hypertension. The purpose of the study is to assess treatment compliance in patients with essential arterial hypertension.

**Materials and methods:** The prospective study included 23 patients with essential hypertension hospitalized in the Institute of Cardiology, the report women:men 1:1, mid age  $64\pm7,4$ . The assessment involved the investigation using Hill-Bone questionnaire, including 3 important behavioral domains of hight blood presure treatment: sodium intake, appointment keeping and medication taking. Rezulting values placed within 14-56 points, with an average of 25,6 points.

**Discussion results:** Analysis of the obtained data showed an average score of 22,26 points, with similar results for both female and male (22.2:22.3points), close to the average result. Noncompliant were 6 (26%) patients, of which 4 women (17.4%) and only 2 men (8.6%), with a score highter than the average values. Compliance was proved similar in all 3 behavioral domains.

**Conclusion:** Compliance evaluation in patients with essential hypertension showed that 26% patients remain noncompliant to the treatment.

Key words: Hypertension, compliance, Hill-Bone.

## 71. THE PERSPECTIVE OF USING BINAURAL BEAT A UDITORY STIMULATION IN THE TREATMENT OF PAIN

## Anastasia Siminenco

Scientific adviser: Ion Moldovan, MD, PhD, Professor, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction:** In the past years there has been observed an evident direction towards making unpharmacological treatment a global priority. The correlation between altered states of consciousness and pain is demonstrated by beneficial influence of oriental techniques where the decrease in pain is obtained through meditation and altered states of consciousness. We have studied possibilities of inducing altered states of consciousness through binaural beat stimulation in therapeutic purpose. The objectives of this study are: analysis of binaural beat stimulation versus placebo; finding responsive persons for inducing altered state of consciousness; analysis of psychological differences between responsive and unresponsive persons for inducing altered state of consciousness; elaboration of criteria for selecting persons suitable to the treatment of pain through binaural beat stimulation. Binaural beats hearing appears when two slightly different and coherent sounds with nearby frequencies are presented to each ear separately. The human mind integrates these two sounds and creates the third sounds, inexistent in reality, called binaural beat. Hearing binaural beats is referred to "central hearing". Binaural beats were discovered by H. Dove in 1839. R. Monroe has studied it in the 1950's and founded The Monroe Institute - a modern center for studying the binaural beats effects.

**Materials and methods:** Ten adults with tensional cephalalgia were tested via symptoms check list SCL-90, Dissociative Experience Scale (28), Personality Inventory for DSM-5, Beck depression inventory, State-Trait anxiety inventory Spilberger and Somatoform dissociation questionnaire. Patients

listened to binaural beats in alpha, theta and delta frequencies (1-13Hz) for 30 minutes. Afterwards they have passed the 5-Dimensions of Altered States of Consciousness Rating Scale (**5D-ASC**).

**Discussion results:** The patients were divided into two groups, those in whom chephalalgia decreased less than 10% (N=2) and those in whom cephalalgia decreased for more than 10% (N=8). In the first group the levels of mental disorders (DSM-5), levels of dissociative experience (DES-28), somatoform reactions, levels of depression, hostility and psychotics (SCL-90) were higher than in the second group (p<0.05). Altered states of consciousness were highly pronounced in the second group.

**Conclusion:** Binaural beat stimulation was more effective than placebo for inducing altered states of consciousness for all 5 scales of 5D-ASC scale. Persons with affective disorders are less sensible to inducing altered state of consciousness. Symptoms check list SCL-90 is the most informative questionnaire for selecting responsive persons according to our study. Inducing altered states of consciousness and using binaural beats for pain treatment is contraindicated in people with mental disorders. Binaural beats are more efficient in pain treatment for persons who are more responsive to inducing altered states of consciousness.

Key words: binaural beat stimulation, altered states of consciousness, pain treatment

## 72. RISK FACTORS EVALUAT ION IN PATIENTS WITH ACUTE CORONARY SYNDROME

## Cristina Gheorghiu, Andrei Grib, Artiom Surev

Scientific adviser: Marcel Abras, MD, University Assistant, Cardiology Department of *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction**: Acute coronary syndromes (ACS) are a major health problem and account for a large proportion of the total number of hospitalizations all over the world. Conventional cardiovascular risk factors, such as hypertension, diabetes, smoking, and dyslipidemia, increase the risk of developing coronary artery disease (CAD). Primary prevention studies have shown that the early detection and aggressive treatment of risk factors prevent cardiovascular events. The objective of our study is to investigate the risk factors and angiographic features of acute coronary syndrome (ACS) in patients who underwent coronary angiography in the emergency room.

**Material and Methods:** We studied 151 patients with a diagnosis of ACS and significant CAD (with stenosis  $\geq$ 50%, as shown on angiography) admitted to the emergency room of Institute of Cardiology in the last quarter of 2015.

Data collection was performed using medical records including following variables: sex, age, risk factors for cardiovascular disease, coronary angiography.

**Results:** A total of 151 patients were studied having mean age of 62,5 years  $\pm$  9,13 years, of which 74,83% were men. ST-elevation myocardial infarction was present in 26,49% of patients, non-ST-elevation myocardial infarction – in 6,62% and unstable angina – in 66,89%. The most frequent risk factor was hypertension, which was present in 83,44% of patients, followed by dyslipidemia (80,79%), obesity (34,44%) and diabetes (29,14%). These risk factors were more prevalent in both men and