

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

SJIF Impact Factor 4.161 Review Article

ISSN 2394-3211 EJPMR

KNOWLEDGE AND ATTITUDE OF SAUDI ADULT MALE ABOUT HYPERTENSION AND ITS RISK FACTORS, RIYADH, 2017

Osamah Khalid Alfentokh*1, Abdulrahman Ahmed Alrehaili*2, Abdualziz Mohammed Alhussain2, Abdullah Abdulrahman Aldeailj², Faisal Suliman Alkahmus², Saad Methhil Alotaibi², Yasser Waled Asiri² and Amar Fathi M. Khalifa³

¹Medical Students/ Al Maarefa Colleges.

²Medical Students/ Al Maarefa Colleges.

³Assistant Professor/ Al Maarefa Collages.

*Corresponding Author: Osamah Khalid Alfentokh

Medical Students/ Al Maarefa Colleges.

Article Received on 25/10/2017

Article Revised on 15/11/2017

Article Accepted on 05/12/2017

ABSTRACT

Background: Worldwide estimates for a number of cases of hypertension may be as much as 1 billion individuals. Approximately 7.1 million deaths per year may be attributable to hypertension. Hypertension (HTN) is an internationally common disease and an important treatable public health problem. Although there has been a significant progress in the management of hypertension in KSA, rates for control of this chronic disease has proved to be very low. High BP is a major risk factor for many serious diseases. Objective: To determine the level of knowledge of Saudi population about hypertension and its known risk factors and to assess different risk factors contribute to the development of hypertension. Methods: institutional based cross sectional study and the technique is simple sampling random technique, the sample size was 159. Inclusion criteria: Saudi male, Exclusion: Nationality other than Saudi, Female, male under age 18. Instrument: questionnaire: a series of close ended questions; analyzed by using the SPSS version 20. Chi square with P value less than 0.05 consider significance. Consent was obtained before data collection. Results: (34.59%) of participants had hereditary hypertension, stressful life is responsible for (16.98%) of cases. more than half of the participants were overweight (51.57%) and (8.18%) are obese. The majority of samples are cigarettes smokers (42.14%) the minority are EX- smokers (16.98%). The minority participants do not eat fast food (8.18%). There is a significant statistical relationship between age and hypertension. Hypertension gradually goes up with age (p value=0.001). There is a statistical relationship between hypertension and stress in general (p value=0.001). Conclusion: In conclusion both hypertensive and non-hypertensive have the same poor to moderate level of knowledge about hypertension, hence the public needs more awareness about hypertension. The commonest risk factors of hypertension is genetic factors followed by obesity. However, it seems the other risk factors like stressful life is underestimated.

INTRODUCTION

Worldwide estimates for number of cases of hypertension may be as much as 1 billion individuals. Approximately 7.1 million deaths per year may be attributable to hypertension. [1] Worldwide, raised blood pressure is estimated to cause 7.5 million deaths, about 12.8% of the total of all deaths. [2] Overall 26.4% (972) million) of the adult world population was estimated to have hypertension in the year 2000, a figure that is projected to increase to 29.2% (1.56 billion) by the year 2025.[3]

The prevalence of hypertension in KSA is about 10%, with one- third of the cases being not well controlled. [1] Hypertension is increasing in KSA affecting more than one fourth of the adult Saudi population. Hypertension in KSA has demonstrated persistently increasing manner this increase is attributed to several reasons such as

lifestyle change in KSA towards urbanization, adopting dietary eating habits that are likely to result in hypertension, increasing prevalence of obesity, as well as changing the definition of hypertension to lower systolic normal level.[2]

High BP is a major risk factor for cardiovascular disease. including ischemic heart disease (IHD). Treatment and control of BP reduce the risk of IHD including (MI). However, the goal of BP control is possible only when the patient is aware and motivated for compliance with the treatment and follow-up and to establish and maintain a health promoting life style. The patient's attitude must be understood in order to increase the communication and control of BP.[4] The aim of this study is To determine the level of knowledge of Saudi population about hypertension and its known risk factors.

Sample technique: Simple random technique.

METHODOLOGY

Research study design: Institutional based cross sectional study.

Research study area: Kingdom of Saudi Arabia, Riyadh, Al Mohammediah, Alrwodah, Diriyah and Alswede primary health care center.

Time of study: Feb-Aug / 2017.

Population study: Hypertensive Saudi male.

Exclusion: Nationality other than Saudi, Female, male under age 18.

Sample size: 159.

Table (1): Personal information.

Instrument: Self-administered questionnaire with closed

ended questions. To gather information about knowledge regarding risk factors of hypertension about hypertension. This questionnaire was subjected to a probe to test validity and ratability.

Data analysis: The data was analyzed using SPSS version 20.0.0 figure. And Charts were generated using Microsoft Excel, Chi Square test with P value less than 0.05 considered significant.

Ethical: Consent was obtained before data collection, Emphasizing on secrecy and the right of the participant to withdraw from the study at any point of time.

Variable		Number	%	
	18-29	61	38.36%	
	30-39	31	19.5%	
	40-49	34	21.38%	
Age	50-59	24	15.09%	
	60-69	8	5.03%	
	70-79	1	0.63%	
	Total	159	100%	
	Illiterate	0	0%	
	Elementary	4	2.52%	
	Preparatory	5	3.14%	
Education	High school	47	29.56%	
	Collage	96	60.36%	
	Others	7	4.4%	
	Total	159	100%	
	Employed	106	66.67%	
Employment status	Unemployed	53	33.33%	
	Total	159	100%	
	Married	82	51.57%	
Marital state	Single	75	47.17%	
	Divorced	2	1.26%	
	Total	159	100%	
			n= 159	

Table (1) reveals that 18-29 age group are the most majority group about (38.36%) and the lowest is 70-79 which is (0.63%). Education status was mostly college and high school, (60.36) percent are college degree and

(29.56%) are high school, employment status most of them employees about (66.67%). Almost half of the participants was married (51.57%), single (47.17%).

Table (2): Factors associated with hypertension.

Are you suffering from diabetes mellitus?	Yes	No		I do not know	Total	
Number	34	115		10	159	
Percentage	21.38%	72.33%		6.29%	100%	
What level of stress do you have?	Stressful life	Normal life stress			Total	
what level of siless do you have?	A lot	Not much		No	rotai	
Number	27	77		55	159	
Daycontogo	16.98%	48.43%		34.59%	100%	
Percentage	10.98%	83.02%			100%	
Does your family has hereditary hypertension diseases?	Yes	No		I do not know	Total	
Number	55	80		24	159	
Percentage	34.59%	50.31%		15.09%	100%	
e you suffering from obesity?	Obese	Over weight	Normal weight	Lean	Total	
Number	13	82	54	10	159	
Percentage	8.18	51.57	33.96	6.29	100	
Do you smoke (cigarettes, hashish, or any type)	Yes	Ex-Smoker		No	Total	
Number	67	27		65	159	
Percentage	42.1%	16.98%		40.9%	100%	
	•		•		n=159	

Table(2) indicates that (34.59%) of participants had heredity hypertension, stressful life is responsible for (16.98%) of cases, diabetes mellitus association (21.38%), in last more than half of the participants were

overweight (51.57%) and (8.18%) were obese. The majority of the sample are cigarettes smokers (42.14%) the minority are EX- smokers (16.98%).

Table (3): Relation between age and hypertension.

		Age				Total		
		18 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	Total
hypertension?	Hypertensive	2	14	16	11	6	1	50
		3.28%	45.2%	47.1%	45.83%	75%	100%	31.45%
	Non-	59	17	18	13	2	0	109
	hypertensive	96.72%	54.84%	52.94%	54.16%	25%	0%	68.55%
Total		61	31	34	24	8	1	159
		38.36%	19.5%	21.4%	15.1%	5.03%	0.63%	100%
							P valu	e = 0.0

We find a statistical relationship between age and hypertension. Hypertension gradually goes up with age. In age 50-59 there is (45.83%) of samples are hypertensive and (100%) of age 70-79 are affected. In

another hand at age 18-29 it less than (3.28%).

P value was significant.

Table (4): Relation between hypertensive and non-hypertensive regarding life stresses.

		What			
		Not stressful life		stressful life	Total
		No	Time To Time	Yes	
Are you suffering from hypertension?	Hypertensive	11	20	19	50
		22%	40%	38%	31.45%
			62%	>>>	\times
	Non- hypertensive	44	57	8	109
		40.37%	52.29%	7.34%	68.55%
		9	2.66%	\rightarrow	\propto
Total		55	77	27	159
		34.6%	48.43%	17%	100%
				P value	= 0.0

There is a statistical relationship between hypertension and stress in general. There are (38%) hypertensive got a stressful life. While (7.34%) of non-hypertensive have a stressful life.

P value was significant.

DISCUSSION

Hypertension is one of the diseases that have a strong link with its risk factors. The more risk factors you got the higher chances to have hypertension. Over weight found in more than half of the participants and at least each one got another modifiable risk factor such as smoking or diabetes mellitus. Almost half of participants were a smoker. In another hand, heredity hypertension is very high in our community. It reached one-third of the participants. This result goes in line with other research in Sudan and Saudi Arabia. [4,9]

We found a statistical relationship between age and hypertension. It goes gradually up with age. This result goes in line with other research in the United States and another research in Ireland. Both confirmed that there is a link between age and hypertension. ^[5,6]

We found a statistical relationship between hypertension and stress in general. This goes in line with a study in the United Arab Emirates and Hong Kong.^[7,8] However, it seems underestimated as a risk factor. But still, it plays a considerable role in the development of hypertension.

REFERENCES

- 1. Khalid S Al-Gelban1, Mohd. Yunus Khan, Yahia M Al-Khaldi, *et al* "Adherence of primary health care physicians to hypertension management guidelines in the Aseer region of Saudi Arabia", *Saudi J Kidney Dis Transpl. 2011 Sep; 22(5): 941-8.*
- 2. Al-Nozha MM1, Abdullah M, Arafah MR, et al "Hypertension in Saudi Arabia", Saudi Med J., 2007 Jan; 28(1): 77-84.
- 3. Maziar Moradi-Lakeh, Charbel El Bcheraoui, Marwa Tuffaha, *et al* "Tobacco consumption in the Kingdom of Saudi Arabia, 2013: findings from a national survey", *BMC Public Health*, 2015; 15: 611.
- 4. Mitwalli AH1, Harthi AA, Mitwalli H, *et al* "Awareness, attitude and distribution of high blood pressure among health professionals", *J Saudi*

- Heart Assoc. 2013 Jan; 25(1): 19-24.
- 5. Christopher B. Brady, Avron Spiro, J. Michael Gaziano "Effects of Age and Hypertension Status on Cognition: The Veterans Affairs Normative Aging Study", *Neuropsychology*. 2005 Nov; 19(6): 770-7.
- 6. Brennan M, O'Brien E, O'Malley K "The effect of age on blood pressure and heart rate variability in hypertension", *J Hypertens Suppl.*, 1986 Dec; 4(6): \$269-72.
- 7. Rizwana B. Shaikh, Elsheba Mathew, Jayadevan Sreedharan, *et al* "Knowledge regarding risk factors of hypertension among entry year students of medical university", *J Family Community Med.*, 2011 Sep-Dec; 18(3): 124–129.
- 8. Bernard MY Cheung, THY Au, SY Chan, *et al* "The relationship between hypertension and anxiety or depression in Hong Kong Chinese", *Exp Clin Cardiol.* 2005 Spring; 10(1): 21–24.
- 9. Babiker FA, Elkhalifa LA, Moukhyer ME. "Awareness of hypertension and factors associated with uncontrolled hypertension in Sudanese adults" *Cardiovasc J Afr. 2013 Jul; 24(6): 208-12.*