

Public Awareness towards Hypertension among Saudis in AL Riyadh, KSA
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ABSTRACT

Background: Hypertension is a major health problem all over the world, causing high mortality and morbidity. It is a major risk factor for brain and heart diseases.

Objectives: To assess the level of public awareness and knowledge towards hypertension among Saudis in AL Riyadh City.

Methods: A cross-sectional self-administrated questionnaire based study distributed among 300 Saudis of AL Riyadh City.

Results: The age was ranged from 30 to 60 and 55% were females and 45% were males respondents. The majority of them had bachelor degree and were employed. Most of the respondents had acceptable knowledge about hypertension, risk factors and management. Also, education was significantly associated with high levels of knowledge of this disease. **Conclusion:** Generally, public knowledge was good with high knowledge about risk factors and managements. No enough campaigns about hypertension to fill the gap. Also, education significantly impacts the knowledge of population about hypertension.

Keywords: Hypertension, AL Riyadh, KSA.

INTRODUCTION

In all nations, hypertension is a major cause of morbidity and mortality^[1].

Many complications could happen if the blood pressure not controlled such as kidney disease, stroke, coronary artery disease (CAD), infarction and atherosclerosis^[2]. Moreover, treatment of hypertension is too costly^[3]. A study showed that the prevalence of hypertension in adult population was about (972 million patients) in 2000^[4].

Compered previous studies revealed that hypertension increase in developing countries and lower in developed countries^[5]. In KSA, study showed that hypertension is a major risk factor which increase the morbidity and mortality^[6].

Other studies showed the prevalence of hypertension in 1995-2000 was 26 % and in 2005 was 25.5 % among population^[7-8]. Hypertension is treatable and preventable disease, it is increasing dramatically over the year and it is significantly associated with older age and if left untreated it will result in life-threatening diseases^[8]. The public awareness, knowledge and attitude must be clarified

to early detection and to help in the controlling of this fetal disease. Thus, this study aimed to assess the knowledge of public towards hypertension.

METHODS

Cross-sectional, self- administrated questionnaire was distributed among public in Alriyadh city and their age from 30-60 from April. 2017 to May 2017.

Sample

The surveys was distributed on 300 Saudis in front of public mall in Alriyadh city.

Study tool

The design of the questionnaire was based on previous studies with some modifications^[9]. Self-administrated questionnaire that consists of two parts: The first part included personal information of participants. The second part consists of multiple question such as assessment knowledge about hypertension.

Statistical analysis

Data were entered and analyzed by (SPSS).

RESULTS

Table 1. Socio-Demographic information of respondents (n = 300)

Personal information	Frequency	Percentage (%)
30-40	125	41.66%
41-50	110	36.66%
51-60	65	21.66%
Female	165	55%
Male	135	45%
Non-educated	50	16.66%
School degree	140	46.66%
Bachelor degree	110	36.66%

Demographics of the studied subjects

Table 1 showed personal information of participants, (41.6 %) between 30-40 y/o and (36.6%) between 41-50 y/o. Most of participants were females (55%) and males were (45%).

As for the level of education, the majority of subjects had a school degree (46.6%), (16.6%) non-educated and (36.6%) bachelor degree.

Table 2. Assessment level of awareness toward hypertension.

questions	No	Yes	Don't Know
Q1: have you heard about Hypertension?	11 (3.7%)	289 (96.3%)	0 (0.0%)
Q2: Do you think that hypertension is treatable disease?	124 (41.3%)	101 (33.7%)	75 (25%)
Q3: Do you think that hypertension is preventable disease?	93 (31%)	130 (43.3%)	77(25.7%)
Q4: Do you think hypertension leads to severe complication?	63 (21%)	87 (29%)	150 (50%)
Q5: Do you think that hypertension has risk factors?	88 (29.3%)	70 (23.3%)	142(47.3%)
Q6: Do you think the community needs more awareness about hypertension?	39 (13%)	190 (63.3%)	71 (23.7%)
Q7: have you seen hypertension campaigns?	211 (70.3%)	45 (15%)	44 (14.7%)

Results of the evaluation of public knowledge.

300 participants filled the surveys. The majority of participants have efficient information about hypertension (96.3%). Also, (41.3%) believe that HTN is not treatable while (33.7) of participants think it is treatable, (25%) don't know if this disease treatable or not. As prevention, majority of participants believe that HTN is preventable disease with (43.3%) while third of the participants have chosen it as not preventable disease and (25.7%) are not sure about prevention. Most of the participants didn't know if HTN has severe complications and risk factors. 211 of participants (70.3%) have never seen HTN campaigns in public places and 190 participants (63.3%) think that the community needs more awareness about HTN.

DISCUSSION AND CONCLUSION

The public awareness about hypertension is increasing with regarding the month of May as the national awareness month about blood pressure [10]. Hard working was done for providing Saudi population information and control of hypertension but further studies are needed to assess the knowledge of Saudi patients about hypertension [11]. The awareness of blood pressure was acceptable among previous studies. However, other studies showed poor score of knowledge was found among hypertensive patients and this could be due to illiteracy and low socioeconomic status of the participants [12-13].

In the present study, the awareness of HTN

considered low and it could be due to no enough public campaigns. Thus health care professionals and doctors should exert much effort and communication with patients to control hypertension and decrease its related complications.

Higher education levels were significantly associated with higher knowledge between patients which was in agreement with our results^[14].

This study has some limitations including that small sample and doesn't represent the whole population of Al-Riyadh City, so, the results can't be generalized.

In conclusion: The general knowledge and awareness of HTN was good with acceptable knowledge about risks and treatments. There is no enough campaigns thus there is need for enhancing health care education about hypertension. Also, national studies should be conducted to assess the general knowledge, attitude and practice of hypertensive patients to decrease the economic loss.

REFERENCES

- Lozano R, Naghavi M, Foreman K, Lim S, Shibuya K, Aboyans V *et al.* (2012):** Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* (London, England), 380:2095-128.
- El Bcheraoui C, Memish ZA, Tuffaha M and Daoud F (2013):** Hypertension and its associated risk factors in the kingdom of Saudi Arabia: a national survey. *International Journal of Hypertension*, 2014:1- 8.
- Kearney PM, Whelton M, Reynolds K, Muntner P, Whelton PK and He J (2005).** Global burden of hypertension: analysis of worldwide data. *Lancet* (London, England), 365:217-23.
- Basu S and Millett C (2013):** Social epidemiology of hypertension in middle-income countries: determinants of prevalence, diagnosis, treatment, and control in the WHO SAGE study. *Hypertension*, 62:18-26.
- Danaei G, Finucane MM, Lin JK, Singh GM, Paciorek CJ, Cowan MJ *et al.* (2011):** National, regional, and global trends in systolic blood pressure since 1980: systematic analysis of health examination surveys and epidemiological studies with 786 country- years and 5.4 million participants. *Lancet* (London, England), 377:568-77.
- IHME (2013):** Stacked bar chart, Saudi Arabia. Deaths. 1990–2010. Institute for Health Metrics and Evaluation, University of Washington, Seattle, Wash, USA, <http://viz.healthmetricsandevaluation.org/gbd-compare/>.
- Saeed AA, Al-Hamdan NA, Bahnassy AA, Abdalla AM, Abbas MA and Abuzaid LZ (2011):** Prevalence, Awareness, Treatment, and Control of Hypertension among Saudi Adult Population: A National Survey. *Int J Hypertens.*, 2011:174135.
- Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL *et al.* (2003):** The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. *JAMA.*, 289:2560-72.
- Mitwalli AH, Harthi AA, Mitwalli H, Juwayed AA, Turaif NA and Mitwalli MA (2013):** Awareness, attitude, and distribution of high blood pressure among health professionals. *Journal of the Saudi Heart Association*, 25:19-24.
- Awareness BP (2011):** Information about Blood Pressure Awareness Month. http://new-fitness.com/Blood_Pressure/month.html.
- Alwakeel J and Hammad D (2012):** Long term effects of Ace-inhibitors on the renal outcome in Type 2 diabetes mellitus patients. *Journal of human hypertension*, 26:639-40.
- Son PT, Quang NN, Viet NL, Khai PG, Wall S, Weinehall L *et al.* (2012):** Prevalence, awareness, treatment and control of hypertension in Vietnam- results from a national survey. *Journal of human hypertension*, 26:268-80.
- Arnaut MS, Almahmeed W, Ibrahim M, Ker J, Khalil MT, Van Wyk CT *et al.* (2011):** Hypertension and its management in countries in Africa and the Middle East, with special reference to the place of β -blockade. *Current medical research and opinion*, 27:1223-36.
- Kilic M, Uzunçakmak T and Ede H (2016):** The effect of knowledge about hypertension on the control of high blood pressure. *International Journal of the Cardiovascular Academy*, 2:27-32.