

DOI: 10.4172/2472-1654.100143

Phobias in Cardiac Patients

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Abstract

Introduction: Heart disease is a general term that refers to a number of acute and chronic pathological conditions that affect one or more parts of the heart. Heart disease can be acute or chronic.

Purpose: The purpose of this review is to highlight the effects of phobias on patients with cardiac problems.

Material & methods: An extensive review of the relevant literature was performed via electronic International and Greek databases (Medline, Pubmed, Cihnal, Google scholar, Iatrotek) and the Association of Hellenic Academic Libraries (HEAL-Link). The exclusion criterion for the articles was the language other than Greek and English.

Results: Phobias are a very common phenomenon. Many people have suffered from them sometime in their lives. There are many situations in life that can be dangerous. Most patients in a cardiac clinic and especially in a myocardial infarction unit are afraid that their future lives will no longer be the same. The severity of each individual's situation depends on the nature of stressors' characteristics, namely, its importance for the individual, the duration of the stressor, its cumulative effect, dealing with many different stressors simultaneously by the same individual, as well as the immediacy of response to it, based on the available personal and social resources.

Conclusion: Cardiac disease and its consequent problems should be investigated in every cardiac patient, as well as the supportive potential of his environment. Patients' needs as well as patient's personality mechanisms with whom they try to manage their problems and phobias should always be examined.

Keywords: Heart disease; Fear; Phobia; Cardiac patients

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Citation: Kourkouta L, Iliadis Ch, Koukourikos K, Ouzounakis P, Tsaloglidou A (2018) Phobias in Cardiac Patients. J Healthc Commun Vol.3 No.3:33

Received: May 22, 2018; **Accepted:** June 08, 2018; **Published:** June 15, 2018

Introduction

Heart disease is a general term that refers to a number of acute and chronic pathological conditions that affect one or more parts of the heart. Diseases affecting the heart may be structural or functional. Anything that causes damage to the heart or reduces its oxygen supply, makes it less efficient, reduces its ability to fill and pump blood, resulting in impaired coordination between the heart, kidneys, and blood vessels. Ultimately, it's not only the heart that is impaired, but equally the rest of the body [1].

Heart diseases may be temporary, relatively stable, or evolving. They may cause a variety of signs and symptoms that often change or worsen over time such as chest pain, easy fatigue and

shortness of breath with or without effort, cough, arrhythmia, dizziness, nausea, anorexia, stress or even phobias [2].

The focus of interest on this aspect of the disease (phobias) is a natural consequence of the evolution of medical science and technology. After the provision of solutions for the treatment of cardiac disease, the interest is further extended to the person, not only as an organism but as a psyche within the framework of a holistic approach of the human factor [3]. Phobia is an intense fear of something that, in fact, represents little or no real risk. Often, even the thought of the object or the situation that causes fear can lead to stress. When somebody is exposed to the factor that is afraid of, the experience is so agonizing that it can even lead to a radical change in his everyday lifestyle [4].

The most common phobias may take the form of claustrophobia, height fear, motorway driving, insects, snakes, needles, etc. However, an individual can develop phobias for almost anything, even in various diseases such as heart disease [5]. Fear is an extremely unpleasant feeling. It is a normal and indeed life-saving reaction of the body to the risk. At that moment, a complicated mechanism comes into operation via the central nervous and endocrine system, in order for our body to survive from the threat [6,7].

Some cases of phobias can be caused by certain traumatic experiences. The person is related to the phobic object and the attitude of his home environment has become particularly supportive of his behavior. In most cases of phobias, however, the symptom of phobia, on a psycho-emotional level, appears to be the "tip of the iceberg" through other major issues concerning the individual [5].

The purpose of this review is to highlight the effects of phobias on patients with cardiac problems, as well as to show the ways of dealing with them, in order patient's health to be protected and promoted.

Material and Methods

An extensive review of the relevant literature (research and review articles were included) for the period of 2000 until today, was performed via electronic International and Greek databases (Medline, Pubmed, Cihnal, Google scholar, Iatrotek) and the Association of Hellenic Academic Libraries (HEAL-Link) using the following key words: heart disease, fear, phobia, cardiac patients. The exclusion criterion for the articles was the language other than Greek and English.

Phobias

Phobias are a very common phenomenon. Many people have suffered from them sometime in their lives. There are many situations in life that can be dangerous. As such, fear is a normal part of human life [8,9].

A big percentage of the population, about 22% suffer from the fear of the animals, while 20.4% suffer from acrophobia. Phobia for blood reaches 13.9%, air travel is 13.2%, for water 9.4% and for storms 8.4%. There are certainly other phobias, but they appear rarely [10,11]. Phobic behavior is not considered a disorder if phobia does not affect a person's life. If, however, it prevents human capacity to respond to his usual obligations, then we are dealing with a phobic disorder: claustrophobia, acrobatics, airplane phobia, phobia of the earthquake [12,13].

Exposure to phobic stimuli almost always causes stress that can take the form of panic. As long as panic disorder occurs, four or more of the following symptoms occur and reach their peak within ten minutes [14,15]:

- palpitation or acceleration of the heart rate
- sweating
- trembling or intense tremor
- feeling gasps or suffocation or choking

- pain or chest discomfort
- nausea or abdominal discomfort
- feeling dizzy, unstable or faint
- fear of death

Phobias, therefore, differ from fears, vary and create many problems to the people carrying them, as they impede them in performing many actions in their everyday lives and in their consciousness [16].

Patients with cardiac disease

When heart is constantly functioning at high frequencies without physical reason, it is likely to experience problems earlier than expected. The same situation applies also to the other organs of the body. Blood pressure is increased resulting in long-term damage to both the vessels and organs [8]. In addition, the increase of heart rate increases electrical instability and can therefore lead to arrhythmias and sudden death [17]. A recent review of the literature reports 10 prospective studies, resulting in stress and heart disease connection [18]. Stress and anxiety can cause heart disease by creating coronary artery stenosis. As a consequence, an increased risk of heart attack, cardiac arrhythmias, such as atrial fibrillation and cardiac death, exists [19,20].

People suffering from heart disease experience a variety of phobias that can cause dramatic consequences both to themselves and their environment. They usually have stress, which acts as a warning signal for the body about an imminent danger, and prepares the mobilization of its defense mechanisms to cope with a threat or escape from it [21,22].

In particular, cardiac patients who have had acute myocardial infarction are strongly exposed to the secondary bio-psychosocial phenomena of the disease; problems that alter mental balance and emotional disturbances create dysfunctions in terms of self-relationship, on the one hand, and their interpersonal relationships, on the other, i.e. the other sex, the family, their wider friendly environment, especially a few months after the episode [23,24].

The transition of a healthy person in a disease state follows a gradual process. Thus, the reaction to a person's life change depends not only on the individual's experience in similar situations in the past, but also on the existence or not of a supportive social system contributing to meet this specific event. Most patients in a cardiac unit and especially a myocardial infarction unit (MIs Unit) are afraid and have realized that their future lives will no longer be the same. Many are terrified of complex angiographic examinations and the probability of a surgery [25,26]. The excessive increase of heart rate due to stress before a test, doubles the risk of sudden death due to myocardial infarction in later life of an individual, according to the results of a French study published in the European Heart Journal [27].

Furthermore, regular or occasional visits of cardiac patients to the doctor are always accompanied by emotions like fear, anxiety, stress, even panic, causing dysfunctional consequences

in everyday life. In these cases, the contribution of a mental health professional may be needed to deal with the difficulties arising for these patients [28].

In addition, it is observed that people who have had more than one cardiac episode are more depressed, with greater interpersonal sensitivity, and more severe phobic anxiety. It is assumed that their profile changes due to recurrent episodes, and the fear of death [3,29].

The severity of each individual's situation depends on the nature of stressors' characteristics, namely, its importance for the individual, the duration of the stressor, its cumulative effect, dealing with many different stressors simultaneously by the same individual, as well as the immediacy of response to it, based on the available personal and social resources [30]. The most common causes are the fear of death, surgery, the possible physical disability and the consequent lifestyle change. Family and professional obligations are frequently a matter of concern as well the capability of dealing with them. Unpleasant experiences with deaths of loved ones from heart disease may enhance anxiety [31].

Anxiety and depression are common in patients with coronary artery disease (CAD). Phobic anxiety is characterized by an unreasonable fear when exposed to specific situations [32]. The depression clearly has been associated with mortality in this population, but the relationship between anxiety and mortality remains unclear [33]. Although the association between phobic anxiety and mortality in patients with documented coronary heart disease (CHD) is not clear yet, several epidemiological studies have reported an association between phobic anxiety and increased risk of fatal cardiac events in community, and especially in women with established CHD [34,35]. Furthermore, women have a higher incidence of cardiac disorders through changes in their estrogen and neuro-endocrine function [19]. Many times, phobic anxiety is aggravated by insomnia caused by conditions of hospitalization and frequent interventions by the staff [36].

It is well documented in the literature that the incidence of anxiety followed by corresponding phobias amounts to 70-80% of patients with acute cardiac arrest, while the symptoms also remain for a long time to 20-25% of patients with cardiovascular disease, resulting in negative impact on their quality of life [37]. Type D personality among patients with heart disease is also considered as a strong predictor of the persistence of depressive symptom. The prevalence of social phobia, dysrhythmia and personality disorders, especially those with avoidant or obsessive-compulsive symptoms is significantly elevated among cardiac patients who are also characterized by type D personality [38].

Dealing with phobias in cardiac patients-the role of health care professionals

The best treatment for someone who suffers from phobias depends on the severity of his phobias. Self-help or treatment strategies may be effective. The more somebody does for himself, the more easily he will be able to gain control over his phobias. When a phobia affects a lot an individual's life by creating panic

attacks and uncontrolled stress, it is advisable for the person to visit a special therapist [8,20].

Counseling and therapeutic interventions play an important role in the treatment of phobias, since each specialist contributes by offering his own knowledge to improve the lives of cardiac patients. A phobia can be treated effectively with counseling and psychotherapy, which can also be combined with pharmacotherapy focusing on [15]:

- helping the person to increase his / her self-esteem
- individual's training to reduce his stress
- helping the individual to change his way of thinking, behavior and emotion regarding fear, in case that the person is humiliated, fails or loses control.

When a psychiatrist is called to examine a patient with stress, he/she should first investigate the causes of the existence of stress. If the stress is caused by physical symptoms, cardiac medications, drug intoxication, or deprivation of alcohol and drugs, the physical problem should be addressed directly in cooperation with the treating physician [5]. When the involvement of physical factors in the onset of stress is excluded, the psychiatrist must approach the patient and try to understand the causes and mechanisms causing stress to him/her [3].

In terms of medication, benzodiazepines are the most commonly used drugs for treating stress in the patient with heart disease. They are well tolerated and in small doses they do not cause a great drop in pressure or significant suppression of respiratory function, and they do not have anticholinergic activity [39]. If depression coexists, antidepressants should be given. Most commonly, selective serotonin reuptake inhibitors (SSRIs) are administered [3]. However, benzodiazepines should be co-administered for immediate patient relief, because antidepressant activity usually occurs after weeks [40,41]. In rare cases, antipsychotic medications, usually atypical, may be used, especially when there is a mental confusion [42].

Furthermore, as cardiac patients need to be safe in their treatment environment, health care professionals - doctors and nurses- are urged to be sensitive enough to assess the impact of anxiety and depression on patients' needs in everyday clinical practice, aiming at improving prognosis and providing high quality care collaboration between psychologists and psychiatric specialists with cardiac surgeons, cardiologists and cardiac nurses may lead to better quality care and improved patient outcomes [43-45].

The need of communication with other patient groups and the provision of appropriate conditions of communicating with the relatives, as well as the need for personalization of care and the involvement of cardiac patients in their care, are considered necessary for their more effective treatment [46].

Conclusion

Cardiac disease and its consequent problems should be investigated in every cardiac patient, as well as the supportive potential of his environment. Patients' needs as well as patient's personality mechanisms with whom they try to manage their problems and phobias, should always be examined [47].

The ability of dealing with cardiovascular disease without the presence of phobias is therefore the goal for all the cardiac patients, in order for them to have a better quality of life. Mental balance and emotional disturbances create dysfunctions in terms

of their relationship with themselves, and their interpersonal relationships, such as their relations with the other sex, family and their wider friendly environment.

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