

The journal has had 40 points in Ministry of Education and Science of Poland parametric evaluation. Annex to the announcement of the Minister of Education and Science of December 21, 2021. No. 32343. Has a Journal's Unique Identifier: 201159. Scientific disciplines assigned: Physical Culture Sciences (Field of Medical sciences and health sciences); Health Sciences (Field of Medical Sciences and Health Sciences). Punkty Ministerialne z 2019 - aktualny rok 40 punktów. Załącznik do komunikatu Ministra Edukacji i Nauki z dnia 21 grudnia 2021 r. Lp. 32343. Posiada Unikatowy Identyfikator Czasopisma: 201159. Przynależność dyscypliny naukowej: Nauki o kulturze fizycznej (Dziedzina nauk medycznych i nauk o zdrowiu); Nauki o zdrowiu (Dziedzina nauk medycznych i nauk o zdrowiu).
© The Authors 2023;
This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland
Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author (s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike. (<http://creativecommons.org/licenses/by-nc-sa/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.
The authors declare that there is no conflict of interests regarding the publication of this paper.
Received: 24.02.2023. Revised: 28.02.2023. Accepted: 09.03.2023. Published: 09.03.2023.

THE ROLE OF STRESS AND ITS IMPACT ON THE FORMATION OF OCCUPATIONAL BURNOUT

Olaf Lisowski, Mateusz Grajek

Department of Public Health, Faculty of Health Sciences, Medical University of Silesia in Katowice

Abstract

The term "stress" is customarily used in connection with environmental pressures and adaptation to changing environmental conditions, but also in reference to the body's psychological and physiological response to them. In the understanding presented, adaptive demands are called stressors, their effects are called stress or stressful situations, and methods and techniques aimed at reducing these effects are called ways of coping with stress. Stress can also be understood as a "product" of inappropriate coping with the challenges of everyday life. The differentiation between stress as a process and stressor as a factor makes it easier to understand the issue and its impact on life and the development of mental illnesses.

Keywords: stress, stress management, occupational burnout, employee, work

Introduction

The term "stress" is customarily used in connection with environmental pressures and adaptation to changing environmental conditions, but also in reference to the body's psychological and physiological response to them. In the understanding presented, adaptive demands are called stressors, their effects are called stress or stressful situations, and methods and techniques aimed at reducing these effects are called ways of coping with stress. Stress can also be understood as a "product" of inappropriate coping with the challenges of everyday life. The differentiation between stress as a process and stressor as a factor facilitates the understanding of this issue [1, 2]. It is important to remember that both terms: "stress" and "coping," are interrelated and dependent on each other.

Canadian psychologist Selye introduced a division of stress, which still functions today. According to him, stress can be divided into good and bad stress, which he called positive/beneficial stress (eustress) and negative/harmful stress (distress). He also distinguished situations when we are not subjected to any pressure and called it neustress. In the simplest reasoning: a situation such as a wedding is associated with positive stress, and a funeral with negative stress. On the other hand, a situation that is neutral for a person can be typical, repetitive and not dynamically changing. The main types of stress indicated use other personal resources of the individual and coping skills [3, 4].

The type of resources and skills used to mitigate the impact of stress will also depend on the stressor we face. Stressors in terms of their origin can be divided into three categories, namely: frustrations, conflicts, compulsions, and they are closely related [5].

Frustrations

Frustration is an affective state of unpleasantness caused by the blockage of the possibility of satisfying some basic need of an individual or group due to an obstacle or insurmountable resistance encountered. It leads to disorganization of physical and mental functions. Frustration occurs when some obstacle is encountered in the pursuit of a goal that prevents its achievement. This very often leads to lower self-esteem and lack of competence. It also makes us believe that we have failed others and ourselves. Obstacles of an internal (personal) and external (environment) nature can lead to the formation of frustration, which include the current life situation, experienced problems, unresolved private and professional issues, as well as emotional difficulties [6, 7].

Conflicts

In many cases, the cause of stress is the simultaneous emergence of needs that are difficult to satisfy, and the satisfaction of one directly affects the unsatisfaction of another - the "eat cake and have cake" mechanism. The need to

make a choice will inevitably become a reason for experiencing conflict. Conflicts, which we all have to deal with, are divided into the following types:

- Approach-avoidance: refers to the strong desire to achieve, and at the same time avoid the same goal;
- Close-up-approximation: refers to the choice between two or more desired targets;
- Avoidance-avoidance: refers to the choice between equally unpleasant in consequences eventualities.

Proximity-avoidance conflict, arising from the necessity of choosing either a career or taking care of one's family, can simultaneously have the character of proximity-avoidance conflict when considering the responsibilities associated with each. Regardless of how we divide conflicts, they will always remain a serious source of stress, the intensity of which can overwhelm us [8, 9].

Coercion

The reason for stress can also be a compulsion to achieve a certain goal or a compulsion to behave in a certain way. We all encounter daily compulsions and generally cope with them without much difficulty. Sometimes, however, a compulsion seriously strains coping abilities, and if the pressure is too great, it leads to pathological adaptive changes. Coercion can come from an external or internal source. For example, a student may feel a strong compulsion to get good grades because that's what his parents demand of him. For many students, the long hours of study and all the effort of several years represent serious stress. Those preparing for exams on which their future career depends, such as the high school diploma or a college entrance exam, feel more anxiety the less time remains before the exam. People with a tendency to counteract stress by abusing defense mechanisms, such as wishful thinking or self-blame, showed an increase in maladaptive behavior and increased anxiety in situations of severe stress. Job demands can also be highly stressful, as many workplaces have stringent requirements for responsibility, punctuality and productivity [10-12].

Predisposing factors

Everyone faces a unique pattern of adaptation requirements. This is partly due to the fact that each of us feels and interprets similar situations differently, and on the other hand it is due to the fact that no two people are exposed to an identical pattern of stressors. Among other things, the response to a stressor depends on what the stressor is associated with and how long the exposure to it is [11]. It also depends on the cumulative effect of the stressors throughout one's life, whether the stressor occurs alone or in combination with others, whether it is "natural" or artificial, what impact it has on one's life and, finally, whether the "victim" of the stressor is convinced that he or she can take control of it. We can easily cope with minor stressors, such as losing our keys, but stressors involving important areas of life, for example, the death of a loved one, loss and job, divorce, or serious illness, cause immeasurable stress for most of us. Moreover, the impact of a stressor is stronger the longer we are exposed to it. The impact of stressors is often cumulative [12]. A married couple may, despite a series of minor disagreements, live in harmony for a long time, only to part due to the triggering of another stressor, overflowing the measure. Sometimes the most important stressors for a person occur in a prolonged difficult life situation. These are then called chronic or long-term stressors. The reason for chronic frustration can be a boring and poorly paid job from which there seems to be no escape, lasting for years in a failed and conflict-filled marriage, or either a long-term illness. The simultaneous occurrence of several stressors further aggravates the situation [13]. If someone has a heart attack, loses his job, and learns that his son has been arrested for drug trafficking, then his stress level will be higher than if he received the news at certain intervals. Stress symptoms are exacerbated in those directly involved in dramatic events. In one school where a shooting occurred (one student was killed and several injured when a bomber opened fire on children on the playground), a comprehensive study of the behavior and stress symptoms of 159 children was conducted. The level of stress found depended on whether the student was on the playground, in the school building, near the school, on his way home, at home, or in another part of the city at the time of the incident. Children who were on the playground, closest to the scene of the shooting, showed the most severe symptoms of stress, while those who were not at school that day showed no symptoms of stress [14].

From time to time, each of us undergoes a period of intense stress, which flows into the development of mental crises. The term crisis refers to stressful situations that approach the limit of an individual's personal endurance. Crisis situations are particularly stressful because the stressors acting at the time are so strong that the coping techniques usually used do not work. A crisis can occur under the impact of a trauma (such as a divorce) or a calamity (such as a flood), or in the aftermath of an accident or illness that requires difficult changes in one's previous life and self-image. How a crisis situation ends has a serious impact on a person's adjustment to life going forward. If, as a result of the crisis, he or she develops a new, effective method of coping, such as practicing gymnastics or joining some discussion group, he or she may come out of it even better adjusted than before. If the crisis undermines a person's ability to cope with similar stressors in the future, because he or she will expect another failure, his or her overall adaptation will suffer. For this reason, crisis intervention, which involves providing psychological assistance in situations of particularly severe stress, has become an important part of modern preventive practice [15].

It is important to remember that changes in life, including positive ones, such as receiving a coveted promotion or getting married, place new demands on us and can therefore be a source of stress. Our psychosocial environment (including our circle of friends, work relationships and social resources) can become an important factor in accelerating the onset of disorders, even biological ones. The faster the changes occur, the greater the accompanying stress. The first research on life changes focused on developing scales with which to measure the relationship between stress and expected physical and psychological disorders. One of the first attempts was developed by Holmes and colleagues, who

designed the Social Readjustment Rating Scale (SRRS) - an objective method of measuring the cumulative stress to which a person has been exposed over a period of time. Using this scale, life stress is measured in Life Change Units (LCUs). The most stressful events are assigned the highest value in LCU. At the very top of the scale is "death of a spouse," which is assigned a value of 100 LCUs, followed by "divorce" with a value of 73 LCUs; at the bottom of the scale are "vacation" (13 LCUs) and "minor conflict with the law" (11 LCUs) [16]. Scales for measuring life stress have been criticized because of a number of methodological problems, including the selection of events for the scales, the subjective determination of their values, the failure to take into account the relevance of particular events to the populations studied, and the reliance on respondents' memories of events. Perhaps the most problematic aspect of the life events scales is that they only serve as a general indicator of distress (negative stress), and do not provide information on individual types of distress. Another of their weaknesses is that the measurement relates to chronic problems rather than responses to specific events in the environment. Despite these limitations, the scales measuring life stressors support the thesis that life changes are a source of stress. Speaking of stress, two more determinants should be noted, namely individual perception and tolerance of the stressor [17].

Perception and tolerance of the stressor

Understanding the nature of a stressful situation, preparing for it, and knowing how long it is likely to last greatly reduce the intensity of subsequent stress. People who endure life changes badly are particularly sensitive to even the slightest frustration or duress. People who are insecure about their self-esteem and adaptability are more at risk than people who have their need for security and belonging met. The term stress tolerance refers to an individual's ability to resist stress without serious consequences [18]. The stressor becomes stronger in the absence of supportive surroundings. In addition, the individual's ability to cope decreases. For example, a person whose partner suffers from a mental disorder is exposed to a stronger stressor than someone who has a mentally healthy partner. The lack of support has an escalating effect on the stress caused by the illness. Many cultures have specific rituals or ways of doing things to help deal with certain types of stress. In most religions, for example, there are rituals to support the bereaved; in some faiths we find confession and absolution to help those suffering from guilt and remorse. The level of stress results from the interaction between the type of stressor and the individual's resources to cope with the situation. If a person feels that he or she can easily cope with a situation, then stress will be low, no matter what kind of stressor he or she is dealing with [19].

Psychophysical reactions to stress

To fully understand stress we need to know something about the nature of emotions. It is known that there are many correlations between external events and bodily reactions and emotions. A scientific theory to explain this relationship is the James-Lange theory. They believed that the brain, after receiving and analyzing information about the environment, transmits it through nerve channels, causing characteristic physical reactions. The James-Lange theory proposes this sequence of factors: A stimulus (such as a lion) is noticed first; this perception causes somatic (accelerated heartbeat) and behavioral (running away) changes; somatic and behavioral changes are interpreted by the subject as an emotion (fear).

That is, according to this theory, I do not run away because I am afraid of the lion, but I am afraid of the lion because I am running away. James and Lange's theory linking physiology and psychology worked until 1920, when advances were made in both fields and the theory was replaced by one that better explained the phenomena, namely Cannon's theory. He believed that information entering the brain is analyzed externally and then transmitted to an important part of the brain - called the thalamus. There, 2 processes take place: the transmission of information to organs such as the heart, which causes its activity to accelerate, and its return to the part of the brain where emotions were realized [20]. A graphical understanding of Cannon's theory can be presented as follows [21]:

event (e.g., an encounter with a dangerous animal)

↓

Information processed by thalamus → instrumental response and sent simultaneously to cortex and body → evaluation of events by cortex

↓

emotion (e.g., fear)

Stress disorders (reactive disorders)

Post-traumatic stress disorder (a.k.a. reactive disorder) is the body's response to prolonged and negative exposure to a variety of stressors at a level that exceeds the individual's adaptive capacity - both physical and psychological. This type of disorder includes post-traumatic stress disorder (PTSD). It is a person's reaction to a situation described as a disaster. It can affect survivors of certain disasters, such as prisoners of war survivors of mass destruction, war veterans, victims of torture as well as victims of rape [22].

Post-traumatic stress disorder (PTSD) is characterized by the following symptoms [22, 26]:

- "A person suffering from PTSD relives the traumatizing event over and over again. She is haunted by intrusive thoughts or recurring night terrors related to it.
- A person suffering from PTSD persistently avoids stimuli related to the trauma, tries, for example, to avoid activities related to the event or to erase certain aspects of it from his memory. Situations that remind her of the traumatic event trigger anxiety.

- A person suffering from PTSD may constantly experience symptoms of agitation. These include chronic tension and irritability, often accompanied by insomnia, inability to tolerate noise and complaints like: "I can't relax."
- A person affected by PTSD may experience impaired ability to concentrate impaired memory.
- A person suffering from PTSD may experience depression. In some cases, this leads to social withdrawal and avoidance of experiences that may increase arousal, which typically manifests as avoidance of contact with other people, loss of interest in sex."

A different diagnosis than PTSD can be acute stress disorder. According to the DSM-V, the following criteria must be met in order to speak of the occurrence of acute stress, namely, the person experienced a dramatic situation or witnessed it, came into contact with death, immediate threat to life, serious mutilation, or experienced a threat to his own physical integrity and the physical integrity of third parties [23]; at the same time, his reaction was intense fear, a sense of helplessness and terror [24].

Three or more of the following dissociative symptoms occurred during or following a dramatic event [25, 26]:

- "A subjective sense of dullness, indifference or lack of emotional sensitivity.
- Reduced awareness of the environment (e.g., a state of dazedness), derealization and depersonalization.
- Dissociative amnesia (that is, the inability to recall any significant element of the traumatic event).
- A person continuously relives a dramatic event, betraying at least one of the following symptoms: recurring images of the event, thoughts, dreams, illusions and snapshots related to the event, a feeling of constantly reliving the event, a persistent sense of depression accompanying recurring memories.
- A person explicitly avoids stimuli reminiscent of the dramatic event (i.e., thoughts, feelings, conversations, activities, places and people).
- The person betrays clear symptoms of either anxiety or agitation (difficulty sleeping, irritability, impaired attention, hypervigilance, increased surprise reaction, hyperactivity).
- Post-traumatic disorder results in clinically significant impairment or impairment of the ability to interact socially, perform work, and function in other important areas of life; it may limit the ability to take necessary actions, such as asking for or obtaining support from family members.
- The disorder lasts no less than two days and no more than four weeks; it reveals itself within four weeks of the dramatic event.
- The disorder is not the result of direct physical effects of psychoactive substances (e.g., drugs or medications) or the result of a general medical condition, does not qualify as a short-term psychotic disorder, nor is it a mere exacerbation of a previous disorder, as defined by Axis I or Axis II."

The concept of occupational burnout

The issue of mental health disorders among health care workers poses a major threat to the entire system. It concerns both the quality of medical services provided and ensuring their efficiency and continuity [27]. This phenomenon has already been observed in the UK, where there has been a decline in interest in detailed medical specialties from 71.3% in 2011 to 37.7% in 2018, and an increase in the number of doctors who take a break from the profession from 4.6% to 14.6% [28]. It is estimated that more than a third of medical professionals suffer from psychological problems related to risk factors such as the type of work they do or job requirements [29].

Occupational burnout was first described by Freudenberger in 1974, when he was working at a center for drug addicts with a group of idealistic volunteers. He noticed a gradual progressive loss of motivation, strength and commitment of the volunteers to their charitable work and the occurrence of various psychosomatic symptoms. The psychological disorder he observed, resulting from the body's prolonged response to chronic occupational stress caused by interpersonal stressors, was first referred to by the term burnout [30, 31]. He characterized WZ as a state of physical and mental exhaustion associated with caregiving activities or professional work that requires frequent and intense contact with people. This work implies a high degree of emotional involvement in relationships between individuals, a high degree of responsibility for the results of one's own work, and an inability to draw a clear line between personal and professional life [32].

In turn, Maslach et al. on the basis of a study of social service, health care and education workers, described WZ as a triad of states that, in addition to overwhelming emotional exhaustion, include depersonalization and a reduced sense of personal achievement. The importance of the multidimensionality of the presented model of the disorder lies in the fact that it places the experience of stress in a socio-occupational context and is related to the understanding of oneself and others [33].

Emotional exhaustion is associated with feelings of excessive strain and depletion of one's physical and emotional resources. It manifests itself in an unwillingness to work, less interest in professional matters, a constant state of psychophysical tension, irritability and psychosomatic symptoms such as headaches, insomnia, chronic fatigue or gastrointestinal complaints. The process of burnout often begins with exhaustion due to excessive demands on energy and resources, which the individual no longer has at his disposal. It should be emphasized that the process usually begins with high motivation, "lighting up for something," hence it mainly affects people with high arousal and commitment to work. Subsequent components of the syndrome become its consequences.

Depersonalization involves an increase in mental distance from the other person and their problems, negative or inappropriate attitudes toward them, loss of idealism and withdrawal. It allows less involvement in interpersonal relationships. It is a consequence of emotional exhaustion or a way of coping with it by protecting the individual from

feelings of harm, loss and a sense of imbalance between the effort put into work and one's own actual achievements. This component of the syndrome is also called distanced concern, defensive dehumanization or cynicism in the literature.

Reduced sense of personal achievement manifests itself as a sense of lack of competence, loss of self-confidence, impression of incomprehension on the part of superiors, gradual loss of ability to solve problems that arise and inability to adapt to difficult professional conditions, actual decrease in productivity and achievement at work. It becomes an incentive to work more. However, over time, as a result of overwork, the person becomes less effective, makes more mistakes, which causes the conviction of lack of competence to be reinforced, and the person affected by GM falls into a vicious cycle. This dimension is a measure of professional effectiveness [34, 35].

The dynamism of burnout syndrome usually consists in the fact that under the influence of severe chronic stress in the individual, emotional exhaustion builds up under the influence of which the individual, in an attempt to protect himself from its effects, uses mechanisms that lead to cynicism of people who are a potential source of emotional burden. Due to the type of work involving interaction with other people, he receives feedback on his aloof attitude, which detracts from his sense of personal achievement, satisfaction with his work activities and ultimately reduces the effectiveness of its performance. Also, the syndrome does not always follow the pattern presented, but in the end all three described components of burnout occur.

Freudenberg details the following phases of the burnout process [36]:

- 1 constant proving of self-worth - a sense of compulsion.
- 2 Increase commitment to work.
- 3 neglect of individual needs.
- 4 Exhaustion.
- 5 negative reevaluation.
- 6 defense mechanisms - displacement.
- 7 withdrawal.
- 8 behavioral changes.
- 9 loss of self-identity.
- 10 a sense of inner emptiness.
- 11 exhaustion and depression.
- 12 burnout.

WZ should be distinguished from other sequelae of occupational stress and psychological constructs such as job dissatisfaction, physical fatigue, occupational stress, crisis and depression [37].

Job dissatisfaction is a temporary phenomenon that does not severely affect an individual's mental health. Only when the situation becomes chronic and arouses a sense of absolute impotence and lack of any proficiency is it a signal of incipient disorders, because a person with sufficient emotional resources under such conditions changes his place of work or profession in order to take care of himself and his well-being. Physical fatigue assumes the possibility of quick recovery after rest. However, if the constant state of emotional tension prevents mental distancing from problems, which would enable one to have a restful night's sleep or engage in some relaxing activity (e.g., going for a walk, meeting friends, etc.), then the individual is inevitably heading toward exhaustion, which is the main component of the disorder. Occupational stress that is stronger than an individual's psycho-physical resources allow is the cause of WZ, and this includes not only interpersonal relations, but also other factors of the work environment. A crisis in psychology is defined as a turning point in the life of an individual, associated with an important change in his life, which forces adaptation to it. Contrary to appearances, as long as the crisis that has occurred is resolved, it can provide opportunities to reach the next stage of emotional development, gain valuable life experiences, create tools to cope with difficult situations in the future (according to the principle "what doesn't kill us makes us stronger"). Hence, it can have an important positive meaning, in contrast to WZ, where, due to emotional exhaustion, it is difficult to find the emotional resources for self-reflection, which is the leaven for taking action to get out of a difficult situation. This is due to the fact that a crisis represents a "turning point," a "culmination point," where the individual mobilizes his or her often overstretched strength, while a PE is chronic in nature, which slowly and imperceptibly drains the individual of emotional resources. Depression, on the other hand, is a disorder that is more general and lacks the context of work and interpersonal relationships. Burnout and depression interpenetrate each other, but do not constitute the same condition [38].

According to the World Health Organization (WHO), WZ has been classified as an occupational syndrome that affects health, but not as a medical condition. In the ICD-11 classification, which went into effect on January 1, 2022, it was assigned the symbol QD85 [39].

In the literature, we find studies on WZ covering representatives of all professions with applications in health care [40-43]. Physicians are a particularly well-studied group. Rotenstein et al. conducted a systematic literature review of 182 studies published between 1991 and 2018, involving 109,628 individuals from 45 countries. Of these, 85.7% used the Maslach Burnout Inventory tool, on the basis of which they found that 67% of respondents were professionally burned out [44]. A recent survey on WZ conducted among Polish physicians also confirms these data [45]. Professional burnout can affect medics at all stages of their careers from the period of study [46], through specialty training [47], to many years of clinical work [48], and it mainly affects young people.

The negative impact of professional burnout on patients includes the risk of a reduction in the quality of medical care provided, the risk of patient safety during medical procedures, and the danger of medical errors. In turn,

the negative consequences of burnout directly on health care workers include depression, psychosomatic illnesses and suicidal tendencies [49-50].

Ways to deal with stress

The term "coping" officially appeared in the literature in 1967. Currently, stress coping processes as defined by Lazarus and Folkman include: "constantly changing, cognitive and behavioral efforts to master specific external demands that are judged by the person to either burden or exceed his or her resources." [5]. The term introduced was intended from the beginning to mark the difference between adaptive (positive) and maladaptive (negative) behavior in the face of stress - distinguished from defensive behavior because defensive behavior is rigid, coercive, reality-distorting and undifferentiated while coping is flexible, purposeful, reality-oriented and differentiated. The classification of coping strategies according to the stressful situation includes confrontational (active) and avoidant (passive) methods [4-8].

For active coping with stress, we can use all methods and techniques that, in the subjective, but also objective perception of the individual, will either level out or reduce the effects of the stressor. Such methods include various types of training (such as autogenic training), biofeedback, or occupational therapy:

Autogenic training is a trance method developed by the German psychiatrist Schultz is one of the most well-known methods of effective stress therapy. The name Schultz autogenic training is derived from the Greek word "autos" (alone) and "genome" (beginning). Autogenic training consists of six elements: a feeling of heaviness, a feeling of warmth, regulation of heart rate, regulation of breathing, a feeling of warmth in the abdomen, a feeling of coolness on the forehead [15]. In autogenic training, basically any position in which the body can relax is allowed. The person performing the exercise, while assuming the position, meditates and takes care of each of the mentioned elements (focuses on it) to minimize the negatively tormenting stress [18].

Biofeedback (biological feedback) is a method of therapy that involves giving the patient feedback signals about changes in the physiological state of his body, so that he can learn to consciously modify functions that are not normally controlled consciously, such as brain waves, electrical resistance of the skin, muscle tension, etc. It teaches control over one's own reactions, helps one to relax properly, and thus cope even under the most extreme conditions. Biofeedback is a device that gives, as the name suggests, biological feedback. This method is used, among others, in psychology, in medicine, but also in sports or business. Biofeedback devices give a person connected to sensors information about some physiological function of their body, such as heart rate, breathing, or blood pressure. Using the appropriate sensors, the device transmits the information obtained in audiovisual form. On the screen, it looks like a computer game, which, however, requires a certain amount of concentration and focus for the right effect [20].

Aromatherapy is a branch of natural medicine that uses essential oils contained in plants to restore harmony of body and spirit. This method of treatment was already known to ancient Greek, Roman and Arab physicians. Today it is used not only in medicine, but also in cosmetics and psychology. The relaxing effect of aromatherapy is due, among other things, to the fact that the sense of smell has a very strong connection with the subconscious and emotional reactions of a person. It is simply the positive use of scents. These scents can be activated in various ways, such as by putting fresh fragrant flowers in the room or lighting scented candles. They can also be natural fragrance oils, such as bergamot, jasmine, sandalwood and many other aromas that have a very soothing effect on the emotions and psyche of a person. When choosing the types of oils, we can be guided by both theoretical knowledge and personal feeling. In practice, the vast majority of natural fragrance oils have a beneficial effect on our psyche. Although it is additionally distinguished that some have a more calming effect (e.g. lavender, rose tree, juniper, mint, lemon balm, marjoram), and some have an antidepressant, or stimulating effect (rosemary, lemon, geranium, grapefruit, canna). A large number of oils have simultaneous calming, relaxing and antidepressant effects (e.g. bergamot, jasmine, lime, tangerine). Orange oil has the effect of restoring good mood and harmony. It also strengthens the heart and has a disinfectant effect. Pine oil has a refreshing effect and strengthens the nerves. In addition, it is antiseptic, meaning it kills germs and soothes inflammation. The vast majority of fragrance oils also show antiseptic properties and stimulate the immune system (e.g. pine, eucalyptus, cloves) [22].

Visualization techniques are nothing more than the role of our imagination in the healing process. Through our imagination, we can assimilate healthy beliefs. Imagination helps us to be more in control of our treatment and allows us to have our own personal input into the healing process and recovery. Our body responds to the signals that come from our imagination as if it were responding to real signals. The best example would be imagining something to eat or a lemon being cut. What did you feel when you read these words, didn't your salivary glands start working harder, or did you feel more saliva? If you did, this is an excellent example of how our imaginations can affect what happens in our body. It is through visualization (imagination) exercises that we can contribute to either maintaining health or regaining it during treatment [14]. An example of exercises using visualization are restorative exercises that bring peace and relaxation. This visualization is designed to bring us relaxation, relieving muscle tension created by stress. With these visualization exercises, we will be able to relax and save the needed strength for struggling. This type of visualization involves imagining a place where we feel comfortable and safe. A place where we rest. Our favorite place. It can be a forest, beach and sea, mountains, or a forest clearing or meadow. It should be our personal place. Let's imagine that we are in it. Let's look around, see what is happening there. Let's look at the surroundings, at what is next to us. Let's stay in that place as long as we feel like it, as long as we want to be there. We can move to that place of ours at any time of the day. All we have to do is close our eyes and be there. Listen to what is going on there, listen to the rhythm of the environment [17, 19].

The above, of course, does not exhaust the list of methods for dealing with stress. Other techniques commonly used include those used in occupational therapy workshops, such as art therapy, music therapy, bibliotherapy, naturotherapy, chromotherapy (color therapy) and others.

Summary

Stress plays an important role in our lives. We cannot remove it completely, as it is an important motivator in action. Nevertheless, its intensity and negative aspect carry the risk of contracting diseases of a psychosomatic nature, that is, affecting not only the psyche, but the entire life functioning of a person. Therefore, it seems important to implement methods and techniques for coping with stress in daily life.

References:

1. Biela, A. (ed.) (1990). Stress in professional work. Lublin: Wydawnictwo KUL.
2. Carson R.C., Butcher J.N., Mineka S. (2005). Psychology of disorders, volume I, Gdansk: GWP.
3. Claus Derra. (2005). Autogenic training for everyone, Warsaw: Wyd. Amber.
4. Dudek, B. (2004). Protection of workers' health against the effects of occupational stress., Łódź: Prof. J. Nofer Institute of Occupational Medicine.
5. Heszen-Niejodek, I. (1996), Style of coping with stress as an individual variable affecting functioning in stressful situations. [In:] J. Strelau (ed.). Personality and extreme stress.
6. Warsaw: GWP. Heszen-Niejodek, I., Ratajczak, Z. (eds.) (1996). Man in a situation of stress. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
7. Jones, Hilary. (1998). I don't have time for stress. Warsaw: Amber Publishing House.
8. Kuczynska, A., Janda-Debek, B. (2002). Subjective interpretation of situations and styles of coping with stress. [In:] Heszen-Niejodek, I. Contexts of psychological stress.
9. Little Encyclopedia of Medicine (1998) volume III Państwowe Wydawnictwo Naukowe Warszawa, ed.
10. Makowska H., Poprawa R. (1996) Coping with stress in the process of building health. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
11. Mietzel, G. (1999). Introduction to psychology. Gdańsk: Gdańsk Psychological Publishing House.
12. Norman Shealy C. (1996). You can heal yourself, Biblioteka Zdrowego Człowiaka, Warsaw: Comes Publishing Agency.
13. Oleś P. (1996) From the problems of crisis intervention and coping with stress. Lublin: RW KUL.
14. Onishchenko V. (1998). Stress - it sounds dangerous, Warsaw: Wydawnictwo Akademickie Żak.
15. Pecyna S. M. B. (1998) Clinical psychology in pedagogical practice. Warsaw: Wydawnictwo Akademickie "Żak".
16. Popularny Słownik Języka Polskiego PWN, (2001) (opr.) E. Sobol, Warsaw: PWN.
17. Ratajczak Z. (2000). Stres-radzenie sobie-koszty psychiczne, in Man in the situation of stress (ed. I. Heszen-Niejodek and Z. Ratajczak), Katowice: Wydawnictwo UŚ.
18. Reinhold, Bailey. (1998). Toxic work. Poznan: Dom Wydawniczy "Rebis".
19. Sęk, H. (2001). Health- stress- resources. Poznan: Humaniora Foundation Publishers.
20. Psychological Dictionary, (1985) (ed.) W. Szewczuk, Warsaw: WP.
21. Smyk K.K. (2008) Neurofeedback therapy, Lublin.
22. Strelau, J., Jaworowska, A., Wrześniewski, K., Szczepaniak, P. (2005), Styles of coping in stressful situations, Warsaw: Pracownia Testów Psychologicznych Polski Towarzystwa Psychologicznego.
23. Strelau J. (2003). Psychology, Academic Handbook, Individual in Society and Elements of Applied Psychology - Volume III, Gdańsk: GWP.
24. Terelak, J. (2001). Psychology of stress. Bydgoszcz: Oficyna Wydawnicza Branta.
25. Wojciszke, B. (2004). Man among men. An outline of social psychology. Warsaw: Wydawnictwo Naukowe "Scholar".
26. Zimbardo, P. G., Ruch, F. L. (1998). Psychology and life. Warsaw: Wydawnictwo Naukowe PWN.
27. DSM-V: <https://web.archive.org/web/20140824150802/http://www.psych.org/File%20Library/Practice/DSM/DSM-5/DSM-5-TOC.pdf> (accessed November 29, 2022).
28. Domaradzka, M., Jachimowicz-Gawel D., Chemical addictions (alcohol, nicotine, psychoactive substances) in opinions and experiences of junior high school youth of Chelmno county. Probl. Hig. Epidemiol., 2014, 95(2), 412-418.
29. Synowska, N., Problem of addiction among children and youth, State Sanitary Inspectorate, Krakow.
30. Karim, R., Chaudhri, P., Behavioral addictions: an overview. J Psychoactive Drugs. 2012, 44(1), 5-17.
31. Alavi, S.A., Masoud, F., Fershte, J., et al, Behavioral addiction versus substance addiction: Correspondence of psychiatric and psychological views. Int. J. Prev. Med., 2012, 3(4), 290-294.
32. Jarczyńska, J. (ed) Behavioral addictions and problem behaviors in youth. Kazimierz Wielki University Publishing House, Bydgoszcz, 2014.
33. Lelonek-Kuleta, B., Behavioral addictions against the background of contemporary knowledge on addiction. Social Studies, 2015, 12 (1), 97-103.

33. Goodman, A., Addiction: definition and implications. *Br. J. Addict.*, 1990, 85, 1403-1408. Lelonek-Kuleta B. (2012), For: Addiction to activities - defining the concept, specificity of the problem and directions of diagnosis. "Information Service NARKOMANIA," National Bureau for Drug Prevention, 1 (57), pp. 13-18.
34. Griffiths, M., Does Internet and computer "addiction" exist? Some case study evidence. *Cyberpsychol Behav Soc Netw*, 2000, 3(2), 211-218, For: Addiction to activities - defining the concept, specificity of the problem and directions of diagnosis. "Information Service NARKOMANIA," National Bureau for Drug Prevention, 1 (57), pp. 13-18.
35. Koryczan, P., Sęktas, M., Dybczak, L., Malicka, K., Addiction to shopping - a review of research [in] *Research and Development of Young Scientists in Poland - Humanities and Social Sciences. IV*, (ed.) Nyćkowiak, J., Leśny J., Młodzi Naukowcy Publishing House, Poznań, 2017, 79-84.
36. <https://icd.who.int/browse11/l-m/en> (27.07.2022)
37. Thege, B.K., Hodgins, D.C., Wild, T.C., Co-occurring substance-related and behavioral addiction problems: A person-centered, lay epidemiology approach. *J Behav Addict.* 2016, 5(4), 614-622.
38. Freimuth, M., Waddell, M.M.A., Stannard, J.M.A. et al, Expanding the scope of dual diagnosis and co-addictions: Behavioral addictions. *J. Groups Addict Recover*, 2008, 3 (3-4), 137-160.
39. Görgülü, Y., Çakir, D, Sönmez, M.B, et al., Alcohol and psychoactive substance use among university students in Edirne and related parameters. *Noro Psikiyatrs Ars.*, 2016, 53(2), 63-168.
40. Ewald, D.R., Strack, R.W., Orsini, M.M., Rethinking Addiction. *Global Pediatric Health. Global Pediatric Health*, 2019, 6(1), 1-16.
41. Juruć, A., Wierusz-Wysocka, B, Bogdanski, P., Psychological aspects of eating and excessive body weight. *Contemporary Pharmacy*, 2011, 4, 119-126.
42. Lal, R., Singh, S., Assessment tools for screening and clinical evaluation of psychosocial aspects in addictive disorders. *Indian J Psychiatry*, 2018, 60, 444-450.
43. Kopsztein, M., Family and its problems. *Zeszyty Naukowe Wyższa Szkoły Humanitas. Pedagogia*, 2015, 10, 23-49.
44. Lelonek-Kuleta, B., Bartczuk, R.P., Wiechetek, M., et al., The prevalence of e-gambling and of problem e-gambling in Poland. *Int. J Environ Res Public Health.* 2020, 17(2), 404.
45. Szpringer, M., Czerwiak, G., Czerwiak, A., Addictions of the elderly. *Polish Nursing*, 2013, 4(50), 324-328.
46. Widomski, M., Betting on sports marketing and the threat of addiction, *Widening Horizons, XXI Part I*, 761-770.
47. Tavalacci, M.P., Ladner, J., Grigioni, S., et al, Prevalence and association of perceived stress, substance use and behavioral addictions: a cross-sectional study among university students in France, 2009-2011. *BMC Public Health.* 2013, 13, 724.
48. Chen, G., Gueta, K., Child abuse, drug addiction and mental health problems of incarcerated women in Israel. *Int. J. Law Psychiatry*, 2015, 39, 36-45.
49. Pisarska, A., Bobrowski, K., Borucka, A., et al., Psychoactive substance use and aggression and violence among middle school students from the perspective of quantitative and qualitative research. *Alcoholism and Drug Addiction*, 2012, 25(4), 357-382.
50. Wieczorek, Ł., Dąbrowska, K., Gambling disorders - prevalence, treatment offer, treatment availability and predictors of treatment initiation. A review of the literature. *Alcoholism and Drug Addiction*, 2015, 28(1), 37-54.