

THE IMPACT OF CHRONIC ANXIETY ON PHYSICAL HEALTH

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Abstract: Chronic anxiety significantly impacts physical health, resulting in the development of psychosomatic disorders, commonly including cardiovascular or gastrointestinal issues, weakened immune systems, reduced psycho-physical resilience, migraines, and similar conditions. This review paper examines the fundamental mechanisms linking anxiety to physical symptoms, manifested as reactions or organic symptoms caused by dysregulation of the autonomic nervous system and chronic stress. The focus is on the interaction between mental and physical health, the role of adaptation processes, coping styles, stress management strategies, and social support in mediating this relationship. Modern preventive and therapeutic approaches, primarily psychotherapy, mindfulness techniques, and integrative medical interventions, can mitigate the negative consequences of chronic anxiety. Understanding this phenomenon is crucial for improving treatment and promoting holistic health. This paper provides insights into the complex connection between chronic anxiety and physical manifestations through the lens of contemporary psychological and medical research.

Key words: chronic anxiety, physical health, mental health, stress, adaptation.

1. INTRODUCTION

Chronic anxiety is one of the most common mental conditions affecting individuals in modern society, with significant implications for physical health. After an extended period, it can lead to the development of psychosomatic disorders, including cardiovascular diseases, gastrointestinal issues, respiratory difficulties, weakened immunity, and more. Chronic stress, often associated with anxiety, disrupts the autonomic nervous system and the body's hormonal balance, potentially resulting in long-term physiological damage and an increased risk of various diseases. Psychosomatic disorders, such as hypertension, migraines, and irritable bowel syndrome, often stem from dysfunctional emotional and cognitive processes. Anxiety not only triggers physical symptoms but also complicates their treatment and increases the likelihood of developing other conditions, such as cardiovascular diseases or asthma. The mechanisms through which anxiety affects physical health, including hormonal changes, immune system dysregulation, and the impact of chronic stress, are the subjects of growing scientific research worldwide. This fact is of crucial importance for the future of humanity, as discovering and improving modern therapeutic approaches, including cognitive-behavioral therapy and mindfulness techniques, can provide key results and contribute to the prevention or alleviation of symptoms and complications. When considering the impact of stress on the health, or psycho-physical status, of an individual, it becomes clear that the intensity of stressors to which an average person today is exposed continuously affects their personal capacity to overcome them through the choice of individual coping mechanisms. Understanding the interaction between mental and physical health is key to improving treatment and promoting a holistic approach to health. By reviewing contemporary research from psychology and medicine, this review paper contributes to a broader understanding of the complex relationship between chronic anxiety and physical health, offering practical guidance for future research and clinical practice.

2. ANXIETY – A SHORTCUT TO ILLNESS?

Some concepts of preventive action are well-known and widely accepted, but their full effect is achieved through consistency and continuity in application, such as physical activity, which has proven benefits in establishing and maintaining an individual's optimal psychophysical status. Evidence from one study suggests that engaging in physical activity protects against symptoms and disorders of anxiety [1]. In general, depressive and anxiety disorders are considered causes of mental illnesses.

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As a physical activity reduces symptoms of depression and anxiety and decreases their prevalence, it is often recommended as an adjunct therapy for treating these disorders [2]. Such data are equally important for achieving overall health and well-being as well as for prevention aimed at reducing psychopathological symptoms and disorders. When it comes to official psychotherapeutic approaches, cognitive-behavioral therapy (CBT) is most commonly and effectively applied in reducing and treating anxiety disorders, a fact supported by evidence and successful outcomes in anxiety treatment [3]. Why is so much attention dedicated to anxiety disorders? Because studies indicate the following: anxiety and its disorders are highly prevalent among individuals with chronic illnesses; they are often comorbid with various medical conditions, including pain disorders, pulmonary diseases, irritable bowel syndrome, cardiovascular diseases, cancer, metabolic and neurological disorders [4]. The results of a study conducted on a sample of hospitalized patients with depression in China indicate the importance of the role of so-called health anxiety in the relationship between functional somatic symptoms and illness behavior in patients with depression and somatic symptoms, emphasizing the need for appropriate assessment and intervention regarding health anxiety, especially in older patients [5].

Chronic anxiety significantly affects an individual's quality of life, primarily due to its main characteristics such as prolonged and intense feelings of fear, worry, and tension that disrupt daily functioning. The long-term presence of these feelings can lead to more serious consequences for mental and physical health, including the onset and development of depression, sleep disorders, and reduced work capacity. The prevalence of anxiety disorders is high, but with more pronounced variations, particularly between the most common (specific phobias) and less common disorders (e.g., agoraphobia without a history of panic disorder). The onset of anxiety disorders typically occurs in childhood or adolescence, with a frequently chronic-recurrent course, and they are highly comorbid with other mental disorders [6]. It is important to highlight neuroendocrine imbalances, such as elevated cortisol levels, can further exacerbate symptoms and increase the risk of developing comorbid conditions [7].

Symptoms of mood and anxiety disorders are partly a result of disrupted balance in the emotional centers of the brain, rather than in the higher cognitive centers in the frontal lobe. Understanding chronic anxiety requires knowledge of its biological foundation: dysregulated activity in the amygdala and prefrontal cortex leads to excessive stress reactivity and impaired emotional regulation [8]. One major issue is that anxiety disorders often go unrecognized and untreated for various reasons: lack of awareness in the individual, social stigma, prejudice against therapy, failure to recognize by professionals, or the presence of other disorders masking anxiety symptoms [9]. Cognitive-behavioral therapy (CBT) is considered the most effective in changing dysfunctional thought and behavior patterns in anxiety patients [4, 10]. Additionally, the integration of mindfulness techniques and body-oriented therapies is increasingly important in treating chronic anxiety, as they have been shown to reduce symptom intensity and improve overall psycho-physical well-being [11]. The prevalence of chronic anxiety and its connection to chronic diseases highlight the ongoing need for a preventive approach: education, early intervention, and promoting healthy lifestyles, such as regular physical activity and stress management, are key to reducing the number of chronically anxious individuals in the population [3, 5, 11].

2.1. The Impact of Chronic Anxiety on Physical Health

Chronic anxiety represents a state of persistent psychological tension that often manifests in physical health issues. It is characterized by constant worry, a sense of fear, and inner tension, and is associated with various somatic complaints, illnesses, and functional bodily disorders. The worry, often multifocal (concerning finances, work, family, health, or the future), is excessive and difficult to control, frequently accompanied by other nonspecific psychological and physical symptoms [12]. Numerous studies emphasize the importance of early recognition and treatment of chronic anxiety, not only to improve mental health and the overall psycho-physical status of the individual but also to prevent serious physical consequences, health problems, and diseases. A multidisciplinary approach, incorporating psychotherapy, pharmacological interventions, and lifestyle changes, can be crucial in

mitigating the harmful effects of this condition. The most common complaints reported by patients as consequences of chronic anxiety will be discussed below.

Although there is still significant room for research into the biological basis of the connection between chronic psychosocial stress and cardiovascular risks, its significant role in linking stress to an increased risk of obesity, hypertension, diabetes, and adverse cardiovascular outcomes, such as myocardial infarction and stroke, is indisputable. Additionally, the perception of unfavorable environmental conditions, as a form of chronic psychosocial stress, has been linked to obesity and other cardiovascular risk factors [13]. At this point, it is also worth mentioning generalized anxiety disorder, which occurs in 7 to 8% of patients; they rarely report worry as a symptom, while physical symptoms such as headaches or gastrointestinal distress are common, along with an increased risk of other mental and physical health conditions, and often coexisting major depression [12]. Possible individual reactions to the onset of symptoms and illness result from the isolated or interconnected effects of various factors: those related to the current symptomatology, those associated with personality profile and structure, and environmental factors that may positively or negatively influence the onset or overcoming of the illness [14]. If the organism fails to reestablish homeostasis disrupted by stress, disease may develop. The general adaptation syndrome is considered a defense mechanism for coping with stressors that disrupt the organism's homeostasis and stability [15]. Adaptation diseases, as an indirect consequence of stressor effects, are regarded as inadequate responses of the organism to the stress reaction and primarily include psychosomatic disorders such as the aforementioned cardiovascular diseases [16].

The relationship between anxiety and sleep is a negatively causal one in both directions – insufficient sleep often leads to anxiety, and conversely, anxious individuals generally experience problems with sleep quality and quantity. Chronic anxiety negatively affects sleep quality and the body's ability to regenerate; insomnia is common among individuals with anxiety, and sleep deprivation further exacerbates stress symptoms and contributes to the development of physical illnesses. Timely detection of psychological difficulties and disorders, the selection and use of appropriate diagnostic tools, and the choice of adequate therapy are important prerequisites for a favorable prognosis for recovery and for improving quality of life. This topic is particularly important in the field of psycho-physical functioning of oncology patients, for whose well-being it is essential and necessary to sensitize oncology and surgical specialists to the early recognition, timely, and adequate treatment of psychological difficulties and disorders in patients, as well as to understand the process of coping with a traumatic event such as the diagnosis of a severe chronic illness and the patient's confrontation with it. Psycho-oncology plays a crucial role as a team-based, multidisciplinary approach that can provide timely and high-quality support to cancer patients with comorbid psychological illnesses or disorders [17]. Based on such data, the importance of psychoeducation for all involved parties (patients, family members, doctors, nurses) is emphasized, focusing on the increasing prevalence of psychological disorders in cancer patients, their detection, specific characteristics, and the corresponding application of adequate psychopharmacotherapy, taking into account the characteristics of the underlying disease and the therapy the patient needs to receive.

3. CONCLUSION

Chronic anxiety has far-reaching consequences on physical health, acting through complex mechanisms that include dysregulation of the autonomic nervous system, hormonal changes, and immune dysfunction. As highlighted in this paper, psychosomatic disorders often emerge as a result of prolonged exposure to anxiety and chronic stress. These disorders further complicate an individual's health status, increasing the risk of developing other severe medical conditions. Given the strong connection between mental and physical health, approaches that integrate preventive measures, early diagnosis, and interventions such as cognitive-behavioral therapy, mindfulness techniques and integrative medical treatments have proven essential in mitigating the negative impacts of chronic anxiety. Evidence suggests that incorporating physical activity into daily life can significantly reduce anxiety symptoms and contribute to overall psychophysical well-being.

In conclusion, understanding the interaction between emotional and physical factors is crucial for advancing clinical practice and promoting holistic health. Future research should focus on further

exploring promising contemporary therapeutic approaches and on developing strategies to address biases, self-sabotaging beliefs, and other barriers to accepting psychotherapies for treating anxiety disorders. This multidisciplinary approach offers the potential to significantly improve the quality of life for the modern individual and reduce the subjective burden of chronic anxiety on a global scale. The aim of this paper was to address several key questions that arise in practice, with answers being essential for the implementation of timely and adequate psychopharmacotherapy or psychotherapy.

4. REFERENCES

- [1] McDowell,CP.,Dishman,RK.,Gordon,BR.,Herring,MP.:Physical Activity and Anxiety:A Systematic Review and Meta-analysis of Prospective Cohort Studies. *Am J Prev Med.* (4):545-556. doi: 10.1016/j.amepre.2019.05.012. PMID: 31542132, 2019.
- [2] Wanjau,MN., Moller,H., Haigh,F., Milat,A., Hauek,R., Lucas,P., Veerman,L.: Physical Activity and Depression and Anxiety Disorders: A Systematic Review of Reviews and Assessment of Causality. *AJPM Focus* 2023;2(2):100074. Published by Elsevier Inc. on behalf of The American Journal of Preventive Medicine Board of Governors. 2023.
- [3] Olthuis,JV.,Watt,MC.,Bailey,K., Hayden,JA.,Stewart,SH.: Therapist-supported Internet cognitive behavioural therapy for anxiety disorders in adults. *Cochrane Database Syst Rev.*:CD011565. doi: 10.1002/14651858.CD011565. Update in: *Cochrane Database Syst Rev.*; 3:CD011565. doi: 10.1002/14651858.CD011565.pub2. PMID: 25742186. 2016.
- [4] Farris, SG., Zvolensky, MJ.: Cognitive Processes in Anxiety and Comorbid Physical Illness and Health Behavior: Introduction to the Special Issue. *Cognit Ther Res.*; 43(1):1-5. doi: 10.1007/s10608-018-9988-4. Epub 2018 Dec 18. PMID: 31462838; PMCID: PMC6713461, 2019.
- [5] Ma,Y.J.,Wang,DF.,Yuan,M.,Long,J.,Chen,SB.,Wu,QX.,Wang,XY.,Liu,TQ.: The mediating effect of health anxiety in the relationship between functional somatic symptoms and illness behavior in Chinese inpatients with depression. *BMC Psychiatry.*;19(1):260. doi:10.1186/s12888-019-2246-9. PMID: 31455294; PMCID: PMC6712795. 2019.
- [6] Kessler RC, Ruscio AM, Shear K, Wittchen HU. Epidemiology of anxiety disorders. *Curr Top Behav Neurosci.* 2:21-35. PMID: 21309104. 2010.
- [7] Chrousos,GP.Stress and disorders of the stress system. *Nature Reviews Endocrinology.* 2009.
- [8] Martin EI, Ressler KJ, Binder E, Nemeroff CB. The neurobiology of anxiety disorders: brain imaging, genetics, and psychoneuroendocrinology. *Psychiatr Clin North Am.*32(3):549-75. doi: 10.1016/j.psc.2009.05.004. PMID: 19716990; PMCID: PMC3684250. 2009.
- [9] Stjerneklar,S., Hougaard,E., McLellan,L.F.,Thastum,M.: A randomized controlled trial examining the efficacy of an internetbased cognitive behavioral therapy program for adolescents with anxiety disorders. *PLoS One*, 14(9). <https://doi.org/10.1371/journal.pone.0222485>. 2019.
- [10] Hofmann SG, et al.The efficacy of CBT for anxiety disorders. *Journal of Consulting and Clinical Psychology.* 2012.
- [11] WHO. Depression and Other Common Mental Disorders: Global Health Estimates. 2017.
- [12] Stein,MB.,Sareen,J.Generalized anxiety disorder. *New England Journal of Medicine*, 373(21), 2059-2068. 2015.
- [13] Powell-Wiley Tiffany,M., Dey Amit,K. , Rivers Joshua,P. , Chaturvedi, A., Andrews Marcus,R. , Ceasar Joniqua,N., Claudel Sophie,E., Mitchell Valerie M. , Ayers,C., Tamura,K., Gutierrez-Huerta Cristhian,A., Teague Heather,L., Oeser Steffen,G., Goyal,A., Joshi Aditya,A., Collins

Billy,S., Baumer,Y., Chung Stephanie,T., Sumner Anne,E., Playford Martin,P., Tawakol,A., Mehta Nehal,N. Chronic Stress-Related Neural Activity Associates With Subclinical Cardiovascular Disease in a Community-Based Cohort: Data From the Washington, D.C. Cardiovascular Health and Needs Assessment. *Front. Cardiovasc. Med.*,10 Sec. Cardiovascular Epidemiology and Prevention. Volume 8 | 2021. <https://doi.org/10.3389/fcvm.2021.599341>.

[14] Kostić, M. *Illness and Personality: Reactions to Illness and Coping with Diagnosis*, Institute of Knowledge Management, Skopje, Vol.60, No.4, pp.725-729. 2023.

[15] Vuković, O. Uticaj dimenzija ličnosti na kardiovaskularnu reaktivnost kod pacijenata sa dijagnozom koronarne bolesti. Doktorska disertacija, Medicinski fakultet Univerziteta u Beogradu. 2013.

[16] Greenwood W. *Managing Executive Stress: a Systems Approach*. New York: John Wiley i Sons, 1979.

[17] Vuk Pisk,S., Filipčić,I., Bogović,A., Milovac,Ž., Todorčić-Laidlaw,I., Caratan,S.: Maligne bolesti i psihički poremećaji - prevalencija, mortalitet, terapijski izazov. *Soc. psihijat*.Vol. 45, Br. 3, str. 187-201. 2017.