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Original Research Article

Perceptions on hypertension, barriers and facilitators on non-communicable disease prevention in urban Shivamogga: a qualitative study

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ABSTRACT

Background: The world's health care needs are changing drastically due to significant population and demographic impact. The socioeconomic transition in India have influenced the health risk behaviour leading to the increasing burden of obesity, hypertension, diabetes and dyslipidemia. Primary care facilities play a vital role in preventing and controlling NCDs. Objectives were to assess the perceptions of healthy lifestyle behaviours among urban migrants of south India. To qualitatively assess the facilitators and barriers of NCD prevention.
Methods: Study was conducted in urban Shivamogga from May to August 2023 using non-purposive sampling technique. It was a qualitative study design-focus group discussion (FGD). It involves two FGD of 8 members each. One FGD is from urban school and other FGD is from nationalized bank. This study aimed at providing grounded approach to develop an understanding about the perceptions of hypertension (HTN) and facilitators/barriers in obtaining treatment of the same. The data was subjected to brief reading and analysed by segregating the text under different themes. Responses were recorded by audio-taping and translated into codes. The results were obtained after drawing inferences.
Results: Mean age of study participants was 38.8±3.8 years (FGD1) and 36.8±2.6 years (FGD2). They identified stress, nuclear family, physical inactivity, dietary habits and urban living as the causes of hypertension. They perceived that illiteracy, ignorance, work-pressure, time-constraints, home-remedies could be the barriers for seeking treatment of hypertension.
Conclusions: Hypertension has been perceived as a common and serious problem in our community. There was a felt need about awareness campaign and screening of HTN that may help in implementation of prevention and control activities.

Keywords: Barriers, Facilitators, Hypertension, Physical inactivity

INTRODUCTION

The world's health care needs are changing drastically due to significant population and demographic impact. Hypertension has become a significant problem and contributor to other cardiovascular diseases. India, being a lower middle income country with a population of more than a billion is undergoing a rapid epidemiological transition leading to increased prevalence of non-communicable diseases.[1] The burden of NCD poses an alarming threat to developing countries and is a leading cause of mortality in India.[2] The socioeconomic transition in India due to rapid urbanization, industrialization, and globalization have influenced the health risk behaviour, leading to the increasing burden of obesity, hypertension, diabetes and dyslipidemia.[3] Primary care facilities play a

vital role in preventing and controlling NCDs. Still, the current private and public primary care facilities in India are not adequately prepared to carry the burden of NCDs.[4]

The current COVID-19 global crisis also profoundly affected the management of NCDs.[5] Identifying the barriers and facilitators of NCD prevention is necessary to guide and strengthen the primary care facilities and adequately manage the NCDs.[6]

The World Health Organization (WHO) has agreed on a set of global voluntary targets linked to the Global Monitoring Framework to prevent and control NCDs by 2025, along with targets to reduce premature mortality from the main four NCDs by 25%.[7] The key to controlling the global epidemic of NCD is by preventing primarily the risk factors based on community-wide comprehensive programs.[8,9] Few of the risk factors are common to all the NCDs, thus preventing those results in the prevention of bulk of NCDs.

Thus, this study was done to understand perceptions on hypertension, facilitators and barriers with regard to NCD prevention in urban south India by using a grounded theory approach.

Objectives

To assess the perceptions of healthy lifestyle behaviours among people of urban Shivamogga. To qualitatively assess the facilitators and barriers of NCD prevention.

METHODS

Qualitative study was conducted in urban Shivamogga. It involves two focus group discussion (FGD) of 8 members each. One FGD is from urban school and other FGD is from nationalized bank. It was conducted from May to August 2023 using non-purposive sampling method. Ethical clearance was obtained from IEC, SIMS, Shivamogga.

Data is collected after obtaining consent and permission from the respective authorities. This study aimed at providing grounded approach to develop an understanding about the perceptions of hypertension (HTN) and facilitators/barriers in obtaining treatment of the same. The data was subjected to brief reading and analysed by segregating the text under different themes. Responses were recorded by audio-taping and translated into codes. Analysis was carried out separately for focus group discussions. The results were obtained after drawing inferences.

Inclusion criteria

Study participants above 30 years of age, irrespective of their hypertensive status and willing to give consent for study.

Exclusion criteria

Those who were not willing to give study were excluded.

RESULTS

The study was carried out in urban Shivamogga with two focus groups. One was among school teachers and the other was among bank employees. Each focus groups comprises of 8 members. Mean age of FGD1 was 38.8±3.8 years and of FGD2 was 36.8±2.6 years. All were females in FGD1 and males in FGD2. Most of them were Hindu by religion and all were degree holders. One was diagnosed with hypertension in FGD1. All members in FGD2 belonged to middle income group family (Table 1).

Table 1: Socio-demographic details of focus groups.

Details	FGD1 (school teachers)	FGD2 (bank employees)
Age range (years)	30-45 (mean age: 38.8±3.8)	30-45 (mean age: 36.8±2.6)
Gender	female	male
Number of participants	08	08
Religion		
Hindu	08	07
Muslim	00	00
Christian	00	01
Income		
EWS	03	00
LIG	02	00
MIG	03	08
HIG	00	00
Hypertensive	01	00

Based on the inferences drawn from focus groups, results were presented under 4 major headings: 1) problem of hypertension in the community, 2) causes of hypertension- perceptions relating to physical activity and urban living in relation to hypertension, 3) awareness of hypertension status, 4) facilitators and barriers for HTN, 5) suggestions for preventing HTN.

Problem of hypertension in the community

Hypertension is called as blood pressure (BP) in the community. The participants explained that if a person has BP means that he/she is hypertensive. They were also aware of low blood pressure and mentioned it as low BP. One of the participants said that BP is common these days due to family tensions and work stress. Earlier, it was associated with rich people but now very common in poor also. Another participant stated that BP runs in family and we acquire it in one or the other days. Males are at high risk than females as they have the responsibility of looking after the family. They concluded that high BP is a serious problem in a community.

Causes of hypertension

The FGDs identified several causes like stress, nuclear family, physical inactivity, dietary habits, urban living, usage of electronic gadgets. Physical inactivity and strenuous physical activity were linked with hypertension (Figure 1). They perceive that it hardly affects young age and children.

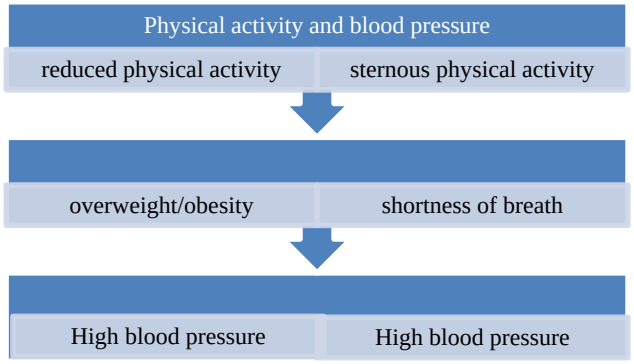

Figure 1: Perceived pathways of physical activity to BP.

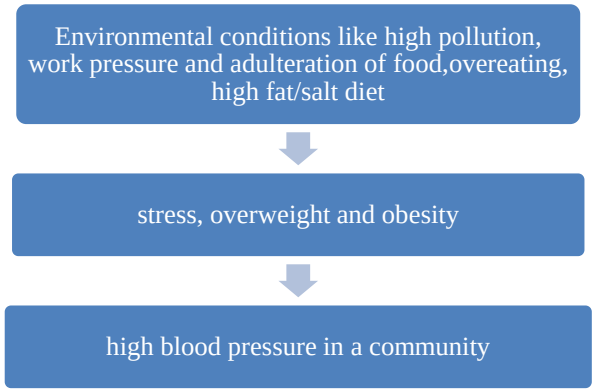

Figure 2: Perceived pathways of urban living to BP.

During FGD, it was expressed that urban living as a cause of hypertension like eating habits of people especially more consumption of fats, bakery items rich in salt, physical inactivity lead to high BP in the community. Few also opined that tensions from unemployment, rising prices, insecurity, urban living, children's education, daughter's marriage etc. make humans prone for developing hypertension (Figure 2).

Awareness of hypertension status

Most of the study participants were unaware of the term hypertension unlike diabetes. They felt the need for blood pressure screening and opined that awareness campaign regarding the awareness campaigns regarding the problem of hypertension, its symptoms and risk factors would help people to protect themselves and make them seeking medical care. They said that hardly any campaigns take place regarding hypertension take place in the community. Few also opined that they have always seen banners and advertisements for TB, diabetes, AIDS and malaria but never seen such things for BP campaigning.

Facilitators and barriers in NCD prevention

Study participants of both FDGs were of opinion that the possible facilitators in NCD prevention could be urban residence where there is no hassle in seeking health care, awareness and knowledge pertaining to a particular health condition, availability of medicines in all government hospitals free of cost and implementing practice of yoga and meditation in our day-today-lives.

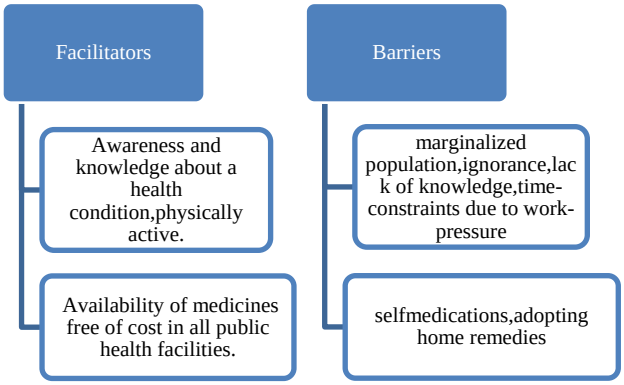

Figure 3: Facilitators and barriers for HTN.

They expressed that living in remote areas, underserved communities, ignorance, lack of knowledge and awareness about health condition, adopting home-remedies, self-medications, work-pressure and time constraints were some of the barriers in seeking medical care and thus have an impact on NCD prevention in a community (Figure 3).

Suggestions for preventing hypertension

Both FGD1 and FGD2 opined that consumption of low salt-diet, avoiding eating junk food and bakery items, being physically active and doing yoga could reduce the chance of getting hypertension in our lives. Few also suggested that being a vegetarian and avoiding alcohol or tobacco consumption could reduce the occurrence of hypertension in the community (Figure 4).

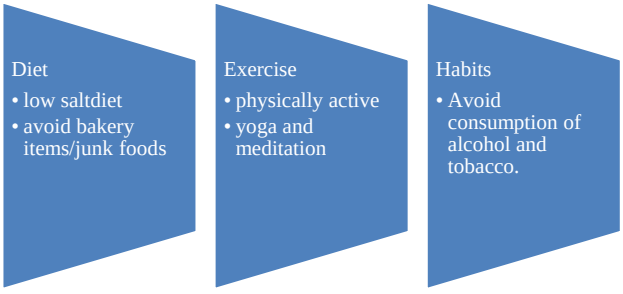

Figure 4: Suggestions for preventing hypertension.

DISCUSSION

This was a qualitative study conducted in urban Shivamogga by FGDs. Before considering the findings of the study, it is vital to note the limitations of this study. The preconceptions of the researchers based on previous studies such as proneness of urban people specifically with obesity and stressful life; lack of awareness regarding hypertension, might have influenced the development of topic guides to some extent. In focus groups, some participants are very expressive while some are inactive, however, these issues were managed by encouraging inactive participants and requesting the expressive participants to let the other participants express first. Only two focus groups were conducted due to limited resources. However, the data was discussed after the completion of interviews/focus group discussions amongst the research team.

This study is first of its kind from India highlighting the perceptions in the community's perspectives. The explanations revealed that hypertension was perceived as a common and serious problem in the community. While the medical model of hypertension mainly centred around the physical aspects, social aspects such as unemployment, raising prices, insecure livelihood and other urban related issues. Beune et al also found that the EMs of hypertension in patients from different migrant groups differed from the common medical perspective.[10] Dela Cruz and Galang found that the EMs of Filipino Americans correspond to the biomedical model in relation to causes, consequences and treatment.[11] In the present study, diet, physical inactivity, stress and urban living were identified as major causes of hypertension and these were interconnected and linked to day-to-day life. Stress was perceived as an important causal factor in the present EMs and was consistent with other studies.[12]

The present EMs had a physiological dimension as demonstrated by the perceived pathways of physical activity and urban living leading to hypertension. Though hypertension is said to be asymptomatic, the present EMs considered hypertension as symptomatic. However, blood pressure check-up has been perceived as the only means of identifying one's hypertension status as ambiguity prevails over perceived symptoms.[11,12]

The present EMs also revealed that perceived susceptibility and seriousness were low in the community. Low levels of risk perception were reported by other studies.[13] The participants highlighted several behavioural risk factors such as unhealthy diet and physical inactivity, however, no mention was made regarding tobacco use and alcohol consumption despite the fact that these were far more widely consumed by the socio-economically disadvantaged communities.[14]

There was felt need for awareness campaigns and mass-screening programmes for hypertension. Awareness regarding the risk factors should be made accessible to the public through various means such as information, education and communication (IEC) campaigns, along with provision of primary health services and proper referral. The primary health care system in India has put more emphasis on IEC and preventive activities related to infectious diseases and family planning and only meagre attempts have been made to prevent coronary vascular diseases (CVDs) and their risk factors including hypertension. However, recently, the government of India has launched a programme for prevention and control of diabetes, cardiovascular diseases and stroke, and IEC is part of it.[15] These activities are yet to reach the communities. Since hypertension is an important public-health challenge worldwide; prevention, detection, treatment, and control of this condition should receive high priority.[16] Effective community education programmes are vital to increase public knowledge and awareness of hypertension and related cardiovascular diseases. Powers et al while studying the perceived risk emphasized the need for better patient education on the risks associated with hypertension.[17] Vergara et al has pointed out that, patients' perceptions and awareness of health-related issues specific to a particular medical condition play an important role in the management and outcome.[18] The present study along with other studies felt the need for cardiovascular health promotion strategies, and further emphasizes the importance of designing culturally sensitive and congruent health education and promotion activities.[13]

Implications

Qualitative studies of this kind are important not only to get an insight into the lay beliefs, but also have implications for providing community specific health care, particularly for those who are underserved for the reasons of social and economic status, migratory status, ethnicity etc. During the times of rising trend of CVDs in developing countries, national level preventive and control activities need this type of inputs. This information is helpful in identifying existing gaps in knowledge and awareness. The inadequate knowledge on causation, prevention and un-sustained life-style changes should be addressed during these activities. Also, screening and counselling should be made accessible for communities with an endeavor to foster positive beliefs and self-reliance regarding life-style changes.

CONCLUSION

Hypertension has been perceived as a common and serious problem in the community. The study concludes that awareness and knowledge about hypertension and its consequences are inadequate in these communities. Inaccurate public understanding of hypertension and its consequences contributes to low levels of perceived susceptibility, seriousness and self-efficacy to bring lifestyle changes in preventing hypertension. There was felt need for awareness campaigns along with screening for hypertension and this may help implementing the

prevention and control activities by addressing the above gaps by the health system.

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REFERENCES

1. Martinez R, Lloyd Sherlock P, Soliz P, Ebrahim S, Vega E, Ordunez P, et al. Trends in premature avertable mortality from non-communicable diseases for 195 countries and territories, 1990-2017: a population based study. Lancet Glob Health. 2020;8:e511-23.
2. Dandona L, Dandona R, Kumar GA, Shukla DK, Paul VK, Balakrishnan K, et al. Nations within a nation: Variations in epidemiological transition across the states of India, 1990-2016 in the global burden of disease study. Lancet. 2017;390:2437-60.
3. Negi PC, Chauhan R, Rana V, Vidyasagar, Lal K. Epidemiological study of non-communicable diseases (NCD) risk factors in tribal district of Kinnaur, HP: a cross sectional study. Indian Heart J. 2016;68:655-62.
4. Krishnan A, Mathur P, Kulothungan V, Salve HR, Leburu S, Amarchand R, et al. Preparedness of primary and secondary health facilities in India to address major noncommunicable diseases: results of a National Noncommunicable Disease Monitoring Survey (NNMS). BMC Health Serv Res. 2021;21:1-2.
5. Chang AY, Cullen MR, Harrington RA, Barry M. The impact of novel coronavirus COVID-19 on noncommunicable disease patients and health systems: a review. J Intern Med. 2021;289(4):450-62.
6. NCD Risk Factor Collaboration (NCD RisC). Worldwide trends in diabetes since 1980: A pooled analysis of 751 population-based studies with 4.4 million participants. Lancet. 2016;387:1513-30.
7. Kontis V, Mathers CD, Rehm J, Stevens GA, Shield KD, Bonita R, et al. Contribution of six risk factors to achieving the 25×25 non communicable disease mortality reduction target: a modelling study. Lancet 2014;384:427-37.
8. Kusuma S. Perceptions on hypertension among migrants in Delhi, India: a qualitative study. BMC Public Health. 2009;9:267.
9. Jose NK, Sruthi MV, Rachel J, Jerome K, Vaz C, Saju CR. Barriers and facilitators of noncommunicable disease (NCD) prevention in Kerala: a qualitative study. J Fam Med Prim Care. 2022;11(6):3109.
10. Beune EJ, Haafkens JA, Schuster JS, Bindels PJ. "Under pressure": how Ghananian, African-Surinamese and Dutch patients explain hypertension? J Hum Hypertens. 2006;20:946-55.
11. Dela Cruz F, Galang CB. The illness beliefs, perceptions, and practices of Filipino Americans with hypertension. J Am Acad Nurse Pract. 2008;20:118-27.
12. Morgan M. The significance of ethnicity for health promotion: patients' use of anti-hypertensive drugs in inner London. Int J Epidemiol. 1995;1(Suppl1):S79-84.
13. Powers BJ, Oddone EZ, Grubber JM, Olsen MK, Bosworth HB. Perceived and actual stroke risk among men with hypertension. J Clin Hypertens. 2008;10:287-94.
14. Reddy KS. India wakes up to the threat of cardiovascular diseases. J Am Coll Cardiol. 2007;50:1370-2.
15. Government of India: National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke (NPDCS). New Delhi. 2008. Available from: https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1048&lid=604. Accessed on 12 September 2023.
16. Kearney PM, Whelton M, Reynolds K, Muntner P, Whelton PK, He J. Global burden of hypertension: analysis of worldwide data. Lancet. 2005;365:217-23.
17. Heurtin-Roberts S, Reisin E. The relation of culturally influenced lay models of hypertension to compliance with treatment. Am J Hypertens. 1992;5:787-92.
18. Vergara C, Martin AM, Wang F, Horowitz S. Awareness about factors that affect the management of hypertension in Puerto Rican patients. Conn Med. 2004;68:269-76.

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