

Prevalence of arterial hypertension in Serbia: PAHIS study

Dragan Lovic^a, Vesna Stojanov^b, Branko Jakovljević^c, Mirjana Krotin^d, Vladimir Jurisic^e,
Dragan Djordjevic^f, Katarina Paunovic^c, Marija Zdravkovic^d, Dejan Simonovic^f,
Dusan Bastac^g, and Banko Lovic^a

Background: Arterial hypertension (AH) is the most common cardiovascular disease risk factor, affecting between 30 and 50% of the adult population in developed countries. A steady increase of the prevalence of AH by about 60% is expected by year 2025.

Methods: Serbian Society of Hypertension conducted a prevalence study from February to May 2012 on a sample of 3878 adult respondents. The study included 2066 women (53.3%) and 1812 men (46.7%). Average age was 48.89 ± 17.48 years. Most participants resided in urban areas (2956 people, 76.2%), whereas 922 resided in rural areas (23.8%).

Results: The prevalence of AH in Serbia is 42.7%. Hypertension is more frequently diagnosed among women (53.3%), than among men (46.7%). One thousand, four hundred and twelve respondents were previously diagnosed and treated for hypertension. The estimated awareness of the presence of AH was 42.99% (i.e. 40.00% among male and 45.41% among female participants). Out of all diagnosed cases of hypertension, 390 persons (27.7%) have well regulated blood pressure values, whereas 1022 persons (72.3%) do not have their blood pressure under control.

Conclusion: Serbia belongs to countries with a high prevalence of AH. A poor control of AH may be explained in view of socioeconomic problems. High prevalence of AH may indicate a remarkably high cardiovascular disease mortality in Serbia.

Keywords: arterial hypertension, BMI, prevalence

Abbreviations: AH, arterial hypertension; PAHIS, prevalence of arterial hypertension in Serbia; SD, standard deviation

INTRODUCTION

Arterial hypertension (AH) is a worldwide health problem, characterized by high prevalence and significant risk for cardiovascular, cerebrovascular and kidney diseases. The World Health Organization (WHO) indicates that 30–50% of the adult population worldwide suffers from high blood pressure [1]. The prevalence of AH increases with age, especially after the age of 50 years, being higher than 50% [2]. The elderly are more

likely to have isolated systolic hypertension because of reduced compliance of large vessels. The Framingham study reported the prevalence of isolated systolic hypertension from 15–20% of all patients with AH [3]. Despite the understanding of the pathogenesis of hypertension, despite all preventive and curative measures, its prevalence remains high in many countries and its regulation remains remarkably poor. WHO estimates that less than 25% of all persons with hypertension have their blood pressure regulated adequately (less than 140/90 mmHg) [1].

Recent epidemiologic studies report that 26.4% of the world adult population suffers from high blood pressure; the prevalence is 26.6% among men and 26.1% among women. Researchers estimate that the prevalence of AH will increase by 60% by year 2025, especially in women. The prevalence of AH will be 29.25% among all adults, 29.05% among men and 29.55% among women. Some experts believe that these predictions are underestimated, and that the number of persons with AH will be much greater, considering the rapid change of lifestyle and increase of risk factors for AH [4]. Comparative analysis of prevalence of hypertension and blood pressure levels among adults (aged 35–64 years) in six European countries, the US and Canada showed that the prevalence of AH was significantly higher in European countries than in the USA and Canada [5].

Considering the lack of epidemiological data on the prevalence of hypertension in Serbia, the Serbian Society of Hypertension has conducted the first major independent cross-sectional study on the prevalence of hypertension in adult population in Serbia [6].

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^aClinic for Internal Disease InterMedica Nis, Nis, ^bSchool of Medicine, University of Belgrade, Multidisciplinary Center for Polyclinic Diagnostics, Assessment and Treatment of Blood Pressure Disorders, Clinic for Cardiology, Clinical Centre of Serbia, ^cInstitute of Hygiene and Medical Ecology, ^dUniversity Hospital Medical Center 'Bezanijska kosa', Faculty of Medicine, University of Belgrade, Belgrade, ^eUniversity Kragujevac Medical School, Kragujevac, ^fInstitute Niska Banja, Nis and ^gOutpatient Clinic 'dr Bastac', Zajecar, Serbia

Correspondence to Dragan Lovic, Clinic for Internal Medicine InterMedica Nis, Serbia, Jovana Ristica 20/2, 18000 Nis, Serbia. E-mail: draganl1@sbb.rs or lovicd@eunet.rs

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