IJIMM, Volume 2, Issue 6, 2024 ISSN: 2995-5319
http://medicaljournals.eu/index.php/IJIMM/issue/view/3
INTERNATIONAL JOURNAL OF INTEGRATIVE AND MODERN MEDICINE

Influence of Psychological Factors on Heart Diseases

Jurayeva Dildora Nasirdinovna
Teacher, Department of pedagogy, psychology and languages, Tashkent Medical Academy, Tashkent, Uzbekistan

Xushbaqova Feruza Jo'ra qizi, Qilicheva Farida Sayitmuod Qizi
3-year student, Faculty of Medical biology, Tashkent Medical Academy, Tashkent, Uzbekistan

Abstract: Although psychological factors play an important role in coronary heart diseases (CHD), it seems there is a need for more researches in this respect. The present study aimed to review psychological factors, including depression, anxiety and stress related to etiology and prognosis of CHD.

Keywords: coronary heart disease, depression, psychological factors, stress.

Coronary heart disease (CHD) - is a type of cardiovascular disease that occurs when plaque builds up inside the arteries that supply blood to the heart muscle. This plaque buildup, called atherosclerosis, can cause the arteries to narrow or become blocked, reducing blood flow to the heart. As a result, the heart may not get the oxygen and nutrients it needs to function properly, which can lead to chest pain or discomfort (angina), heart attack, or even death. CHD is a common and serious condition that affects millions of people worldwide and is a leading cause of death globally. Risk factors for CHD include high blood pressure, high cholesterol, smoking, diabetes, obesity, a family history of the disease, and a sedentary lifestyle. Management of CHD typically involves lifestyle changes (such as healthy eating and exercise), medications to manage risk factors, and, in some cases, medical procedures or surgery.

Psychosocial factors in the course and development of CHD

Several psychosocial factors influence both the risk of developing CHD and the worsening of clinical course and prognosis in patients with CHD. The following psychosocial factors have been identified:

1. Work stress on CHD

Occupational stress refers to the physical, emotional, and mental strain experienced by employees in response to work-related demands or pressures. One of the various physiological and behavioral mechanisms that may contribute to the association between work stress and CHD is the role of the hypothalamic-pituitary-adrenal axis in mediating the physiological effects of work stress. Chronic activation of the hypothalamic-pituitary-adrenal axis can lead to dysregulation of stress responses, resulting in elevated cortisol levels, inflammation, and oxidative stress, all of which are associated with CHD. Another strength of this paper is the consideration of behavioral factors in the association between work stress and CHD.

The role of unhealthy behaviors such as smoking, physical inactivity, and poor diet in the development of CHD. Although work-related stress may contribute to the adoption and maintenance of these unhealthy behaviors, which may further increase the risk of CHD, individual and organizational interventions to reduce work-related stress effective in reducing it can. Individual interventions such as stress management and relaxation techniques can help reduce negative physiological and behavioral responses to work stress. Organizations such as job redesign and work schedule flexibility can also be effective in reducing work-related stress.

2. Depression on CHD

Depression has been found to be a risk factor in the etiology of CHD.However pervious research has had several potential limitations concerning causal inference. The greatest challenge in research on prospective association between depression and CHD is the possibility that both depression and subsequent CHD are caused by subclinical manifestation of cardiovascular disease. Atherosclerosis, the underlying pathophysiological mechanism of CHD, is known to develop during the decade before the first clinical symptoms. Therefore, atherosclerosis may facilitate depressive symptoms even before clinical CHD symptoms.

3. Anxiety

Research has shown that anxiety disorders and heart disease can both cause the other to develop. If you have an anxiety disorder, including generalized anxiety disorder (GAD), panic disorder, and post-traumatic stress disorder (PTSD), you are 26% more likely to develop heart disease—especially coronary artery disease and heart failure.

People who have anxiety for a long time experience certain changes in their bodies, including reduced blood flow to the heart, increased heart rate and blood pressure; and elevated levels of cortisol, a stress hormone released by the adrenal glands. Over time, these effects can lead to heart disease. Anxiety disorders contribute to heart disease in several other ways, such as:

Inflammation: Both anxiety and anxiety disorders are associated with increased inflammatory markers, which indicate there is a heightened level of inflammation in the body.

Endothelial dysfunction: The layer of cells that make up the lining of blood vessels (vascular endothelium) plays a key role in the health and maintenance of the circulatory system. Anxiety and anxiety disorders have been linked to changes in the vascular endothelium that have been implicated in inflammation, blood clots, and the buildup of fatty deposits in the arteries (atherosclerosis).

Platelet dysfunction: Platelets are blood cells that are responsible for blood clotting. People with anxiety and acute stress have greater platelet aggregation, which can result in abnormal blood clotting and heart attacks.

References

1. Libby P, Theroux P. Pathophysiology of coronary artery disease,2005
2. McCullough PA. Coronary artery disease. Clin J Am Soc Nephrol. 2007.
3. Roth GA, Mensah GA, Johnson CO, et al
4. Huffman JC, Celano CM, Beach SR, et al.. Depression and cardiac disease: epidemiology, mechanisms, and diagnosis. Cardiovasc Psychiatry Neurol. 2013.
5. Rozanski A, Blumenthal JA, Kaplan J. Impact of psychological factors on the pathogenesis of cardiovascular disease and implications for therapy.
6. Whooley MA. Depression and cardiovascular disease: healing the broken-hearted. JAMA. 2006.
7. Everson-Rose SA, Lewis TT. Psychosocial factors and cardiovascular diseases. Annu Rev Public Health. 2005.