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Insight about Hypertension: How people value it?

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ABSTRACT

Introduction: *Since hypertension is a symptomless disease and little is known about it among younger population. So in this qualitative study, we examine knowledge, attitude and practices about hypertension and its associated risk factors among adults.*

Methods: *Three Focus Group Discussions (FGDs) were conducted one in rural and two in urban area of Varanasi.*

Results: *show that all the respondents were holding approximately the same level of awareness on causative and symptomatic factors of hypertension. Perception of the respondents about severity and complications of hypertension were almost same except medical graduates as they were more specific. It was observed that very few medical graduates (8.8%) are practicing some form of exercise to keep themselves healthy. However, none of the respondents from other two groups was taking any preventive measures.*

Conclusion: *Planned promotional activities are the need of the hour so as to promote the concept of fitness and its relation to life style modification.*

Key words: *DASH (Dietary Approach to Stop Hypertension) diet, FGD (focus group discussion), Hypertension, Life style practices, Myths*

INTRODUCTION

Hypertension is a major contributor to the global disease burden.^[1] It poses an important public health challenge to both economically developing and developed countries, including Asia.^{[2],[3]} Hypertension remains a major global public health challenge that has been identified as the leading risk factor for cardiovascular morbidity and mortality as well as all-cause mortality¹⁻³.

In 1984, review of evidence showed that elevated blood pressure in child-hood indicated the early stages of hypertension, which therefore was a risk for adult cardiovascular disease (CVD).^[4]

Risk factors of hypertension are not well studied in young adults^[5] and public awareness of hypertension in countries undergoing epidemiological transition is dismal.^[6] The prevalence and rate of diagnosis of hypertension in children and adolescents appears to be increasing.^[7] The simplest and most effective public health strategies for controlling hypertension and its target organ damage include preventive measures and antihypertensive therapy which have been associated with reductions in stroke incidence averaging 31 – 45%, myocardial infarction 20 – 25% and heart failure more than 50%.^{4,7} Since hypertension is a symptomless disease and little is known about the amount of awareness among younger population⁴, we chose a qualitative approach to estimate how these young adults in Varanasi, India understood hypertension in their own words. In this study, we examine knowledge, attitude and practices about hypertension and its associated risk factors among adults.

Objectives: Our main aim was to assess current perceptions about hypertension as a risk factor for causation of serious cardiovascular disorders. We also aimed to study level of awareness and treatment seeking behaviour regarding hypertension and the determination of lifestyle practices and understanding of the consequences of high blood pressure in relation with educational background.

METHODOLOGY

This study was carried out in Varanasi city in India. This city is an old city and belongs to 'B' grade cities. The total population is 3.6 million (2.0 million rural & 1.6 million urban). The respondents were from Tikari village (the outreach centre of the community medicine department) for rural representation and from University campus as urban representation.

Study Design: Three Focus Group Discussions (FGDs) were conducted one in village and two in urban area with three sets of respondents' i.e. rural people, non-medical graduates (students of Mass Communication & Journalism) and medical graduates (undergraduates who had cleared the 3rd semester of MBBS examination) with a total of 23 respondents participating. All the subjects with a history of hypertensive disorder in the family, those suffering from hypertension and respondents below 18 years of age were excluded from the study. The FGD was conducted thus; a question guide (FGD tool) composed of 11 leading questions covering a total of three themes was administered. The themes covered the following areas; knowledge and awareness about

hypertension(local names, symptoms, Causes, affected age and persons); attitude and perception about hypertension (perceived severity, possible complications, precautions to prevent hypertension); practices regarding hypertension prevention (precautions being taken to prevent hypertension, action required after the diagnosis of hypertension).The FGD was conducted in the commonly understood local language by the facilitator assisted by two manual recorders and sociogram was prepared by investigators. Each FGD was conducted in a quiet and isolated space, duration varied from 35-55min, the whole process was audio recorded and transcribed on the same day. FGD analysis was carried out and the observations are presented in the form of matrix.

RESULTS

The FGD assessed various key areas and themes . For the assessment of knowledge regarding the subject, the respondents were asked six leading questions during the FGD. Most of the urban respondents were aware about the term hypertension while rural people knew it but called it 'blood pressure'. Rural people considered it as a disease however urban young adults expressed that it is only an abnormality; however it is becoming a public health issue in the current scenario. When they were asked about causes, almost all the three group of respondents accepted the role of defective food habits ^[8, 9] and irregular and stressful lifestyle practices as the main factors (table 1). During FGD a rural respondent on the question of probable causes of hypertension stated that-*"If brain is weak and not working properly*

then the person becomes nervous and B.P. shoots up".

Rural people were of the opinion that blood pressure develops after reaching the age of 35 years and above. However, non-medical graduates mentioned that hypertension develops after the age of 25 years due to professional / survival stress. Medical graduates were of the opinion that it is due to fast food culture, stressful life, pressure of studies and obesity. However, some respondents spoke that hypertension occurs after the age of 25 or 35 years. This response was while sharing about the causes of hypertension; however they were asked a specific question about the age at which hypertension occurs? The answers were almost same except the medical students, who informed that a person can develop hypertension at any age due to genetic reasons or due to wrong life style practices (table 1).

As hypertension is called a 'silent killer' due to the absence of symptoms¹. It was necessary to understand the awareness of respondents about it. Table-1 shows that most of the rural people (89%) stated that the hypertensive person will be irritable, quarrelsome, of nervous temperament and will lack patience and the hands and legs will tremble at the time of an episode of high blood pressure. Non medical graduates were of the similar opinion with additional information that hypertensive people get tired early, have breathlessness and face becomes red. Medical graduates added that hypertensive's are short tempered by nature. During FGD, a medical student narrated a past event of his life while studying in junior class when a teacher shouted on

him “then my classmates consoled me that the teacher is hypertensive so there was no need to cry.”

Respondents were asked to share their opinion about the type of persons who usually suffer from hypertension? Rural respondents stated (table 1) that people living comfortably and leading sedentary life with irregular routine suffer from hypertension. Sedentary life style has been reported by many scientists as one of the reasons

for causing hypertension. [8, 10] Non-medical graduates were also of the same opinion and added that those working in night shifts are also prone to develop hypertension. In addition, they also stated that women who are home makers have more chance to develop hypertension. The medical students shared different views and stated that obese/overweight, inert by nature and specially those who don't share their worries with others develop hypertension. (Table 1)

Table 1 Matrix showing comparative observation of knowledge regarding hypertension, it's Causes and symptoms

Rural People	Non- Medical Graduates	Medical Graduates
1) Have you ever heard about Hypertension?		
Most of them (87%) heard about it but as 'Blood Pressure'	Almost all (92%) of them heard about it as Hypertension	Almost all (100%) of them heard about it as Hypertension
2) Hypertension is disease or Abnormality?		
Over half (62.5%) of them considered it as a disease	Majority (71.4%) of them told that it is only abnormality and not a disease	Most of them (82%) agreed that it was not a disease but now it has become a big health problem
3) Expected Causes of Hypertension?		
Any kind of Mental Tension and Unhealthy food habits	Genetic reasons, Food habits, Irregular lifestyle and stress factors	Fast food culture, stressful life, pressure of studies and obesity
4) Which age group is prone to develop hypertension?		
Almost all (100%) agreed that after reaching the age of 35-40 years	No specific age bar but mostly hypertension develops after 25 years due to professional/ survival stress	A person can develop hypertension at any age due to genetic reasons or by any other wrong behavioural practices
5) What are the common symptoms of Hypertension?		
Most on them (89%) stated that the person will be irritable, quarrelsome, of nervous temperament, lack of patience and trembling of hands and legs during episodes of high B.P.	Almost all (94%) told that such persons will be irritable, get tired early, have breathlessness, and face become red and trembling of hands and legs at the time of tensions.	Short tempered, quarrelsome and irritable by nature.

6) Which type of person usually suffers from hypertension?		
Those living comfortable life or sedentary life and living their life with irregular daily routine.	Over/Hyper active personalities, doing sitting jobs, working in night shifts and females especially homemakers	Obese/ overweight persons, non-vocal inert by nature especially those who usually don't share their worries with others

Table 2. Matrix showing comparative observation of attitude & perceptions regarding severity and complications of hypertension

Rural People	Non- Medical Graduates	Medical Graduates
1) People's perception about Severity of the problem!		
It is a severe and deadly disease	Almost all agreed that it is a very serious public health problem because every third person is hypertensive	Now it has become a serious health issue because of fast changing life style and due to western food culture.
2) What are the maximum complications of Hypertension?		
Brain Hemorrhage, handicapped or a person can die	A person can suffer from any kind of heart problem, heart disease or heart attack, paralysis, brain hemorrhage and at times his daily routine may also be affected.	Death due to heart attack, paralysis, brain hemorrhage and any kind of mental disorders.
3) Can we take some precautions to prevent Hypertension?		
Almost all (91.4%) stated that we should increase physical labour, controlled food intake, avoid quarrelsome places, avoid visiting site of accidents, regular exercise and freedom from stress	Avoid spicy foods, regular health checkups, steps should be taken to reduce stress at workplace, health programs and campaigns should be organized and recreational facilities should be provided to home makers (to avoid monotony)	We should take Balanced diet, regular exercise; cycling or morning walk is good for health, and try to avoid stressful situations, proper planning of work and studies is essential to reduce the work load at home or at work place.

The respondents of the 3 groups were further explored through three leading questions during FGD (table 2), about their perception regarding the severity of the problem, almost all the respondents unanimously agreed that it is a very serious public health problem. On the issue of its complications, rural people stated that it may lead to brain haemorrhage, can make person

handicapped and death⁶. Non-medical graduates added that persons may also suffer from heart problems and even their daily routine may get affected. However, medical students were very clear that it may lead to death due to heart attack, brain haemorrhage or people may develop mental disorders⁸. One of the rural respondents explained the sequence of events which can happen due to

high blood pressure; “If brain haemorrhage occur what will happen? Sugar level will increase leading to imbalance and finally the person gets paralyzed.”

All the respondents (91.4% in case of rural people) collectively agreed that by increased physical labour/ regular exercise, balanced diet, reducing stress and by avoiding stressful situations one can prevent hypertension^{9,10}. The non-medical graduates (table 2) added that regular health checkups and recreational facilities to homemakers can help in preventing hypertension. However, medical graduates stressed that proper planning of work and studies (time management) is essential to reduce work load to prevent

hypertension¹⁰. The respondents of the 3 groups were also explored through two leading questions related to lifestyle practices to prevent hypertension during FGD (table 3) rural people were not very precise in their view and some of them (18%) stated that they go for regular health checkups as per the advice of the elders. However non-medical graduates suggested many preventive measures but could not reply about their own preventive practices. The medical graduates expressed the similar views except very few of them (8.8%) told that they regularly go for morning walk and gym.

Table 3. Matrix showing comparative observation of lifestyle practices and precautions to be taken to prevent hypertension

Rural People	Non- Medical Graduates	Medical Graduates
1) What precautions you are taking to prevent Hypertension?		
Some of them (18%) told that we use to take advice from elders and try for regular health check-up.	They all suggested lot of preventive measures but could not reply about their own preventive practices (00.0%).	Situation remains almost same with medical students except very few (8.8%) of them told that they regularly go for morning walk and Gym in the evening.
2) If one develops hypertension then what should he do?		
Almost all (91%) stated that they should take regular medicines, should do Pranayaam and exercise, walking and farming is also good	Immediate medical consultation and counselling, yoga, diet restriction and family members should support him emotionally.	All agreed for regular medication and checkups, low salt food intake especially to avoid high caloric/ cholesterol foods regular walking and 8 hours of complete sleep and should avoid stress and heavy work.

About curative measures, almost all rural respondents (91%) stated that regular medicines and exercise are the only way out¹¹. Non-medical

graduates emphasized that immediate medical consultation and counselling along with diet restriction and exercise was essential¹⁰. They also

added that family support plays a vital role in recovery from such situations. Medical graduates clearly explained that regular medication and checkups with dietary precautions is important. Further they stated that eight hours of complete sleep is necessary and one should avoid unnecessary stress (table-3).

As far as knowledge about hypertension was concerned, all the respondents of the three groups were holding approximately the same level of awareness on causative and symptomatic factors of hypertension. About age group prone to develop hypertension they all agreed that after the age of 25 yrs the chances were more (Table-1). However regarding the type of person who usually suffer from hypertension, the respondents unanimously expressed that those following a sedentary lifestyle with irregular daily routine and unhealthy dietary intake are more prone to develop hypertension¹⁰ (table-1). Perception of the respondents of 3 groups about severity and complications of hypertension were almost same except medical graduates as they were more specific (table-2). It was observed that very few medical graduates (8.8%) are practicing some form of exercise to keep themselves healthy. However, none of the respondents from other two groups was taking any preventive measures (table-3).

DISCUSSION

Focus group discussion is an important method of carrying out a qualitative analysis. The present study tried to focus on the young adults. Broad categories of knowledge, perception and

preventive practices regarding hypertension were highlighted. Young adults are increasingly developing various lifestyle related disorders³, hence lifestyle modification and awareness are key strategy employed for prevention^{9,10}. A study focussing on the representative groups of young adults (rural and Urban) in terms of awareness regarding an important public health problem as hypertension is important^{3,9}. Matrix analysis helps in ascertaining the differences across the various groups. To our knowledge this study is one of the initial studies trying to employ this form of analysis. The analysis shows that the focus group participants were in general aware about hypertension or 'blood pressure' as the rural group chose to address this disorder as. Our finding is similar to the trend of increasing awareness in the masses^{6,9}. As hypertension is a symptomless disorder in the initial few years it is often difficult to motivate a person⁶, this is shown by the observation that most of the respondents were not practicing healthy lifestyle to prevent hypertension¹². The community especially the rural community was a victim of certain myths about hypertension^{3,6} and these myths must be targeted through appropriate means and the focus group discussion could be one such measure. The other methods which can be employed should target towards understanding the variations in the views and prevailing perceptions among the subjects with regards to hypertension^{2,8}. With regards to the education of the community the dissipation of the messages must be area specific so as to enhance its receptive value.

CONCLUSION

The message of prevention of hypertension can be transmitted into the community keeping the idea of shifting from the ‘cycle of Disease Causation’ (Fig. 1) to ‘Cycle of Health promotion’(Fig. 2) ^{9,10}.The various awareness strategies can motivate a person to adopt healthy lifestyle practices with intake of DASH(dietary approach to stop hypertension) diet ^{10-12,13}, it can

Lead to a reduction in the risk of developing hypertension leading to the reduction in medical burden of disease globally ^{1,12}. Thus the healthy life style practices can become easy to practice and the community can be mobilized to adopt them ¹³. Hence, a well designed promotional activity should be implemented at community level with the community participation

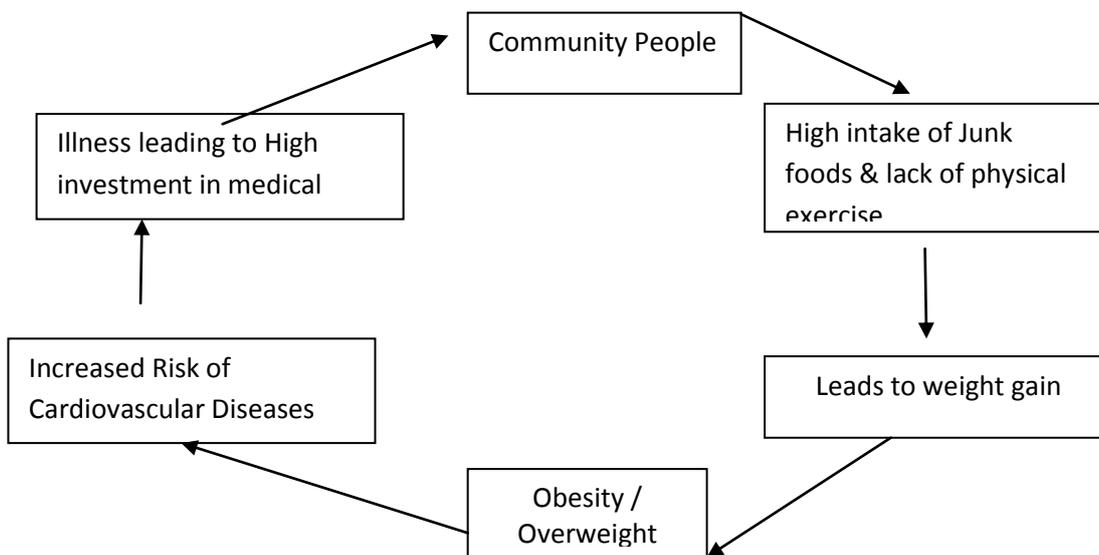


Figure 1: Cycle of Disease Causation

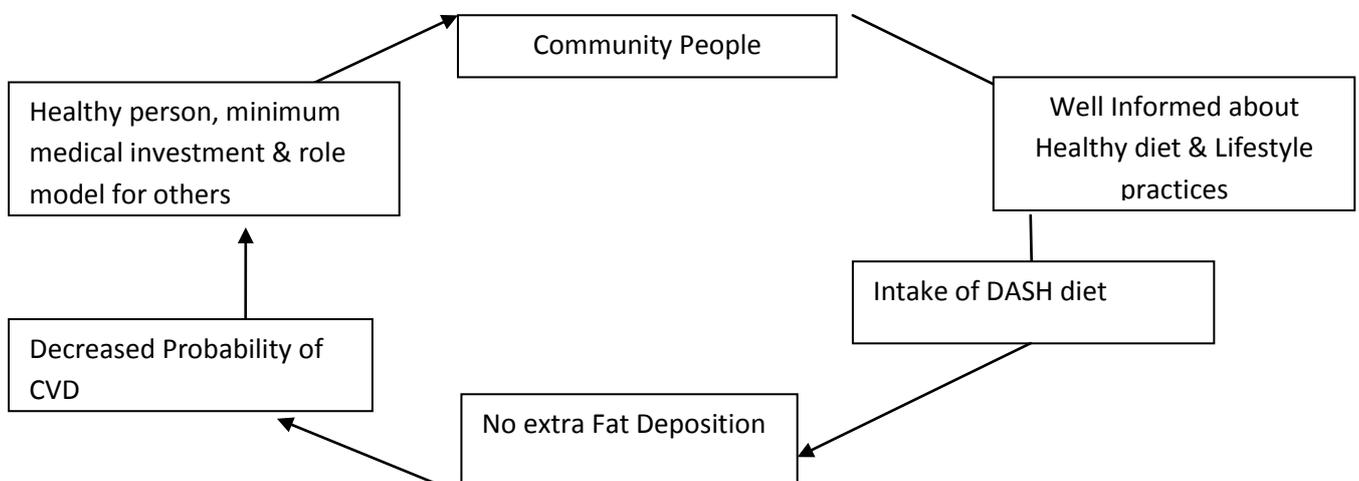


Figure 2: Cycle of Health Promotion

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