

**JOURNAL**

of Health Inequalities

# Hypertension

Tomasz Zdrojewski

Department of Hypertension and Diabetology, Medical University of Gdansk, Gdansk, Poland

**ADDRESS FOR CORRESPONDENCE:** Prof. Tomasz Zdrojewski, Department of Hypertension and Diabetology, Medical University of Gdansk, 7 Dębinki Street, 80-211 Gdansk, Poland, e-mail: [tzdroj@amg.gda.pl](mailto:tzdroj@amg.gda.pl)

According to the World Health Organization (WHO), hypertension is the leading cause of death worldwide accounting for 13% of total number of deaths [1, 2]. In representative research in 40 countries, Kearney *et al.* [3, 4] estimated that the prevalence of hypertension accounted for 26.5% in 2000 worldwide (972 million people), and by the year 2025, it will increase to 30% (1,650 million people). In recent decades, meta-analyses [5] showed a strong and independent impact of hypertension on increasing risk of coronary heart disease (CHD), stroke, heart failure, peripheral vascular disease, and renal failure. The results of the INTERHEART study [6] conducted in 52 countries worldwide and published 12 years ago, confirmed that beside cigarette smoking, hypertension is the main modifiable risk factor of heart attacks. In turn, Collins and MacMahon [7] based on meta-analyses concluded that the effective treatment of hypertension and reduction of diastolic blood pressure by 5-6 mmHg, decreases the risk of complications of coronary heart disease by 16% and stroke by 38%. In most countries, high prevalence of hypertension, insufficient detection, and low treatment efficacy are the major problems and challenges for public health. A similar situation is observed in Poland. Simultaneously, international organizations (for example WHO, European Union) and scientific societies tend to pay more attention to the problems of health inequalities arising from the social factors such as education level, place of residence, and employment. Those inequalities are expressed as significant differences in the prevalence and control of hypertension in various social groups. Therefore, the fact that such analyses are held in Poland should be assessed positively.

Nationwide research conducted in representative samples of Polish adult population (NATPOL 1997, 2002, 2011; WOBASZ 2003-2006; WOBASZ II 2013-2014; POLSENIOR 2007-2011) [8-10] has provided a good knowledge of the epidemiology of hypertension, in comparison with other countries. The prevalence of hyper-

tension in Poland, evaluated based on current diagnostic criteria ESC/ESH and PTNT (which includes two separated visits with two blood pressure measurements at each visit), accounts for 33% of adults aged of 80 years (37% in men, 29% in women;  $p < 0.05$ ) in the general population; including the oldest people is approximately 35-40% [11]. The prevalence of hypertension in Poland, as in other countries, significantly increases with age. Hypertension is diagnosed in almost three quarters of population aged equal to or above 80 years old. Among 10.8 million of patients with hypertension in Poland, 3.1 million are unaware of existing hypertension, whereas only 2.6 million is effectively treated (RR < 140/90 mmHg) [12]. The prevalence of hypertension in Poland is similar to prevalence in Czech Republic, Romania, and Portugal, while it is about 5-10% higher than in Turkey and Italy [12]. In 2011, in comparison with the United States, the incidence of hypertension in Poland were 5% higher but the percentage of patients successfully treated (RR < 140/90 mmHg; approximately 24%) was two times lower [13]. In summary, hypertension in Poland seems to be one of major medical, social, and economic issues, requiring continuous and comprehensive monitoring, also in terms of health inequalities.

## DISCLOSURE

Author reports no conflict of interest.

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