Abstract

Screening Analysis of the Patients at Risk for Arterial Hypertension in a pharmacy I.

Author: Zuzana Filipová¹

Supervisor of the thesis: Josef Malý^{1,2}

Consultant: Stanislav Havlíček³

¹ Department of Social and Clinical Pharmacy, Charles University in Prague, Faculty of

Pharmacy in Hradec Králové

²Hospital Pharmacy Motol, Prague

³Czech Chamber of Pharmacists, Prague

Introduction: Blood pressure measurement in pharmacies is one of the options to find

patients with previously untreated hypertension. A timely diagnosis of hypertension and a

proper treatment may reduce the risk of cardiovascular diseases.

Objectives: The aim of this study was to analyze the importance of blood pressure

measurement in pharmacies as a means of detecting a previously unrecognized hypertension

and as a part of the care which is provided to the patients with arterial hypertension.

Methodology: The measurement of the blood pressure was carried out from April to June

2012 in a community pharmacy in Poděbrady. The pharmacist accomplished it by means of a

validated and calibrated sphygmomanometer. Additional data were acquired on the basis of a

controlled interview with the participants of the study. The outline of the dialogue was a

questionnaire that had been created in advance. The data were evaluated in MS Excel and

processed by means of a frequency analysis. Furthermore, a retrospective analysis of potential

drug-related problems in patients on pharmacotherapy or dietary supplements was carried out.

Results: The data were acquired from 128 persons (33 % male and 67 % female). The blood

pressure of 48 (37 %) participants was over 140/90 mm Hg. 31 of these patients were on

antihypertensive drugs; the remaining 17 individuals had not been treated with arterial

hypertension. A high cardiovascular risk was found in 23 % of the participants. All in all,

there were 64 drug related problems in 52 participants of the study. 92 participants received a

final recommendation which involved a change in lifestyle, encouraging the patient's

compliance with treatment or a consultation of drug-related problems. Some individuals were recommended to visit a physician or to undergo a blood-pressure monitoring more frequently.

Conclusion: The measurement of blood pressure in pharmacies contributes to the detection of arterial hypertension and is beneficial for the prevention of cardiovascular diseases. Moreover, it was revealed that blood pressure measurement as a part of consultation activities enables to analyze the therapy and drug-related problems of the patients with arterial hypertension. A timely diagnosis and a rational supervision of pharmacotherapy reduce the costs of the arterial hypertension therapy. The clients of the pharmacy should perceive the consultation activities positively, as a part of the pharmaceutical care, and provide all information that is indispensable for the analysis of the arterial hypertension problem. At the same time, it is necessary for the pharmacy to provide suitable conditions for the consultation activity and the measurement of blood pressure.

Key words: blood pressure measurement, arterial hypertension