

THE ROLE OF PHARMACEUTICAL CARE IN SELF-CONTROL INTENSIFYING IN PATIENTS WITH DIABETES MELLITUS AND ARTERIAL HYPERTENSION

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Introduction. Statistical overviews data indicate that arterial hypertension (AH) associated with a significant increase of premature morbidity and mortality (primarily from cardiovascular complications) manifests in 80% of patients with type II diabetes mellitus (DM). European Society of Hypertension (ESH) / European Society of Cardiology (ESC) and associated with global standards the Order of the Ministry of Health of Ukraine № 384 dated May 24, 2012 provides following approaches to disease control in cases where the type II DM is complicated by hypertension: 1. Reaching the target blood pressure (BP) and blood glucose levels using adequate therapy. 2. Modification of lifestyle. 3. Self-discipline.

Aim. To develop the approaches to optimize the treatment of patients with type II DM complicated by hypertension within pharmaceutical care, providing by a pharmacist in a pharmacy.

Materials and methods. The study included several stages: the development of the questionnaire, which contained questions for research of the respondents' awareness about the targets of BP, blood glucose and compliance, patients' survey, analysis of the results, development of instructions for the patient with type II DM.

The survey was conducted during November 2014 and March 2015 on the basis of Pharmacy №2 «Pharmacy of hormones drugs» in the «Institute of Endocrinology and Metabolism named V. P. Komisarenko of National Academy of Medical Science of Ukraine» (Kyiv, Ukraine). A total of 56 visitors were interviewed who purchased drugs by physicians' prescription for DM and AH treatment. The survey was conducted with their consent.

Processing of survey results was performed with statistical analysis techniques.

Results and its discussion. Results of survey show that 42 (75%) from 56 pharmacies visitors who purchased prescription drugs for the treatment of DM and AH bought drugs at the request of relatives, 14 (25%) – «for himself». The survey was conducted among pharmacy visitors who acquired the drugs «for himself».

The results of the survey on issues related to BP self-control showed that: 57,14% of respondents constantly measure BP, 42.86% of respondents measure BP from time to time, and only 28.57% are aware of the target BP at diabetes ($\leq 130/80$ mm Hg). 35.71% of respondents said that they are taking drugs to lower BP constantly, 64.29% take drugs only in case of recrudescence.

Analysis of the questionnaire responses regarding blood glucose self-monitoring showed that 50% of respondents regularly take medications prescribed by a physician to reduce the blood glucose level; 14.28% of respondents answered that they constantly monitor the blood level of glucose (using glucometers), 70.58% of respondents said that occasionally control blood glucose level. None of the respondents did not know the meaning of glycosylated hemoglobin, its target levels and its continuous control significance.

As for compliance of treatment prescribed by a physician, 57.14% of respondents follow the mode of drugs taking, 42.85% said that they often forget about drugs; 42.85% of patients said that they regularly go to the physician for treatment correction; 57.14% refer to physician in case of recrudescence; 64.28% of visitors said that they are taking drugs on doctor's advice.

Considering the fact that drug therapy of patients with chronic diseases involves the doctor and the pharmacist, pharmacist has a function for implementing constant pharmaceutical care of such patients. Pharmacist conducts consultation and information work as a part of the pharmaceutical care. In this regard, we have developed the instruction, which contains information for patients with diabetes type II complicated by hypertension, target BP, fasting glucose 2 hours after a meal, the standards level of glycosylated hemoglobin, BP measurement mode, blood glucose level. Providing a consultation by a pharmacist as well as the use of the instruction by patients in everyday life will increase their awareness and self-discipline that in result will facilitate patient adherence to treatment.

Conclusions.

1. The survey results show an insufficient level of self-discipline among patients with type II DM complicated with AH, which in result affects the effectiveness of the treatment. Thus, only over half of the respondents involved in a survey constantly measure BP, about one-third regularly take drugs to reduce BP and know about BP targets for diabetes type II; glucose levels monitoring is carried out only by about 20% of the respondents.

2. The survey showed an insufficient level of adherence to treatment by interviewed patients that is indicated by irregular drugs taking by majority of respondents and non-compliance with the physician's recommendations.

3. Providing consultation by a pharmacist regarding disease control, as well as use of patient instruction in everyday life will increase their awareness and self-discipline, which in result will facilitate patient adherence to treatment.