



Public's Knowledge, Attitudes and Practices Related to Hypertension

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aim: The present study aimed to describe the public's knowledge and beliefs on hypertension and its treatment in Saudi Arabia.

Methodology: This cross-sectional study included a survey was used to collect demographic data of the respondents and the response to the main questions of the survey that were close-ended questions.

Results: Most of the respondents agreed that aging (81.17%), family history (74.06%), smoking (69.46%), eating fatty foods (80.33%), and overweight (83.26%) are risk factors of developing hypertension. Additionally, more than 90% agreed that regular physical exercise reduces hypertension and 89.54% of them agreed that more salt consumption increases blood pressure.

Conclusion: The respondents had a good knowledge about hypertension and how to prevent it. But still more health education about hypertension prevention and blood pressure control was needed.

Keywords: Beliefs; hypertension; knowledge.

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1. INTRODUCTION

Blood pressure is determined both by the amount of resistance to blood flow in the arteries and the amount of blood the heart pumps [1]. Narrowing of the arteries and increasing the amount of blood the heart pumps increase the blood pressure. A blood pressure reading is given in millimeters of mercury unit (mm Hg) [1].

Hypertension is the most frequent chronic disease in underdeveloped and developed countries. It is usually diagnosed incidentally so it is called the silent killer [1]. More than a quarter of the world's adult population has hypertension, and the rate is expected to increase to about 30% by 2025 if the response is not effective [2]. Several studies informed that hypertension is a common problem globally with estimates as much as one billion patients, and cause of more than 7 million of global preventable premature deaths [3-6].

The excessive pressure on the arterial walls caused by high blood pressure can damage the blood vessels as well as your organs [1]. Uncontrolled high blood pressure can lead to numerous complications including heart attack, stroke, aneurysm, heart failure, weakened and narrowed blood vessels in the kidneys, thickened, narrowed or torn blood vessels in the eyes, metabolic syndrome, trouble with memory or understanding, and dementia [1].

It is important to have a good knowledge about hypertension in order to prevent the occurrence of hypertension and to control the blood pressure in hypertensive patients. Increasing the knowledge and awareness of the public and changing their attitude and practice play a significant role in controlling this disease [2]. The present study aimed to describe the public's knowledge and beliefs on hypertension and its treatment in Saudi Arabia.

2. METHODOLOGY

This was a cross-sectional study that was conducted to describe the public's knowledge and beliefs on hypertension and its treatment in Saudi Arabia.

The survey was used to collect demographic data of the respondents and the response of these respondents to the main questions of the survey that were close-ended questions and that were related to public's Knowledge and beliefs on hypertension and its treatment.

The online survey results were collected in Excel sheet and they were shown as percentages and numbers. The percentages are calculated by dividing each value by the total value, and after that the result was multiplied by 100%.

3. RESULTS and DISCUSSION

The survey was completed by 239 respondents. More than half of them were males (51.05%) and the age of more than half of them was less than 30 years. The majority of the respondents were nonsmokers (70.71%) and the reported level of exercise was high in only 9.62% of them. The demographic data of the respondents are shown in Table 1.

Table 2 shows the knowledge and beliefs on hypertension and its treatment. The results show that the respondents have a good knowledge about hypertension and its risk factors. Most of the respondents agreed that aging (81.17), family history (74.06%), smoking (69.46%), eating fatty foods (80.33), and overweight (83.26%) are risk factors of developing hypertension. Additionally, more than 90% agreed that regular physical exercise reduces hypertension and 89.54% of them agreed that more salt consumption increases blood pressure.

On the other hand, only 48.12% of the respondents knows that hypertension is asymptomatic condition, 65.27% of them said that hypertension is curable condition and only 43.10% of them have a good knowledge about how to treat hypertension.

Generally, the respondents had a good knowledge about hypertension and how to prevent it nonetheless more awareness is needed. The respondents lacked in the knowledge of hypertension treatment and blood pressure control. This is rational because the study included the general population either who had hypertension or no.

Sadeq and Lafta reported that among hypertensive patients attending hospitals in Baghdad, more than 60% had a good knowledge about hypertension [7]. Gong et al informed that the knowledge and belief of hypertension prevention were good in Shanghai [8]. Bashaar et al stated that the hypertension related knowledge among respondents was found to be good at community level in Kabul [9]. Sabouhi et al informed that among the hypertensive patients referring to public health care centers in Khor and Biabanak, patients relatively had high

awareness, knowledge about hypertension [2]. with hypertension, their mean score of Chotisiri et al reported that among older adults hypertension knowledge was high [10].

Table 1. Socio-demographic data of the respondents

Variable	Category	Number	Percentage
Gender	Male	122	51.05
	Female	117	48.95
Age (years)	< 30	140	58.58
	30–39	36	15.06
	40–49	41	17.15
	50–59	17	7.11
	>60	5	2.10
Reported level of exercise	Low	112	46.86
	Intermediate	104	43.52
	High	23	9.62
Smoking	Nonsmokers	169	70.71
	Smokers	70	29.29

Table 2. Knowledge and beliefs on hypertension and its treatment

Variable	Category	Frequency, n (%)
The normal values of BP as 120/80mmHg	Yes	177 (74.06)
	No	62 (25.94)
The increase in BP > 140/90mmHg is called hypertension	Yes	153 (64.02)
	No	86 (35.98)
Hypertension can progress along with the age	Yes	192 (80.33)
	No	47 (19.67)
Both sexes have equal chance of developing hypertension	Yes	163 (68.20)
	No	76 (31.80)
Family history of hypertension is a risk factor of developing hypertension	Yes	177 (74.06)
	No	62 (25.94)
Aging is a risk factor of developing hypertension	Yes	194 (81.17)
	No	45 (18.83)
Smoking is a risk factor of developing hypertension	Yes	166 (69.46)
	No	73 (30.54)
Eating fatty foods is a risk factor of developing hypertension	Yes	192 (80.33)
	No	47 (19.67)
Overweight is a risk factor of developing hypertension	Yes	199 (83.26)
	No	40 (16.74)
Regular physical exercise reduces hypertension	Yes	217 (90.79)
	No	22 (9.21)
More salt consumption increases blood pressure	Yes	214 (89.54)
	No	25 (10.46)
Do you know how to treat and control hypertension	Yes	103 (43.10)
	No	136 (56.90)
Hypertension can lead to life-threatening conditions	Yes	217 (90.79)
	No	22 (9.21)
Hypertension is asymptomatic condition	Yes	115 (48.12)
	No	124 (51.88)
Hypertension is curable condition	Yes	156 (65.27)
	No	83 (34.73)
Changing your lifestyle helps to lower your blood pressure	Yes	212 (88.70)
	No	27 (11.30)

On the other hand, Sefah et al stated that among the People of Ahoé-Ho, only few respondents in their study had good knowledge on what hypertension was [11]. Iyalomhe G and Iyalomhe S reported that patients' knowledge of hypertension in Auchi is low and that patient education is imperative [12]. Chimberengwa et al stated among residents of a disadvantaged rural community in southern Zimbabwe, members of the community had poor knowledge on hypertension [13].

4. CONCLUSION

The respondents had a good knowledge about hypertension and how to prevent it. However, more health education about hypertension prevention and blood pressure control is needed to reduce the risk for hypertension among the population and to control blood pressure among hypertensive patients.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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