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Sociocultural factors in cardiology: previous knowledge *de novo*

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Despite the progression in cardiovascular biomedicine, the issue of a person's social life and his social relations remains relevant. The impact on adherence to lifestyle changes and therapy, on risk factors such as stress or physical inactivity, is imperative and cannot be realized through biomedical methods alone. In the modification of sociocultural and psychosocial risk factors, the work of a doctor with a patient is the interaction of two subjects, who have experience in their lives. The article provides a brief analysis of the modern understanding of sociocultural aspects of cardiovascular processes and proposes the concept of identity as a unit of meaning in such a coordinate system. The modern understanding of the biosocial structure of a person makes it possible to move from the declarative principles of "treating the patient — not just the disease" to a scientific interdisciplinary and practical concept. The inclusion of a humanitarian knowledge about the structure of culture and society in modern biomedicine will provide a novel, constructive understanding of doctor-patient relationship.

Key words: psychosomatics, patient-centered care, burnout, risk factors, communication, adherence, social identity.

Relationships and Activities: none.

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History moves in a spiral. The history of medicine is no exception. The spiral movement suggests a new level based on accumulated knowledge. The old truths that it is necessary to "treat the patient — not just the disease" in their original form cause only a sentimental sigh from any practitioner involved in modern economic and social relations. But old truths are getting a second wind. The development of humanitarian knowledge, supported by the progress in neuroscience and psychology, gives a qualitatively different understanding of the social person, and in the opposite direction — an understanding of the specifics of somatic processes under the influence of sociocultural factors.

The relationship between the biological and the social is deeply rooted in human nature. Not considering social interaction as a factor of health and illness is to abdicate the human nature. The social is a manifestation of life. Earlier I proposed a risk factors hierarchy for cardiovascular disease [1], according to which purely biological factors are at the lower level, and sociocultural ones at the upper level. A movement from the bottom up is a movement along the biopsychosocial definition of health (according to the World Health Organization), that is, a movement along the biosocial nature of human. All factors are framed by genetics and epigenetics, more precisely, the influence that the genome has on the structure and functioning of a person as a biosocial subject. The genome predetermines a certain structure of human biology; however, gene expression is dynamic and associated with the influence of social factors [2]. Thus, one of the many vicious circles of the cardiovascular continuum may consist in the fact that the initial psychophysiological prerequisites reinforce stereotypes of behavior in society, and the situation that develops due to the behavior, on the contrary, creates conditions for certain regulatory shifts.

But society and culture are created by people. They are the summation of the people actions. Culture is the result of human activity in history, and its first task is to free a person from natural necessity. Culture satisfies the demand for heat, food, safety, treatment of diseases, etc. That common thing that involves people in intersubjective interaction, and gives rise to culture. And culture, becoming the context of the development and life of a social person, determines his behavior, attitudes, stereotypes, motivation, experiences, and feelings. And so are the risk factors for disease.

Working with culture as an independent world is no less important for clinical medicine than the ability to manage the biological components of the disease pathogenesis. But human science is opposite in its structure to natural science. In natural science, generalization allows one to discover the truth. In human science, any generalization is fraught with the loss of individuality. The general can be identified, but the applicability of such a generalization to a specific individual is limited by the degree of universalization. The more detailed a conclusion about the nature of social interaction is made, the less it coincides with people in general and with an individual person in particular. Psychology allows us to reconcile individuality and generalization. Psychology, for example, generalizes into patterns some specificity of a person's response in life situations. This is a somatopsychic process in response to semiotic stimulation — words, items, statements.

What we call a psychosocial risk factor is a somatic response to semiotic influences. When medicine chooses a target for an intervention, the effectiveness of such an intervention must be proven in large samples. Large samples equalize the differences between people and allow to identify a pattern. This is absolutely possible for biochemical processes, less possible for psychological processes and even less possible for socio-psychological and sociological processes. The area of culture, in principle, is not calculated.

The social sciences can identify common cultural assumptions (such as income levels) and in the same way identify the relationship. For example, a multivariate analysis of income can find that poorer people are more likely to get sick and die earlier from cardiovascular disease. They have more stress, worse food quality, higher tendency to addiction and destructive behavior [3]. But does this mean that by setting the unconditional basic income at a high level, we will rid these people of behavioral risk factors? Wouldn't it turn out that low income is not a cause, but a result of social maladjustment due to low levels of education and/or intelligence and/or awareness, which in themselves can determine behavioral patterns? By allowing money, will we obtain the good health parameters? Will these people begin to eat better, experience less stress, get rid of bad habits and physical inactivity? Probably, in part, yes, but as a result of the intervention in social interactions, new factors will appear, previously unknown.

It is obvious that universalization in such matters falls apart about the individual characteristics of human experience, which precedes one or another factor of behavior, and also determines the specificity of the environmental action. And stress as a biopsychosocial event is the best example. The severity of stress depends on the context of the stressful event and the experience.

Psychology works with an individual experience. What, in a similar context, is the place of medicine? This is working with sociocultural components from

the perspective of a physician which represents medicine. The right to tell the truth is given to a physician by the cultural institute of medicine and healthcare. Apart from the legal side of the issue, one must understand the healthcare practice is not only associated with biomedicine. How the patient acts in view of psychosomatic processes depends on the surrounding context, the received information and experiences. Cardiology practice, especially in terms of essential hypertension, coronary artery disease, acquired cardiac arrhythmias, is replete with such examples.

Cardiology as a discourse, that is, an integral field of practice and theory about human conditions associated with the cardiovascular system, is included in biomedical science, psychology, ethics, law, economics and even politics. Rational thinking requires the identifying object for research and a more detailed understanding, but the world is arranged continually. Medicine, as an integral science about a person, including both physicochemical aspects and a picture of illness, fate, suffering, is forced to combine an analytical way on a par with a synthetic one. When working with a patient, one has to take into account both purely biomedical aspects, and purely social ones, and their interconnection.

What to do with this knowledge in practice? If the biomedical side of the issue is more or less clear and much attention is paid to it, then the sociocultural component is still outside the field of view of medicine, except for some psychological items.

I propose identity as a unit of meaning. The concept of identity, that is, a person's idea of his social characteristics taken as criteria for self-concept, organize behavior and experiences. The self-concept assumes self-awareness, including interception, communication, response to the statements of other people and one's own statements. Today, the immune models of the concept of 'self' or cardiophenomenology are considered to be integral concepts of the somatopsychic structure of a person [4, 5]. It is identity that is the source (carrier) of stress, unhealthy lifestyle, negative socially emotions and other well-known factors. A person's identity and self-identification lead to the experience of emotions and feelings and to the decision-making, motivation, presence/absence of medical adherence, etc. Identity is biosocial. The dynamics of biological health changes the social self, and changes in social relations alter somatic status. An incorrect pattern of oneself in social relations leads to feelings of guilt or resentment, aggression, stress, and as a result to fixing patterns of response and life exhaustion.

Working with a person's identity is the highest and most difficult level of work, at least because a helper himself must be free from the problems which helps to solve. Helping a helper is another important aspect of working with sociocultural risk factors for cardiovascular disease. A doctor as the personification of medicine and health care is also an identity. His own image of himself, of the situation, of the patient is manifested through communication with the patient. The influence of a doctor on patient's psychosomatic status, disease, medical adherence is important. Therefore, work with sociocultural and psychosocial factors should begin with the interpersonal interaction between a doctor and a patient, as well as with the cultural context.

The questions raised go far beyond the modern conventional understanding of health care. But moving forward also implies looking back. A doctor as a representative of medicine, having today the most powerful tools for working with human biology, does not stop working with a living human, that is, experiencing feelings, emotions, living his life in a social context.

Relationships and Activities: none.

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