

ORIGINAL RESEARCH

A study to assess knowledge, attitude and practice for ‘hypertension’ in rural area of Gwalior , M.P.

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Received: 15 February, 2023

Accepted: 18 March, 2023

ABSTRACT

Introduction: Hypertension is a growing problem in India and unfortunately, the incidence of hypertension, a key tracer indicator of health services for cardiovascular diseases that remained a matter of concern in low-income countries. The present study was conducted with the aim to assess the knowledge, attitude and practice regarding ‘hypertension’ of the participants. **Material and Methods:** The present descriptive study was conducted at Barai in rural Gwalior on 1000 Participants aged 18 years and above. The data was collected, analysed and interpret using Microsoft-Excel Software (Window 10). Percentage, Proportion was calculated. **Result:** In the present study, the 31% participants had adequate knowledge regarding BP. 48.4% of participants knew about type of value of BP and 45.5% knew site of BP measurement with only 10 % knowing that it can be measured in any arm. 44.1% knew manner of measurement of BP. 39.9% had knowledge regarding its normal value. 94.1 % had perception of being in touch with physician regularly.53.8% preferred to add extra salt for meal The maximum number of participants 388 (38.8%) preferred less spicy and less oily food in daily routine .986 (98.6%) participants responded that they have adequate sleep and 14 (1.4%) responded that they had inadequate sleep. 7.2% participants had history of smoking for more than 5 years. 5.7% participants had history of alcohol consumption for more than 5 years. **Conclusion:** In the present study, the maximum number participants had adequate knowledge regarding BP. About half of the participants were known about measured value of BP and site of BP measurement and the minimum number of participants. Overall moderate knowledge were observed among the participants and attitude and practice observed was not too impressive. So there is need for some educational interventional programme among the rural community.

Key Words: Awareness; Consumption; Normal;Spicy.

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INTRODUCTION

Hypertension is a growing problem in India and causes significant burden on the health system. According to data from the Global Burden of Disease study of 2016, hypertension led to 1.63 million deaths in India in the year 2016 alone. [1] According to World Health Statistics 2017, an estimated 17.7 million deaths occurred due to cardiovascular disease, accounting for 45% of all NCD deaths. According to the World Health Organization, in 2015, raised BP was responsible for 7.5 million deaths, about 12.8 per cent of the total of all deaths globally. The Global Burden of Disease (GBD) study of 2016 showed that high systolic BP, defined as >140 mmHg, was the second leading risk factor in terms of attributable disability-adjusted life years (DALYs) in men (122.2 million DALYs)

after smoking and the leading risk factor in women (89.9 million DALYs).[1]

The hypertension epidemic in India was further complicated by the fact that a large proportion of individuals were unaware of their hypertension status. A systematic review and meta-analysis of 142 studies on prevalence, awareness and control of hypertension in India published between 1950 and 2013 showed that only 25 per cent of rural and 42 per cent of urban Indians were aware of their hypertension status.[2] Hypertension presents a major area of intervention because it is a frequent condition and is amenable to control through both non-pharmacological lifestyle factors and pharmacological treatment.[3,4,5,6] So the present study was conducted with the aim to assess the knowledge, attitude and practice regarding ‘hypertension’ of the participants.

MATERIAL AND METHODS:

The present descriptive study was conducted at Barai Gwalior which is Rural Field Practice Area for Rural Health Training Centre of Department of Community Medicine G.R Medical College Gwalior from the period of 1st January 2021 to 31st December 2021 on 1000 study participants. From the study of Kumar S et al., the sample size was calculated at 5% level of significant and at 10% relative precision using the question "Should we keep in touch with physician regularly?", which had provided maximum size i.e. 969 which were approximated to 1000. Participants aged 18 years and above were included in the study. Severely ill and Participants not willing to participate in the study were excluded. Participants were interviewed by a pre-designed structured questionnaire. Informed consent was taken from each participant. A house to house survey was done in the area and maximum of 4 participants belonging to the same

family were interviewed by pre-designed and pretested questionnaire. 440 household was taking from which household having higher age group was preferred more than 18 year from elder youngest age group. During the interview if any participant was found to be diagnosed with hypertension and was taking anti-hypertensive therapy his symptoms of hypertension were asked in detail and were correlated with personal history pertaining to life style modification. The data was collected, analyzed and interpret using Microsoft-Excel Software (Window 10), Percentage, Proportion, Chi square and other appropriate test were applied.

RESULTS

A total of 1000 participants were interviewed to assess their, their attitude and practice knowledge regarding Hypertension.

Table 1: Distribution of the participants for their knowledge regarding the hypertension

Sr.No.	Questions	Number	Frequency
1	Knowledge regarding BP is adequate	313	31.30
2	Showing Knowledge regarding type of value of BP	484	48.4
3	Knowledge regarding Site of measurement of BP	455	45.5
4	Showing Knowledge regarding Manner of measurement of BP	441	44.1
5	Knowledge regarding knowing normal value of Blood Pressure	399	39.9
6	knowledge regarding awareness of synonyms	84	8.4
7	Knowledge of participants regarding method of measurement of BP	514	51.4
8	knowledge of participants regarding etiology of high blood pressure	554	55.4
9	knowledge regarding screening of BP in lifetime	470	47.0

In the present study, the maximum participants 31% participants had adequate knowledge regarding BP. 48.4% of participants knew about type of value of BP and 45.5% knew site of BP measurement and the minimum number of participants 100 (10.0%) answered that it can be measured in any arm. 44.1% knew man-

ner of measurement of BP. 39.9% had knowledge regarding its normal value. 8.4% responded that BP and hypertension are synonymous. 51.4% knew that BP is measured by instrument. 55.4% knew the cause of high BP .47% had undergone there BP screening (Table1).

Table 2: Distribution of the participants for their attitude and practice regarding the hypertension

Sr.No.	Questions	Number	Frequency
1	Perceptions of effectiveness of taking antihypertensive medicine timely (n=1000)	786	78.6
2	Perception of being in touch with physician regular (n=255)	157	15.7
3	Preference of adding extra salt for meal	538	53.8
4	Showing adequate sleep at night of 6-8 hours. (n=1000)	986	98.6
5	Showing the personal history regarding Smoking. (n=1000)	72	7.2
6	Showing the personal history regarding Alcohol intake more than 5 years (n=1000)	57	5.7
7	Preference of More Spicy and more oily type of food in daily routine (n=1000)	444	44.4

In the present study, 78.6% responded that taking antihypertensive medicine timely was effective. 94.1 % had perception of being in touch with physician regularly. 53.8% preferred to add extra salt for meal. The maximum number of participants 388 (38.8%) preferred less spicy and less oily food in daily routine and the minimum number of participants 14 (1.4%)

used non-spicy food. 986 (98.6%) participants responded that they have adequate sleep and 14 (1.4%) responded that they had inadequate sleep. 7.2% participants had history of smoking for more than 5 years. 5.7% participants had history of alcohol consumption for more than 5 years (Table 2).

DISCUSSION

In the present study participants, the maximum participants i.e 687 (68.7%) had inadequate knowledge regarding BP. Similarly, Pugie Tawanda Chimberengwa et al (2019) study found that knowledge on hypertension was poor. [7] Sandeep Kumar et al (2016) found that in contrast to the basic knowledge specific knowledge on hypertension was less, example, 40.2% of all participants knew to hypertension only rarely causes symptoms whereas 24% of the participants knew normal blood pressure level. [8] Whereas, Line Aubert et al (1997) found that a high proportion of participants (both AH and UH) showed good basic knowledge on hypertension. [9] In the present study, the maximum number of participants 441 (44.1%) did not had knowledge regarding its normal value. Whereas, Mohammad Bashaar et al study (2019) found that 195(65%) participants knew the correct normal value for blood pressure measurement. [10] In the present study, the maximum number of participants 468 (46.8%) responded that the cause of high BP was stress and minimum number of participants (1.5%) responded that the cause of high BP was any problem in family. Whereas, Pugie Tawanda Chimberengwa et al study (2019) showed that 64.8% respondents stating that stress was the main cause. [7] In the present study, the maximum number of participants 512 (51.2%) responded that palpitation was most common symptom of hypertension and minimum number of the participants 114 (11.4%) responded that it was headache Similarly, Pugie Tawanda Chimberengwa et al study (2019) found that 85.9% stated that palpitation was the main symptom of hypertension. Only 7% of respondents correctly stated that it was asymptomatic while 86% incorrectly reported palpitations were the commonest symptom of hypertension.[7]Whereas, Mohammad Bashaar et al study (2019) found that when asked about the symptoms of hypertension, "headache" was selected mostly (153 times) by the participants. [10]

In the present study, the maximum number of the participants 455 (45.5%) responded that the most common risk factor for hypertension is Diet related and minimum 143 (14.3%) responded that it was hereditary. Similarly, Pugie Tawanda Chimberengwa et al study (2019) found that Diet (83%) was singled out as the commonest risk factor in developing hypertension, and 14% had no knowledge of risk factors for hypertension [7]whereas, Sandeep Kumar et al (2016) found that 82.4% of the participants knew that salt was associated with hypertension.[8]

In the present study, the maximum number of participants 786 (78.6%) responded that consuming antihypertensive medicine timely was very effective and rest 214 (21.4%) did not know. similarly, Mohammad Bashaar et al study (2019) found that out of the 33 hypertensive participants, 24 consumed their medicines on regular basis. [10] Pugie Tawanda Chimberengwa et al study (2019) found that 65% of those who took medication perceived that they had well-

controlled blood pressure however we found out that their scale of measurement was based on experiencing or perceived "complications" rather than blood pressure readings. the majority (94%) believed in using tablets for controlling hypertension. [7]Similarly, Jugal Kishore et al study (2015) found that out of these 68 subjects, only 29 (42.6%) reported that they were taking antihypertensive medications. [11]

In the present study, the maximum number of participants 501 (50.1%) responded that they did not undergo there BP check regularly and minimum no of participants 29 (2.9%) respond that they do not know. Similarly, Siraj Ahmad et al study (2015) found that most of the patients were not undergoing blood pressure measurement and eye check-ups regularly. It was observed that only 4.0% of the patients were getting their blood pressure measured at 15 days intervals, whereas, 60.2% of the patients were getting their blood pressure checked after 6 months interval. [12]Sandeep Kumar et al (2016) found that only 20.6% of responders had their blood pressure checked. [8] whereas, Mohammad Bashaar et. all study (2019) found that Overall attitudes of all respondents (both hypertensive and normal) towards causes of HBP were positive all hypertensive respondents agreed that in order to control HBP one should have regular BP checking. [10] Pugie Tawanda Chimberengwa et al study (2019) found that more than 30% of respondents had last checked their blood pressure for more than 4 months while some had lost track of when they had a BP checked. [7]

In the present study, the maximum number of participants 941 (94.1%) responded that one should be in touch with doctor regularly. Similarly, Mohammad Bashaar et al study (2019) found that when we asked their opinion that antihypertensive should be taken to a clinic every day, it was observed that less than half of the hypertensive's and normal respondents (n=12) and (n=60) did not agree with the statement. [10]

In the present study, the maximum number of participants 514 (51.4%) preferred to add extra salt for meal and 486 (48.6%) participants did not prefer to add extra salt for meal. Similarly, Pugie Tawanda Chimberengwa et al. study (2019) found that 59.8% of respondents added salt on the table and this was due to lack of knowledge on the risk factors of hypertension. [7] However, Jugal Kishore et al study (2015) found that 49 (72.1%) reported lesser intake of salt in diet. [14]

In the present study, 928 (92.8%) participants did not had history of smoking and 72 (7.2%) participants had history of smoking for more than 5 years. 943 (94.3%) Participants did not had history of alcohol consumption and 57 (5.7%) participants had history of alcohol consumption for more than 5 years. 927 (92.7%) participants did not had history of tobacco consumption and 73 (7.3%) participants had history of tobacco consumption for more than 5 years. Similarly, Siraj Ahmad et al study (2015) found that some kind of addiction was present in 68.9% of patients. Tobacco chew-

ing was present in 30.2% patients, whereas, 31.4% were smokers. [12] Jugal Kishore et al study (2015) found that the hypertensive group was significantly higher in those who take alcohol than in the other group when inquiring about the alcohol intake in the past one year (p value = 0.02). [16]Shikha Singh et al. (2017) study found that Tobacco use and alcohol use were found to be risk factors for being hypertensive in the study subjects. [15]Sandeep Kumar et al (2016) found that Most of the participants (81.2%) reported that smoking causes high BP. [8]Seham A.Abd El-Hay ET AL (2015) found that (76.2%) from the patients were smoking . [13]

CONCLUSION

In the present study, the maximum number participants had adequate knowledge regarding BP. About half of the participants were known about measured value of BP and site of BP measurement and the minimum number of participants. In the present study, 78.6% responded that taking antihypertensive medicine timely was effective. About half were preferred to have extra salt in diet. The 38.8% participants preferred less spicy and less oily food in daily routine. Almost all the patients were have adequate sleep. Some participants had history of smoking and alcohol consumption for more than 5 years.

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