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PERSONAL RESOURCES IN COPING WITH STRESS AMONG PARAMEDICS PART 1

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Summary:

The concept of personal resources is used in health psychology in reference to all the factors that help in coping with stress. Moos and Schafer define personal resource as: 'relatively stable personal and social factors, which influence the way the individual tries to tackle life crises and stress transactions'. Many researchers count the following as important personal resources: social support, ways of coping with stress, self-esteem and self-efficacy, sense of coherence, level of optimism, ability to act assertively, locus of control. Paramedics can be associated with jobs requiring above-average level of both health and psychological costs. Thus, determination of the relation between the sense of coherence and ways of coping with stress will be the subject of this project.

Keywords:

personal resources, sense of coherence, paramedics, coping with stress

INTRODUCTION

The basis for the proper functioning of a human being in the surrounding world is to maintain good health. Life, work conditions and development of broadly understood civilization raises newer and newer opportunities, but it also causes negative consequences related primarily to the psycho-social sphere. Every day we are exposed to stress. Sometimes we cope with it well, sometimes not so well. Sometimes it causes a loss of sense of security and control over our lives. The feeling of powerlessness and pointlessness deprives us of optimism. The word evokes many emotions, and for the one who utters them, they have a unique importance. They remind us of the unpleasant events, which we would like to forget. However, they cannot be avoided. Stress

plays an important role in many areas of life. It is natural and sometimes necessary, and not just harmful. Multidimensionality of stress and its sources act diversely on the psychophysical life by reducing the efficiency. The dominant activity in the life of each of us is a professional one. The specificity of work, the dynamics of the environment, interpersonal relations determined by personality and situational factors are often a source of stress. More and more often professional activity is a source of stress and, consequently it causes physical and mental ailments.

There are many social professions linked intrinsically to a constant exposure to stress. Working in the emergency services at the Medical Rescue Teams Ambulance service, or being one of the organizational units in the healthcare system is regarded to be one of them. Its main task is the provision of medical services by providing assistance within the State Emergency Medical System. Employees of Emergency Medical Service are doctors, nurses of the system and paramedics. Their work is inevitably associated with exposing themselves to severe stressors. These stressors often appear during traumatic events related to helping and saving people - gruesome views, extensive mutilations, death and suffering children.

The choice of profession is one of the most important decisions in human life. It may be pure calculation or a fulfilled dream because one does what they desired. Working in this profession requires the appropriate qualifications and experience. It is also a calling - 'service' for other people, therefore one needs to show empathy. This is a prerequisite to be able to become a professional. The profession of a paramedic is quite a new one, in Poland it emerged in the 1990's, hence it not always enjoys prestige and respect it deserves. The rescue operation is teamwork where discipline and the ability to cooperate are required. The rescuer must have self-reliance, self-discipline, represent prompt decision making, and ability to manage emotions. The members of the team have the responsibility for the life and safety of other people. This can accumulate resentment and tensions that are damaging for the professional and personal life. In order for the rescuer to be able to work efficiently, they should be properly trained in the response to stress, get to know their own emotions, benefit from social support and know the methods of relaxation.

1. DEFINING STRESS IN SCIENTIFIC CONCEPTS

In terms of psychology stress means 'the state of overloading psychological regulation system occurring in an emergency situation, while facing difficulties or inability to achieve goals, objectives and values important for an individual' [10]. Today the issue of stress combines many disciplines: medicine, psychology, and sociology. Historical studies of stress-related works in the field of biology (physiology and endocrinology) and psychosocial research. There is no doubt that the foundations of the development of this phenomenon owe much to a French experimenter from the mid-nineteenth century, physiologist named Walter Bradford Cannon. It was him, who introduced the concept of the inner world balance (regardless of the external environment), the so-called homeostasis which is the answer to all external changes [8]. Any perturbations meet the body's reaction aiming at maintaining integrity of the living conditions in the external environment. He called the phenomenon of stress 'the state of emergency',

which was a reaction to a threat. The function of this condition was to create conditions for the body to be able to survive and to have adaptability characteristics [13]. This physiologist discovered that the result of identifying the risk was an intensified secretion of adrenaline (epinephrine primarily) at the same time stimulating the sympathetic nervous system (stimulant). As a result of these operations, the organism responded with an accelerated heart rate, acceleration of breathing and increased skeletal muscle tone, while reducing the blood supply to the visceral organs and skin. In this state, an organism could more easily fight the danger or flee. Cannon made a conclusion that the function of stress was to create conditions for the survival of the organism. These conclusions shed new light on the issues of stress on a physiological level and the way to deal with it [6]. It is amazing that nowadays these simple ideas were considered revolutionary in the history of medical ideas.

In medical science the pioneer of the research on stress phenomenon was a Canadian psychologist Hans Selye. It was him, who described the non-specific response of the body to harmful stimuli called stressors in the form of 'General Adaptive Syndrome', GAS [27] (also called *General Adaptation Syndrome*, GAS)[26]. He called this reaction a stress response, causing non-specific biological and endocrine changes. Three stages of the GAS syndrome were distinguished:

- the stage of alarm reaction mobilizing the defense forces;
- the stage of resistance full adaptation to stresor;
- the stage of exhaustion exhaustion of energy to adapt to the stresor.

A bit later, Salye extended the concept of his theory and introduced the concept of distress - stress of a negative meaning, and the concept of eustress - stress of a positive meaning for an individual. An incorrect process of the adaptation syndrome causes many diseases. The damage caused by stress has cumulative properties in a given timeframe, and its actions are involved in different pathologies. The above anomaly occurs when the body has exhausted all possibilities to cope with the problem.

The biological stress concept put forward by Salye was accused of insufficient consideration of psychological factors. For the course of this kind of stress what matters is the importance of the psychological assessment of its causes.

The issue of psychological stress aroused a lot of interest during World War II while observing the failures of combat operations due to psychological and physiological nature experienced by American soldiers. These were disorders which were close and remote in time. R. Gringer and J. Spigel, in their research 'Men under stress' from 1945 pointed out that some aspects of the fight were the cause for the occurrence of disturbances in mental and physiological functions, but they did not cause physical damage among soldiers [30]. In defining the concept of stress, the authors concluded that factors such as: threat to life and health, lack of sleep and food, isolation from family and dependence on professional superiors had an impact on a soldier performing combat missions [12].

The period of the fifties and sixties is the second stream of research on stress. At that time the impact of stress conditions on the level of performing different tasks was be-

ing determined. This research was carried out in a linear approach, stimulus-response, trying to explain the impact of stress on the functioning of the human body in normal conditions. However, individual (INTRA-INDIVIDUAL) differences of an examined person have been omitted. Thus, defining psychological stress was still difficult. What was not taken into account was the fact that individual differences between people cause that the same event for one person can be stressful and for the other one it is not [31].

Before the definition of stress was widespread, Polish psychological literature recognized this phenomenon as 'a difficult situation' [3]. One of the first Polish researchers who faced this problem was Tadeusz Tomaszewski. He characterized a difficult situation as the one in which the balance between basic elements has been disturbed: tasks, activity, conditions and characteristics of the object. These elements are located both, within a man and the environment. However, he paid attention to the importance of individual characteristics of each person, i.e. for one person the given situation may be normal, while the other sees it as a difficult, which causes the imbalance between these elements [26].

The author of the first concept of stress was Janusz Reykowski. In his publication "Funkcjonowanie osobowości w warunkach stresu psychologicznego" he referred to the basic features of the theses of Tadeusz Tomaszewski's theory. The starting point is the overall concept of a man as a person involved in a targeted purposeful activity, paying attention to the role of noticing the stressors that have a huge impact on his or her actual behavior.

After a thirty-year break in the conceptualization of stress, a Polish psychologist Jan Strelau took an attempt to detail this definition. According to him, stress is 'a condition that is characterized by strong negative emotions, such as fear, anxiety, anger, hostility and also other conditions that cause emotional distress and physiological as well as biochemical changes coupled with them, clearly exceeding the basal level of activation' [15]. Such a view of the definition of stress is the relational approach describing it as the result of interaction between the requirements and real possibilities as well as those perceived ones.

The role of cognitive assessment in defining the phenomenon of stress caused the problem for the subject researchers. Strelau, in this regard, took a consistent and clear position. He distinguished between objective and subjective requirements and opportunities, which were the result of the participation of cognitive assessment of the stress effect. Universal factors considered stressors influence regardless of individual perception, as well as requirements resulting from diversified individual assessment are a source of stress [3].

According to Reykowski, the first definitions of psychological stress considered binary meaning of the phenomenon, namely components of external factors and internal processes. The difference between the researchers was based on the factors, which they accepted as stress. Today's view on the issue is expressed by the fact that one needs to consider two meanings and also depends on the perception of the situation by the person [29]. Modern psychology recognizes the view of stress pointing to the

location, not in the environment or in the individual, but in the relationship between them (transactions and interactions). Thus, it determines the imbalances in the relationship or announces these disturbances between the resources or capabilities on one side, and the expectations on the other [10].

The authority in the field of research on psychological stress is Richard Lazarus. His first studies were in the form of laboratory experiments. He repeatedly developed, specified and partially changed his concept of stress and the way to cope with it. He tried to reformulate 'stress' in the term 'emotions', to which he gave a broader and more general meaning. However, this idea did not gain much approval and had no effect on research in the field of stress [21].

In his deliberations, Lazarus pays particular attention to the importance of interactions between an individual and the environment. He introduced the term 'transaction', stressing that an individual in the situational context forms an inseparable whole with the components. Transaction with the environment is a continuous process. It involves assessing all the elements of the relationship with the environment, important for a sense of well-being of the individual. This relationship can be evaluated in many ways: as insignificant, favourably-positive or stressful [2].

Richard Lazarus and Suzan Folkman together defined a new meaning of stress as: a specific relationship between the person and the environment, which is assessed by the person as an aggravating or exceeding its resources and threatening their well-being' [23]. Resolving the issue of whether the relationship is a stressor is subjectively assessed by the individual. However, it must be also acknowledged that even a factor that can be objectively dangerous to humans and by determining their fate will not cause stress, could have been inaccurately assessed [29]. Stress transaction was recognized by Lazarus in two assessments:

- a) evaluation of the original scheme:
 - harm/loss loss of valuable objects, such as: self-assessment, social assessment or a close person. Characteristic emotions are: anger, grief, sadness;
 - threat can relate to damage that may occur. Released emotions are accompanied by: fear, anxiety, worry;
 - challenge mayrelate to possible damage, losses or benefits. In this case the emotional image is complex, as next to the negative emotions there may also appear positive ones - cheer, enthusiasm, hope;
- b) secondary evaluation: occurs when the original assessment is considered to be stressful. In thissituation, an action shall be taken to remove stress or to mitigate its effects in order to achieve the available benefits. This assessment applies to the sources of stress and one's own resources [20].

Both evaluations function in a close-coupled manner. It all depends on the possibility of one's own actions [28]. If the initial assessment is optimistic, then the stressful situation changes from 'threat' to 'challenge', while the pessimistic attitude is the opposite course of action [16]. According to Lazarus, the concept of secondary assessment is the

starting point of activity, which will be targeted at changing the stressful transaction, specifying the way of coping with stress.

The above concepts of stress related to the overall assumptions of a human being and his functioning. StevanHobfoll used a different rule in his research. He stated that the overall goal of human activity is to obtain, maintain and protect the cherished objects which he described as resources. According to him, there are four types of resources:

- items such as housing, car;
- good conditions, that is stable job, satisfaction with marriage;
- personal resources in the form of interpersonal skills, self-efficacy;
- energyresourcessuch as knowledge or money [34].

In this way, using the model of resources preservation, he defined his own theories of psychological stress as 'a reaction to the environment in which there is (a) the risk of losing net resources, (b) loss of net resources, (c) no increase in resources after investing them [33]. According to Hobfoll, the most acute source of stress is a threatening or occurring disturbance in exchanging resources balance, which takes place between the individual and the environment [17]. Lazarus believed that in order to understand and explain the course of psychological process of coping strategy, he assessed the relationship of the individual with the environment as the most important issue. Hobfoll, however, put more emphasis on the notion of resources and their depletion. He argued that it is helpful when the object of interest are negative effects of stress and coping with it based on physical illness, as a result of organism's resistance resources depletion, or the costs of coping with stress in the form of damage to resources. The tool used by Hobfoll to measure the resources usage was a five-point Likert-type scale. It includes the list of 74 resources and can be used as a stress factors load measure. Those who are tested use a five-point scale evaluating the validity of the mentioned resources, and then they fill out four times a list describing profits and losses they have experienced in the resources - during the recent weeks and the past year. This is socalled COR assessment (the Conservation of Resources Evaluation, COR-Evaluation) which is a valuable measuring instrument that meets all the adopted criteria for the accuracy and reliability [10].

It is worth to mention a few other examples of scientists studying the phenomenon of stress and ways of defining it. In 1972 Charles N. Cofer and Mortimer H. Applley thought that the course of processes that are caused by adverse factors, which are insufficient to satisfy the motives of the body, has a gradual character [6]. The condition for going through subsequent stages is the ineffectiveness in coping with difficulties at every stage. First, reflexive-habitual actions are activated. At a time when they bring no positive results an individual enters into a state of agitation. At this stage, one implements such operations which are non-routine ones, aimed at solving the problem. If the obtained results are not positive, the next stage is introduced –frustration. The transition to the next stage - stress, is the result of no effective response to the previous level. At this stage defense forms are used. The ineffectiveness of these forms leads to the last level which is exhaustion [23].

Such adopted approach was the reason for defining stress as a 'state of the body in which the body perceives that its well-being (or integrity) is at risk and that it must direct all its efforts on self-defence' [3]. I would add that these researchers made an attempt to distinguish biological stress from psychological one. They noted that the latter is more complex, because there are more processes involved, which are associated with cognitive development of various forms of the situation. Therefore, the conclusion is that biological stress is often caused by a single damaging factor.

The described gradual model of stress process has not found many supporters among scientists. Most researchers moved towards the claim to recognize stress as a direct response to the difficulties. In addition, I would like to cite the last example of an attempt to define stress, which was made by John w. Hinton and Richard F. Burton in 1997. They defined this concept as a mental state. Its content is to make an individual aware of the inability to cope with the situation and of the internal and subjective nature of the issue. The consequences of this state of affairs are emotional and physiological reactions, weakening of motivational processes in the form of denial [17].

Stress is defined in many ways. In the literature we can find many divergent ways of conceiving the process. Some treat it is as an emotional response, for others it is a mental state and some recognize it as a subject - environment relation. No matter what kinds of factors cause it, it is always the same process. However, one should take for granted that the impact of stress on health must be considered with regard to the process of coping with it. There is no doubt that our health and mental condition depend on: the nature of the stressful events, their validity, duration of engagement and gathering strength using a variety of coping strategies.

1.1. Mechanisms of stress formation

The variety of factors and mechanisms of stress is enormous. It depends on psychologists' concept of explaining the genesis of stress. The various theories differ significantly in meaning attributed to the factors that contribute to the formation of stress. Let me cite a few examples. The most important and characteristic criterion results from psychological division point of view.

In his theory, Władysław Łosiak included four ways of stress process formation which concern the way the environment impacts a body:

- biological some situations are harmful to a person, instinctively in a way, even if just because of biological significance, for example constraints or a view of an aggressive animal;
- conditional mastering the process of individual experience on the way of associations with certain factors that cause stress;
- frustration causing some events are too difficult and block our action, the situation is unfavourable for the person;
- cognitive occurs when a person makes a complex evaluation and interprets events as the unfavourable ones, for example bereavement [2].

Selye, who I mentioned earlier, described the reasons in the context of life events, inspired by Cannon's study, and especially by his idea of homeostasis. The answer to stress is body's physiological reaction, which, if not stopped, leads to a disease. The opposite of homeostasis is allostasis, that is a process of achieving stability, both in the physical and mental sphere, by making a change (e.g. releasing cortisol is body's reaction to restore the disturbed balance in the organism) [21].

Another example of the division of stress factors is the scale of life events developed by Holmes and Rahe, based on Meyer's idea. It concernedvarious events in a person's life: less important ones, serious and traumatic. Especially those events which, according to the researchers, constitute an adaptive burden, cause the development of various diseases. The list consisted of 43 events, more or less serious. These events were assigned appropriate values, which were the measure of adaptation efforts. The average weight was divided by 10, being the measure of adaptation efforts. They were expressed in the so-called 'life changing units' [20]. The scale has gained immense popularity. It was used to study factors that have contributed to the formation of somatic diseases. Later on, similar scales were formed, which were based on this one.

In the works of Strelau we find a division basing on strength and the scope of impacts on an individual or many individuals [9]. It is the basis for distinction:

- dramatic events, which take the size of disasters and cover the entire groups (war, natural disasters), they are defined as extreme or traumatic stress;
- serious challenges related to single individuals or more people;
- daily minor problems [34].

In his analysis of traumatic events, in addition to impact forces, Strelau also took into account the degree of interaction: they touch the fundamental human values (e.g. life or shelter), the demands which have been made are high and it is impossible to meet them, they appear suddenly, leaving a huge mark in such a way that when they reoccur, they are associated with the given event [23]. Another dimension to distinguish the stressor, in the opinion of the same author, is the dimension of time:

- disposable, e.g. an unpleasant encounter;
- cyclic or periodic repeated with some regularity, for example, disliked family visits;
- chronic, permanent, e.g. the marriage, which is a seedbed of constant arguments and tensions;
- sequential the initiating stressor causes a chain of events; the example here could be the work by a single mother - difficulties in providing care for children - frequent sick leaves due to sickness of children [30].

This multidimensional nature of stress and its sources adversely affect the psychological and physiological processes of a human, reducing the efficiency. However, one cannot overlook the dominant activity in the life of every human being which is the professional activity.

The specificity of work, motivational systems and actions aimed at increasing work efficiency, dynamics of environment and various interpersonal relationships that are conditioned by personality or situational factors are frequently the source of stress [2]. Adapting to rapidly changing environmental conditions at work entails the need to meet new challenges. It involves a lot of pressure from the employers' side to increase one's efficiency, necessity of continuous learning, being subject to monitoring and evaluation, etc. Such behavior is often accompanied by deterioration in the working environment, loss of sense of security, growing an emotional burden. Then, a negative chain of events starts, which can lead to pathological phenomena [18]. More and more often economic activity is a source of stress - the cause of mental and physical ailments.

Currently, the jobs of a police officer, a miner, a pilot, a surgeon, an air traffic controller are considered the most stressful occupations [4]. Stressors that can affect work may be of physical origin. These are excessive physical effort, excessive noise, temperature, vibration, lack of visibility, toxic pollution and climatic conditions. These stressors are important, for instance, among firefighters, rescue workers and soldiers. To other group belong the stressors associated with professional development due to: limited possibilities of carrier development, continuous job changing, overstated or understated eligibility requirements, or being at risk of losing one's job. Another group constitutes of the stressors caused by working conditions: time deficit or monotony, working shifts, performing many activities simultaneously. The organization of work may also trigger stress factor in the form of excess duties and responsibilities, initiative and independence limitations, low wages, or because of disturbed personal relations [24].

There appears the conclusion that a low level of job satisfaction positively correlates with the decrease in job capacity, well-being, as well as the general health condition. What should be added here is an important property of a stressor which is controllability. This concept allows one to understand the extent to which the course and consequences of the stressors depend on deliberate actions of the people involved. On the one hand, we experience stressful uncontrolled events (independent of us, for example a serious illness or death of a loved one), on the other hand, there appear controlled events, which can be prevented, e.g. by taking appropriate measures to prevent adverse effects. Stressor controllability is essential for the course and activity result of a stressful situation [19]. This activity is focused on regaining the balance between requirements and possibilities in order to improve emotional state. Such behaviour is referred to as 'coping with stress'.

2. COPING WITH STRESS

In human experience stressors are ubiquitous. Most people are not subjected to a strong feeling of stress and cope with it quite well. In other situations stress leads to debilitating disease. It takes the form of mobilizing the body to fight, adapt, master the requirements posed by the reality, which give a chance for growth and profit [8]. This behavior protects us from destructive effects of stress while increasing resilience and personal development. This is a complex and dynamic activity taken by an individual when in danger. If it is spread out in time, then the actions that are directed to the original situation change it, and these changes affect the structure and course of re-

medial action [4]. It shows that the relationship between stressors and coping is interactive. The mode of action and decisions taken are constantly changing as the situation itself and its assessment is changing, so the methods of coping must also be changed.

Dealing as a process has basic functions: [2]

- instrumental task-focused on the problem of improving relations, mastering the stressor, removing or mitigating its effects;
- emotional self-regulation of emotions, which basically means to reduce emotional stress.

The effectiveness of coping with stress also depends on many factors: the type of a stressful situation, the characteristics of the individual, the nervous system, and the time frame [9]. To be able to cope with the threat of the stressor, one should take appropriate strategy. As I mentioned previously, Lazarus singled out two strategies consisting of taking direct actions aiming at solving the problem and regulating the emotions [19].

Solving the problem - affects the objective situation in the form of an active coping with stress by removing or weakening the stressor or searching for creative solutions, planning remediation methods or preparation of the action plan, focusing only on the stressor and removing the problem, while anticipating better conditions for action. Also, of no small importance is seeking social support [31].

Focusing on emotions - it is a strategy of controlling the effects of stress. It may take the form of distancing oneself by diminishing the value, adaptation of a disadvantaged situation and reconciliation with it, positive reassessment of the problem and reevaluation, scheduled termination, seeking spiritual support, avoiding or escape from drug or food abuse. It is also taking other measures to advert attention away from the stressor, the denial by failing to recognize the reality of the situation, denial, erasing the problem from the field of mental experiences from memory, offsetting stress with positive experiences, taking responsibility [21].

Lazarus believes that individuals focused on strategies related to the solution of the problem put the main emphasis on solving the problem, transforming or changing the situation. While those focused on emotional strategies put efforts to overcome the emotional tension that can hinder contacts with other people and break the mental toughness.

A good strategy choice is an effective fight against the stressor and also the impact on the physiological reactions, which translates on our health. Only the choice of several methods gives a positive result, because by facing the situation it proves if one should focus on the task or the emotions. Such a flexible approach gives a positive result as one experiences less negative emotions and better adapts to difficult situations [17].

One more strategy is an addition to the aforementioned. It involves the escape or avoidance, possibly taking another task. This way of coping with stress avoids thinking, experiencing and going through unpleasant situations, even engaging in substitute activities or social contacts. In such a way one escapes from fear, their own helpless-

ness while lacking self-acceptance, at the same time the sense of the effectiveness of one's own actions is reduced. A person applying such a strategy faces unsolved problems that he or she escapes from, thrashing in negative emotions [9].

There is one more model of coping with stress strategy worth to be presented, which was created by Kazimierz Wrześniewski. He assumes that the kind of strategy depends on an equal level on personality constraints: optimism, the level of self-esteem, the extent of achievements and timidity, age, sex, education and psychophysical evaluation [33].

To sum up the problem of coping with stress, let me refer to the opinion of a famous psychologist John Strelau, who states that 'the cognitive assessment of an event as stressful is considered as a condition for recognizing whether stress has actually occurred' [11]. This assessment also determines the course of activity, which should aim to cope. It takes two functions: the form of improving relations between requirements and the capabilities, as well as emotions control [8]. There are also relationships going beyond the control of the individual, and then they become the source of chronic stress and in this way contribute to the disease [14].

It is impossible to talk about coping with stress without mentioning the factors that affect the way a man copes with it. A term that refers to this action is 'resources' or 'personal resources'. Unfortunately, source literature does not provide a precise definition. It is believed that these are biological factors, psychological and social ones. Acquiring, maintaining and protecting environmental resources are the overall goals of human activity, these are: tangible objects, various conditions, personal resources and energy sources (health, fitness, strength, knowledge, instrumental - devices, money, etc.). One cannot forget to mention social support, which is of a great importance in dealing with stress. It has four basic functions: emotional, instrumental, informational and evaluative (acceptance, understanding, encouragement, etc.)[14]. Of course, there are still a lot of resources, which define them more precisely, but in my opinion these are one of the most important and frequently described by the authors.

2.1. A sense of coherence in coping with stress

An important aspect of thinking about health in a holistic aspect is the salutogenic perspective. It involves leaving the pathogenic orientation to the pro-health one, the purpose of which is to maintain health, not focusing on the disease and its treatment process [8]. Salutogenesis also refers to the theory of stress and coping by Lazarus and Folkman, with a focus on coping. According to this concept, the health condition is determined not only by pervasive stressors, but primarily by the way of dealing with them. The factors differentiating people in the context of health are the mechanisms for coping with stressors and the tension they cause [23].

In the seventies of the last century a professor of medical sociology Aaron Antonovsky, distinguished two groups of patterns while conducting the research among Israeli women who were prisoners of concentration camps. One group could not regain the will to live, it was pessimistic and bitter, and the mortality rate was higher than in the second group. The second group of women represented optimism and serenity and led

a happy life after the war. Antonovsky drew attention to the fact that these women, experiencing the same physical and mental suffering, after obtaining freedom were characterized by a different approach to life. Therefore, he rightly noticed that this fact must arise not from internal but external conditions. The author's observation was so striking that he took a new direction of research, calling it a salutogenic model [1].

Salutogenesis focuses on finding resources and factors, which maintain and support health condition, as well as lead to the formation of a strong sense of coherence without which one cannot cope with tension. The author under these terms shall mean [7]: the ego, money, social support, cultural position, satisfaction, self-realization. These factors effectively allow one to face all sorts of stressors. A common feature of all generalized resistance resources is to facilitate the understanding of the meaning of these stressors. The repetition of these experiences leads eventually to a deep sense of coherence [24]. Thus, coherence has been defined as 'general orientation, which expresses the extent to which a man has poignant, lasting but dynamic conviction about the predictability of internal and external environment, and probability that things will be as successful as one can expect on a reasonable basis'. Salutogenic orientation inclines to think in categories of factors that contribute to moving the continuum towards health. A man is healthier not only because of a low level of risk factor, but because of being opposed to concentrate on the stressors and by drawing attention to the mechanisms of dealing with them [34].

Pathogenic approach encourages researchers to focus on a specific, diagnosed disease and its prevention. In fact, it leads to intensifying the fight against the disease, and this mode of operation creates the illusion of health. The supporters of salutogenesis are focused on active adaptation to the environment, where the presence of stressors is inevitable. This method forces one to look for useful ways to affect the physical environment, social system, the body, etc. [34] It is known that human life is limited and human body is slowly affected by the inevitable aging process. The idea is that with proper procedures and ensuring appropriate social measures, a person can enjoy life to the fullest until his or her death [30].

The main objective of a salutogenic orientation is a thesis, which says that all living organisms have inalienable characteristics such as: heterostasis, aging and increasing entropy. Therefore, the assumption must be [30]:

- reject the distinction between healthy and sick people, paying attention to multidimensional continuum health – disease;
- learn about the history of human life, thus disease; this protects one from exclusive concentration solely on the etiology of the disease;
- focus on resources that enable one to cope with stress;
- stressor is not always a pathogen, it can also promote health; however, it depends on its nature and the effectiveness of reducing tension;
- not to rely on fate, but to look for sources of negative entropy, which promotes adaptation to environmental conditions.

Antonovsky, finding confirmation in empirical research, expressed his belief that in the process of gaining health, the co-decisive meaning have:

- the level and type of stress that comes from the environment of a psychological and biological structure of an individual and the interaction person environment;
- global, genetic and psychosocial resistance resources;
- sense of coherence (SOC) [8].

The author believes that coherence is a priority category for effective coping and overcoming health threats. At the same time, he emphasizes that salutogenic model is a new way of thinking, which compliments pathogenic approach. Thinking in frames of this category compels us to focus all our efforts on developing the theory of coping with stress [1].

CONCLUSIONS

As mentioned before, sense of coherence is a global human's orientation, that expresses the extent to which a man has a dominant, stable but dynamic confidence that: stimuli incoming throughout the life from the internal and external environment are structured, predictable and explicable, there are available resources, which will enable an individual to meet the demands posed by these stimuli, these requirements are challenges worth the effort and commitment [25].

General resistance resources allow one to function properly, coping with various stress factors. This role is to develop appropriate mechanisms to cope with problems or burdens in life. The sense of coherence involves three basic components [22]: comprehensibility¹, resourcefulness² and reasonableness³. The relationship between these

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Intelligibility – it is a degree to which a man perceives stimuli that income from the external and internal world. He orshesees this information as consistent, meaningful, cognitive and structured, clear, and not as chaotic, random, unordered, unexplained or accidental one. A person with a strong sense of intelligibility in contact with the stimulus expects that it will be predictable, and can match it with something as well as explain. It does not matter, that the given stimulus is desirable or not, even if it was a war, someone's death or defeat, he or she sees a sense in it.

Resourcefulness – it is a degree to which the available resources are seen as sufficient to meet the needs of incoming stimuli. Theseresourcesarethose possessed by a man himself and those disposed of by others, e.g. a spouse, a friend, or a doctor, who can be relied on. A person with a strong sense of resourcefulness does not feel to be a victim of fate, nor feels a sense of injustice. At the moment of contact with an unfavourable course of events, a man is able to cope and does not fall into an endless despair.

Reasonableness - expressed in the extent to which a man, from the emotional point of view, feels that life has a meaning. He orsheunderstands that at least part of the problems or requirements that life brings is worth the sacrifice, effort and commitment. They treat a problem not as a burden, which they do not want to be encumbered with, but as something 'welcomed'. The reasonableness is a motivational side of human life. The events are perceived as challenges, which are worth to get emotionally involved and to devote time to them. People with a strong sense of meaningfulness boldly take up the challenge, by defending themselves they look for some meaning and they do everything in their power to deal with the problem.

components, according to the author's assumption, is that the condition to have a strong sense of resourcefulness is a strong sense of intelligibility. If we can deal with the incoming stimuli, they are understandable for us, but if we did not engage motivation and emotions, resourcefulness and intelligibility will be impermanent [1]. The high rate in every aspect of SOC causes stressful situations or critical event to be treated as a challenge and can be a source of effective adaptation. This causes inspiration for improvement, personal development or for achieving more and more ambitious goals [9].

The sense of coherence is growing thanks to the repetition of life experiences that are closely associated with a sense of comprehensibility, manageability, meaningfulness, and are mutually inseparable [1]. In addition to the above components, Antonovsky distinguished one more very important factor, which is the range of limits. For the individual it is very important in the area of living space, that is, in family life, work, passions etc. Although throughout the lifetime the limits can be flexible and changeable they can widen or narrow, yet everything outside is not important [8]. No matter if this is understandable, meaningful and whether we can deal with it. This flexibility of limits is closely linked with the selection made in terms of importance of experiences. A high sense of coherence can be remained while considering: one's own emotional life, interpersonal contacts, life activity, existential problems, that is, experienced failures, death of a loved one, conflict, isolation, shortcomings. However, a too broad range of such limits or suppressing those areas leads to a low sense of coherence. To achieve a high level, one should value everything that surrounds an individual and everything that is happening around him or her. In this way, a man is convinced that it is possible to control and explain everything, and then

An important role in shaping the sense of coherence is played by generalized resistance resources which include [7]: physical and biochemical body resistance, education, occupational status, interpersonal skills and life experiences gained in the development of education, one's own activity, e.g. socio-cultural, or politically-economical.

Generalized resistance resources that provide the individual with life experiences are characterized by consistency, activity and balance between overload and underload. These repeated experiences influence the formation of the pattern of human life experiences and the development of a sense of coherence [17]. The determinants of the sense of coherence, which develop throughout life, are family experiences, gender, social affiliation and socio-historical location. However, the author suggests that at the age of 30 this sense is the most strongly developed [1].

Antonovsky defines the stressors as a initializing tensions state, 'the requirements for which there are no ready or automated adaptive responses' [1], moreover, he also believes that the lack of generalized resistance resources can act as a stressor. In this way he distinguished: chronic stressors⁴, important life events⁵, nagging everyday

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Chronic stressors - evoke a situation of a fundamental importance in human life, which is characterized by a persistent inability to perform a specific role in life by the individual. Theydetermine the level of a sense of coherence.

troubles⁶. A clear line between them is difficult to see. They differ among each other qualitatively [9].

The sense of coherence is intercultural. It is the culture that determines which measures are appropriate and eligible in a given situation, and determines the range of limits in which the sense of coherence will be taken into account. Individuals with a strong sense of coherence cope better with problems than people with a weaker sense of coherence. If they do not deal with solving the problem, they suffer less, as they can adapt. They are more aware of their emotions and express them openly, not suppressing them [11].

To summarize the above considerations, a certain pattern should be noted. People with a strong sense of coherence estimate stimuli as less stressful and therefore show greater readiness and willingness to use potential resistance resources, as opposed to those with a low rate. This conviction takes a form of faith and confidence that everything will be fine and has always a more general sense [5].

Antonovsky draws the attention to one more factor, which is the ability to control the stressors even in the form of avoidance. According to him, this factor depends more on personal experience than on cultural patterns. Another form taken by the control factor is the struggle with, for example, the conviction of the need for internal changes in the sphere of feelings, ideas or countermeasure skills. This allows minimizing mental tensions, while self-esteem, sense of strength and mental toughness is increased. Whereas maintenance (another factor) is the result of positive experiences of emotional events, as well as the awareness of the possibilities and capacities for active control. As a result of positive experiences, interpretation and evaluation of the situation in the process of internal changes, another factor is released, namely experiencing [21].

The theory, which was pioneered by Antonovsky, hypothesizes that the stronger the sense of coherence, the better chance an individual has to maintain their welfare or its improvement. This manifests itself in the ability to avoid the risks and dangers more easily, engaging in health-promoting activities, and at the same time avoiding those that have an adverse effect. The belief in the meaning of life is the reason to take care of one's own health. This way of ordering life can provide a solid basis to avoid destructive behaviour that affects heath. The awareness of the resources owned enables coping with stress. The examples could be the efforts to quit smoking, proper nutrition, doing sport or similar behaviour, as the people with such conviction believe in the viability of such behavior. When it comes to people with a low sense of coherence, this group of people does not have the motivation, nor the attitude required to actively cope in order to avoid risks [11].

Important life events - are limited in time and space. An example might be a divorce, death in the family, dismissal, etc. The attention should be paid not to the event itself but to its consequences. They impair the sense of coherence due to the sequence of events that generates tension

Nagging daily problems - have a negative character, for example, failing an exam, a neighborhood quarrel, negative evaluation in school etc. Theyrequire a reasonable adaptation. If they are very frequent, they result from the overall life situation, if they are rare and separate, then they should be omitted.

A stronger sense of coherence lets one judge the unavoidable incoming stimuli, which are unavoidable, not as danger, causing a paralysis, but as challenges worth investing your own energy to be able to handle them [8]. The confrontation with a potentially harmful factor does not always have to be harmful, it depends on defining and redefining the situation [9]. Activities that support coping with stress should be treated as a potential transformed during overcoming the threat. Also, important is the readiness and willingness to use the resources the individual has, which differentiate individuals with a stronger or weaker sense of coherence. The stronger ones will seek available resources, while the weaker ones will retreat stating that no one can help them [23].

It is reasonable to say that a man, who sees life as understandable, meaningful and manageable, has greater chances of using potential resistance resources effectively, resulting in maintaining good health or improving it, than a person who does not have such orientation [11]. It is extremely interesting how, under current considerations, a sense of coherence is formed and how the employees of Medical Rescue Teams cope with stress, as shown in the second part of the article.

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