

EVALUATING THE EFFECTIVENESS OF WORK OF SCHOOL FOR THE HYPERTENSIVE PATIENT AT THE LEVEL OF PRIMARY HEALTH CARE

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Abstract

The past 5-year data from 222 randomly selected outpatient cards of hypertensive patients who were followed up at a family polyclinic (n=54) and in a number of rural ambulances (n=168) of the Republic of Uzbekistan were retrospectively analyzed. The physicians from the Tashkent family polyclinic and rural ambulances of a number of the Republic's regions, who had taken 10-month retraining courses for general practitioners, were questioned. Two hundred and fifty-six hypertensive patients followed up at the family hospital and rural ambulances were interviewed using questionnaires and examined. Then some of them (a study group) took a course of training at a school for the hypertensive patient and the others (a comparison group) did not participate in the education program. All the patients were followed up for 2 years with a subsequent reexamination and study. Most outpatient cards give recommendations for non-drug treatment incompletely. In a number of cases, the physicians who attach importance to the detection and correction of risk factors has substantially increased after education. The patients who had taken training courses were found to be significantly ($p < 0,001$) more aware of their having hypertension and the major risk factors of hypertensive disease, to be more adherent to treatment, and to know its adequacy.

Keywords: Arterial hypertension, hypertensive disease, school for the hypertensive patient, patient education.

Introduction

In the Republic of Uzbekistan, as in all countries of the world [1, 2], arterial hypertension (AH) remains one of the urgent problems. This is confirmed by a simultaneous epidemiological study of the population aged 20 to 79 years in one of the districts of Tashkent. The prevalence of hypertension in the population was 35.7%, including 28.1% in men and 40.6% in women. from 8.2% aged 20-29 to 71.9% aged 70 and over. Regardless of gender, the most common in the studied population was stage 1 hypertension, detected in 66.2% of men and 60% in women; Grade 2 hypertension in 16.2% of men and 25.2% of women; Grade 3 in 17.6% of men and 14.8% of women [3]. People with high blood pressure are at significantly higher risk of stroke, coronary heart disease (CHD), other heart

diseases, and kidney failure. Effective control of hypertension involves not only the correctness of medical prescriptions (selection of the drug, dose, regimen, etc.), but also the correction of the main risk factors closely related to the patient's behavioral habits [4]. Most patients with hypertension have adverse risk factors that negatively affect the prognosis of the development and course of the disease. Only about 7–10% of AH patients are under dispensary observation, but even these patients often have high levels of risk factors, and the target BP is not achieved, which is unfavorable for the prognosis [5,6]. Numerous studies that have studied the causes of inadequate AH control in real practice have shown that the main obstacle to improving the quality of medical preventive care is low adherence of patients with hypertension to medical prescriptions [7,8,9,10]. Scientific studies of recent years aimed at studying the factors of increasing patient adherence to medical prescriptions [5,6, 7,9,11,12,13] have shown that one of the main methods that increase the completeness and accuracy of medical prescriptions is patient education [14]. It allows you to expand the scope of the doctor's influence from the treatment of the disease to prevention. With this approach, medical control of the disease is supplemented by control of health factors caused by the patient's lifestyle, habits, and behavioral features that affect health and the course of the disease [11,12,14].

Objective

Improving the effectiveness of prevention and treatment of hypertension (HA) by educating patients in "hypertensive schools" at the primary health care level.

Material and Methods

A retrospective analysis (over the past five years) was carried out on 222 randomly selected outpatient records from among patients under dispensary observation with hypertension in family polyclinics (n=54) and in a number of rural medical centers (SVP) of the Republic of Uzbekistan (n=168). The data of retrospective analysis of outpatient records were compared with the results of examination of patients (questioning, examination, anthropometry, blood pressure measurement, cholesterol determination, etc.). Doctors of the Tashkent city SP and the SVP of the regions were interviewed Republics that underwent 10-month retraining courses for a general practitioner. Before the training, 156 doctors were surveyed, after training 119, and 236 patients who are under dispensary observation with HA in the SP/SVP were questioned and examined. Subsequently, some of them (n=122, the main group) completed a course of study at the school of hypertensive patients, and some (n=114, comparison group) did not participate in the educational program. All patients were under our observation for 2 years with subsequent repeated examination and examination. In the study group, the age of the patients was 45-71 years, the mean age was 51.75±1.85 g. Of these, 29.5% were men and 70.4% were women. The distribution of patients by stages of the disease was as follows: stage I HA – 45 (36.8%); stage II HA – 62 (50.8%); stage III HA – 15 (12.2%). The crisis course of the disease was observed in 40 (32.7%) patients. who were treated according to the traditional method in the SP/SVP and do not participate in the educational

program. Of these, 80 (70.1%) are women, 34 (29.8%) are men aged 44-75 years, the mean age is 52.6 ± 1.62 . In this group, patients with HA were divided as follows: stage I HA – 41 (35.9%); Stage II hypertension – 61 (53.5%); Stage III hypertension – 12 (10.5%). The crisis course of the disease was observed in 37 (32.4%) patients. In terms of the main clinical and laboratory-instrumental indicators, the groups were comparable. In the main group of patients who received schooling, 46 (37.7%) patients had an average risk, 63 (51.6%) patients had a high risk, and 14 (11.4%, $p < 0.05$) had a very high risk. The comparison group consisted of patients with an average risk of cardiovascular complications of 41 (35.9%), with a high risk of 62 (54.3%), with a very high risk of 11 (9.6%, $p < 0.05$) people, respectively.

Results and Discussion

A retrospective analysis of the risk factors registered in the outpatient cards of SP ($n=54$)/SVP ($n=168$) yielded the following results: burdened heredity was established in SP 34 (62.9%) and SVP 88 (52.3%) cases, smoking – in SP 16 (29.6%) and SVP 47 (27.9%), overweight – in SP 18 (33.3%) and SVP 35 (20.8%), alcohol abuse – in SP 9 (16.6%) and SVP 37 (22.0), hypercholesterolemia in SP 21 (38.8%) and SVP 43 (25.6%), hypodynamia in SP 25 (46.2%) and SVP 57 (33.9%), stress in SP 38 (70.3%) and SVP 115 (68.4%), respectively. In our study, the most common risk factors were burdened heredity, stress, overweight, and physical inactivity. In most outpatient SP/SVP records, recommendations for non-pharmacological treatment are incomplete. The results are as follows: restriction of table salt is recommended by 35 (64.8%) doctors of the SP and 53 (31.5%) doctors of the SVP; auto-training 24 (44.4%) and 64 (38.0%); restriction of fat intake 31 (57.4%) and 71 (42.2%); fluid restriction to 1-1.5 l/day 25 (46.2%) and 54 (32.1%); weight loss in obese 37 (68.5%) and 71 (42.2%); smoking cessation 11 (20.3%) and 72 (42.8%); Regular exercise is recommended by 37 (68.5%) and 67 (39.8%), respectively. A comparative analysis of the retrospective indicators of the outpatient records with the data of the oral survey of doctors and examination of the same patients revealed a significant discrepancy ($p < 0.001$) of the above risk factors. These data allow us to conclude that the majority of patients did not timely identify and correct hypertension risk factors. Studying the outpatient charts, we paid attention to the groups and rules for prescribing antihypertensive drugs with proven efficacy. Doctors prescribe β -adrenergic blockers in the SP 44.4%, in the SVP 8.9%; diuretics 35.1% - 10.7%, respectively; calcium antagonists were prescribed in 24% in SP and 5.9% in SVP; ACE inhibitors 51.8% and 42.2%, respectively. Despite the fact that general practitioners still prescribe antihypertensive drugs recommended as the first line along with this, in the "other drugs" group, doctors prescribed dibazole, papazole, adelfan, raunatin, papaverine and no-shpu, and in courses, without a specific regimen and duration of administration.

As the analysis of outpatient records shows, doctors in SP 35 (64.8%) and 30 (17.8%) in SVP regularly prescribe antihypertensive drugs, 19 (35.1%) and 138 (82%) respectively in short courses, the difference between them in both cases is highly reliable ($p < 0.001$). Based on these data, it can be assumed that not all general practitioners adhere to the principles

of non-pharmacological methods of treatment and drug-based therapy. based on continuous long-term intake of drugs in effective doses. An anonymous survey of doctors of SP and SVP who underwent 10-month retraining courses before training interviewed 156 doctors (SP n=63; SVP n=93), after training 119 (52 and 67, respectively), underestimation of risk factors and their correction by doctors in patients with hypertension were revealed. It should be noted that after the training, the number of doctors who attach importance to the identification and correction of risk factors significantly increased ($p < 0.001$). Thus, *reducing the consumption of table salt*, before training, was recommended by 46.0% of SP doctors and 30.1% of SVP doctors, after training 92.3% and 76.1%, respectively; *weight loss* before training 26.9% and 15.0%, after training 96.1% and 85.0%, respectively; *Limiting fat intake* was recommended by 20.6% and 16.1% before training, and 94.2% and 43.2% after training, respectively.

Conclusions of the Study:

1. At the primary level in patients with hypertension, risk factors are not fully detected; some of them do not correct the identified modifiable risk factors; the overwhelming majority of patients use antihypertensive drugs in short courses (SP-35.1%; SVP-82%), not observing the regularity and duration (SP-64.8%; SVP-17.8%) of administration;
2. There is a low awareness of general practitioners about the principles of prevention and treatment of hypertension on an outpatient basis;
3. Patients with hypertension are not sufficiently aware of the risk factors (33.9%) affecting the course and prognosis of the disease; do not have the skills of self-control (63.3%) and self-help (75%) in acute BP; there is a low adherence (24%) of patients to the implementation of medical recommendations;
4. Antihypertensive therapy in patients with hypertension who do not participate in the educational program does not significantly affect controllable risk factors and does not lead to the achievement of target BP levels (29%);
5. The School of Hypertension is an effective system for organizing patient education and complex therapy in SP and SVP; reliably contributes to the prevention of cardiovascular complications, adequate blood pressure control (96.7%);
6. Adequate pharmacotherapy is optimally possible in patients participating in the educational program, in our study this training made it possible to achieve the target BP level in 82.7%, reduce the pharmacological burden on the patient's body, and, thereby, reduce the number of adverse reactions of drug therapy.

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