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%.²³ 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 1991.¹ 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%⁶ 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


