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Stress and its impact on modern life

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Abstract: Stress is one of the most widespread experiences of contemporary man and, at the same time, one of the most complex. Although it is often perceived only as a negative state, it is a much more nuanced phenomenon, with biological, sociological and psychological roots. Stress is a central concept in contemporary psychology and medical sciences. It is defined as a set of physiological and psychological reactions through which the body responds to external or internal demands that exceed the individual's adaptive resources.[1] Although it has an adaptive role, under prolonged exposure, stress becomes a major risk factor for health and quality of life.

Keywords: *stress, eustress, distress, mental health, resilience*

Contemporary society is characterized by acceleration, competition and instability. In this context, stress becomes a constant of modern life, affecting all age groups and professions. Stress is one of the most common reactions of the human being to the pressures of the internal and external environment. Although it has an adaptive value, when prolonged or intense, it becomes a major source of physical, emotional and social imbalance. The article aims to analyze the concept of stress from an interdisciplinary perspective, explaining its biological and psychological mechanisms, social causes, effects on health and performance, as well as management and prevention strategies. Thus, stress is not only a psychological problem, but a complex phenomenon involving the nervous, endocrine, immune and behavioral systems.

Stress is one of the most striking realities of the contemporary world, a fragile bridge between the individual's inner balance and the complexity of the environment in which he lives. In an era marked by speed, competition and constant challenges, modern man often lives under the pressure of time and expectations, in a continuous state of adaptation. In this context, stress is not only a physiological reaction, but also an expression of the way in which the human being responds to his own vulnerability and to the limits imposed by society.

From a psychological perspective, stress is a complex mechanism at the intersection of biology and emotion, mind and body. It reflects the way a person perceives, interprets and manages life events. Far from being just a negative phenomenon, stress can become a tool for personal growth, a force that stimulates adaptation and development, when properly controlled and understood.

However, the balance is fragile. When stress exceeds the body's response capacity, it turns from ally into enemy, triggering a chain reaction that affects both physical and emotional health. Prolonged tension, overexertion and lack of recovery periods lead to the erosion of resilience, psychosomatic disorders and a decrease in the quality of life. In this light, stress becomes not only an individual challenge, but also a social, medical and moral one.

Understanding the phenomenon of stress requires an interdisciplinary approach, combining psychological, physiological and social perspectives. The study of this concept helps us to decipher the subtle mechanisms of human adaptation and to discover the means by which inner balance can be

restored. To talk about stress is, in essence, to talk about the human condition itself – about fragility, resilience and the deep need for harmony between mind, body and spirit.

1. What is stress?

Stress is one of the most discussed problems of the contemporary world, affecting individuals regardless of age, social status or profession. Currently, stress is viewed as a complex phenomenon located at the intersection of biology, psychology and sociology.

The word "stress" comes from the English language and originally refers to a pressure or force exerted on an object. In psychology and medicine, the term refers to the body's reaction to factors perceived as threatening or demanding, called stressors.

Hans Selye, one of the founders of modern stress theory, defined stress as "the nonspecific response of the organism to any demand placed on it."[1]This definition emphasizes the general and inevitable character of the phenomenon, which does not depend on the specific nature of the stimulus, but on how it is perceived by the individual.

According to the transactional theory formulated by Lazarus and Folkman, stress is not just an automatic reaction, but the result of a cognitive assessment of the situation, which operates in two essential stages:[2]:

- Primary assessment
- Secondary assessment

In other words, stress is the body's natural reaction to situations that are perceived as challenging or threatening. When we are faced with a difficult situation, the body releases hormones such as cortisol and adrenaline, which prepare us for the "fight or flight" response. Although this response was essential for the survival of our ancestors, in modern society, chronic stress has become a major problem.

Stress has a dual nature: it can be adaptive and beneficial in certain contexts, but it becomes harmful when it is intense or prolonged. Biologically and psychologically, it involves the activation of the sympathetic nervous system and the release of hormones such as cortisol and adrenaline, which prepare the body for "fight or flight". Stressors can be psychogenic (of purely psychological origin, such as financial worries) or neurogenic (related to brain processes), and the response to them influences well-being, behavior and general health.

The World Health Organization (WHO) defines stress as a state of mental or emotional tension resulting from a difficult or demanding situation, emphasizing that this is a normal response of the body to the challenges of modern life.[3].

Within the International Classification of Diseases – ICD-11 (2022 edition), stress is analyzed both as an adaptive reaction and as an etiological factor of numerous mental and somatic disorders.[4].

1.2 The concept and classification of stress. Stress can be viewed from several perspectives:

a) Physiological – the biological reaction to adapt to a demanding factor (called a stressor), through the release of adrenaline and cortisol.

b) Psychological – subjective perception of pressure and evaluation of one's own resources to cope with the situation.

c) Social – the result of the interaction between the individual and his environment: family, work, community, institutions.

Stress is not always negative; it can be classified into several types. Depending on its intensity and duration, we distinguish:

[1] Selye, Hans – The Stress of Life, McGraw-Hill, New York, 1956.

[2] Lazarus, Richard & Folkman, Susan – Stress, Appraisal, and Coping, Springer, 1984.

[3] World Health Organization – Stress at the Workplace: A Guide to Managing Stress, Geneva, WHO Press, 2021.

[4] World Health Organization – International Classification of Diseases 11th Revision (ICD-11), Geneva, 2022;

- Eustress (positive stress)**:** It appears in motivating situations, such as a new job or a sports competition, and helps with performance and personal development.
- Distress (negative stress): It is associated with feelings of threat or anxiety, leading to discomfort and potential health problems. This is negative, prolonged stress that affects health and emotional balance[5].

According to the specialized literature[6], stress can be classified into three main forms:

A. Acute stress, is of short duration and high intensity, triggered by specific situations, such as an exam or a spontaneous conflict. This is a short response to a specific event, adaptive for survival, but exhausting if repeated.

Acute stress is the body's immediate and short-term reaction to a situation perceived as threatening or challenging. This reaction has an adaptive role: it mobilizes energy, increases reaction capacity, and focuses attention.

Physiologically, acute stress activates the hypothalamic–pituitary–adrenal axis, causing the release of adrenaline and cortisol, which leads to increased heart rate, blood pressure, and alertness.[7].

After the stressor disappears, the body returns to balance. Under normal conditions, acute stress does not produce pathological effects, being considered a natural survival mechanism.

B. Acute episodic stress, associated with people prone to excessive worry and frequent interpretation of everyday events as threatening. This form of stress occurs in people who frequently face stressful situations or who lead an intense, chaotic lifestyle with multiple responsibilities and pressures. Although each episode of stress is acute, their rapid succession does not allow the body to fully recover. Affected people are often perfectionists, competitive, impatient and tend to perceive the world as a series of permanent emergencies.

Symptoms include: constant muscle tension, headaches, migraines, digestive disorders, irritability, and increased anxiety.

Over time, acute episodic stress can evolve into chronic stress, if not addressed through psychological regulation measures or lifestyle changes.[8].

C**.** Chronic stress, characterized by prolonged exposure to stress factors (financial problems, conflicting relationships, precarious working conditions), being considered the most dangerous risk of cumulative impact on health. It is caused by persistent factors such as relationship problems or excessive work, and associated with major health risks, including cardiovascular disease, depression or a weakened immune system.Chronic stress is the most dangerous and persistent form.

It occurs when the individual is exposed to long-term stressors without the ability to eliminate or control them. Typical situations include: prolonged family conflicts, emotional abuse, continuous professional pressures, lack of economic stability, or loss of existential meaning.

The World Health Organization warns that chronic stress has profound effects on physical and mental health, being correlated with cardiovascular disorders, depression and generalized anxiety, sleep disorders, decreased immunity and premature aging.[9]

Therefore, chronic stress is no longer an adaptive mechanism, but a pathogenic factor that damages the body's balance and quality of life.

[5] Lazarus, Richard & Folkman, Susan – Stress, Appraisal, and Coping, Springer, 1984.

[6] Csikszentmihalyi, Mihaly – Flow: The Psychology of Optimal Experience, Harper & Row, 1990.

[7] McEwen, Bruce – Protective and Damaging Effects of Stress Mediators, New England Journal of Medicine, 338(3), 1998.

[8]Lazarus, Richard & Folkman, Susan – Stress, Appraisal, and Coping, Springer, 1984.

[9] Schneiderman, N.; Ironson, G.; Siegel, S. – Stress and Health: Psychological, Behavioral, and Biological Determinants, Annual Review of Clinical Psychology, 1, 2005

1.2 Common causes of stress. The generative factors of stress can be divided into several categories:[10]:

- Professional: overload, lack of control over tasks, deadline pressure.
- Social and relational: family conflicts, social isolation, lack of emotional support.
- Personal: high level of self-demand, imbalances between professional and personal life.
- Contextual: major life changes (divorce, loss of a loved one, migration).

Nowadays, stress can be triggered by a variety of factors, including:[11]:

- Pressure at work: Tight deadlines, high workload or conflicts with colleagues can generate stress.
- Financial problems: Worrying about paying bills or economic instability.
- Interpersonal relationships: Conflicts with your partner, family or friends.
- Technology and superinformation: Constant exposure to notifications, news, and social media.
- Major changes: Moving to another city, changing jobs, or losing a loved one.

2. The effects of stress on health

When the body perceives danger, the sympathetic nervous system triggers the fight or flight response. Adrenaline, noradrenaline, and cortisol are released, increasing heart rate, blood pressure, and alertness.[12].

2.1 Effects of chronic stress. Chronic stress can have a significant impact on physical and mental health. Its effects include:

- Physical problems: Headaches, insomnia, chronic fatigue, muscle tension or digestive problems.
- Mental disorders: Anxiety, depression, irritability or decreased ability to concentrate.
- Weakened immune system: Prolonged stress can make the body more vulnerable to disease.
- Unhealthy behaviors: Some people turn to smoking, excessive alcohol consumption, or emotional eating to cope with stress.

In the long term, chronic stress is associated with the occurrence of cardiovascular diseases, mental disorders and a significant decrease in cognitive and professional performance.
The World Health Organization (WHO) has declared stress the "epidemic of the 21st century", emphasizing that it is involved in over 70% of modern diseases.[13].
Psychologically, stress occurs when an individual perceives that the demands of a situation exceed their resources. This perception is influenced by experience, personality, education, and social support. Lack of control, uncertainty, and conflict between social roles are the main stressors in modern society.
At a social level, collective stress is fueled by economic instability, job insecurity, violence, political and informational crises.[14].

2.2 Stress management. Fortunately, there are effective ways to reduce and manage stress. Some of these practical strategies include:

[10] Giddens, Anthony – The Consequences of Modernity, Stanford University Press, 1990;
[11] Csikszentmihalyi, Mihaly – Flow: The Psychology of Optimal Experience, Harper & Row, 1990.
[12] McEwen, Bruce – Protective and Damaging Effects of Stress Mediators, New England Journal of Medicine, 338(3), 1998.
[13] World Health Organization – Mental Health: Strengthening Our Response, WHO Report, Geneva, 2023
[14] Giddens, Anthony – The Consequences of Modernity, Stanford University Press, 1990;

- Regular physical exercise: Activities such as walking, yoga, or running help reduce cortisol levels and improve mood.
- Relaxation techniques: Meditation, deep breathing, or mindfulness can calm the mind and reduce anxiety.
- Time management: Setting priorities and planning activities can reduce feelings of overwhelm.
- Quality sleep: A regular sleep schedule helps the body recover and better cope with challenges.
- Social connections: Spending time with family or friends and sharing worries can provide emotional support.
- Limiting exposure to technology: Reducing time spent on social media or periodically disconnecting from electronic devices.

The W.H.O. classification of stress provides an essential scientific framework for understanding how the body and mind react to pressure.
Recognizing the form of stress in a person is the first step towards restoring psychological balance, developing resilience, and maintaining overall health.
At the same time, the concept of resilience, represented by the ability to overcome difficulties without breaking down mentally, has become central to modern education. Well-being and mindfulness programs implemented in institutions and companies have proven effective in reducing professional stress and increasing life satisfaction.[15].
A crucial first step in managing stress is recognizing its signs. Ignoring stress can lead to it building up, which can worsen health problems. If stress becomes overwhelming, it's important to seek help from a professional, such as a psychologist or counselor.
Stress is a phenomenon inherent to human existence, but its impact on the individual depends on its intensity, duration and available coping resources. Although it can function as a short-term motivating factor, chronic stress constitutes a major health risk. By adopting effective strategies and implementing public health programs, the negative consequences of stress can be considerably reduced.
Stress is an inevitable part of modern life, but it doesn't have to control us. By adopting healthy coping strategies and being aware of its impact, we can reduce its negative effects and improve our quality of life. The key is to find a balance between responsibilities and moments dedicated to relaxation and personal well-being.
In other words, stress cannot be completely eliminated from human life, but it can be transformed into a force for growth. Through self-knowledge, balance between reason and emotion, and the development of resilience, man can transform stress from an invisible enemy into an inner teacher. Learning to manage stress means, in essence, learning to live consciously.

In conclusion, stress is an inevitable component of modern human existence, a natural response of the body to environmental demands and challenges. Although in its acute forms it can play an adaptive role, stimulating performance and responsiveness, the persistence of stress leads to profound imbalances. From the WHO perspective, the delimitation between acute, episodic and chronic stress allows understanding the mechanisms by which psychological tension is transformed from a protective factor into a source of disease and vulnerability.
On an individual level, the effects of stress go beyond the psychological dimension, influencing the functioning of the nervous, cardiovascular and immune systems. Prolonged exposure to stress causes a continuous physiological reaction, which erodes the ability to adapt and favors the appearance of sleep disorders, depression and somatic diseases. Therefore, early identification of stressors and the development of healthy coping mechanisms are essential for maintaining internal balance.
At a societal level, chronic stress is becoming an indicator of contemporary dysfunctions – the accelerated pace of life, economic pressures and the lack of authentic emotional connection. In this

[15] Kabat-Zinn, Jon – Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness, Delta, New York, 1990.

context, prevention strategies, mental health education and the promotion of resilience become collective priorities. A deep understanding of stress, beyond the simple biological reaction, leads to a holistic view of the human being, in which emotional, mental and physical balance are inseparable.

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