



Original Research Article

Study of knowledge, attitude and practice of general population of Gandhinagar towards hypertension

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ABSTRACT

Keywords

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Assessment of knowledge, attitudes, and practices (KAP) is a crucial element of hypertension control, but little information is available from developing countries where hypertension has lately been recognized as a major health problem. Therefore, we examined KAP on hypertension in a random sample of 500 adults aged above 20 years from Gandhinagar, Gujarat. A suitably designed and validated KAP questionnaire was administered and responses were coded and analysed. Most of the respondents (42.4 %) were aged 31- 40 years and 98% of the participants knew that hypertension is the disease state. We observed poor score in attitude and practice part of the questionnaire. It concludes that the responders had good knowledge but poor attitude and practice towards hypertension. Repeated reinforcement and motivation along with health education will definitely bring about a positive change in attitude and practices.

Introduction

Non Communicable Diseases (NCDs) are now the leading causes of death in India and worldwide. Representing a growing threat to national and global health as well as social and economic development, these diseases are increasingly recognised by governments, non-government organisations (NGOs) and the scientific community as a chronic global epidemic.

Their burden is expected to double by 2030. [1] Hypertension has become a significant problem in many developing countries experiencing epidemiological transition from communicable to non-communicable chronic diseases. [2, 3, 4] The emergence of hypertension and other cardiovascular diseases (CVDs) as a public health problem in these countries is strongly related to the aging of the populations, urbanization, and

socioeconomic changes favoring sedentary habits, obesity, alcohol consumption, and salt intake, among others. [5, 6] In this context, 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. Life style measures for lowering BP include reduced alcohol intake, reduced sodium chloride intake, increased physical activity, and control of overweight. [7, 8, 9, 10, 11] Several models have been proposed to account for health behaviors and sustained behavioral changes. [12, 13, 14, 15, 16, 17, 18] A proper assessment and understanding of KAP factors is particularly helpful in the area of chronic conditions such as hypertension, for which prevention and control necessitate a lifelong adoption of healthy lifestyles. In this study, we examine KAP for hypertension and associated risk factors in adults to help improve primary and secondary CVD prevention and control complications of the same.

Materials and Methods

A suitably designed and validated KAP questionnaire was administered to General population of Gandhinagar, Gujarat. [19] Study population sample was selected by lottery method. The questionnaire was pretested and verified for errors. [20] The questionnaire covered three areas: knowledge, attitude and practice towards hypertension. There were a total of 19 questions, with 8 questions related to knowledge about hypertension, 5 questions to assess the attitude of the patient towards the disease, and 6 questions regarding practices. This questionnaire was filled in at a face-to-face interview with the investigator. In scoring method, 19 was the maximum possible score in which each correct answer was carry one point and

incorrect or unsure answer was carry no point. The interviewer did not in any way try to improve the knowledge of respondents. Gujarati or English version of questionnaire was provided as per requirement of individual.

Results and Discussion

Most of the respondents (42.4 %) were aged 31- 40 years, followed by those aged 20-30 years. Most of them (55.8 %) were educated up to graduate level as per Table – 1. The major source of knowledge for the general population was television (32 %) and newspaper (30 %) followed by family physician (28 %). However 10 % received information from friends and relatives. Majority were aware about the causes, symptoms and complications of the disease as per Table – 2. We observed poor score in attitude part of the questionnaire and only 45.2 % had positive attitude towards exercise as per Table – 3. Only 20.6 % of responders had their blood pressure checked. Only 17 % of responders were able to answer 50 % of practice questions correctly as per Table – 4.

Hypertension remains a major health problem, causing high mortality and morbidity all over the world. It is considered a major risk factor to both cerebro-vascular accidents and coronary artery disease. In the year 2001, high blood pressure accounted for 54% of stroke, 47% of ischemic heart disease, 75% of hypertensive disease, and 25% of other cardiovascular disease worldwide. The negative impact of hypertension on health status is clear, especially taking into account the disability, decreased quality of life and mortality associated with stroke and cardiovascular disease. In 2001, 7.6 million deaths and 92 million disability life years were attributable to systolic blood pressure greater than 115

mm/Hg. [21] The WHO estimated that the condition accounted for 4.5% of the global disease burden and attributed the increase in hypertension to increasing contributing factors and co-existing cardiovascular risk factors such as obesity, poor diet, lack of physical activity and smoking. Given the large scale and modifiable nature of the problem, it certainly merits the attention of the health care community. [22]

The serious spread of disease can cripple the nation's fiscal and human resources; therefore, it is the time to act now and do as much as possible to cover almost all aspects of the disease. Proper education and awareness programmes developed according to the need of the society can improve the knowledge of general population and change their attitude. [23]

Obtaining information about the level of awareness is the first step in formulating a preventive programme for the disease. There is need to investigate KAP among general population to aid in future development of programmes and techniques for effective health education. KAP surveys are effective in providing baseline for evaluating intervention programmes. [24] This study aims to assess the baseline levels of knowledge, attitude and practices of general population of Gandhinagar towards hypertension.

A high proportion of participants showed good basic knowledge on hypertension. For example majority of participants (98%) recognised high blood pressure to be a threat to health which is comparable to the Dugee Otgontuya et al. [25] 82.4% of the participants knew that salt and 80.4% knew that obesity were associated with

hypertension. Most of the participants (81.2%) reported that smoking causes high BP. The benefit of physical exercise on BP was also well recognized by 63.6% of the participants. All these findings were comparable with the study done by Aubert et al. [26] who reported >96% knew role of salt and obesity in hypertension.

In contrast to basic knowledge, specific knowledge on hypertension was less. For example, 40.2% of all participants knew that hypertension only rarely causes symptoms whereas 24% of the participants knew normal blood pressure level. This lack of knowledge was associated with male gender, younger age, lower level of education and unemployment. Again similar associations were observed in the study by Kusuma YS et al. [27] The lack of proper knowledge of each responder should be given individual attention for good practice and fill the gap of this 10 % to 100 % as studies report that there is a positive correlation between knowledge and good attitude. [28]

Attitude of our population was very poor towards hypertension. Here, we observed that 45.2% of the participants agreed with that habit of exercise are associated with healthy life. Many studies have confirmed the beneficial role of physical activity in improving blood pressure control.

The attitude of our population for regular medication was good that 72% of participants having positive attitude which was comparable with the study by Dugee Otgontuya et al. [25] Many studies showed that participants perceived medication and exercise as the only interventions moderately effective at preventing high blood pressure.

Table.1 Demographic details of the study population

Variables		No of general population	%
Gender	Male	289	57.80
	Female	211	42.20
	Total	570	100
Marital status	Married	487	97.4
	Unmarried	13	2.6
	Total	500	100
Educational status	Illiterate	140	28.00
	Primary school	45	9.0
	Secondary school	279	55.80
	Graduate	36	7.20
	Total	500	100
Age (years)	<20	---	---
	21-30	168	33.6
	31-40	212	42.4
	41 or above	120	24.0
Smoking (Cigarettes/day)	Non smokers	328	65.6
	Smokers	172	34.4

Table.2 Response to knowledge questions

Sr No	Questions	No of persons correctly answering	%
1	Do you know hypertension is a disease?	490	98
2	What are the complications of hypertension?	305	61
3	What is the normal level of blood pressure?	120	24
4	Is the diet rich in salt causes hypertension?	412	82.4
5	Is the smoking major cause of hypertension?	406	81.2
6	What are the symptoms of hypertension?	201	40.2
7	Is obesity associated with hypertension?	402	80.4
8	Is exercise having beneficial role in hypertension?	318	63.6

Table.3 Response to attitude questions

Sr No	Questions	No of persons correctly answering	%
1	Should we reduce salt intake to prevent hypertension?	200	40
2	Do you think regular checking of your blood pressure level is important?	181	36.2
3	Should we keep in touch with physician regularly?	142	28.4
4	Do you think regular medication is important in hypertension?	360	72
5	Should we exercise regularly for healthy life?	226	45.2

Table.4 Response to practice questions

Sr No	Questions	No of persons correctly answering	%
1	When was your blood pressure checked last?	103	20.6
2	When was your last visit with your physician?	215	43
3	When was your last urine examination done?	50	10
4	When did you have your last lipids checked?	31	6.2
5	When was your blood sugar level checked last?	84	16.8
6	When did you have gone for exercise last?	98	19.6

Poor attitude of our population for less salt intake, regular visit to physician and regular measuring of blood pressure may be due to lack of awareness regarding this important issues.

Regarding response to practice questions showed that very few of the general population had positive practice overall. Only 20.6% participants checked their own blood pressure in last one year. Poor practice regarding regular blood and urine examination as well as of exercise may be due to lack of importance and awareness for need of it. Demographic transition combined with urbanisation and industrialisation has resulted in drastic changes in lifestyles globally, [29] which require great efforts by health teams to enhance education and improve the attitude and practice towards hypertension in our society. We found reasonable gap between knowledge, attitudes and practices, so to overcome that it is very important to formulate and implement certain strategies by which positive attitudes can be converted into beneficial practices.

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