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Aleksandar Ljubotina[1], Vladimir Mićović[2], Miljenko Kapović[3], Maja Ljubotina[4], Branislava Popović[1] and Eris Materljan[1]

[1] Department of Family Medicine, School of Medicine, University of Rijeka, Rijeka, Croatia

[2] Department of Environmental Health, School of Medicine, University of Rijeka, Rijeka, Croatia

[3] Department of Biology and Medical Genetics, School of Medicine, University of Rijeka, Rijeka, Croatia

[4] Department of Surgery, General Hospital, Varaždin, Croatia

ABSTRACT

This survey was performed to determine the relationship between the adherence to hypertension drug treatment and the perception of stress, depression, hypertension, and myocardial infarction. 300 patients with uncomplicated hypertension from Rijeka, Croatia, were included (131 women, 169 men, mean age 53.5 years). Adherence to hypertension drug treatment as criterion, and the perception of stress, depression hypertension and myocardial infarction as prediclors were determined by self-assessment. Collected data were analysed using factor analysis, regression analysis, Kolmogorov-Smirnov test, χ^2-test and t-test. The statistical significance was set at a probability rate of less than 5% (p<0.05). 45.09% of women (p=0.479), and 64.08% of men (p=0.032) were motivated to take antihypertensives. 55.79% of women (p=0.382) and 64.78% of men (p=0.028) had sufficient knowledge about drug treatment of hypertension. The positive predictors of motivation for taking antihypertensives were physiological disturbances and perceived potency of hypertension and the negative were perceived helplessness in stress control and negative thoughts and emotions. The positive predictors of knowledge about taking antihypertensives were perceived helplessness in stress control, perceived potency of hypertension and myocardial infarction and the negative predictors were perceived self-efficacy in stress control, physiological disturbances and evaluation of hypertension. Both the motivation as well as the knowledge about taking antihypertensives should be improved, especially in women. The perception of stress, depression, hypertension and myocardial infarction can be used to predict adherence to hypertension drug treatment.

Key words: arterial hypertension; adherence; antihypertensives; stress; depression; myocardial infarction

Introduction

Essential hypertension is one of the most common reasons for visiting a family doctor. The prevalence of hypertension in adults is about 40%, while in contemporary guidelines for the treatment of hypertension high blood pressure is highlighted as the most important risk factor for cardiovascular diseases. There is no doubt that the optimal treatment of arterial hypertension has significant public health, clinical and economic consequences[1]. In general practice, the proportion of hypertensive patients achieving optimal BP control is inadequate, and this fact makes the adherence to hypertension treatment of a special importance for public health[2].

Adherence is defined as the degree to which patients respect a prescribed way of taking drugs. Adherence to the drug treatment and adherence to a healthy lifestyle are the foundation of a successful control of hypertension[3]. Monitoring the patients' adherence to the treatment of hypertension is an important function of a family doctor who, acting within the biopsychosocial model has the best insight into the variables associated with adherence. Despite the possibilities of effective treatment, the patients' adherence to the treatment of hypertension is not satisfactory. It is estimated that only 50 to 70% of patients show satisfactory adherence to the drug therapy for arterial

hypertension[4,5]. Also, it is estimated that in the first year of treatment 16 to 50% of patients interrupt the drug treatment[6]. Psychological stress is correlated with the development and control of hypertension[7]. Psychological stress, beside direct effects on BP, has an indirect effect in that it modifies the level of adherence of hypertensive patients. The patients' views on their health condition or disease, as shown in the Health Belief Model (perceived susceptibility, perceived severity, perceived barriers and perceived benefits from the treatment) are of great predictive value in the treatment of chronic diseases[8].

Knowledge about the patients' perceptions of the disease may be of great help for a family doctor in his attempts to improve their adherence[9]. Morgado et al. emphasize that lack of knowledge about target blood pressure and hypertension complication, the lack of specific indications for an antihypertensive treatment, the lack of knowledge about the drug side effects, and the lack of regular BP control are likely to cause a poor adherence to the pharmacotherapy for hypertension[10]. Malik found that depression, cognitive impairment, complexity of treatment, side effects and price of drugs are major predictors of non-adherence to drug treatment of hypertension. Also, the diagnosis of arterial hypertension can lead to denial, if it is perceived as an economic or social threat – a possible job loss or decreased libido[11]. Márquez and al. surveyed over three thousand family physicians in Spain and found that most physicians in assessing the adherence of hypertensive patients rely on clinical experience and interviews with the patients. However, clinical experience and unstructured interviews proved to be unreliable criteria in assessing the adherence of hypertensive patients[12]. Adherence to prescribed medications is usually measured with: biological assays, pill counts, weight of topical medications, electronic monitoring, pharmacy records and prescription claims, patient interviews, patient estimates of adherence and questionnaires[13].

For the routine work in family medicine, validated short structured questionnaires are the best choice for estimating adherence to prescribed anihypertensives, as well as for estimating variables related to adherence.

The aims of this study were to determine the degree of adherence to the drug treatment of hypertension and to identify the relationship between the perception of stress, depression, hypertension and myocardial infarction and the adherence to the drug treatment of hypertension.

Sample and Methods

Subjects

Subjects for this study were selected within patients with uncomplicated arterial hypertension from 4 family practices in Rijeka, Croatia. From the list of 1877 registered hypertensive patients, those with complications of hypertension such as myocardial infarction, heart failure, chronic renal failure and stroke were excluded. Hypertensive patients with severe comorbidities such as malignant diseases with infaust prognosis, mental disorders that

prevent reality testing, COPD and bronchial asthma which causes severe respiratory failure, and systemic collagen diseases were also excluded. Of the remaining 437 subjects with uncomplicated hypertension using a table of random numbers 300 subjects were selected: 131 women and 169 men. The average age was 53.5±8.4 years.

Variables

Criterion variable: Adherence to hypertension drug treatment.

Adherence to prescribed antihypertensive medication was operationalized as patients' self-assessment on a modified Morisky scale. Morisky et al. developed a 4-item scale to access adherence to antihypertensive medication treatment. In the modified version (MMS) 2 items were added. The questionnaire has acceptable psychometric properties[14,15].

Subscales of motivation and knowledge consist of 3 items each. Because of its simplicity and small numbers of items, the MMS is suitable, with satisfactory reliability, for a use in everyday work.

Perceived stress was measured by the Perceived Stress Scale, a 10-item self-report questionnaire with satisfactory psychometric properties (PSS10)[16].

Depression was measured by the Beck Depression Indicator: a self-report questionnaire which consists of 21 item groups, each group containing 4 options, (BDI), with good psychometric properties[17].

Perception of arterial hypertension and myocardial infarction were measured by the questionnaire constructed according to the principles of the Osgood semantic differential[18].

The questionnaire consists of 15 bipolar scales (3 2 1 0 1 2 3) with opposite adjectives at the end of each[19].

Procedure

In the preliminary procedure 23 of the potential subjects were unavailable or have refused to join the study, and they were replaced with others from a list of patients with uncomplicated hypertension. Subjects filled out the questionnaires in this order: Morisky Modified Scale (MMS), Semantic differential for hypertension and myocardial infarction, Perceived Stress Scale (PSS10), Beck Depression Inventory BDI).

Statistical analysis

The collected data were analyzed using Statistical Package for Social Sciences for Windows version 13.0 (SPSS Inc., Chicago Illinois, USA). Statistical significance was determined at a level of probability of less than 5% (p <0.05). The distribution of variables was tested with the Kolmogorov Smirnov test. Statistically, the criteria and predictor variables did not significantly differ from a nor-

mal distribution (<0.05). The following statistical tests were used: factor analysis, regression analysis, χ^2-test and t-test for independent samples.

Results

Adherence to the antihypertensive drug therapy

The results on the Morisky Modified Scale (MMS) were subjected to a factor analysis on principal components with oblique rotation. There were 2 factors with eigenvalue greater than 1 (2.515 and 1.109) extracted. The results are shown in Table 1.

Motivation subscale items were saturated with the factor 1, and knowledge subscale items were saturated with factor 2. The Cronbach alpha reliability coefficient for the first factor is 0.722, and 0.691 for the second one.

In further analysis, subjects were divided according to their adherence. Subjects with 0 and 1 points on subscales were considered nonadherent, while those with 2 and 3 points were considered adherent. Among men a significantly higher number (64.08%) of them was motivated for taking antihypertensive medications (χ^2=4.604, p=0.032), while within the women group the difference was not statistically significant, there were 45.09 motivated women (χ^2=0.501, p= 0.479). 55.79% women had suffitient knolewdge (χ^2=0.642, p=0.382), while among men there were more (64.78%) with suffitient knowledge about taking antihypertensive medication (χ^2=4.807, p=0.028). Men were more motivated and had more knowledge about taking anihypertensives than women.

Predictors of patients' adherence to hypertension drug therapy

The results of the Percieved Stress Scale (PSS10) were subjected to a factor analysis with oblique rotation. There were 2 factors with eigenvalue greater than 1 (3.133 and 1.468) extracted. The results are shown in Table 2.

An exploratory factor analysis of PSS10 done by Roberti et al. also revealed a 2-factor structure measuring Perceived Helplessness and Perceived Self-Efficacy[20], so we

TABLE 1

RESULTS OF FACTOR ANALYSIS WITH OBLIQUE ROTATION OF MORSISKY MODIFIED SCALE (MMS) – ROTATED FACTOR MATRIX

MMS ITEMS	FACTOR 1	FACTOR 2	COMUNALITY
Do you sometimes forget to refill your prescription medicine on time? (MMS 6)	0.875		0.758
Are you at times careless about taking your medicine? (MMS 2)	0.798		0.601
Do you ever forget to take your medicine? (MMS 1)	0.629		0.460
When you feel better, do you sometimes stop taking your medicine? (MMS 3)		0.775	0.607
If you feel worse when you take your medicine, do you sometimes stop taking it? (MMS 4)		0.758	0.533
Do you know the long-term benefits of taking your medicine as instructed to you by your doctor or pharmacist? (MMS 5)		0.702	0.590
% of explained variance	41.660	17.488	59.148

Factor loadings of 0.20 and higher are shown

TABLE 2

RESULTS OF FACTOR ANALYSIS WITH OBLIQUE ROTATION OF PERCIEVED STRESS SCALE (PSS10) – ROTATED FACTOR MATRIX

PSS10 ITEMS (1–10) In the last year, how often have you...	FACTOR 1	FACTOR 2	COMUNALITY
... felt difficulties were piling up so high that you could not overcome them? (PSS10)	0.745		0.613
... been upset because of something that happened unexpectedly? (PSS1)	0.722		0.532
... found that you could not cope with all the things that you had to do? (PSS6)	0.699		0.473
... been angered because of things that were outside of your control? (PSS9)	0.684		0.561
... felt nervous and »stressed«? (PSS3)	0.606		0.368
... felt that you were unable to control the important things in your life? (PSS2)	0.546		0.286
...been able to control irritations in your life? (PSS7)		0.718	0.498
...felt confident about your ability to handle your personal problems? (PSS4)	0.308	0.706	0.476
...felt that you were on top of things? (PSS8)		0.643	0.590
...felt that things were going your way? (PSS5)		0.540	0.383
% of explained variance	33.128	14.677	47.804

Factor loadings of 0.20 and higher are shown

decided to name factors in the same way, adding *in stress control* to their names. The Cronbach alpha reliability coefficient for the Perceived Helplessness was 0.725, and 0.659 for the percieved Self-Efficacy.

The results of the Beck Depression Inventory (BDI) were subjected to a factor analysis with oblique rotation. There were 2 factors with eigenvalues greater than 1 (2.835 and 1.255) extracted. The results of the BDI factor analysis are shown in Table 3.

According to the items content we named the first factor *Negative thoughts and emotions*, and the second *Physiological disturbances*. The Cronbach alpha reliability coefficient for the first factor was 0.764, and 0.689 for the second one. Morley at el. also revealed the 2-factor structure of the BDI, i.e. the Negative Cognitive factor and the Vegetative factor[21].

Results on the Semantic differential questionnaire for the terms hypertension and myocardial infarction were subjected to a factor analysis with oblique rotation. 5 factors with eigenvalues greater than 1 were extracted, but the Scree test determined 3 factors, so the factor analysis was repeated with three given factors with eigenvalues 3.324, 1.757 and 1.219. Results are shown in Table 4.

Based on its content, the first factor corresponded to the *evaluation factor*, the second to *potency* and the third to the *activity factor*, which is consistant with the re-

searches mentioned in the section Materials and methods. The Cronbach alpha reliability coefficient was 0.744 for the evaluation, 0.726 for the potency and 0.645 for the activity factor. The *good/bad* scale in our study reflected the potency factor, and not the evaluation factor as expected. Both tested terms were diseases, so subjects perceived the adjective bad as something strong, and the adjective good as something mild.

Table 5 shows the mean and standard deviations of the results in predictors regarding to gender.

In this study, men perceived myocardial infarction (p<0.05) to be significantly more potent than women. All subjects, regardless of gender, evaluated arterial hypertension significantly better, but still as a negative term, than myocardial infarction (women: t=13.850, p<0.0001, men: t=16.611, p<0.0001), finding myocardial infarction a significantly more potent (women: t=12.693 p<0.0001, men: t=22.014, p<0.0001) and active term (women: t=5194; p=0.002, men: t=3.866 and p=0.003).

Table 6 shows the results of the regression analysis in which the criterion variable was the motivation for taking antihypertensive drugs, and the predictors were the perception of stress, depression, hypertension, and myocardial infarction.

Physiological disturbances and perception of the potency of hypertension were significantly (p<0.05) positive

TABLE 3

RESULTS OF FACTOR ANALYSIS WITH OBLIQUE ROTATION OF THE BECK DEPRESSION INVENTORY (BDI) – ROTATED FACTOR MATRIX

BDI items	FACTOR 1	FACTOR 2	COMUNALITY
Self-dislike (BDI7)	0.810		0.336
Self-criticism (BDI8)	0.780		0.462
Loss of interest(BDI12)	0.770		0.454
Sadness (BDI 1)	0.750		0.379
Punishment feelings(BDI6)	0.688		0.505
Loss of pleasure (BDI4)	0.663		0.479
Pessimism (BDI2)	0.644		0.468
Guilty feelings (BDI5)	0.638		0.449
Crying (BDI10)	0.627		0.419
Worthlessness (BDI14)	0.619		0.422
Past failure (BDI3)	0.588		0.397
Loss of energy (BDI15)	0.455	0.231	0.552
Indecisiveness (BDI13)	0.412	0.253	0.507
Suicidal thoughts (BDI9)	0.388	0.309	0.491
Agitation (BDI 11)	0.325	0.281	0.563
Changes in appetite (BDI18)		0.711	0.489
Changes in sleeping pattern (BDI16)		0.695	0.667
Irritability (BDI17)		0.649	0.357
Difficulty to concentrate (BDI19)	0.227	0.643	0.517
Tiredness or fatigue(BDI20)		0.538	0.488
Loss of interest in sex (BDI 21)		0.476	0.407
% of explained experience	38.429	17.551	55.980

Factor loadings of 0.20 and higher are shown

TABLE 4
RESULTS OF FACTOR ANALYSIS WITH OBLIQUE ROTATION OF THE SEMANTIC DIFFERENTIAL QUESTIONNAIRE FOR THE TERMS
HYPERTENSION AND MYOCARDIAL INFARCTION – ROTATED FACTOR MATRIX

SCALE	FACTOR 1	FACTOR 2	FACTOR 3	COMUNALITY
Joyful – Sad	0.723			0.624
Light – Heavy	0.704			0.645
Relaxed – Tense	0.677	0.229		0.469
Sweet – Bitter	0.662			0.447
Pleasant – Unpleasant	0.634			0.404
Good – Bad	−0.294	0.747		0.712
Significant – Insignificant	0.215	0.681		0.492
Powerful – Powerless	−0.314	0.672		0.473
Healthy – Unhealthy		0.644		0.705
Calm – Restless		0.636		0.358
Quick – Slow		0.592		0.316
Bright – Dark		0.522		0.277
Active – Passive			−0.792	0.652
Hard – Soft			−0.723	0.561
Close – Distant			−0.593	0.484
% of explained variance	25.331	13.443	10.757	49.531

Factor loadings of 0.20 and higher are shown 0

TABLE 5
RESULTS IN TESTED PREDICTORS REGARDING GENDER

Predictor variables	Women (N =131)		Men (N=169)		t-test	
	Mean	SD	Mean	SD	t	p
Perceived helplessness in stress control	13.620	3.658	12.935	3.740	1.813	0.071
Perceived self-efficacy in stress control	8.892	2.674	9.095	2.617	−0.681	0.496
Negative thoughts and emotions	5.119	1.862	4.724	1.951	1.811	0.072
Physiological disturbances	4.246	1.696	4.033	1.720	1.106	0.269
Evaluation of hypertension	−8.292	3.359	−8.464	3.317	−0.437	0.663
Evaluation of myocardial inafrction	−13.881	3.174	−14.095	2.915	−0.617	0.538
Potency of hypertension	8.447	3.113	8.680	2.271	−0.621	0.535
Potency of myocardial infarction	13.960	3.898	15.007	2.970	−2.551	0.011
Activity of hypertension	3.381	2.102	3.472	1.997	−0.376	0.708
Activity of myocardial infarction	4.314	2.432	4.525	2.410	−0.781	0.436

predictors of motivation for taking antihypertensives, while the perceived helplessnesstn and negative thoughts and emotions were statistically significant (p <0.05) negative predictors of motivation for taking antihypertensive drugs.

Table 7 shows the results of the regression analysis in which the criterion variable was the knowledge about taking antihypertensive drugs, and the predictors were the perception of stress, depression, hypertension, and myocardial infarction.

The percieved helplessness and the perception of the potency of hypertension and myocardial infarction were statistically significant (p<0.05) positive predictors of

knowledge about taking antihypertensive drugs, while percieved self-efficacy and evaluation of hypertension were significantly (p<0.05) negative predictors of knowledge about taking antihypertensive drugs.

Discussion

The patients' adherence to drug therapy for chronic diseases without significant symptoms is around 50%, which is consistent with the results of our study[22]. Gu et al. found that hypertensive women were significantly more likely to get treated than men, but less likely to achieve a satisfactory BP control[23]. In this research wom-

TABLE 6
PERCEPTIONS OF STRESS, DEPRESSION, HYPERTENSION AND MYOCARDIAL INFARCTION AS PREDICTORS OF MOTIVATION FOR TAKING ANTIHYPERTENSIVE DRUGS -. REGRESSION ANALYSIS

Criterion variable: Motivation for taking antihypertensive drugs				
Predictor variables	Non-standardized coeff. B st. error	Standardized coeff. beta	t	p
Perceived helplessness in stress control	−0.082 0.020	−0.278	−3.990	<0.0001
Perceived self-efficacy in stress control	−0.045 0.036	−0.080	−1.270	0.201
Negative thoughts and emotions	−0.069 0.019	0.237	−3.125	<0.0001
Physiological disturbances	0.043 0.021	0.172	2.191	0.032
Evaluation of hypertension	−0.181 0.112	−0.113	−1.574	0.119
Evaluation of myocardial infarction	−0.212 0.136	−0.102	−1.522	0.122
Potency of hypertension	0.177 0.071	0.204	2.431	0.015
Potency of myocardial infarction	0.306 0.342	0.051	0.822	0.391
Activity of hypertension	0.025 0.028	0.098	0.774	0.407
Activity of myocardial infarction	0.075 0.061	0.072	1.162	0.224

The coefficient of multiple correlation R=0.576; explained variance: R^2=0.332

TABLE 7
PERCEPTIONS OF STRESS, DEPRESSION, HYPERTENSION AND MYOCARDIAL INFARCTION AS PREDICTORS OF KNOWLEDGE ABOUT TAKING ANTIHYPERTENSIVE DRUGS -. REGRESSION ANALYSIS

Criterion variable: Knowledge about taking antihypertensive drugs				
Predictor variables	Nonstandardized coeff. B st. error	Standardized coeff. beta	t	P
Perceived helplessness in stress control	0.091 0.018	0.359	5.177	<0.0001
Perceived self-efficacy in stress control	−0.077 0.031	−0.157	−2.505	0.013
Negative thoughts and emotions	0.016 0.022	0.031	0.474	0.621
Physiological disturbances	−0.101 0.032	−0.238	−3.207	0.001
Evaluation of hypertension	−0.048 0.026	−0.199	−2.339	0.019
Evaluation of myocardial infarction	−0.013 0.010	−0.128	−1.199	0.225
Potency of hypertension	0.112 0.031	0.253	3.510	0.001
Potency of myocardial infarction	0.104 0.035	0.216	2.875	0.004
Activity of hypertension	0.068 0.229	0.057	0.477	0.619

The coefficient of multiple correlation R=0.576; explained variance: R^2=0.430

en were less motivated to take antihypertensives than men, a fact that could be explained by the psychoanalytic concept of unconscious noncompliance, in this case higher in women[24]. Men perceived myocardial infarction as a more potent term than women did, which corresponds to the perception of myocardial infarction as a »male« disease, five times more likely to affect men than women[25].

Physiological disturbances and the perception of the potency of hypertension were positive predictors of motivation for taking antihypertensive drugs, while perceived helplessness in stress control and negative thoughts and emotions were negative predictors of motivation for taking antihypertensive drugs. Subjects suffering from physiological disorders are therefore more directed towards medical therapy in general, so they are more adherent to antyhypertensives. Those patients who perceived hyper-

tension as a potent and serious illness are more motivated to lower their BP, and therefore to take antihypertensives. The perception of hypertension, since hypertension is an asymptomatic or oligosymptomatic condition, is a significant determinant of adherence to prescribed antihypertensive medication[26]. It is very important for family doctors to know how their hypertensive patients perceive hypertension and its complications because it is the family doctor and his/her team who are in the position to help their patients change any inadequate perceptions about these conditions, and improve the patient's chances for a successful control of his or her BP. Perceived helplessness in stress control together with negative thoughts and emotions, suggest an increased emotional engagement that could lower the motivation for undergoing antihypertensive therapy. Modern studies emphasize that not only

clinical depression, but even self- reported moderate level of symptoms of depression can predict nonadherence in hypertensive patients[27].

Perceived helplessness in stress control and perceived high potency of hypertension and myocardial infarction were positive predictors of knowledge about taking antihypertensive drugs, while perceived self-efficacy in strss control and a less negative evaluation of hypertension were negative predictors of knowledge about taking antihypertensive drugs.

Hypertensive patients who experience more stress perceive hypertension and myocardial infarction as serious diseases and are more interested to learn about taking prescribed medication, as well as about the nature of hypertension.

Perceived self-efficacy in lowering blood pressure can result in reduced reliance on medication on account of a change in the lifestyle and a consequent poor adherence to the prescribed medication treatment[28]. The family doctor should pay attention to such patients and teach them about the benefits of drug therapy in combination with a healthy lifestyle in the treatment of arterial hypertension.

Dijkstra et al. found that the perceived severity of hypertension, expressed through the perception of systolic and diastolic blood pressure, rather than the true severity of the illness, is a determinant of adherence to antihypertensive medication[29]. Pierin et al. analyzed patients with uncomplicated and complicated hypertension, finding that the latter have negative psychosocial characteristics, negative attitudes toward treatment and are unaware of the severity of the disease[30]. Therefore, the family doctor should, as soon as possible, determine significant predictors of a patients' adherence to the treatment, in order to build rationale for preventing target organ damage and complications of arterial hypertension. Also, the analysis of a patient adherence can help the family doctor to distinguish poorly controlled hypertension from truly resistant hypertension[31], which is important because the addition of antihypertensive drugs in the situation of poor adherence has significant negative consequences for the patient's health and negative financial consequences for the health system. The working alliance between a family doctor and his/her patient is important in medical treatment, as it is associated with the patient's adherence and satisfaction[32]. Tools like information leaflets about hypertension, BP tracking diaries and educational booklets may help patients to perceive hypertension as a serious, but controllable condition, which would in turn lead to a better adherence[33]. A family doctor and his/her team can, knowing the psychological factors that can help predict a patient's adherence to antihypertensive medication, build effective strategies to improve it.

Conclusion

In this study we found that men (64.08%) were more motivated than women (45.09%) to undergo a pharmacological treatment of hypertension, while women (55.79%) and men (64.78%) did not differ significantly in knowledge about taking antihypertensive medications. Within their own gender, more man than not were motivated and had better knowledge about taking antihypertensives, while women did not differ significantly.

Patients who suffer from physiological disturbances and those who perceive hypertension as a potent disease were highly motivated to take antihypertensive drugs, while those who perceive themselves as helpless in stress control and focused on negative thoughts and emotions were poorly motivated to take antihypertensive drugs.

Patients who perceive themselves as helpless in stress control and those who perceive hypertension and myocardial infarction as potent diseases have better knowledge about taking antihypertensive drugs, while those who perceive themselves as self-efficient in stress control, suffer from physiological disturbances and evaluate hypertension as less bad disease had poor knowledge about taking antihypertensives.

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A. Ljubotina

Department of Family Medicine, School of Medicine, University of Rijeka, Braće Branchetta 20, 51 000 Rijeka, Croatia
e-mail: alexandar_ljubotina@yahoo.com

PERCEPCIJA STRESA, DEPRESIJE, HIPERTENZIJE I INFARKTA MIOKARDA KAO PREDIKTORI SURADLJIVOSTI U MEDIKAMENTOZNOM LIJEČENJU HIPERTENZIJE

S A Ž E T A K

Istraživanje je provedeno kako bi se odredio odnos između suradljivosti u medikamentoznom liječenju hipertenzije i percepcije stresa, depresije, hipertenzije i infarkta miokarda. Sudjelovalo je 300 pacijenata s nekompliciranom arterijskom hipertenzije iz Rijeke (131 žena, 169 muškarca, prosječne dobi 53,5 godina). Suradljivost u medikamentoznom liječenju hipertenzije kao kriterij i percepcija stresa, depresije, hipertenzije i infarkta miokarda kao prediktori određeni su samoprocjenom. Prikupljeni podatci analizirani su pomoću faktorske analize, regresijske analize, Kolmogorov-Smirnov testa, χ^2-testa i t-testa. Statistička značajnost određena je na razini vjerojatnosti manjoj od 5% (p<0,05). 45,09% žena (p=0,479), i 64,08% muškaraca (p=0.032) bilo je motivirano za uzimanje antihipertenziva. 55,79% žena (p=0,382) i 64,78% muškaraca (p=0,028) malo je dovoljno znanja o medikamentoznom liječenju hipertenzije. Pozitivni prediktori motivacije za uzimanje antihipertenziva bile su fiziološke tegobe i percipirana potencija hipertenzije, a negativni su bili percipirana bespomoćnost u kontroli stresa i negativne misli i emocije. Pozitivni prediktori znanja o znanja o uzimanju antihipertenziva bili su percipirana bespomoćnost u kontroli stresa, percipirana potencija hipertenzije i infarkta miokarda, a negativni percipirana samoučinkovitost u kontroli stresa, fiziološke tegobe i evaluacija hipertenzije. Trebalo bi poboljšati i motivaciju za uzimanje antihipertenziva, kao i znanje o uzimanju antihipertenziva, posebno u žena. Percepcija stresa, depresije, hipertenzije i infarkta miokarda mogu se koristiti kao prediktori suradljivosti u medikamentoznom liječenju hipertenzije.