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**ВЛИЯНИЕ КОРОНАРНОЙ АНГИОГРАФИИ  
НА ПСИХОЛОГИЧЕСКИЙ СТАТУС ПАЦИЕНТА**  
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**THE EFFECT OF CORONARY ANGIOGRAPHY  
ON PATIENT'S PSYCHOLOGICAL STATUS**

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**Резюме.** Психологический статус пациента оценивается до и после процедуры коронарной ангиографии, и мы обнаружили, что общая осведомленность о процедуре у пациентов в Республике Беларусь достаточно хорошая. Менее трети пациентов не беспокоятся, а оставшиеся две трети все еще борются с тревогой и отсутствием поддержки со стороны семьи.

**Ключевые слова:** психологический статус, коронароангиография, поддержка семьи, сердечно-сосудистые заболевания.

**Resume.** Psychological status of the patient is assessed before and after the coronary angiography procedure and we found out that the general awareness of the procedure is pretty well in the patients in Republic of Belarus. Less than one-third of the patients are without anxiety and remaining two-third are still struggling with anxiety and lack of family support.

**Keywords:** psychological status, coronary angiography, family support, cardiovascular disease.

**Relevance.** Currently, coronary angiography is a standard heart diagnostic procedure. It is a crucial component of the clinical assessment of patients with cardiomyopathies, valve diseases, and ischemic heart disease. The problem currently lacks widespread understanding, which affects the patient's psychological state and, in turn, the procedure's overall result and patient satisfaction.

**Purpose:** Analyze how coronary angiography affects the patient's mental health and sensitivity to the intervention.

**Tasks:**

1. To evaluate the significance of reducing the number of complications after coronary angiography intervention by analyzing the long-term dynamics of the incidence of specific preventable complications in the hospital units of the Republic of Belarus.

2. To identify the strategies and elements considered while establishing ongoing connections with patients regarding their treatment.

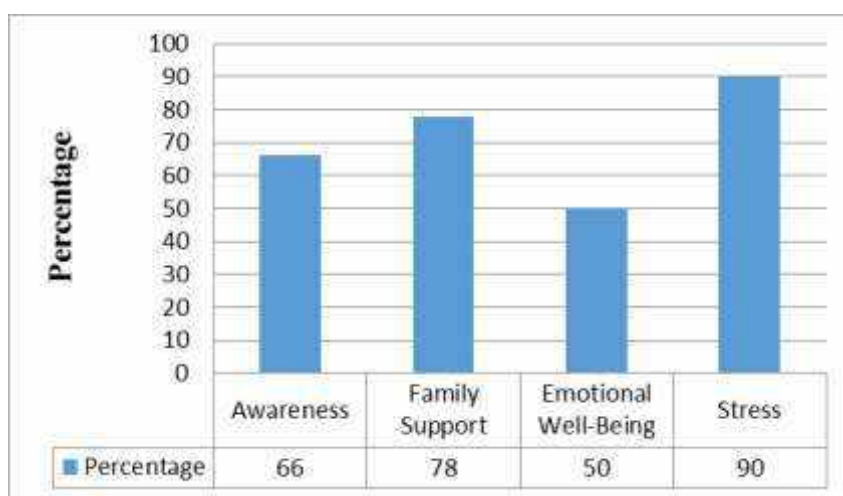
3. To take into account the psychological strain on patients with cardiovascular illness in the Republic of Belarus at a time when coronary angiography is developing as a field.

**Materials and methods.** The information that we used was provided by the state institution Minsk Scientific and Practical Center for Surgery, Transplantation, and Hematology. 10 patients in total had pre- and post-coronary angiography tests. Although the doctor has influence over most of the elements of this comprehensive definition, it can be difficult

to predict how much and what sort of information the patient will receive. Numerous studies have found that patients' or doctors' inadequate disclosure of information or a patient's lack of understanding frequently impede the information's components from being communicated successfully. A self-made questionnaire was used, and it addressed questions on the patient's general mood, any form of anxiety, the medical condition's advancement, the procedure's awareness, blood pressure and pulse, dietary restrictions, and the encouragement of family members.

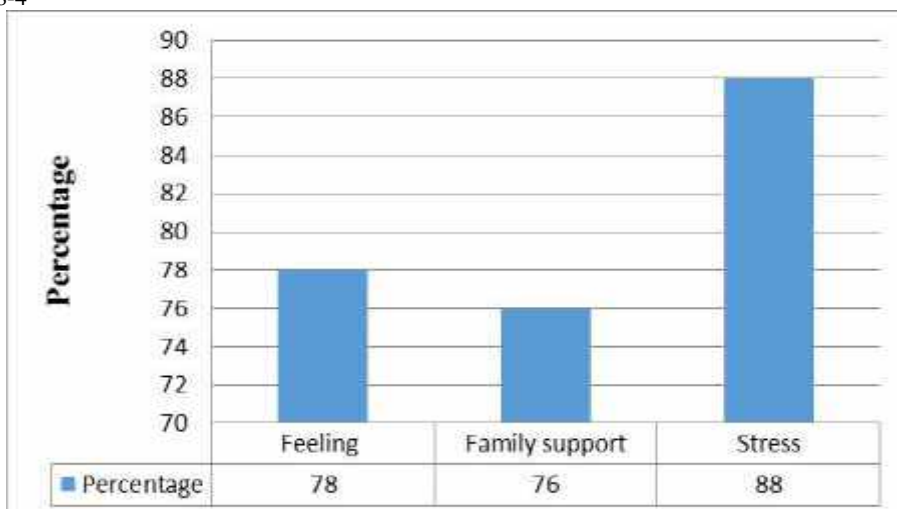
**Results and their discussion.** Coronary angiography is a procedure that is used for screening and diagnosis of cardiovascular diseases (angina pectoris, valvular disease, atypical chest pain or chest pain of unknown etiology). In this procedure we use contrast dye, ultrasound or X-ray and we monitor the vessels of heart and assess the blood flow in the heart.

According to the data that was gathered, before coronary angiography 66% of patients gave the angiography procedures a good understanding (4 or 5 points out of 5). Doctors who had undergone training and instruction told patients of the procedure the day before and they signed a consent form. Every patient had to sign a document indicating that all of their questions had been appropriately answered and that the necessary information had been given. 78% of patients report strong family support, scoring 4 or 5. 50% of patients were emotionally stable both before and after the procedure, while only 90% of patients expressed anxiety before the procedure. After the procedure, the anxiety level decreased.



**Fig. 1** – Level of various psychological parameters in patients of cardiovascular disease

After coronary angiography 78% of the patients were having general feeling of well-being and they got discharged in a day or two. Amongst them, 76% of the patients had good family support while the others were still struggling alone. Moving forward we noticed, despite the smoothness of the procedure 88% of the patients are still stressed about their general well-being.



**Fig. 2** – Level of various psychological parameters in patients of cardiovascular disease after coronary angiography intervention

Importance of psychological well-being is very evident in patients of old age, who comprises a large portion in patients with cardiovascular disorders. So, retrospective analysis and awareness is needed about impact of various procedures on the patients well-being in order to get a better outcome and to create a people friendly environment.

#### **Conclusions:**

1. The process for coronary angiography was widely known to the patients. There isn't much stress or worry about this topic.
2. Strong family support and successful awareness-raising initiatives by Belarusian medical institutions have helped reduced the stigma and anxiety surrounding this subject.
3. Further investigation is necessary to gather more clinically and statistically meaningful information about the psychological state of patients before to and during coronary angiography.

#### **Literature**

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