

**DO PEOPLE LIVING IN JEDDAH, SAUDI ARABIA CONSIDER
HYPERTENSION AS THE MOST IMPORTANT RISK FACTOR TO GET
ISCHEMIC HEART DISEASES?**

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ABSTRACT

Introduction: There are many risks for ischemic heart disease including (age, family history of coronary insult, smoking, diabetes and hypertension). Hypertension is a silent disease and once it damages the vessels that supplies the heart the patient might feel chest pain that radiates to the neck or the shoulder, jaws and the back associated with shortness of breath, palpitation. The best way to prevent ischemic heart disease is modifying the risk factors such as changing life style, do regular exercise, stop smoking and eating healthy. **Objective:** The main objective of this study was determine the

prevalence of moderate risk factors of hypertension and to know about the effect of hypertension on IHD among people living in Jeddah Saudi Arabia. **Method:** A Cross-sectional study was conducted in Al Balad, A historic festival in Jeddah, Saudi Arabia. A questionnaire, weight and height scales were used to collect the data of demographic characteristics, risk factors, and diseases-related details. **Results:** In our study there were

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3231 participate Saudi and non-Saudi people, in a middle-aged, most of them were female (54.5%) They education level bachelor degree (63%) and smokers which elevates the score of ischemic disease along with diabetes and hypertension. **Conclusion:** Our study extracts the most of people visit Al Ballad – Historic Jeddah Festival think the most important risk factors to get IHD is hypertension.

INTRODUCTION

The heart is the vital organ in our body and it is in the size of our fist, the normal heart pumps 70- 100 beat /min.^[1] The heart is the main organ that pump oxygenated blood to all body. The heart's surface is covered with coronary arteries that nourish the heart and keep it pumping,^[2] when these vessels are blocked due to atherosclerosis it causes ischemia and later fat deposition on the heart muscles weakening its function^[3] There are many risks for ischemic heart disease including (age, family history of coronary insult, smoking, diabetes and hypertension).^[4]

Hypertension is a silent disease and once it damages the vessels that supplies the heart the patient might feel chest pain that radiates to the neck or the shoulder, jaws and the back associated with shortness of breath, palpitation. Unlike diabetes patient may only suffer from sweating and epigastric discomfort.^[5]

According to the coronary heart disease, we have different types of syndrome (Angina pectoris, Stable angina, Variant angina, Unstable angina, Silent ischemia and Myocardial infarction).^[6] The best way to prevent ischemic heart disease is modifying the risk factors such as changing life style, do regular exercise, stop smoking and eating healthy.^[7]

JUSTIFICATION

Hypertension in kingdom of Saudi Arabia has become an increasingly important health problem affecting more than one fourth of the population. Uncontrolled hypertension considered as the main risk factor of cardiovascular disease, stroke, heart attack and other serious illness. An early detection and management of the risk factors limits the damage to the heart and arteries.

OBJECTIVE OF THE STUDY

- To determine the prevalence of moderate risk factors of hypertension.
- To avoid and delay the development of complications (IHD) within the next 5-10 years.

- To educate those who are at risk and modify their life style to a better and health life.

MATERIAL AND METHODS

Jeddah is one of the biggest city in the kingdom of Saudi Arabia with multi-cultural residents. Being such an important city, a commercial hub and dramatically growing in rate, we chose this beloved city to conduct our research specially in Al-balad during Ramadan where most of the people visits for the historic Jeddah festival.

Study Area/Setting

The study conducted at Al Balad – Historic Jeddah Festival

Study Subjects:

Inclusion criteria

- Adults above 20 years old.
- Both Saudi and non-Saudi.

Exclusion criteria

- Ethnicity.
- Person diagnosed with Hypertension.
- Residents staying less than five years.
- Alcohol consumption.

STUDY DESIGN

The type of research to be conducted is a randomized cross-sectional study.

Data Collection Methods

Data collection methods in this study include questionnaire, weighing scale, Stadiometer (Height scale), All measurements will be taken by trained medical interns and paramedics with reliable instruments.

Verbal consent will be taken after which the questionnaires will be filled using computer-based application. Then the person will be sent to obtain the remaining measurements which will be hand-filled on a prepared sheet and coordinated with the questionnaire information.

DISCUSSION

The ischemic heart disease affected many family. It is important to recognize how much the

community awareness about the disease. When we talk about the risk factors of ischemic heart disease (coronary heart disease) there were many factors such as (age, gender, smoking, Hypertension, diabetes mellitus, family history, and obesity) and when we talk specific to relation to the risk factor hypertension there a positive and a strong relation seen in our study which is the strong positive family history. In our study there were 3231 participate Saudi and non-Saudi people, in a middle-aged, most of them were female (54.5%) They education level bachelor degree (63%) and smokers which elevates the score of ischemic disease along with diabetes and hypertension.

The baseline characteristics of the respondents

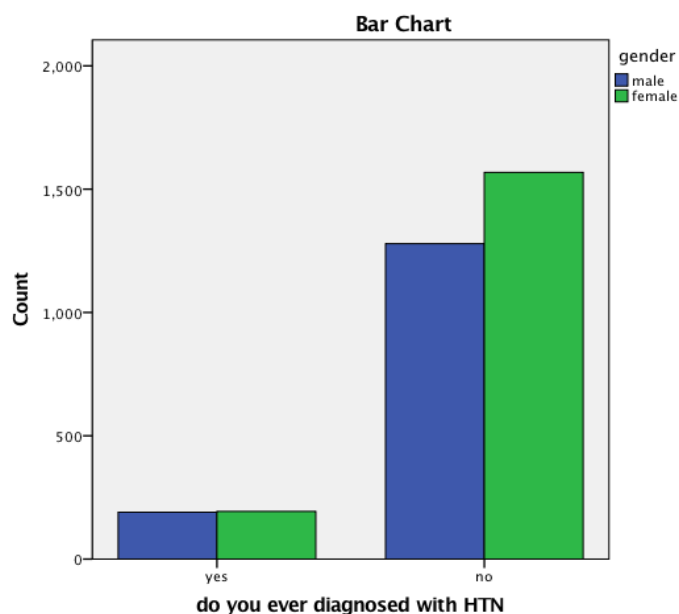
Variable	Category	N	%
		Total = 3230	
Age	35 AND YOUNGER	2198	68
	36-49	606	18.8
	50- 64	332	10.3
	65 AND ABOVE	20	0.6
	Missing	74	2.3
BMI	<18.5	182	5.6
	18.5-24.9	1145	35.4
	25-29.9	948	29.3
	30-39.9	645	20
	>39.9	151	4.7
Gender	Male	1469	45.5
	Female	1761	54.5
Nationality	Saudi	2691	83.3
	Non-Saudi	539	16.7
Marital status	Single	1600	49.5
	Married	1556	48.2
	Divorced	74	2.3
Educational Level	Elementary school	58	1.8
	Intermediate school	132	4.1
	High school	766	23.7
	Bachelor degree	2038	63.1
	Higher education	236	7.3
Employment	Student	1240	38.4
	Employed	1207	37.4
	Non Employed	783	24.2
Medical Insurance	Yes	1518	47
	No	1712	53
Smoking Status	Yes	830	25.7
	No	2400	74.3

Energy Drinks?	Yes	750	23.2
	No	2480	76.8
HTN	Yes	383	11.9
	No	2847	88.1
DM	Yes	314	9.7
	No	2916	90.3
Exercise Regularly	Yes	1885	58.4
	No	1345	41.6
investigate blood Glucose or Cholesterol or BP?	Yes	2009	62.2
	No	1221	37.8
Family History of HTN	Yes	2250	69.7
	No	960	29.7
	Missing	20	0.6

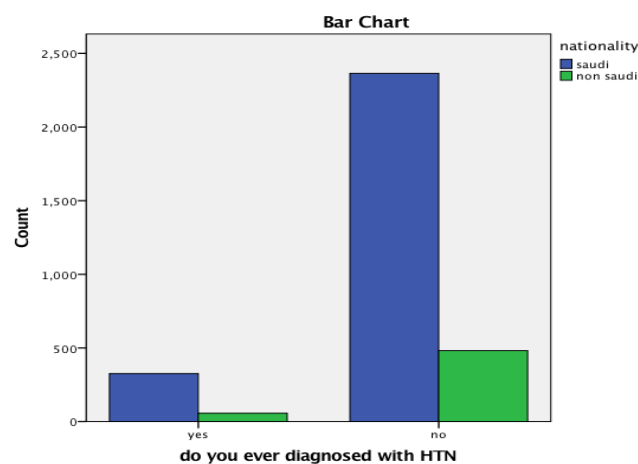
Any one of your family diagnosed with this diseases?

Category	N	%
	Total = 3230	
No diseases	327	10.1
DM	406	12.6
HTN, CAD, HD	16	0.5
DM, HD	93	2.9
CAD, HD	11	0.3
HTN, HD	46	1.4
HTN	188	5.8
HTN, CAD	12	0.4
CAD	7	0.2
HD	45	1.4

Do you ever diagnosed with HTN * gender?				
		Gender		Total
		Male	Female	
do you ever diagnosed with HTN	yes	190	193	383
	no	1279	1568	2847
Total		1469	1761	3230



Do you ever diagnosed with HTN * nationality				
		Nationality		Total
		Saudi	Non Saudi	
Do you ever diagnosed with HTN	yes	326	57	383
	no	2365	482	2847
Total		2691	539	3230



CONCLUSION

Our study extracts the most of people visit Al Ballad – Historic Jeddah Festival think the most important risk factors to get IHD is hypertension and smoker more than others and they want to know more about how to modify the risk factors.

REFERENCE

1. Mayo clinic health system : <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/basics/definition/con-20019580>.
2. Blood pressure UK:
<http://www.bloodpressureuk.org/BloodPressureandyou/Thebasics/Whatisnormal>
3. Hypertension research
<http://www.nature.com/hr/journal/v39/n7/full/hr201621a.html#aff1>
4. Hypertension research :
<http://www.nature.com/hr/journal/v39/n7/full/hr201621a.html#aff1>
5. Mayo clinic health system : <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/basics/risk-factors/con-20019580>
6. Mayo clinic health system : <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/basics/complications/con-20019580>
7. Mayo clinic health system: <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/basics/lifestyle-home-remedies/con-20019580>