

EDITORIAL

Hypertension and associated cardiovascular risk factors in Romania

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The Study for the Evaluation of Prevalence of Hypertension and Cardiovascular Risk in Romania, SEPHAR, has shown in repeated national cross sectional surveys, performed in 2005, 2012 and 2016, that Romania is a country with prevalence of hypertension as high as 45%¹⁻⁴. Romania is a typical East European country with high prevalence of also other cardiovascular risk factors¹⁻⁴.

In this issue of the Romanian Journal of Cardiology the SEPHAR investigators aimed to investigate the Romanian prevalence of high normal blood pressure (BP) and to investigate whether people with high normal BP have higher prevalence of other cardiovascular risk factors compared to people with normal BP⁵. Knowing that the number one cause of death in Romania is cardiovascular, they collected this information in order to provide a basis for national preventives strategies against hypertension and cardiovascular disease.

A representative sample of Romanian adults was enrolled in the SEPHAR III survey. During the two study visits, the 1970 participants had their BP taken 3 times according to current guidelines and the enrolled individuals responded to a questionnaire, anthropometric measurements were performed, and the investigators did an extensive evaluation of target organ damage, blood work, and urinalysis.

The prevalence of high normal BP was 11%. Individuals with high normal BP were older (mean age 51 yrs.) than individuals with normal BP (mean age 41 yrs.) but they were younger than those with established hypertension (mean age 56 yrs.). Body weight, waist circumference, body mass index, total and low density lipoprotein cholesterol, fasting triglycerides, fasting blood glucose, glycosylated haemoglobin (HbA1c), serum uric acid, serum creatinine, urinary albumin/cre-

atinine ratio, carotid intima-media thickness, arterial stiffness and cardiac diastolic dysfunction, left ventricular mass index, interventricular septum and posterior left ventricle wall thickness and left atrial volume were significantly higher in participants high normal BP compared to participants with normal BP.

In short, people in Romania with high normal BP represent approximately 11% of the population and they had elevated cardiovascular risk. From these data the authors suggest that it is essential to educate the general public and the health care providers to be aware of these individuals and implement steps that should be taken to improve their cardiovascular risk factors.

Thus, the national situation has been described in Romania and this is an important first step in the work with creating awareness and initiating activities to improve the situations with the untoward high cardiovascular risk factors in the country. Of course in this context the message from the SEPHAR investigators is to properly treat hypertension and keep an eye on BP in all the people with high normal values. Over time they tend to develop established hypertension in need of antihypertensive drug treatment. However, a more aggressive attitude may be indicated; the most recent European Hypertension Guidelines⁶ recommend drug treatment also in people with high normal BP and concomitant high cardiovascular risk. This is especially the case in people with hypertension mediated organ damage, here referred to as “target organ damage”⁵. Many of these people may have masked hypertension, elevated BP at ambulatory measurements, and antihypertensive drug treatment is indicated⁷⁻⁹.

Further, aggressive antismoking activities, promoting more physical activity and weight control and recommending a healthy diet^{10,11} are also natural con-

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sequences of the SEPHAR findings. Possible, or maybe most likely, also in Romania the cardiovascular risk factors including the situation with high normal BP or established hypertension may be rapidly improved such as in the Nordic countries which were considered high risk countries in Europe not too many years ago but now have successfully moved into the low risk category regarding cardiovascular diseases¹².

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