Effects of Healthcare Access and Education on Hypertension Risk in Kenyan Men Aged 35-70: A Scoping Review

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ABSTRACT

Hypertension is one of the non-communicable diseases that is on the rise, also referred to as a 'silent' chronic killer. It is defined as a systemic blood pressure of more than 140mmHg systolic and more than 90mmHg diastolic. Education level and accessibility to health care are vital risk factors that have a direct impact on hypertension. Awareness enables an individual to diminish the myths and misconceptions about hypertension, which include the use of herbal medications for hypertension.

This review sought to evaluate the effects of healthcare access and education as risk factors for hypertension among male patients aged 35-70 who attend government health centers in Kenya.

Primary studies were reviewed using four databases (PubMed, Google Scholar, Scopus, and Science Direct). This was done systematically by employing the illustration by Arksey, O'Malley, and Levac. The scoping review adopted a broad literature search that allowed the transparency, reproducibility, and a state of reliable literature. A narrative synthesis was used to describe the included studies and results.

Eleven primary studies were found to be eligible for this review. These articles met all the inclusion criteria. The studies were obtained from Western (n=3), Nairobi (n=2), Rift Valley (n=2), Coastal (n=1), Central (n=1), Eastern (n=0), North Eastern (n=0), and all regions (n=2).

The studies' results picked out pertinent factors. Group medical visits are lower in both males and females, which influences disability-adjusted life years (DALYs). Screening also came out as another very significant reason for hypertension; impaired screening results in delayed diagnosis of hypertension.

Education has a direct impact on hypertension, i.e., the more educated one is, the lower the chances of becoming hypertensive. For male participants who took the screening positively and were started on treatment, the blood pressure was well controlled, and linkage to the nearby health facilities was done.

Awareness about hypertension leads to early detection and, as a result, early initiation of therapy. Linkage to the facilities ensures that the clients are followed up on keenly to avoid late treatment. Encouraging the population to obtain health insurance is essential to making sure that they obtain access to health care.

INTRODUCTION

Overview

Let’s get right to it. This review examines how healthcare access and education shape people’s risk of hypertension. It synthesizes findings from 11 studies into a broader picture using narrative synthesis. Here’s what stands out: people with more education tend to fare better with hypertension. They know more, spot issues sooner, and start treatment earlier. When people have better access to healthcare, they get the follow-up they need, so treatment doesn’t fall through the cracks. By the way, hypertension isn’t just a technical term. It’s when your blood pressure stays high — diastolic at or above 90 mmHg, or systolic at or above 140 mmHg, according to the WHO’s 2023 guidelines. This isn’t a small thing. Hypertension drives up rates of heart disease, strokes,

and other serious problems worldwide (Bludorn and Railey, 2024). It's called the "silent killer" for a reason. Most folks won't notice anything is wrong until the disease is advanced. Maybe some nasty headaches, but that's about it. Unlike diabetes, you can go years without knowing you have hypertension. But catching it early really does change lives — it boosts quality and length of life, and people simply feel and function better. Take the US, for example. About 46.7% of adults — that's roughly 122 million people — have high blood pressure. The split is 62.8 million men and 59.6 million women, which means men carry a heavier burden. This matches the trend we found in these studies. Globally, it's grim. In 2019, the Global Burden of Disease study counted 1.16 million deaths from hypertensive heart disease, making up a little over 2% of deaths from 369 diseases. That's a 76% spike from earlier years (Lu et al., 2024). And it's not just about the heart — hypertension can wreck your kidneys and eyes as well. One interesting study by Burnier and colleagues (2021) surveyed over 3,000 healthcare workers. They found that the more time doctors spend teaching patients about hypertension, the better those patients do. Education isn't just a background factor. It's something doctors and policymakers can actually work with. This isn't just a Kenyan problem. Every year, hypertension kills over 10 million people around the world — as many as all infectious diseases put together. Most of these deaths hit low- and middle-income countries (LMICs) the hardest. Here, people often struggle to get care or don't know the risks, so sticking to treatment can be tough (Piot et al., 2016). In Kenya, hypertension is one of the top reasons people end up in the hospital for long stays — over half of those cases, in fact. That means huge costs, both for the healthcare system and for families. A 2019 survey put the prevalence at 34.7% in women and 31.4% in men, straining resources even more. There's a clear link between poverty, lifestyle, and higher blood pressure (Gaiser et al., 2024). But even with these studies, we still have a lot to figure out.

For starters:

1. Nobody's really looked at how city versus rural life affects hypertension in Kenya, even as cities grow fast and most Kenyans still live in rural areas. We barely have any studies comparing these groups or testing ways to close the gap.

2. There's not much research on how cultural beliefs shape hypertension risk. Some folks think it's a "rich person's disease" or that it doesn't affect young adults. We don't know how these ideas interact with education, especially across Kenya's many ethnic groups.

3. Rising substance use among Kenyan men — tobacco, alcohol, even cannabis — seems to drive higher rates in men, but there's a lack of gender-focused or long-term studies on this.

4. We don't know enough about how education campaigns actually play out over time — do they really help people stick with treatment, catch hypertension early, or improve quality of life when resources are scarce?

5. Kenya just rolled out the Social Health Insurance Fund (SHIF) in 2024, but nobody's properly measured what it's doing for access, treatment, or outcomes yet.

6. There's a shortage of good comparisons between LMICs to see how social class, access, and education work together — or which prevention strategies actually pay off as hypertension rates climb worldwide. 7. Finally, we need stronger evidence on how different groups — from government to community leaders can team up on prevention and make blood pressure checks routine before it becomes too late. All in all, this review makes it clear: if we want to tackle hypertension, we need to get serious about access to care and education. That's where real change starts. This review highlights how much healthcare access and education shape people's health risks. Look at the numbers: the 2018 UN-Habitat Kenya profile says just 27% of people live in cities. That means most Kenyans are in rural areas, where healthcare just isn't up to par. City dwellers usually have more education and, honestly, they're better at seeking out care when they need it. Then you've got cultural myths and rising substance use among men, which just make things worse. Studies back this up—men have higher rates of hypertension, like 61.8% compared to 56.6% in women (Joshi et al., 2014). Now, the government's stepped in with new policies, like switching to SHIF in September 2024. That move is opening up coverage for chronic diseases and making it easier for people to get their meds or see a specialist, even though the rollout hasn't been perfect. All of this just shows how urgent it is to review what's working and what's not, especially if we want to tackle hypertension head-on. If future research digs into the gaps we've found here, it'll help shape smarter interventions and better policies, so we can actually prevent the worst complications.

METHODOLOGY.

Identifying the research question.

The question of this scoping review is "What are the effects of healthcare access and education as a risk factor for hypertension among male patients aged 35-70 years attending government health centers in Kenya?

Identifying relevant studies.

A search using four electronic databases was used; these are Google Scholar, PubMed, Scopus, and Science Direct.

A systematic literature review on the effects of healthcare access and level of education as a risk factor for hypertension among male patients visiting government health facilities in Kenya was performed. The studies bring out the use of scoping review, as illustrated by Arksey and O'Malley (2005 and Levac et al.

This Scoping review adopts a broad strategic search as it allows transparency, reproducibility, and a state of reliable literature. Keywords have been used while searching for the literature, original peer-reviewed articles published in English. The date limit was intentionally left open to ensure that there is a collection of all the relevant articles, hence ensuring that there is a richness of data to answer the research question. The articles were obtained via an electronic database search, such as Google Scholar. PubMed and Scopus. Unpublished work was not included to ensure that there is quality of the findings. Medical peer-reviewed journals, public health, and social sciences journals were carried out extensively searched on the database mentioned above.

The initial search utilized a broad search strategy whereby free text terminologies, synonyms, and headings related to the effects of education, healthcare access in hypertension, and males between 35-70 years. Then on the final bit, a general search combining the terms "effects of healthcare access in hypertension", " education risk factor for hypertension"," high blood pressure in Kenyan males", "health centers attendance males in Kenya", and "effects of elevated blood pressure".

The reference list of the obtained primary articles was further checked for any availability of other potential studies that may be relevant to this scoping review. This is very essential as it allows a wider scope for the literature search, and since there is a wider scope of the open data search, as well as enabling more data to be obtained.

Selection of relevant & reliable studies.

By ensuring that the eligibility criteria (inclusion & Exclusion) are taken into account. The study selection process was engaging as it entailed a literature search, search strategy refining, and article review to ensure that they met the inclusion criteria.

The studies to be included had to focus on male patients aged 35-70 years, and the research papers, articles, and journals that address healthcare access and education level as risk factors related to hypertension in Kenya. Ensuring that both qualitative and quantitative studies are taken into account.

While the studies that were nonspecific to Kenya or even lacked data on hypertension risk factors were excluded. Additional studies published in a language other than English were excluded.

Charting the data.

This is the initial step in summarizing and synthesizing the evidence obtained from the search. This process was quite interactive since it entailed discussion and reflection among the authors. Keeping in mind that the principles set in place by Gough, Thomas, and Oliver were strictly adhered to. Gough et al., (2017) and Thomas et al., (2017).

The data charting form was developed using an Excel sheet. The data extracted included the title of the study, objectives of the study, authors' publication year, the country where the study was conducted, study design, study population, and key findings that relate to the review question.

Data synthesis and analysis.

Thematic analysis was done on the extracted data; themes were identified, and appropriate categories that clearly

describe the breadth of the review question. Findings obtained from the thematic analysis were put in a table format and synthesized through a narration.

Collating, summarizing, and reporting the results

Following the recommendation by Levac et al. (2010), a narrative synthesis was used to discuss the included studies. Healthcare access and level of education were compared, and the definitions were obtained, taking into consideration how various authors gave the description. This was done purposely to check for any commonalities or differences. Based on the two risk factors for hypertension (Healthcare access and Level of education), they were further classified based on the male PA patients aged 35-70 years and patients attending government health centers. Through this interactive process, evidence from the articles was extracted. This further allowed them to ensure that the wide array of narrative synthesis is well achieved.

Ethical approval.

There was no direct involvement of any primary patient in this review, so institutional review board approval was not required.

Search outcome.

Figure 1 below clearly explains how the search process was attained via the databases and other sources. 804 titles were identified as per the following databases:

1. PubMed
2. Scopus
3. Google Scholar
4. Science Direct

Articles that remained after the duplicates were removed were 510. Further assessment in terms of the screening was done, making the articles that remained after the screening to be 73 eligibilities obtained, and based on inclusion and exclusion criteria, 11 studies were included in the scoping review.

Google Scholar	Pub Med.	Scopus.	Science Direct.
307	193	98	206

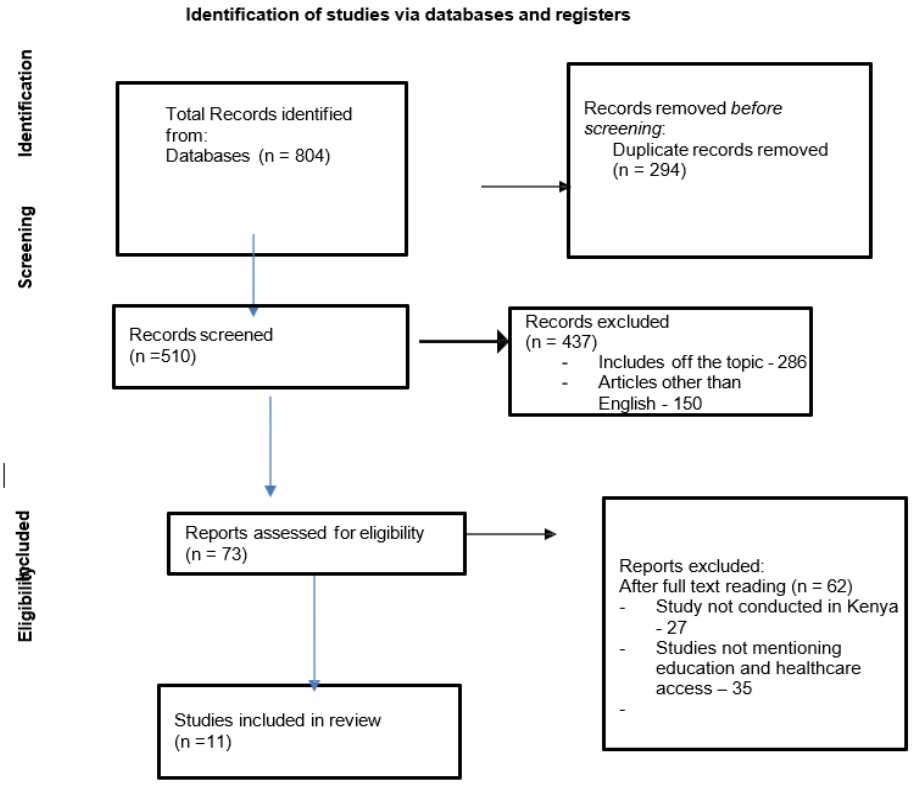

Fig. 1 PRISMA 2020 flow diagram for the study selection process.

RESULTS.

Identifying potential studies.

Database yielded the following results:

Google Scholar – 307, PubMed – 193, Scopus – 98, Science Direct - 206

These databases yielded 804 searches. The stages involved were the identification stage, filtering stage, depending on the title and abstract, and where the duplicates are filtered, giving 510 searches. Eligibility criteria (Inclusion and exclusion) filtered, narrowing the searches to 73. The final step involves capturing the studies included and providing a detailed report on each of them. The included studies were 11 in my final data extraction.

Characteristics of the studies included.

The peer-reviewed literature on healthcare access and the level of education as risk factors of hypertension. The majority of the articles were obtained from all the regions in Kenya, which include Nairobi, Western, Rift Valley, Nyanza, Central, coastal Eastern, and North Eastern parts of Kenya.

Table 1 presents a full range of the included studies; the different studies examined how healthcare access and level of education are greater risk factors for hypertension in men. Various studies further go ahead to ensure that a vivid description is given of why men are at greater risk as compared to women. The articles reported on how healthcare access and level of education are the greatest risk factors for hypertension; this strongly gives a reason why HTN is one of the NCDs that is on the rise in Kenya. The numbers have regional representation, i.e., Nairobi (n = 2), Western (n = 3), Rift Valley (n = 2), Nyanza (n = 0), Central (n = 1), coastal (n = 1), Eastern (n = 0), and North Eastern (n = 0). All regions combined (n=2). There was no specific range for the search period to allow rich data search; the articles obtained were of recent publication. Most studies applied quantitative data collection methods, while mixed methods were also used in some selected articles.

Level of education and healthcare access as a risk factor for hypertension.

Various factors have been elicited in the articles regarding how each of the aforementioned factors hurts HTN. According to Joshi et al. (2014). The slums have a higher number of people ailing from hypertension and its resultant complications due to poor health care access. This results in higher cases of mortality. The results from the articles are quite distinctive, painting a picture that an extensive public health strategy has to be made to ensure that these risk factors are greatly addressed.

Results presentation in tabular form.

The results of the 11 included sources are listed down capturing the name of the author, year of publication, the title of the article, the publisher, and the results of the articles.

Table 1 shows the results.

No	Writer	Year	Title	Publisher	Results
1	Chay, J., et al	2024	Cost-effectiveness of group medical visits and microfinance interventions versus usual care to manage hypertension in Kenya: a secondary modeling analysis of data from the Bridging Income Generation with Group Integrated Care (BIGPIC) trial.	Published by Elsevier Ltd. (2024) DOI: 10.1016/S2214-109X (24)00188-8	Group medical visits burden both genders; microfinance is cheaper than visits for hypertension care, lowers recurring costs, and DALYs.
2	Gaiser, M., et al.	2024	Facilitators and Barriers in the Early Detection and Diagnosis of Hypertension in a Peri-Urban Sub-County of Kiambu County, Kenya:	First Look Scientific African. doi.org/10.2139/ssrn.4942964	Screening enables early hypertension detection and management; barriers include low awareness, perceived susceptibility, education gaps, insufficient health worker knowledge, and high costs of meds/transport, leading to worse complications.

3	Mohamed, S.F., et al	2018	Prevalence, awareness, treatment, and control of hypertension and their determinants: Results from a national survey in Kenya.	Springer Nature DOI: https://doi.org/10.1186/s12889-018- 6052-y	Low hypertension awareness (15.6%), treatment (26.9% of aware), and control (51.7% of treated); prevalence rises with wealth (unhealthy habits, higher BMI), but awareness is higher in the wealthy, and control is better in the poorest; education and male alcohol use increase risk.
4	Naanyu, V., et al	**2016**	Barriers influencing linkage to hypertension care in Kenya: qualitative analysis from the LARK hypertension study.	Springer Nature DOI https://doi.org/10.1007/s11606-015- 3566/1	In Baraza with 411 participants (22% post-secondary educated), distance to health facilities ranked as the top barrier to hypertension care linkage; men show poor health-seeking behavior due to the asymptomatic nature and focus on daily needs; doubts on medication benefits and limited hypertension knowledge highlight the need for extensive health education.
5	Oguta, J., et al	**2024**	Socioeconomic Inequalities in Ideal Cardiovascular Health in Kenya: A Decomposition Analysis	Research Square DOI https://doi.org/10.21203/rs.3.rs- 5083685/v1	Social inequalities in ideal cardiovascular health: higher prevalence in males (53% vs 50% females) and unmarried; half of female inequality due to urban residence, education, region, and ethnicity; urbanization shifts diets, increasing hypertension, while education aids CVD management.
6	Olack, B., et al	**2015**	Risk factors of hypertension among adults aged 35–64 years living in an urban slum in Nairobi	Springer Nature DOI https://doi.org/10.1186/s12889-015- 2610 8	In Kibera informal settlement survey (1528 participants, 418 hypertensive), one-third were unaware of the condition; most residents were>10 years; higher hypertension prevalence in males due to smoking (114 men vs 16 women), alcohol, poor diet/activity, overweight/obesity; risk increases with age (5x higher >55 vs 34-44 years).
7	Ongosi, A.N., et al.	**2020**	Prevalence and risk factors of elevated blood pressure and elevated blood glucose among residents of Kajiado County, Kenya: A population-based cross-sectional survey. International Journal of Environmental Research and Public Health.	Published by MDPI, EISSN 1660-4601 DOI https://doi.org/10.3390/ijerph17196957	Most participants were married Maasai living in rural areas, followed by Kikuyu participants mainly in urban settings. About 38% lived in urban areas and had at least a secondary education. Hypertension risk factors were generally higher in men than in women. Only 9.1% were current smokers, highlighting the need for strong health education programs to reach remote communities.

8	Oyando, R., et al.	**2019**	Patient costs of hypertension care in public health care facilities in Kenya. The International journal of health planning and management	John Wiley & Sons Ltd, Feb 2019. DOI https://doi.org/10.1002/hpm.2752	Among the 114 participants, fewer than half had secondary education and formal employment. Many used public transport and took about 30 minutes to reach health facilities, while others lived far from the facility, making timely medication collection difficult. Females were more consistent with clinic appointments than males, indicating poorer health-seeking behaviour among men. Most participants (57%) preferred government hospitals over private facilities (14%) due to lower costs, subsidized medications, and better access to specialists.
9	Sikka, N., et al	**2021**	Sex differences in health status, healthcare utilization, and costs among individuals with elevated blood pressure: the LARK study from Western Kenya.	BMC Springer Nature ISSN: 1471-2458 DOI https://doi.org/10.1186/s12889-021- 10995 3	The LARK hypertension study found that 58% of participants were mostly unemployed women. There were notable sex differences in health status, healthcare use, and costs, with more women being informed of elevated blood pressure in the past year. Some women sought care from herbalists and spiritual healers, increasing the risk of complications and highlighting the need for health education. Limited health insurance coverage among participants hindered access to healthcare, despite the national insurance offering affordable premiums and both outpatient and inpatient coverage.
10	van de Vijver, S.J., et al	**2013**	Prevalence, awareness, treatment, and control of hypertension among slum dwellers in Nairobi, Kenya	Wolters Kluwer Health, Inc. May 1, 2013 DOI 10.1097/HJH.0b013e32835e3a56	High hypertension prevalence, higher in women; low awareness, treatment, and very poor blood pressure control, highlighting the need for intensive public health education.
11	Vedanthan, R. et al	**2019**	Community Health Workers Improve Linkage to Hypertension Care in Western Kenya.	Published by Elsevier. DOI https://doi.org/10.1016/j.jacc.2019.08.0 03	Low-income hypertensive patients show improved blood pressure control when linked to care, with health education enabling early treatment.

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Results Synthesis.

The research result by Chay et al (2024) illustrated that continuous medical education is vital to the population to reduce the cost through which people spend on buying drugs; instead, the finances are channeled to another economic advancement.

Gaiser et al (2024) also went ahead to mention that early diagnosis is vital for hypertension, which will ensure that the complications that would have occurred are prevented. Despite the lack of awareness regarding the availability of preventive health measures among asymptomatic hypertensive clients. The study also finds that the cost of both medications and transport was a great concern since this impairs healthcare access, resulting in more hypertensive complications like CVD.

The study by Mohamed et al (2018) showed that Hypertension prevalence was recorded as high as wealth increases, this is because of unhealthy eating habits, which then increase the Body Mass Index (BMI). On the flipside, wealthy individuals were more aware of hypertension than poor individuals were. Blood pressure control was higher among the poorest individuals since they could not afford to buy antihypertensives, and others had a low level of knowledge regarding hypertension.

The search result by Naanyu et al (2016) clearly described the Delphi process; the distance to the health facility was ranked as one of the leading barriers to hypertension linkage. The results further indicate that men have poorer health-seeking behavior than women do. Limited information about hypertension among the participants was a concern.

The study by Oguta et al (2024) found that prevalence was higher in males than in females among the participants who had no formal education and were unemployed as well. Level of Education, associated with regional residence, and eating habits had a significant role in being at risk of Hypertension and other non-communicable diseases.

Moreover, Olack et al (2015) findings were very classical that in the informal settlement, Kibera, located in the capital city of Kenya, among the participants who were surveyed, more males than females were smokers and alcoholics, and most of them had resided in the place for more than 10 years. The interesting bit is that most of them had no awareness about the effects of smoking and the use of illicit alcohol brew; they had no connection between the health effects of smoking and alcohol intake, to smoking. This posed a challenge that there is a need for intense health education for the locals.

Ongosi et al. (2020). This study focuses on the Maasai ethnic group, who reside in the eastern part of the country. Maasai are known for their reserved culture. There is an extensive use of nonscientific means of medications for their ailments; most of the participants were smokers, hence the need for awareness to improve their lifestyle changes, since this will hurt their health.

According to Onyango et al (2019), the results showed that less than half of the sampled population had secondary education. Most of the participants opted to go to the government health facility since it was closer to them and the cost of buying the medications was cheaper than in private facilities.

Aside from that, the results of the study done by Sikka et al. (2021) showed that there was significant variation in sex when it came to health status, utilization, and costs. More women reported having been informed of their elevated blood pressure in the last 12 months. A large A Proportion of the participants did not have health insurance coverage, hence impairing them from having healthcare.

Moreover, the study by van de Vijver et al. (2013) summed up the fact that hypertensive control is still very low, and there is the perception that hypertension is the "disease for the rich." Intensive mass education is paramount to address the myths and encourage linkage to the facility.

Finally, Vedanthan et al (2019) on the study found that linkage to the facility for close follow-up is key. This enabled early diagnosis of hypertension, hence initiation of the treatment, leading to reduced complications associated with hypertension.

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DISCUSSION.

This scoping review is essential in terms of critically analyzing the effects of the level of education and healthcare access as a risk factor for Hypertension. The analysis of the 11 articles gave an in-depth understanding of hypertension in regards to the Level of education and Healthcare access as the most profound risk factors. The discussion is classified into individual level, community level, Policy Levels, and strengths and limitations. The findings are valuable in terms of eliciting factors surrounding the risk factors for hypertension. It also came out clearly in the studies analyzed that spiritual factors, cultural factors, and the use of herbal medications were some of the factors leading to hypertensive complications.

Individual factors.

The study found that there were limited awareness and several other myths and misconceptions regarding hypertension diagnosis. Consistent with the findings in this review, a lack of knowledge among participants was noted in six of the reviews, making it one of the greatest risk factors. This is not only consistent in Kenya but also among other Low and middle-income countries (LMIC). The studies also reported that hypertension was associated with increasing age, sometimes referred to as a lifestyle disease. Other individual factors reported include misconceptions and the use of herbal medications. Being knowledgeable enables one to give credit to scientific medications since they have been researched and tested, but convincing the illiterate to accept that is an uphill task.

It was further described clearly in the studies that men have poor health-seeking behavior; they only go to the hospital in the advanced stage of the disease, hence hurting their health. Men are also more engaged in behaviors like smoking and alcohol consumption, which puts them more at risk of hypertension and its resultant complications.

Other social demographic aspects like age, gender, level of education, and socioeconomic status were linked to having a closer influence on hypertension on gender parity; women were strongly recognized to have a greater uptake of screening services, though the reasons were not adequately discussed in this review.

Still, in the studies, it also came out clearly that acceptance is one important aspect. Most participants below 45 years old believed that hypertension is only a disease of the old; they thought that their age was not an important consideration, and they feared being on lifelong medications and, more so, other cardiovascular complications.

Community Level

According to the studies in this review, family and friends influence seeking medical attention, which is considered a promotive approach. Healthcare access was one of the factors that influenced treatment. The study by Sikka et al (2021) pointed out that healthcare access could be a big hindrance to combating hypertension. In the Eastern and North-Eastern parts of Kenya, which are arid areas, the accessibility of the healthcare facility is a concern. Previously, the presence of militia groups destabilized the security, further affecting accessibility to health facilities in the region. Studies also mentioned that places of worship like churches were a good avenue to give education on hypertension screening, diagnosis & risk factors since most of the Community members have an affiliation with at least one place of worship. Religious leaders have a significant social status and influence in the community.

In addition to that, the study by Sikka et al (2021) brought out the concern about herbal medication use; some participants opted for herbal medications and traditional healers to be "healed" of hypertension. This has a great impact on oneself and the community at large. Health education had to be intensified to ensure that the community could have a clear distinction between herbal medications and scientific medicines. Access to healthcare is ideally considered one's right. This review picked out the fact that financial constraints impaired one's ability to seek treatment for hypertension, and poverty was exacerbated by hard economic times.

Policy stakeholders

Having a strong and working public health system is paramount to ensuring that there is an active and functional community outreach, outreach activities, and designated hypertension facilities. The findings in these studies

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indicate that there is limited funding for public health, which impedes the functionality of many programs. This is further affected by the embezzlement of funds by various public organs. Rooted corruption derails the efforts of adequately addressing hypertension and its resultant complications, like cardiovascular diseases, retinopathy, and renal failure.

Routine screening and health education on hypertension were considered a major facilitator of the detection of hypertension in this review. Collective responsibility and ensuring that proper linkage to the hypertensive clients is achieved.

The pie chart below illustrates the various risk factors for hypertension:

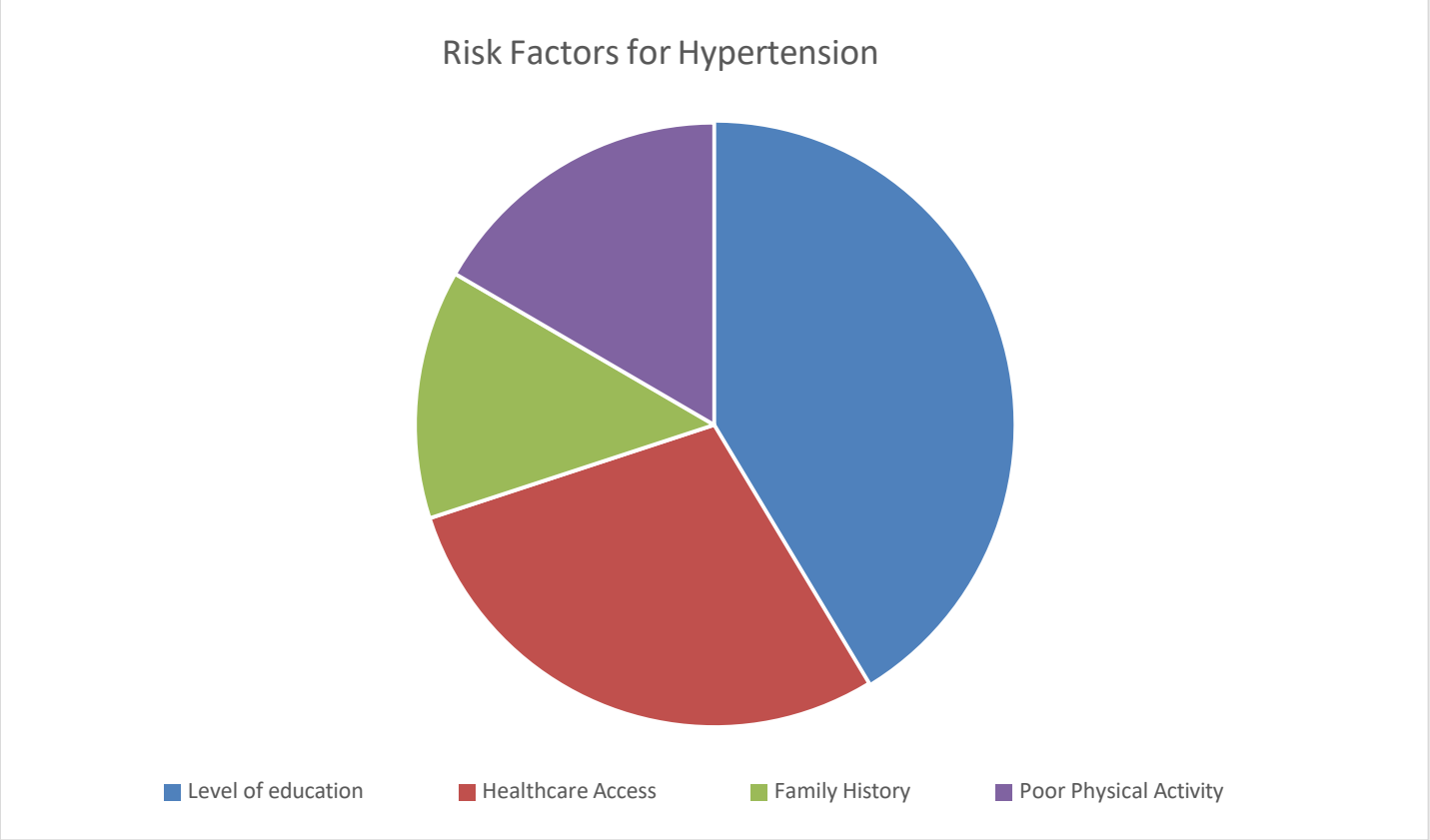

Fig 2.

Strengths and Limitations

The strength of this review is that it analyses the recent studies on the education level and healthcare access as risk factors for hypertension. The strength of this review includes the inclusion of awareness of hypertension among the participants, males being most at risk of hypertension, and how impaired healthcare access has an effect as a risk factor for hypertension. On the other side, the limitation that was elicited was that there are limited studies related to the review topic, but managed to obtain relevant studies. The exclusion criteriaIncluded any studies outside Kenya. Additionally, the treatment modalities for hypertension were not analyzed.

CONCLUSION

Hypertension is a non-communicable disease that has devastating effects. The complications are very dire and include heart failure, stroke, kidney complications, and retinopathy, among others. The level of education and healthcare access are the key risk factors for hypertension; they affect a particular individual. The more educated an individual is, the more they are responsible for their health. Hypertension is more common among the less educated as compared to the educated, and awareness is crucial for combating the devastating complications of hypertension. Accessing health facilities could be hindered by distance to the facility, and poverty could prevent one from paying for medications. Hypertension is a silent killer, and extensive health education through all the available media platforms is paramount. Information is power; that is why reaching out to as many people as possible is essential.

Utilizing formal and informal meetings in the community, Churches, and other places of worship where numerous people gather should be an opportune place to convey health-related messages on Hypertension. This also gives the platform to demystify the myths and misconceptions, as well as the use of herbal medications and visits to traditional herbalists/healers for the treatment of hypertension. Males are more at risk than women because of poor health-seeking behavior in men compared to women. Men tend to visit the health facility when the complications become severe, and they impair their normal functioning, i.e., gradual vision loss because of hypertensive retinopathy. Men engage more in unhealthy behaviors such as smoking and alcohol consumption, which put their health at risk for hypertension. It is a collective responsibility for every one of us who live in a healthy community free of preventable/ avoidable non-communicable diseases like hypertension. The government is spending substantial resources on this menace in the management of the complications, which could otherwise be avoided by altering our lifestyles.

RECOMMENDATIONS.

Health education.

Promoting awareness of hypertension is a minimum. All the necessary stakeholders from the community to the county and then to the national level should be engaged. This should make this a collective responsibility.

Hypertension screening.

This will enable early detection and diagnosis, which will ensure timely initiation of therapy and hence close follow-up, reducing the latter complications of hypertension.

Further Research.

More Studies and scoping reviews to be done around this topic on risk factors for hypertension, this will enable continuous realization of gaps that need to be investigated. Furthermore, international partners are needed to support any studies related to this area since this is a global concern.

Funding.

There was no funding provided for this scoping review.

Competing interests.

No competing interest for this review.

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