EDITORIAL

Oman Medical Journal [2018], Vol. 33, No. 5: 365-366

Hypertension in Oman: Where Do We Stand?

Ibrahim Al-Zakwani[1]* and Khamis Al-Hashmi[2]

[1]Department of Pharmacology and Clinical Pharmacy, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman

[2]Department of Physiology, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman

ARTICLE INFO

Article history:
Received: 8 August 2018
Accepted: 8 August 2018

Online:
DOI 10.5001/omj.2018.68

Hypertension (HTN), also known as high blood pressure (BP), is a global public health concern. It is associated with significant morbidity and mortality contributing to coronary heart disease (CHD), stroke, and kidney failure as well as premature death and disability.[1] In 2008, the World Health Organization (WHO) approximated that 40% of adults, aged ≥ 25 years, had been diagnosed with HTN with the prevalence highest in Africa (46%) and lowest in the USA (35%). In the WHO Eastern Mediterranean Region, the prevalence of HTN was estimated at 42%.[2,3] There has been a progressive increase in the prevalence of HTN in Oman in the last few decades. Recent data from the Oman World Health Survey estimated the prevalence of HTN in Oman at 41.5%[4] compared to 27% reported by the National Blood Pressure Survey, which was conducted in 1991.[5] This increased prevalence is in parallel with increases in obesity and other cardiometabolic diseases as a sequel for aging and changes in diet and lifestyle.[1]

Reducing BP by 10/5 mmHg lowers the risk of CHD events by 22% and strokes by 41%.[6] A number of studies have been conducted in Oman to determine BP goal attainment of the population.[7–10] BP goal attainment has remained largely low ranging from 39%[9] to 55%[8] with diabetics faring the worst at 30%.[11] Various hypotheses have been put forward to explain such discrepant low goal attainment numbers. Because of the asymptomatic nature of HTN, up to 60% of patients have been reported to discontinue treatment.[12] Other reasons include forgetfulness, side effects, complex regimens, cost of medication, and a lack of patient knowledge as to the consequences of non-adherence.[13] Physicians could also have contributed to this by their reluctance to change or intensify antihypertensive medications when BP is not controlled.[13] The attainment of these BP goals will now become even more challenging as the thresholds have recently become more stringent from < 130/90 mmHg to < 120/80 mmHg.[14] Most of the above mentioned studies were based on office BP measurements and might have overlooked masked HTN or masked uncontrolled HTN (which was reported to be 14.5%) and requires 24-hour ambulatory BP monitoring.[15]

As recommended by the WHO, addressing behavioral risk factors, which are influenced by working and living conditions, are also crucial to tackling this killer disease. These include an unhealthy diet and increased salt intake, harmful use of alcohol, physical inactivity, and tobacco use.[1] Other secondary causes such as kidney disease, endocrine disease, obstructive sleep apnea, and malformations of blood vessels need to be ruled out.

REFERENCES

1. World Health Organization. World Health Day 2013. A global brief on hypertension. Silent killer, global public health crisis.[cited 2018 August 5]. Available at: http://apps.who.int/iris/bitstream/handle/10665/79059/WHO_DCO_WHD_2013.2_eng.pdf;jsessionid=7E885D0A9D7250A82EDCAC9492B848ED?sequence=1.
2. World Health Organization. Global status report on noncommunicable diseases 2010. Geneva, World Health Organization, 2011. [cited 2018 August 5].Available at: http://www.who.int/nmh/publications/ncd_report2010/en/.
3. World Health Organization. Global Health Observatory Data Repository [online database]. Geneva, World Health Organization, 2008. [cited 2018 August 5]. Available at: http://apps.who.int/gho/data/view.main.
4. Abd El-Aty MA, Meky FA, Morsi MM, Al-Lawati JA, El

*Corresponding author: ial_zakwani@yahoo.com

Sayed MK. Hypertension in the adult Omani population: predictors for unawareness and uncontrolled hypertension. J Egypt Public Health Assoc 2015 Sep;90(3):125-132.

5. Alshishtawy MM. Re: Acute Coronary Syndrome, Diabetes and Hypertension: Oman must pay more attention to chronic non-communicable diseases. Sultan Qaboos Univ Med J 2012 Feb;12(1):126-128.
6. Law MR, Morris JK, Wald NJ. Use of blood pressure lowering drugs in the prevention of cardiovascular disease: meta-analysis of 147 randomised trials in the context of expectations from prospective epidemiological studies. BMJ 2009 May;338:b1665.
7. Almahrezi A, Al-Zakwani I, Al-Aamri A, Al-Khaldi S, Al-Zadjali N, Al-Hatali M, et al. Control and management of hypertension at a university health centre in oman. Sultan Qaboos Univ Med J 2008 Jul;8(2):179-184.
8. Al-Shidhani TA, Bhargava K, Rizvi S. An audit of hypertension at university health center in oman. Oman Med J 2011 Jul;26(4):248-252.
9. Al-Saadi R, Al-Shukaili S, Al-Mahrazi S, Al-Busaidi Z. Prevalence of uncontrolled hypertension in primary care settings in Al seeb wilayat, oman. Sultan Qaboos Univ Med J 2011 Aug;11(3):349-356.
10. Al-Zakwani I, Al-Mahmeed W, Arafah M, Al-Hinai AT, Shehab A, Al-Tamimi O, et al. Control of Risk Factors for Cardiovascular Disease among Multinational Patient Population in the Arabian Gulf. Curr Vasc Pharmacol 2016;14(4):374-381.
11. El-Shafie K, Rizvi S. Control of Hypertension among Type II Diabetics. Oman Med J 2010 Jan;25(1):32-36.
12. Degli Esposti L, Di Martino M, Saragoni S, Sgreccia A, Capone A, Buda S, et al. Pharmacoeconomics of antihypertensive drug treatment: an analysis of how long patients remain on various antihypertensive therapies. J Clin Hypertens (Greenwich) 2004 Feb;6(2):76-84.
13. Karakurt P, Kaşikçi M. Factors affecting medication adherence in patients with hypertension. J Vasc Nurs 2012 Dec;30(4):118-126.
14. Whelton PK, Carey RM, Aronow WS, Casey DE Jr, Collins KJ, Dennison Himmelfarb C, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Hypertension 2018 Jun;71(6):1269-1324.
15. Al-Hashmi K, Al-Busaidi N, Jaju D, Al-Waili K, Al-Rasadi K, BaOmar A. White coat hypertension and masked hypertension among omani patients attending a tertiary hospital for ambulatory blood pressure monitoring. Oman Med J 2015 Mar;30(2):90-94.