

**Conclusions:** 1. Even with different PID-5 domains, some variables of the respiratory pattern in twins are the same 2. Twins are very similar in PID-5 items, of which the most common domain is Detachment 3. The most common in PID-5 domains are girls 4. Domain of Disinhibition may have an effect on the length of apnea.

**Key words:** “respiratory personality”, respiratory pattern, PID-5, twins

## **246. SLEEP QUALITY OF URBAN POPULATION IN REPUBLIC OF MOLDOVA**

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**Introduction.** For each person, sleep is an essential part of normal life rhythm and well-being. Spending roughly third part of life in this state, many people are underestimating its influence on body's functioning, mood and sharpness of mind. Especially clearly, sleep problems can be observed among the urban population, affected by increasing rhythm of life and burden of constant stress. Sleep disturbances are directly linked to human errors, accidents, material losses and long-term effects on health. This study was designed to prove statistical significance of sleep-related pathologies among the urban population of Moldova and deficiency of its diagnostics and treatment.

**Aim of the study.** To determine sleep quality of urban population in Republic of Moldova

**Materials and methods.** The study consisted of an anonymous survey of urban citizens aged 18-40 years old and included the Pittsburgh Sleep Quality Index (PSQI), a self-rated instrument that evaluates sleep habits for last month. It consists of seven “component” scores: subjective sleep quality, sleep duration, sleep latency, habitual sleep efficiency, use of sleeping medication, sleep disturbances and daytime dysfunction. The sum of scores for these seven components yields one global score.

**Results.** Study was completed by 359 people. Prevalence of bad sleepers, characterized by PSQI score > 5, was reported by 181 respondents (50,2%). Medium PSQI score was 6,11. Medium score for women was 6,28 and 5,89 for men. 5,67 for married respondents and 6,26 for not married. Medium score for respondents, which've evaluated their income as “low” was 6,46, 5,97 for those who said “medium” and 4,33 for people who characterized their income as “high”.

**Conclusions.** Every second person is experiencing problems with sleep, which is more significant, comparing it to data provided by other countries (30-40%). Also, it was confirmed that men experience less sleep problems than women, married couples sleep better than unmarried and that sleep quality increases with subjective satisfaction of financial status.

**Key words:** sleep quality, disturbances, PSQI

## **247. CARDIAC FUNCTIONAL INDEX - LEFT VENTRICLE EJECTION FRACTION AS A PREDICTOR FACTOR IN HEART PATHOLOGY**

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**Introduction.** The ejection fraction (EF) is the volumetric fraction of blood ejected from a ventricle of the heart with each heartbeat. EF is used as a measure of the pumping efficiency of the heart. The systemic circuit is provided by the left ventricle, thus left ventricular ejection fraction (LVEF) is the main index the body's systemic circulation. By today's standards, LVEF is

used as an important determinant of the severity of systolic heart failure (HF). In many studies, LVEF was proposed as a predictor in patients' outcome presenting cardiac disease.

**Aim of the study.** It was performed a literature review in order to highlight the significance of the LVEF in cardiac disease prognosis outcome.

**Materials and methods.** There were used "PubMed MEDLINE" database to select relevant full-text original articles published from 2013 till 2018, using a search formula "ejection fraction predictor mortality", non-human studies, as well as review articles were excluded. According to research criteria, there were retrieved 36 full-text, clinical trial articles, published in the last 5 years.

**Results.** Several studies identified LVEF as the most prominent independent predictor of morbidity and mortality in both acute and chronic HF patients. Acute heart failure (AHF) is one of the most important cardiovascular syndromes associated with high cardiovascular morbidity, and is the major cause of admission in emergency departments worldwide. AHF is an increasing cause of admission in emergency departments worldwide and in almost half of patients the LVEF is moderately or severely reduced (<40%). Since AHF is a very heterogeneous condition, it is important to identify clinical and laboratory parameters useful for risk stratification of these populations. LVEF may be one of the most convenient, since it is widely measured, easily interpreted, and inexpensive. This applies mainly to patients with reduced LVEF, while the interactions between diabetes and HF with preserved LVEF are less known.

**Conclusions.** On one side, studies have shown that LVEF is an independent predictor in both acute and chronic HF patients. On the other side, patients with diabetes and HF, as well as those with non-ST segment elevation myocardial infarction after revascularization, the reduced and preserved LVEF have a major impact which are less known and require additional research.

**Key words:** left-Ventricle Ejection Fraction, Heart Failure, Predictor

## **248. BLOOD DONATION IMPACT ON CARDIO-VASCULAR SYSTEM ACCORDING TO AUTONOMIC NERVOUS SYSTEM PREDOMINANCE**

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**Introduction.** Blood donation is a voluntary act of giving a portion of blood from a healthy person to diseased with a curative goal. This blood is used during operations and in emergencies accompanied by significant blood loss. As soon as blood donation is connected to functional abilities of cardio-vascular system orthostatic tests are needed in order to evaluate its tolerance to changes without any harm.

**Aim of the study.** Evaluation the influence of donation on cardiovascular system activity depending on the tone of autonomous nervous system.

**Materials and methods.** Have been used methods of cardiovascular system function assay, including Valtgofel orthostatic test (hemodynamic stats evaluation) and autonomic nervous system tone evaluation (e.g. Kerdo index, Danini-Ashner reflex). The study was attended by 100 volunteers, who were divided in two groups: 50 volunteers who donated blood in Vinnitsa district blood transfusion center and 50 – control group. Autonomic nervous system and orthostatic test were evaluated in both groups.

**Results.** Natural reaction to the test was heart rate increasing by 10-16 b/min after the test and heart rate stabilization in a follow up period of 3 min (on the level from 6 to 10 beats per minute higher than in horizontal position). Strong reaction indicates high reactivity of sympathetic part of autonomic nervous system, what is common for untrained people. Weaker reaction is observed in case of low reactivity of sympathetic system and higher tone of parasympathetic part of autonomic nervous system, what usually indicates trained state of cardiovascular system.