmacists, health educators, and behavioural health consultants either co-located within the primary care clinic or in close proximity. A wellness centre for lifestyle change support is also available. In addition, SCF patients have access to tertiary and speciality care services provided by the Alaska Native Tribal Health Consortium [28].

In 2006, SCF established its own research department to address community-identified priorities. More than half of SCF's employees, including within the research department's employees, are ANAI, and recruiting and retaining ANAI staff at all levels of the organisation is a longstanding organisational goal [29]. The all-AN SCF Board of Directors oversees each step of the research process, from inception to dissemination, and provides final approval of all proposals, abstracts, and manuscripts as well as all participant materials including consent forms, moderator guides or surveys, and advertisements [28].

Recruitment

Patient participants were recruited through flyers and in person at one SCF primary care clinic in Anchorage. Patients were eligible if they were ANAI; received care

from SCF providers within the previous 12 months; self-reported a diagnosis of hypertension; and were at least 18 years of age. Primary care providers including physicians, nurse practitioners, and physician assistants were recruited at clinic staff meetings and through email. Patient participants were issued \$50 gift cards to a local retailer for participation in focus groups. As employees of the health system, providers did not receive additional compensation for their participation.

Data collection and analysis

SCF research staff, including two ANAI staff who also receive care at SCF, developed written moderator guides that asked participants to share their general perspectives about blood pressure, blood pressure management strategies, and potential improvements. The provider guide included questions about 1) how they monitor patients' blood pressure and what does and does not work, 2) interactions with patients regarding home blood pressure monitoring, and 3) communication about blood pressure. The patient guide covered 1) experiences with hypertension and management, 2) monitoring blood pressure measurements, 3) interactions with providers about hypertension, and 4) communication about blood pressure.

Four focus groups were conducted between March and April 2017. Two of the focus groups included SCF patients (ranging from 6–10 participants in each focus group) and two included providers (2–3 in each focus group). Focus groups were moderated by the same AN researcher, who had training in qualitative methods and was an experienced focus group moderator. The researcher obtained oral informed consent from all participants before data collection began. Focus groups were audio recorded and transcribed verbatim. A second researcher assisted as note-taker for each focus group.

We performed a descriptive thematic analysis [30] of the transcripts. Two research team members reviewed the moderator guides to develop deductive codes and developed inductive codes based on transcript assessment. The draft codebook was reviewed and revised by research team members and uploaded into ATLAS.ti 8.3 software [31]. The research team members independently coded two transcripts, met to resolve differences, and finalised the codebook. The final codebook was then applied to the full dataset, with the coders meeting at regular intervals to discuss and resolve differences. Themes from deductive and inductive coding were compared and contrasted between patients and providers. We did not collect demographic information of the study participants given the small sample size.

Results

In what follows, we describe thematic results from the focus groups, noting where differences and similarities were observed between provider and patient participants. Key areas of divergence are shown in Table 1.

Perspectives about hypertension

When asked to describe their approach to hypertension counselling and education, providers said that an accurate understanding of hypertension and its causes was a prerequisite to productive shared decision making. They perceived that patients needed to understand the nature of hypertension and risk factors to make sense of treatment goals and understand the rationale for recommended management strategies. After making the clinical diagnosis of hypertension, providers reported devoting careful attention to providing short, understandable descriptions of the chronic nature of hypertension. They said they also discuss risk factors for hypertension, potential negative impacts on health, and hypertension management strategies.

Providers indicated that it was often challenging to give patients adequate information and counselling about hypertension because patients often present with other concerns, as in this example: “Most of the people you see in the day, I’m guessing, have high blood pressure on their diagnosis, and usually, it’s the fifth thing we talk about in the visit”. Competing priorities led to providers often having relatively short discussions about hypertension, supplemented with informational materials or other resources for patients to “read and come back with questions”. Providers also discuss general lifestyle changes that will help improve

overall health and suggest specific additional resources given the potential for misinformation.

Patients in this study accurately described many risk factors for hypertension, including unhealthy food choices, alcohol consumption, smoking, and high cholesterol. They also expressed awareness that certain racial and ethnic communities may be at higher risk than others. Although some patients described hypertension as a long-term health issue, most associated high blood pressure with transient stress, anger, frustration, or sadness, rather than considering it a chronic medical condition with physiological causes and consequences. For example, one patient said, “I didn’t understand high blood pressure. I knew I was about to go off like the Fourth of July if somebody touched the wrong button, but that was [just] stress [and not hypertension] that I couldn’t deal with ... I thought stress was just a natural part of your day”. Patients reported that provider-offered hypertension information tended to be brief and supplemented with handouts. They perceived this one-way communication as somewhat unsatisfactory; patients overwhelmingly described a desire for deeper and more personalised discussions about hypertension with their provider. To fill the gaps in their understanding, patients said they routinely sought additional information from the Internet, friends, or family.

Management strategies and supports

Once hypertension is identified, patients and providers generally indicated a preference for lowering blood pressure through lifestyle changes, rather than medications to manage hypertension. However, providers reported that they often used medication as a first-line treatment because medications are easy to use, effective, and produce more immediate results. Providers stated that decreasing the dose or eliminating hypertension medication altogether should be a long-term goal for most patients. For example, one provider said, “It is a potential to go off these medications over time; [medication is] going to initially get your [blood pressure] under control as you are changing – because lifestyle changes don’t happen overnight”. Most patients recalled being given a prescription upon diagnosis, but many expressed discomfort or reluctance to use medications, and some reported negative side effects of medication or trouble keeping track of multiple medications.

To maximise the likelihood of patients making lifestyle changes, providers said that they emphasised the potential impact on blood pressure of even a few small changes to diet or exercise. They described eliciting

Table 1. Key Differences in Provider and Patient Perspectives on Hypertension and Management Strategies.

	Patient	Provider
Nature of hypertension	A transient condition triggered by stress and negative emotions.	A chronic medical condition.
Counselling	Desired more personalised two-way discussion with provider.	Provided short descriptions of nature of hypertension supplemented with other material to read.
Management	Desired lifestyle changes.	Provided medication for immediate results.
Lifestyle changes	Identified barriers to increasing healthy food and physical activity. Some preferred ongoing interactions by provider rather than referrals.	Refer to dietitians and behavioural counselling to increase healthy food and physical activity.

information about the patient's lifestyle to suggest one or two easily adoptable, specific changes. Patients cited a variety of barriers and facilitators to lifestyle changes, for example noting the lack of access to, or the high cost of, healthy foods. Patients also noted their awareness that traditional subsistence foods, including salmon, provide a healthier alternative to processed foods, but commented that availability of and access to these foods can be limited in an urban setting. Some patients recognised that other family members may also benefit from a heart-healthy diet, and this helped motivate them to make recommended lifestyle changes.

Increasing levels of physical activity was another common provider recommendation that was strongly influenced by seasonality: patients referenced winter's cold and decreased daylight hours as barriers to increasing physical activity, while the long days of summer were noted as a facilitator, motivating patients to be more active. One patient described these barriers and facilitators this way: "It's kind of hard getting around in the wintertime, you know, it gets icy and deep snow. But spring and summer makes you kind of liven up because you can go out walking". Patients also described efforts to increase physical activity by recruiting family members into walking with them, or walking pets regularly.

Providers mentioned several SCF services as supporting increased physical activity and a healthier diet, including the SCF wellness centre, which includes a gym and frequent free classes related to exercise, wellness, and healthy eating. Providers also said that they refer patients to dieticians or behavioural counselling for additional help in managing hypertension. Some patients were aware of and appreciated these services, while others would prefer to work primarily with their provider and did not want to be referred to other providers or programs.

Non-clinical blood pressure monitoring

Both patients and providers also commented on hypertension monitoring outside of the clinic. Providers stated they sometimes recommend home monitoring for patients, and some patients reported using blood pressure devices at home. Patients and providers both indicated that home monitoring may be inconsistent and that patients may not share these results with providers. More frequent use was reported after an initial diagnosis or when providers ask patients to monitor blood pressure for specific reasons, such as when medications are being titrated or new medications are initiated. Patients said they sometimes use public

monitors in local retail stores. Providers described in-store monitors as prone to inconsistency and often uncalibrated, but they also stated that it is better for patients to use these stations than forego monitoring altogether. Some patients who used public monitors reported difficulty using the station or understanding the readouts.

Discussion

The overall purpose of this study was to explore patients' and providers' perspectives about hypertension and management strategies within a tribally-owned and operated health system in Alaska. Understanding where patient and provider perspectives converge and diverge may be important in improving patient-provider communications as well as in the selection of appropriate strategies for hypertension management.

Our results identified key similarities and differences in how patients and providers view hypertension, counselling, and relevant management strategies. In general, most patients accurately identified risk factors for hypertension. However, some patients viewed hypertension by nature as a transitory condition, caused by daily stressors or other short-term factors, rather than as a chronic condition. The silent nature of hypertension likely contributes to patients' perception and their incomplete understanding of the need for consistent, lifelong management [32]. Study participants generally agreed about the need to modify risk factors that increase blood pressure, such as stress and diet, as well as the potential value of monitoring blood pressure outside of the clinical setting.

Our findings are consistent with other literature identifying gaps between what providers believe are the important conversation points and what patients may gain from these discussions [16,17]. These results suggest that, rather than delivering a standard hypertension talk to all patients, providers may be able to more effectively impact hypertension management through more personalised discussions. Further research is needed to explore how best to structure these conversations. Implementing shared decision making techniques, such as transparency [33] and the ask-tell-ask approach [34], may have the ability to enhance patients' understanding of the potential consequences of hypertension and their treatment options. Providers or others from the ANAI community may also be able to share information in a more culturally appropriate, relatable manner or potentially in a patient's first or second language. Within the SCF integrated care teams, for instance, some primary care providers and

nurse case managers are ANAI and the majority of certified medical assistants are ANAI. In other settings, health education and visits with nurses or community health workers have improved blood pressure control in diverse and underserved populations [35,36].

This study also points to a divide between the provider's clinical perspective and the patient's everyday life [21]. Our results suggest that some patients with hypertension may be reluctant to use antihypertensive medications, particularly for a condition that does not have readily perceived symptoms. Prior studies at SCF have demonstrated that some patients disfavour the use of medications in general [37,38]. Future research should explore whether framing antihypertensive medication use as a short-term tactic that is part of a longer-term strategy to lower blood pressure helps patients use medications more effectively. For instance, providers could link the potential for blood pressure medications to make immediate, discernable differences as a "jumpstart" which over time could be augmented or supplanted by lifestyle changes in diet and activity levels. Otherwise, providers' prescribing behaviours may be viewed as contradicting patient preferences and needs.

Patients also clearly expressed a desire for tailored treatment in which their unique circumstances and needs are considered by their provider on an ongoing basis. Patients perceived longer discussions with their provider could improve communication yet acknowledged the busy schedules of their primary care teams. Perhaps relatedly, some patient participants in this study seemed to perceive referrals to dietitians and wellness facilities as driven by a desire to save time for primary care providers, rather than as opportunities to obtain more specialised, high-quality support. This is another situation in which providers being transparent about their clinical rationale could increase patient uptake of recommended management activities. A recent systematic review of patient-provider interpersonal interventions found that simple, low-demand communication skills training improved patient satisfaction and involvement in care, as well as health outcomes [39]. Other prior studies have also demonstrated that shared decision-making regarding hypertension management strategies, in which providers present the clinical rationale for their recommendation and patients weigh in with their treatment preferences, generally improves clinical care, increases patient satisfaction with treatment and their provider, and influences the selection of hypertension management strategies [40–42].

Limitations of this study include a small sample size which may not have captured all perspectives, particularly among providers, and the fact that all participants

were recruited within a single health system. However, our results are exploratory in nature and will inform important future research efforts in this area. No demographic characteristics on patients or providers were collected. In addition, the data presented were collected in 2017, and the findings may differ if current data was analysed. However, more current data are not available in this population. Hypertension remains a key focus for quality improvement efforts at SCF. Although results may not be generalisable to other people with hypertension and those providing medical care, key similarities and differences in perceptions of healthcare communication have been identified in similar studies representing other groups [16–20].

This study may guide future pragmatic research on hypertension interventions. Given the expressed disconnect between patients and providers regarding hypertension education and counselling, there is an opportunity to conduct further research to better characterise the degree to which this disconnect occurs and how to improve communication.

Acknowledgments

The authors thank the study participants, the SCF and Alaska Native Tribal Health Consortium research review committees, and the Community Advisory Board for their guidance on this study. We are grateful to Charlene Apok for her assistance with data collection and analysis, and Devon Sigourney for helping with study recruiting and logistics. This work was supported by the National Institute on Minority Health and Health Disparities under Grant U54MD011240. The authors report no conflict of interest.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the National Institute on Minority Health and Health Disparities of the National Institutes of Health [U54MD011240]. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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