

# Comparison of the Expression of Antihypertensive Action of Preparation of Different Clinical and Pharmacological Groups

S. Nehoda Tetiana, M. Polova Zhanna, V. Sakhanda Ivanna,  
V. Shumeiko Mykola, M. Roik Olena

*Department of Pharmacy and Industrial Technology of Drugs, Bogomolets National Medical University, Kyiv, Ukraine*

## Abstract

**Introduction:** Increased blood pressure (BP) is one of the most significant epidemiological, medical, social, and economic consequences of problems. The results of many studies indicate that in one-third of people in Ukraine, the level of BP exceeds 140/90 mm Hg, it is increased. There is a contradiction between the need to adhere to the current level of therapy, which involves the use of new, as a rule, expensive techniques and drugs, and the constant lack of funding for health care. **Materials and Methods:** Methods of statistical description, systematic, sociological, economic, and statistical analysis, including variational statistics, correspondence questionnaires, and expert assessments, were used in the research process. The study included 1568 patients diagnosed with hypertension. As a result of the pharmacoepidemiological analysis, it was shown that the most often antihypertensive monotherapy is performed for younger patients with initial lower BP values. **Results:** A more detailed analysis of the antihypertensive activity of drugs belonging to the main pharmacological groups was performed with arterial hypertension monotherapy. Therefore, it is important to analyze the therapeutic efficacy of antihypertensive drugs from different clinical and pharmacological groups, safety, and their impact on the well-being of patients. **Discussion and Conclusion:** Analysis of the structure of prescriptions revealed the dominant positions of Agriculture Commercialization Equity Fund drugs, and, above all, drugs enalapril, among patients with hypertension in all study groups, regardless of age and gender, as well as regimens of antihypertensive therapy. A retrospective study of the antihypertensive effect of drugs from different clinical and therapeutic groups revealed no significant differences, but significant differences were noted when comparing the original drugs with their reproduced analogs (generics).

**Key words:** Antihypertensive drugs, hypertension, marketing research

## INTRODUCTION

In the 21<sup>st</sup> century, the high prevalence of hypertension remains a leading medical and social problem that has attracted the attention of internists worldwide. Arterial hypertension (AH) is the most common non-communicable disease on Earth, which largely determines the high mortality of persons of working age and disability from cardiovascular and cerebrovascular diseases.

It is safe to say that the problem of hypertension for the past 20 years is the most thoroughly researched, most often discussed, and covered in the most detail in the world as well as in Ukrainian medical literature, recommendations, and guidelines.

The current arsenal of drugs for the treatment of patients with cardiovascular disease is extremely large and includes about 20 major pharmacological groups, comprising hundreds of drugs with different mechanisms of action. This requires the internist to have a thorough and versatile knowledge of clinical pharmacology as a fundamental basis, in line with evidence-based medicine and rational pharmacotherapy.

### Address for correspondence:

V. Sakhanda Ivanna, Department of Pharmacy and Industrial Technology of Drugs, Bogomolets National Medical University, Kyiv, Ukraine. Phone: +380991943687. E-mail: sahandavanna@ukr.net

**Received:** 06-04-2020

**Revised:** 20-04-2020

**Accepted:** 14-05-2020