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QUALIFICATION WORK on the topic: «STUDY OF APPROACHES TO THE DEVELOPMENT OF STRESS RESISTANCE IN PHARMACIES»

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АНОТАЦІЯ

У роботі досліджуються причини, прояви та методи боротьби зі стресом; досліджено управління стресом у діяльності сучасного фармацевта; досліджено причини виникнення стресу у фармацевтичних працівників та шляхи їх подолання. Кваліфікаційна робота містить 44 сторінки, 18 рисунків, список літератури з 30 найменувань.

Ключові слова: підходи, розвиток, стрес, резистентність, аптека.

ANNOTATION

The work studied the causes, manifestations and methods of combating stress; stress management in the activity of a modern pharmacist was investigated; the causes of stress in pharmaceutical workers and ways to overcome them were investigated. The qualification work contains 44 pages, 18 figures, a list of literature with 30 titles.

Key words: approaches, development, stress, resistance, pharmacy.

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INTRODUCTION

Relevance of the research topic. Many environmental factors can cause stress in a person. It is customary to attach a negative meaning to this concept, but this is not always the case, the feeling of joy after good news and events is also stress, but positive [5].

In organizations where the work process is continuous, stressful situations often arise. This is facilitated by conflicts between team members, unresolved tasks, work overload and lack of time. However, most often the head of the organization suffers from all these factors. The greater the responsibility entrusted to him, the more subordinates he has at his disposal, the more facts and phenomena need to be verified [2].

There is a concept of professional stress — it is a diverse phenomenon that is expressed in mental and physical reactions to difficult situations that arise in the work of an employee [3]. Stress is mentioned in a separate section of the International Classification of Diseases. Moreover, the causes of such stress can be not only a lack of time, information or a lot of work, but also working conditions: poor lighting of the workplace, poor ventilation, overcrowding [17].

Cardiovascular diseases account for 40% of the causes of death in most developed European countries. At the same time, stressful situations as risk factors for cardiovascular diseases are constant companions of a person's life: war, instability of the political situation, severe injuries or illnesses, failures at work or studies, death of loved ones, etc. Today, the stress reaction is considered as an adaptive mechanism aimed at maintaining the stability of the physical and mental functioning of the body under the influence of a stressor. However, stress is not always an adaptive response. Excessive stress is a pathological condition. Stress is a non-specific general reaction of the body in response to excessive or pathological (physical or psychological) irritation, which is manifested in excessive tension of reactivity (changes in homeostasis and the state of the nervous system). Psychosocial factors can cause acute pathophysiological changes in the cardiovascular system or increase the risk of coronary heart disease due to an unhealthy lifestyle (alcoholism, smoking, low physical activity, unbalanced diet). Psychosocial distress can cause transient myocardial ischemia, ventricular arrhythmias, and sudden coronary death. The main mechanisms by which acute psychosocial stress increases the risk of cardiovascular disease and death are an increase in heart rate and blood pressure due to activation of the sympathetic nervous system and a decrease in the activity of the parasympathetic nervous system, which leads to an increase in myocardial oxygen demand; transitory endothelial dysfunction; increased blood coagulation; hyperglycemia and hyperlipidemia. All this leads to further strengthening of atherosclerotic damage to vessels [14].

The development of stress resistance is facilitated by: optimization of the system of motivation and stimulation of pharmacy workers to develop stress resistance using various methods and forms; providing pharmacists with knowledge about stress; conducting seminars and trainings on conflict management; provision of psychological support through practical consultations of a psychologist; ensuring openness of pharmacists' communication channels; creation of a favorable social and psychological atmosphere in the team [1].

The purpose of the qualification work is study of approaches to the development of stress resistance in pharmacies.

To achieve the goal of the qualification work, it is necessary to solve the following **tasks**:

- to describe the types of stress;
- to explore stress management techniques;
- to investigate the sources of stress in managers;
- to evaluate stress management models in pharmaceutical organizations;
- to analyze the causes of stress among pharmacists;
- to study methods of overcoming stress among pharmacy workers.

The object of the research is pharmacists.

The subject of the research is stress management in pharmacies.

During our work, we used the following research methods: questionnaire, analysis, grouping, comparison, generalization.

Practical significance of the obtained results. The use of research results allows to determine the main causes, manifestations and methods of stress management in pharmacies.

Approbation of research and publication results. The qualification work was tested on I Republican scientific and practical conference with international participation "Current issues and trends in the development of the modern pharmaceutical industry" and XXIX international scientific and practical conference of young scientists and students "Actual issues of creation of new medicines". Abstracts of reports were published: Bondarieva I.V., Chafi Hassana. Study of approaches to the development of stress resistance in pharmacies. I Republican scientific and practical conference with international participation "Current issues and trends in the development of the modern pharmaceutical industry". 25 –26 April 2023 The Pharmaceutical Institute of Education and Research Uzbekistan, 2023. P. 209-211; Chafi Hassana, Bondarieva I. V. Analysis of the causes of stress among pharmacists. Actual issues of creation of new medicines: materials of the XXIX international scientific and practical conference of young scientists and students (April 19-21, 2023, Kharkiv). – Kharkiv: NUPh, 2023. – P. 496.

Structure and scope of qualification work. The qualification work consists of an introduction, a literature review, an experimental part, general conclusions, a list of used literary sources, and appendices. The qualification work is laid out on 44 pages, includes 18 figures, as well as 30 sources of literature.

CHAPTER 1

THEORETICAL APPROACHES TO THE ESSENCE OF STRESS

1.1. Characteristics of types of stress

Stress is a state of increased body tension, which is a protective reaction to various harmful factors [2].

The work of English psychologists from the University of Manchester, who research stress problems and factors affecting the course of psychoneurological diseases, shows that the least resistance to stress at work is needed by library workers, and miners and police officers top the list of stressful jobs [9].

The work of a pharmacy is more like a bubbling spring. At rush hour, he wakes up among disgruntled, angry customers, and irritation and rage manifest in the atmosphere of the pharmacy. Thus, it is not surprising that pharmacy workers, and especially first-line pharmacists, are on the list of specialists most prone to stress and professional burnout [8].

There are several types of professional activity: "man - nature", "man - technology", "man - symbolic system", "man - artistic image", "man - man". Today, many professions belong to the "person-to-person" category, communication with people, their service, and their communication are inevitable in the modern world [4].

Working with people is always very difficult, this is a general problem of the entire service sector, but it is especially difficult for those who work in the pharmaceutical industry, namely pharmacy workers. Dissatisfied customers, low wages, the need to keep in mind a large amount of information about drugs, as well as an uncomfortable work schedule, sometimes cramped premises, conflicts in the team, and this list can be continued for any profession [14].

All this can lead to severe nervous tension. Constant tension accumulates over time, which leads to stress in pharmacy staff. And, unfortunately, the consequences of this often do not pass without a trace for the body and lead to the development of psychosomatic diseases [3]. A variety of external and internal factors that cause anxiety and irritation further worsen the situation. A person is practically unable to independently control the external causes of stress, that is, everyday living conditions, features of the social environment and corporate culture of the employer's organization, adverse ecology. Their negative impact can only be compensated for [1].

In fig. 1.1 shows the main factors affecting the occurrence of stress among pharmacists in pharmacy organizations [4].

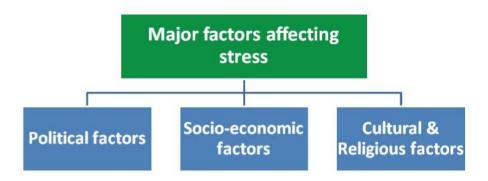


Fig. 1.1. Analysis of the main factors affecting the occurrence of pharmacist stress

But the personal characteristics of a person have a significant influence on the development of stress reactions. Beliefs, attitudes, needs, expectations, emotions, assessment of the situation and past experience are largely responsible for how a person sees and interprets the events that occur, and how they react to them — positively or negatively [1].

Of course, personal characteristics also affect how pharmacists treat the behavior and statements of customers or the manager of the pharmacy, by what signs they classify the visitor as "harmful and difficult", how they react in conflict situations and how long they can survive an unpleasant situation. And all these individual characteristics can be modified and studied during stress [6].

Analysis of stress stages is shown in fig. 1.2.

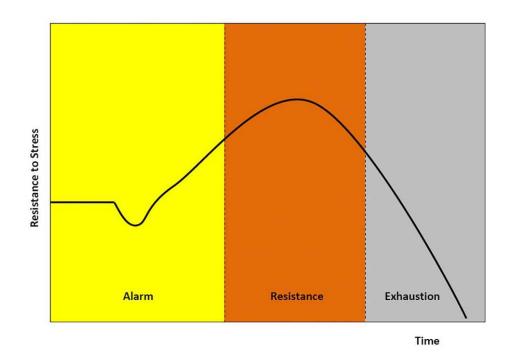


Fig. 1.2. Analysis of stress stages

According to research, a person's reaction to various stimuli is 30-40% determined by the genes received from parents, and 60-70% depends on education, life experience and qualification of acquired skills. So, if you wish, you can learn to cope with stress and develop the necessary stress resistance. It is believed that if the medicine is expensive, any pharmacy will gladly sell it without a prescription [7].

Not all people develop a stressful state even under the influence of aggressive external factors. Psychologists advise people to look for the cause of frustration and anger at work internally, between their personal qualities and psychological reactions. Some of the causes of stress are discussed below [4].

Inadequate attitudes and beliefs are formed in childhood under the influence of parents, and they affect our worldview, we perceive events in our life positively or negatively. For example: "No one has the right to shout at me and raise his voice", "I know better what medication a client with certain symptoms needs" — such attitudes can greatly complicate the life of the receptionist when communicating with difficult types of clients [5]. Poor control over emotions. "Mood people" belong to this category. They are easily susceptible to random mood swings, unable to restrain and control their impulsive emotions, as a result of which they are more prone to stress than more restrained people who are not subject to feelings, who can freely control them [5].

Unsatisfied needs for a long time. Such a reason increases a person's tendency to react with increased irritation to outwardly neutral events. The inability to take a vacation in the summer, regularly going to work "in shifts", sometimes for the same salary, can contribute to the appearance of irritability and the development of excessive aggression in reception workers [4].

A tense situation in the team has a very bad effect on the employee, because we spend half of our lives at the workplace [24].

Unresolved conflicts at work, frequent quarrels with colleagues, the inability to communicate calmly in a difficult situation increase the general tension in the team, intensify negative emotions and intensify their release on others. When two pharmacy workers argue or conflict, the customer usually gets the aggression. Emotions are released on it, from light: "Speak louder, I can't hear" to strong, sometimes aggressive: "Woman, I don't take medicine, how should I know why there is none, don't prevent me from serving others" [8].

Types of stress are presented in fig. 1.3 in a generalized form they [9].

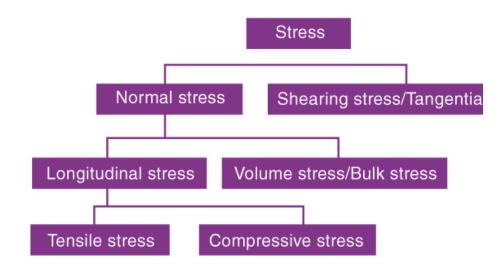


Fig. 1.3. Types of stress

If too much importance is attached to the events of the past, obsessive memories of some traumatic event, for example, an angry client, an unpleasant conversation with a manager. The inability to abstract from a negative situation, constant scrolling and self-flagellation undoubtedly lead to constant stress and can lead to mental or muscle diseases [14].

Among the behavioral manifestations, we highlight: muscle tension and speed of reaction, deterioration of work productivity, increased fatigue, an increase in the number of errors when performing usual activities, a chronic feeling of lack of time, increased conflict, increased aggressiveness, and a decrease in the ability to understand others during communication. The result: a tense, eternally quarrelsome worker feels that he does not have time for anything and is always tired by ten o'clock in the morning [7].

Emotional manifestations of stress: a depressed, gloomy mood prevails, a constant feeling of longing, anxiety, increasing anxiety, irritability, tantrums, aggressiveness, initial stages of depression, tears when leaving for work. The tendency to blame oneself increases, self-esteem decreases [14].

As a result, the negative atmosphere can infect the entire team, spread to customers, making them want to return to "this gloomy pharmacy", or can go home and drive the household crazy. If a person is so dissatisfied with his work and feels constant stress, it is very difficult for him to keep himself under control in front of his loved ones [19].

Change in physiological processes: the stress reaction affects almost all human organs and systems – digestive, cardiovascular and respiratory [3].

But the following changes are most often recorded, for example, increased pulse rate, blood pressure disorders, disorders of the gastrointestinal tract (diarrhea, constipation), heart pain and headache, difficulty breathing, muscle tension, discomfort in the stomach and intestines [4].

This can lead to a decrease in immunity, increased fatigue and frequent malaise. The consequences of long-term stress lead to serious changes in the body,

up to the development of psychosomatic diseases, such as stomach ulcers or heart attacks [4].



Types of stress are shown in fig. 1.4. [3].

Fig. 1.4. Types of stress

Change in intellectual processes: concentration of voluntary attention decreases, distraction to smaller events and objects increases, working memory decreases due to constant scrolling in the head of unpleasant events and thinking about a way out of them, confusion of thinking increases and, as a result of compiling error reports, problems may arise with the storage of medicines, as well as increasing customer service time [5].

There is no need to spend your whole life in constant struggle with stress. So that health is not affected by stress, it is necessary to first of all learn to listen to your body, understand which systems are most exposed to stress, and use simple methods of prevention of such conditions [9].

Stress phases are shown in fig. 1.5. [7].

General Model of Stress Process

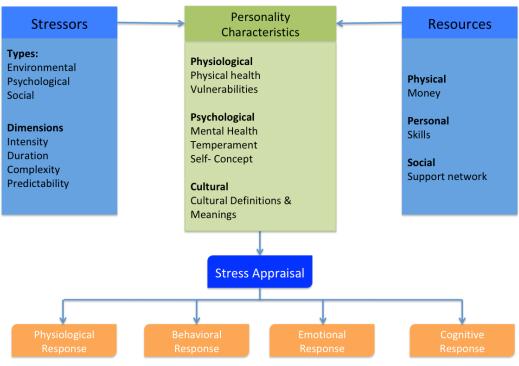


Fig. 1.5. Phases of stress

An active life situation and belief in one's own strength is one of the important characteristics of a person, which is the basis of many methods of combating stress, and this should not be forgotten [4].

Causes of stress are presented in fig. 1.6.

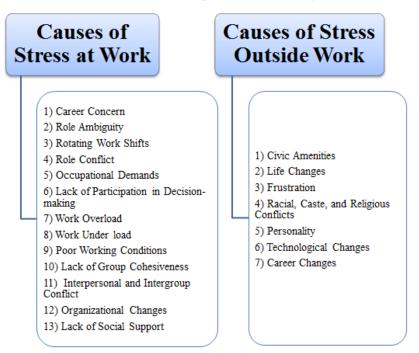


Fig. 1.6. Causes of stress

1.2. Study of methods of combating stress

There are many techniques and methods for dealing with stress. Below are three simple techniques that will help a person normalize his condition in a short time and cope with the situation that caused it [7].

During work, a person studies his past successes and achievements that helped him cope with difficulties, analyzes the resources at the expense of which he managed to do this [2].

For example, a person who considers himself intemperate will find in his own experience many examples of keeping cool. Having analyzed the methods by which she managed to keep calm, a person begins to use them in stressful situations [12].

The second method is the analysis of beliefs and attitudes that influence the emergence of stress reactions in a person. They write it down on paper, and next to each belief they write a new one that is more pleasing and suitable for a person. Example: if you are worried about the statement "I have no right to offer expensive drugs if I am not sure of their effectiveness", replace it with "No pharmacy employee can be sure of the 100% effectiveness of all existing expensive drugs." Expensive drugs are different for different people. People have the right to choose" [7].

The ways to deal with stress are presented in fig. 1.7.

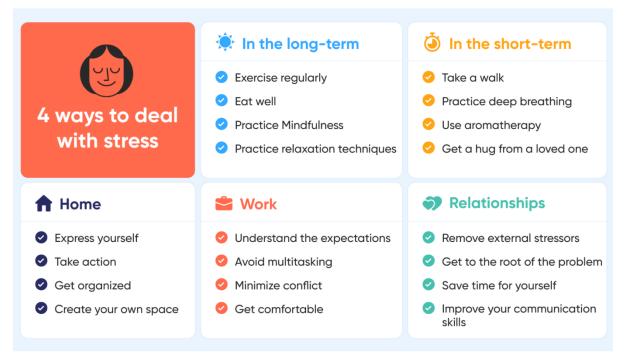


Fig. 1.7. The ways to deal with stress

The third technique — a person answers 5-7 questions about a difficult situation, immediately after a stressful event. The questions concern the emotional sphere, the thoughts and beliefs that arose during the situation.

For example: What emotions did I experience? What influenced you the most? What are my strengths that can help me recover quickly? What did I do right in this situation? [5].

These methods of stress management are quite simple and effective in practice. As experience shows, nothing is impossible, and many times using them at work, after communicating with a difficult client, many pharmacy workers have noticed a reduction in stress. The main thing is regular training and self-confidence! [4].

Often we not only suffer from stress ourselves, but also witness how our loved ones, friends, colleagues get into difficult situations.

When we see that another person is in a stressful situation (be it a manager, colleague or client), we are faced with a choice — to try to help or to do nothing and watch how the condition of the "neighbor" worsens, and the irritability and negativity spread to ourselves [12].

Of course, the choice is obvious — you have to act! And that is why pharmacy workers, guided by the best motives, and not professional psychologists, do not harm a person who is experiencing stress.

Knowing certain rules, you can quickly and effectively help a colleague get out of an unpleasant situation and maintain work capacity [1].

CONCLUSIONS TO CHAPTER I

- 1. A description of types of stress is given.
- 2. Methods of combating stress were studied.

CHAPTER II

STRESS MANAGEMENT IN THE ACTIVITY OF A MODERN PHARMACIST

2.1. Research on the sources of stress of heads of pharmacy

The source of "professional" stress for a manager (both the owner of a small pharmaceutical organization and a pharmacy) can be any factor [1]:

- incompetent employees;
- unscrupulous partners and officials;
- tough competitors;
- demanding consumers, etc.

Among the most important stresses, managers at different levels named:

complexity and inconsistency of domestic laws and regulations;

low employee motivation and the need for constant monitoring of their activities;

lack of mutual understanding and conflicts with business partners",
 "constant lack of time;

excessive and not always justified management control (in the case of civil servants);

- a feeling of inconsistency between the efforts spent and real results;
- loss of sense of activity, stress from unfulfilled hopes, etc.

There are six main sources of stress for managers [2]:

1) way of working (poor working conditions, too intense activity, lack of time, etc.);

2) the employee's role in the organization (role conflicts, increased responsibility, lack of authority, role uncertainty, etc.);

3) communication factors (relationships with management, subordinates or colleagues, difficulties with delegation of authority, etc.);

4) difficulties in building a business career (inappropriate level of harassment, professional failure, too slow or too fast career growth, fear of dismissal, etc.);

5) factors related to organizational culture and psychological climate (consistency of employee attitudes and company culture expectations, restrictions on individual freedom, intrigues, etc.);

6) sources of stress outside the organization (problems of family life due to work overload; inability to separate professional and family role strategies; conflicts related to spouses' desire for career growth, etc.) [5].

According to researchers dealing with psychophysiological stress phenomena, the factors that cause industrial stress can be conventionally divided into two types: subjective, the development of which depends more on the person himself, and objective, little dependent on the personality of the employee [2].

The consequence of constant problems and stresses of managers of various ranks is a whole list of neurotic and psychosomatic diseases. Because the manifestation of neuroses, one of the forms of which is neurasthenia, most often occurs in people who hold managerial positions. The Polish scientist A. Kempinski introduced the concept of "managerial neurosis" [8].

The situation is rarely soft and lenient, and when all efforts do not lead to a satisfactory result, and the manager himself incorrectly assesses the environment and does not adapt to real conditions — all this leads to his own status of inferiority, which is even strengthened by the aggression of subordinates [2].

Kempinski describes managers with executive neurosis as follows: "They are constantly managing something, repeatedly hold several phones at the same time, react angrily to simple questions and often give contradictory orders. Their behavior annoys the social group, they spin like squirrels in a wheel, which eventually leads to general irritation" [9].

Since stress has several negative consequences, it is important that managers learn how to manage their own stress as well as that of their subordinates. Therefore, stress management is used for the fastest and most comfortable recovery after a stressful situation [5].

The term "stress management" literally means "overcoming stress" [7].

But there is no clear and generally accepted definition, since it includes direct control over oneself and behavior at the time of stress and overcoming the negative consequences of stressful situations, but most practitioners interpret this term as "self-control at the time of stress" [6].

There are two main stages of stress management: stress management at the organizational level and stress management at the individual level, including oneself [3].

Stress management includes the recognition that employees are exposed to influences that can negatively affect their physical and mental health, thereby solving the production tasks of the organization, as well as systems of measures aimed at weakening and preventing, as the effect of factors that cause stress, as well as about their consequences [7].

The most predictable and common reaction of the human body to a stressful situation is anxiety, which occurs during any stress. Therefore, the first thing a person should do is to keep calm and not panic. Keeping clear thoughts that give a clear idea of the essence of the problem helps to quickly find its solution [3].

English psychotherapist M. George wrote: "You don't need to be a doctor to recognize stress. You don't need to be an expert to save. Understanding the real causes of stress is the first step to getting rid of it".

Physical activity, like stress, initiates the processes of consumption and breakdown of substances necessary for energy mobilization. To balance these processes, it is necessary to strengthen recovery processes [8].

Ways to strengthen recovery processes [13]:

• healthy human sleep is the basis of a strong nervous system;

• autogenic training; this option is a method of self-suggestion; with the help of this technique, a person affects the processes occurring in his body at the mental and vegetative level, as well as those processes that are not amenable to arbitrary conscious regulation; self-education is more suitable for intellectual types of people — especially if they have a certain patience, which is characteristic of

managers; like yoga, autogenic training has two levels: lower and higher; mastering the latter makes it possible to induce a special state of consciousness [4];

• meditation (lat. Meditatio from the word meditator — to think, contemplate) is a mental action that brings a person's state of mind to deep concentration; the meditator's physical state is characterized by maximum relaxation, and his consciousness by some alienation from external objects and experiences; vacation; provides protection against stress and its consequences; also contributes to an adequate assessment of the situation and the growth of self-confidence [3].

Engineer faced with stressful situations, the carrier followed three components of his own method [8]:

1. The need to calmly analyze the situation and try to clearly understand possible negative consequences [17].

2. Imagine the worst that can happen and try to find facts that will allow you to accept it as inevitable [5].

3. As soon as you have realized and come to terms with the most unfavorable outcome, calmly begin to consider the decision to change the situation [20].

Preparing for the worst outcome of events, which allows you to more calmly perceive the consequences, is a privilege and perhaps the only advantage of a pessimistic attitude, while most practitioners advise to follow the opposite approach, that is, optimism [10].

Experience shows that positive thinking, namely the search for the positive in all situations, including negative ones, brings a lot more benefit to a person, significantly reducing the total amount of stress in his life [3].

For example, 3,000 men were observed at the American Harvard University for 40 years. Based on the results of several psychological and medical studies, they concluded: "Pessimists suffered from serious cardiovascular disorders 6.5 times more often than those who are optimistic about life's problems" [6].

All the described ways of restoring the balance between consumption and obtaining energy in stressful situations agree on one thing — the main thing is to

understand the essence and causes of the problem, and then we will definitely find a solution.

It is especially worth highlighting an essential factor of the manager's activity, which is the correct allocation of time. An American psychologist says: "You must learn to manage your time; otherwise time will manage you". Sometimes there are signs that a person feels stress precisely because of inefficient use of time [3].

The presence of at least half of these signs suggests that a constant lack of time can lead to serious stress: a feeling of constant haste; lack of time for favorite things and communication with family; frequent lateness; lack of time plan; inability to delegate power to other people; inability to say no to people who take up your time; sometimes the feeling of wasted time [4].

Drucker is one of the founders of time management and a specialist in management psychology, highlighted in his work the skills necessary for effective time management [11]:

- analysis of own time;
- schedule planning;
- reduction of unproductive costs;
- fixing time.

It is also necessary to reduce unproductive spending of time, that is, not to do big things in small portions, thus losing consistency and a coherent structure [7].

Thus, the correct use of time allows not only to perform work faster and better, but also to avoid stress associated with the feeling of unproductive spending of time [4].

Regarding stress management at the organizational level, stress and its management have only recently received attention in Ukraine, which is why third-party companies that offer training and seminars in the field of stress management are becoming more and more popular [8]. Stress management training is based on the fact that it is useless to fight against negative emotions that arise in stressful situations, but it is possible and necessary to learn to cope with them [4].

Trainers use role-playing and simulation of stressful situations. It is enough to conduct stress management training once. The fact is that the employee wants to change [3].

A significant disadvantage of trainings is that most stress management programs are focused on the person, not on the organization, and are separated from the process of diagnosing problems [4].

The source of stress can be not only in the employee's relationship with the team or the boss, but also simply in insufficient training [5].

Thus, foreign practice offers various methods of preventing and eliminating stress. Everyone chooses for himself depending on his psychological and physical condition [4].

All this contributes to a person's positive mood, confident communication with others and restoration of work capacity [3].

The goal of stress management in the personnel management system is to increase the stress resistance of the workforce, reduce the consequences of stressful situations and the risk of overtiredness [5].

The problem must be solved in such a way that, first of all, stress resistance develops in managers, and then in employees [5].

By determining the causes of organizational stress, it is possible to control the negative effect when business success is directly related to labor productivity [3].

To this end, companies can manage organizational stress by applying methods such as time management, social support, goal-setting activities, job enrichment, shared management, role clarification and conflict prevention, career planning and management, and training leaders stress, development of physical working conditions, salary management [12].

Supporting these efforts with individual stress management can help reduce the negative effects of stress in addition to preventing organizational stress, negative consequences of stress [9].

2.2. Assessment of stress management models in pharmaceutical organizations

The life and activity of a person in the socio-economic and industrial conditions of modern society are inextricably linked with the periodic, sometimes quite long and intense influence of adverse environmental, social, professional and other factors, which is accompanied by negative emotions, strong experiences, physical overstrain of mental functions [1].

The impact on the human psyche is especially pronounced in psychologically complex situations in connection with natural and man-made disasters, accidents and catastrophes, social and professional conflicts, performance of complex, responsible and dangerous work [3].

In most cases, these actions lead to a deterioration of the functional state, a change in personal status, a violation of professional performance and occupational safety, and the development of psychosomatic diseases [4].

Stress is the most typical mental state that develops as a result of extreme life circumstances. The term "stress" is widely used in many fields of knowledge, therefore several interpretations of the causes, mechanisms of its formation, features of manifestation and consequences of such a condition have been formulated [7].

It unites a large circle issues related to the origin, manifestations and consequences of extreme environmental impacts [8].

The study of stress was based on the research of G. Selye, who at the beginning of the 20th century developed the hypothesis of the general adaptation syndrome, which is a process characteristic of all organisms and ensures survival [20].

Every stimulus that affects us causes:

1. specific changes (which occur upon activation of the functional system responsible for adaptation to this factor, for example, cold).

2. a general non-specific adaptation reaction, which was also called stress (this group of stress included: strengthening and increasing the activity of the adrenal

cortex, reduction (or atrophy) of the thymus gland (thymus) and lymph nodes, the appearance of ulcers in the gastrointestinal tract [21].

There are three phases of the general adaptation syndrome, the development of which leads to the restoration of homeostasis or the death of the organism:

• anxiety reaction, when the body prepares for a new situation;

• the stage of resistance, when the body uses its resources to overcome a stressful situation;

• stage of exhaustion, when the body's reserves are reduced catastrophically.

Immediately after overcoming the stressful situation that has developed in the cells of the responsible functional system, an increase in physiological function causes the activation of the genetic apparatus, which is accompanied by an increase in the synthesis of nucleic acids and proteins, because they form the key structures of cells that limit their function [5].

As a result of the selective growth of these structures, a so-called structural trace is formed, which leads to an increase in the productivity of the system responsible for adaptation, and allows to transform the initially urgent, but unreliable adaptation into a stable, long-lasting one [10].

Therefore, the main function of stress is the formation of stable adaptation. If a certain functional system does not develop (under emotional stress), homeostasis disturbances caused by environmental factors in the body, as well as the stress reaction continue to exist, become too long and intense [14].

Tense psychological reactions together with physiological components can lead to a violation of adaptive reactions, causing increased sensitivity to various harmful effects and can create a state of anxiety [6].

Anxiety is such an overload of the work of neuroendocrine mechanisms, which causes a violation of the activity of various structures of the body (functional or morphological), which leads to the development of borderline states and psychosomatic diseases [3].

Negative changes in the internal environment of the body as a result of chronic stress, that is, a state of anxiety, lead to the development of " adaptation diseases", such as: arterial hypertension, ischemic heart disease, peptic ulcer disease of the stomach and duodenum, headache, migraine, muscle headache, cancer, allergy, rheumatic arthritis, back pain [2].

Among the main theories and models of stress, the following can be distinguished:

A psychodynamic model based on the principles of Sigmund Freud's theory. In his theory, he described two types of genesis and manifestations of anxiety and worry:

a) signal alarm as a reaction to predicting a real external danger;

b) traumatic anxiety develops as a result of an unconscious, internal source.

The most vivid example of the cause of this type of anxiety is the suppression of sexual drive and aggressive instincts. To describe the consequences of this condition, Z. Freud coined the term "psychopathy in everyday life" [4].

Wolff's model, according to which the author considered stress as a physiological reaction to socio-psychological stimuli, established the dependence of these reactions on the nature of the relationship, the motives of the individual's behavior, the certainty of the situation and attitude [9].

Interdisciplinary model of stress. According to the authors, stress arises as a result of stimuli that cause anxiety in most individuals or some of their representatives and lead to a series of physiological, psychological and behavioral reactions, which are sometimes pathological, but possibly to a higher level of functioning, or new parameters of regulation [8].

Conflict theories. Many models of stress reflect the connection between the social behavior of subjects and the state of tension in relations accompanying group processes [4].

The main causes of tension are related to the fact that members of society must obey its social norms. One of the conflict theories believes that stress prevention should be based on providing members of society with favorable conditions for development and great freedom in choosing views and life positions [12].

Factors of stability of social relations, social distribution of economic goods and services, interpersonal interaction of power structures are considered causes of stress in conflict theory. Social aspects also underlie such theories of stress as the evolutionary theory of social development of society, ecological theory (the role of social phenomena in society), the theory of life changes (in the family, at work, etc.) [13].

Mechanical model. The central element of this model is the concept and mechanisms of adaptation, which the author defines as how an individual struggle with the situation, with the feelings caused by the situation, and has two manifestations: coping — struggle with the situation); protection (defense) — struggle with the feelings caused by the situation [4].

Overcoming and "mastering" the situation is determined by purposeful behavior and the ability of individuals to make adequate decisions in front of life's tasks and requirements. Stress as a behavioral response to social and psychological stimuli [2].

The model of physiological stress considers stress as a state of the body, which is based on both adaptive and maladaptive reactions. By stressor, the author means primarily factors of a social nature, such as economic or family failures, that is, objective events that disrupt (destroy) or threaten to undermine the normal life of an individual [27].

They are not necessarily negative and do not always lead to an objective crisis. The system stress model, reflecting the understanding of management processes (behavior, adaptation, etc.) at the level of system self-regulation, is implemented by comparing the current state of the system and its relatively stable normative value [9].

Integrative model of stress. The central place in the model is occupied by a problem that needs a solution. The concept of such a problem is defined as the manifestation or impact on a person of stimuli or conditions that require him to exceed or limit the usual level of activity. The emergence of a problem (difficulties in solving it) is accompanied by a strain on the body's functions, if the problem cannot be solved, the tension persists, even intensifies, and stress develops. According to the authors, a person's ability to solve the problems facing him depends on several factors [7]:

1) human resources — general abilities to solve various problems,

2) personal energy potential needed to solve this problem,

3) the origin of the problem, the degree of unexpectedness of its occurrence,

4) the presence and appropriateness of a psychological and physiological attitude to a specific problem,

5) the type of chosen response – defensive or aggressive. The importance and consideration of these factors determines the choice of behavior strategy for stress prevention [6].

The concept of stress was most influenced by the concept of "unclear" categorical reasons and restrictions. Initially, it meant a non-specific reaction of the body to the influence of harmful substances, which is manifested by the symptoms of the general adaptation syndrome, today this concept is applied to everything. Thus, in critical works on stress, a kind of genre tradition has developed to begin the review of studies by listing reactions to completely heterogeneous events, such as the influence of temperature and criticism of language, hyperventilation of the lungs and success in business, physical fatigue and moral humiliation [6].

Most consider everything that happens to a person when he is not lying in bed as stress, but they believe that a sleeping person feels some kind of stress even in a state of complete relaxation, and the absence of stress is equated with death [19].

In modern psychological works on stress, persistent attempts are made to somehow limit the use of this concept, subordinating it to traditional psychological problems and terminology. To this end, he introduces the concept of psychological stress, which is a response to a physiologically strongly stereotyped response to stress, mediated by threat assessment and defense processes. Scientists consider the essence of a stressful situation to be a loss of control, that is, a lack of an appropriate reaction to a given situation, when the consequences of not reacting are significant for the individual [7].

Stress is a state in which a person finds himself in circumstances that prevent his self-realization [11].

It consists in denying the uncontrollability of stressful situations. Stress is not caused by any demands of the environment, but only by those that are considered threatening, disrupt adaptation and control, and prevent self-realization. In order to solve the theoretical problem of survival during stress in a psychological context, one can try to pose an imaginary experiment: what should a hypothetical creature be like, so that any requirement of the environment would be critical and extreme for it [15].

It is clear that such a coincidence of "any" and "extreme" is possible only in a being that does not cope with any requirements at all, but at the same time whose internal vital needs are immediate ("here and now"). For such a being, only an "easy" and "simple" world of life can be "normal", that is, one in which the satisfaction of any need occurs directly, without external obstacles, and therefore, without what would require the individual to do anything – what kind of activity [12].

The empirical realization of the described hypothetical existence, when the goods necessary for life are given by themselves, and life is reduced to the vital activity of the organism, can be seen only in the presence of a fetus, and even then with great reservations. In the mother's womb; however, as one aspect, such existence is inherent in all life and manifests itself in the form of an attitude toward pleasure "here and now," or what Freud called the "pleasure principle." It is clear that the implementation of this attitude in real natural and social conditions is often interrupted by the most mundane requirements of reality. If such a breakthrough is classified as a special critical situation – stress, in which the ideas of "extremity" and "addressability" can obviously be combined. In addition to the described content and logical conditions, it is quite clear how stress can be considered a critical event and, at the same time, a permanent state of life [10].

The science of stress is complex, and there is no doubt that some stressful experiences have negative consequences. However, people live and function differently depending on the course of their life history. In fact, human responses to stress have evolved with humans and adapted with them to a changing world. The stress response activates different biological systems that support different behavioral strategies, and thanks to this, a person can not only "escape or attack", but can also cope with the problem by acquiring new knowledge, using it in practice, social support or learning from life experience6 communicate and develop, rethinking stress and turning it into a resource [9].

In recent years, several studies have proposed the term "stress paradox," which is that high levels of stress can be associated with both negative experiences and well-being. Importantly, a happy life does not mean the absence of stress, just as a person without stress is not guaranteed to be happy and well-being. It turns out that people are happy even if their lives are filled with affairs, various activities, meaningful activities, even if they have to bear additional responsibility for everything that happens. And when the main sources of stress coincide with the main sources of meaning, stress only increases the level of well-being, the level of what is important for a person, what he can cope with, increases his work capacity and resilience. During the experience of various experiences and the realization of personal abilities, a way of thinking focused on activity, support of interpersonal relations, and interest in life is formed [12].

A person's choice of survival strategies speaks of courage, bravery, stimulates and promotes self-renewal, development of one's being in the world, existential growth. A person, expanding his horizons and understanding of the world, learns to better understand himself in his relations with the world and other people, which prompts him to be creative in life [14].

The phenomenon of sustainability is often conflated with similar concepts. The concept of "viability" is understood as the main component of a person's working capacity, which affects his activity, the activity of the mind, emotional endurance, and the stability of the attitude towards the realization of a once distant goal [17].

Close to the term "vitality" is the concept of "viability", which was first designated as a scientific category.

CONCLUSIONS TO CHAPTER II

1. Stress management in the activity of a modern pharmacist has been studied.

- 2. Sources of managerial stress are analyzed.
- 3. The models of combating stress in pharmacies were studied.

CHAPTER III

STUDY OF APPROACHES TO THE DEVELOPMENT OF STRESS RESISTANCE IN PHARMACEUTICAL ENTERPRISES

3.1. Analysis of the causes of stress among pharmacists

Stress reduces the efficiency of any activity, therefore it is expensive for pharmacy institutions, stress negatively affects health, leads to an increase in the number of sick days, stress directly or indirectly increases the costs of achieving pharmacy goals and worsens the quality of life of employees [5].

It has been established that stress can be positive – eustress, it is based on pleasant impressions (for example, winning the title of "Best Pharmacist of the Year") and does not have destructive consequences. Negative stress is a stress leaves a deep negative mark on human health [4].

Sources of anxiety may include:

- strong positive or negative emotions;
- trauma or crisis;
- minor household and work problems;
- conflicts or communication with "difficult" consumers;
- feels pressure from management;
- unattainable dreams or too high demands on yourself;
- noise;
- monotonous work;
- perfectionism (pathological desire for perfection in everything);
- hard work;
- financial difficulties (loans, paid education of children, etc.).

Risk groups are those who are most prone to stress:

- women as they are more emotional than men;
- elderly people and children;
- people with low self-esteem;
- extroverts are emotional, open people;

smokers who abuse alcohol.

Marketing research was conducted among pharmacy workers. The purpose of the study was to determine whether the problem of stress among specialists of the pharmaceutical market is relevant and how specialists cope with it.

A total of 38 questionnaires were filled out. It was found that 30% of the respondents are heads of pharmacies, 70% are pharmacists (Fig. 3.1).

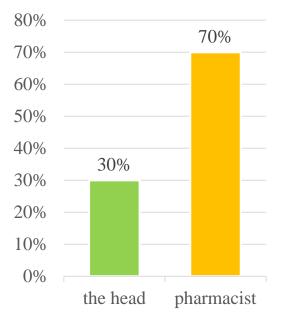


Fig. 3.1. Analysis of the positions of the respondents who took part in the marketing research

We found that 91% of respondents are women (Fig. 3.2). Men are less prone to stress, and men more often choose destructive methods of overcoming it (alcohol, smoking, high-calorie food, aggressive behavior).

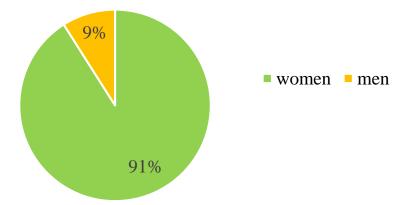


Fig. 3.2. Analysis of the gender of the respondents who took part in the marketing research

It was established that the experience of working in the pharmacy organization of respondents is no more than 5 years is 6% of respondents, 6-10 years – 23% of specialists, 11-20 years – 34% of respondents, 21-30 years – 22% of respondents, 31-40 years – 10% of respondents and over 50 years old – 5% of experts (Fig. 3.3).

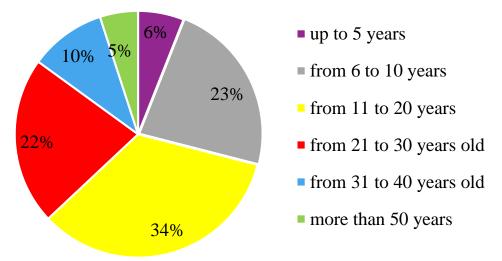


Fig. 3.3. Analysis of work experience of pharmacists

During work, it was found that 95% of pharmacists feel stressed (Fig. 3.4.), and only 5% of respondents answered that they do not.

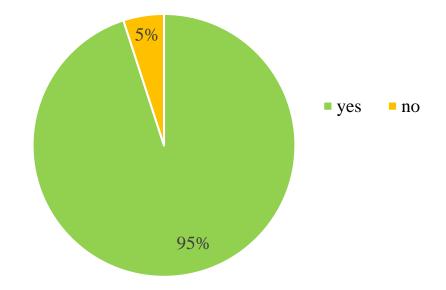
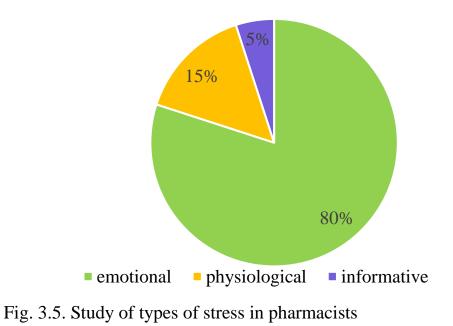


Fig. 3.4. Analysis of the feeling of stress by pharmacists

It was established that 80% of respondents noted that they most often feel emotional stress, 15% of specialists feel physiological and 5% feel informational (Fig. 3.5).



The majority of respondents (82%) believe that they get into stressful situations more often at work than at home (Fig. 3.6).

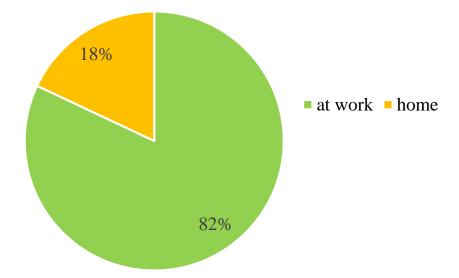


Fig. 3.6. Study of the place of occurrence of stressful situations of pharmacists

After that, we investigated the frequency of stress among pharmacists (Fig. 3.7).

It was found that 27% of respondents experience stressful situations 2-3 times a month, 1 time a month — 27%, constantly — 18%, 2-4 times a week — 16%, once a quarter — 10%, 1-2 times a year — 5% [9].

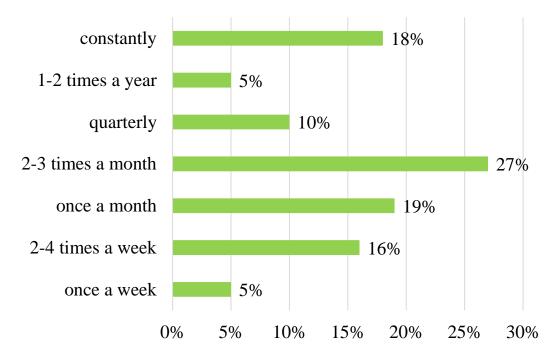


Fig. 3.7. Evaluation of the frequency of occurrence of stress in pharmacists

Professional stress is a tense state of an employee that arises as a result of emotionally negative and extreme factors associated with the performed professional activity [8].

The difference between professional stress and organizational stress lies in the specific stress factors characteristic of each profession [8].

It is generally accepted that professional stress is an objective regularity that manifests itself in the most diverse types of professional activity and can significantly affect its performance, professional formation and development of the personality of the subject of work, professional longevity, somatic and mental health [12].

Statistics show that prolonged stay in stressful conditions or intense exposure to stressful factors in the professional environment can lead to serious emotional and somatic disorders: psychosomatic diseases, desocialization, various professional and personal deformations [6].

In this context, the issue of timely prevention and correction of stress arises, which should be based on comprehensive diagnosis of early manifestations of stress, identification of individual predisposition of a given person to the development of stress and application of various response strategies [12].

As a result of the study, 38 questionnaires filled out by pharmacy employees (pharmacists) and their managers were collected [7].

When the respondents assessed the stressfulness of their work, it turned out that the majority of employees, both managers (82%) and subordinates (85%) consider their work stressful, in addition, 9.5% of managers rate it as the most stressful factor in life [4].

When analyzing the degree of stress, it was determined that it is the main factor in the lives of 15% of respondents, 44% of respondents noted that organizational stress is "high", 7.5% noted "extremely high", and only 1.5% admitted that do not feel stressed at work [2].

The degree of organizational tension of pharmacists directly depends on the correctness of the chosen profession and satisfaction with the work performed [8].

Some of the respondents – both managers and subordinates are admitted that they were disappointed in the choice of profession, and when asked whether they were satisfied with their work, 8.5% answered "not at all", 3.0% — "no" [3].

Heads of pharmacies are "completely" satisfied with their choice of profession to a greater extent (59%) than their subordinates (42%). 34.5% of heads and 44.0% of their subordinates doubted their satisfaction, but still answered "rather yes" [1].

Although they are satisfied with their chosen profession, 59% of heads are not satisfied with the quality of life it provides, which may be one of the factors of organizational stress affecting the productivity of a pharmacy organization [2].

At the same time, the majority of subordinates (65%) consider their quality of life to be quite high, which, despite the high level of stress, most likely keeps them at a job they don't like [1].

26% of heads and 30% of subordinates think about changing jobs due to organizational stress, of which 12% think about changing jobs "often" [1].

There is a lot of empirical evidence that stress at work is a factor that negatively affects people's health, job satisfaction and, ultimately, productivity [11].

In our survey, the majority of interviewed pharmacists believe that work stress has not significantly affected their physical and mental health (68%), but at the same time they name a number of symptoms of stress that they experience [11].

The following symptoms were revealed: depression, insomnia, irritability and disappointment in life, reluctance to work, constant feeling of anxiety, loss of mental concentration, which are characteristic of all pharmacy pharmacists, regardless of age, education and work experience [4].

Examining the trends in the level of stress, it later turned out that it decreased "significantly" in 26%, "insignificantly" in 10%, and 19% of respondents noted that the level of experienced organizational stress has not changed over time. An increase in the level of stress was noted by 55% of respondents, and significant – by 10%. One of the most important causes of a pharmacist's stress are conflicts that arise during work [1].

Conducted studies have shown that managers of pharmacy organizations are the most frequent factors of professional stress, with inspection and control bodies (37%), senior management and organizations (27%), pharmacy visitors (28%) [23]. They are much less concerned about conflicts with suppliers, subordinates and colleagues (8% and 5%).

Conflicts with pharmacy visitors (40%) are cited by the majority of subordinates as the most important factor in professional stress [11].

To a much lesser extent, subordinates name conflict with managers (16%), colleagues (10.6%) and management bodies (5%) as a stress factor [12].

According to the survey, only 2.0% of respondents try not to get into conflicts at work [14].

Thus, pharmacy heads and their subordinates have different opinions about the sources of conflict situations in pharmacies [14].

Managers do not attach sufficient importance to conflicts with subordinates, and subordinates rate this type of conflict the most as a factor of professional stress. To study the causes of organizational stress, all problems that hinder the effectiveness of staff work were divided into several modules [12]. The module "Material technology" — problems related to the material and technical support of activities. The most significant of them are poor organization of the workplace, working conditions, poor lighting, noise, etc. [7]. The personnel module is a problem in personnel policy: low wages, staff turnover, personnel training, lack or insufficient professional training, improper training of employees, etc. [25].

Management module — management problems: inability of managers to correctly set and distribute tasks to subordinates, lack of help in professional adaptation, limitation of employee independence, conservatism of work [8]. Sociopsychological module is dissatisfaction with interpersonal relations and psychological climate in the team.

In the pharmacy environment, interpersonal relationships are widespread, since, in addition to relationships between colleagues, managers and subordinates, there is also communication with visitors to the pharmacy, and these relationships are often conflictual for objective reasons.

The study showed that the problems that cause stressful experiences of pharmacy managers and their subordinates are somewhat different.

For managers, these are mostly personal issues — 59% of respondents, the socio-psychological (24%) and material and technical module (40%) are significantly expressed.

It was established that temporary employees to a lesser extent associate their psychological problems with issues of personnel policy (33%).

At the same time, socio-psychological problems are more important in the team (42%), management problems are seen more by 23% (compared to 4% of managers). The effects of stress can be different for different people. Long-term organizational stress can cause staff turnover, reduced work productivity, loneliness and dissatisfaction with life, professional burnout, and many other complex experiences known as stress syndromes [19]. Among the stress syndromes named by the respondents, we found: decrease in job satisfaction — 34.0%, decrease in

labor productivity — 26%, disruption of social relations — 20%, direct damage to health — 29.0 %.

3.2. Studying methods of overcoming stress among pharmacy workers

Measures used by pharmacists to overcome stress have been determined (Fig. 3.8).

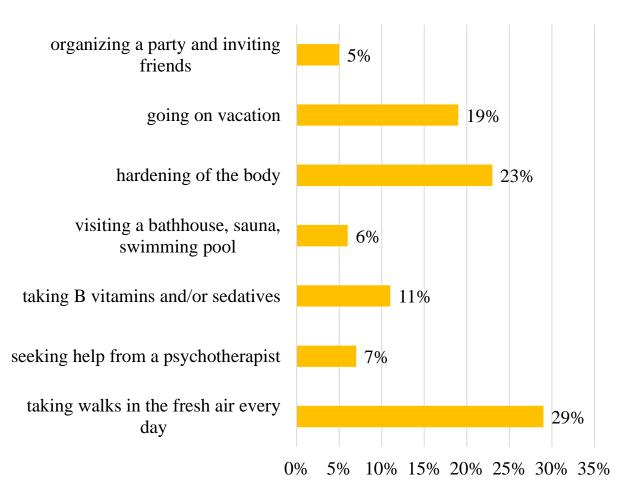


Fig. 3.8. Analysis of measures used by pharmacists to overcome stress

It was found that 29% of respondents walk in the fresh air every day to overcome stress, 23% of experts — harden their bodies, 19% of respondents — go on vacation; 11% — take B vitamins and/or sedatives; 7% — seek help from a psychotherapist who will help understand how a person got into this state and what needs to be done to avoid getting into it again, relieve psychological and emotional pressure; 6% — visiting a bathhouse, sauna, swimming pool; 5% — organize a party and invite friends.

It turned out that only 10% of respondents do not use coffee as a psychostimulant.

It was established that more than 90% of respondents drank 1-3 cups of coffee or more per day (Fig. 3.9).

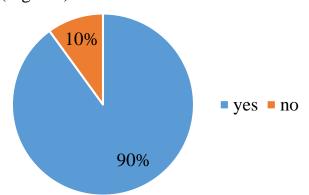


Fig. 3.9. Analysis of the use of coffee by pharmaceutical workers to overcome stress

99% of respondents feel a decrease in working capacity in the winter period, and this period is the peak of the "pharmacy season".

Therefore, the decrease in the working capacity of employees during this period is a direct loss of the pharmacy.

It was found that 97% of pharmacists need to increase the pharmacy's stress resistance from the outside.

However, only 3% of respondents regularly take anti-stress vitamin complexes, and 47% — regularly (Fig. 3.10).

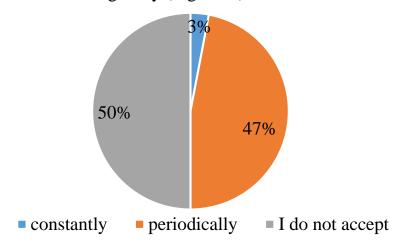


Fig. 3.10. Research on the intake of vitamin complexes by pharmacists

At the same time, pharmacy workers take more responsibility for their health, give priority to the prevention of stress and its consequences.

It turned out that 37% of respondents take sedatives with varying regularity (Fig. 3.11).

So, it can be established that 25% of specialists save themselves from stress by "firefighting", which, of course, also has negative consequences — because stress has already occurred.

Information about the quality of sleep, smoking, increased blood pressure, and frequent headaches can be indirect evidence of increased stress on the body.

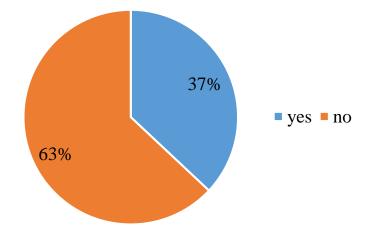


Fig. 3.11. Analysis of the use of sedatives by pharmacists

To overcome and prevent the negative consequences of stress, it is important to implement and apply various psychotechnologies. We analyzed stress relief methods known to pharmacists.

The results of the study showed that to neutralize stress reactions, respondents use communication with friends (28.0%), sleep (24.0%), communication with relatives (23.0%), breaks at work (23.0%), physical activity (9.0%).

A small percentage of respondents mentioned eating (6.0%) and smoking and alcohol (3.0%). None of the interviewees, neither managers nor ordinary employees, mentioned the selection of pharmacotherapeutic agents or the possibility of seeking help from a specialist (psychologist, psychotherapist) as correction of emotional states. Competence of managers in stress management helps to take measures to

prevent the impact of stressors or reduce the tension arising from existing stressors [7].

The study showed that 79.0% of managers of pharmacy organizations do not even know the concept of "stress management", while 81.0% of employees need the organization's help in preventing and overcoming professional stress [21].

65% of specialists believe that the management is currently doing nothing for these purposes, only 18% took part in a paid vacation of a pharmacy company, 7% had a paid vacation in a sanatorium, 5% took part in trainings or conversations with a psychologist [8]. Thus, we experienced a high level of occupational stress among pharmaceutical workers and a low competence in stress management among pharmacy workers and, more importantly, managers of pharmacy organizations [17]. Based on the conducted research, it can be safely asserted that the problem of professional stress among pharmacists is quite acute and requires active attention and practical actions from the managers of pharmaceutical organizations [14]. Knowledge of the revealed regularities related to the stress factors of professional activity, which specialists subjectively perceive as stressful, makes it possible to substantiate recommendations for the creation of educational programs that can be included in the process of professional training of the future pharmacist [9].

These are training programs on basic methods of psychological self-regulation of states, emotional regulation of stressful situations, acquisition of communication and conversation skills, skills of conflict behavior, etc. [11].

According to the data obtained, the main point of preparation of such educational programs is the formation of an appropriate image of the future professional activity, which includes an idea of the most significant factors of increased psychological tension in the activities of pharmacists [30].

CONCLUSIONS TO CHAPTER III

1. With the involvement of 38 pharmacy workers, we conducted a survey on stress among pharmaceutical specialists. It turned out that 30% of survey participants are pharmacy heads, and 70% are pharmacists. We found that 91% of respondents were female. Men are less prone to stress, but men more often choose destructive methods of overcoming it (alcohol, smoking, high-calorie food, aggression). It found that 95% of pharmacists felt stressed, and only 5% of respondents said they did not.

2. Types of stress among pharmacists were analyzed. It turned out that more than 80% of respondents noted that they most often experience emotional stress, 15% – physiological, and 5% – informational. It is worth noting that the majority of respondents (82%) believe that they are more likely to get into stressful situations at work than at home. The frequency of stress among pharmacists was analyzed. It was found that 2-3 times a month – 27% of respondents, 1 time a month – 27%, constantly – 18%, 2-4 times a week – 16%, 1 time a quarter – 10%, 1-2 times a year — 5%.

3. Measures used by pharmacists to overcome stress have been identified. Thus, 29% of respondents walk in the fresh air every day to overcome stress, 23% of experts – harden their bodies, 19% of respondents – go on vacation; 11% – take B vitamins and/or sedatives; 7% – seek help from a psychotherapist who will help understand how a person got into this state and what needs to be done to avoid getting into it again; 6% – visiting a bathhouse, sauna, swimming pool; 5% – organize a party and invite friends. It turned out that only 10% of respondents do not use coffee as a psychostimulant. It turned out that more than 90% of respondents drink 1-3 cups of coffee or more per day.

4. It was found that 99% of respondents feel a decrease in working capacity in the winter period, and it is during this period that the peak of the "pharmacy season" falls. It was found that 97% of respondents need to increase the stress resistance of the pharmacy organization from the outside. However, only 3% of respondents regularly take anti-stress vitamin complexes that increase resistance to stress, and 47% regularly. At the same time, pharmacy workers take more responsibility for their health, give priority to the prevention of stress and its consequences. It turned out that 37% of respondents take sedatives with varying regularity.

GENERAL CONCLUSIONS

1. A description of types of stress is given. Methods of combating stress were studied. Stress management in the activity of a modern pharmacist has been studied. Sources of managerial stress are analyzed. The models of combating stress in pharmacies were studied.

2. With the involvement of 38 pharmacy workers, we conducted a survey on stress among pharmaceutical specialists. It turned out that 30% of survey participants are pharmacy heads, and 70% are pharmacists. We found that 91% of respondents were female. Men are less prone to stress, but men more often choose destructive methods of overcoming it (alcohol, smoking, high-calorie food, aggression). It found that 95% of pharmacists felt stressed, and only 5% of respondents said they did not.

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APPLICATIONS

Appendix A

Questionnaire

The Department of Pharmaceutical Management and Marketing conducts marketing research to study the main causes of stress among pharmaceutical

workers

Answer the following questions:

1. Your age

- \Box up to 25 years old
- $\Box \qquad \text{from 26 to 35 years old}$
- \Box from 36 to 45 years old
- \Box from 46 to 55 years old
- \Box from 56 to 65 years old
- \Box older than 65 years

2. Your gender

- a man
- a woman

3. Your position

- □ pharmacist
- □ pharmacist
- □ manager

4. Your work experience

- \Box up to 5 years
- \Box from 6 to 10 years
- \Box from 11 to 20 years old
- \Box from 21 to 30 years old
- \Box from 31 to 40 years old
- \Box more than 50 years
- 5. Did you feel stressed?
- □ yes
- □ no
- \Box difficult to answer
- 6. What kind of stress did you feel?
- □ emotional
- □ informative
- □ physiological
- 7. Where did you most often get into stressful situations?
- at work
- □ home
- 8. How often do you experience stressful situations?
- \Box once a week
- \Box 2-4 times a week
- \Box once a month
- \Box 2-3 times a month

- \Box once a quarter
- \Box 1-2 times a year
- □ constantly

9. What means do you use to combat stress?

- \Box taking walks in the fresh air every day
- □ seeking help from a psychotherapist
- □ taking B vitamins and/or sedatives
- □ visiting a bathhouse, sauna, swimming pool
- \Box hardening of the body
- \Box going on vacation
- □ organizing a party and inviting friends

10. Do you use coffee to fight stress?

- □ Yes
- □ No
- 11. If yes, please indicate how many cups per day_

12. Do you feel a decrease in working capacity in the winter period?

- □ Yes
- □ No

13. Do you need to increase the body's stress resistance from the outside?

- □ Yes
- □ No

14. How often do you take anti-stress vitamin complexes?

- □ constantly
- □ periodically
- □ I do not accept

15. Do you take anti-stress vitamin complexes?

- □ Yes
- □ No



«ZAMONAVIY FARMATSEVTIKA SOHASINI RIVOJLANISHINING DOLZARB MASALALARI VA TENDENSIYALARI» MAVZUSIDAGI XALQARO ISHTIROKIDAGI 1 - RESPUBLIKA ILMIY AMALIY ANJUMAN MATERIALLARI

МАТЕРИАЛЫ 1 РЕСПУБЛИКАНСКОЙ НАУЧНО ПРАКТИЧЕСКОЙ КОНФЕРЕНЦИИ С МЕЖДУНАРОДНЫМ УЧАСТИЕМ «АКТУАЛЬНЫЕ ВОПРОСЫ И ТЕНДЕНЦИИ РАЗВИТИЯ СОВРЕМЕННОЙ ФАРМАЦЕВТИЧЕСКОЙ ОТРАСЛИ»

ABSTRACT BOOK OF THE 1st REPUBLICAN SCIENTIFIC AND PRACTICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION «CURRENT ISSUES AND TRENDS IN THE DEVELOPMENT OF THE MODERN PHARMACEUTICAL INDUSTRY»







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 У. Регистрация лекарств – при подтверждении GMP украинским инспекторатом (с 2012 г.)

 Бессрочная перерегистрация лекарств на основе данных фармаконадзора (с 2014 г.)

Список использованной литературы:

<u>https://www.ich.org/</u>

 Указ Президента Украины от 11.06.98 № 615/98 «Об утверждении стратегии интеграции Украины в Европейский Союз»

STUDY OF APPROACHES TO THE DEVELOPMENT OF STRESS RESISTANCE IN PHARMACIES

Bondarieva I. V., Chafi-Hassanna¶

National University of Pharmacy, Kharkiv, Ukraine, e-mail: <u>iryna.bondarieva@gmail.com</u>, tel: +380667929732

Introduction: In organizations where the work process is continuous, stressful situations often arise. This is facilitated by conflicts between team members, unresolved tasks, work overload and lack of time. However, most often the head of the organization suffers from all these factors. The greater the responsibility entrusted to him, the more subordinates he has at his disposal, the more facts and phenomena need to be verified. There is a concept of professional stress — it is a diverse phenomenon that is expressed in mental and physical reactions to difficult situations that arise in the employee's work. Stress is mentioned in a separate section of the International Classification of Diseases. Moreover, the causes of such stress can be not only a lack of time, information or a lot of work, but also working conditions: poor lighting of the workplace, poor ventilation, overcrowding.

Purpose of the study: study of approaches to the development of stress resistance in pharmacies.

Materials and methods: survey, analysis, grouping, comparison, generalization.

Results and conclusions: As a result of the research, a survey of pharmacy workers (pharmacists) and their managers was conducted.

It has been established that the majority of employees, both managers and subordinates, consider their work stressful, and some managers rate it as the most stressful factor in their lives.

During the analysis of the degree of stress, it was determined that it is the main factor in the life of the respondents, the respondents noted that the organizational stress is "high", "extremely high", and only a few admitted that they do not feel stress at work.

It was established that the degree of organizational tension of pharmacists directly depends on the correctness of the chosen profession and satisfaction with the work performed.

Some of the respondents - both managers and subordinates - admitted that they were disappointed in the choice of profession, and when asked whether they were satisfied

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with their work, some answered "not at all", and some - "no".

It was found that managers of pharmacies are "completely" satisfied with their choice of profession to a greater extent than their subordinates. Although they are satisfied with their chosen profession, most managers are not satisfied with the quality of life it provides, which can be one of the factors of organizational stress affecting the productivity of the pharmacy organization.

At the same time, most subordinates consider their quality of life quite high, which, despite the high level of stress, most likely keeps them in a job they don't like.

It was found that 26% of managers and 30% of subordinates think about changing jobs due to organizational stress, of which 12% think about changing jobs "often".

There is a lot of empirical evidence that stress at work is a factor that negatively affects people's health, job satisfaction and, ultimately, productivity.

In our survey, the majority of interviewed pharmacists believe that work stress has not significantly affected their physical and mental health, but at the same time they name a number of symptoms of stress that they experience. The following symptoms were revealed: depression, insomnia, irritability and disappointment in life, reluctance to work, constant feeling of anxiety, loss of mental concentration, which are characteristic of all pharmacy pharmacists, regardless of age, education and work experience.

Examining trends in the level of stress, it later turned out that it decreased "significantly" in 26%, "insignificantly" in 10%, and 19% of respondents noted that the level of experienced organizational stress has not changed during the last time. An increase in the level of stress was noted by 55% of respondents, and a significant increase in the level of stress was noted by 10%. One of the most important causes of a pharmacist's stress is the conflicts that arise during work.

Conducted studies have shown that managers of pharmacy organizations are the most frequent factors of professional stress with inspection and control bodies, senior management and organizations, pharmacy visitors. They are much less concerned about conflicts with suppliers, subordinates and colleagues.

It was found that the most important factor of professional stress is called by the majority of subordinates conflicts with pharmacy visitors.

To a much lesser extent, subordinates name conflict with managers, colleagues and management bodies as a stress factor.

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МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ



CHAFI·HASSANNA¶

у секційному засіданні студентського наукового товариства кафедри фармацевтичного менеджменту та маркетингу

ХХІХ Міжнародна науково-практична конференція молодих вчених та студентів «Актуальні питання створення нових лікарських засобів»

В.о. ректора Національного фармацевтичного університету



Алла КОТВІЦЬКА

19-21 квітня 2023 р. м. Харків



МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ

АКТУАЛЬНІ ПИТАННЯ СТВОРЕННЯ НОВИХ ЛІКАРСЬКИХ ЗАСОБІВ

МАТЕРІАЛИ ХХІХ МІЖНАРОДНОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ МОЛОДИХ ВЧЕНИХ ТА СТУДЕНТІВ

> 19-21 квітня 2023 року м. Харків

> > Харків НФаУ 2023

ANALYSIS OF THE CAUSES OF STRESS AMONG PHARMACISTS

Chafi Hassana Scientific supervisor: Bondarieva I.V. National University of Pharmacy, Kharkov, Ukraine fmm@nuph.edu.ua

Introduction. In pharmacies where the work process is continuous, stressful situations often occur. This is facilitated by conflicts between team members, unresolved tasks, overloaded work and lack of time. Most often, however, the head of the pharmacy suffers from all these factors. The greater the responsibility entrusted to him, the more subordinates at his disposal, the more facts and phenomena that must be checked. Inadequate staffing, increased responsibilities and a high workload are some of the factors that are directly related to stress levels experienced by pharmacists, which in turn affect job satisfaction.

Aim. The aim is analysis of the causes of stress among pharmacists.

Materials and methods. The methods of questionnaire, analysis, grouping, comparison, generalization have been used in study.

Results and discussion. With the involvement of pharmacists, we conducted a survey on stress among pharmaceutical specialists. It turned out that 30% of survey participants are pharmacy heads, and 70% are pharmacists. It found that most pharmacists felt stressed, and only 5% of respondents said they did not.

Types of stress among pharmacists were analyzed. It turned out that more than 80% of respondents noted that they most often experience emotional stress, 15% – physiological, and 5% – informational. It is worth noting that the majority of respondents (82%) believe that they are more likely to get into stressful situations at work than at home. The frequency of stress among pharmacists was analyzed. It was found that 2-3 times a month – 27% of respondents, 1 time a month – 27%, constantly – 18%, 2-4 times a week – 16%, 1 time a quarter – 10%, 1-2 times a year — 5%.

One of the most important causes of a pharmacist's stress are conflicts that arise during work. Conducted studies have shown that managers of pharmacy organizations are the most frequent factors of professional stress, with inspection and control bodies, senior management and organizations, pharmacy visitors. They are much less concerned about conflicts with suppliers, subordinates and colleagues.

Conflicts with pharmacy visitors are cited by the majority of subordinates as the most important factor in professional stress. To a much lesser extent, subordinates name conflict with managers, colleagues and management bodies as a stress factor.

Conclusions. Analysis of the causes of stress among pharmacists was conducted.

ANALYSIS OF THE ASSORTMENT OF DRUGS AFFECTING RENIN-ANGIOTENSIN-ALDOSTERONE SYSTEM ON THE PHARMACEUTICAL MARKET OF MOROCCO Elbahaji Raihana, Belik Halina

Scientific supervisor: Shchokina K.G. National University of Pharmacy, Kharkiv, Ukraine acya@ukr.net

Introduction. Arterial hypertension (AH) is one of the most common diseases. More than 1.5 billion people worldwide suffer from this disease. Arterial hypertension is a risk for the appearance

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National University of Pharmacy

Faculty <u>for foreign citizens' education</u> Department <u>pharmaceutical management and marketing</u> Level of higher education <u>master</u> Specialty <u>226 Pharmacy, industrial pharmacy</u> Educational program<u>Pharmacy</u>

> APPROVED The Head of Department <u>pharmaceutical</u> <u>management and</u> <u>marketing</u>

Volodymyr MALYI "01" September 2022

ASSIGNMENT FOR QUALIFICATION WORK OF AN APPLICANT FOR HIGHER EDUCATION

Hassanna CHAFI

1. Topic of qualification work: «Study of approaches to the development of stress resistance in pharmacies», supervisor of qualification work: Iryna BONDARIEVA, PhD, assoc. prof.,

approved by order of NUPh from <u>"06st" of February 2023 №35</u>

2. Deadline for submission of qualification work by the applicant for higher education: April 2023.

3. Outgoing data for qualification work: <u>sources of scientific literature, directories, retail sector of</u> the pharmaceutical market, legislative and regulatory framework, statistical and reporting data, activity of pharmacy enterprises, analysis of professional periodicals.

4. Contents of the settlement and explanatory note (list of questions that need to be developed): to describe the types of stress; to explore stress management techniques; to investigate the sources of stress in managers; to evaluate stress management models in pharmaceutical organizations; to analyze the causes of stress among pharmacists; to study methods of overcoming stress among pharmacy workers.

5. List of graphic material (with exact indication of the required drawings): Pictures – 18.

6. Consultants of chapters of qualification work

Chapters	Name, SURNAME, position of consultant	Signature, date	
		assignment was issued	assignment was received
1	Iryna BONDARIEVA, associate professor of higher education institution of department pharmaceutical management and marketing	17.11.2022	17.11.2022
2	Iryna BONDARIEVA, associate professor of higher education institution of department pharmaceutical management and marketing	09.03.2023	09.03.2023
3	Iryna BONDARIEVA, associate professor of higher education institution of department pharmaceutical management and marketing	21.04.2023	21.04.2023

7. Date of issue of the assignment: «01» September 2022.

CALENDAR PLAN

№ 3/п	Name of stages of qualification work	Deadline for the stages of qualification work	Notes
1	Collection and generalization of data from scientific literature by areas of qualification work	September 2022	done
2	Research on the sources of stress in pharmacy	September 2022	done
3	Assessment of stress management models in pharmaceutical organizations	October 2022	done
4	Analysis of the causes of stress among pharmacists	November 2022	done
5	Studying methods of overcoming stress among pharmacy workers	December 2022	done
6	Writing and design of qualification work	January 2023	done
7	Approbation of qualification work	April 2023	done
8	Submission of the qualification work to the EC of the National University of Pharmacy	April 2023	done

An applicant of higher education

_____ Hassanna CHAFI

Supervisor of qualification work

_____ Iryna BONDARIEVA

ВИТЯГ З НАКАЗУ № 35 По Національному фармацевтичному упіверситету від 06 лютого 2023 року

нижченаведеним студентам 5-го курсу 2022-2023 навчального року, навчання за освітнім ступенем «магістр», галузь знань 22 охорона здоров'я, спеціальності 226 – фармація, промислова фармація, освітня програма – фармація, денна форма здобуття освіти (термін навчання 4 роки 10 місяців та 3 роки 10 місяців), які навчаються за контрактом, затвердити теми кваліфікаційних робіт:

Прізвище студента	Тема кваліфікаційної роботи		Посада, прізвище та ініціали керівника	Рецензент кваліфікаційної роботи
• по ка Шафі Хассанна	федрі фармацевти Дослідження підходів до розвитку стресостійкості в аптечних підприємствах	Study of approaches to the development of stress resistance in pharmacies	та маркетингу доцент Бондарєва І.В.	доц. Терещенко Л.В.

Підстава: подан на на кана вгода ректора

Ректор вірно. Ссарстар Абодо 100 Вірно. Ссарстар

Ф A2.8-47-110

ВИСНОВОК

Комісії з академічної доброчесності про проведену експертизу щодо академічного плагіату у кваліфікаційній роботі здобувача вищої освіти

№ 112962 від «3 » травня 2023 р.

Проаналізувавши випускну кваліфікаційну роботу за магістерським рівнем здобувача вищої освіти денної форми навчання Шафі Хассанна, 5 курсу, ______ групи, спеціальності 226 Фармація, промислова фармація, на тему: «Дослідження підходів до розвитку стресостійкості в аптечних підприємствах / Study of approaches to the development of stress resistance in pharmacies», Комісія з академічної доброчесності дійшла висновку, що робота, представлена до Екзаменаційної комісії для захисту, виконана самостійно і не містить елементів академічного плагіату (компіляції).

Голова комісії, професор

Bm

Інна ВЛАДИМИРОВА

1% 21%

REVIEW

of scientific supervisor for the qualification work of the master's level of higher education of the specialty 226 Pharmacy, industrial pharmacy Hassanna CHAFI

on the topic: «Study of approaches to the development of stress resistance in pharmacies»

Relevance of the topic. In organizations where the work process is carried out continuously, stressful situations occur quite often. This is facilitated by conflicts between team members, unresolved tasks, work overload, and lack of time. But most often the head of the organization suffers from all these factors. The more responsibility is entrusted to him, the more subordinates are at his disposal, the more facts and phenomena must be controlled.

Practical value of conclusions, recommendations and their validity. The practical significance of the conducted research lies in the use of recommendations in the practical activities of a pharmacy enterprise. The given results are scientifically based and can be used in determining the main causes, manifestations of stress and will allow managing stress in pharmacy organizations.

Assessment of work. Hassanna CHAFI conducted a significant research work and successfully coped with it, showed the ability to analyze and summarize data from literary sources, to work independently. In the work, the research results are properly interpreted and illustrated with figures. While completing the qualification work, the higher education applicant showed creativity, purposefulness, independence, and perseverance.

General conclusion and recommendations on admission to defend. The qualification work of the 5th year applicant of higher education Phm18(5.0) eng-06 group Hassanna CHAFI on the topic: "Study of approaches to the development of stress resistance in pharmacies" is a completed scientific study, which in terms of relevance, scientific novelty, theoretical and practical significance meets the requirements for qualification works, and can be presented to the EC of the National University of Pharmacy.

Scientific supervisor	 Iryna BONDARIEVA
«13» of April 2023	

REVIEW

for qualification work of the master's level of higher education, specialty 226 Pharmacy, industrial pharmacy

Hassanna CHAFI

on the topic: «Study of approaches to the development of stress resistance in pharmacies»

Relevance of the topic. Cardiovascular diseases account for 40% of all causes of mortality in most developed European countries. At the same time, stressful situations as a risk factor for cardiovascular diseases are constant companions of human life: instability of the political situation, serious injury or illness, failures at work or studies, death of loved ones, etc. Today, the stress response is considered as an adaptive mechanism aimed at maintaining the stability of the body's physical and mental functioning in response to the stressor. However, stress is not always an adaptive response. Excessive stress is a pathological condition.

Theoretical level of work. It is disclosed in the qualification work theoretical approaches to the nature of stress.

Author's suggestions on the research topic. The author identified measures that pharmaceutical workers use to combat stress.

Practical value of conclusions, recommendations and their validity. The obtained research results are of practical importance and can be used to increase the efficiency of pharmaceutical workers.

Disadvantages of work. As a remark, it should be noted that some results of the literature review, which are presented in the first chapter, need stylistic refinement. In general, these remarks do not reduce the scientific and practical value of the qualification work.

General conclusion and assessment of the work. Hassanna CHAFI qualification work "Study of approaches to the development of stress resistance in pharmacies" is a scientifically based analytical study that has theoretical and practical significance. The qualification work meets the requirements for qualification papers and can be submitted to the EC of the National University of Pharmacy.

Reviewer _____assoc. prof. Lyubov Tereshchenko

«18» of April 2023

Ф А2.2.1-91-287 МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ

ВИТЯГ З ПРОТОКОЛУ № 11

21 квітня 2023 року м. Харків

засідання кафедри фармацевтичного менеджменту та маркетингу

Голова: завідувач кафедри ФММ, доктор фарм. наук, професор Малий В.В.

Секретар: доцент ЗВО, канд. фарм. наук, доц. Жадько С.В.

ПРИСУТНІ: зав. кафедри ФММ, доктор фарм. наук, проф. Малий В.В., професор ЗВО, докт. фарм. наук, проф. Слободянюк М.М., професор ЗВО, докт. фарм. наук, проф. Пестун І.В., професор ЗВО, докт. фарм. наук, проф. Ткачова О.В., доцент ЗВО, канд. фарм. наук, доц. Рогуля О.Ю., доцент ЗВО, канд. фарм. наук, доц. Софронова І.В., доцент ЗВО, канд. фарм. наук, доц. Жадько С.В., доцент ЗВО, канд. фарм. наук, доц. Бондарєва І.В., доцент ЗВО, канд. фарм. наук, доц. Малініна Н.Г., доцент ЗВО, канд. фарм. наук, доц. Бабічева Г.С., асистент, канд. фарм. наук Шуванова О.В., асистент, канд. фарм. наук Чегринець А.А., асистент, канд. фарм. наук Ткаченко І.В., здобувачі вищої освіти випускного курсу спеціальності 226 Фармація, освітньої програми Фармація.

ПОРЯДОК ДЕННИЙ: Про допуск здобувачів вищої освіти факультету з підготовки іноземних громадян випускного курсу спеціальності 226 Фармація, промислова фармація, освітньої програми Фармація до захисту кваліфікаційних робіт в Екзаменаційній комісії НФаУ.

СЛУХАЛИ: Про допуск здобувача вищої освіти факультету з підготовки іноземних громадян випускного курсу спеціальності 226 Фармація, промислова фармація освітньої програми Фармація групи Фм18(5,0д)англ-6 Хассанна ШАФІ до захисту кваліфікаційної роботи в Екзаменаційній комісії НФаУ. Кваліфікаційна робота на тему «Дослідження підходів до розвитку стресостійкості в аптечних підприємствах».

ВИСТУПИЛИ: В обговоренні кваліфікаційної роботи взяли участь проф. ЗВО Слободянюк М.М., доц. ЗВО Бабічева Г.С. Керівник кваліфікаційної роботи: доц. ЗВО, канд. фарм. наук, доц. Бондарєва І.В.

УХВАЛИЛИ: Допустити здобувача вищої освіти Хассанна ШАФІ до захисту кваліфікаційної роботи на тему «Дослідження підходів до розвитку стресостійкості в аптечних підприємствах» в Екзаменаційній комісії НФаУ.

Зав. каф. ФММ, доктор фарм. наук, професор

Володимир МАЛИЙ

Секретар, доцент ЗВО, канд. фарм. наук, доцент

Світлана ЖАДЬКО

НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ

ПОДАННЯ ГОЛОВІ ЕКЗАМЕНАЦІЙНОЇ КОМІСІЇ ЩОДО ЗАХИСТУ КВАЛІФІКАЦІЙНОЇ РОБОТИ

Направляється здобувач вищої освіти Хассанна ШАФІ до захисту кваліфікаційної роботи за галуззю знань <u>22 Охорона здоров'я</u> спеціальністю 226 <u>Фармація, промислова фармація</u> освітньою програмою Фармація

на тему: «Дослідження підходів до розвитку стресостійкості в аптечних підприємствах».

Кваліфікаційна робота і рецензія додаються.

Декан факультету / Світлана КАЛАЙЧЕВА /

Висновок керівника кваліфікаційної роботи

Здобувач вищої освіти Хассанна ШАФІ виконав на кафедрі фармацевтичного менеджменту та маркетингу НФаУ кваліфікаційну роботу, яка присвячена дослідженню підходів до розвитку стресостійкості в аптечних підприємствах.

У першому розділі роботи розкрито теоретичні підходи до сутності стресу.

У другому розділі проведено оцінку моделей боротьби зі стресом в фармацевтичних організаціях. У третьому розділі визначено методи подолання стресу серед аптечних працівників

У цілому подана до захисту кваліфікаційна робота Хассанна ШАФІ на тему «Дослідження підходів до розвитку стресостійкості в аптечних підприємствах» відповідає вимогам, що висуваються до кваліфікаційних робіт, оцінюється позитивно і може бути рекомендована для захисту в Екзаменаційну комісію НФаУ.

Керівник кваліфікаційної роботи

Ірина БОНДАРЄВА

«13» квітня 2023 р.

Висновок кафедри про кваліфікаційну роботу

Кваліфікаційну роботу розглянуто. Здобувач вищої освіти Хассанна ШАФІ допускається до захисту даної кваліфікаційної роботи в Екзаменаційній комісії.

Завідувач кафедри фармацевтичного менеджменту та маркетингу

Володимир МАЛИЙ

«21» квітня 2023 р.

Qualification work was defended

of Examination commission on

« » of June 2023

With the grade _____

Head of the State Examination commission,

D.Pharm.Sc, Professor

/ Oleh SHPYCHAK /