treatment. The aim of the study was to evaluate the acceptance of the disease by patients with hypertension and co-morbidities.

Design and method: The study included 100 patients with hypertension, treated in a hospital setting. The occurrence of comorbidities was evaluated based on a medical history. The study used a standardized questionnaire which assessed a quality of life in the course of disease: AIS (Acceptance of Illness Scale), that allows to evaluate patients' acceptance of the disease using 8 questions regarding negative behaviors and reactions. AIS consists of five statements: 1- I definitely agree, 2- I agree, 3- I don't know, 4- I don't agree, 5- I definitely don't agree. On the basis of the sum of points obtained in AIS we are able to define patient's acceptance of disease as: low (<20 points), average (20–30 points) or high (>30 points).

Results: The examined group included 65 women and 35 men. The average age of women was 59 years and the average age of men was 62. The occurrence of diseases coexisting with hypertension was declared by 28 patients. Women showed a high level of disease acceptance more often than men (70,3% vs 55,6%, P = 0,03). There was no dependence between the level of acceptance of the disease and age of the patients (P = 0,61). The occurrence of comorbidities was not related to the level of acceptance of the disease (P = 0,23).

Conclusions: Patients with hypertension are characterized by varying levels of disease acceptance, women showing a higher level of disease acceptance compared to men.

BLOOD PRESSURE LOWERING EFFICACY OF TELMISARTAN, AZILSARTAN, OLMESARTAN TAKING ON THE MORNING OR AT BEDTIME IN PATIENTS WITH MILD TO MODERATE ARTERIAL HYPERTENSION: ABPM RESULTS

O. Rekovets, O. Torbas, S. Kushnir, G. Primak, Y. Sirenko. *Institute of cardiology, Department of Symptomatic Hypertension, Kiev, UKRAINE*

Objective: Aim study was compared the antihypertensive effects of morning (a.m.) and evening (p.m.) dosing of olmesartan, azilsartan, telmisartan on 24-h BP.

Design and method: 126 patients (57 men, 69 women) was included in 12-week study with evaluated the efficacy and safety of olmesartan 20–40 mg (n = 40), azilsartan 40–80 mg (n = 41), telmisartan 40–80 mg (n = 45), dosed a.m. or p.m., in patients with grade 1–2 hypertension. Mean ages 51,80 ± 1,31, BMI - 28,81 ± 0,39 kg/m2. Mean 24SBP – (135,60 ± 0,96) mmHg., 24DBP – (82,41 ± 0,84) mmHg., 24HR – (71,88 ± 0,89) b.p.m.

Results: Mean 24-h SBP/DBP change from baseline to Weeks 12 in olmesartan group was benefit (-11,09 ± 2,30/8,38 ± 2,58 mmHg) in p.m. compared (-4,06 ± 2,25/3,38 ± 2,31mmHg) in a.m., p < 0,01 between evening and morning administration. Mean 24-h SBP/DBP change in azilsartan group was comparable in p.m. (-13,06 ± 2,65/9,76 ± 1,73 mmHg) and a.m. (-12,71 ± 1,62/7,00 ± 1,50 mmHg) in a.m., p > 0,05 between evening and morning. Mean 24-h SBP/DBP change from baseline to Weeks 12 in telmisartan group was benefit (-16,48 ± 2,86/12,56 ± 2,80 mmHg) in a.m. compared (-4,93 ± 1,53/5,40 ± 1,89 mmHg) in p.m., p < 0,01 between morning and evening administration. All treatments were well tolerated. At 24-h BP, with the administration of olmesartan, azilsartan and telmisartan, the target blood pressure levels were 71.80%, 71.05% and 75.61% respectively. Thus, all three drugs have equally effectively.

Conclusions: Taking telmisartan more significantly reduced the 24-h BP in the morning compared with the evening adminisrtation, olmesartan lowered 24-h BP better in the evening administration, and the use of azilsartan equally decreased 24-h BP, regardless of the time of taking the drug.

IMPROVING BLOOD PRESSURE CONTROL BY OPTIMIZATION OF GUIDELINE DIRECTED THERAPY FOR HYPERTENSION IN A PRIMARY CARE SETTING: QUALITY IMPROVEMENT PROJECT

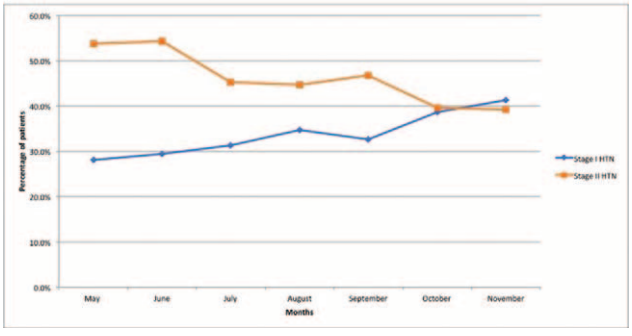
H. Khan, C. Sadeghi, A. Tiemeier, S. Bakhai. *University at Buffalo, Department of Medicine, Buffalo, NY, USA*

Objective: The Internal Medicine Clinic (IMC) is an academic safety-net clinic, with its population comprised of 70% African Americans within an underserved region. It is estimated about 16% of the patients with hypertension (HTN) had BP at goal (less than 130/80 mmHg), according to the 2017 ACC/AHA HTN guidelines. It is estimated 70% of the patients have a diagnosis of HTN in IMC. The aim of this quality improvement (QI) project is to improve BP control to less than 130/80 from a baseline of 16% to 50% over 18 months in patients between 40 to 80 years old.

Design and method: A multidisciplinary QI team performed root cause analysis to assess provider, patient and system related barriers to optimal BP control. The Plan-Do-Study-Act (PDSA) method of healthcare improvement was implemented. PDSA cycles included: provider education; nursing education on accurate BP measurement; consistent medication reconciliation and use of the electronic medical record (EMR) to develop a care guide for patient education.
The primary outcome measure is the percentage of patients with BP < 130/80. The percentage of patients with Stage 1 HTN, Stage 2 HTN and HTN crisis was also recorded. Process measures include the percentage of patients with same day repeat BP, care guide use for patient education, and completed medication reconciliation. Data analysis was performed with monthly run charts.

Results: There was a steady increase in percentages of patients with BP nearing goal (<130/80). There was a sustainable improvement in BP control during various PDSA cycles. Sustainable improvement in stage 1 HTN, achieved highest at 41.5% in November 2018. There was also sustainable increase in rates of medication reconciliation and care guide use during clinic visit. The attached table represents data from May to November 2018.

Measure	May (%)	June (%)	July (%)	August (%)	September (%)	October (%)	November (%)
Controlled BP (<130/<80)	18	16.3	21.2	19.2	18.5	19	17
Stage 1 HTN (130-139/80-89)	28.1	29.4	31.3	34.6	32.7	38.7	41.5
Stage 2 HTN (>140/>90)	53.8	54.3	45.2	44.6	46.9	39.7	39
HTN Crisis (>180/>120)	2.7	3.2	2.7	1.6	2.2	2.6	2.5
Care guide use for patient education	2.5	3.2	2.7	5.3	11.3	16.5	9.1
Medication reconciliation	41.6	48	51.1	61.2	55.4	54.3	53.6



Conclusions: Improvement noticed in reduction of Stage 1 HTN and HTN crisis with overall increase in percentage of patients with BP < 130/80 and medication reconciliation. Further implementation of PDSA cycles necessary with increased education of providers and patients.
Provider, nursing and patient education, along with accurate medication reconciliation, can lead to improved BP management in the primary care setting.

REGULAR RESVERATROL INTAKE IMPROVES THE VENTRICLE-ARTERIAL COUPLING IN YOUNG AND HEALTHY ADULTS

T. Pereira[1], B. Dias[1], E. Fondin[2], E. Vesik[2], A. Caseiro[1], B. Svealv[2], J. Castanheira[1]. [1]*Instituto Politécnico de Coimbra, Escola Superior de Tecnologia da Saúde de Coimbra, Coimbra, PORTUGAL,* [2]*University of Gothenburgh, Salgrenska Academy, Gothenburgh, Sweden*

Objective: Previous studies have demonstrated that rich resveratrol-diet decreases cardiovascular risk. The aim of this study was to evaluate the effects of regular low-dose resveratrol intake on the heart´s structural and functional parameters and the ventricle-arterial coupling (VAC) in young and healthy adults.

Design and method: Thirty participants (age: 18 - 26 years) were randomized into two groups: control group (CG) - placebo; intervention group (IG) - 100 mg/day of Resveratrol for 1 month. A baseline evaluation and 30 days after intervention were performed, comprising blood pressure measurement, heart echocardiogram (including tissue Doppler), carotid pulse wave analysis (PWA) and blood sample tests.

Results: Baseline measurements showed no statistical significance differences between the groups, and all the parameters were within normal range. No significant heart structural changes were observed from baseline to post-intervention in neither of the groups. A positive trend was observed for the Doppler and tissue Doppler parameters in the IG only. Regarding the VAC, significant changes were observed only in the IG, with a mean increase of +0.15 (p < .001).

Conclusions: This study showed an improvement of ventricle-vascular interaction that could translate a positive cardiovascular modulation provided by the regular intake of resveratrol. Therefore, regular intake of resveratrol could be a good preventive approach for cardiovascular diseases, but further research is needed.