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# Illness perceptions in patients with coronary heart disease and their doctors

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## Abstract

The research is devoted to comparative analysis of the illness perceptions in patients with coronary heart disease and their doctors. The research is based on the concept of the internal picture of the disease (A. Tkhostov & G. Arina, 1990). This concept allows explaining how a bodily sensation turns into a symptom receiving definition through a system of social and cultural representations about the given disease. Patients with chronic disease underestimate a number of important, alarming sensations, requiring attention and consultation of a doctor.

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## 1. Introduction

The illness representations of cardiovascular diseases are widely explored in European and American studies on low compliance of patients, their quality of life, and interaction with doctors [1], [2], [3].

This researches are based on the concepts: well-being (physical well-being - feeling very healthy and full of energy) [4]; self-regulatory model H. Leventhal [5], [6] describing how patients construct their own representations of illness perceptions; representations of physical symptoms J. Bishop [7].

Illness perceptions are diagnosed with the help of questionnaires: the Illness Perception Questionnaire (IPQ); the Revised Illness Perception Questionnaire (IPQ-R); the Brief Illness Perception Questionnaire [8], [9], [10].

The physical manifestations of the illness are assessed by a list of symptoms (for example, pain, sleep difficulties, dizziness, breathlessness, and headache) [11], among which a patient has to choose the ones

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describing his state. Here we come across ambiguous interpretations of one's symptoms by patients without medical background. For instance, high arterial pressure can be perceived in different ways. The patient's understanding of one's symptoms often differs seriously from the concept of a doctor.

This research is based on the concept of the internal picture of the disease A. Tkhostov & G. Arina [12]. This concept allows explaining how a bodily sensation turns into a symptom receiving definition through a system of social and cultural representations about the given disease.

## 2. Method

Classification of bodily sensations is used for studying bodily experience of patients. Illness perceptions were assessed with the test “Selecting descriptors interoceptive sensations” A. Tkhostov & S. Elshansky [12]. The test includes the 80 cards with the names of the internal bodily sensations.

The methods were applied to patients and their cardiologists. The patients with coronary heart disease (exertional angina) (N=51) and their doctors (N=18) categorize the cards depending on the groups.

A short version of the test consisted of three stages: 1) choice of bodily illness sensations, 2) dangerous sensations, 3) frequent sensations.

Dangerous and frequent bodily sensations are selected among the total number of feelings suiting the description of the illness. The participants of the research are informed about the disease in question in order to prevent them from mixing with notions about accompanying illnesses.

Data were analyzed using Statistica - 10.0. Groups were compared on frequency selection sensations by F-test ( $\varphi^*$  criterion).

Table 1. Demographic characteristics of the study population (n)

Demographic characteristics of the study population	Patients	Cardiologists
Age	45±9	35±9
Sex (female)	60%	55%
N	51	18

## 3. Results and Discussion

### 3.1. Illness bodily sensations

Most of the doctors (2/3 of sampling) use the following words to describe the bodily experience of the patients (in degrading scale): “pain”, “sting” ( $p \leq 0.01$ ), “pressure”, “heaviness” ( $p \leq 0.05$ ), “to contract” ( $p \leq 0.01$ ), “weakness”, “bad” ( $p \leq 0.01$ ), “choking” ( $p \leq 0.05$ ), “beating”, “anxiety” ( $p \leq 0.01$ ). The doctors use the symptoms that are similar to the names of the symptoms used in anamnesis as emotionally colored words that describe rather emotions than bodily sensations. Probably, the choice of anxiety as one of the leading symptoms is related to wide practice of prescribing sedative medications in cardiology (anxious patient causes many difficulties: complains a lot, doubts that the therapy is correct). Usually the patients do not relate anxiety to the illness.

At the same time a group of patients (2/3 of sampling) used most frequently the following few words to describe their bodily experience: “pain”, “pressure”, “weakness” and “heaviness”. The vocabulary of chronic patients is extremely varied. The patients of the study used to claim that such a word had already been mentioned, couldn't choose between synonyms (for instance, they left the word "heat" (heat in the bosom) and crossed the

words "sting" and "hot" (the word "heat" was chosen by the patients more often than by the doctors ( $p \leq 0.05$ )). Also, 40% patients use the words "sluggish" and "nausea" more often than the doctors.

### 3.2. *Dangerous sensations*

The doctors' vocabulary of dangerous, life-threatening feelings (1/2 of sampling) included the following words: "pain" ( $p \leq 0.01$ ), "pressure", "sting" ( $p \leq 0.01$ ), "to contract" ( $p \leq 0.01$ ), "heaviness" ( $p \leq 0.01$ ), "choking".

The patients' vocabulary (1/2 of sampling) for such states is as varied as the one for the illness. The most frequent words in degrading order are the feelings: "pain" and "pressure". Choking was considered dangerous only by 40% of patients. As we see, not all the feelings described by doctors are regarded as alarming by the patients. Probably, as the patients gets accustomed to the illness, his painful feelings become habitual and turn into his "normal" state.

### 3.3. *Frequent sensations*

The doctors' vocabulary (1/2 of sampling) for effort angina includes: "pressure" ( $p \leq 0.01$ ), "pain" ( $p \leq 0.01$ ), "heaviness" ( $p \leq 0.01$ ), "sting" ( $p \leq 0.01$ ), "to contract" ( $p \leq 0.01$ ) and "weakness". At the same time at least 1/2 of patients chose for this state only the words "pain", "pressure" and "weakness" (40% patients).

While the doctors regard frequent sensations as typical clinical picture of the diseases (that is why it largely coincides with the vocabulary of painful feelings), the patients (when asked during examination) call those sensation frequent that made them address the doctor and that keep on worrying them.

## 4. **Conclusions**

1. The painful bodily experience of patients is extremely varied. The patients confuse bodily sensations and similar symptoms, such as the feeling "pressure" and the symptom of high arterial pressure.

2. Patients with chronic disease underestimate a number of important, alarming sensations, requiring attention and consultation of a doctor. As a result, they often address for medical help late.

3. A physician rather describes not a typical disease, but a typical patient with such disease, as he includes atypical painful symptoms such as anxiety into description of the disease. When a doctor talks symptoms with the patient instead of bodily sensations, it may lead to misunderstanding, as patients and physicians understand symptoms in a different way.

4. In order to prevent irrelevant and expectations from treatment and bring down the inclination to it, the doctor has to clearly structure the patient's complaints, divide them according to the related diseases influenced and not influenced by the therapy.

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