

**MINISTRY OF HIGHER AND SECONDARY SPECIAL EDUCATION OF  
THE REPUBLIC OF UZBEKISTAN  
MINISTRY OF HEALTH OF THE REPUBLIC OF UZBEKISTAN  
BUKHARA STATE MEDICAL INSTITUTE NAMED AFTER ABU ALI  
IBN SINO  
DEPARTMENT OF PROPEDYTICS OF INTERNAL DISEASES**

"I APPROVE"  
Vice-rector for educational work  
DSc \_\_\_\_\_ G.J. Jarilkasinoва  
« \_\_\_\_\_ » \_\_\_\_\_ 2021

**FACULTY OF METHODOLOGY FOR 2021-2022 ACADEMIC YEAR  
ON THE SUBJECT OF NURSING FOR 1-COURSE STUDENTS OF  
THE FACULTY OF HIGH-CLASS NURSE**

**Bukhara-2021**

**1rd year Faculty of high-class nurse  
The subject "Nursing" for students  
Educational and methodical complex**

Department of Propaedeutics of Internal Medicine, Bukhara State Medical Institute named after Abu Ali ibn Sino, Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan

Field of knowledge 500000 -Health and social security

Field of education 510000 -Health

Field of study 5110700 - Nursing

Department of Propaedeutics of Internal Medicine  
mudiri, tfd dots. Nurboyev F.E.

Developer:

Aslonova I.J. - Senior Lecturer of the Department of Propaedeutics of Internal Medicine, Ph.D.

Tosheva Kh.B. - Senior Lecturer of the Department of Propaedeutics of Internal Medicine, Ph.D.

Reviewers:

Axmedova N. Sh. Associate Professor of Internal Medicine, Ph.D.

Nurov U.I. Head of the Department of ENT and Ophthalmology, Associate Professor

Scientific-methodical council of Bukhara Medical Institute  
Considered at the 2021 №\_2\_\_ meeting

Bukhara - 2021

## TABLE OF CONTENTS

Annotation .....	4
Chapter 1 essence of nursing .....	6
Chapter 2 history of sisterhood.....	31
Chapter 3 human needs.....	51
Chapter 4 communication .....	67
Chapter 5 nursing training.....	81
Chapter 6 nurse care models .....	89
Chapter 7 sister process.....	118
Chapter 8 possibilities of applying authorized care models v. Henderson.....	148
Chapter 9 stress and adaptation .....	230
Chapter 10 nutrition and physical exercises....	249
Chapter 11 pain and sister process.....	264
Chapter 12 quality of medical care - one of the components of quality of life school of patients – way to increase the quality of life.....	280
Glossary .....	335
List of used literature .....	348

## INTRODUCTION

The new revised and supplemented textbook “Theoretical Foundations of Nursing” is intended to study the subject “Fundamentals of Nursing” in accordance with the modern requirements of state educational standards of a new generation in the specialties “Nursing” 5110700, “General Medicine” 5510100, Chapter 1 sets out the essence of nursing, its philosophy, which contains elements of medical ethics, ethical values, virtue, and basic responsibilities.

The history of the development of nursing in Russia and abroad, the modern system of training nursing personnel in Russia, the history of creation and tasks of associations of nurses is described in detail in Chapter 2.

Chapter 3 highlights the basic human needs using the pyramid of the American psychologist A. Maslov.

Particular attention is paid to the technique of communication and patient education (chapters 4, 5).

Chapter 6 lists only a few models of nursing, as the time allotted for this discipline is limited.

Chapter 7, devoted to the nursing process, will help to understand the essence of each stage and the whole process as a whole, its documentation and will help to introduce the nursing process into medical institutions, using the model of B. Henderson, taking into account the recommendations of the WHO Regional Office for Europe as part of the Lemon project ". The use of other well-known or newly created models is not ruled out if they are recognized by the nursing staff as the most optimal.

Chapter 8 outlines the capabilities of the model by V. Henderson, adapted to Russian conditions, examines the initial (nursing) assessment of the patient's condition, formulates problems, defines goals, the volume of nursing interventions, and evaluates the outcome of care according to 10 everyday needs of a person.

The Appendix to Chapter 8 gives you the option of filling in the nursing documentation, which, in our opinion, will help students in studying the nursing process.

Chapter 9, Stress and Adaptation, has been expanded to include detailed information about nursing care for various behaviors caused by stress.

Chapter 10, “Nutrition and Movement,” will allow students to expertly advise patients and their relatives on issues related to nutrition and physical activity.

A fragment of OST "Protocol of management of patients. Pressure ulcers "will introduce a new form of regulatory document and will allow the use of modern approaches to the prevention of pressure ulcers.

Chapter 11 discusses the problem of pain and offers several scales for assessing the intensity of pain, allowing the sister to provide adequate assistance to the patient.

A new chapter 12, “Quality of medical care is one of the components of the quality of life”, is introduced in the book, which reveals the concepts of quality of life and medical care, their main aspects, and the tasks of medical personnel in its provision.

We hope that the textbook will help teachers and students of medical colleges and schools, as well as students of faculties of higher nursing education and practicing nursing staff to take a fresh look at nursing and improve the quality of nursing care.

We are grateful to everyone who directly or indirectly helped to reprint the textbook, as well as to the heads of nursing services, staff of medical institutions, teachers and students of nursing departments of medical schools, colleges, universities for their comments and comments on the content and form of this textbook.

## CHAPTER 1 ESSENCE OF NURSING

### After reading this chapter, you will learn:

- on the content of the specialty "Nursing";
- on the essence of nursing;
- on the content, basic concepts and ethical elements of the philosophy of nursing;
- the need for a holistic approach to health;
- about some models that explain the concept of “health”;
- about nursing deontology and the content of the Florence Nightingale oath.

### Concepts and terms:

- **illness** - a change in the physiological, psychosocial and spiritual state of a person, which leads to a decrease in his ability to take care of himself and a decrease in life expectancy [40];
- **personality** - the social essence of man [40];
- **“do no harm”** - the ethical principle of no harm;
- **basic human needs** - conditions for growth and development: physiological, psychological, and social needs necessary to maintain physiological equilibrium, mental and social health [40];
- **nursing intervention (action)** - *assisting the patient in progressing to an optimal level of health in any given situation by planned care (using the nursing process) and ensuring appropriate interventions [40];*
- **holistic** - *holistic [40];*
- **Nursing Code of Ethics** - *principles formulated by nursing professionals in each country. This code is periodically reviewed and supplemented by new concepts and advances in the health system. Most often, it is promoted by professional associations of nurses, and is also represented in the code of ethics of the International Council of Nurses [40].*

### 1.1. NURSING AS A PROFESSION

The content of nursing has changed over the centuries, just as the demands of society and living conditions have changed.

Today it is very difficult to unequivocally answer the question of what is nursing. Currently, there are many definitions of this concept. Each of them was inferred under the influence of a number of factors: the specific historical period, the socioeconomic level and geographic location of the country, the needs for nursing care, the number of nurses and their responsibilities, the views and experience of the person that explain the meaning of this term. If you ask people of different ages, any professions and social strata to determine what nursing is, then we get different interpretations.

The first scientific definition of the specialty "Nursing" was given by F. Nightingale in "For Notes about leaving" (1859). She believed that nursing was "an act to use the patient's environment to help him recover." At the same time, the goal of nursing care was formulated as follows: "To create the best conditions for the patient to activate his own strength." By "best conditions" F. Nightingale meant pure, fresh air, proper nutrition. Calling nursing art, she believed that this art requires "organization, practical and scientific training." F. Nightingale was firmly convinced that "in essence, nursing as a profession is different from medical practice and requires special knowledge that is different from medical one." One of the definitions of nursing belongs to an American nurse, professor and researcher Virginia Henderson. In 1958, the International Council of Nurses asked her to formulate the meaning of this term and write a book about the fundamental principles of patient care. It has been called the Basic Principles of Patient Care Activities and has been translated into 25 languages. The definition of nursing given by W. Henderson in 1961 is still relevant today.

V. Henderson argues that the unique task of a nurse is to help a person, sick or healthy, in the implementation of actions related to his health, recovery or quiet death, which he would take, having the necessary strength, knowledge and will. The nurse carries out this work, helping the patient to fulfill all the appointments prescribed by the doctor, and to gain independ-

ence faster. She is a member of the medical care team, helps others (just like the last ones), and participates together with her colleagues in the planning and implementation of the full program of action - whether it is disease prevention, recovery or support for the dying. None of the members of the brigade can assign to such heavy duties that will impede the performance of immediate functions. None of the medical staff should be distracted from performing their main task, despite the need to clean record, register and perform other actions. All medical professionals must understand that the patient is the central figure, and they are all called to serve him. The efforts of the medical care team will be in vain if the patient does not accept help and does not participate in it. The sooner the patient will be able to take care of himself, observe the state of his health and fulfill the doctor's prescriptions, the better. Such a look at the nurse as a substitute for what the patient lacks for "integrity", "intactness" or "independence" may seem somewhat limited. However, it is not. It is difficult to achieve this goal, so the tasks and functions of a nurse are very complex.

How rarely are people mentally and physically "safe and sound"? To what extent is good health hereditary and to what extent acquired? It is believed that the level of mental development and education is associated with a state of health. And if good health is difficult to achieve for most people, then it is much more difficult for a nurse to help a person achieve this goal. She just needs to "fall into place" of each patient in order to understand his needs. "The sister is either conscious, now falls into unconsciousness, then loves life, then inclines to suicide. A nurse is the feet of a legless person, the eyes of a blind person, the support for a child, the source of knowledge and confidence for a young mother, the mouth of those who are too weak or too self-absorbed to speak "[11].

At a meeting of national representatives of the International Council of Nurses (New Zealand, 1987), the following wording was unanimously adopted: "Nursing is an integral part of the

health system and includes activities to promote health, prevent disease, provide psychosocial care and care for people with physical and mental illness, as well as incapacitating for all age groups. Such assistance is provided by nurses, both in medical and in any other institutions, as well as at home, wherever there is a need for it. ”

At the First All-Russian Scientific and Practical Conference on Theory of Nursing (Golitsyno, 1993), the following definition of nursing was given: “Nursing as part of the healthcare system is a science and art aimed at solving existing health problems in changing environmental conditions environment ”[40].

## **1.2. NEW NURSE CONTENT**

“A lot has been created and written about the fact that every woman shows herself well as a sister of mercy. I, on the contrary, believe that these fundamentals of leaving are almost unknown,”F. Nightingale wrote in“Notes on leaving”. These words were said more than 100 years ago, however, even today, the idea of nursing as a profession is constantly changing. This specialty has arisen and exists to serve society. The role of medical personnel depends on social conditions and health care needs.

Much has been written about the role of F. Nightingale in the development of nursing. After the Crimean War, she made an attempt to change her mind about the place and role of the sister of mercy in medical practice. Thanks to her active life position and asceticism, enormous changes have taken place in her views on the profession of a nurse. She suggested changing the system of vocational education, a new theory of patient care, and hygiene techniques. Her activity was aimed at the prevention of diseases.

For a long time, the medical sisters performed only the doctor's prescriptions. They were strictly forbidden to make in-

dependent decisions on patient care. However, the development of nursing, the struggle for human rights in the world, including in our country, have become an incentive for change in one of the main medical professions. The nurse in her activities is becoming more independent.

Until recently, patient care was largely intuitive or empirical (when sisters relied more on practical, often routine experience or observation than on scientific research). Through trial and error, the nurse found funds that were supposed to help the patient, and many nurses became professional thanks to the accumulated experience in caring for patients.

Previously, nursing received a scientific basis either from the field of medicine (medical business), or from the field of physiology, biology, psychology, sociology. Now nursing is striving to create its own, unique knowledge base. Some aspects of patient care practice have not been finalized and are being solved on an intuitive level, but the basis of a scientific approach in this area has already been created and will be developed. It should be borne in mind that “the pace of development of nursing depends on practice, therefore, significant variations can be observed between its various areas, as well as its features in different countries. At various times, sisters performed (and still do) the work of doctors, nutritionists, cleaners, and clerks. All this introduces confusion in understanding the unique role of the sister,” F. Nightingale wrote. According to her, it can be concluded that nursing means caring for a person, and not just solving his medical problems - “it is better to know a person in a certain condition than the very condition that brings him suffering” [42].

The time when the work of a nurse basically came down to helping the patient wipe the sweat from his face is running out. Today, she is still fulfilling the prescription of a doctor, but is becoming increasingly independent in making an independent decision.

Dr. T. Billroth wrote: “To be able to help the suffering is undoubtedly one of the most beautiful abilities that a person has. Nevertheless, the “manual” should be elevated to “art”, should combine knowledge and skill, if they want to achieve its full beneficial effect on themselves and others ”[2].

And indeed, nursing today is both art and science. It requires both understanding and application of special knowledge and skills. Nursing is based on the theory and practice created on the basis of the humanities and natural sciences: biology, medicine, psychology, sociology, etc. The nurse assumes responsibility and acts with appropriate authority, directly fulfilling professional duties, and is responsible for those medical services that it provides. She has the right to independently decide whether she needs to continue her education in management, training, work in the clinic and research, and take steps to meet these needs. The mission of nursing in society is to help individuals, families and groups develop their physical, mental and social potential and maintain it at an appropriate level regardless of changing living and working conditions. This requires nurses to work to promote and maintain health, as well as prevent disease.

A new nursing business is the need to change the foundation of current practice. The organization of nursing activities is based on the implementation of doctor's prescriptions, on care, which pays attention to the individual needs of the patient.

The new concept will replace the long-established hierarchical and bureaucratic system of organizing nursing with a professional model. A highly qualified nurse practitioner should have enough knowledge and skills to plan, implement and evaluate the results of care that meets the needs of a particular patient. At the same time, special emphasis is placed on the uniqueness of the contribution of nursing care to the recovery and restoration of the patient's health.

### **1.2.1. Mission and functions of a nurse**

From the history of medicine it is known that patients needed and received help and treatment long before nursing officially became a specialty. Until the end of the 19th century in the West and until the 30s of the 20th century in Russia, family members usually nursed sick relatives on their own, and hospitals were intended only for the poor or people with significant mental disabilities. And today, the family is still the most accessible “health service” in the world.

Recently, the concept of the functions of a nurse has changed. If earlier it was focused on patient care, now the nurse, together with other specialists, considers the main task to be maintaining health, preventing diseases, ensuring maximum independence of a person in accordance with his individual capabilities. However, until now, in most countries, including Russia, inpatient care and treatment are considered preferable.

In fact, F. Nightingale wrote in “Private Notes” about the need to change this function of a nurse: “My view on this issue is that the ultimate goal of all nursing is to care for patients in their own home. I am counting on the abolition of all hospitals and infirmaries. However, it is useless to talk about this until 2000. ” Indeed, more than 100 years after the publication of the book, the World Health Organization came up with the global program “Health for All by the Year 2000” in 1988.

**What is the mission of the nurse?** It consists in helping specific people, families and groups of people to determine and achieve their physical, mental and social health in the changing environment of the environment in which they live and work. “This will require the sisters to perform certain functions that contribute to strengthening and maintaining health, as well as preventing diseases. Nursing includes the planning and implementation of care both during the period of illness and during rehabilitation, affecting not only the physical, but also the psychological and social aspects of a person’s life that make up his

whole. All these aspects to some extent affect a person's health, his illness, disability or death" [40].

**The functions of a nurse** follow from the mission of nursing in society. They are of great importance regardless of the place (home, work, school, university, prison, refugee camp, hospital, clinic and other places) and the time of assistance, the severity of the patient's condition, his financial situation [44].

The nurse should actively involve the patient in self-care, and his family members, friends in caring for him. It should help him maintain independence and independence.

The functions of nursing personnel are determined by the goals of nursing, which, to varying degrees, should be shared by other health workers. These goals include:

- assistance to a person, family, group in determining and achieving physical, mental and social health and well-being in connection with their social and environmental environment;
- strengthening and maintaining health;
- maximum involvement of a person in caring for his health;
- alleviating or minimizing the negative impact of the disease on the person;
- meeting the needs of people in physical, emotional or social care in case of ill health, weakness or death [42].

The functions of a nurse (and they may be different depending on the needs of society) are determined for the MH by the European Regional Office for Nursing in the framework of the Lemon project [42].

**The first function** is the implementation of nursing care. This can be preventive measures, nursing interventions related to rehabilitation, psychological support of a person or his family. It is most effective if carried out as part of a nursing process, and consists in identifying and assessing the needs of a person or his family; identifying priority health problems; planning and implementing the necessary nursing care; involving the patient

in self-care, and if necessary, members of his family, friends to care for.

**The second function** is to teach patients and their loved ones the skills related to maintaining and maintaining health at a certain level.

**The third function** is the performance by a nurse of both a dependent and an independent role in the team of medical workers serving the patient.

Without these functions, nursing will not be able to take its rightful place in the healthcare system. Some components of these important functions - cooperation with the patient, family and other health care workers in planning, organizing, managing, discussing the plan and the result of patient care - are already being successfully implemented in medical institutions in many regions of the Russian Federation.

**The fourth function** - research activities in the field of nursing practice and its subsequent change in accordance with new scientific facts - also begins to be realized in our country. An example of this is the standards of some simple and complex medical services, patient management protocols, in the creation of which nurses take an active part.

So, these functions defined by ERO allow us to rethink the profession of a medical sister.

### **1.2.2. Philosophy of Nursing**

One of the most widely used definitions of the term “philosophy”: philosophy is the science of the interaction of the subject and object and the changes in the relations between them that arise as a result of this interaction [40].

With the beginning of the reform of nursing in Russia, the concept of "philosophy of nursing" is actively used - "expressed in the concepts of the spirit of this profession, the definition of its mission in society, as well as the underlying value system" [11].

Philosophy and nursing. What is the connection between them? Why is nursing a philosophy? And what is the philosophy of nursing? These issues were discussed at the I All-Russian scientific-practical conference on the theory of nursing.

For the first time in our country, definitions were given of such key terms in nursing as “nurse”, “patient”, “nursing”, and “environment”. The relationships and interactions that arise between these entities and objects were established. Finally, the ethical values that a professional nurse should have are formulated.

Based on the adopted definitions, the principles of the philosophy of nursing in Russia were stated. Below is the full text of this document [40].

“The philosophy of nursing is part of the general philosophy and is a system of views on the relationship between the sister, patient, society and the environment. It is based on the universal principles of ethics and morality. At the center of this philosophy is man. Nursing is based on an ancient tradition, the purpose of which is to satisfy human needs in protecting health and the environment.

The basic principle of nursing philosophy is respect for life, dignity and human rights. We believe in the sacred gift of life and in this regard we consider each individual person as a whole with its internal capabilities for growth and development, physical, philosophical, social, cultural, intellectual and spiritual.

The implementation of the principles of nursing philosophy depends on the interaction of the sister and society. These principles provide for the sister's responsibility to society (including the patient) and society's responsibility to the sister. The society recognizes the important role of nursing in the health care system regulates and encourages it through the issuance of legislative acts.

The purpose of nursing is to carry out the nursing process.

The sister strives to carry out her work professionally, respecting and protecting the dignity of the patient, his autonomy and harmony with society and social needs.

Modern nursing is a science and art. The successful application of the philosophy of nursing in Russia, the development of the creative potential of sisters are possible only if the society fulfills all its obligations towards them.

The sister is a specialist who has the knowledge and skills, is responsible for the care process and shows mercy. A sister is a unique, socially active person who improves her professional, psychological and emotional qualities in order to provide the patient with optimal care. The nurse acts both independently and in collaboration with other health professionals in order to meet the health needs of the community and individual patients.

The obligations of sisters include respect for patients and their right to independence. In accordance with this, she acts on the basis of the principles: not to cause harm, to do good, to be able to cooperate and be devoted to both the profession and the patient. Nursing has no restrictions on national, racial, gender, political or religious convictions, or social status.

The need for nursing care is universal. Man needs her from birth to death. In helping the patient, the sister tries to create an atmosphere of respect for his ethical values, customs and spiritual beliefs. The sister maintains confidentiality in the interests of the patient, protects information if it does not contradict his health and the health of society.

Sister takes part in solving environmental problems.

Modern sisters turn to the experience of the founders of the sister movement, the asceticism of such legendary personalities as Lawrence Nightingale, Ekaterina Bakunina, Daria Sevastopolskaya and others.

The sisters are optimistic about the future and developing nursing as a science and art.

With a new sisterly affair for a new Russia in a new century!  
”

### 1.2.3. Nursing components

According to the international agreement, the philosophy of nursing is based on 4 basic concepts: the patient as a person, nursing as a science and art, environment, health.

The following are definitions of terms [40].

**A patient** is a person (individual) who needs nursing care and receives it.

**Nursing** is part of medical health care, specific professional activities, science and art aimed at solving existing and potential health problems in a changing environment.

Nursing should focus on patient care. The nurse uses her knowledge and skills to strengthen their health.

This work should be focused and systematic. The art of nursing is to combine the imagination and creativity of patient care with scientific justification. The art of care is vital to maintaining contact with the patient. A medical sister should not only be able to recognize important health problems, but also understand the thoughts and feelings of a person.

The art of care also implies the protection of the patient if he is not able to make decisions on his own, which is especially important for children and the elderly.

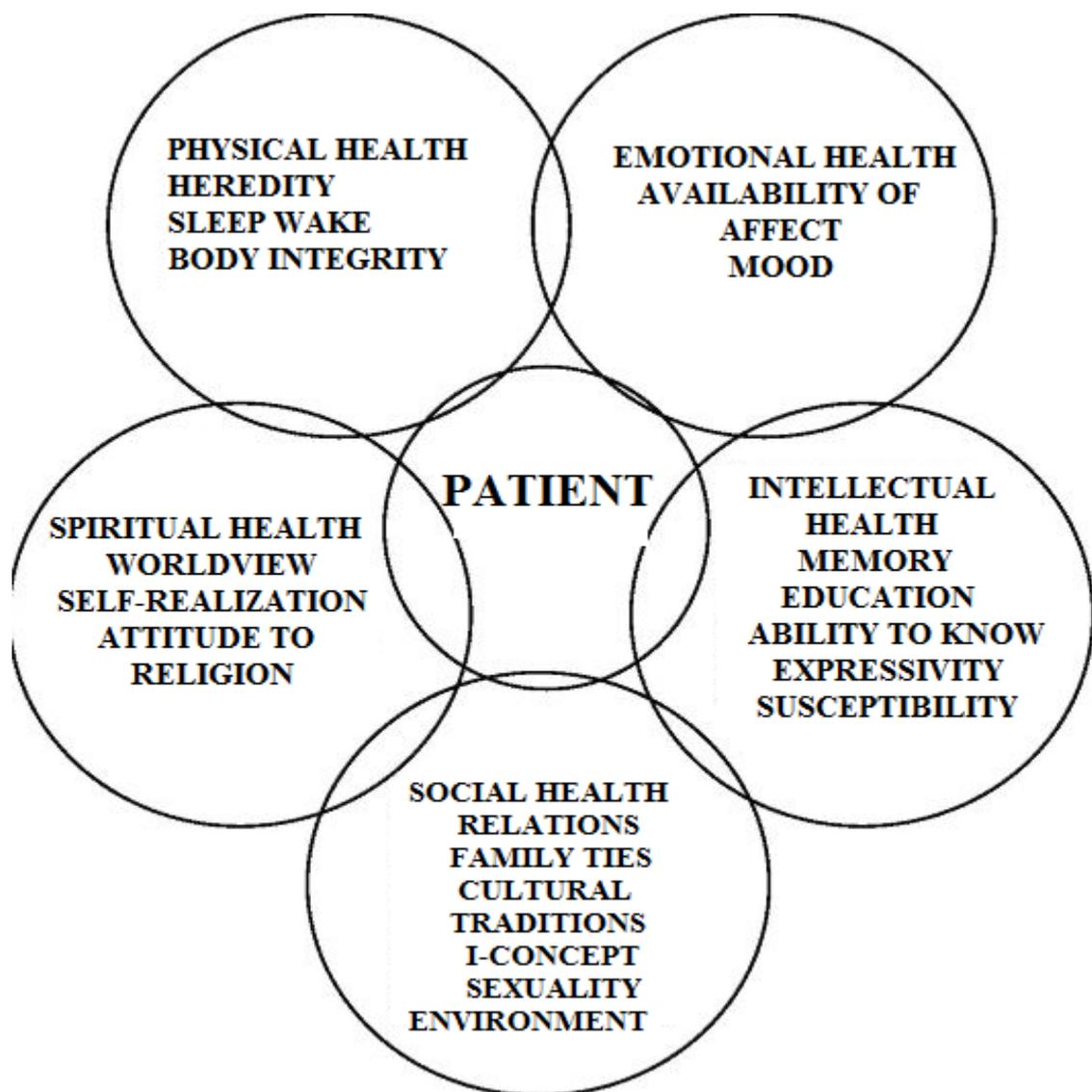
Carrying out its unique functions, the nurse acts independently (as part of the nursing process), interdependently (as part of the team) and depending on the doctor (following his appointment). In different countries, the parameters of these functions are different.

One of the main problems of nursing is changing the approach to the patient. This is not just a person who needs nursing care and receives it, it is a person. A nurse who develops a care plan together with a patient can count on its successful implementation only if she understands and takes into account that she communicates with a person with certain biological, psychological, social and spiritual problems.

The nurse should be ready for a holistic (holistic) approach to a person (Picture 1-1).

**Environment** - a combination of natural, social, psychological, spiritual factors of human life.

The environment, according to American experts, “is all the events, factors and influences to which a person (or system) is exposed, passing through stages of development. Everything that is not human is considered as the environment ”[40].



**Picture 1-1** Holistic approach to health based on 5 key aspects

F. Nightingale also considered the environment an important factor in the prevention of diseases. Some nursing theorists divide it into physical, social, and cultural.

The physical environment is primarily the material world: air, water, light, sounds, and climate. Contaminated air leads to respiratory diseases, allergies. Poor-quality water and food are satellites of infectious diseases and chemical poisoning (both air and water often contain carcinogens, that is, cancer-causing). Noise and light contribute to the development of stress, in some cases they can even disorient a person. And directly the noise itself during prolonged exposure leads to hearing loss. The physical environment also includes human-created infrastructure (buildings, bridges, parks, etc.). The habitat must be safe. In residential and public buildings, the levels of ambient temperature, humidity, light, brightness, sound, vibration should be maintained within acceptable values.

The social environment is a family, neighbors, friends, colleagues. The family, as a rule, plays a major role in satisfying physiological and social needs. School, colleagues, neighbors, friends force each of us to perform certain duties.

The cultural environment determines a person's behavior, his relationships, faith, as well as language, traditions, customs and manner of communication. It can both change and be stable.

The last major component of nursing is health. There are several of its definitions. Below is one of them.

Health is the dynamic harmony of the individual with the environment, achieved through adaptation.

In addition to the definitions of 4 basic concepts, it is necessary to know the meanings of other terms that are essential for nursing [40].

**Man** is an integral, dynamic, self-regulating biological system, a combination of physiological, psychosocial and spiritual needs, the satisfaction of which determines growth, development, and fusion with the environment.

**Nurse** - a specialist with professional education who shares the philosophy of nursing and has the right to nursing work.

The beliefs and values on which nursing is based should also become important for other health workers. These include:

respect for the personality of each person; the belief that people are complex integrity (holism);

- recognition of factors that influence a person's experience regarding health and illness;

- the need to strengthen and maintain health throughout life;

- the conviction that people have the right to participate in decisions regarding the care they receive [42].

It is these beliefs and values of nursing that are embedded in his philosophy.

The ethical elements of nursing philosophy are ethical responsibilities, values, and virtue (excellence).

The nurse who shares the accepted philosophy of nursing accepts the following ethical responsibilities: tell the truth, do good, do no harm, respect the rights of the patient, respect the obligations of others (team members), keep a word, be devoted to their work, respect the right (of the patient ) for independence.

**Ethical values** (which philosophy is also based on) that determine the goals that a nurse seeks are professionalism, health, a healthy environment, independence, human dignity, and care (care).

**Virtue (perfection)** determines the personal qualities that a good nurse should possess. Virtue - these are the character traits that have a person to good deeds: compassion, mercy, patience, determination.

The ultimate goal of nursing is to help the patient and / or his family, but the most important means of achieving this goal are care, care and nursing.

If someone chooses the profession of a nurse, he assumes the obligation to adhere to those values on which the philoso-

phy of nursing is based. The Code of Ethics of the Russian Nurse, adopted in 1996 by the Association of Russian Nurses, reflects modern ethical principles, norms and standards that are mandatory in the professional activities of nurses [47].

The main principles of care are:

- ensuring patient safety;
- confidentiality;
- respect for the patient and maintaining his self-esteem;
- communication;
- maintaining patient independence;
- ensuring infectious safety [27].

Adopting a nursing philosophy, a nurse should provide care within these principles.

Nursing philosophy involves very specific obligations to the patient. So, in one of the departments of the hospital in the city of Leeds (UK), the care philosophy was formulated as follows:

"Our goal:

Restore health when possible.

To provide the patient with comfort and maintain a sense of dignity.

Encourage independence wherever possible.

To enable the patient to reveal his full potential.

Identify all physiological, social and spiritual needs of the patient.

Plan care and discuss the care plan with the patient and / or his entire family.

Remember! We are here for you, speak with us at any time, help us help you. ”

In another (ontological) department of the same hospital, the philosophy of care was somewhat different:

“Our department is able to provide the highest standards of nursing care using a holistic approach.

We are sure that you will be provided with the necessary care and attention. We strive to ensure your independence.

We resort to a solution to problems where we jointly evaluate and plan care to meet your needs.

Our goal is to give you and your family the opportunity to choose nursing care and work together to resolve contentious issues.

We look forward to the mutual support of staff and patients.”

In many hospitals, the text of the philosophy of care is posted so that everyone can see it and can get acquainted with it. In some hospitals, patients and / or their loved ones will necessarily receive the text of the care philosophy of this medical department.

### **1.3. WHAT IS HEALTH?**

In the ancient world, people were preoccupied with maintaining their health much more than today. So, in ancient Greece, the achievement of perfection, based on the ideal of Plato, required a healthy mind in a healthy body. In his work “Republic,” Plato argues that “in a well-organized and developing society, every person does not have time to spend his life on illness and treatment. There is nothing more debilitating than an illness at home, as well as in the army and in any civilian institution”[53].

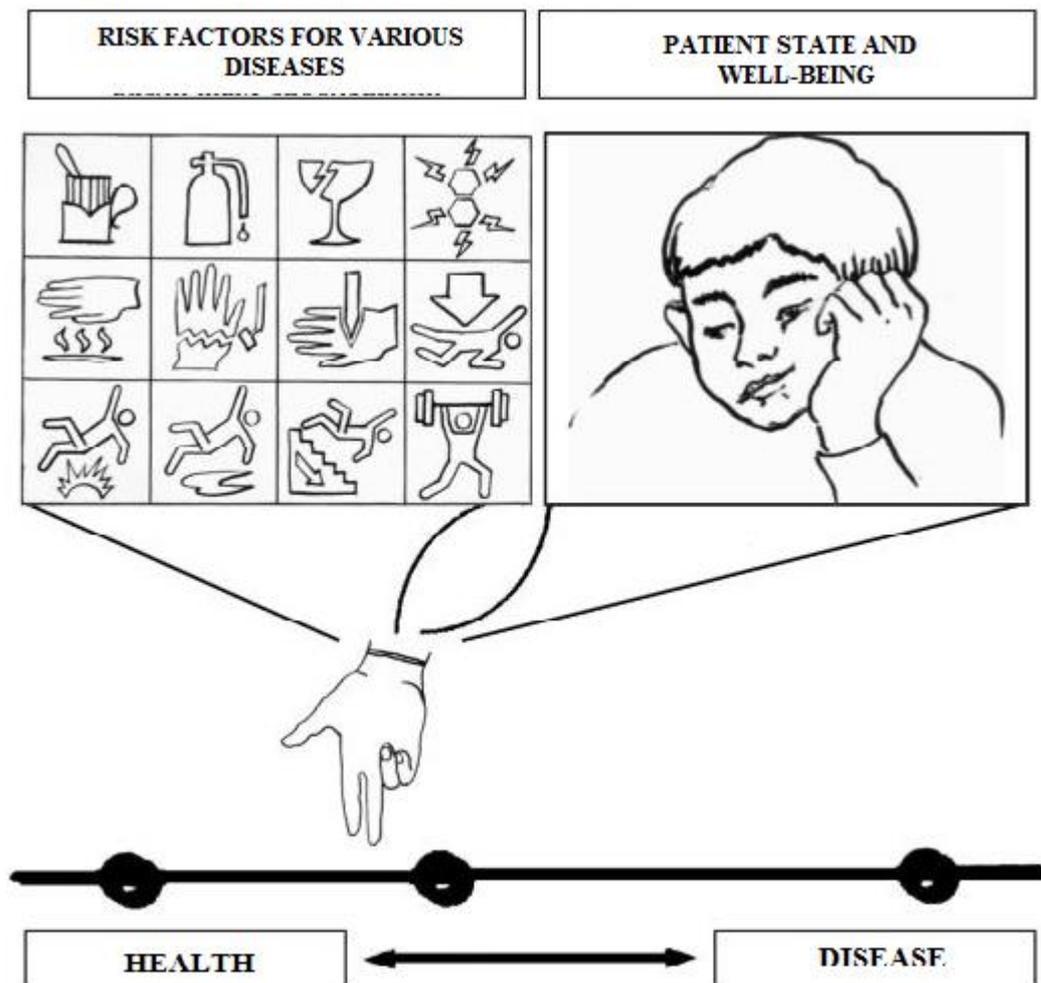
The famous doctor Galen (201-131 BC) believed that health in the abstract sense is an ideal condition that no one reaches. He regarded health as a state of reasonable (acceptable) performance of all functions and the absence of pain, even a slight malaise.

Of course, this is a fairly old definition of health, but WHO professionals and the general public in many countries of the world today believe that health is not an absolute quality. This concept is constantly changing in the process of acquiring knowledge and cultural development. In 1946, WHO defined the term "health" as "a state of complete physical, spiritual and

social well-being, and not just the absence of disease or weakness." A comprehensive definition of health does not exist, but it should be remembered that health is a dynamic process that is determined subjectively and objectively; this is the ability to take care of oneself; it is the integrity of the personality with the optimal functioning of the organism as a whole; it is adaptation to stress caused by illness, death, divorce; processes of continuous growth and formation of personality. This is the goal to strive for.

Under the health A. Perry and P. Potter understand the condition in which a person uses his adaptive capabilities in external conditions. Health is not only the absence of disease. A healthy person has good health in the framework of the physical, mental, psychosocial and spiritual aspects [40].

As a result of advances in medical technology, as well as information and knowledge that the population receives through the media, part of the population's expectations of "better health" are constantly growing. However, even in this situation, some people insist that they are "absolutely healthy", despite a rather serious illness or disability. On the other hand, a person with an undiagnosed disease can prove that he is "unhealthy" because he feels bad.



**Pic.1-2. Health-Disease Continuity Model**

The nurse should be able to assess a person's condition, well-being and help him improve his health or prevent a disease within his competence.

There are many different models associated with the concept of "health-disease." One of them views this chain as continuity. (picture 1-2).

The patient (in the figure - this is the point) is located along a continuous line, on the one side of which is health, on the other is a disease. The location of the point (patient) may vary depending on changes in its condition at any time. Risk factors of various diseases, present and previous condition, his well-being at a particular moment can influence human health. According to this model, a person who has no disease is considered healthy.

The well-being of a person is always subjective. For example, the great philosopher Emanuel Kant, painful by nature, wrote in his work “On the Power of the Soul” that he perceives the weaknesses and ailments of his body as if they did not concern him, he simply ignores them and behaves like a completely healthy person. The concepts of "health" and "disease" are relative. Recall that early loss of hearing, vision, and teeth was previously considered a natural aging process. Currently, thanks to modern methods of prevention and treatment, it is possible to save or restore them.

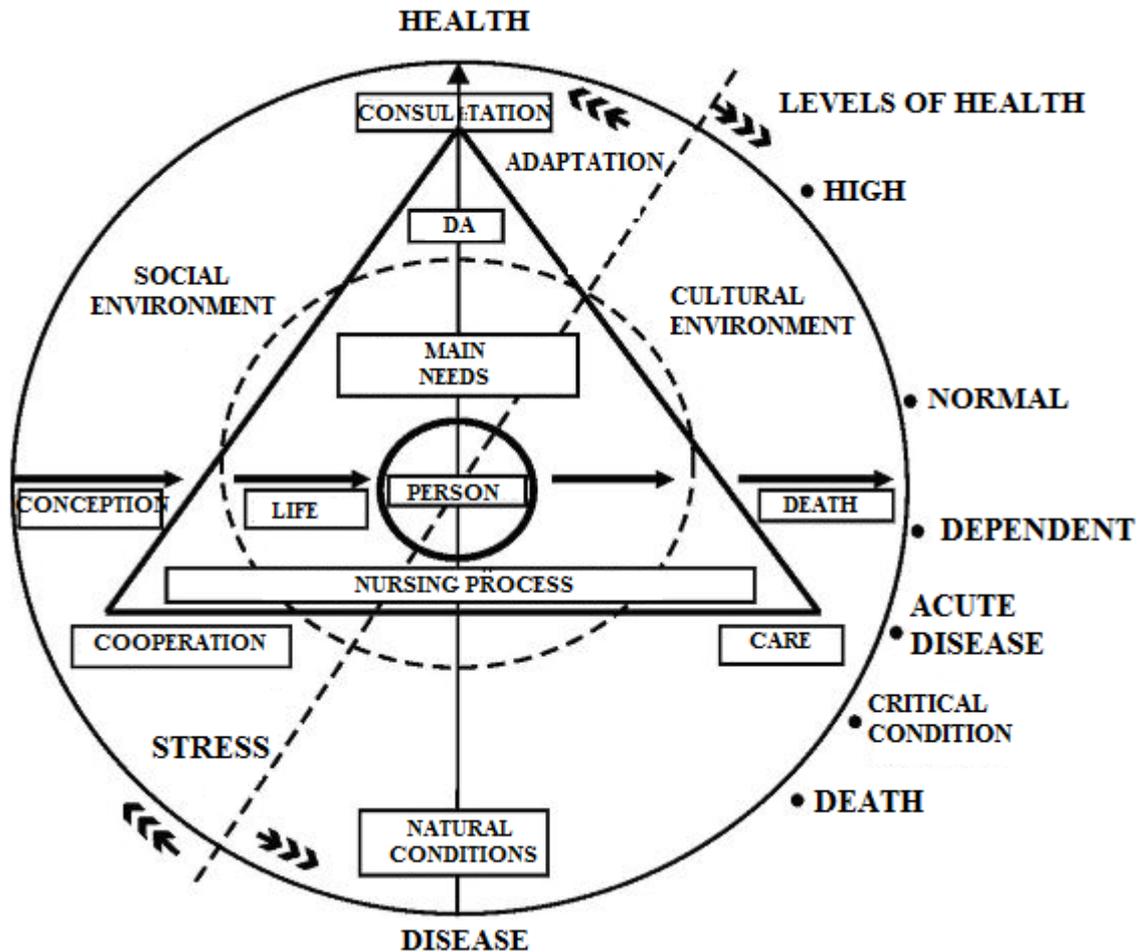
Many people through the media learn about new medical technologies and make higher demands on their health. Some, despite a rather serious illness or even disability, insist that they are “healthy”. There are those who insist that they are “unhealthy,” although they have no disease.

Another model of health is the “high level of well-being” model, which uses the full potential of all life. This is possible taking into account the unity of mind, body and spirit. The author of this approach (Dan G.L., 1959) believes that nursing care should be aimed at improving the quality of life, regardless of the severity of the patient's disease.

Many argue that one who feels well and lives as he considers most appropriate can be considered “healthy” even with significant physical and mental disabilities. A person’s behavior is determined to a large extent by his attitude to his health or illness, and the presentation of the value of health.

In picture 1-3 presents this conceptual health model used in some US colleges (particularly Virginia). At the heart of this concept is man, a unique creation of nature. It is depicted in the center of the chart.

The next circle shows the vital (basic) needs of a person, which are necessary for his growth and development.



**Picture 1-3. Model of "high level of well-being." DA - daily activities.**

Next is everyday activity that satisfies these needs, which are necessary to maintain physical, mental, social and creative well-being (it is located on the health-disease line).

An external broken circle illustrates the socio-cultural environment and the natural conditions (the environment) that affect a person and on which he himself influences and adapts to it.

The vertical line intersecting the continuity of the health-disease state. Throughout his life, a person constantly changes and adapts to various stressful situations. At the same time, he uses both physiological and psychological mechanisms to maintain a certain level of health. They are indicated by the stress adaptation line. Health levels (high to critical and death) are shown around the circle. The nursing process, indicated by a triangle, is an activity that enables the sister to take care, maintaining the patient's health at the highest possible level for him,

ensuring a decent quality of life. The nursing process is carried out by nursing care technologies, and this may require consultation with the patient and his family on issues related to maintaining or restoring health.

Care and consultations will be successful provided that all the people who are the patient and provide assistance cooperate with him. These three elements of nursing (care, counseling and cooperation) are located at the corners of an equilateral triangle, since their importance for maintaining human health is equivalent (see picture 1-3).

Preventive measures, both passive and active, help people stay healthy, prevent diseases and injuries, and help maintain and maintain health. They should begin already in the prenatal period (and in some cases before conception, when genetic counseling is carried out) and continue throughout life to avoid or reduce the impact of risk factors on human health.

Currently, around the world, the personal responsibility of each person for his health is reviving.

The term “self-care” is used more and more often when it comes to the activities of health services, family members, friends, self-help and self-help groups. Care itself presupposes the activity of the person himself, aimed at satisfying his vital needs, as a result of which a sufficient level of health is ensured for him.

F. Nightingale in her Notes on nursing (1859) wrote that caring for a healthy person means “maintaining a person in a condition in which the disease cannot occur,” and caring for the patient is “helping a person suffering from a disease to a person in his desire to live the most fulfilling life, bringing satisfaction.”

At a conference in 1988 in the UK where the WHO Health for All by 2000 Program was being considered, participants recalled that the challenges facing health were based on “... the premise that health is not just the absence of disease, but also an

opportunity to create an environment of well-being and realize the potential of human potential. ”

#### **1.4. NURSING DEONTOLOGY**

The ethical elements of accepted philosophy were previously considered indispensable for sisterly work. The moral and moral qualities of a nurse have always been no less important in her professional activity than practical skills.

The specificity of medicine, which significantly distinguishes it from other types of human activity, consists, first of all, in the need for constant, daily, hourly communication of the nurse with the patient. It should be remembered that a person who has health problems, by the nature of thinking, the depth of experience, the strength of psycho-emotional stress in relation to himself and others, as a rule, differs significantly from a person who does not have such problems. The disease, especially chronic, for many people is a severe mental trauma, which leads not only to a deterioration in physical condition and well-being, but also to serious shifts in the psycho-emotional sphere. A patient who entrusts his health to a nurse, and often his life, wants to receive effective nursing care as soon as possible. He must be sure not only of the high professionalism of the nurse, but also of her decency, honesty, kindness, mercy, sensitivity and responsiveness. Therefore, since ancient times, society has made high demands precisely on the moral, moral qualities of nursing personnel. And the nurse assumes certain moral obligations in relation to the patient, society, colleagues.

A part of sister ethics is deontology (from Greek deon, genitive deontos - necessary, due and logos - teaching) - a section of ethics that addresses the problems of duty and due. This term was first introduced by I. Bentham, who used it to refer to the theory of morality as a whole. Deontology teaches how, from the point of view of nursing ethics, a nurse should act in specific situations arising in the process of her professional activity.

For the first time, the main deontological principle was formulated by Hippocrates (460-377 BC): “We must pay attention to everything that is accepted to be useful.” He wrote: "A person who has devoted himself to medicine should have the following qualities: selflessness, modesty, chastity, common sense, composure ..."

What qualities are necessary for a nurse for her professional activities?

“Love and care are the best medicine,” wrote Paracelsus. I. Hardy notes the same qualities that are necessary for nursing staff in the book “Doctor, Sister, Patient” (1981): “Tenderness, affectionateness, patience and courtesy are the components of a good work style, they express carefulness, sister’s attention and love for the sick.”

In our opinion, the principles of nursing ethics and deontology are most accurately reflected in the oath given by graduates of nursing schools in many countries. This is the oath of Laurence Nightin Gale:

“Before God and in the face of those gathered, I solemnly promise to lead a life full of purity and honestly fulfill my professional duties.

I will refrain from everything poisonous and harmful, and I never consciously use or prescribe medication that can be harmful.

I will do everything in my power to maintain and improve the level of my profession. I will keep secret all personal information that will be at my disposal during the work with patients and their relatives.

I will faithfully help the doctor in his work and devote myself to tireless care for the well-being of all those entrusted to my care” [40].

The nurse must understand that all people deserve to be treated as the golden rule says:

Treat people the way you would like to be treated.

With her behavior in the workplace, the nurse should create an atmosphere of respect and care. The moral and ethical attitude to work has a direct impact on the quality of nursing care and on colleagues.

## CHAPTER 2 HISTORY OF SISTERNESS

After reading this chapter, you will learn:

- on the emergence of nursing in Russia;
- about the communities of nurses;
- about the founders of nursing in Russia;
- on the activities of F. Nightingale;
- on the activities of the sisters of mercy in the war;
- about the history of the creation of the International Committee of the Red Cross;
- on the history of the creation of the Russian Committee of the Red Cross;
- on the modern system of training nursing personnel in Russia;
- about the history of creation and tasks of the Association of Nurses;
- on periodicals for nursing staff in the Russian Federation.

Health care reform, and in particular nursing, involves the expansion of staff functions. This is due to changes in the training system for nurses.

Systematic training for patient care in Russia began at the school at the Moscow hospital, opened in 1707 by the efforts of Peter I and the Dutch doctor N. Bidloo.

For the first time in Russia, women began to be attracted to care for patients in hospitals and infirmaries under Peter I. By his decree in 1715, educational houses were created in which women served. Soon, the recruitment of women for work in hospitals was canceled. The role of carers was assigned to retired soldiers.

The Military Statute of 1716 says: “It is always necessary for ten sick people to be pacified by one healthy soldier, who have these sick people to live and wash their clothes.”

In 1728, they again made attempts to attract women to work with patients in hospitals and laundries. To this end, the medical office has introduced positions for women in hospital states. However, during the reign of Catherine I, female labor in

hospitals was canceled. In the middle of the XVIII century, again began to use female labor in hospitals. Attracted "female caregivers" - wives or widows of hospital soldiers.

In 1763, in connection with the creation in Moscow of a new hospital with 25 beds, which was called Pavlovsky, a need arose for female labor. "The servants for the male patients ... were the soldiers who were sent from the Military College. In the women's department, women from soldiers' wives were hired to go after the sick. They all lived with the sick, each in their own room." In 1775, at the opening of the Catherine Hospital in Moscow with 150 beds in Moscow, it was assumed that there were "24 male and female saddlers" [30].

At the same time, apparently, there were no special sisters to care for patients in secular hospitals. Nursing in Russia began in 1803, when the service of "compassionate widows" appeared. In the same year, widow houses were set up in educational institutions in Moscow and St. Petersburg for charity of the poor, crippled and elderly wives and widows who were in the public service of soldiers who were left without a livelihood.

In 1814, by order of Empress Maria Fyodorovna (the widows of Emperor Paul I), women from the Petersburg Widow House were invited and sent to the hospital on a voluntary basis in order to walk and look after the sick. Widows supervised hospitals, monitored the distribution and ingestion of food, medication, the tidiness of patients, and the cleanliness of their beds and linen. Compassionate widows had to own some medical methods to help patients. After a year-long trial on March 12, 1815, 16 out of 24 compassionate widows were sworn in and the empress placed a special sign on each initiate - a golden cross on a green ribbon, on one side of which was written: "All mourners are joyful", and on the other is "Heartbeat." Compassionate widows are the forerunners of the sisters of mercy. Subsequently, almost every year (until 1886), other widows after a probationary period, which included duty in the hospital under

the supervision of experienced colleagues and the head physician for 1 year, were sworn in at the widow's church. Together with the certificate they were awarded a golden cross.

In 1818, Empress Maria Fyodorovna ordered that 12 women be distinguished from the Moscow Widow House, distinguished by good manners, meekness and exemplary behavior, who voluntarily wished to devote themselves to the “philanthropic occupation” - caring for the sick.

In 1818, the Institute of Compassionate Widows was created in Moscow, and at hospitals they began to organize special nursing courses. From this time in Russia, special training for female medical (nursing, midwifery) personnel begins. Teaching was conducted by doctors on the textbook X. Opiel. This was the first manual in Russian for special training of staff for patient care, which was published in 1822.

Kh. Opiel pi-sal, an experienced doctor and the first organizer of nursing care in Russia: “Without the proper walking and looking after the sick, even the most skilled doctor can do little or nothing even to restore health or aversion to death, and therefore this subject "especially worthy of the attention of a beneficent government about the life of citizens who are baking.”

Kh. Opiel described the principles of selection of caring staff, the requirements for their physical and moral qualities, i.e. for the first time the basics of deontology were given. Separate chapters of the manual were devoted to the features of caring for seriously ill, recovering, injured, dying, wounded, infants, and especially for patients "with sticky diseases.”

Kh. Opiel paid great attention to the hygienic conditions of the patients. The methods of performing basic medical procedures and taking medications are described.

Over the next 32 years, starting in 1829, the charity created by Empress Maria Fedorovna and including educational homes, women's shelters and hospitals was headed by Empress Alexandra Pavlovna. In 1844 (long before the creation of the International Red Cross), the first communities of sisters of mercy

appeared in Russia, which were managed by the Committee and the Board of Trustees.

In Russian nursing schools, nurses were not bound by marriage, which allowed them to fully devote themselves to their ministry.

In 1844, on the initiative of Grand Duchess Alexandra Nikolaevna and Princess Theresa of Oldenburg in St. Petersburg, a secular compassionate institution was opened - the first Russian community of sisters of mercy, called the Holy Trinity. Widows and damsels between the ages of 20 and 40 were admitted to this community. First, training was carried out at the 1st Overland Hospital. The Sisters of Mercy were taught to care for the sick, the principles of dressing, the basics of pharmacy, and the formulation. They worked both in hospitals and in private homes. N.I. Pies in 1845-1856 He spent in the community hospital, surgery and pathological-anatomical dissection.

In 1847, the title of Sisters of Mercy was awarded to the first 10 women. The community of sisters of mercy existed at the expense of charitable organizations.

To meet the needs of society in sisters of mercy, new similar communities were created in St. Petersburg and Odessa. In Moscow, at the end of the 1850s, nuns from the Ascension Monastery were carried to a hospital for laborers on duty. The prototype of the communities of sisters of mercy, which began to be created in Russia in 1854, was the Institute of compassionate widows, abolished in 1892.

In Sevastopol, in the Museum of the Black Sea Fleet, along with other relics of the war, a photograph of 1901 is stored. On it, among 13 participants of the defense of Sevastopol, you can see an elderly woman in a white shawl and a dark dress with three medals. Her name is Dasha Sevastopol.

She was 15 years old when she cut her hair under the boy, put on an old sailor braid-tail, a cap and became like a young man. She did this in order to get into the troops defending Sevastopol. Not far from the trenches, Dasha set up a first-aid

post, which turned out to be in the center of the stream of the wounded. N.I. Pirogov in a letter to his wife says: "When our troops, having lost the battle of September 8, returned back after a long and stubborn battle to Sevastopol, exhausted, physically and mentally exhausted, with many wounded and mutilated, bleeding, Daria" turned "into a sister of mercy and began to help the sufferers free of charge. Fortunately, there was vinegar in her cart and some rags that she used to dress the wounds. The teams with the wounded passing by came to her as a dressing station for help, and only then did the allowance stop when they were used up she has all the stockpiles. "

Thus, Dasha's wagon was the first dressing station, and she herself was the first sister of mercy. Throughout the siege of Sevastopol, she spent days and nights at a dressing station, brought water to soldiers on a yoke, washed them with linen, bandages, and bandaged the wounded.

The documents of 1854 mention that "a girl named Daria exerts exemplary efforts in courting the sick and wounded in Sevasto Pole, who was awarded the medal" For diligence "on the Vladimir tape for wearing on her chest and 500 rubles in silver."

After the first bombardment of Sevastopol in October 1854, an almost one-year siege of the city by the Anglo-French-Turkish troops began. In the same month in St. Petersburg, to care for the wounded and sick, not only at dressing stations, but also in military hospitals, Grand Duchess Elena Pavlovna (sister of Emperor Nicholas I), at her own expense, established and organized the Cross-Movement Community of Sisters of Charity for the care of wounded and sick warriors.

She invited the famous surgeon N.I. Pirogov organize women's care for the wounded and sick on the battlefield. N.I. Pirogov accepted the offer of the Grand Duchess.

At the end of November 1854, the first detachment of 28 people arrived in Crimea. The main head of this detachment was A.P. Stakhovich. In January 1855, the 2nd detachment of

sisters of mercy, headed by M. Merkulova, arrived in Sevastopol. The head of the 3rd detachment was E.M. Bakunin. N.I. Pirogov divided the sisters of mercy into three groups: bandaging sisters, who helped doctors during operations and dressings; pharmacist sisters who prepared, stored, and distributed medicines; hostess sisters who monitored the cleanliness and change of linen, the maintenance of patients and household services. Then the 4th detachment of sisters of mercy, headed by E.M. Bakuninoy, who accompanied the wounded during long-distance transport.

Many sisters of mercy died of typhoid, some were injured or shell-shocked. However, they, resignedly rescuing difficulties and dangers, sacrificing themselves selflessly, served the wounded and sick.

N.I. Pirogov (1853) wrote: “The first Cross Exaltation sisters had to go directly into the fire of the Crimean campaign. If they do this as they do now, then they will bring, no doubt, much benefit. They alternately visit hospitals day and night, help with dressing, attend surgery, distribute tea and wine to patients, monitor ministers and caretakers, and even doctors. The presence of a woman, neatly dressed and assisted, revives the lamentable pain of suffering and calamity. ”

For the first time in world history, the sisters of mercy began to help the wounded and sick on the battlefield. Grand Duchess Elena Pavlovna, having established a community, rendered service to the truly suffering, made a revolution in hospitals, introducing the service of sisters of mercy into them, whose calling is to be sensitive and caring when caring for the sick.

In October 1855, N.I. in Sevastopol Pirogov for each category of sisters of mercy of the Holy Cross Exaltation community developed detailed activity instructions. However, he also demanded from doctors, especially young ones, “the fulfillment of the experience of the sisters”, believing that the sisters “are not blind executors of the orders of a person who has just en-

tered the medical field”. “Does knowledge of the patient’s personality,” he wrote, “acquired by constant care for him mean nothing to a doctor who saw him only once or twice a day?”

Members of the community were women of different classes and levels of education. This was written about them by L.N. Tolstoy (1855). “Sisters with calm faces and with the expression of not that empty female painful and tear suffering, but active practical participation, now and then, walking through the wounded with medicine, with water, bandages, lint, flickered between bloodied overcoats and shirts.”

Among the chiefs of detachments, occupies a special place. E.M.Bakunin. N.I. Pirogov in the “Sevastopol-Polish Letters” (1853) recalls: “Every day, day and night, it was possible to find her in the operating room, assisting in operations; at a time when bombs and missiles flew over, then flew under, and lay around. She found with her accomplices a presence of spirit that was hardly compatible with female nature. ”

Father E.M. Bakunin - Governor-General of St. Petersburg, mother - niece M.I. Kutuzova. E.M.Bakunin received an excellent comprehensive education. Since the beginning of the Crimean War, having learned about the organization of the Holy Cross Community and overcoming the enormous resistance of relatives and friends, she achieved enrollment in the squad and was sent to Sevastopol. Bakunin became a permanent assistant to N.I. Pirogov during surgical operations, looked after the wounded and sick during their transportation from Sevastopol.

After the Crimean War, E.M. Bakunin began to create a new community of sisters of mercy. Unfortunately, her struggle against turning the community into a religious order, suggestions for improving the training of sisters of mercy did not bring success.

After a trip to Germany and France, where E.M. Bakunin went to get acquainted with the activities of sister communities, she firmly became convinced that the basis of such communities should not be based on religious, but moral principles. It

does not matter what religion the nurse belongs to, but her social views and moral principles are important. However, Grand Duchess Elena Pavlovna did not agree with her convictions, and in the summer of 1860 E.M. Bakunin forever said goodbye to the community, where she was the abbess sister. In his declining years, E.M. Bakunin wrote "Memoirs of the Sister of Mercy of the Exaltation of the Holy Cross Community of 1854-1860." E.M. Bakunin is considered the ancestor of nursing and rural medicine in Russia.

Saying goodbye to the community, E.M. Bakunin in his estate in the Tver province organized at his own expense a small hospital for peasants. E.M. Bakunin turned to doctors for advice, inviting them to her own funds from the city. Soon (also at her own expense) in her hospital she put a few beds and set up a pharmacy in her own house, where she herself prepared the medicine. Her self-employment for 7 years to bear fruit: the local provincial district council embarked on the organization of public health care to the rural population. Hospital E.M. Bakunina entered the nationwide network, a medical assistant was appointed to help her, and a doctor came regularly three times a month.

At the suggestion of the Zemsk assembly E.M. Bakunin took over the duties of a trustee of medical institutions of the Novotorjok district of the Tver province.

In 1877, at the age of 65, E.M. Bakunin again found herself in a war in the Caucasus, where she, at the request of the Russian Red Cross Society, led the work of divisions of sisters of mercy.

Summing up the activities of this community, we note that a total of 160 sisters of mercy worked at the theater of war, 17 of them died in the line of duty.

In our opinion, it would be right to interrupt the story of the development of nursing in Russia and to tell how the English sister of mercy F. Nightingale (1820-1910) began her noble activity in parallel with the Holy Cross community on a different

front line in the position of the British troops. , which throughout the world is considered the founder of nursing.

Already in her youth, F. Nightingale saw her mission in ridding people of diseases that could be prevented. She decided to become a nurse at age 20. However, her dream was not destined to come true, because the society had supposedly irrefutable evidence of the dissuasive behavior of nurses. In this regard, women of her circle (the family belonged to high society) could not think about the profession of a nurse. F. Nightingale turned to religion. Reading books on medicine and patient care, visiting hospitals, caring for children living in slums, brought her dream closer, which came true only 33 years after her internship in a hospital owned by the Catholic organization Sisters of Mercy. In 1853, F. Nightingale became the overseer in an institution for sick women of noble birth in London. Her responsibilities: monitoring the work of nurses, the state of medical equipment, monitoring the preparation of medicines. The institution was exemplary, but F. Nightingale justified the need to create a special school for nurses.

In 1854, British troops landed in Crimea to help Turkey in the war with Russia. After the battle of Sevastopol, the British newspaper "Time" published a note stating that sick and wounded English soldiers were left to die without any help in an English military hospital in Scutari near Constantinople.

On October 21, 1854, a detachment of 38 nurses led by F. Nightingale arrived in Turkey. While working as a senior nurse in a hospital, she was convinced from her own experience that by improving sanitary conditions in the hospital and barracks, mortality could be drastically reduced and thousands of lives could be saved.

Despite numerous administrative duties, F. Nightingale looked after patients at night. The soldiers called her a guardian angel. G. Longfellow (1857) wrote: "She alone, with a small lamp in her hands, emanated many miles among helpless sufferers."

F. Nightingale returned to England in July 1856 at the age of 36 world-famous, since her work on statistics, which showed how expensive the illnesses of soldiers and the effectiveness of improving sanitary conditions cost England, made a struggle for reform of the medical system. Qing service in the British army successful. In 1857, her *Notes on Health, Effective Measures and Hospital Management in the English Army* led to the creation of the Royal Military Medical Commission, which resulted in reforms that improved the health of the barracks and military hospitals. In addition, as a result of the reforms, a military medical school was created, special training programs were developed that set high demands on the activities of a nurse.

F. Nightingale tried to take care of the sick all the time, but after returning from the Crimea she was sick most of the time and was actually bedridden. Overcoming weakness, she wrote her famous "Notes on leaving" (1859), where she defined nursing as a profession and showed its difference from medical practice. According to her model of nursing, the first nursing schools were created, first in Europe, then in America. In England, in honor of F. Nightingale, such a school was opened in 1860 with funds raised by the public. Professional values described by F. Nightingale as mandatory in the activities of a nurse have not changed until our time.

The International Council of Nurses (ICN), created in 1899 on the initiative of the British National Association of Nurses, in 1910 after the death of F. Nightingale decided to perpetuate the memory of the great founder of nursing and create a memorial in her honor - the Postgraduate Education Fund. This foundation provided the conditions and means for medical nurses from different countries to improve their professional knowledge and engage in scientific research in the field of nursing.

"F. Nightingale belongs not only to England and the English people. She is one of those whose home is the Universe. Her work is the invaluable legacy of all of Mankind. Therefore,

the best memorial to her would be not a dead museum in her honor, but a vibrant and developing international center for professional nursing improvement," said a message from A. Nutting, an American nurse, first professor of nursing sciences to the board of directors of ICN.

Since 1971, the birthday of F. Nightingale - May 12 - has been declared by ICN as International Nursing Day. In 1912, the International Committee of the Red Cross established the F. Nightingale Medal, which is awarded to nurses who showed heroism in the war. During the Great Patriotic War of 1941-1945. 46 nurses in our country have been awarded this medal. Returning again to the period of the Crimean War, it should be said that mercy for the warrior as a social movement was born precisely at a time when two prominent women of the warring countries - Englishwoman F. Nightingale and Grand Duchess Elena Pavlovna - simultaneously extended their hands to those who shed blood on the field scolding.

In the historical dispute about the primacy in the establishment of nursing, "the main thing is not recognition of the primacy of one side or another, but virtue and mercy, both born in the hearts of people who brought relief and the return to life of sick and wounded soldiers, most of whom were doomed to death."

The oldest Moscow community was created in 1866 by Princess N.B. Shakhovskoy - "Soothe My Sorrows" community of sisters of mercy. The sisters of mercy of this community took part in the Serbian-Turkish (1876) and Russian-Turkish (1877-1878) wars. The first detachment was led by Princess N.B. Shakhovskaya. Emperor Alexander II, who personally participated in the hostilities against the Turks in the Balkans, praised the activities of the sisters of the community and took it under their high patronage. After that, the community of sisters of mercy "Satisfy My Sorrows" began to be called Alexandrovskaya. In 1906, after the death of the princess, the community was given the name of its founder.

During the Russian-Turkish war, new communities were created to help the wounded and sick on the battlefield. St. George community created by E.P. Kartseva, daughter of the landowner of the Novgorod province, on the recommendation of the famous Russian therapist S.P. Botkin went with her troops through the Balkan Mountains to Andrianopol, then from Plevna to San Stefano.

In the late 1860s, communities of sisters of mercy appeared in Odessa, Kharkov, and Tbilisi.

The Swiss A. Dunant came up with thoughts of organizing international private and voluntary assistance to victims of the war, regardless of rank and nationality, under the influence of the sisters of mercy that struck him during the Crimean War: on the one hand, F. Nightingale and, on the other, the Holy Cross Exaltation community. In addition, on July 25, 1859, at the height of the Franco-Austrian war, accidentally finding himself in the town of Solferino (Northern Italy), A. Dunant was shocked by the picture he saw on the battlefield: the wounded were dying due to lack of timely medical assistance. In 1862, he published *Memoirs of Solferino* and made the final decision on the creation of an international organization to help victims of the war. In 1863, a permanent International Committee for Assistance to the Wounded was organized in Switzerland, renamed in 1876 the International Committee of the Red Cross. In 1864, a diplomatic conference was held in Geneva, at which representatives of 12 countries signed an international agreement - the Geneva Convention on Improving the Condition of Wounded and Sick Warriors in the Field Armies. This convention laid the foundation for international humanitarian law, which is still in force. At this conference, a special international distinctive sign was established that provides legal protection on the battlefield - the Red Cross and white phone.

Russia joined the Geneva Convention in 1867, and at the same time the Society for the Care of the Wounded and Sick

Warriors was established on the basis of the Holy Cross Community. In 1876 it was renamed the Russian Red Cross Society.

Since 1871, women were allowed to work in hospitals and in peacetime.

In 1875, a regulation was published on the medical sisters of the Red Cross to care for the sick and wounded during the war. Detachments of Red Cross nurses helped the wounded in the fields of the Russian-Turkish and Russian-Japanese wars.

In 1897, the Russian Red Cross Society established an institute in St. Petersburg, the purpose of which was to prepare men to care for the wounded and sick. The term of study at the institute was 2 years.

By this time, 109 communities were engaged in two-year training of nurses. Courses of nurses were opened at hospitals. By 1913, there were 10,000 sisters of mercy in Russia.

In February 1909, in Moscow, on the initiative of Grand Duchess Elizabeth Feodorovna, wife of Grand Duke Sergei Alexandrovich, the Martha-Mariinsky Convent of Mercy began its activities, and in September 1909 the first hospital church in the name of Martha and Mary was consecrated. In April 1909, 18 sisters of mercy, led by the Grand Duchess, were ordained to the cross sisters of love and mercy.

From the very beginning of the First World War in November 1914, Empress Alexandra Fedorovna, wife of Emperor Nicholas II, devoted herself to serving the wounded. In the shortest time, an evacuation center was organized, which united 85 hospitals and 10 ambulance trains. Together with her elder daughters, Grand Duchesses Olga and Tatyana, the empress completed two-month courses of nurses at the Kingdom rural community and in the Russian Red Cross society. They were awarded the title "Wartime Sister of Mercy."

The Grand Duchesses Olga and Tatyana worked in the Kingdom rural hospital, helping the wounded and sick. Empress Alexandra Fedorovna, like her daughters, did dressings for the wounded, assisted in operations. In March 1915, Alex-

andra Fedorovna wrote to her husband: “How much grief is around! .. Thank God that we, at least, have the opportunity to bring some relief to the suffering and can give them a feeling of comfort in their loneliness!”

In 1914, during the First World War, in order to accelerate the preparation of the sisters of sweetheart, which hospitals really needed, the training period was reduced to 6 weeks.

On August 26, 1917, the First All-Russian Congress of Sisters of Mercy was held in Moscow, which established the All-Russian Society of Sisters of Charity.

In January 1918, the weekly “First Messenger of the Sister of Mercy” journal, created by the company, began to appear. The editorial of the first issue stated that the demands of society and the state posed new, more complex and difficult tasks. To fulfill them, we need a correct, united organization, which can give a single common guiding principle in the work, uniting all individual members into one conscious friendly force that devotes itself to serving the homeland and humanity [30]. Society was forced to cease to exist shortly after the October Revolution of 1917, so only 9 issues of the messenger were published.

Sisters of mercy played a big role in caring for the wounded and sick in the Red Army and in combating epidemics during the Civil War. The People’s Commissariat of Health, established in 1918, approved a plan and training programs for schools that train nurses. In 1920, the nursing community was abolished and the training of nurses was entrusted to the health authorities. At the same time, the word “mercy” also disappeared from the name of schools.

In 1922, the First All-Russian Congress on Medical Education was held. The types of secondary medical educational institutions were determined, and two-year training periods were set for nurses. In 1926, at the II All-Russian Conference, the following reform was carried out: for the sake of all the general technicalization, medical schools became known as technical

schools, and medical sisters as nursing technicians. In 1933, the role of assistant physician was assigned to the nurse.

By 1940, the provision of secondary medical personnel in comparison with 1913 increased by 8 times. In 1942, the journal "Nurse" began to appear. During World War II, 17 nurses received the title of Hero of the Soviet Union, 46 were awarded the F. Nightingale Medal.

In the 50s, medical schools were reorganized into medical schools, a system of secondary specialized education was created.

In 1988, a new curriculum in the specialty "Nursing" was introduced. Since 1991, the training of nursing personnel began, not only in medical schools for a 2-3-year program, but also in colleges for a 4-year training program. In the same year, faculties of higher nursing education were opened at higher educational medical institutions to train teachers and organizers of nursing.

In 1993, another important step was taken for the reform of nursing: at the international conference "New Sisters for a New Russia", organized by the Russian Federation, which was attended by teachers of nursing from the Pacific University (USA), various educational nursing institutions in Russia, as well as practicing sisters, a nursing philosophy was created and adopted.

In 1992, the Association of Russian Nurses was established, which takes part in the work of ICN. For the first time in Russia (after the October Revolution of 1917), a nongovernmental professional organization was organized at the initiative of medical nurses. The directions of the association's work are defined in the "Development Project of the Association of Nurses of Russia":

- increasing the role of a nurse in the healthcare system, increasing the prestige of the profession;
- improving the quality of medical care;

- dissemination of best practices and scientific achievements in the field of nursing;
- revival of the traditions of nursing charity;
- protection of the interests of nurses in legislative, administrative and other bodies of state power;
- Organization of the collection of information on nursing, its analysis and dissemination;
- Collaboration with international organizations and government agencies.

The Association of Nurses of Russia was the initiator of the development, took an active part in the creation and discussion of standards for the practical activities of nurses. The creation of these standards marked the beginning of a serious scientific approach to standardization of the nursing process. President of the Association of Nurses of Russia V.A. Sarkisova is a member of the expert commission of the Ministry of Health of the Russian Federation for standardization.

In 1996, at the I All-Russian Conference on Nursing, a draft of the Code of Ethics of the Russian Nurse was adopted, developed with the participation of the association. The code was finally adopted in 1997.

In 1997, a regular conference on nursing took place, at which priority measures to improve nursing care in the Russian Federation were discussed. Among these measures are the revision of workload standards and standards of activities of nurses of various specialties, the revision of the level of pay, improvement of social conditions, strict regulation and control of the safety of working conditions of nurses, the creation of professional associations in the regions and the approval of the status of associations at the legislative level.

Many regional associations are members of the Association of Nurses of Russia, which, thus, has become interregional.

The I European Conference on Nursing (1988) recommended that the countries of this region determine the goal, role in society and the strategy for the development of nursing. The

WHO European Region brings together 50 countries, most of which have already identified their strategies. WHO has repeatedly called for this and our state. The WHO initiative was supported by the Association of Russian Nurses and Russian interregional associations. A working group was set up in the Ministry of Health of the Russian Federation to prepare a state program for the development of nursing. The draft of this program was compiled on the basis of the concept of development of healthcare and medical science in the Russian Federation. The goal of the state program for the development of nursing in the Russian Federation is to specify the main directions and provisions of this concept related to all aspects of nursing [34].

A notable event in domestic health care was the First All-Russian Congress of Nursing Workers, held November 3-5, 1998 in St. Petersburg. In greeting the congress, ICN President K. Stahl Knecht (1998) said: “The United Medical Nurses of Russia can become a force that drives change.”

At the congress, a draft state program for the development of nursing in Russia was presented, the issues of organizing nursing in health facilities, training and retraining of specialists with secondary medical education, as well as problems of higher nursing education were discussed.

After the First All-Russian Congress of Nursing Workers, regional conferences on nursing were held in many regions of the Russian Federation.

By 2000, 44 regional sister associations were created in the Russian Federation. The interregional association has 41.5 thousand members. It consists of representatives of 69 regions of the Russian Federation and 31 regional associations.

Regional and interregional associations of nurses are actively working to increase the prestige of the profession of a nurse, to improve the organization of their work, to introduce modern views on the nursing process as an independent process of working with patients, closely associated with the medical process [16, 36].

In June 2000, the Second WHO European Nursing Conference was held. In Munich, the results of health care reform were summed up after the First European Conference in Vienna (1988). Both general and particular problems of the countries of the European region, factors hindering the more effective work of nurses and midwives were discussed, the foundations of a pan-European strategy and a plan for the development of nursing and midwifery for the next decade were developed.

In 1998, within the framework of the global policy "Health-21" implemented by WHO, 21 countries were set for the countries of the European Region to achieve health for all. Each medical sister and midwife who participated in the Munich Conference was asked to sign the oath of the Health 21 policy and then pass it on to other medical sisters and midwives in their country.

The oath of nurses and midwives - adherents of the Health 21 policy

As a midwife nurse who adheres to the principles of the Health-21 policy, I undertake to use my knowledge, skills and humanism to protect the health of all members of society. My mission is to work together with the public to improve the health of the population and ensure the right of everyone to appropriate treatment and prevention and care. Together with fellow nurses and midwives and in collaboration with other medical professionals and the public, I will constantly make every effort to promote a healthy lifestyle and create healthy conditions at work and in the community. The criterion for the effectiveness of my work will be a higher level of health of individuals, families and communities. By providing medical care and caring for the sick, I will always be guided by the high ideals of compassion and morality.

In the Russian Federation, a structure of educational institutions has been created and is successfully functioning that is able to fully ensure high-quality training of nursing specialists in programs of three levels: college-college-university:

- **1st level (basic)** - a wide-profile nurse providing general care and patient monitoring, capable of providing emergency care;

- **2nd level (advanced)** - upon completion of training, such a specialist can work as a nurse in specialized and large health care facilities, social welfare institutions, and a teacher of nursing in secondary professional institutions;

- **3rd level** - a nurse with higher education. Certified specialists can work as managers, chief medical sisters of multidisciplinary large hospitals and medical institutions, and engage in scientific activities.

The network of secondary schools was reorganized, colleges were created, and faculties of higher nursing education were opened in 43 medical universities. Several graduations of nurses with higher education were carried out.

In 1995, for the first time in Russia, G.M. Perfilieva - leader of nursing, the initiator of the creation of the faculty of higher nursing education at the Moscow Medical Academy named after I.M.Sechenova - defended her doctoral dissertation on the topic: "Nursing in Russia." To date, several medical dissertations have been defended.

In 1995, a new journal, Nursing, addressed to medical sisters, was published, inside which there is another journal, The Bulletin of Nursing Associations. Since 1998, the journal "Nurse" has been re-published; since 2001, the journal "Sister of Mercy".

Leaders of nursing today take part in all international meetings dedicated to the further development of nursing and contributing to its further reformation in our country.

In 2001, an order of the Ministry of Health of the Russian Federation approved a sectoral program for the development of nursing in the Russian Federation, developed in accordance with the concept of healthcare development in Russia. The purpose and main objectives of this program are to create optimal conditions for increasing the effectiveness and strengthening

the role of nursing personnel in providing medical and medical and social assistance to the population, improving the management system of nursing personnel, increasing the professional and social status of the profession, ensuring social protection of nurses, etc.

## CHAPTER 3 HUMAN NEEDS

After reading this chapter, you will learn:

- about the theory of Abraham Maslow about the hierarchy of human needs;
- about physiological needs;
- about the need for security;
- about the need for devotion and love;
- about social needs;
- about the need for self-expression;
- about the need for self-esteem and respect of others;
- about cognitive needs;
- about aesthetic needs.

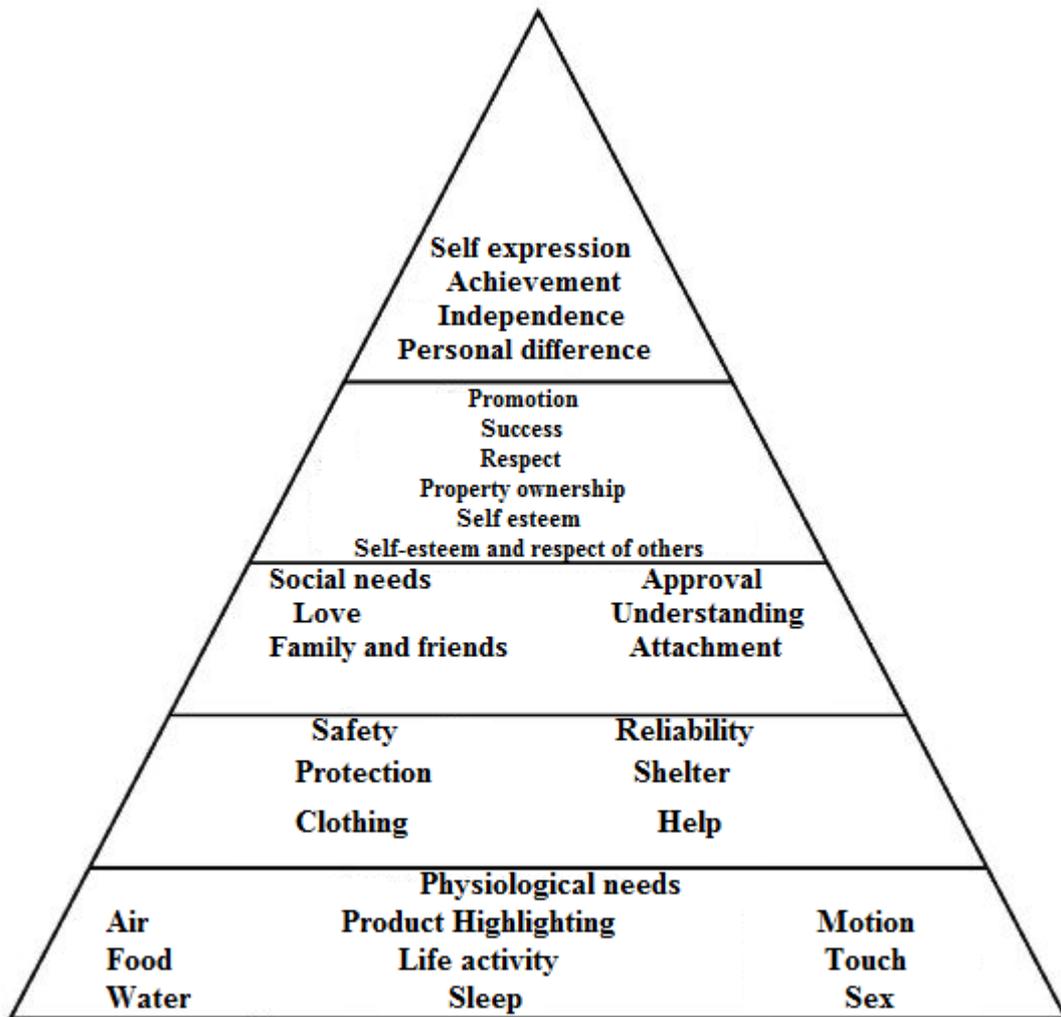
### Concepts and terms:

- **apathy** - a state of complete indifference, indifference; painful condition;
- **arthritis** - inflammation of the joint;
- **atrophy** - intravital reduction in the size of an organ or tissue of the body, accompanied by a violation or termination of their functions;
- **depression** - a depressed, depressed mental state;
- **contracture (from lat. Contractura)** - narrowing, reduction;
- **immobility** - a condition in which a person cannot move or is experiencing difficulty in the movements necessary for normal functioning;
- **environment** - the natural environment surrounding a person and the material world created by him;
- **osteoporosis** - dilution of the spongy and cortical layers of the bone due to partial resorption of bone substance;
- **need** - the need or lack of something necessary to maintain the vital activity of the organism, human personality, social group, society as a whole;
- **self-expression** - a person's desire to realize their talents and capabilities;
- **self-respect** - self-respect.

### 3.1. LEVELS IN HUMAN NEEDS A. Maslow

To live, to be healthy and happy, people need food, air, sleep, etc. A person independently satisfies these needs throughout his life. They largely depend on human behavior. So, each patient needs food, but not everyone reacts the same way to a tray of food: one, smiling, says “thank you” and with pleasure it starts, no, there is another, looking at dishes, with facial expressions and words will make it clear that “this "He will not eat, the third will prefer to sleep first, and then already take food. Thus, all patients have different food needs. It turns out that the disease also interferes with the satisfaction of needs, leads to discomfort.

In 1943, the American psychologist A. Maslow developed a theory of the hierarchy of needs that determine (direct) human behavior. According to his theory, some needs are more important for a person than others. This position made it possible to classify them according to a hierarchical system: from physiological (lowest level) to needs for self-expression (highest level). A. Maslow depicted the levels of human needs in the form of a pyramid (picture 3-1). This figure has a broad base (base, foundation). In the pyramid, the physiological needs of a person form the foundation (basis) of his life. The ability to meet people's needs is different and depends on several factors: age, environment, knowledge, skills, desires and abilities of the person himself. First of all, they satisfy the needs of a lower order, i.e. physiological.



**Picture 3-1. The hierarchy of human needs according to A. Maslow (1943)**

### **3.1.1. Physiological needs**

To live, a person needs to satisfy the physiological needs for air, food, water. In addition, each of us needs movement, sleep, physiological needs, as well as communication with people, satisfaction of our sexual interests.

It should be remembered that physiological needs are the same for all people, but are satisfied to a different degree.

**The need for oxygen (normal breathing)** is the basic physiological need of a person. Breathing and life are inseparable concepts. Man learned long ago: dum spiro spero (lat.) - while I breathe, I hope. Many words in the Russian language have a “respiratory” meaning: rest, inspiration, spirit, etc. Maintaining this need should be a priority for the nurse. The cerebral cortex

is very sensitive to a lack of oxygen. With a lack of oxygen, breathing becomes frequent and shallow (tachypnea), shortness of breath appears. For example, a prolonged decrease in the concentration of oxygen in tissues leads to cyanosis: the skin and visible mucous membranes acquire a bluish tint.

Man, satisfying the need for oxygen, supports the necessary gas composition of blood for life.

**The need for food.** Nutrition is essential for maintaining health and good self-esteem. Parents, satisfying the baby's need for rational nutrition, show not only parental care, but also provide the child with the possibility of normal growth and development. Eating an adult helps eliminate the risk factors for many diseases. For example, coronary heart disease is caused by eating foods rich in saturated animal fats and cholesterol.

A diet containing a large number of cereals and plant fibers reduces the risk of colon cancer. Adequate nutrition for diseases contributes to recovery. Thus, a high protein content in food helps to heal wounds, including bedsores.

Note that the unmet need for food often leads to a deterioration in well-being and health.

**The need for fluid.** A healthy person should drink 2.5-3 liters of fluid daily. This amount of fluid makes up for physiological losses in the form of urine, sweat, feces and fumes during breathing. To maintain water balance, a person should consume more fluids than allocate, otherwise signs of dehydration appear. The patient's ability to avoid many complications depends on the knowledge and skills of the nurse to predict dehydration. Потребность в физиологических отправлениях.

The undigested part of the food is excreted in the form of feces. The act of defecation and urination is individual for everyone, and their satisfaction cannot be postponed for a long time. Most people find these processes to be personal, intimate, and prefer not to discuss them. In this regard, the nurse, providing assistance to a patient who has problems with the physio-

logical needs, should be especially delicate and, respecting the human right to privacy, provide him with privacy.

A. Maslow also relates the need for sleep and rest to physiological needs. The alternation of periods of sleep - wakefulness is the main background for the daily activities of man.

Studies by T. Gower (1997) showed that women are more likely to suffer from fatigue caused by lack of sleep. Lack of sleep is in second place after housework among the causes of fatigue. In cases where a person makes time for doing business due to sleep, he increases the debt of lack of sleep, since the duration of sleep of a modern person, necessary for a normal existence, is at least 7-7.5 hours.

With a lack of sleep, a person's health worsens. Plasma glucose levels decrease, brain nutrition changes, mental processes slow down (attention is scattered, short-term memory worsens, speed and accuracy of calculations slow down), and learning ability decreases. Studies conducted by American experts (T. Gower, 1997) indicate a decrease in the number of phagocytic cells in the body of a sleepy person. It is known that we spend a third of our lives sleeping. A sick person needs even more sleep, as it helps to improve well-being.

**he** is “an altered state of consciousness that periodically arises in a person for a more or less long time and helps to restore his strength and well-being” (M. Venderova, 2000). There is a circadian biorhythm - a daily cycle of sleep and wakefulness. The state of drowsiness occurs twice during the day: from 00:00 to 04:00, then between 12:00 and 16:00. Despite a decrease in the susceptibility of a person to external stimuli during sleep, this is a very active state. As a result of studies conducted by M.I. Venderova (2000), several stages of sleep are distinguished.

**Stage I** - slow sleep (phase of slow eye movements). A light sleep lasts a few minutes. During this period, there is a decline in the physiological activity of the body, a gradual decrease in the activity of organs and a slowdown in metabolism. At this

time, the sleeping person can be easily woken up; if the dream does not interrupt, then the second stage occurs after 15 minutes.

**Stage II** - slow sleep (phase of slow eye movements).

Shallow sleep, lasting 10-20 minutes. The vital functions of the body continue to weaken, complete relaxation sets in. It is difficult to wake a person.

**Stage III** - slow sleep (phase of slow eye movements).

The stage of the deepest sleep lasting 15-30 minutes. It is very difficult to wake a sleeping person. The weakening of vital functions continues: it is complete relaxation, including a slow-down in heart rate.

**Stage IV** - slow sleep (phase of slow eye movements).

Deep sleep lasting 15-30 minutes. It's just as difficult to wake a sleeping man. In this phase, the restoration of physical forces. Vital functions are much weaker than during wakefulness. Some people experience "walking in a dream" and involuntary urination during this stage of sleep. Following IV, III, II, then V stage of sleep come again.

During the slow sleep phase, breathing and pulse are reduced, muscles relax.

**Stage V** - REM sleep (phase of rapid eye movements).

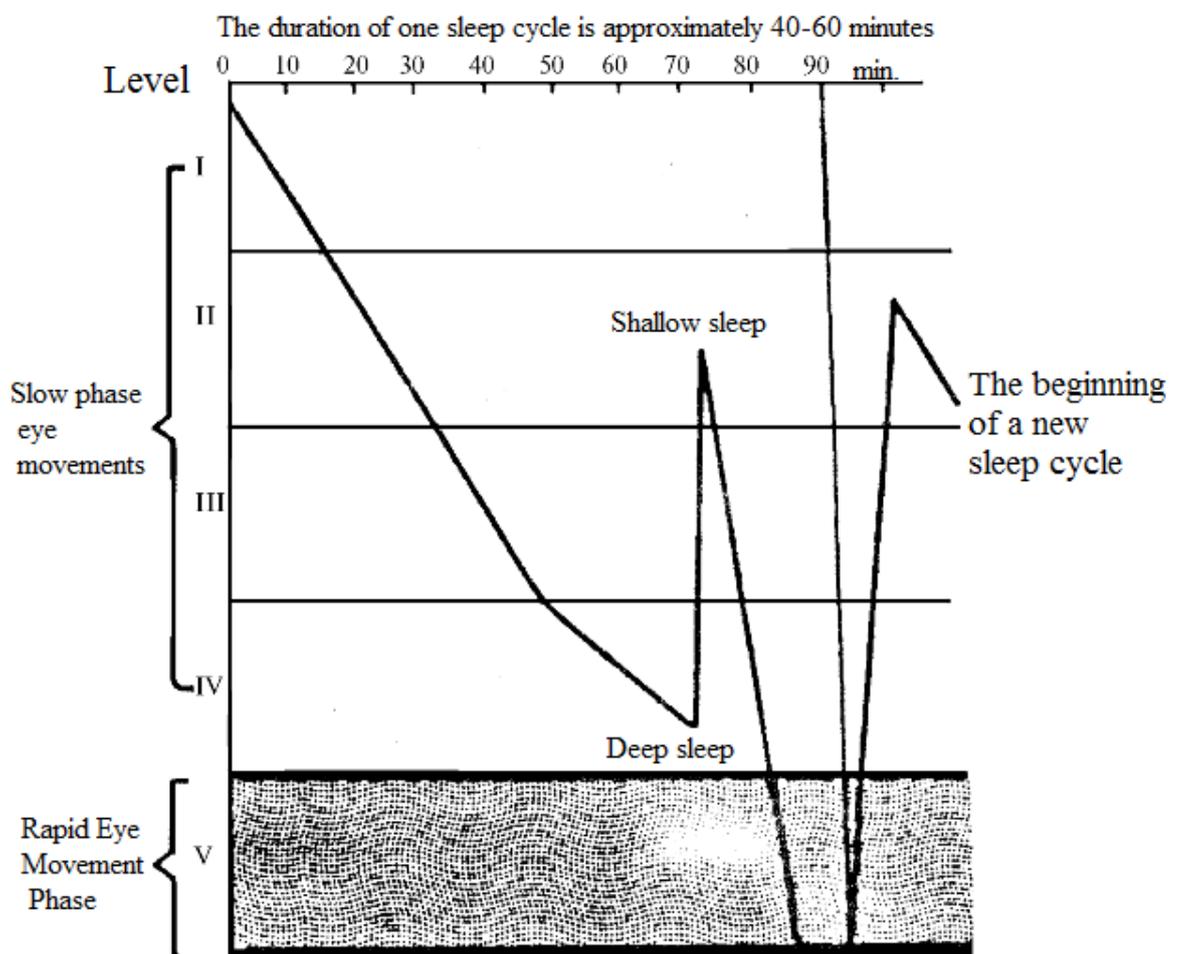
Bright, colorful dreams are possible 50-90 minutes after stage I. Rapid eye movements are observed (at that moment the dreamer sees dreams), increased heart rate and respiratory movements, changes in blood pressure, decreased skeletal muscle tone. In this phase, the mental functions of the sleeping person are restored, it is extremely difficult to wake him up, despite the signs of a more shallow sleep (increased respiratory movements and pulse). The duration of this stage is about 20 minutes.

After the V stage of sleep, IV, III, II for a short time come, then again the III, IV, V stages, i.e. next sleep cycle.

REM sleep never occurs immediately - it is preceded by several stages of slow sleep. The dream of any person consists

of a sequential alternation of 4-6 completed cycles, the duration of each of them is 60-90 minutes. The duration of REM sleep at the beginning of the night is a few minutes, and by morning about 30 minutes.

Such factors as an uncomfortable (unusual) posture, physical and / or mental malaise, drugs and drugs, lifestyle, emotional stress, the environment, and physical exertion influence sleep. Any illness accompanied by pain, physical malaise, anxiety and depression leads to poor sleep.



### Picture 3-2. Sleep cycle

For example, with a pathology of the respiratory system, the patient has to put 2-3 pillows at night, which, of course, affects the quality of sleep. With coronary heart disease, the patient is afraid to sleep because of fear of a heart attack.

Table 3-1 shows the effect of drugs on sleep quality.

Sleeping pills rather create new problems for the patient than benefit. Many people are not aware of all aspects of the effects of caffeine and alcohol. In particular, caffeine is a long-acting psychostimulant (from 12-20 hours) that can reduce the depth of sleep. It is found in coffee, tea, chocolate, and many soft drinks.

**Table 3-1. The effect of pharmacological agents on sleep quality**

<b>Pharmacological preparations</b>	<b>Impact on sleep quality</b>
<b>Sleeping pills</b>	Prevent the development of the stage of deep sleep. Provide only a temporary (1 week) increase in its duration. They lead to a state of hangover: the patient experiences drowsiness during the day, absent-mindedness and a breakdown. In elderly patients, they may initiate an asthma attack during sleep
<b>Diuretics</b>	Summon Nocturnal Polyuria
<b>Antidepressants, psychostimulants</b>	Suppress REM stage
<b>Alcohol</b>	Alcohol Accelerates falling asleep. Interrupts the REM sleep phase. Promotes frequent waking up and worsens sleep resumption
<b>Caffeine</b>	It makes it difficult to fall asleep. Sometimes contributes to sleep interruption
<b>Digoxin</b>	Summons Nightmares
<b>β-blockers</b>	Cause nightmares, insomnia and quick wake ups
<b>Tranquilizers</b>	Reduce the duration of stages II and IV of sleep
<b>Narcotic drugs</b>	Suppress the stage of REM sleep. With a sharp cessation of admission, they may increase the risk of arrhythmias. Promotes frequent awakening, causes drowsiness during the day

The nurse should familiarize the patient with the prescribed medications and their effect on sleep. In elderly and old people, sleep changes often occur:

- it takes more time to fall asleep, to reach the stage of fast deep sleep;
- the total duration of sleep does not change, even if a person often wakes up at night, so a person often feels sleepy;
- sleep is more often superficial, it is more difficult to fall asleep, frequent awakenings at night and early awakening;
- with age, the duration of superficial sleep increases, so often a person says that he "did not sleep a wink";
- during the day, an elderly person complains that it is difficult for him to perform the usual elementary work, he quickly gets tired, and there is apathy.

**Rest** - a state of reduced physical and mental activity. You can relax not only lying on the couch, but also during a long walk, reading books or performing special relaxing exercises. In a medical institution, loud noise, bright light, the presence of other people, as well as frequent medical procedures can interfere with relaxation. Rest and sleep are necessary for the daily life of a person. Knowing the stages of sleep and the possible causes of its violation will enable the nurse to provide the patient with help and satisfy the means available to her.

**The need for movement.** Restriction of mobility or immobility creates many problems for a person. Immobility is called "a condition in which a person cannot move or has difficulty with the movements necessary for normal functioning" (Jeng M., 1995). This condition can be long or short-lived, transient or permanent. It may be due to the forced use of orthopedic systems (splint, traction, corset or some special means to hold the body), pain (in joints, back, etc.); chronic disease (arthritis, residual effects of cerebrovascular accident, etc.), mental disorders (delirium, depression, etc.).

**Immobility** is one of the risk factors for the development of trophic disorders (the occurrence of pressure sores), pathological

changes in the musculoskeletal system (osteoporosis, muscle atrophy, joint contracture), disorders of the cardiovascular and respiratory systems (especially when lying on the back). With prolonged complete immobility, changes in the digestive system are observed (dyspepsia, flatulence, anorexia, diarrhea or constipation). Regular and intense straining, to which the patient is forced to resort during the act of defecation while lying down, leads to hemorrhoids, myocardial infarction, cardiac arrest. Immobility causes a violation of urination, which in turn leads to the development of urinary tract infections and / or the occurrence of urolithiasis.

And most importantly, a motionless person is deprived of communication with the environment, which affects the formation of his own "I". The severity and duration of immobility affect the psychosocial sphere of a person: the ability to learn, motivation, feelings and emotions change.

Help from a nurse aimed at restoring mobility is essential to improving the patient's quality of life.

**Sexual need.** It does not stop even during illness or when reaching old age. Sex usually means only its biological component (sexual relations). At the same time, sexuality includes the need for intimacy, love, touch and a sense of one's own femininity or masculinity.

According to WHO, a person's sexual health affects their social health and includes three main components:

- the ability to enjoy and control sexual, reproductive behavior in accordance with social and moral standards;
- lack of fear, shame, guilt, misconceptions and other psychological factors that suppress reactions and worsen sexual relationships;
- the absence of organic disorders that worsen sexual and reproductive activity.

A person's sexual health is affected by his illness, developmental defects, and in women, the birth of a child. However, many patients are reluctant to talk about this subject, even with serious sexual problems. As a rule, people are not required to satisfy their sexual

needs on a daily basis, but, like the need for breathing, food, water, sexual need is always present. Solving sexual problems can help the patient find harmony in their health status. Treating the patient with understanding and not violating (if possible) the intimate atmosphere or privacy is the smallest thing a nurse can do to satisfy his need for sex (Golubev V.L., 1991). “When talking with their patients about sexual issues, many medical nurses are uncomfortable. In order to get rid of this feeling, it is necessary:

- develop an accurate scientific basis for understanding healthy sexuality and its most common disorders and dysfunctions;
- understand how sexual orientation, culture and religious beliefs of a person affect sexuality;
- determine for themselves the boundaries in which discussion with patients of issues and problems of sexuality does not inconvenience;
- learn to identify problems that go beyond nursing competence, and recommend the patient the help of a specialist. ”

The physiological needs considered, according to the theory of A. Maslow, are the needs of the lowest level and exist in any person, regardless of age and sociocultural environment. The importance of nursing staff in meeting the physiological needs of patients should not be underestimated (Table 3-2).

**Table 3-2. Help the nurse to meet the physiological needs of the patient**

<b>Physiological needs</b>	<b>Help nurse</b>
Need for air	Raise the head of the bed; teach coughing technique
Need for food	To assist in eating; teach nutrition
Fluid requirement	To help with the intake of fluid and ensure its sufficient amount
Departing physiological needs	Help the patient get to the toilet; to teach to use a urinal
Need for sleep	Provide comfortable sleeping conditions;

	find out the reasons for its violation
Need for movement	To help the patient in moving; to teach the patient and his family active and passive exercises in the joint
Need for touch	Talking with the patient, take his hand; advise loved ones to hug him more often
Need for sex	Do not disturb patient privacy

### 3.1.2. Security needs

Physical and psychological safety are the needs of the second level. For most people, safety means reliability and convenience. Each of us needs shelter, clothes and a person who can provide assistance.

For example, the patient feels safe if the bed or wheelchair is fixed, the floor covering is dry and there are no foreign objects on it, the room is lit in the dark; a visually impaired person has glasses; he is dressed according to the weather, he has a comfortable temperature in his home and is confident that he will be provided with help if necessary. A person must be sure that he is able not only to ensure his safety, but also not to harm others. Everyone feels safe when their individual security requirements are met. The nurse should not only be able to provide the patient with safety, but also know his requirements for it (Table 3-3).

**Table 3-3. Helping a nurse patient with a safety need**

<b>Type of need</b>	<b>Help nurse</b>
Need for reliability	Lower the bed to the lowest possible level; teach patient how to use walking stick
Need for protection	More often check if bedridden patient needs help
Need for shelter	Make sure that the patient discharged from the hospital has shelter
Need for clothes	Make sure the patient is dressed appropriately for the weather.
Need for help	Provide the patient with a means of communi-

**3.1.3. Social needs**

The needs of the third level - social (the attitude of people in society): family, friends, communication, approval, affection, love, etc., acquire the greatest importance for a person.

Most people want love and understanding. Nobody wants to be abandoned and lonely, and if this happened, then the social needs of the person are not satisfied.

Elizabeth Kubler-Ross writes in his book “The Wheel of Life”: “I have never had a chance to meet a person who in some way would have a greater need than for real, boundless love. You will find it in a simple manifestation of kindness towards someone who needs help ... This is what connects us with God and with each other”[53]. In severe illness, disability, or in old age, a vacuum often breaks social contacts; in such cases, the need for communication is not satisfied, especially among the elderly and single people.

It is necessary to remember the social needs of a person, even in those cases when he prefers not to talk about it. Helping a person to solve his social problems, it is possible to significantly improve the quality of life (tab. 3-4).

**Table 3-4. Assisting a nurse with a patient to meet social needs**

<b>Type of need</b>	<b>Nurse help</b>
Need for approval	Praise the patient if he has managed to expand his self-care capabilities.
Need for understanding	Listen to the patient with genuine interest
Need for affection	Explain to the patient's relatives the benefit of regular visits; make the patient feel its importance
Need for love	Explain to the patient's relatives the importance of the manifestation of signs of love towards him
Need for love	Explain to the patient's relatives the importance

	of the manifestation of signs of love towards him
--	---

### 3.1.4. The need for self-esteem and respect

Communicating with people, we cannot be indifferent to the assessment of our success on their part.

A person has a need for respect and self-esteem. The higher the level of socio-economic development of society, the more fully these needs are met.

Often sick, disabled and elderly people are of no interest to anyone and there is no one to rejoice at their success, they have

there is no way to satisfy the need for self-esteem and respect of others, therefore it is important to help them in meeting these needs, and in this the role of the nurse is huge (tab. 3-5).

**Table 3-5. Helping a nurse patient with self-respect and respect**

Type of need	Help nurse
Need for promotion	Sincerely praise and congratulate the patient for their achievements
Need for respect	Contact the patient by name and patronymic; make the patient understand the meaning of his words
The need for self-esteem	Help the patient to achieve self-esteem
Need for success	Help the patient share their success with others
The need for an advantage	Teach patient to take advantage

### 3.1.5. Expression Needs

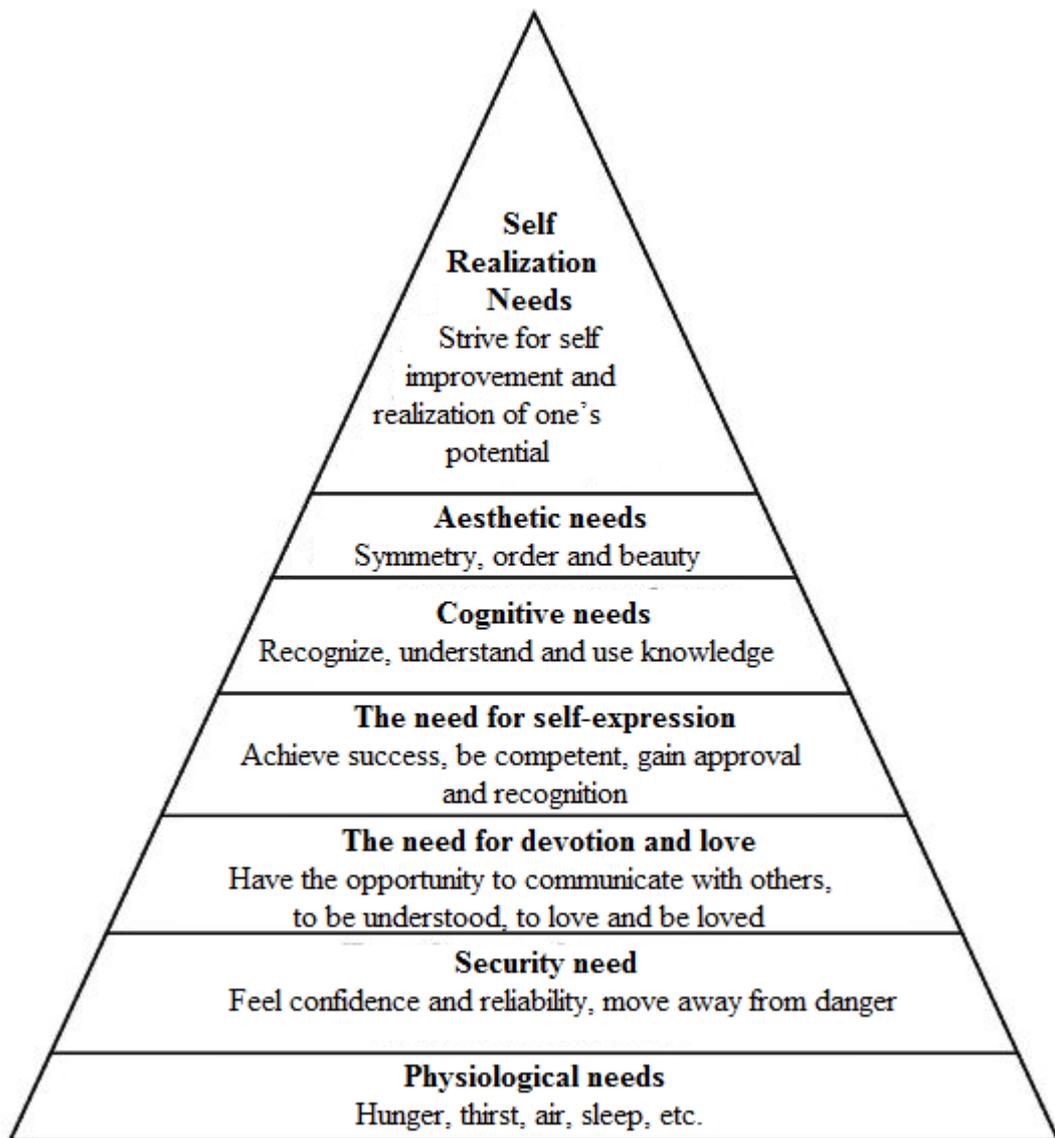
A. Maslow called self-expression the highest level of human needs. He believed: satisfying his need for self-expression, everyone believes that he is doing something better than the others. For one, self-expression is writing a book, for another it is growing a garden, for the third it is raising a child, etc.

In 1977, A. Maslow increased the number of levels in the pyramid to 7 and changed the list of requirements (Fig. 3-3) [49]. He introduced such important needs for a developed society as cognitive (including self-knowledge, knowledge of risk factors for one's health, etc.) and aesthetic (purity, beauty, and symmetry that surround a person, improve mood, enhance quality of life), etc.

Of course, not every person feels the need to fulfill the needs of all 7 levels, this is affected by education, culture, social status. So, one patient seeks to learn everything in order to stay healthy, another - everything about his illness, the third does not interest anything. For many people in our society, it is important to satisfy their aesthetic needs even in a medical institution: the neatness of medical personnel, nervous bedding, and cleanliness in the ward, dining room, good furniture, walls and floors can seriously affect the well-being of the patient and his relatives.

At each level of the hierarchy, the patient may have one or more unmet needs.

A nurse, in drawing up a patient care plan, should help him realize at least some of them.



**Picture 3-3.Hierarchy of human needs according to Maslow (1977)**

**A.**

## CHAPTER 4 COMMUNICATION

After reading this chapter, you will learn:

- on the classification of communication levels;
- about the elements of effective communication;
- about the characteristics of communication channels;
- about the features of the wording of open and closed questions;
- on techniques for effective verbal communication;
- on methods of effective non-verbal communication;
- definition of the concept of “comfort zone”;
- about the characteristic confident manner of communication.

### Concepts and terms:

- **communication** - 1) a series of dynamic events consisting in the transfer of information from the sender to the recipient; 2) a complex, multifaceted process of establishing and developing contacts between people in order to carry out joint activities;

- **verbal communication** - the process of transmitting information when communicating from one person to another using speech (oral or written);

- **non-verbal (wordless) communication** - the transfer of information using facial expressions, gestures, posture and posture without the use of speech;

- **visual** - visual;

- **communication** - the exchange of information between two or more people, orally or in writing, or through non-verbal techniques;

- **sender** - a person transmitting information;

- **message** - information sent by the sender;

- **channel** - a way to send a message: spoken language, non-speech components (facial expression, eyes, facial expressions, gestures, postures) or in writing;

- **recipient** - the person receiving the message;

- **confirmation** - a signal by which the recipient informs the sender that the message has been received.

## **4.1. COMMUNICATION IN SISTERNESS**

Communication between people is an important component of everyday life. “Nursing, along with a benevolent, technically competent implementation of medical procedures and manipulations, implies a nurse communicating with a patient who is sometimes physically and psychologically difficult, depressed, frightened or aggressive. Patients may have a variety of communication needs, they may need advice, comfort, support, consultation, or just the opportunity to share their experiences ”[32].

The value of the psychotherapeutic effect possible with effective communication is well known, its result sometimes surpasses all other treatment methods. In this regard, communication is one of the important skills necessary for the quality work of a nurse. Communication skills are necessary for her to gain the trust of the patient, his family, interaction with doctors and other specialists involved in the treatment process. Many people know from their own experience how often people misunderstand each other. Effective communication skills will help eliminate this problem.

The basic principles of nursing philosophy are respect for life, dignity and human rights [21, 40]. In order to understand a person and communicate with him, respect, faith in his significance, value, uniqueness, kindness, strength, the ability to manage his actions and the right to do so are required. Nursing is a responsible caring relationship [23].

## **4.2. COMMUNICATION TECHNIQUE**

Many have experience ineffective communication with other people. If they don't understand you, it is surprising: “I expressed myself quite clearly! Why don't they understand me? ”

One of the conditions for effective communication is the use of all its components (pic. 4-1).

Why do people sometimes misunderstand each other, even if all 5 elements of effective communication are used?

Firstly, the message itself may be fuzzy. For example, pronounced in a too low voice, written in bad handwriting, contains obscure terms, etc.

Secondly, the sender may use the wrong channel to transmit information. For example, a person with hearing problems is given a large amount of information through spoken language, and a person with vision problems is given a written instruction written in too small a handwriting, etc.

Thirdly, the recipient of the message does not confirm that the information he received and understood exactly as planned by the sender. For example, if to a nurse's question: "Do you understand how to take the medicine prescribed for you?", The patient replies, "Yes, I understand," this does not mean that he really understood everything correctly. In this case, in order to confirm that the message was received and understood by the patient correctly, the nurse must ask some specific open questions, for example: "How long after eating will you take the medicine?"; "How will you drink this medicine?", Etc. In this case, the patient would retell the nurse's message as he understood it.



**Picture 4-1. Elements of effective communication**

The message was received and understood by the patient correctly, the nurse should ask a few specific open questions, for example: "How long after eating will you take the medicine?"; "How will you drink this medicine?", Etc. In this case, the patient would retell the message from the nurse as he understood it.

Effective communication requires careful preparation, careful attention to the interlocutor, mutual readiness for communication. Often people with similar visual impairment, hearing impairment, physical activity, etc., have various problems. The uniqueness of each person is revealed through communication.

### **4.3. COMMUNICATION METHODS**

There are two ways of transmitting information: verbal (oral or written) and non-verbal (pose, gesture, facial expressions, etc.). In

fig. Figure 4-2 shows the types of verbal and non-verbal communication. The choice of information transfer method depends on the content of the message and the individual qualities of the message recipient. For example, for a blind person you can use spoken language, for a deaf person you can use both oral (many deaf people can read lips) and written (memo) speech. Often, several channels are used simultaneously to transmit a message, for example, oral speech is accompanied by facial expressions and gestures.

Verbal communication involves two important elements: meaning and form of expression. The message should be clear and concise.

By asking questions correctly, you can make communication more effective. Questions can be closed, which can be answered monosyllabically “Yes” or “No”, and open (special), to which you can get a more or less detailed answer. Closed questions begin with the words: “Can you ..?”, “Do you want ..?”, “Do you need ..?”, “Do you have ..?”, Etc.

Open questions begin with the words: “Tell me ..?”, “What ..?”, “Where ..?”, “When ..?”, “Why ..?”, Etc.

An incorrectly asked question can make the message ineffective. So, teaching a patient some necessary skills to the question: “Do you understand me?”, You can get the answer: “Yes”, while a person simply does not want to admit that he did not understand everything. If you say: “I would like to make sure that you understood me correctly”, you can receive confirmation of the received message.

You can improve message performance if:

- attract the attention of the message recipient (if a person is busy with something, and your message is not urgent, it is best to postpone the conversation with him for some time);
- speak slowly, with good pronunciation, simple short phrases;
- Do not abuse special terminology;
- change the speed and pace of speech when communicating with a specific patient: if the medical nurse speaks too slowly, the patient may think that she underestimates his ability to perceive in-

formation. If the nurse speaks too quickly, the patient may think that she is in a hurry and will not want to listen further;

- choose the right time for communication: the person to whom the information is addressed should have an interest in the conversation. The best time for communication is when the patient asks himself questions about his condition, care plan, nursing interventions, etc .;

- Do not start a conversation immediately after the doctor's information about an unfavorable outcome or incurable disease;

- monitor the intonation of your voice, make sure that it matches what you are going to say. The tone may express interest, care, indifference and irritation, fear, anger;

- select the desired volume: speak so that you are heard, but not scream;

- humor promotes effective verbal communication, but it should be careful, especially when manipulating personal hygiene of the patient. When caring for him, nurses can tell funny cases and use a play on words to make the patient smile. Some foreign researchers note that humor helps reassure the patient, relieve tension and pain, provides emotional support and softens the perception of the disease;

- make sure that you are understood by asking a person open, not closed questions. The question should be asked: "How will you prepare for the examination?", But not "Do you understand how to prepare for the examination?" The patient may say "Yes" to the second (closed) question, even if he did not understand the message [27].

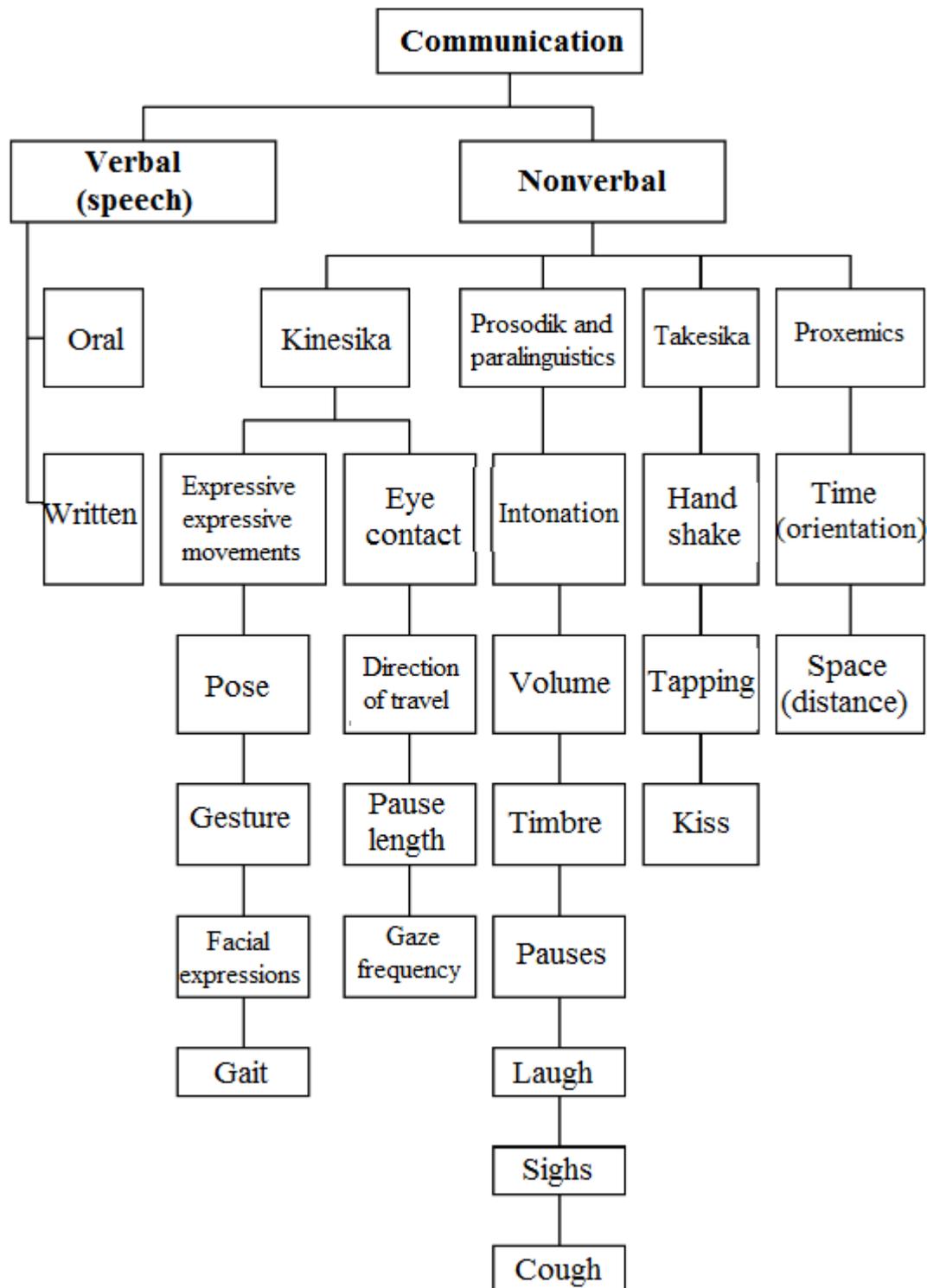
To make sure that you are understood correctly, and to evaluate the answer of the interlocutor, you need to be able to listen.

It's important for any person to be listened to when they say something. And he receives confirmation of this both through verbal and non-verbal channels of communication, as well as through verbal silence.

There are 3 elements of active listening: encouraging non-verbal components, encouraging verbal components, silence.

Encouraging non-verbal components of active listening include eye contact, a posture indicating attentiveness and willingness to listen, distance between interlocutors, nodding and facial expression.

Encouraging verbal components of active listening include short exclamations that show the speaker that his words are of interest.



## **Picture 4-2. Types of communication**

Silence can serve as a very important pause in a conversation: it allows the speaker to collect his thoughts in a difficult situation, find words that match feelings, and think about his point of view. Silence can be awkward if the speaker addresses a difficult topic that he is not prepared to discuss; you can go to the interlocutor and change the subject [23].

“The ability to listen means openness to the world, thoughts and feelings of other people, openly expressed or implied. The ability to listen is not a passive perception of information, but active, conscious efforts to form participation in an interlocutor. For this, in addition to a simple understanding of the meaning of the words spoken, concentration, lack of prejudice and an interested attitude to what is being said are required. To be a good listener, you need to fully focus on another person, which means suppressing your own prejudices, feelings of concern and other distracting internal and external factors ”[23].

Written (verbal) communication is extremely important for a nurse. It can be effective when you consider the following recommendations:

- write carefully (if you have poor writing, write in block letters);
- choose the correct size and color of the letters (for a visually impaired person, write in blue or black pen in block letters on white paper);
- make sure that all necessary information is included in the note;
- write correctly. Mistakes undermine the authority of the nurse;
- choose clear and simple words;
- Be sure to sign your message.

The effectiveness of written communication depends on many factors:

- Whether a person can read;
- see what is written;
- Does the language in which the message is written know?
- understands what is written.

In this regard, the following rules should be followed by nursing staff for effective written communication:

- to a person who cannot read, draw pictures;
- be precise when naming time (morning, evening);
- be careful (check if you have included all the necessary information).

Non-verbal communication is carried out using symbols, gestures, facial expressions, poses, touching. Researchers found that 55% of information during a conversation is perceived by its participants through facial expressions, postures and gestures, 38% through intonation and voice modulation. Consequently, only 7% of the information is spoken. Moreover, it is believed that with the help of words (verbal channel) only information is transmitted, and through the non-verbal channel, the attitude to the interlocutor is transmitted.

As a rule, people are less able to consciously control the channel of non-verbal communication. His study is engaged in a new science - kinetics. Kinetic researchers have proven that verbal speech is easier to control than facial expressions and gestures, since non-verbal information is closely related to a person's mental state. It is nonverbal people who express their mental state.

Sometimes the whole body of a person is involved in the transmission of a message. A man's gait is also a way of transmitting a message and expressing oneself. For example, a person who boldly and confidently enters the room demonstrates either his well-being or anger. Slowly entering shows restraint, fear or anxiety. In these examples, in order to correctly understand the message, additional information is needed. It should be noted that the nurse often has to look after patients who are unable to use spoken language as a communication channel; therefore the nurse needs the non-verbal communication skill.

When you look at a person, you get a lot of information on the expression on his face, facial expressions, gestures. For example, during a conversation, a nurse sees that the patient has folded her arms and pressed them close to her chest. This may mean that she is very worried or upset. When receiving a message in a non-verbal way, the medical worker must be sure that the patient understood it correctly. In the situation under discussion, the nurse may ask, "Are you upset about something?"

Mimicry of a person is a very rich source of information about his emotional state. All people, regardless of the nationality and culture in which they grew up, almost equally understand the emotional state expressed by facial expressions on the face of the interlocutor. For example, when a person suffers, his mouth is closed, the corners of his mouth are lowered, his eyes are narrowed, dull, his eyebrows are shifted to the bridge of the nose, the outer corners of the eyebrows are raised upwards, there are vertical folds on the forehead and nose, and the face is frozen.

Psychologists believe that the person's face is a kind of center for receiving and transmitting social signals. It is well known that facial expressions give a person an individual look. As many note, the most expressive in the face is the eyes. This is evidenced by many sayings and phrases: "read the soul through the eyes," "sparkle with your eyes," "devour your eyes," "hide your eyes," etc. The person's view complements what is unsaid by words and gestures, and often it is the view that gives the true meaning to the spoken phrase. An expressive look is able to convey the meaning of not only what was said, but also unsaid or unspoken. In some cases, a look can be said more than words. Therefore, the "eye to eye" look is the most important channel of non-verbal communication. The sight launches and supports communication at all its stages; its significance especially increases with confidential communication "eye to eye" [4].

Eye contact indicates a disposition to communicate. With the help of the eyes, the most accurate signals about the state of a person are transmitted, since the expansion or contraction of the pupils does not lend itself to conscious control. For example, if a person is agitated, his pupils are four times larger than usual, and if he is angry, the pupils narrow.

The person retains a stable expression for a long time (sad, indifferent, evil, good, etc.). Moreover, the center, allowing the interlocutor to determine facial expression, are eyes. According to research, more than 50% of the communication time the interlocutors look into each other's eyes.

Hands play an important role in sign language, and it's not only when the speaker shows with his hands the shape of the subject under discussion, indicates the direction or comments on any event. Hands transmit and emotional state. So, anxiety can be manifested by the continuous movement of the hands, trembling fingers, etc.

One important aspect of non-verbal communication is the appearance of the nurse. If she is dressed professionally, the patient will trust her more. Naturally, in different countries, depending on the level of economic development, culture and religion, society has certain expectations and requirements for both nursing as a whole and the appearance of a nurse. Even in one country, each patient has his own, pre-compiled idea of a nurse.

Выражение лица медицинской сестры значительно влияет на эффективность общения с пациентом. Пациенты смотрят, как правило, на выражение лица медсестры, когда она делает перевязку, отвечает на вопросы о тяжести и прогнозе заболевания. В связи с этим следует научиться контролировать выражение своего лица, особенно в случаях, вызывающих неприятные эмоции, чтобы смягчить чувство страха у пациента.

The position of the patient's body, his movements indicate both his physical and emotional state.

Verbal and non-verbal communication can exist simultaneously. For example, a conversation (verbal communication) may be accompanied by a smile, gestures, crying, etc. (non-verbal information). It should be noted that the perception of the message largely depends on non-verbal information. The ability to "read" a non-verbal message will help the nurse understand the true feelings, mood and problems of the patient. For example, if a patient tells a nurse that he is okay and does not bother anything, but does not look into his eyes, sits with his hands clenched in fists, the nurse should see a pose of mistrust, fear, confusion, and, of course, do not leave such a patient without help.

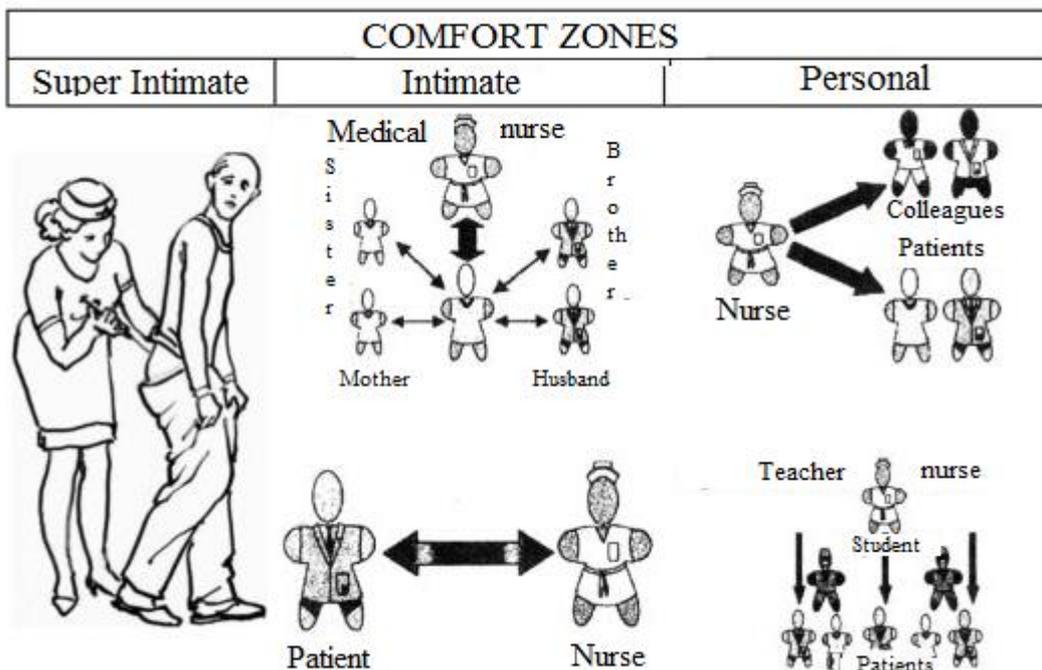
The process of communication is largely influenced by the previous experience of a person and his memory. Everyone involved in the conversation brings their position and beliefs to the conversation.

Although both methods of communication (verbal and non-verbal) are complementary, many researchers believe that non-verbal signals are used more efficiently, especially when you need to convey the emotional state of a person. Verbal communication, on the other hand, is a common means of transmitting factual information. The effectiveness of verbal communication largely depends on the ability to think, speak, listen, read and write.

Non-verbal methods - touching the shoulder with a hand, patting on the back or hugs - allow a nurse to inform a person about attachment to him, emotional support, approval, empathy.

Nursing specialists show that the skill of assessing the patient's condition is based on many skills of wordless (non-verbal) communication, in particular, on touch. Touch often truly reassures people with intense mental suffering. However, you need to be very careful about physical contacts, because in some cultures, touching and close contact with strangers may not be acceptable. The nurse should consider that communication will be more successful if it occurs in the comfort zone (Figure 4-3).

Each person has his own comfort zone size. As a rule, a person does not think about the comfort zone or the amount of personal space around him until someone invades this zone. A person immediately feels uncomfortable and, if possible, takes a step back to restore a comfortable personal space around him. The discomfort that appears in a person if someone falls into his personal space may be associated with the concepts of intimacy, threat, superiority. A person admits only close people and friends to his personal space. So, for most people, the size of their personal zone is 0.45-1.2 m.



**Picture 4-3. Comfort zones**

As a rule, comfortable communication is possible at a distance of 1 m. Usually, this distance is regulated by the norms of culture.

At the same time, when performing certain procedures, the nurse invades not only the personal, but also the intimate (16-45 cm) and ultra-intimate (0-15 cm) zones. The nurse, knowing and understanding the difficulties that the patient may experience, should be especially attentive and delicate. For example, the size of the comfort zone of a nurse allows her to stand close to other people, but they feel uncomfortable and move away, because the size of their comfort zone may be smaller. And vice versa, a nurse can only feel comfortable if there is a lot of space around her, and a person thinks that he is unpleasant to her and therefore she stands (sits) so far from him.

It must be remembered that often medical workers are so accustomed to communicating with people in various situations, including when the patients are stripped, that their perception of people's discomfort and their confusion in such situations becomes dull. In this regard, you need to carefully pay attention to the comfort zone of everyone and find a distance that is mutually acceptable for the sister and patient.

One needs to be very attentive to the patient and / or his relatives displaying a feeling of discomfort associated with the invasion of the comfort zone.

#### **4.4. CONFIDENT MANNER OF COMMUNICATION**

No matter what communication channel a person uses, he should strive to ensure that the message conceived by him is transmitted most accurately. This is facilitated by a confident manner of communication. If the message is transmitted firmly and confidently, the likelihood that the message recipient agrees with it increases. Some people confuse a confident manner of communication with aggressiveness and rudeness, so you should use it selectively and always think about how it will be perceived.

In cases where a person behaves aggressively (not to be confused with confident behavior!) Towards a nurse, use the following recommendations:

- one should not take someone's aggressive behavior as a personal insult; most often people throw out their negative emotions on those whom they see more often, even if someone else upset them;
- you need to breathe deeply: take a deep breath and count out loud, until there is peace of mind;

- you can leave the room if there is a fear of saying or doing something unpleasant (of course, this can only be done if the patient is safe);
- you can take a break by taking a short walk by drinking a sip of water;
- you can tell the incident to someone who respects yours;
- you should talk again with a man who showed disrespect for his sister: make it clear that the sister will continue to fulfill her duties [27].

It is very important for medical personnel to leave communication channels open (watch, listen) even in cases where the received message causes a feeling of awkwardness.

Below are a few suggestions to keep in touch, despite the awkwardness. To do this:

- pause for a few seconds to calm down, stop thinking about your feelings and concentrate on the message of the interlocutor;
- show interest in the interlocutor, using facial expressions, gesture, touch; if a person feels the interest of a nurse, then this silent support can be more effective than any words;
- again invite a person to the conversation, asking the question: “How do you feel?”, “Are you sure that you are better off alone now?” Sometimes you can repeat the interlocutor’s message in your own words: “Do you really miss your family?”;
- just listen to the interlocutor, because sometimes this is the only thing a person needs. If the nurse believes that the patient needs answers to the questions, and she cannot do this, you should find someone who will answer the questions;
- talk about your feelings, about misunderstandings with another person who uses the trust of a nurse.

#### **4.5. COMMUNICATION - AN INTEGRAL COMPONENT OF NURSING**

The practice of nursing in Russia over many decades has been predominantly associated with the performance of certain procedures that do not require a nurse to communicate. The reform of nursing, in the framework of which the expansion of the functions of nursing staff is supposed, makes the ability to communicate effectively, as the information about the patient's problems, as well as the assessment of its results, require an active discussion of all is-

sues with the patient. In particular, this refers to counseling patients (including parents of young children and relatives of elderly patients) on issues related to maintaining (maintaining) health.

A person should want to tell a nurse about their health problems, who should be able to listen and understand him.

## CHAPTER 5 NURSING TRAINING

After reading this chapter, you will learn:

- on the field of patient education;
- on the conditions for the effectiveness of training;
- on methods for assessing the initial level of knowledge;
- on methods of planning and implementing a training plan;
- on methods for assessing learning outcomes.

Concepts and terms:

- learning ability - individual indicators of speed and quality of a person's assimilation of knowledge, skills in the learning process;
- daily activities - activities performed by the patient during a normal day: eating, dressing, bathing, brushing, putting oneself in order, etc .;
- areas of learning - areas in which the learning process takes place: cognitive, emotional and psychomotor;
- the purpose of training is a statement of what a person intends to do in order to achieve a certain result. The goal should correspond to the capabilities of man and not contradict his inner values.

### 5.1. TRAINING - ONE OF THE NURSING FUNCTIONS

Nursing education of patients and / or their relatives is a continuous process, which often occurs informally, during conversations or when observing certain actions of another person. Each patient has the right to receive information about his illness or injury, state of health, prognosis of the disease. Nurses, educating people of different ages, knowing the risk factors for diseases for each age period, help people learn how to change their behavior in order to maintain their own health, the health of their children and loved ones, or to maintain it at the highest possible level.

An important function of nursing staff is to educate patients and their families on issues related to their health. In some cases, this is training in specific skills of self-care or caring for a child or adults, in others - preparation for a particular study, training in taking medications (for example, the technique of administering insulin), and

in the third - on rational (dietary) nutrition, adequate physical activity, etc. By educating patients, the nurse helps them adapt to their condition in order to maintain the maximum comfortable living standard for them, or explains how to change their lifestyle in order to reduce or eliminate the influence of disease risk factors.

Training can take place in a formal setting (in a medical institution or at the patient's home), when a nurse teaches a patient new techniques for performing everyday activities (washing, walking, etc.), or in an informal setting when a nurse is performing discusses his everyday duties with a person about problems that concern him (for example, how to protect himself from HIV infection, how to protect his child from injury), providing information necessary for maintaining a healthy lifestyle.

In some cases, a nurse helps the patient to consolidate the skills acquired by him from another specialist (for example, a set of physiotherapy exercises for extremities or breathing exercises).

## 5.2. SCOPES OF TRAINING

Training takes place in three areas.

**Cognitive sphere** - a person learns and understands new facts, analyzes information, distinguishing important information from irrelevant. For example, a person learns about the risk factors for diseases of people of his age, or about the components of food, which contain the elements necessary for a balanced diet, or about the danger to which he exposes himself due to improper behavior.

**Emotional (sensual) sphere** - a person, having received information, changes his behavior, expressing it with feelings, thoughts, opinion and assessment of some factors; a person actively listens and responds to new information, both verbally and nonverbally. For example, a person reduces the number of cigarettes smoked, alcohol consumption, or eats the amount of cereal products, protein, etc., necessary for his age, or stops wearing shoes that pose a danger to him when walking, fastens his seat belt in the car, carries the child in the car only in the back seat, etc.

**Psychomotor sphere** - a person masters skills thanks to mental and muscular activity; learns new types of movement (e.g. walking with a cane); confidently performs the necessary actions; psychologically, physically and emotionally ready to perform actions related to everyday activities.

### 5.3. TRAINING EFFICIENCY

The effectiveness of training the patient and / or his relatives, i.e. what they learn and how they do it is determined by many factors.

One of the factors is the initial knowledge that the patient already has. For example, if a person who, due to his illness, has to change his usual diet and physical activity, already has an idea about the new diet and activity mode, his training will be more successful. At the same time, if the information he has does not coincide with the new information that the nurse tells him, training may be less effective.

The next factor, which also depends on the effectiveness of training, is the person's opinion or attitude to what he needs to know and change in the future. For example, if a man believes that cooking is exclusively a woman's business, it will be difficult for him to study and perceive information related to diet planning.

A person's past experience also influences the assimilation of new information. For example, if an overweight woman has already made several attempts to lose weight, it will be difficult for her to change her behavior again in order to try to succeed. However, if these attempts were successful and she felt more alert at the same time, it is much easier to teach her to eat properly and to perform adequate physical activity.

Education of patients and their families is effective under the following conditions:

- the presence of a clear goal and motivation to acquire knowledge;
- sister's friendly attitude towards students (patients and members of their families);
- creating an associative relationship between new information and their past experience and knowledge;
- obligatory practical development of the acquired knowledge.

Students better understand and remember information if the sister:

- uses the technique of effective communication;
- listens to everything she is told or asked about;
- treats them patiently;
- praises for academic excellence;
- takes a break if they feel unwell or are upset by something.

For training to be effective, three factors must be considered: desire and willingness to learn; ability to learn; surroundings.

**The desire and willingness to learn depends**, firstly, on the cognitive abilities of the student, allowing him to concentrate and understand new material, and secondly, on attention. If a person is not able to concentrate, then training should be postponed or canceled. Anxiety, pain, fatigue, hunger, thirst, drowsiness - all this interferes with the learning process and requires special skills from the teacher. When planning a training, the nurse should evaluate the patient's desire and readiness for training.

**The ability to learn depends** on the stage and level of human development (child, adult, elderly, etc.). Before starting training, the nurse must assess the level of development of a person's cognitive abilities and choose the appropriate method of training. Important criteria for assessing the ability to learn are the person's age, his physical condition (weakness, exhaustion, etc.), in which learning may be impossible or ineffective, disposition to communicate, range of motion, degree of mobility, etc.

**The environment** is also an important condition for successful learning. Starting training, the nurse must determine the optimal number of students (group training is not always effective), assess their need for privacy, air temperature, lighting, noise, ventilation, furniture.

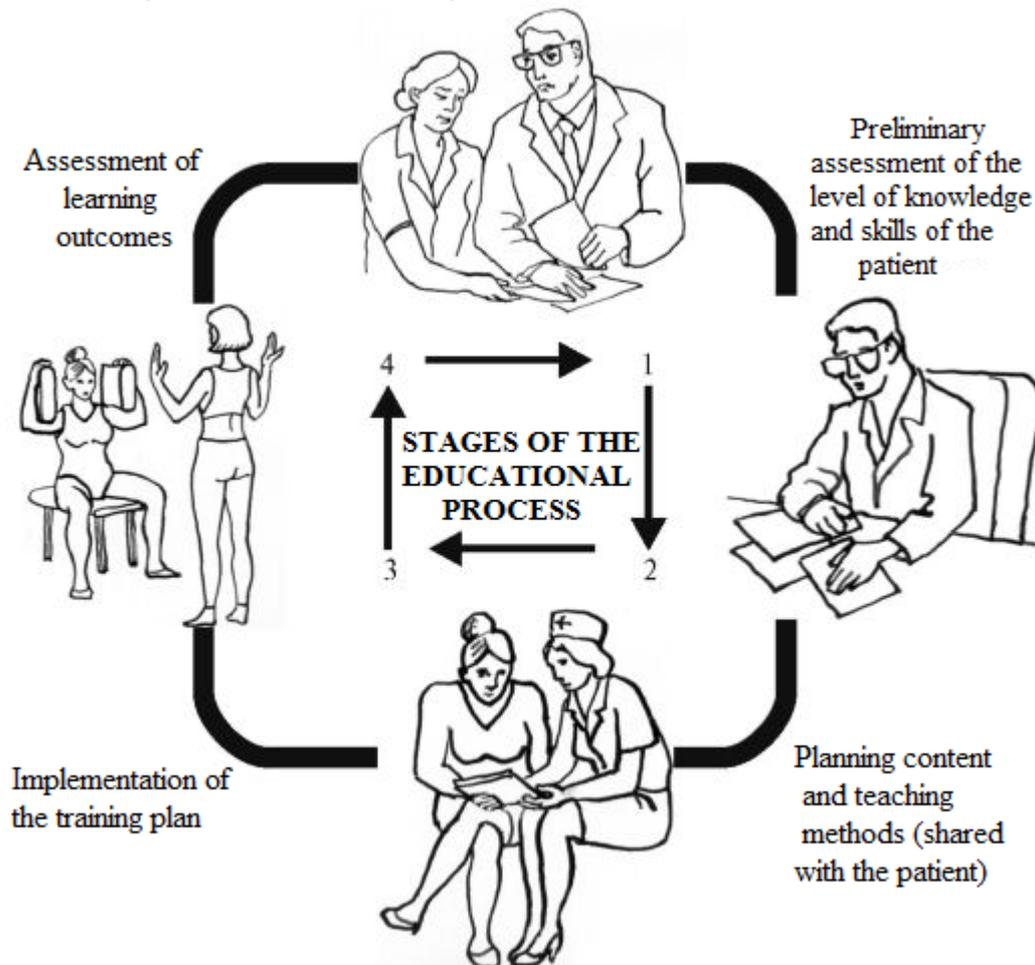
## 5.4. LEARNING PROCESS

Teaching a patient and / or his relatives is effective if the nurse knows and understands the significance of each stage of training (educational process) (Fig. 5-1). These steps are as follows:

- assessment of the initial level of knowledge and skills of the patient and / or his relatives;
- setting goals, planning the content, methods and scope of training;
- implementation of a training plan;
- assessment of learning outcomes.

### 5.4.1. Assessment of the initial level of knowledge and skills of the patient

Assessment of the initial level involves the determination of a person's knowledge and skills, as well as his attitude to the information that he will learn. When conducting an assessment, factors such as age, education and level of knowledge, current health status, well-being and medical diagnosis should be taken into account.



**Picture 5-1. The scheme of the educational process**

Carrying out this preliminary assessment, it should be understood that patients suffering from certain diseases (for example, stroke, limb trauma, spine) will need to learn very specific skills when walking, buttoning, putting on shoes, eating, etc.

### 5.4.2. Setting goals, planning content, methods and areas of study

The topic can be taught in any (or all) field of study. The formulation of goals in the framework of the implementation of the nursing process should be focused on three areas of education.

Moreover, learning-related goals are called behavioral. The goal statement reflects what the patient needs to do to achieve a result. Goals must be measurable.

A well-defined goal contains three components:

- what the patient has to do (for example, “must pass”, “must know”, “must be able”, etc.), ie learning outcomes;
- time frame: the date or time interval during which the learning objective will be achieved (for example, “20 minutes after breakfast”, “in a week”, etc.);
- who, with the help of what devices provides assistance, ie the condition under which the goal will be achieved (for example, “with the help of an instructor”, “on crutches”, “independently”, etc.).

In formulating the goals of training in the psychomotor sphere, the following verbs are used that define the skills: "Ivan Petrovich must demonstrate the ability to use the feces receiver." An example of the formulation of the goal in the psychomotor field of education can be: "Ivan Petrovich must walk 50 m daily in the morning on his own."

In formulating learning objectives in the cognitive sphere, one should use verbs that reflect mental activity: “Ivan Petrovich understands why he should limit the liquid and salt in his diet” or “Anna Petrovna understands why there should not be carpets in the apartment”.

When setting goals in the emotional sphere of learning, verbs are used that reflect feelings, reactions and the patient’s assessment of certain phenomena: “Ivan Petrovich adequately responds to the presence of a colostomy” or “Svetlana correctly responds to the need for lifestyle changes in connection with pregnancy.”

Having determined the learning objectives, the content and methods of training should be planned. The plan includes time (morning, afternoon, evening) and duration of training. If as a result of training the patient must master several skills, it is necessary to take into account the optimal learning sequence, which does not tire the patient and does not cause negative emotions in him. First of all, a person is taught simpler skills, and then more complexes.

Sister needs to develop an individual training plan for each patient. For example, a nurse, together with a patient who suffered an acute cerebrovascular accident, after which his right leg is unstable and his right arm is not functioning, plans to study like this: “Ivan Petrovich should dress himself in a week”. Moreover, they plan that

at first he will learn to wear trousers, then shoes, and only last but not least, a shirt, because the patient believes that this is the most difficult for him.

After the preparation of the training plan, it is very important that both the sister and the trained patient or his relatives clearly realize their mutual responsibility for the successful implementation of this plan.

### **5.4.3. Implementation of the training plan**

Fulfilling the plan, the nurse must choose the right time for training, when the patient is most able to perceive information. Training is provided only if the nurse has sufficient time and the patient feels well, calm and in a comfortable environment. Otherwise, postpone training. If the patient is upset that he cannot perform any action that he is being taught, you need to offer him to wait, while showing calm and patience.

When teaching patients, you can use the specialized literature published for them. By emphasizing important information, a nurse helps a person focus on information that is meaningful to him. It is necessary to ask students a lot of specific (open) questions, to maintain their interest in the material, then patients will demonstrate the knowledge and skills that they have mastered.

When teaching, you need to be sure that the patients and / or their loved ones correctly understand the transmitted information. In this regard, the nurse during the training periodically checks how effective the training is, asking the patient specific questions, receiving open answers and observing how he is performing new skills or planning changes in behavior. In cases where the sister has to transmit a large amount of information, it is necessary to divide the message into several parts, periodically asking the patient if he understood the sister. In conclusion, all information can be briefly repeated.

Perhaps, for successful training, various non-standard methods will be required that must be used skillfully and carefully. One such method is a demonstration. For greater clarity, self-help skills can be demonstrated by a sister. For example, a patient who has had a stroke has difficulty acquiring personal hygiene skills, but at the same time, the patient needs these skills to restore independence. In this regard, a clear, repeated demonstration by the sister of each

stage of these skills is a very visual and important means of achieving learning goals. A useful addition to the demonstration method is “homework” to develop specific skills a certain number of times over a specific period of time.

Practical help in the form of counseling may also be required by the patient in developing new practical skills. In this case, the nurse can observe from the side how the patient performs one or another skill. At difficult stages in the development of the skill, the nurse provides the necessary assistance.

Role-playing can be a very effective way to teach some social skills. This training method allows you to:

- it is better to realize their own capabilities and difficulties in self-care in a domestic environment;
- develop new skills, for example, how to start a conversation or behave confidently in a relatively safe and friendly environment;
- increase self-awareness, find new solutions.

#### **5.4.4. Assessment of learning outcomes**

Assessing the results of training, it is necessary to make it clear to the patient that other patients also have questions, and at the same time tell him: "Many people have questions about this." To encourage interest, you need to praise the patient when he asks a question, addressing him with the words: “This is a good question. I'm glad you asked him! ”

If a person addresses a question that the nurse does not know the answer to, he needs to be told that she needs to consult. It is very important not to use special terms that the patient is not able to understand. You can ask the main assessment question whether the patient wants to be able to fulfill the task assigned to him and use the new information. After obtaining the consent of the patient, ask him to demonstrate the acquired knowledge and skills. It is imperative to inform the patient the result of the nursing assessment: he must know how successfully he coped with the task and whether the training in these specific skills can be considered completed.

## CHAPTER 6 NURSE CARE MODELS

After reading this chapter, you will learn:

- on the main provisions of nursing care models;
- about the differences of models;
- about the features of the medical model: models by V. Henderson, N. Roper, V. Logan and A. Tayer-ni, D. Johnson, C. Roy, D. Orem;
- about the features of the use of various models in the nursing process.

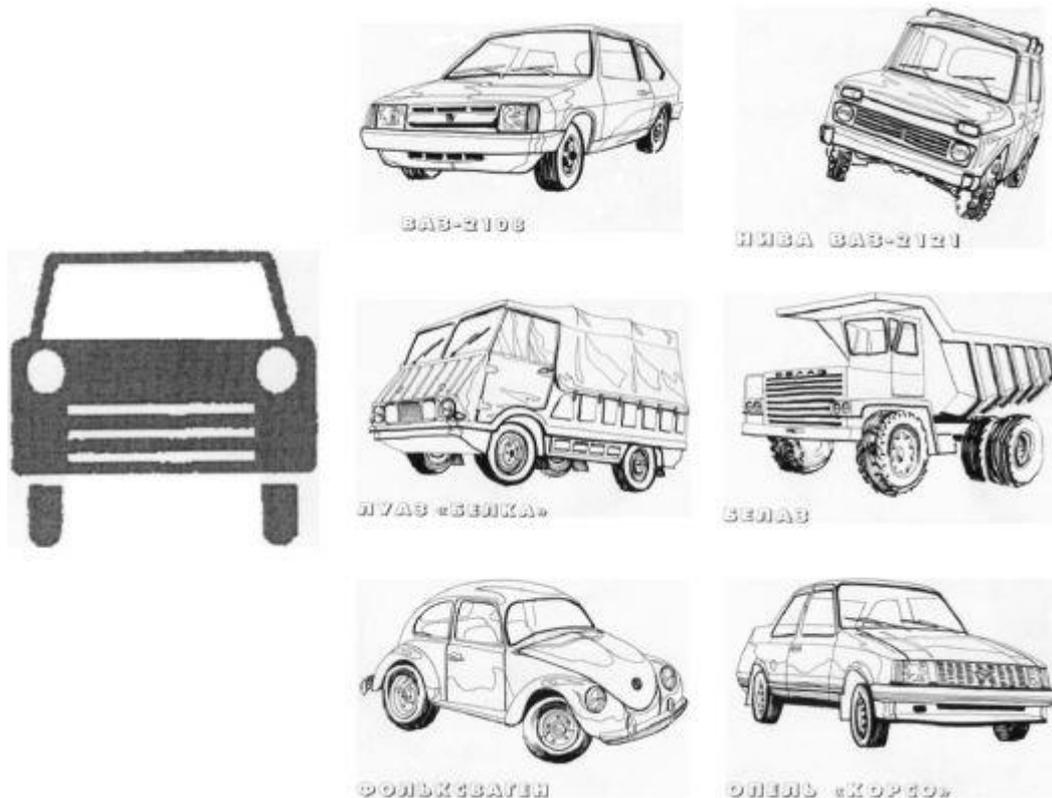
Concepts and terms:

- mastectomy - removal of the mammary gland;
- model - a model by which something should be done;
- behavior - 1) the way a person functions (physiological, psychological, social, spiritual) in specific circumstances; 2) any observed action;
- pathological - painful;
- stoma - hole;
- scheme (image) of your body - a mental picture of your own body. This includes emotions and the individual relationship of a person to his body as an object, clearly limited from other environmental objects;
- NANDA - North American Nursing Diagnostic Association.

### 6.1. BASIC PROVISIONS OF MODELS

The concepts of "nursing process" and "model of nursing care" are significantly different from each other. Models of nursing care are sometimes called conceptual, as they are built on the basis of various concepts and concepts. V. Reichl and C. Roy define them as follows: "A systematically constructed, scientifically sound and logically related set of concepts that make up the elements of nursing practice" [40].

Let's try to figure out what the model of nursing care means. Look at the pic. 6-1. What is common between a nursing care model and ... car models? The figure on the left schematically shows a "symbolic" model of the car, which has some characteristics common to all cars, and on the right, certain models that have different names and differ from each other in appearance, engine size, and number of doors, and payload, etc.



**Picture 6-1. The analogy between car models and care models**

Just as all cars share common features, so do nursing care models. In each model, the authors see differently:

- the patient as an object of activity of nursing personnel;
- source of patient problems;
- focus of nursing intervention;
- purpose of care;
- methods of nursing intervention;
- role of sister;
- assessment of the quality and results of care.

Historically, there was no clear description of nursing care models even in foreign literature until the early 70s of the twentieth century. And at present, there is no single approach to determining the nature and structure of nursing. About 20 different models have been developed. The content of each of them depends on the level of economic development of the country, its policy, universally recognized values, the healthcare system, religion, as well as the beliefs of a particular person or group of people developing a particular model.

The development of existing sister models was influenced by research and discoveries in the fields of physiology, sociology, psychology. The core of each model is the differences in understanding

the essence of the patient as an object of nursing activity, the purpose of care, the set of nursing interventions and the features of evaluating the results of nursing care.

**A patient.** One of the models of nursing care considers the patient as a set of anatomical organs and physiological systems. In another model, the patient is an independent, perfect personality with 14 fundamental daily needs. Depending on the patient's description in a particular model, the content and volume of the primary nursing assessment within the nursing process and the care content change.

**Source of patient problems.** Some nursing models prioritize differently when assessing the patient's condition and determining the source of the problem. Health problems requiring nursing care also vary across models. So, in some models, problems are presented as a violation of the functions of organs and / or physiological systems. Others see the source of the problem in that a person cannot change his behavior depending on the circumstances, assuming that this is due to functional and structural processes (model D. Johnson).

In some models, the nursing process is considered quite simply: the problem determines the nature of the nursing intervention. In others, it is more complex: identifying problems - identifying the causes of a problem - determining the nature of nursing intervention.

The direction of nursing intervention in one of the models is determined exclusively by certain symptoms (shortness of breath, cough, diarrhea, etc.). The direction of nursing intervention in most other models depends on the patient's problems identified in the nursing assessment process. The generally accepted direction of nursing intervention according to the medical model is pathological changes in various organs or physiological systems. According to the model of D. Orem, the intervention is determined by the deficit of self-care, according to the model of D. Johnson - altered (inadequate) behavior, according to the model of K. Roy - stressors that cause adaptation disturbance.

**Purpose of care.** In the XIX century. F. Nightingale believed that the goal of patient care is to create conditions for the patient's well-being, the best sanitary conditions for maintaining impaired functions. In some models, the goal of care is solely to restore the function of individual organs or systems. According to another model, as a result of withdrawal, equilibrium in human behavior

should be restored. Many believe that it is necessary to improve the psychological or social condition of the patient. Most model authors believe that the goals of nursing care should be consistent with the patient. The authors of almost all models believe that the goals should be the visible side of human behavior and other measured parameters. The success of achieving set goals is primarily determined by how the patient himself evaluates the progress in achieving the goal and what he manages to do on his own. The authors of some models believe that phased goals should be set (short-term, intermediate and long-term).

**Ways of nursing intervention.** When implementing a nursing care plan, the sister's attention should be focused on various aspects of the patient's condition. F. Nightingale believed that the sister observes and changes the patient's environment (purity, light, heat, fresh air, food, water). The authors of some models suggest that nursing interventions are aimed exclusively at specific anatomical or physiological systems and depend on the experience of the doctor. The authors of other models, offering a holistic approach to the patient, prefer to restore full balance between a person and the environment through adaptation. Some models include nursing interventions that provide the patient with the possibility of self-care.

**Assessment of the quality and results of care.** The authors of most models believe: in order to assess the quality and result of patient care, it is necessary to determine whether the goal has been achieved. Moreover, both the sister and the patient determine how appropriate this or that intervention was. In some models, the function of the anatomical and physiological systems of the body is evaluated (moreover, this assessment is carried out exclusively by the doctor as part of the treatment process), in others - psychological and behavioral systems, and in the third - the degree to which the patient achieves self-care capabilities.

If several models are used simultaneously, then when evaluating the results of care, they determine, firstly, the feasibility of using one or another model for a particular patient, and secondly, the achievement of specific care goals.

**The role of a sister is** the last position according to which particular models differ from each other. The authors of one model assign the sister only the role of an assistant to the doctor, others - the defender of the rights of the patient, others - the permanent caregiver, fourth - the person who changes the patient's behavior. The au-

thors of each model give many arguments in favor of this or that role of the sister. In the D. Orem model, the sister is assigned the role of a specialist, providing the patient with the opportunity to become as independent as possible. In the adaptation model, K. Roy's sister defined the role of a specialist who helps the patient adapt to the effects of stressors. The role of a sister should be considered by society as necessary as the role of a doctor.

Thus, each model reflects differences in the authors' understanding of not only the term "nursing", the concepts of "patient", "source of patient problems", "direction of nursing intervention", "goal of care", "methods of nursing intervention", "quality assessment and results of care", "the role of sister", but also in understanding the concepts of "health", "environment".

The author of one of the sister models believes that nursing should help the patient to satisfy the needs associated with self-care, and the sister will provide him with assistance, while it will be necessary. According to another model, the sister helps to adapt to life situations related to stress, so that it is easier for the patient to cope with the health problems arising from them.

Unlike the medical model, which has not changed over the centuries and focuses on a particular symptom (impaired function of certain systems of the body), most modern models of nursing care are focused not only on patients, but also on healthy people, helping them not only recover health, but also keep it.

Currently, there is not only a unified model of nursing, but also a consensus on the need to use one or more models. In connection with the foregoing, we offer an overview of some models of nursing.

## **6.2. DOCTOR (MEDICAL) MODEL**

The medical model is well known to most domestic sisters, since it was precisely on it that the training of nursing personnel in our country was previously oriented.

Researchers in the field of nursing have noticed that the idea of good medical preparation in different eras was not the same. Until the 18th century medical practice was basically holistic: when making a diagnosis and prescribing treatment, the connection between the patient and the environment was taken into account. However, modern medical attention is focused on establishing the anatomical,

physiological and biochemical causes of the disease and its manifestation. This approach often minimizes or even completely ignores political, social, psychological and economic factors in determining the cause of the disease and, in some cases, does not allow prescribing adequate therapy.

### **6.2.1. Key points of the model**

According to the medical model, a person (patient) is a set of organs (heart, lungs, stomach, etc.) and physiological systems (respiratory, circulatory, digestive, etc.) systems.

Source of patient problems. With this model, it is believed that social behavior and many features of a person's psychological behavior are the result of changes in the physiological and biochemical systems of the body. With this approach, a person is considered as a passive carrier of the disease.

Nursing in this model is associated exclusively with the physiological needs of a person, i.e. care is aimed at maintaining the function of a particular organ or system, and not at restoring (maintaining) human health in general.

The direction of the nursing intervention is determined by the doctor, not the sister, and depends solely on the violation of the activity of certain organs and systems, such as shortness of breath, cough, constipation, etc.

The goal of care is to eliminate (reduce) pathological changes in specific physiological or anatomical systems of the body, restoring their activity to the previous stable level. In this model, the interests of the patient are rarely in the spotlight. The goal of care, as a rule, is determined by the doctor and is aimed at the quick and effective elimination (reduction) of violations of the activity of a particular organ or system.

The methods of nursing intervention are also aimed at "bringing what is in dire need to a good condition" (Burton, 1985) [40]. The choice of method, as a rule, depends on the experience of the doctor, and the set of nursing interventions is almost the same for different patients who have the same disease (the same symptoms).

A final assessment of the quality and results of care in the medical model is not required. But if it is nevertheless carried out, the degree of care is determined when eliminating (reducing) pathologi-

cal violations of the functions of a particular physiological system or anatomical organ.

The role of nursing staff comes down to the role of assistant physician (with a doctor). Hall (1983) [40] argued that sisters should never “try to destroy the essential work of doctors,” but at the same time, they should not consider themselves as “medical assistants.” Hall's efforts, Hall argues, to improve standards of care, should be seen as positive.

Faulkner (1985) [40] states that the medical model must be replaced by a sister process. However, the nursing process alone does not provide the sisters with the necessary knowledge about the person, his needs and health problems, although it involves examining the patient (assessing his condition), setting goals and interventions (planning), evaluating the results of care.

### **6.3. MODEL W. HENDERSON**

Model proposed in USA. Henderson in 1960, and then supplemented in 1968, focuses more on nursing staff on physiological, and less on psychological and social needs that can be met through nursing care. One of the indispensable conditions of this model is the participation of the patient himself in the planning and implementation of care.

#### **6.3.1. Key points of the model**

The patient, according to V. Henderson, has fundamental human needs, the same for all people: “Regardless of whether a person is sick or healthy, the sister should always keep in mind the person’s vital needs for food, shelter, clothing; in love and goodwill, in a sense of necessity and interdependence in conditions of public relations ... ”

V. Henderson gives 14 needs for everyday life. A healthy person, as a rule, does not have difficulty in meeting these needs. At the same time, during a period of illness, pregnancy, childhood, old age, with the approach of death, a person is not able to satisfy these needs independently. It was at this time that the sister helps “a person, sick or healthy, in performing those functions that support his health or contribute to his recovery (or at the time of his death) and which this person would perform without assistance, if he had

strength, desire or knowledge ... "[48]. The author claims that at all times nursing care should be aimed at the speedy restoration of human independence.

### **The Needs of Everyday Life by W. Henderson**

1. Breathe normally.
2. Eat plenty of food and fluids.
3. Allocate waste products.
4. Move and maintain your position.
5. Sleep and rest.
6. Dress and undress independently, choose clothes.
7. Maintain body temperature within normal limits by selecting appropriate clothing and changing the environment.
8. Observe personal hygiene, take care of appearance.
9. Ensure your safety and not endanger other people.
10. Maintain communication with other people, expressing their emotions, opinions.
11. Conduct religious ceremonies in accordance with their faith.
12. Do your favorite job.
13. Relax, take part in entertainment and games.
14. Satisfy your curiosity, which helps to develop normally.

**Source of patient problems.** V. Henderson, developing his model, was based on the theory of the American psychologist A. Maslow about the hierarchy of basic human needs (see Fig. 3-3).

According to the table 6-1 we see on what the priority of the needs proposed by W. Henderson is based. At the same time, the requirements according to V. Henderson are much less at each level than according to A. Maslow. This is due to the fact that in the mid-60s of the twentieth century, when this model of nursing care was created, the real possibilities of a sister in the USA were limited by activities to satisfy this particular limited list of needs. (The NANDA model, which has been used by nursing staff in North America since the late 80s, includes needs at all levels.)

Problems requiring nursing intervention arise when a person, due to certain circumstances (illness, infant and / or senile age) is not able to take care of himself. Problems may appear during recovery or prolonged dying.

**Table 6-1. The relationship of basic needs according to A. Maslow with the needs of everyday life according to V. Henderson**

Levels of basic human needs according to A. Maslow	The Needs of Everyday Life by W. Henderson
<b>First level (physiological needs)</b>	Breathe normally; consume enough food and liquid; to excrete vital products from the body; to move and maintain the desired position; to sleep and rest
<b>Second level (need for security)</b>	Dress and undress independently, choose clothes; maintain body temperature within normal limits by selecting appropriate clothing and changing the environment; observe personal hygiene, take care of appearance; ensure their safety and not danger to other people
<b>Third level (social needs)</b>	Maintain communication with other people, expressing their emotions, opinions; worship in accordance with one's faith
<b>Fourth level (need respectfully and self-respect)</b>	Do your favorite job; relax, take part in various entertainments, games; satisfy your curiosity that helps you develop normally

V. Henderson argues that a person's ability to satisfy his daily needs varies depending on his temperament and emotional state. For example, experiencing a sense of fear and anxiety, a person can sleep and eat poorly. An elderly person who has recently suffered a bereavement may have difficulty communicating, moving, dressing and undressing if his deceased relative had previously assisted him in this. The physiological and intellectual abilities of a person can also affect the ability of a person to satisfy his fundamental needs.

**The focus of nursing intervention.** Despite the fact that V. Henderson clearly does not recommend the use of the nursing process (in the 60s, this type of nursing practice, as the nursing process,

was not yet final in today's understanding of this term), she believes that during the examination of the patient, the sister discusses there are conditions for the provision of nursing care: "Only in a state of very high dependence of the patient, such as a coma or a state of complete prostration, does the sister have justifiable motives for making a decision (without discussing this with the patient), which for him nnom case is good "[42]. According to V. Henderson, the sister should try to take the patient's place, understand his own assessment of her condition and choose the necessary intervention.

**Purpose of care.** V. Henderson believes that the sister should set only long-term goals in restoring the patient's independence while meeting 14 daily needs. True, short-term and intermediate goals also have a right to exist, but only in acute conditions: shock, fever, infection or dehydration (dehydration). The author recommends writing a nursing care plan by modifying it in writing after evaluating the outcome of nursing interventions.

**Nursing intervention.** B. Henderson believes that nursing care should be associated with both drug therapy and the procedures prescribed by doctors, while nursing interventions may require the participation of family members of the patient.

**Assessment of the quality and results of care.** According to this model, one can finally evaluate the result and quality of care only when all the daily needs, for which the nursing intervention was taken, are satisfied.

**The role of the sister is represented by V. Henderson in two ways.** On the one hand, a sister is an independent and independent specialist in the healthcare system, since she performs those functions that a patient cannot perform to feel independent enough, on the other hand, this is a doctor's assistant who performs his appointments.

### **6.3.2. Application of the Model W. Henderson in the Nursing Process**

This model is one of the most famous among practicing centers now. It should be remembered that it provides for the indispensable participation of the patient in all stages of the nursing process.

At the stage of the initial assessment of the patient's condition, the sister and the patient should determine which of the 14 daily needs should be met first. Moreover, the sister makes a decision for the patient only if he is not able to do this. For example, if a patient refuses to eat hospital food, then his need for food is not satisfied.

Together with the patient, the sister determines the possible causes of this problem (poor appetite, squeamishness, etc.) and sets realistic goals for solving it. If the patient has a sleep disorder, the sister should establish the causes of this problem (uncomfortable bed, stuffiness, snoring in the ward's roommate, etc.), and then determine the goals of nursing care and intervention.

**Care Planning.** V. Henderson believes that a person should fully and independently meet his daily needs, therefore, the long-term goal of care is to achieve maximum independence in the patient. To solve this problem, the sister sets several intermediate and short-term goals together with the patient. So, in the case of a patient who refuses food, you need to plan a conversation with relatives, with the patient himself, possibly with the staff of the catering department. In the case of a patient having problems with sleep, one should plan exercises for relaxation (relaxation), airing the room or transfer to another room.

The goals set must be realistic and measurable so that one can assess the success or failure of nursing intervention.

**Nursing intervention** is aimed at improving the patient's health, a complete solution of the tasks assigned to him. Ultimately, intervention involves helping the patient achieve independence as much as possible.

**Assessment of the results of care.** Sisters working on the model of V. Henderson, starting a final assessment of the implementation of the care plan, begin with an assessment of each daily need, the satisfaction of which identified problems. The sister establishes how achieved the goal is in meeting the needs. If the goal is not achieved, new nursing interventions or a change in the wording of the goal are planned.

#### 6.4. MODEL N. ROWPER, V. LOGAN AND A. TAYERNI

The model proposed by N. Roper in 1976, supplemented in the 80s by V. Logan and A. Tayerni, was built on the achievements in the field of physiology, psychology of nursing [48]. In it, just as in the model of V. Henderson, a certain list of needs common to all people is used. They believe that a sister should focus on the observed aspects of human behavior, and assessing the success of nursing activities is based on visible, measurable and measurable results.

### 6.4.1. Key points of the model

Considering a person as an object of sisterly activity, N. Roper for the first time established 16 types of everyday life activity (fundamental needs), some of which are necessary for maintaining life itself, while others, being necessary for everyday life activity, affect its quality (Table 6-2 ) Subsequently, the authors of the model reduced this list to 12 manifestations of vital activity, which are human needs. Some of them have a biological basis, others cultural and social. The degree of satisfaction of certain manifestations of life depends on the person's age, his social status and cultural level.

**Table 6-2. Manifestations of everyday life according to N. Roper**

Essential for life support	<ol style="list-style-type: none"> <li>1. Breath</li> <li>2. Food and drink</li> <li>3. Disposal of vital products</li> <li>4. Regulation of body temperature</li> <li>5. Physical activity</li> <li>6. Sleep</li> <li>7. Maintaining Your Own Security</li> </ol>
Contributing to a Better Quality of Life	<ol style="list-style-type: none"> <li>8. Respect for personal hygiene</li> <li>9. Clothing (outfits, jewelry, etc.)</li> <li>10. Communication</li> <li>11. Study</li> <li>12. Work</li> <li>13. Work and leisure</li> <li>14. Sex</li> <li>15. Family</li> </ol>
Leaving life	<ol style="list-style-type: none"> <li>16. Dying</li> </ol>

Manifestations of daily life [48]

1. Maintenance of environmental safety (self-preservation functions).
2. Communication.
3. The breath.

4. Food and drink.
5. Excretion of waste products.
6. Compliance with personal hygiene.
7. Regulation of body temperature.
8. Motor activity.
9. Work and leisure.
10. Sex.
11. Sleep.
12. Dying.

**Source of patient problems.** The authors of this model indicate 5 factors that may cause the need for nursing care:

- disability and related violation of physiological functions;
- pathological and degenerative changes in tissues;
- accident;
- infection;
- a consequence of the influence of physical, psychological and social environmental factors.

These factors can make a person partially or completely dependent.

**The focus of nursing intervention.** According to this model, the sister, together with the patient, consistently evaluates his capabilities in satisfying 12 needs, identifying the patient's actual and potential problems. This model provides for a continuous need satisfaction assessment.

**Purpose of care.** Planning for nursing care actually begins with an initial assessment of the patient's condition, when together with him the sister determines the goals of care. In the future, the sister determines the means for specific interventions.

**Nursing intervention.** After the sister discusses the goal of care with the patient, she chooses the means of intervention to address her needs. This can be an expansion of the degree of mobility, reduction of anxiety, training in communication skills, washing, dressing, etc.

**Assessment of the quality and results of care.** The criteria for assessing the quality and results of care should be the degree of satisfaction of each need (and they are all observable) in accordance with the goals. If the desired result is not achieved, the sister, together with the patient, reviews both the goals and the previous interventions.

**Role of sister.** The authors see the role of the sister in the healthcare system as independent, dependent and interdependent. An independent role is to evaluate (together with the patient) his condition, plan, carry out nursing interventions and evaluate the results of the care provided. A dependent role is to help doctors in performing certain procedures, as well as appointments of the attending physician. An interdependent role - work as part of a team with other specialists.

#### **6.4.2. Application of the model N. Roper, V. Logan and A. Tyerney in the nursing process**

Models N. Roper, V. Logan, A. Tyerney are used in the nursing process. At the initial assessment, the nurse should collect data on the patient's vital activity (needs). Then for each of them she sets:

- that in a normal situation the patient performs normally, without difficulty;
- what the patient can do now;
- What are the real problems that currently exist?
- What potential problems may arise.

When planning nursing care, the nurse writes down both actual and potential problems, care goals, and nursing interventions that will be undertaken.

Nursing interventions should:

- prevent the development of potential problems;
- remove (reduce) patient anxiety;
- provide the patient with the opportunity to seek help and take it for daily life;
- help solve real problems.

When conducting the final assessment, the sister determines how much the originally set goals were achieved, and how useful and effective this model of nursing was.

### **6.5. MODEL D. JONSON**

In his model, D. Johnson (1968), in contrast to W. Henderson and N. Roper, suggests radically avoiding medical ideas about a person and focusing nursing care on people's behavior and needs [48].

### 6.5.1. Key points of the model

The patient, according to the model of D. Johnson, is “an individual having a set of interconnected systems of behavior, each of them striving for balance and equilibrium within himself.”

A person has 7 main subsystems that somehow change his behavior (Table 6-3).

**Table 6-3. Subsystems of behavior, according to the model of D. Johnson**

Behavior subsystem	The essence of behavior within the subsystem
Achievement (fulfillment)	Control over yourself and your environment
The connecting (installing) subsystem	Close relationships with other people
Aggressive Subsystem	Self-defense against threats, self-affirmation
Dependent Subsystem	Addiction to others
Excretory subsystem	Discharge of waste products
Digestion	Maintaining the integrity of the body, a state of bodily pleasure
Sexual subsystem	Sexual satisfaction

D. Johnson defines the action of each subsystem in a person’s desire to achieve certain goals on the basis of past experience. This result depends on how he perceives his behavior, how he understands his abilities in changing behavior (which he can and cannot change). The behavior chosen by a person is determined by his predisposition to one or another type of behavior (attitude). D. Johnson distinguishes between two main types: 1) a setting created by actions and objects directly around a person; 2) a setting created by past habits.

Source of patient problems. D. Johnson believes that illness, lifestyle changes can imbalance subsystems of human behavior. Nursing care should be aimed at restoring balance.

The focus of nursing intervention. To determine the direction of the intervention, it is necessary to assess the patient's condition relative to each subsystem. This assessment is carried out in two stages:

1) determine whether the patient's behavior suggests an imbalance in any subsystem; 2) determine the causes of this violation (organic or functional).

**Purpose of care.** Imbalance within the subsystems of behavior is an occasion for nursing care. The goal of care may be to restore (as much as possible) the balance in each subsystem and between them. It can be aimed at changing:

- motives of behavior;
- actions of a subsystem limited by past human experience;
- human behavior, determined by a past predisposition to one or another type of action;
- Installation created by the environment (type 1) or past experience (type 2).

If functional changes are the cause of the imbalance in the behavioral subsystem, the goal of nursing care should be to change the patient's environment and provide protection, guardianship, and stimulate the patient to change behavior. To achieve the goal, with the help of specific interventions, the sister seeks to restore equilibrium in each subsystem, changing certain environmental factors.

**Nursing intervention.** D. Johnson offers 4 areas of nursing intervention:

- control or restriction of behavior by some framework;
- protection against threats and other factors causing stress;
- inhibition (suppression) of ineffective reactions;
- stimulation of behavior change, partnership, assistance in the form of guardianship.

**Assessment of the quality and results of care.** D. Johnson believes that, firstly, it is possible to evaluate the results of care within a particular subsystem according to the patient's behavior, i.e. by changes caused by certain structural violations in the human body. In the event that the expected results are associated with the planned changes in the environment, a change in behavior due to nursing intervention aimed at the environment in connection with functional changes is evaluated. If nursing intervention does not lead to the expected result (goals), new goals and new interventions are formulated again.

**Role of sister.** According to the author's definition, the role of the nurse is complementary to the role of the doctor, but does not depend on her. The role of a specialist is assigned to the sister, re-

storing the balance of the patient's behavioral subsystems during a psychological or physical crisis.

### **6.5.2. Application of D. Johnson's model in the nursing process**

At the first stage of the nursing process, an initial assessment of the patient's condition is made: the sister determines whether there are problems associated with behavior. For example, a young man who is in a medical institution for a fracture of the leg bones does not want to walk with crutches, despite the appointment of a doctor. At the same time, he refuses to help his wife, considering her guilty of this injury. In this case, violations are observed in the aggressive and dependent subsystems. Another example: a 30-year-old woman suffers from constant constipation and overweight - one can assume imbalance in both the excretory and digestive subsystems.

At the second stage of the nursing process, subsystems that are out of balance should be studied in detail. D. Johnson suggests isolating structural (organic) and functional changes that cause problems separately. The sister has to decide what the intervention should be directed to. To do this, she needs to get additional information from various sources (relatives, attending physician, etc.).

In particular, in the above example, the sister must determine whether the young man has been in a similar situation before (excessive fear for his safety, distrust of his wife, etc.). If it turned out, then the patient has structural (organic) changes. Otherwise (if the behavior is not typical for this young man), we can conclude that these changes are of a functional nature.

In the case of a woman, it is also necessary to determine the nature of the changes in the digestive and excretory subsystems. Nursing intervention will be aimed at restoring balance in these subsystems in order, on the one hand, to limit the amount of food, change physical activity, on the other hand, to make nutrition rational and to encourage the patient to regain control of herself.

According to D. Johnson, the imbalance in one subsystem affects the interconnected subsystems.

**Care Planning.** Having established an imbalance in specific subsystems, the sister together with the patient determines the goal of care. If the patient's problem is associated with functional impairments, the sister determines the interventions aimed at changing

the environment, changing the patient's motivation (belief). So, for a patient with a fracture, the sister could have planned psychological support and counseling to reduce the unjustified fear of walking on crutches. When planning medical care for a 30-year-old woman, it is better to focus primarily on the motivation (conviction) of the need for self-control, over the digestive subsystem. In a detailed plan, short-term and intermediate, as well as long-term goals for restoring equilibrium in the subsystems should be established.

#### **Nursing intervention. D. Johnson identifies 4 areas.**

1. Behavior restriction (in the example of a 30-year-old woman, you can recommend that she restrict certain foods in the diet, reduce the weight of the daily diet, and increase physical activity).

2. Patient protection from adverse environmental factors (in the example of a patient refusing to help his wife, you can recommend the patient's wife for some time

Do not participate in active assistance to your husband when walking, at least you should not insist on this).

3. Suppression of ineffective (inadequate) patient reactions (in the example of a young man, a sister can slow down his inadequate behavior, convincing that his fear is exaggerated, and his distrust of his wife is not confirmed by anything).

4. Partnership (collaboration with the patient). The patient must accurately represent his role, his actions in the restoration (maintenance) of health.

**Assessment of the quality and results of care.** Assessing the effectiveness of the application of the D. Johnson model, the nurse should describe the results of nursing interventions, indicating one of two types of behavior, anticipate the patient's possible behavior in advance, since it determines that the intervention was successful and the goal was achieved. If the expected results are not achieved, the nurse reassesses the patient's behavior within each subsystem.

### **6.6. ADAPTATION MODEL OF NURSING C. ROY**

The model C. Roy (1976) also uses achievements in the field of physiology and sociology [48].

### 6.6.1. Key points of the model

The provisions of this model are widely used by NANDA.

The patient, according to C. Roy, is an individual with a set of interconnected and influencing the behavior of systems: biological (anatomical and physiological), psychological and social. The author believes that for both physiological and psychological systems there is a state of relative equilibrium to which a person aspires, i.e. this is a range of conditions in which people can adequately cope with their experiences. For each person, this range is unique. According to this model, there is a certain level of adaptation and all stimuli (stressors) falling into this range meet a more favorable reaction than those that are beyond its limits.

Factors affecting the level of adaptation are called irritants. They, in turn, are of three types: focal - are surrounded by a person; situational - arise when providing nursing care near the focal and affect them; residual - the result of past experiences, beliefs, relationships. When combined with focal and systemic, they affect the level of adaptation.

Adaptation methods that change behavior (Table 6-4): physiological; Self-concept; role-function; interdependence.

**Table 6-4. Adaptation methods and problems encountered by the patient during the adaptation process**

Adaptation method	Manifestations of adaptation
Physiological method	Hyperactivity, fatigue Impaired appetite, vomiting, constipation, diarrhea Dehydration, edema Oxygen deficiency (hypoxia) Shock Drowsiness, insomnia Hyperthermia, hypothermia Decreased mental activity, excessive mental activity Hormonal imbalance Physical fatigue

Self concept	Feelings of guilt, anxiety, helplessness, social liberation, aggression
Role function	Feeling of failure, conflict
Interdependence	Feeling of alienation, rejection, rivalry, loneliness, domination of self-expression

**The physiological method** of adaptation is a person's reaction to temperature, humidity, atmospheric pressure, food, liquid, oxygen, carbon dioxide and other sensory irritants. The ability to cope with new, unusual physiological stimuli is not only due to them, but also depends on the capabilities of the physiological system of adaptation of a particular person.

**Self-concept** is a person's desire to understand himself, both his own behavior and body image. Like the previous one, this method of adaptation has boundaries within which a person can cope with changes in his psychological and physical

**"I"**. This adaptation method should be especially effective when preparing a person for operations that significantly change the body scheme: amputation of limbs, mastectomy, stoma placement, etc.

**The role-function** involves changing the role of a person in life (in the family, at work) due to certain circumstances. For example, a person who is engaged only in physical labor for a long time finds himself in leadership work or an active, active person who leads a large team finds himself in a medical institution and is forced to adapt to the passive role of the patient. In both examples, a person can go beyond his capacity for adaptation in the role-function method.

**Interdependence** is the desire of people to achieve a state of relative balance in different relationships. For example, mother-son, husband-wife, seller-buyer, teacher-student, boss-subordinate, doctor-patient, sister-patient, etc. Nursing staff should take into account the limited possibilities of adaptation in situations where the patient, being completely dependent on the staff, experiences a feeling of pressure, contempt, loneliness, rejection, familiarity, etc.

**Source of patient problems.** The need for nursing care arises in the case when there is a lack or excess of funds and opportunities for using one or another way of adaptation in a person's environment.

**The focus of nursing intervention.** When examining the patient, first of all, it is necessary to establish effective ways of adaptation in those cases when his behavior gives cause for concern. The sister alternately studies them within the 4 named methods, then determines the focal, situational and residual stimuli, as well as the need for nursing care. The sister determines the degree of influence of this stimulus on the patient's behavior (what is an irritant for one may not affect the other).

**Purpose of care.** Having identified possible focal (situational, residual) irritants that cause inappropriate behavior, the sister together with the patient outlines goals that allow him to adapt to the changing environment (long-term goals), and specific goals that allow to expand the level of adaptation in a specific way. Interventions are planned that can change either irritants or the level of adaptation.

**Nursing intervention** is aimed at stimuli that are outside the patient's adaptation level, in order to change them or to be within the adaptation level. Possible interventions aimed at expanding the level of adaptation, giving the patient the opportunity to cope with existing irritants. In his model, C. Roy suggests using nursing interventions mainly for focal stimuli.

**Assessment of the quality and result of care.** When assessing the quality of care, the sister and the patient pay attention to the positive changes in a particular adaptation method.

**Role of sister.** C. Roy believes that, unlike doctors who mainly focus on biological (anatomical and physiological) systems, the role of a sister is to contribute to the adaptation of a person during health and illness due to the effect on focal irritants that fall into the zone of a particular adaptation method.

### **6.6.2. Application of the C. Roy model in the nursing process**

Assessment of the patient's condition is carried out in two stages. First, the sister must determine if the patient's behavior in any of the 4 adaptation modes gives cause for concern. In that case, if there is cause for concern, the sister should find out what caused the patient's adaptation problems: focal, situational, or residual stimuli.

For example, a young woman whose breasts have been removed does not want to see visitors, except for close relatives. Thus, already at the first stage of the nursing process, the sister must

assume the problem of adaptation in the “I-concept” system. Another example: a child is often and for a long time sick, every time he approaches a sister with a syringe he shows signs of aggression (crying, screaming, etc.). In this case, a violation of adaptation is observed within the "Interdependence" method.

The sister using this model determines the limits of the level of adaptation for each person. That which is an irritant and creates problems for one, for the other, due to its level of adaptation, is not a problem. For example, a patient refuses to see visitors because of many reasons - the presence of postoperative drainage, the absence of a mammary gland act as focal stimuli and significantly change her own image of herself due to the beliefs and values that have developed in her (and in society). In this regard, a woman cannot continue to maintain relationships with others. What exactly is this irritant in this case, a nurse can identify by understanding the information received from various sources. In the second case, the child may inadequately respond even to such a focal stimulus as a white coat, which means a painful procedure for the child.

**Nursing Care Planning.** Having identified irritants causing inadequate reactions in the patient, the sister together with the patient determines short-term goals of care, which allow expanding the level of adaptation or eliminating the irritant. At the same time, long-term goals are necessary, upon reaching which the patient will be able to adapt to a constantly changing environment. Returning to the first example, a short-term goal for a woman would be to feel able to spend some time in the company of friends. In the second case, the goal of care could be to eliminate the influence of a white coat.

**Nursing intervention.** The K. Roy model suggests that every person strives for a state of psychological and physiological equilibrium. In this regard, nursing intervention must change the stimulus so that it acts within the level of adaptation. C. Roy suggested that nursing interventions should be mainly aimed at focal stimuli.

In the first example, the sister will not be able to eliminate the focal irritant — the absence of a woman’s breast, but she can expand her level of adaptation, for example by introducing a patient who has already adapted in a similar situation. In the second example, the sister can’t take off the white coat (she wanted the nursing gowns in the institutions to be colored but dim), but she can expand the child’s adaptation by playing with him several times, dressing in a white coat.

Assessment of the quality and result of care. Nursing intervention is effective only if the goal is achieved in specific adaptive methods. So, the effectiveness of nursing intervention in the first example can be evaluated positively if a young woman receives visitors. In the second - if the child becomes friendlier to people in white coats and will not be afraid of his sister.

(For more on stress issues and nursing care for maladaptation, see Chapter 9.)

## 6.7. MODEL D. OREM

The model proposed by D. Orem (1971), in contrast to the models of D. Johnson and C. Roy, considers a person as a whole. It is based on the principles of self-care, which D. Orem defines as “activities to preserve life, health and well-being, which people begin and carry out independently” [51].

In this model, much attention is paid to a person’s personal responsibility for their own health. However, nursing interventions for the prevention of diseases, injuries, and training are also of great importance. Adults should rely primarily on themselves and bear some responsibility for their dependents while maintaining (maintaining) their health.

### 6.7.1. Key points of the model

According to the model of D. Orem, the patient is a single functional system that has a motivation for self-care. A person carries out self-care regardless of whether he is healthy or sick, i.e. its capabilities and needs for self-care should be in balance.

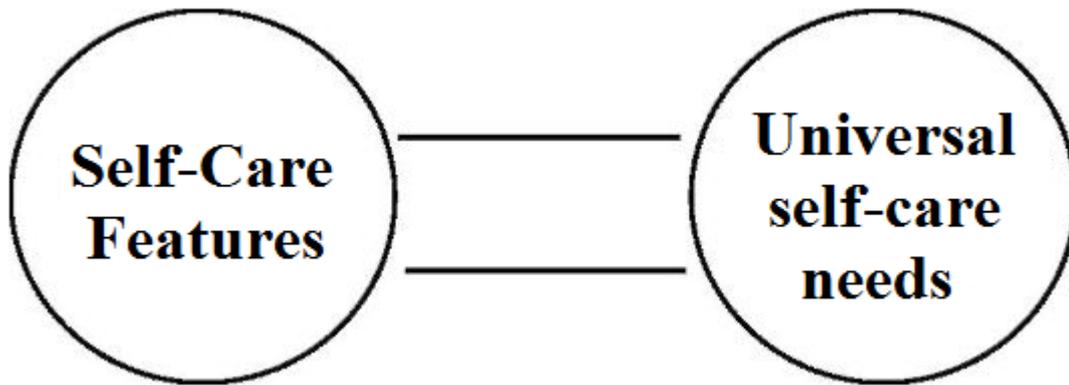
D. Orem distinguishes three groups of needs for self-care:

#### 1. Universal:

- adequate air consumption;
- adequate fluid intake;
- adequate food intake;
- sufficient opportunity for isolation and needs associated with this process;
- maintaining a balance between activity and relaxation;
- time of loneliness is balanced with time in the company of other people;
- prevention of dangers to life, normal functioning, well-being;

- stimulation of the desire to correspond to a particular social group depending on individual abilities and limitations [51].

The level of satisfaction of each of the 8 universal needs for each person is individual. Factors affecting these needs: age, gender, stage of development, state of health, level of culture, social environment, financial capabilities.



**Picture 6-2. The concept of self-care according to the model of D. Orem**

A healthy person has sufficient self-care capabilities to satisfy these universal needs (picture 6-2).

**2.** Needs associated with the stage of development (from infancy to old age and during pregnancy). These needs are met, as a rule, by all adults who are amenable to training and education.

**3.** Health-related needs are caused by hereditary, congenital and acquired diseases and injuries. Three types of violations are distinguished in this group:

- anatomical changes (for example, severe swelling, burns);
- functional physiological changes (eg, shortness of breath, stiffness of the joints);
- a change in behavior or daily living habits (for example, a sense of indifference, insomnia, sudden mood changes).

If a person copes with these problems, a general balance is maintained, which means that he does not need care.

**Source of patient problems.** If the patient (his relatives or close ones) cannot maintain a balance between his abilities and needs for self-care, and the needs of self-care exceed the capabilities of the person himself, there is a need for nursing care. At the same time, D. Orem believes that assistance is provided with the active participation of the patient, his relatives and relatives.

**The focus of nursing intervention.** Nursing intervention should be aimed at the identified deficit of self-care and its causes. The reasons for the deficit may be a lack of knowledge, inability to perform certain self-care actions, and a lack of understanding of the importance of self-care.

The author of this model connects a lack of understanding of the need for self-care with the level and stage of development, as well as with the patient's past life experience. D. Orem believes that to address the issue of the need for nursing intervention, a sister should:

- determine the level of patient's requirements for self-care;
- assess the ability of a person to meet these requirements and safely carry out self-care;
- assess the potential for self-care recovery in the future.

The author believes that only by defining the patient's requirements and abilities for self-care, can one make a decision about planning care.

**Purpose of care.** Short-term, intermediate, and long-term goals (or combinations thereof) should be focused on the patient (his self-care capabilities). In this case, not only the goals of care, but also the planned nursing interventions should be discussed with the patient.

**Nursing intervention.** Nursing intervention can be aimed both at expanding the possibilities of self-care, and at changing the level of needs for it. D. Orem calls these changes recovery.

D. Orem identifies 6 ways of nursing interventions:

- do something for the patient;
- direct the patient, direct his actions;
- provide physical support;
- provide psychological support;
- create an environment for self-care;
- educate the patient (or his relatives).

Offering these 6 ways to help, D. Orem suggests that the patient wants and can play a role, trying to provide self-care, i.e. the patient is ready and wants to receive nursing care.

In addition to the methods, the author defines three systems of nursing care: fully compensating - it is used in cases where the patient is either unconscious or unable to move, or unable to learn; partially compensating - applies to a patient who has temporarily or partially lost the ability to provide care; advisory (training) - is used

when it is necessary to educate the patient (relatives) on self-care skills

**Assessment** of the quality and results of care. D. Orem believes that the assessment of the quality of care should be carried out first of all from the point of view of the possibility of the patient and his family in the future to carry out self-care. Even if the nursing intervention from a fully compensating system has passed into a partially compensating, supporting the patient with self-care, it is possible to consider the nursing intervention effective.

Role of sister. The author of the model defines it as complementary to the patient's ability to carry out self-care. Nursing intervention allows a person to maintain health, cope with the consequences of an injury or illness.

### **6.7.2. Application of the D. Orem model in the nursing process**

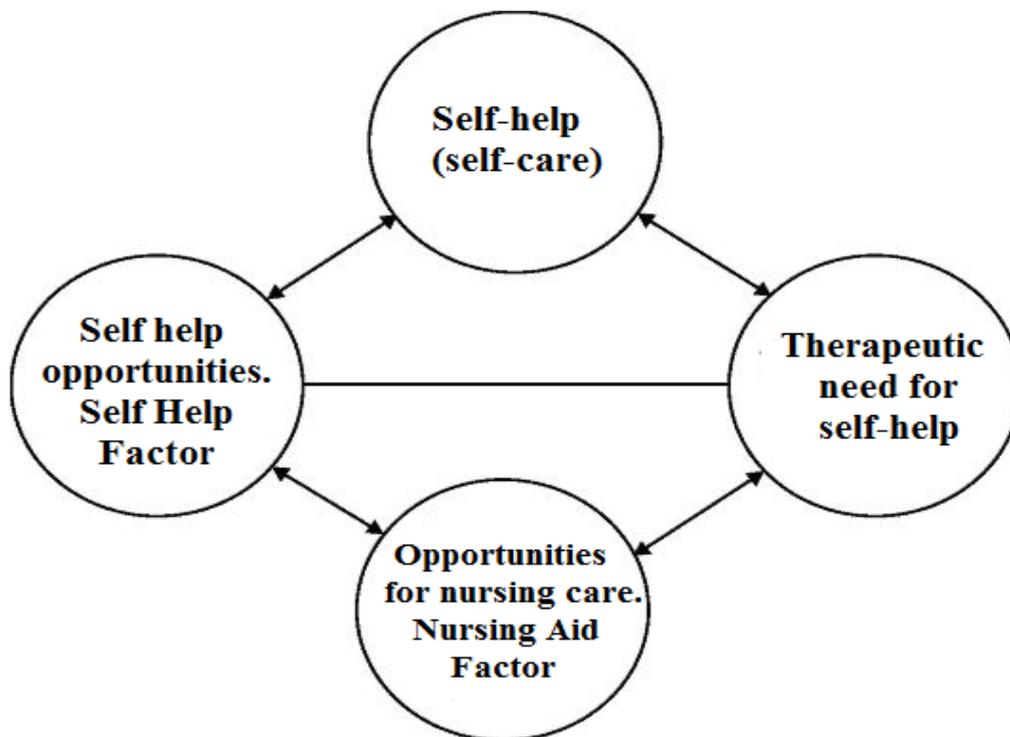
Every person, healthy or sick, must maintain a balance between the need for self-care and the ability to carry it out. Having determined the therapeutically necessary behavior during self-care during an injury or illness, the sister together with the patient finds the method and type of nursing intervention.

When conducting an initial assessment of the patient's needs and capabilities in self-care, the sisters determine the therapeutically necessary behavior for self-care - the balance between needs and the ability to self-care (Fig. 6-3).

Conducting an initial examination of the condition of a patient in a medical institution, the sister determines whether her help is needed. For example, if in connection with a fracture of the bones of the lower leg, the patient is cast, a sister may suggest that he is not able to move on crutches immediately afterwards without assistance. In this case, there is an imbalance between some of the universal needs of the patient and his ability to carry out self-care (actively move, use the toilet, take a shower, etc.), i.e. the patient needs help.

In another case, assessing the condition of an 8-year-old girl with a common childhood infection, the sister discovers that her mother cannot satisfy her daughter's needs for self-care (the mother does not understand why she should not dress warmly, why she needs to stay in bed, more drink liquids, etc.). In this case, there is

an imbalance between the mother's ability to help her daughter with self-care and the requirements for the mother at the moment.



**Picture 6-3. Patient-sister interaction according to model D. Orem**

In this regard, the sister should collect additional information and find out why there is a shortage of self-care. Inspection, observation, conversation will help her understand its reason: lack of knowledge and skills, motivation, restriction of behavior by frames dictated by social and cultural norms, etc.

In the example of a young man, the lack of self-care is associated with the lack of some walking skills on crutches that would help him cope with his current situation in order to restore the ability of self-care. In the second example, the mother of the sick girl is either not sure that she can do everything right, or she does not have enough knowledge to help her daughter in self-care.

**Nursing Care Planning.** Nursing care is planned depending on the possibilities of self-care as the patient himself and his relatives. In the first of these examples, the planned intervention will be in the framework of a partially compensating and training system. A young man will be able to independently satisfy such universal needs as consumption of air, food, and liquid. However, he needs help with movement, in particular, even in order to satisfy his other universal needs. The sister plans his training in safe mobility skills to prevent the risk of repeated injury. In the second case, the sister

plans a teaching, advisory intervention to teach the mother how to care for her daughter.

**Nursing intervention.** In each case, the goal of nursing intervention is to restore a balance between opportunities and needs for self-care. In the first case, the patient needs his sister to help him put on or take off his trousers, using a fully compensating intervention, since he acts for the patient. At the same time, she teaches him how to safely move on crutches, as well as new skills that allow him to dress and move on his own over time. In the second case, the sister can tell the mother how the disease progresses in the girl and what needs to be done to alleviate the condition of the child. The psychological support of the mother, the praise of her actions can greatly help in caring for the child.

**Assessment of the quality and results of care.** Assessing the effectiveness of nursing care, the sister first of all takes into account what the patient has achieved by the time they have appointed together. So, in the first example, the assessment will be positive if the young man learns to walk on crutches and manage most of the time without outside help. In the second case, nursing intervention can be considered effective if the mother of the sick girl confidently provides care for her daughter.

Thus, nursing is considered effective if it is possible to maintain or restore the balance between the possibilities and needs for self-care.

## **6.8. NURSING MODELS: ONE OR SEVERAL?**

So, you have familiarized yourself with several models from the many existing ones. There is no single model today, although, of course, it would contribute to a better understanding both in the training of sisters and in practical activities, especially in our country, where the reform of nursing is just beginning.

Practicing sisters in many countries use several models at the same time, and the choice depends solely on the patient's inability to meet certain needs.

Comprehension of already developed models helps to choose suitable for a particular patient. The Nursing Care Model is a tool that helps you imagine what the sister should focus on when examining the patient, what the goals and nursing interventions should be. For planning care choose any elements from various models. In

connection with the changing needs of society in nursing, apparently, new models will be created.

### 6.8.1. From models to nursing

Which model to choose for practical use? How to choose: intuitively, relying on personal perception or relying on elements of models?

Many researchers in nursing theory point out that the models that are discussed in this chapter (and all other models) cannot be judged as good or bad, right or wrong. Rather, they should be used as a guide to action in a given situation.

It should be borne in mind that all models were created in a specific social and cultural environment, taking into account the needs of society. Therefore, different models differently determine the nature of a person (patient), his needs, the role of a sister, the goals and scope of nursing interventions.

It must be understood that a model created in one country may not be acceptable to another. What model to use now in our country? “Within the framework of the WHO Regional Office for Europe, nurses planning to use the nursing process are advised to use a model that takes into account the physiological, psychological and social needs” (of the patient and his family. - Approx. Author.). The advantage of using the WHO model is the shift in the focus of nursing care from aspects of the disease to aspects of health. In order to assist individuals, groups of people and people with different health conditions, sisters evaluate the physiological, psychological and social aspects of human health in relation to their needs:

- in self-help - what can a person do to satisfy his own health needs;
- in home help - what can a family or other people do to meet a person’s health needs;
- in professional assistance - what contribution a sister can make in helping a person ”[42].

**Self-help**, or self-care, is necessary for a person to perform daily activities that affect his health and well-being. As a rule, a person takes care of himself voluntarily and does not need professional help. The sister should be able to determine when the patient will be able to resume self-care, and encourage him to do so.

**Home help** (patronage, guardianship services) - “the type of assistance that a person receives at home by his relatives, friends or acquaintances” [42]. Persons with chronic diseases, people with disabilities can be at home, helping them is a manifestation of people’s caring attitude towards each other. The role of the sister here comes down to consultation and training.

**Professional care** is a type of care that requires professional knowledge (sisters, midwives, etc.), provided both in medical institutions and at home.

Studies conducted in 1970 identified three types of ideology of nursing: re-artisanal, professional and guardian. In our country, a craft-ideology still operates. In the framework of the reform of nursing, which began in Russia in 1993, it has to be changed to a professional one. This is possible when nursing staff develop a new type of activity - the implementation of the nursing process.

Within the framework of the WHO structure, B. Henderson's model is recommended for this (which does not exclude the use of other models). It should always be remembered that any model is not permanent, it can change, reflecting the views, practical activities and tasks of nursing over a certain period of time.

## CHAPTER 7 SISTER PROCESS

### **After reading this chapter, you will learn:**

- about the essence of the nursing process;
- about the stages of the nursing process;
- about the documentation needed by the sister;
- about the features of communication in assessing the patient's condition;
- on the observation technique in assessing the patient's condition;
- definition and formulation of patient problems;
- about the stages of care planning;
- about the features of the succession of sisters in the implementation of the care plan;
- on the methodology for assessing the effectiveness of nursing care.

### **Concepts and terms:**

- **dependent nursing intervention** -action according to medical prescription or recorded at the suggestion of nursing specialists who can provide a solution to the patient's problem;

- **independent nursing intervention** - an act of a sister that can solve a patient's problems without consulting or collaborating with a doctor or other non-nursing specialists;

- **expected result** - the patient's expected condition at the end of treatment or

diseases characterizing the patient's well-being and the need for continued care, medication, support, counseling or training;

- **basic human needs** - the need for normal breathing, food, water, excretion, movement, touch, sex, which a person has in everyday life-activities;

- **daily activities** - activities carried out during the usual day of the patient's life, such as eating, drinking, dressing, bathing, brushing teeth, putting oneself in order and other procedures necessary to maintain physical, mental and social well-being and personal integrity. Activities are necessary to ensure physiological, psychosocial functions and interaction with the environment;

- **need for care** - a condition in which the patient in everyday life cannot satisfy his physiological, sociocultural, spiritual or developmental needs;

- **problem** - the subject's recognition of the impossibility of resolving difficulties and contradictions that arose in a given situation, by means of personal knowledge and experience (from the Greek. problema - task);

- **process** - any behavior or action of a sister aimed at fulfilling the nursing care plan as a whole or achieving its individual goals and necessary to achieve the expected results (from Lat. Processus - promotion).

At present, more than ever, patients need a qualitatively new type of nursing care. The profession of a nurse is developing together with a society that imposes a seal on human relations. F. Nightingale often asked the question: "Could the work be more significant than this?" If it were our contemporary, she could add: "Can you imagine a time more suitable for this kind of activity?"

## 7.1. GENERAL PROVISIONS

Nursing is a method of organizing and providing nursing care. The results of a study conducted by WHO testify: “The essence of nursing is to care for the person and how the sister provides this care. The basis of this work should not be based on intuition, but on a well-thought-out and formed approach, designed to satisfy needs and solve problems .”[42].

At the heart of the nursing process is the patient as a person, requiring an integrated (holistic) approach. One of the prerequisites for the implementation of the nursing process is the participation of the patient and his family members in determining the goals of care, the plan and methods of nursing intervention. The patient and his family also participate in evaluating the results of care. The extent to which the patient influences the implementation of the nursing process depends on several factors: the relationship between the sister and the patient; degrees of trust between them; patient attitude to health; level of his knowledge, culture; awareness of the need for care.

The participation of the patient in this process allows him to realize the need to help himself, to study it and to evaluate the quality of the nursing process.

The word "process" means progress, the course of events, in this case, we are referring to sequential actions, steps taken by the sister to achieve a certain result.

The WHO nursing and midwifery program in Europe describes the nursing process as follows.

- “Nursing process” is a term used in the system of characteristic types of nursing intervention. This includes planning for patient needs, organizing care, and evaluating results. The information obtained in the evaluation of the results should form the basis of the necessary changes in subsequent interventions in similar situations of nursing care. Thus, nursing is turning into a dynamic process of our own adaptation and improvement.

Thus, based on scientific principles, the nursing process provides a clear scheme for patient care to achieve professional goals. In other words, the nursing process consists of a sequence of actions performed by the nurse in relation to the patient in order to prevent, alleviate, reduce and minimize the problems and difficulties that arise.

The following definition is often found in scientific nursing literature: “The nursing process is a scientifically based methodology of professional nursing care, focused on the needs of the patient.”

The nursing process consists of 5 successive stages (picture 7-1):

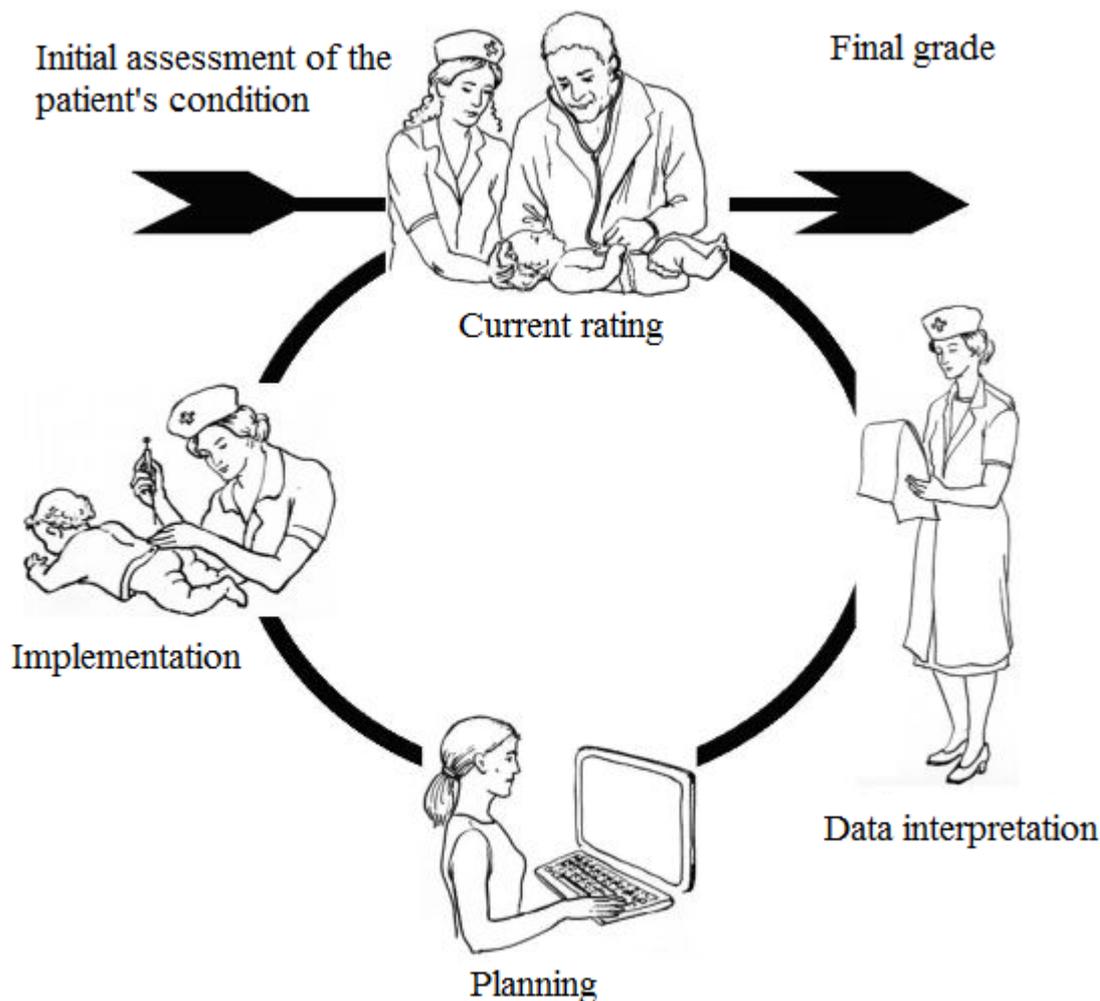
- assessment of the condition (examination) of the patient;
- interpretation of the data obtained (identification of problems);
- planning future work;
- implementation (implementation) of the plan;
- assessment of the results of these stages.

Until the mid 70s of the twentieth century. The nursing process, first proposed in the United States of America, included 4 stages: examination, planning, implementation, evaluation. In 1973, the American Association of Nurses published standards for nursing practice, where a significant role was given to the importance of nursing diagnosis. In this regard, another stage was identified, and their number increased to 5: examination, diagnosis, planning, execution, analysis [32].

To make professional decisions and meet the needs of the patient, the sister is guided by a scheme corresponding to the sequence of 5 stages of the nursing process.

Prerequisites for the actions of a nurse should be:

- professional competence;
- skills of observation, communication, analysis and interpretation of data;
- sufficient time and confidence;
- confidentiality;
- consent and participation of the patient;
- if necessary, the participation of other medical and / or social workers.



**Picture 7-1. Stages of the nursing process**

The nursing process is dynamic, since any of its stages can be reviewed and adjusted after the current assessment. This allows the sister to respond in a timely manner to changing patient needs.

**Documentation of all stages of the nursing process - a pre-requisite**

**7.2. EVALUATION OF THE CONDITION (SURVEY) OF THE PATIENT**

Assessment is a continuous, systematic process that requires observation and communication skills.

The purpose of the assessment is to obtain information about the patient's condition. For a competent assessment, it is necessary to collect objective and subjective data on the patient's health status and then analyze them, determine the specific needs for nursing care

and the ability of a person or family to provide assistance on their own

The principles of holism are the cornerstone of a nursing examination - a holistic approach to the personality of the patient, taking into account not only his physical, but also psychological, emotional, intellectual, social and spiritual needs. The quality of the examination and the information obtained determines the success of the subsequent stages of the nursing process. Data for the assessment can be collected from a conversation with the patient, the history of his illness recorded by the doctor [inpatient (outpatient) patient card], during an objective examination, as well as from family members and other medical workers.

The survey methods necessary to collect information can be subjective, objective and complementary.

The subjective examination method is a conversation during which the sister learns the biographical data she needs to evaluate the patient, as well as information about his well-being and about certain needs, reactions, sensations, adaptation features that a person describes in his own words . Thus, during this conversation, the patient gives subjective information and an assessment of the problems associated with his health. The data obtained during the conversation depend on the emotions and feelings of the person with whom the sister is talking (the patient, his relatives).

The subjective examination information source can be either the patient himself, his family members or medical staff. The family can be the primary source of information, especially if the patient is a child or a person incapable of communication (in serious condition, with a violation of cognitive abilities, unconscious, disoriented). In these situations, only from family members can one get information about the features of the patient's normal state and his condition during the period of the disease, medications taken, and allergic reactions. The family may provide additional information on how the patient usually responds to changes in health status and impaired activity.

It is very important for the sister to get as much information about the patient as possible in order to create an adequate nursing care plan.

The objectives of the conversation during the assessment:

- establishing a sister-patient relationship, in the center of which is the patient's health;

- development of an adequate assessment by the patient of his anxiety and anxiety;
- determining the level of patient expectations from the medical care system;
- Obtaining the information necessary to draw up an adequate care plan.

### 7.2.1. Communication as a way of objective assessment

Since a subjective examination is carried out in the form of a conversation, its results will largely depend on the communicative skills of the sister, i.e. from her ability to listen, ask questions, etc. The first impression that the patient and / or his relatives have when meeting with his sister remains for a long time. It is for this reason that it is very important that the patient immediately clearly feel the good and sincere disposition.

A smile, a warm greeting is a good start to a conversation. The sister should introduce herself, specify the surname, first name, and in adults and middle name, then tell about the care plan.

- Example: a patient is delivered from the reception to the treatment department. Nurse: “Good afternoon, I’m Svetlana Petrovna, nurse on duty, and you are Sidorov Ivan Petrovich?” Patient: “Yes, it’s me.” Sister: "Now I will take you to the ward, and then after 20 minutes I will come to you to talk about your health."

Even at the moment of meeting you may have confidence in your sister and a desire to share details from life.

Questions can be of several types: general, specific, suggestive, trial, plural (Table 7-1).

**Table 7-1. Types of Nurse Questions [23]**

Type of question	Examples of question
General question	How are you?
Specific question	What is your name? Your address? Call your close relatives? Do you like mashed potatoes?

Наводящий вопрос	Вы бросите курить, не так ли? Вы будете больше заниматься физическими упражнениями после выписки из больницы?
Пробные вопросы	Вы говорите, Ваш муж много работает? В последнее время боли в желудке у Вас усилились?
Множественные вопросы	Вы говорите, Ваш муж много работает? Как Вы управляетесь по дому с двумя детьми?

So, during the conversation any questions are relevant, but different types of questions are asked for different purposes. General questions are one of the main means of communication within the framework of a psychologically safe conversation technique, and specific questions are useful for quickly obtaining standard information. Specific issues are used in emergency situations where accurate recording of information can be very important for care planning. They do not allow the patient to give a thorough answer, so the nurse may have to ask more questions in order to get the necessary information. For example:

Nurse: “Do you like cottage cheese?” Patient: “Yes, I often eat it for breakfast, but ...”

Nurse: “Do you want to say that you like a particular cottage cheese?”

The advantages and disadvantages of each of these types of questions are discussed below (Table 7-2).

Table 7-2. Advantages and disadvantages of different types of questions [23]

<b>Question type</b>	<b>Benefits</b>	<b>Disadvantages</b>
General question	Useful as it promotes self-expression. A person can describe in his own words what is important to him	It is difficult to control deviations from the content of the question, to achieve a specific goal or to limit talkative interlocutors
Specific question	Allows you to quickly collect specific information, accurate and unambiguous	Limited to the question. Focused on a specific answer only
Leading question	It prompts the responder to a response consistent with conventional wisdom	Limits self-expression of the eternal. May cause anger if perceived as threatening

Trial question	Investigate a topic that the asker considers important. Answers may provide specific information. May catch the responder by surprise	They can scare the responder. May cause anger
Multiple question	May show interest and enthusiasm	It leads to confusion, because the respondent does not know which question to answer first. The answer cannot be rational.

Guiding and multiple questions often look like clues, but at the same time they are guiding and concrete. For example:

“After all, will you daily determine the level of glucose in the blood plasma daily morning and evening?”, “Now that I have explained to you why the endocrinologist insists on the daily independent determination of the blood glucose level of the blood plasma, do you think that you will have some or difficulties? ”

Trial questions may seem intrusive to the patient, so they should be asked carefully and very rarely. For example:

*Patient: “Recently, I have become weak, I have to rest often.”*

*Nurse: “Have you noticed any other symptoms?” Patient: “Yes, I have lost weight.”*

*Nurse: “How many kilograms have you lost weight?” Patient: “I have lost more than 10 kg.”*

*Nurse (trial question): “Did something like this happen to you before?”*

*Trial questions can be both general and closely related to the topic under discussion.*

In addition to the above 5 types of questions, there are many others. Some questions are easier to ask, others more difficult, some open the way to communication with patients, while others scare and cause a protective reaction.

General questions asked by the nurse to the patient give him the opportunity to express his thoughts descriptively, in his own words. The person who answers the question chooses the pace of the answer and details important to him. During the conversation from the side of the nurse should not come any pressure, the conversation should be conducted as a confidential communication. The patient

should know that his conversation with the nurse will remain confidential and will help to improve nursing care. At the same time, if you ask only general questions, you may encounter difficulties in collecting the material necessary for an adequate assessment of the patient's condition. In this situation, focused general questions help. In this case, the respondent can freely express his thoughts in accordance with the question posed.

For example:

*Nurse: "Tell me how you usually eat during the day."*

*Patient: "I am not hungry."*

*Nurse: "How many times a day do you eat?"*

*Patient: "Two times thoroughly (morning and evening) and three times" on the go ": chips, nuts, rolls," Fanta "and sometimes ice cream."*

*Nurse: "What kind of food do you prefer to eat at home?"*

*Patient: "Well, dumplings, scrambled eggs with sausage, pizza. I love sauerkraut, but ... "*

In this example, focused questions allowed the nurse to direct the be-sed in the right direction and enabled the respondent to add something that he might not have said. The sister controlled the course of the conversation and, completing the assessment of the patient's nutrition, could ask him the following question: "What else would you like to tell me about your diet and habits?"

Focused questions make it easier to get in touch with closed people. The nurse must have communication skills and the ability to skillfully ask questions in a conversation with the patient and his family members.

Questions should be asked sequentially, one at a time. For example, it is better to ask: "Do you have children?" And then: "Do you have someone dependent?" You should not combine these questions: "Do you have children or someone else dependent?" If the sister is talking with a person, a medical worker by profession, there may be special terms in questions: "Do you have nocturia?"

For another patient, this question needs to be formulated: "Do you get up at night to urinate?"

Questions can be closed (completed) or open (unfinished). Sister receives short answers to closed questions: "Yes" or "No". Open ones require a more detailed answer. To the question: "How do you feel today?" You can get the necessary information about the patient's health status. To the question: "Do you feel better today?"

The patient is likely to answer in a monosyllabic manner. The question must be structured so that it does not affect the patient's response.

The following factors are important for obtaining information during a conversation with patients as efficiently as possible: silence, attentive listening, friendly attitude, preliminary preparation of questions and taking notes during a conversation.

- Silence allows you to monitor the patient and gives him time to collect his thoughts.

- Careful listening facilitates eye contact with the patient and gives him the opportunity to feel his sister's interest in her problems and in everything that bothers him.

- A benevolent attitude contributes to an unbiased look at the patient's lifestyle and his life values.

- Preparation of questions allows you to make the conversation understandable for both the sister and the patient.

- Short notes during the conversation will help in further work.

The ability to establish contact is very important for the sister, especially when assessing the condition of the patient, as this will provide mutual understanding and trust. It must be remembered that a person can be agitated, nervous and even angry, feel bad. During the conversation, the sister should sort out what and how many questions a person can “withstand”. Annoyance and irritation should not be shown if the patient cannot remember something.

When talking with the patient, you need to put a chair near his bed and sit in such a way that the eyes of the patient and sister are on the same level. This will allow the patient to believe that the sister has time and she has a desire to listen to him. You need to be able to maintain a leisurely conversation, and not turn it into short questions and answers. Remembering all the information received is difficult, so you should keep notes.

The sister must be sure that she understood the answers correctly, for which sometimes it is necessary to clarify the information during the conversation: “It seems to me that you are speaking ...” or: “If I understood you correctly, you ...”

During the conversation, remember that other people should not hear the patient's response. This is not always easy to do if the patient beds are close to each other, but nevertheless everything must be done to ensure the confidentiality of the information received (both oral and written). If the patient can walk and have free space,

it is advisable to conduct a conversation there. You need to communicate in a quiet, calm environment and, if possible, without interruption. The sister should not show the patient that she is in a hurry, since he, seeing this, will begin to answer questions hastily and inaccurately.

We already said that before the start of the conversation, including during the initial assessment, the sister must explain why she asks questions and why this information is needed. It is advisable to smile at the patient, give your name, patronymic and position. It should be made clear to the person that the more a sister knows about him and his family, the better she will be able to arrange care. Taking care can be expressed without words. If the sister bends to the patient during the conversation (for example, if he does not hear well), he will let him know that she is interested in the accuracy and confidentiality of the information.

The patient can also report on his condition without words, so the sister should carefully observe the expression on his face, look “face to face,” since the lack of eye contact can cause confusion, anxiety or fear in the patient. However, you do not need to look long at the patient or your notes. You should not lose sight of busyness, wringing hands and other similar actions. Tell the patient the phrase: “I see. You pull your button .”, helping him to express his concern with words and make sure that your assumption that the person is nervous is correct.

Let the speaker finish the sentence, even if he is too verbose. No need to skip to another topic and repeat the question unnecessarily.

“The information recorded on the nursing assessment sheet should not, whenever possible, contain such affirmative phrases as “good ” or “ bad ”, because what seems to one sister “ good ”, the other may seem “ not very good ” .

The sister should be able to conclude the conversation with the patient with the phrase: “Only two questions remain ...” At the end of the conversation, it is necessary to “agree with the patient on further ways of interaction” [42].

### **7.2.2. Objective examination**

An objective examination includes examining the patient, observing his facial expression, breathing, position, measuring blood pressure, temperature, pulse, respiratory rate, determining dryness

or lethargy of the skin, etc. For an objective examination, the sister uses her eyesight, hearing, touch, smell.

F. Nightingale in her Care Notes, published in 1859, wrote: "The most important practical lesson that sisters can give is to teach them what to observe, how to observe, and which symptoms indicate deterioration, what signs indicate inadequate care, what is the lack of care."

The importance of monitoring the patient's health has not decreased at this time. Just one observation today is not enough for a complete assessment. The term "observation" has long been used by nursing staff in our country. However, many reduce it to measuring body temperature, pulse, blood pressure, respiratory rate, which is not enough to assess the patient's condition.

For example, monitoring the physical and mental state of how a person sees and hears, as well as the activity, mobility and the presence of urinary or fecal incontinence will allow the sister to assess the risk of developing pressure sores. Observing the skin, it is easy to determine its dryness, the presence of edema, rash, icteric staining, violation of integrity.

Evaluation and monitoring of the oral cavity is especially important in critically ill and elderly patients, as this can prevent nosocomial infections of the oral cavity.

The skill of observation will allow you to correctly evaluate non-verbal messages, make conclusions about the emotional state of a person. To do this, you should carefully observe how a person communicates with other patients, how he eats, walks, sleeps. Analysis of behavior, appearance, relationships with others will help the sister to determine how much the data obtained during the observation are consistent with the facts revealed in the conversation.

Observation is an invaluable source of information in assessing the psychological and mental state: a sister should pay attention to what she sees and hears.

The verbal form of behavior is just what the patient is talking about (for example: "I am very afraid of surgery"). The non-verbal form is how the patient lies, sits or walks during a conversation, what are his movements, whether he looks into his sister's eyes, how he speaks to her (stutters, stammers). Watching non-verbal behavior, the sister makes notes, for example: "N.V. often changes body position "or" N.V. during the conversation he looks at the ceiling."

Thus, when assessing the psychological and mental state, the following verbal forms of patient behavior should be evaluated:

- manner of speaking (quickly, slowly, with difficulty, excerpts);
- voice (loud, quiet);
- logic of constructing the answer;
- the adequacy of the response to the question (what and how it answers). Non-verbal forms of behavior can be assessed by observing:

- eye contact (looking in the face or looking away);
- facial expressions;
- pose (sits, stands or walks during a conversation, takes part in what is happening or without participation);
- movements (constrained, active, slowed down, calm, impulsive).

When assessing behavior, you need to analyze a person's mood:

- sad (crying: a lot, a little, for what reason, when, for how long);
- gloomy (inadequately refers to his illness);
- energetic (sympathetic to the problem);
- funny (glad of the current situation).

A person differently assesses the environment. In some cases, the patient is ill-disposed, in others he is vulnerable, reacts negatively to what is happening. In some situations, the patient may be confused, preoccupied, or restless (reacts with fear or impatience to a situation, is afraid to do something, or does it with difficulty).

By behavior, you can evaluate how oriented (or disoriented) a person is. It is necessary to find out whether the patient knows who he is, the current time (hour, day, month and year), place (where and why he is in the hospital).

The success of the assessment of the patient's condition largely depends on the skill of communication and observation of the patient.

An additional source of information may be the data of laboratory and instrumental studies.

The data collected should be clear and give a complete picture of the patient's condition. It is necessary to correctly interpret the information received.

When collecting data, the model of nursing adopted in a particular hospital (region, country) should be taken into account. Given the WHO recommendations on nursing, it is better to focus on the

model of Henderson, in which she formulated the goal of nursing as helping people meet their personal (basic) needs [42].

When examining a patient, you need to find out:

- his state of health, taking into account each of the 14 basic needs;
- the norm chosen by the patient in connection with each indicated need;
- type of human activity and the necessary amount of assistance to meet each need;
- the degree of maladaptation associated with the inability to self-service, according to the state of human health or in connection with special social needs;
- potential difficulties or problems associated with a change in the patient's health;
- the ability of a person to self-care and the amount of assistance that he can receive from friends or relatives;
- medical diagnosis, treatment principles and prognosis;
- previous illnesses and social problems.

Information about the physical condition includes normal characteristics, age-related changes (e.g., infant, adult, elderly person) and pathology caused by the disease.

Information about the state of mind allows you to evaluate the patient's ability to self-care at home.

Survey data are recorded in the "Nursing Assessment Sheet", which has several forms. When making notes, the information should be stated briefly, clearly and unambiguously, using only generally accepted abbreviations (Appendix 7-1).

The following is another possible option for presenting the results of a nursing examination [39], not oriented to a specific model of nursing care.

### **Health Nursing Assessment Sheet**

(is an insert on an outpatient card or patient history and is filled out upon first use)

**Name, age, address of the patient .....**

**Date of receipt .....**

**Medical (medical) diagnosis .....**

**Complaints currently .....**

**The main problems of the patient .....**

Daily life indicators	Data received during the appeal
Physiological needs Allergy Medication Respiration Pain / Comfort Movement Activity Safety (ability to avoid danger, not harm others) Rest / sleep Nutrition, adequate food and drink Departures of the body: excreta urination	
Choosing the right clothes: dressing undressing Skin, keeping the body clean, caring for the exterior Pulse, pressure Constant body temperature hearing vision speech <b>Psychological and mental state</b> Emotional condition Communication, expression of emotions, needs, fear and opinion Reaction to the disease, the need to stay in the hospital Pain Relief Emotional needs Self esteem Feeling of inner well-being Value orientations, belief in good and evil, attitude towards illness, religious beliefs <b>Social health</b> Living conditions Family friends Material well-being, income Job Leisure (leisure), interests Bad habits	

Availability of social support The need for information for development and cognition	
---	--

### 7.3. INTERPRETATION OF RECEIVED DATA

After an initial assessment of the patient's condition and recording the information received, the sister summarizes it, analyzes and draws certain conclusions that affect the plan of nursing care.

However, one should not rush to conclusions, since this can lead to an incorrect formulation of the problems. It is useful (especially in the absence of experience) to discuss the conclusions made by the sister with colleagues and the attending physician.

Thus, the goal of this stage of the nursing process is to formulate existing (actual) and potential (probable) problems that arise in the patient in connection with his condition, including as a reaction to the disease.

#### 7.3.1. Patient problems

Regardless of how the author created the model of nursing care (V. Henderson, D. Orem, etc.), the patient's problems arise if it is impossible to satisfy their needs. In other words, if the need is satisfied - there is no problem, if not satisfied - there is a problem.

Problems are real and potential. If a person cannot cope with self-care (for example, difficulties in dressing, washing, maintaining safety, etc.), he needs help - this is a real problem. In some cases, a nurse can identify these problems, even if the person does not know about them (for example, in a conversation with a person with poor eyesight or hearing). However, sometimes the patient does not consider it possible to communicate all the information about himself, so the sister does not know about the existing problems.

Potential problems can be foreseen by both the sister and the patient. For example, a person suffering from coronary heart disease anticipates deterioration if he does not change his diet and physical activity, but sometimes he does not know the features of this diet and adequate physical exertion. The sister can also anticipate the complication of the disease (pressure sores, infection) and take certain measures, having previously discussed them with the patient

and / or relatives, if the patient himself, due to certain circumstances (illness, age), cannot independently make decisions.

Sources of possible problems of the patient may be his disease, environment, drug therapy, medical institution, personal circumstances.

Thus, on the one hand, the presence of a problem is the basis for nursing care, on the other hand, not all problems require the intervention of medical personnel. As well as not all patients suffering from the same disease or disorder face the same problems. A person often adapts to his illness or helplessness (dependence) in such a way that such circumstances do not lead to problems, which means that nursing help is not required.

For example, a person does not have a right hand as a result of a disease, but he has learned to perform all daily functions and can satisfy part of his needs (personal hygiene, dressing and other functions) with his left hand. In this situation, there are no problems and there is no need for nursing care.

Writing down the patient's problems in the care plan, they are formulated in the patient's own words, as this will enable the patient to better understand the entire care plan, and his sister to discuss the purpose of care with him.

It should be understood that in order to attract the patient to a conscious participation in the implementation of the care plan, it is important to provide him with the most complete information about both actual and potential problems and interventions planned for their prevention.

### **7.3.2. Prioritization of problems**

When examining a patient, two, three or more problems can be identified at the same time. In such cases, the nurse must establish priority in the sequence of their resolution, taking into account the degree of risk to the life and health of the patient. By priority, problems are classified into primary, intermediate and secondary. Primary include problems associated with increased risk and requiring emergency assistance (for example, the risk of pressure sores). Intermediate problems do not pose a serious danger and allow a delay in nursing intervention (for example, in a situation associated with the inability to carry out personal hygiene). Secondary problems are not directly related to the disease and its prognosis (for example,

smoking a patient who was admitted to the hospital for appendectomy). Of course, the primary problems of the patient should be addressed first. At the same time, the sequence of problem solving should be determined by the patient himself (for example, a patient whose right arm is paralyzed decides that he will first learn to put on his pants with his left hand, then the shirt, since it is much more difficult to fasten the buttons on the shirt, and only after that learn to shave yourself). Obviously, in cases of life threatening, the sister herself must determine what problem she will solve in the first place.

Potential problems can sometimes be top priority. For example, an elderly patient is exhausted, suffers from urinary and / or fecal incontinence, motionless, unconscious. In this case, potential problems (high risk of bedsores, risk of urinary tract infection) become primary.

If the patient has several problems, it is often impossible to satisfy them simultaneously. In such a situation, when developing a care plan, the sister should discuss with the patient (his family) the priority of solving problems.

The World Health Organization's strategy "Health for All by 2000" and the 1978 Alma-Ata Declaration urged all health workers and nursing staff to "help people freely express their needs for better health, and provide them with the opportunity to critically examine and satisfy these needs in the most acceptable way from their point of view. "

In our country, despite the rights of the patient listed in the "Fundamentals of Legislation of the Russian Federation on the Protection of Citizens' Health" (Article 30), he has only a passive role in determining who will care for and treat him and how. Therefore, it should be remembered that the nursing process provides for "attracting people as partners in servicing oneself" [42]. Apparently, difficulties in establishing such a partnership are inevitable for us, since neither nursing staff nor patients are used to this approach.

**Partnership Tips:**

- at the patient's admission or at the first contact with him, explain why you are gaining access to it in your own way. Find out his opinion on this issue;
- Use nursing records as a means of involving the patient in this work. Let him write down personal needs, if that is the patient's desire;

- Using your communication skills, stimulate the patient's desire to express his views and concerns. For example, conduct a nursing assessment in the form of a conversation or dialogue, and not just fill out the answer sheet;

- When working with nursing records, try to create an atmosphere of openness. Then the patient feels that he has the right to determine and verify what has been decided and recorded in relation to his assessment and planned care;

- Familiarize the patient with your assessment of his condition and care needs. Find out if he wants to express his opinion, object or propose any changes;

- Whenever possible, openly fill out written documentation. For example, recording some personal needs, comment on possible effective help;

- explain to the patient that his documentation is confidential until the person himself wants to acquaint, say, family members with it;

- carefully check your joint patient care plans so that they do not cause unwanted excitement, fear or doubt, which can harm and complicate your collaboration;

- when a person is not able or unwilling to participate in this process (for example, young children, or patients in an unconscious state, or in great confusion), the sister draws up a care plan, to the extent possible she captures all the patient's objections, the views of his relatives.

These tips were developed by nursing staff in one of the hospitals in the UK, but, in our opinion, they are suitable for our sisters.

Problems identified at this stage of the nursing process are recorded in the care plan.

### **Nursing Care Plan (outline)**

Name of patient: Department: ? wards:

- Date:

- Patient problem:

- Objectives (expected result):

- Interventions (sister's actions):

- Frequency, frequency, frequency of assessment:

- End date for achieving the goal:

- Final assessment of the effectiveness of care:

Sister (signature): Doctor (signature):

## 7.4. CARE PLANNING

Planning, as well as assessment of the patient's condition, is directly related to the chosen model of nursing.

The essence of planning is to determine (together with the patient):

- goals (expected result) for each problem;
- the nature and extent of nursing intervention necessary to achieve the goals;
- duration of nursing intervention.

So, setting goals for each problem, you should consider:

- wishes of the patient and / or his family;
- the capabilities and resources of a sister (and a health facility);
- professional experience.

Planning in the framework of the nursing process is defined by the World Health Organization as “a description of the desired physical, psychological and / or social state, its estimated necessary level and the one to whom it refers” [42].

WHO's “Needs of People for Nursing Care: A European Study” (1989) provides a more specific definition of planning: it is “documenting the specific expected outcomes of nursing intervention in accordance with a nursing care plan” [42].

### 7.4.1. Defining Care Goals

Having determined the goals of care, the sister, together with the patient, can determine the effectiveness of their joint efforts in solving problems. To assess the result of nursing care, goals should be indicated in measurable terms, i.e. recorded as change

the patient's behavior, his verbal reaction, specific observations in the dynamics of the state, the measurement of certain physiological indicators. For example.

- Problem: N.'s appetite is reduced due to high body temperature.
- Expected Result / Goals:
  - ▲ N. says two days later that he has a good appetite;
  - ▲ two days later N. eats up the whole daily diet on his own;
  - ▲ N.'s body weight will not be reduced by discharge.

It should be noted that the sister cannot set goals beyond her competence (“the patient will not have hemoptysis” or “the patient will have a lower body temperature”).

Thus, the goal is what the patient and sister want to achieve as a result of the implementation of the care plan. The goals should be patient-oriented and written down in simple words so that each sister understands them unambiguously. The goals provide only a positive result:

- reduction or complete disappearance of symptoms that cause fear in the patient or anxiety in the sister;
- improvement of well-being;
- expanding self-service capabilities within the framework of fundamental needs;
- a change in attitude to your health.

Goal setting requirements:

- reality and reachability;
- the ability to verify achievement;
- time limits (indicating the time frame for achieving the goals).

Distinguish between short-term (calculated for 1-2 weeks) and long-term (more than 2 weeks) goals.

The objectives should include:

- specific action;
- criterion - date, time, etc .;
- condition - with the help of whom or what the result will be achieved.

Remember! When planning patient care, find out what result he wants to achieve.

As the patient's condition changes, the level of dissatisfaction with his needs will change, which means that goals will also change. In such a situation, it is necessary to constantly evaluate the achievement of the expected result.

Before discussing the goals of care with a patient, a sister should:

- understand what requirements can be presented to the patient;
- evaluate its ability to meet these requirements;
- evaluate whether the patient can perform any self-care activities;
- evaluate whether the patient can learn self-care and to what extent.

For example, N. 62 years old was admitted to the department, with a diagnosis of osteoarthritis of the right knee joint in the acute stage. When assessing the patient's condition, the sister found out that N. couldn't quickly reach the toilet (due to pain), therefore, she

often has urinary incontinence (this is a problem). Before discussing the expected result with the patient in solving the problem, the sister concludes: firstly, try to convince N. to go to the toilet with the help of her sister, and secondly, she decides that N. is able to reach the toilet. After discussing this issue with the patient, the sister will record the following:

- Problem: N. has urinary incontinence, since she cannot quickly reach the toilet due to pain in the joint.
- Expected Result: There will be no incontinence. N. will be able to go to the toilet with the help of his sister at any time.

#### **7.4.2. Definition of nursing interventions**

Nursing interventions recorded in the care plan are a list of the sister's actions aimed at solving the problems of a particular patient. If the problem is potential, then the intervention should be aimed at preventing its transition to real.

A care plan can record several possible interventions; this allows both the sister and the patient to feel confident that different actions can be taken to solve one problem.

Nursing interventions should be:

- based on scientific principles;
- specific and clear, so that any sister can perform an action;
- real within the allotted time and qualifications of the sister;
- aimed at solving a specific problem and achieving the goal.

The methods of nursing intervention, as well as the entire planning stage, depend on the chosen model. Intervention is dependent and independent. In our country, the most common are only dependent interventions, i.e. the sister fulfills the doctor's prescription, although nursing activities should be much wider.

“Independent nursing activities are determined by the framework of the chosen nursing model.

Independent nursing interventions - actions taken by a sister on her own initiative based on her own considerations without the direct appointment of a doctor. They are carried out at:

- assisting the patient in the implementation of natural (universal, fundamental) needs;
- monitoring the patient's response to the disease, its adaptation to the disease;

- monitoring the patient's response to treatment, adaptation to treatment;
- teaching the patient (his relatives) self-care (care);
- counseling the patient regarding his health "[42].

D. Orem, in her proposed model, clearly articulated three systems of nursing care.

- Fully compensating system for:

- ▲ patients who are not able to carry out any self-care activities and are in an unconscious state;

- ▲ conscious patients who are not allowed to move or who cannot move independently;

- ▲ patients who are not able to make decisions and take care of their own lives, but who can move around and perform some self-care activities under the guidance and supervision of specialists.

- Partially compensating system designed for patients with varying degrees of restriction of motor activity. The patient requires certain knowledge and skills, as well as a willingness to perform certain actions.

- A counseling and support system is used by self-help patients, or trained with help. The sister supports, supervises, teaches, creates a suitable climate for self-service.

Choosing these or other nursing interventions, one should not only list their patient, but also explain why they should be performed. Researchers in nursing have shown that if the intervention is formulated in general terms, it can be understood differently by different sisters in different ways. You can not write: "Increase fluid intake." Many questions arise: "How much, when, what, how often, how to give fluid?" With this formulation, the patient will receive a different amount of fluid every day and at different times.

If the intervention is defined in concrete terms, it will be carried out clearly. We give an example.

Patient A.N. 78 years old. Six months ago, she suffered an acute violation of cerebral circulation, after which she remained weak in her left leg and arm. Communication with A.N. It is difficult, because she does not hear well. A.N. lives in an apartment on the fifth floor in a house without an elevator. She does not go outside. Products are brought by a social worker, sometimes neighbors. A.N. poorly remembers upcoming events, forgets to eat and drink.

When assessing the condition of A.N. the sister notes that the patient has reduced nutrition (Quetelet index 18.1). Skin, tongue, lips

dry. Removable dentures in the mouth from above and below. You can dress and undress yourself. He can carry out personal hygiene on his own, but does it reluctantly.

He walks with difficulty because of the general weakness and instability of his left leg, so he prefers to lie more.

From the extract given by the district doctor of the clinic, it is known that A.N. daily diuresis 700 ml, irregular stool - 1 time in 4-5 days.

One of many problems for A.N. is dehydration, as evidenced by violations of the excretion of urine (only 700 ml) and feces (stool 1 time in 4-5 days).

Dry skin, tongue, and lips also indicate dehydration.

A fragment of a nursing care plan is presented with sample language for the problems, expected results, and nursing interventions (Table 7-3).

**Table 7-3. Fragment of a nursing care plan**

Date	Patient problem	Expected Result (Goal)	Nursing Interventions	Assessment Frequency	Goal Date
16.03.01	Decrease in the amount of urine; rare stool; dry lips, tongue, oral mucosa due to dehydration	A.N. receives the required amount of liquid 3000 ml per day	Offer hourly: tea, tea with lemon, water (does not like coffee) 1500 ml from 8.00 to 16.00; 1000 ml s16.00 to 22.00; 500 ml from 22.00 to 8.00	14.00 20.00 7.00	17.03.01
		Lips and tongue will not be dry	Lubricate the lips with petroleum jelly	Daily after meal	16.03.01
		The amount of urine will be at least 2000 ml	Record the amount of urine	Daily with every urination	16.03.01
		Bowel movement will be at least 1 time in 3 days	Observe stool, give laxatives (as directed by a doctor)	Daily	20.03.01
	Oral infection risk	There will be no infection	1% iodine solution for prostheses (help from nursing staff)	Daily at night	
			Rinse the oral cavity (independently)	Daily after meal	
			Oral examination	Daily morning	

## 7.5. IMPLEMENTATION (IMPLEMENTATION) OF THE NURSING CARE PLAN

The implementation (implementation) of the nursing care plan is the fourth stage of the nursing process, although all the stages, complementing each other, cannot exist separately. For example, the planning phase is not possible without the implementation phase: but in the first case, the interventions are only recorded in the care plan, in the second they are executed, then recorded.

The implementation phase is defined by the World Health Organization as "... the implementation of actions aimed at achieving specific goals. They (actions) include what the sisters do for the person, together with him and in the interests of his health to achieve the goals of care ... including ... documenting information about the implementation of specific nursing activities in terms of nursing care "[42 ].

When implementing the plan, you need to pay attention to the following points:

- how information is transmitted about the necessary nursing interventions;
- how they are performed;
- how all care issues are coordinated;
- how responsibility and accountability in nursing care are distributed.

When implementing nursing interventions, it is necessary to coordinate the actions of the sister with the actions of other medical workers, the patient and his relatives, taking into account their plans and capabilities.

The sister more often than others works with the patient, performing both dependent and independent interventions, therefore she should be given the role of coordinator of actions with other co-workers.

Example:

- The doctor allowed the patient to sit down only three times a day for a short time. It is better if the sister and patient decide together that this time should be combined with breakfast, both home and dinner. This will be the right decision - the patient will be able to take food on his own while in a sitting position.

This example demonstrates the partnership (sister-patient) in decision-making. And, as a rule, a person adequately responds to his active involvement in the care process.

Remember! All nursing interventions performed at the implementation stage are recorded in the protocol to the care plan, indicating the time, the action itself and, if necessary, the patient's response to the nursing intervention.

Remember! The ability of the patient (or his family) to participate in the nursing process is the main component of the nursing care model proposed by W. Henderson.

## **7.6. EVALUATING CARE EFFICIENCY**

The purpose of the stage is to assess the patient's response to nursing interventions, analyze the quality of care provided and evaluate the results.

The current assessment of the effectiveness and quality of nursing care (the fifth stage of the nursing process) is carried out continuously by the sister. To carry out the final assessment, the sister will need the same skills as in the initial assessment of the patient's condition.

According to the definition of the World Health Organization, the final assessment is "... research and decision-making from the point of view of certain criteria relevant to the goal.

Using the final assessment, feedback is provided that can be used to determine other human needs. The purpose of the final assessment is to determine the result, i.e. the patient's condition as a result of nursing intervention "[42].

When evaluating, a nurse performs several functions:

- determines the progress in achieving the goal;
- analyzes whether the set goals have been achieved and whether the result is consistent with the expected;
- evaluates the effectiveness of nursing intervention in solving a specific patient problem;
- provides information for reassessing the needs of the patient and new care planning (in case the goal has not been achieved).

### **7.6.1. Determining the achievement of goals**

The effectiveness of nursing care can be determined, first of all, by establishing whether the goals set with the patient have been achieved. This will be possible if they are measurable and real. Goals should be recorded in the form of patient's behavioral and verbal reactions, sister's assessment of certain physiological parameters.

The time or date of the assessment should be indicated for each problem identified. For example, when evaluating the effect of sleeping pills, an assessment can be carried out after a short period of time, when teaching a child with a cognitive impairment in self-care skills (dressing,

undressing, washing, eating, drinking, etc.) - after a long time, with the risk of bedsores - daily.

It is very important that the sister together with the patient predicts when they will be able to achieve the expected result and evaluate it (Table 7-4).

**Table 7-4. Fragment of a patient assessment sheet**

Date	Patient problem	Expected Result (Goal)	Nursing Interventions	Frequency, estimates	Goal Date	Final grade
30.03.01	Pressure ulcer II degree 3x2 cm in the sacral region due to immobility	The decubitus ulcer decreases in 2 days with the subsequent decrease within 4 days	Prevention in accordance with the All-Union standard "Protocol for the management of patients. Pressure ulcers	Daily for 20 days when changing dressings	02.04.01	Healed on the sacrum, but the surface of the skin remains very tender
		Decubital pressure sore after 14 days	Treatment in accordance with the All-Union standard "Protocol for the management of patients. Pressure ulcers		20.04.01	

“The assessment itself is a sister’s conclusion about the patient’s response to nursing care (objective assessment) and the patient’s opinion on the goal (subjective assessment). These estimates may not coincide, then preference should be given to the assessment of the patient himself”[42].

In the evaluation results, one can note the achievement of the goal, the absence of the expected result or the deterioration of the patient's condition, despite the ongoing nursing interventions. If the goal is achieved, a clear entry is made in the exit plan: "The goal is achieved." In the event that the goal is not achieved or is not fully achieved, both the verbal and behavioral reactions of the patient should be recorded in the column “Final assessment” (for example, “Only 50% of the daily diet is still eaten”).

In some cases, the sisters record “Stopped” next to the record of the corresponding intervention or cross out the resolved problem. In any case, records of already resolved patient problems are not excluded from the plan.

In our opinion, the most convenient registration option for work is to place records about goals and interventions on one side of the

sheet, and about implementation - on the back of this sheet. Such a record may look as follows.

Need:

- Branch:
- Ward:
- name of patient:
- Date:
- Problem:
- Objectives:
- Interventions:
- Frequency of assessment:

This will allow transferring from the plan to the “archive” the sheets with the problems solved in the process of leaving. An “archive” can be a “pocket” (file separator) at the end of a package of documents. If a previously resolved problem reappears in the process of leaving, the sheets from the “archive” are returned to the plan.

### **7.6.2. Determining the effectiveness of nursing intervention**

When evaluating care, it is important to take into account the patient’s opinion on the care provided to him, on the implementation of the plan, and on the effectiveness of nursing interventions.

In the ideal case, the final assessment should be carried out by the sister who conducted the initial assessment of the patient's condition. The sister should note any side effects and unexpected results when performing planned nursing interventions.

In the event that the goal is achieved, it should be clarified whether this happened as a result of planned nursing intervention or if any other factor influenced here.

On the back of a care plan sheet to address a specific problem, a current and final assessment of the results of the nursing intervention is recorded.

- Date Time:
- Evaluation (current and final) and comments:
- Signature:

When determining the effectiveness of nursing intervention, one should discuss with the patient his own contribution, as well as the contribution of his family members to the achievement of the goal.

### **7.6.3. Reassessing Patient Problems and New Care Planning**

The care plan is advisable and gives a positive result only if it undergoes correction and is reviewed every time there is a need for it.

This is especially true when caring for seriously ill patients, as their condition changes rapidly.

### **Reasons for changing the plan:**

- the goal has been achieved and the problem has been resolved;
- the goal is not achieved;
- the goal is not fully achieved;
- a new problem has occurred and / or the previous problem has ceased to be so relevant in connection with the emergence of a new problem.

A sister, conducting a current assessment of the effectiveness of nursing interventions, should constantly ask herself the following questions:

- Do I have all the necessary information;
- Have I correctly identified the priority of current and potential problems;
- whether the expected result can be achieved;
- whether interventions are correctly selected to achieve the goal;
- Does the care provide positive changes in the patient's condition?

Thus, the final grade is the last stage of the nursing process. It is just as important as all the previous steps. A critical appraisal of a written care plan ensures that the quality of care standards is improved and their implementation is clearer.

Remember! When maintaining documentation of the nursing process, you must:

- document all nursing interventions as soon as possible after they have been performed;
- record vital interventions immediately;
- comply with the documentation rules adopted by this medical institution;
- always record any abnormalities in the patient's condition;
- clearly sign in each column specified for signature;
- document facts, not your own opinion;
- do not use “foggy” terms;
- be precise, describe briefly;
- daily focus on 1-2 issues or important events of the day to describe how the situation differs on a given day;

- record virtually inaccurate patient compliance with the doctor's prescriptions or their refusal;
- when filling out documentation, write down the assessment, problem, goal, interventions, assessment of the results of care;
- do not leave free columns in the documentation;
- Record only sister interventions.

## CHAPTER 8 POSSIBILITIES OF APPLYING AUTHORIZED CARE MODELS V. HENDERSON

### **After reading this chapter, you will learn:**

- on conducting an initial nursing assessment of the patient's condition for each of 10 fundamental needs;
- about life support problems in the terminology of fundamental needs;
- on planning nursing care (goals, interventions, and frequency of assessment);
- on the current and final assessment of the results of nursing care.

### **Concepts and terms:**

- *Alzheimer's disease* - dementia as a result of age-related changes in the brain;
- *analgesia* - loss of pain;
- *autism* (from the Greek. Autos - himself) - the mental state of reflection, estrangement from the collective;
- *autism* (early childhood) - a syndrome characterized by a violation of social relationships, impaired speech and understanding, uneven intellectual development;
- *aphasia* - a disorder (complete or partial) of speech due to brain damage;
- *hemiplegia* - unilateral muscle paralysis;
- *bowel movement* - bowel movement;
- *stroke* - a sudden violation of brain activity due to insufficiency of cerebral circulation;
- *cachexia* - exhaustion;
- *contracture* (from lat. *Contractura* - contracting, reduction) - violation of mobility;
- *metabolism* - metabolism;
- *OST* - industry standard;
- *paraplegia* - paralysis of both (lower or upper) limbs;

- *paresis* - incomplete paralysis;
- *peak flowmetry* - determination of peak expiratory flow rate;
- *postural drainage* - the position of the body, contributing to the improvement of wet discharge;
  - *sleep apnea syndrome* - short-term respiratory arrest in a dream;
  - *tetraplegia* - paralysis of the upper and lower extremities;
  - *tremor* - involuntary trembling;
  - *euphoria* - increased, joyful mood;
  - *electroencephalography (EEG)* - recording of electrical impulses of the cerebral cortex.

The Nursing Process, developed by Yale University Nursing School in the 1960s, is based on a systematic approach to the provision of nursing care aimed at meeting the needs of the patient.

V. Henderson, the most famous researcher of nursing at that time, indicated that people, both healthy and sick, have certain necessities of life. In the list of vital needs, she included food, shelter, love and recognition of others, demand, a sense of belonging to the community of people and independence from them. She developed in detail the provision on the basic actions of a nurse to meet the needs of the patient and proposed a list of activities that, in her opinion, cover the most important areas of the nurse's activities in relation to the patient:

- ensuring normal breathing;
- ensuring proper nutrition and drinking;
- ensuring the removal of vital products from the body;
- assistance in maintaining the correct position of the body, changing the position;
  - providing sleep and rest;
  - assistance in selecting the necessary clothes and putting them on;
  - assistance in maintaining normal body temperature;
  - assistance in maintaining a clean body and protecting the skin;
  - assistance in the prevention of all kinds of dangers from the outside and monitoring that the patient does not harm others;
  - assistance in maintaining contacts with other people, expressing their desires and feelings;
  - facilitating the worship of patients;
  - assistance in finding opportunities to do something;
  - promoting patient entertainment;

- promoting patient education.

Each of the listed items W. Henderson illustrated with various examples. In some cases, the nurse acts on her own initiative; in others, she follows the doctor's instructions [33].

In the model of Henderson, the physiological needs of a person are taken into account to a greater degree, and psychological, spiritual, and social needs are less taken into account.

Adapting the model proposed by V. Henderson in the book "Basic Principles of Patient Care Activities" to the modern Russian conditions, the authors of this training manual somewhat changed the list of fundamental human needs, having reduced and combined some of them. This is due to the level of development of today's nursing and nursing education in the Russian Federation, the reform of which began recently, as well as the modern request of the population for one or another (new in content) nursing care.

So, for example, the nurse's duties include helping patients and their relatives to perform religious ceremonies in accordance with their religion. For this, the medical sister needs knowledge in the field of customs and rituals of various faiths. Understanding and respecting the feelings of a person practicing a particular religion will help the nurse to gain the trust of the patient and members of his family, which means to make nursing assistance more effective.

A person must be sure that during his life, and in the event of his death, the nurse will provide care, taking into account the existing religious rites and customs.

A person's need for "satisfying one's curiosity" (14th need according to V. Henderson) is not identified by the authors as an independent need, however, issues related to motivation and teaching the patient a healthy lifestyle are considered within 10 needs (as well as chapter 10):

- normal breathing;
- adequate nutrition and drink;
- physiological administration;
- motion;
- sleep;
- clothing: the ability to dress, undress, and choose clothes;
- personal hygiene;
- maintaining normal body temperature;
- maintaining a safe environment;
- communication;

- work and rest.

## **8.1. NEED FOR NORMAL RESPIRATION**

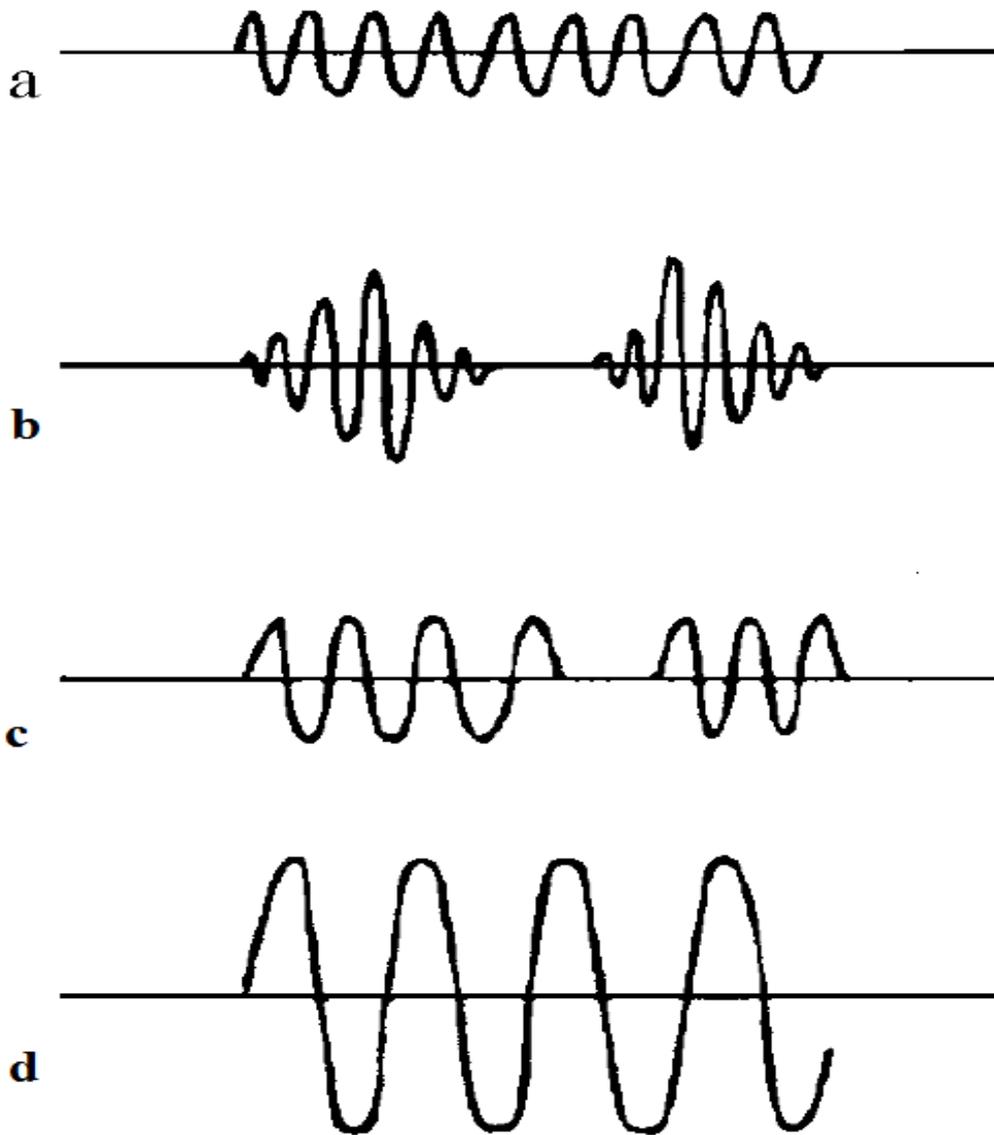
### **8.1.1. Initial assessment**

Risk factors for respiratory dysfunction are chronic obstructive pulmonary disease, tracheostomy, nasogastric tube, vomiting, trauma or surgery on the neck, face, oral cavity, etc.

To assess the satisfaction of the need for normal breathing (providing sufficient oxygen), the nurse should be able to conduct both subjective (questioning) and objective (examination) examination of the patient.

The most common signs indicating insufficient oxygen supply to the human body are shortness of breath, cough, hemoptysis, chest pain, tachycardia.

Shortness of breath is a subjective feeling of difficulty breathing. The patient, as a rule, says that he does not have enough air, there is nothing to breathe. Signs of shortness of breath are increased breathing, a change in its depth (superficial or, conversely, deeper) and rhythm.



**Picture 8-1. Pathological types of breathing.**

a - normal breathing; b - Cheyne-Stokes breathing; c - Biot's breath; g - Kussmaul breathing

It is necessary to clarify under what circumstances shortness of breath appears. Shortness of breath can be physiological if it appears after physical exertion or in a stressful situation, and pathological (with diseases of the respiratory system, blood circulation, brain, blood, etc.).

In some cases, a nurse can detect a pathological violation of the rhythm and depth of breathing, which is observed in diseases of the brain and its membranes (hemorrhage in the brain, tumor and brain injury, meningitis, etc.), as well as in severe intoxications (uremic, diabetic coma etc.).

Depending on the change in the depth of breathing, the respiratory volume of the lungs may increase or decrease, breathing may be

superficial or deep. Superficial breathing is often combined with a pathological increase in breathing, in which inhalation and exhalation become shorter. Deep breathing, on the contrary, in most cases is associated with pathological respiratory depression. Sometimes deep breathing with large respiratory movements is accompanied by a loud noise - Kussmaul's great breathing (Fig. 8-1), characteristic of deep coma (prolonged loss of consciousness).

With certain types of shortness of breath, the rhythm of respiratory movements may be impaired. Violation of the function of the respiratory center causes a type of shortness of breath in which after a certain number of respiratory movements, an extension of the respiratory pause or short-term respiratory arrest (apnea) is noticeable to the eye (from a few seconds to a minute). Such breathing is called periodic. Two types of shortness of breath with periodic breathing are known.

Biot's breathing is characterized by rhythmic movements that alternate through equal lengths of time with long (up to 30 s) breathing pauses.

Cheyne-Stokes breathing is characterized in that after a long breathing pause (ap-noe), a silent surface breathing first appears, which quickly increases in depth, becomes noisy and reaches a maximum at the 5-7th inspiration, and then in the same sequence - slowly decreases until the next short pause. During a pause, patients sometimes poorly orient themselves in the environment or completely lose consciousness, which is restored with the resumption of respiratory movements.

*Cough* - a protective-reflex act aimed at eliminating sputum and foreign bodies from the bronchi and upper respiratory tract. Coughing push - fixed sound exhale.

The cough may be dry (without sputum production) and wet (*with sputum production*). Sputum can vary in consistency (*thick, liquid, foamy*), color (*transparent, yellow-green, with blood*) and smell (*odorless, offensive, putrid*).

You should know that the effectiveness of a cough depends on several factors: viscosity of sputum, closure of the glottis, patient's ability to take a deep breath and strain auxiliary respiratory muscles to obtain high pressure in the airways.

With damage to the nerve centers, muscle weakness, intestinal paresis, pain, the presence of an endotracheal tube or tracheostomy,

as well as non-closure of the vocal cords, lung coughing is not possible.

Hemoptysis - secretion of blood or sputum with blood during a cough.

Pain in the chest usually occurs when the pleura leaves are involved in the pathological process. It should be clarified with the patient:

- localization of pain;
- intensity and nature of pain;
- the reason for the increase or decrease (for example, it lies on the sore side or presses the sore side with the hand) of pain.

Signs of any (localization) pain can be:

- voice reactions (soft or loud moans, crying, screaming, breathing changes);
- facial expression (grimace of pain, gritted teeth, wrinkled forehead, tightly squeezed or wide-open eyes, gritted teeth or wide-open mouth, biting lips, etc.);
- body movements (anxiety, immobility, muscle tension, continuous swaying back and forth, scratching, movements to protect the painful part of the body, etc.);
- reduction of social interactions (avoiding conversations and social contacts, the implementation of only those forms of activity that alleviate pain, narrowing the circle of interests).

Smoking, especially for a long time and a large number of cigarettes, causes chronic obstructive pulmonary disease and lung cancer. These diseases lead to a violation of the supply of oxygen to the body, i.e. disrupt the need for normal breathing. An adverse environment (gas contamination, dust, tobacco smoke, etc.) can have a similar effect.

Assessing the patient's condition, it is necessary to pay attention to his position (for example, a forced sitting position - orthopnea, a forced position on the sore side, Fowler's high position), the color of the skin and mucous membranes (cyanosis, pallor).

Assessing the need for normal breathing, it is necessary to determine the frequency, depth and rhythm of the respiratory movements, as well as to examine the pulse. Normally, respiratory movements are rhythmic. The frequency of respiratory movements in an adult at rest is 16-20 in 1 minute, and women have 2-4 more than men. In the supine position, the number of respiratory movements usually decreases (to 14-16 in 1 minute), and in the upright

position it increases (18-20 in 1 minute). Superficial breathing is usually observed at rest, and with physical or emotional stress it is deeper.

It should be remembered that in cases where the need for breathing is not satisfied due to any acute illness and acute respiratory failure (ARF), a number of characteristic signs can be identified in assessing the patient's condition. One of them is tachypnea (rapid breathing) up to 24 in 1 minute or more. Human behavior changes: anxiety appears, sometimes euphoria, verbosity, agitation. Verbosity is caused by fear of death.

Speaking against the background of rapid breathing is always very difficult. With a high degree of ARF, a person gradually loses consciousness and falls into a coma.

The color of the skin changes. Most often cyanosis develops, but gray pallor, the so-called earthy color of cold, covered with sticky sweat skin, is even more dangerous. ONE is accompanied by increased heart rate (tachycardia), sometimes the pulse becomes frequent and non-arrhythmic (tachyarrhythmia) or rare (bradycardia). Blood pressure initially rises (hypertension), then decreases (hypotension).

A patient with ONE needs emergency care from all members of the medical team

### **8.1.2. Patient problems**

Based on the data obtained during the assessment of the patient's condition, these or those patient's problems are formulated related to the unmet need for normal breathing.

#### **Patient problems can be related to such reasons as:**

- ignorance, inability, unwillingness or inability to take a position that reduces shortness of breath and pain;
- unwillingness to regularly perform breathing exercises;
- inability to use a spittoon;
- inability to use an inhaler;
- risk of respiratory tract infection due to inadequate care for the oral cavity, respiratory equipment, etc .;
- decreased physical activity (due to shortness of breath or pain);
- fear of death from suffocation;
- the need to quit smoking;

- decreased appetite due to sputum with an unpleasant odor;
- lack of understanding of the importance of taking regular medications prescribed by a doctor, etc.

### 8.1.3. Nursing Objectives

When discussing with the patient a plan for upcoming care (in case of detection of unmet need for normal breathing), it should be considered that the patient will achieve one or more goals:

- the patient will know and be able to take a position that facilitates breathing;
- the patient will recover (maintain) physical activity necessary for self-care;
- the patient will be able to independently use the inhaler (spit-toon);
- the patient will take the medicine as prescribed by the doctor;
- the patient quits smoking (reduces the number of cigarettes smoked per day);
- the patient will know the methods of self-help with an attack of suffocation;
- the patient will be able to take measures to reduce the discomfort associated with expectoration;
- the patient will complete the entire treatment program;
- the patient will prevent airway infections, etc.

### 8.1.4. Nursing care

Positioning the patient in bed with a raised headboard or using two or three pillows will significantly improve breathing.

Various types of drainage position improve sputum production, which means they contribute to recovery. Postural drainage will be effective (stimulating the natural discharge of sputum) only if the patient stays in a given position for a long time. Such drainage is prescribed by a doctor, and is performed under the supervision and with the help of a nurse.

There are several poses for emptying various segments of the lung.

In fig. Figure 8-2 shows the different positions of the body during postural drainage of the lungs depending on the location of the pathological process.

**Table 8-1. Posture Lung Posture**

<b>Lobes and segments of the lung</b>	<b>Body position</b>
Upper lobes of the lungs Apical, anterior segment	Lying on a back without a pillow, a roller under the knee joints
Back segment	Sitting, leaning forward, cushion in the abdomen
Middle lobes of the lungs (on the right - lateral and medial, on the left - upper and lower lingual segments)	Lying on a healthy side, head down (30 °), the affected side slightly bent back (20 °), knees bent
Lower lung lobes Upper segment	Lying on his stomach, pillow under the pelvis
Anterobasal segment	Lying on your back, head down (30 °), knees bent
Outer lateral basal segment	Lying on his stomach, head down, affected side slightly raised, hips on a roller
Posterior basal segment	Lying on his stomach, head down, roller under the hips

It should be said that postural drainage is most effective in combination with other methods of stimulating natural discharge and artificial sputum removal. It should be borne in mind that some of them, such as vibration massage, during the patient's stay in the draining position significantly improve sputum discharge.

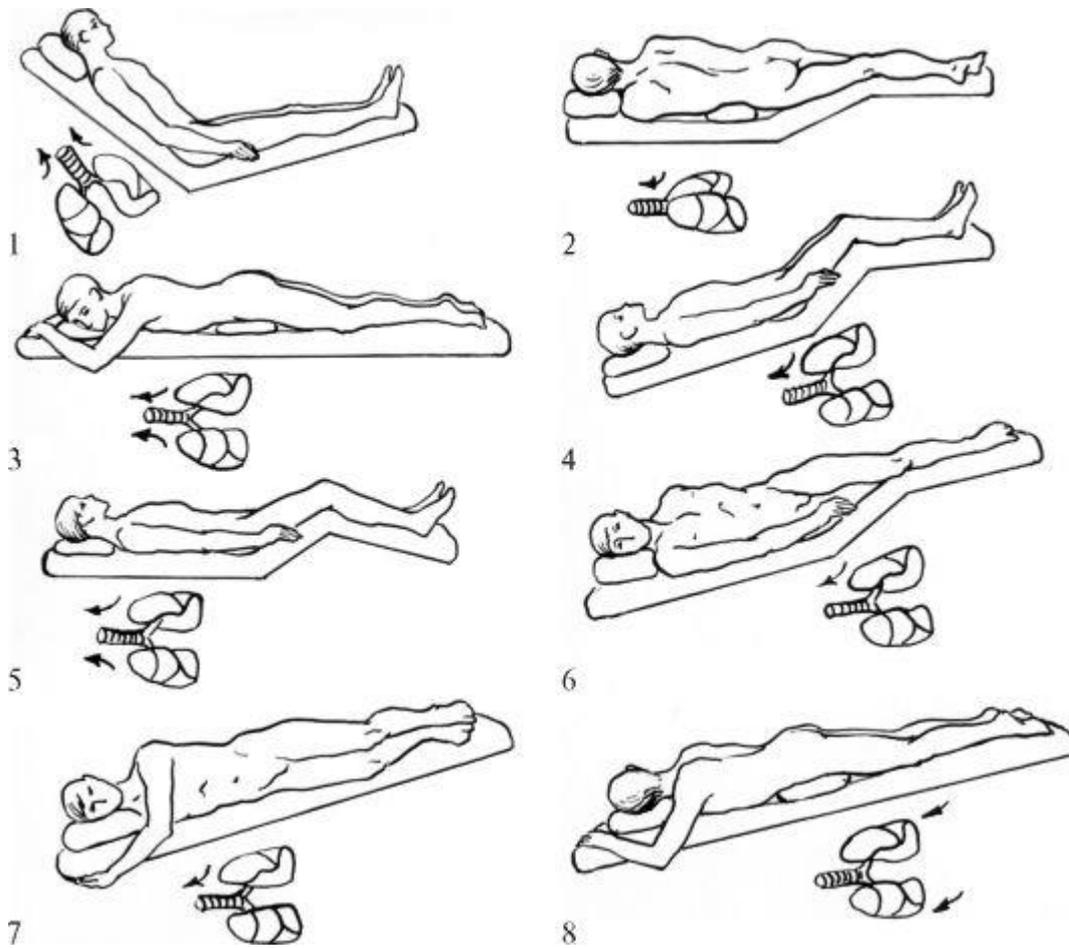
Teaching the patient the technique of coughing will give him the opportunity to most effectively remove phlegm. One of the methods:

- take a slow deep breath;
- hold your breath for 2 seconds;
- open your mouth and clear your throat while exhaling.

Training in specific breathing techniques is also aimed at improving the patient's need for normal breathing.

One of these techniques is that the patient exhales through the folded lips of the tube, while the exhalation is lengthened. With this breathing technique, patients cough up sputum more easily, i.e. coughing becomes more productive.

As prescribed by the doctor, the nurse conducts oxygen therapy (oxygen treatment).



**Picture 8-2. Draining body positions depending on the localization of the pathological process.**

1 - apical segments of the upper lobes; 2 - upper segments of the lower lobes; 3 - anterior segments of the upper lobes; 4 - lateral basal segments of the lower lobes; 5 - posterior segments of the upper lobes; 6 - anterobasal segments of the lower lobes; 7 - reed segments; 8 - back-basal segments of the lower lobes

Oxygen is necessary for life, therefore, with respiratory failure, it is used as a medicine for the purpose of replacement therapy.

**Like any medicine taken in excess, oxygen can become a poison.** The concentration, speed and duration of oxygen therapy is determined by the doctor.

One of the most common methods of oxygen therapy is oxygen inhalation. Regardless of the type of inhaler used and the method of inhalation, it is necessary to moisten the inhaled oxygen mixtures, and in some cases it is also desirable to warm them (when carrying out oxygen therapy through an endotracheal or tracheostomy tube).

The most comfortable for the patient is the method of inhalation through the nasal fork-shaped cannula, since in this case the patient has the opportunity to speak, cough, drink and eat. It should be remembered that without special methods of hydration, the patient may experience severe dryness of the nasal cavity. The facial mask provides better hydration of the respiratory mixture, but creates significant discomfort and requires a break of oxygen therapy to remove sputum, eat and talk.

The discomfort created by the face mask is manifested by severe burping, as the patient swallows the respiratory mixture. Vomiting that occurs during oxygen therapy through a facial mask is a formidable complication, as it can lead to asphyxiation. The method of oxygen therapy through the nasal catheter is still used, which has the same advantages as the nasal cannula, but creates a certain discomfort to the patient.

The patient must have a clear idea of the purpose of the drug therapy that the nurse carries out as prescribed by the doctor. A part of the nursing interventions is aimed at educating a patient with breathing problems in behavioral features for specific diseases. So, for example, in bronchial asthma, a nurse teaches the patient peak flowmetry, how to keep a self-monitoring diary, measures that can be used to reduce the number of risk factors in the patient's environment.

The risk of lower respiratory tract infection can be reduced by adequate oral care, a nasogastric tube, tracheostomy tube, and respiratory equipment.

### **8.1.5. Assessing Nursing Results**

During the implementation of the care plan, the nurse conducts a current and final assessment of the effectiveness of nursing intervention.

If the interventions aimed at expanding the patient's ability to satisfy the need for normal breathing were insufficient and ineffective, the nature of the interventions should be changed, coordinating them with the attending physician.

## **8.2. ADEQUATE FOOD NEEDS AND DRINKS**

### **8.2.1. Initial assessment**

To assess the adequacy of the patient's nutrition and fluid intake, you should know such indicators as age, height and body weight (normal and at the time of the examination).

It must be remembered that reduced body weight is considered to be 10-20% less than ideal for a person of a given age, height and constitution. In some cases, body weight can be reduced by 20% or more, up to cachexia. Excess body mass is considered to be 10% more than ideal for a person of this physique. If body weight exceeds ideal by 20% or more, a person is considered obese.

Ideal body weight is determined by special tables that take into account the gender, age and height of the person. The most accurate and simple way to determine the ideal body weight by the Ket-le index (see chapter 10). If the patient cannot accurately name his body weight, it should be determined.

It is necessary to find out from the patient whether he uses dentures. Of great importance for satisfying the need for food and drink is the patient's ability to independently take food and drink liquid, as well as the ability to provide themselves with a varied amount of food in sufficient quantities. Often, as a result of the examination, it turns out that, despite the ability to independently take food and liquid, and provide themselves with them, a person eats poorly, irrationally and monotonously due to habits, life circumstances, lack of knowledge.

To provide adequate assistance to the patient, it is also necessary to obtain information about his appetite (good, elevated, lowered, absent), favorite and unloved dishes, a special diet that a person observes due to a disease.

In some cases, the need for nutrition is not satisfied due to pain arising from eating, nausea, vomiting, and persistent bad breath. Lack of satisfaction in nutritional requirements can be caused by inadequate physical load, both excessive and limited.

The need to receive a sufficient amount of fluid may be violated due to the inability to independently visit the toilet and forced dependence on other people, including nursing staff. Dissatisfaction with the patient's need for fluid is manifested by signs of dehydration (dry skin, mucous membranes, constipation, etc.).

### **8.2.2. Patient problems**

Based on the data of the examination of the patient with his direct participation, problems are formulated that can be associated with the following reasons:

- ignorance of the principles of rational adequate dietary nutrition;
- lack of motivation to comply with nutrition principles;
- inadequate nutrition or fluid intake due to a disease;
- the impossibility of self-administration of food, liquid;
- fear of possible incontinence of feces, urine;
- inconvenience associated with the use of the vessel, urinal;
- offering tasteless, unloved dishes;
- abuse of diet, laxatives or enemas;
- the inability to consume a sufficient amount of liquid;
- bedsores (or the risk of their development), etc.

### **8.2.3. Nursing Objectives**

Discussing together with the patient the goals of upcoming care, provide for the achievement of one or more goals:

- the patient knows the principles of rational adequate nutrition;
- the patient understands the need for a rational and adequate diet;
- the patient receives an adequate amount of food and liquid (alone or with the help of nursing staff and relatives);
- the patient drinks at least 2 liters of fluid per day;
- the patient receives adequate care and is not afraid of possible fecal or urinary incontinence;
- the duration of the diet (taking laxatives, the frequency of use of enemas) is determined by the doctor;
- the patient's water balance is not impaired;
- signs of dehydration are not observed;
- the patient receives 120 g of protein and 1000 mg of ascorbic acid per day (the goal is set when implementing the plan for the prevention and treatment of pressure sores);
- the patient's body weight does not differ from ideal by more than ten%;

- physical activity of the patient is adequate to the food consumed;
- the patient eats the entire daily diet;
- the patient believes that he has a good appetite, etc.

#### **8.2.4. Nursing**

Nursing interventions aimed at satisfying the patient's needs for adequate nutrition and fluid intake should be as follows.

Firstly, it is important to educate the patient and his relatives on the principles of rational adequate dietary nutrition. In some cases, a dietitian must be involved in this process.

Secondly, nursing interventions should be aimed at increasing the patient's appetite in cases where his body weight is below ideal. An important point for increasing appetite is the creation of a favorable environment during meals. It is well known that you can eat more when you enjoy eating. For this:

- the room should be clean, bright;
- a person should eat at a certain time;
- the patient needs to be allowed to wash his hands and sit comfortably (if the patient takes food in bed, he should be helped to occupy Fowler's high position);
- hot food should be hot, cold - cold;
- do not mix the components of the grated food (for example, the grated meat and mashed potatoes should be separated on a plate), in some cases, the grated food can be given a semi-liquid consistency (you should consult a dietitian or dietician about how to dilute the dish).

When assisting while eating or drinking, it is necessary to predict what the patient needs. Sometimes it's enough to open a packet of milk, support a person with shaking or weak hands by the elbow, cut a piece of meat, etc.

If a seriously ill patient cannot independently use a sufficient amount of liquid, the duties of a nurse include:

- offer drinks at the temperature that he prefers;
- offer to drink liquid during meals in larger quantities than previously, even if it is unusual for the patient;
- provide the patient with an individual container with clean water and a clean cup;
- pour water if the patient is afraid to do it on his own;

- offer a straw (drinking straw) for drinking if a person is afraid to spill water from a cup.

### **8.2.5. Assessing Nursing Results**

To achieve this goal, a systematic daily assessment of care outcomes is required. This can be a determination of the daily amount of food eaten and drunk fluid, weekly measurement of body weight. If there are signs of dehydration, dry skin, stool, diuresis are assessed.

To determine the amount of food eaten, it is necessary to indicate how much a person ate from the offered portion in percentage. For example, soup - 50%, mashed potatoes - 100%, fish - 0%, compote - 100%. If the patient does not eat the entire daily diet, it is necessary to organize additional nutrition between the main meals.

When determining the amount of liquid drunk, one should take into account not only drinks, water, broths, but also the mass of fruits and vegetables eaten, while the mass is approximately equal to the volume of liquid (for example, 200 g of apples - 200 g of juice).

The data obtained when determining the amount of food eaten and the liquid drunk should be recorded in a diary of observations in any form.

The final assessment of the patient's nutritional needs is made by determining his body weight and comparing it with the ideal.

## **8.3. PHYSIOLOGICAL DEPARTURE NEEDS**

### **8.3.1. Initial assessment**

In a subjective assessment of the satisfaction of the patient's need for physiological administration, it should be:

- find out its ability to independently manage and regulate waste;
- specify the frequency of waste;
- nature of the waste.

When conducting a subjective examination, it should be borne in mind that people, as a rule, feel awkward when talking on this topic, so a nurse should be especially sensitive.

Urinary dysfunction (dysuria) can be of two types: increased urination (pollakiuria) and difficulty urinating (stranguria). With a

pronounced delay in urination, ischuria may occur (accumulation of urine due to the inability to urinate independently). Urinary incontinence can also be attributed to urinary disorders. Nicuria (nightly urination) can lead to diaper rash.

In a healthy person, urination during the day occurs 4-7 times, and at night, the need for urination occurs no more than 1 time. In each portion, from 200 to 300 ml of urine (1000-2000 ml per day). Increased urination may be a physiological phenomenon (when taking a large amount of fluid, cooling, emotional stress) or a consequence of pathological conditions (urinary tract infections, diabetes mellitus or diabetes insipidus).

Difficulty urinating, which is mainly observed in men with adenoma or prostate cancer, as well as in the postoperative period, can be both chronic and acute. In chronic partial urinary retention, the person is forced to push for several minutes to complete the urination act. Urine is separated by a thin sluggish stream, sometimes dropwise. The patient experiences frequent, often infertile urination. In such cases, emptying the bladder is not possible, although it is full. The patient develops excruciating tenesmus (false urges) and severe pain in the projection of the bladder.

Acute urinary retention after surgery or childbirth is most often due to the lack of a habit of urinating in a horizontal position, and sometimes with outsiders.

Bowel emptying in each person is carried out individually: for some, daily bowel movement is considered normal, for others every 2-3 days. Changes in the normal bowel movement may result in diarrhea, constipation, or fecal incontinence.

Diarrhea is a common sign of diseases of the stomach, pancreas, intestines. It occurs with enteritis, enterocolitis, as well as a violation of the secretory function of the stomach and pancreas. This symptom is especially important for some infectious diseases: dysentery, cholera, toxicoinfections, etc.

Constipation - fecal retention in the intestines for more than 48 hours. Various functional factors are of great importance in the origin of constipation, especially in elderly and senile patients: eating easily digestible foods that are poor in fiber, reducing intestinal motor activity (atonic constipation) or vice versa, spastic condition of the colon (spastic constipation). In addition, since 3/4 of feces consists of water and 1/4 of solid waste, constipation can occur in a person who uses an insufficient amount of liquid.

In order to get an idea of the mode of allocation of a person, you should find out from him:

- how often he empties the bladder;
- if there are any features during urination that a nurse should know about;
- how often the urge to defecate;
- what time of day the bowel movement usually occurs;
- whether there are any features associated with bowel movements.

For example, if a patient who usually urinated every 2-3 hours suddenly started to urinate every 30 minutes, the nurse should report his observation to the doctor, since such increased urination may indicate a urinary tract infection. A decrease in the amount of fluid consumed leads to a decrease in the amount of urine, a change in its color and odor, which increases the risk of urinary tract infection.

Problems with urination can occur due to a change in the vertical position of the body that is familiar with this procedure. In addition, problems may be associated with the use of a diet (dry eating) or the inability (inability) to properly carry out hygiene procedures in the perineum. In the elderly and senile age, urinary incontinence and urinary tract infection (UTI) often occur due to changes in the urination system.

Incontinence is the loss of control over the discharge of urine from the bladder. This condition can be caused by the following factors:

- damage to the spinal cord and certain parts of the cerebral cortex, leading to the loss of the urge to urinate;
- weakening of the muscles surrounding the exit from the bladder;
- the use of certain drugs;
- difficulties associated with finding a toilet;
- difficulties associated with movement and making it difficult to use the toilet;
- the late response of the nurse to the patient's call;
- UTI.

In some cases, the causes of UTI are catheterization of the bladder, inadequate care of the urinary catheter, and insufficient hygiene of the perineum (in women). Symptoms of UTI can be:

- pain and burning when urinating;

- frequent urination with a small amount of urine;
- cloudy, concentrated (dark yellow), sharply smelling urine;
- flakes of mucus and blood in the urine;
- increase in body temperature.

**If signs of UTI appear, the doctor should be informed immediately.**

In some cases, physiological administration is carried out through special openings: urination through cis

toostoma (hole in the bladder), excrement of feces through the colostomy (hole in the colon) or ileostomy (hole in the ileum). A permanent catheter is inserted into the cystostomy by the doctor, through which urine is not controlled by the patient. In the presence of a colostomy, uncontrolled excretion of feces occurs in a special container - a colostomy receiver. Some patients with colo-, ileoil or cystostomy experience certain difficulties, most often of a psychological nature, associated with physiological functions.

### **8.3.2. Patient problems**

Patient problems may be related to the following factors:

- the inability to independently visit the toilet;
- the need to use the toilet at night;
- difficulties associated with the need to carry out physiological functions in an unusual position;
  - urinary or fecal incontinence;
  - violation of the usual physiological regimen;
  - risk of developing UTI;
  - the inability to independently carry out personal hygiene of the perineum;
    - unwillingness to openly discuss issues related to physiological functions;
    - the presence of a permanent external catheter;
    - the presence of a permanent Foley catheter;
    - the patient has an ileo-, coloil cystostomy;
    - fear of possible incontinence of feces, urine, etc.

### 8.3.3. Nursing Objectives

Discussing together with the patient the goals of upcoming care in case of violation of the need for physiological administration, the following points should be provided:

- the patient has the opportunity to visit the toilet in a timely manner;
- the patient has maintained the usual physiological regimen;
- the patient does not have fecal or urinary incontinence;
- the patient is not experiencing discomfort due to the need to carry out physiological departures in bed;
- the patient does not have UTI;
- the patient knows how to use an external catheter;
- the patient does not experience discomfort in connection with ileo-, colo-, cystostomyitis.

### 8.3.4. Nursing Content

Nursing interventions aimed at satisfying the patient's needs in physiological departures should be focused on achieving their goals.

In order to prevent the development of UTI, you should:

- timely and proper conduct of the perineum toilet;
- teach the patient or family members who care for him the proper technique for washing and using toilet paper (front to back);
- remind the patient to drink enough fluids;
- provide the patient with sufficient time to urinate;
- provide full care for the catheter and perineum in a patient with a permanent urinary catheter (Foley catheter);
- observe the correct location of the drainage bag and the tube connecting the bag to the catheter;
- timely empty (change) the drainage bag.

In case of urinary incontinence, it is recommended to use a catheter with an urinal, and to teach the patient and his family members the proper care of the catheter.

Women with urinary incontinence are encouraged to use diapers. But it is better in this case to call them differently, for example, “hygienic underwear”, since for many people the use of diapers is associated with childhood, they often feel a sense of awkwardness from such a recommendation.

Both women and men can be assigned a bladder training program that provides for regular, every 2 hours emptying.

Many psychological problems associated with physiological functions can be solved if the patient's self-esteem is respected and his safety and solitude are maintained during bowel movements and urination.

If the patient has a colostomy, the correct diet regimen and nature will help to avoid problems associated with violation of the bowel movement.

For bedridden patients, when submitting the vessel, they should be moved to a high position of Fowler, or the sister should be helped by the court, delivered to the nasal.

When giving the man an urinal, you must also give him a high Fowler position, to be able to either sit on the bed with his legs down or stand up to urinate.

Good nutrition for constipation can help solve the problem.

### **8.3.5. Assessing Nursing Results**

To achieve the goal while meeting the need for physiological administration, a daily systematic assessment of the results of care is necessary.

A daily assessment will be to determine the amount of urine released, its color, transparency, and frequency of urination. In addition, daily should be kept track of bowel movements, and in some cases - the nature of the stool.

Nursing care will be more effective if the patient can openly discuss their problems with the nurse.

## **8.4. NEED FOR MOVEMENT**

A lot of difficulties arise with the restriction of mobility associated with a particular disease. Health is not only physiological indicators of the body's vital activity, but also the vitality of the individual, a measure of adaptation to the environment, and therefore the degree of human freedom.

For a nurse, from these philosophical premises it follows that comprehensive encouragement, stimulating the patient to independence, independence are extremely important from the moral and ethical point of view and from the standpoint of modern nursing as a science.

Even a bedridden patient, to the best of his mental and physical abilities, should enjoy maximum freedom within his own bed. Most likely, if G. Heine, who suffered a painful incurable disease at the end of his life, were provided with modern nursing care, he would not say that his life at that moment was "mattress could."

#### **8.4.1. Initial assessment**

Assessing together with the patient the satisfaction of the need for movement, it is first of all necessary to determine how the limitation of mobility affects the independence of the person.

Restriction of mobility or complete immobility can be in one or more joints, one half of the body, both lower limbs, one limb (or part thereof). At the same time, there may be complete immobility when there is no movement of all limbs.

Limitations of mobility even for a short time (especially in older people) can lead to stiffness of the joints, which in turn aggravates the degree of immobility.

Dependence arising from the restriction of mobility entails a violation of the satisfaction of daily activities necessary for a person, such as eating food and liquids, physiological functions, communication (communicative activity) and maintaining an environment that is safe.

The following means of transportation can testify to the patient's limited mobility: walkers, crutches, a wheelchair, prosthetic limbs next to the patient.

In connection with the above, we recall the factors leading to the formation of pressure sores.

Pressure is the most known factor. Under the pressure of the human body, tissue is compressed between the surface on which it lies and the protrusions of the bones. This squeezing of vulnerable tissues is aggravated by heavy bedding, tight dressings or human clothing, including shoes. Under normal conditions, none of these factors leads to the formation of pressure sores, but in combination

with other factors (immobility, loss of sensitivity) they pose a risk of tissue damage.

Shear strength is the less studied cause of pressure sores. Destruction and mechanical damage to tissues can also occur under the influence of indirect pressure. It is caused by a shift in tissue relative to the surface, or by shearing.

Tissue shift can occur if a person moves down from the pillows on the bed or is pulled up to her head. This can cause the same deep tissue damage as direct pressure. In more serious cases, rupture of muscle fibers and lymphatic vessels may occur, which leads to the formation of deep bedsores. Deep damage can become noticeable only after some time, since the skin loc

Friction is a component of the shearing force, causing peeling of the stratum corneum of the skin and leading to a violation of its integrity. Friction increases with moisture. The most exposed to this factor are patients with urinary incontinence, excessive sweating, wearing wet and non-absorbent clothes or lying (sitting) on non-absorbing surfaces (plastic chairs, underlay oilcloths or polyethylene diapers, irregularly changing diapers). Forced immobility does not allow a person to independently change position, and therefore there is a risk of developing pressure sores.

The scale for assessing the risk of pressure sores, proposed by D. Norton, allows you to effectively identify patients who are most prone to the formation of pressure sores. Currently, nurses in many countries use this scale to assess the risk of bedsores in the elderly, including nursing homes. D. Norton conducted her research more than 30 years ago among elderly patients. Recently, thanks to research in this area, information on the factors causing the development of pressure sores has become more complete. To date, there are many similar assessment tools that have been tested on individual groups of patients, from those confined to a wheelchair as a result of a spinal injury (but otherwise healthy) and ending with seriously ill patients in the intensive care unit.

The scale proposed in 1985 by D. Waterlow is used more often today because it meets the requirements of a holistic approach to humans, which increases the effectiveness of risk assessment in different groups of patients. Use of these data is necessary for the initial assessment, analysis, planning of care, implementation and analysis of the results of nursing care. In connection with the urgency of the problem of bedsores in the Russian Federation, the OST

“Protocol for the management of patients. Pressure ulcers” (normative document within the framework of the healthcare standardization system in the Russian Federation, a federal level standard, which is mandatory for medical institutions of any departmental subordination). Risk factors for the development of pressure sores are presented in table.8-2.

**Table 8-2. Risk factors for bedsores**

<b>Reversible irreversible</b>	
<b>Internal risk factors</b>	
Exhaustion	Senile age
Mobility restriction	Neurological disorders (sensory, motor)
Anemia	Peripheral circulation
Inadequate intake of protein, vitamin C	
Dehydration	
Hypotension	
Urinary incontinence	
Skin thinning	
Anxiety	
Confusion	
Coma	
<b>External risk factors</b>	
Inadequate hygiene	Extensive surgery (lasting more than 2 hours)
Folds on bed or underwear	Spinal cord injury
Handrails for beds, patient fixation devices	The use of cytostatic drugs
Injuries to the spine, pelvic bones, abdominal organs	
Incorrect technique for moving the patient in bed	

A risk assessment is carried out by nursing staff on the Waterlow scale. To obtain information about risk factors, a patient or his relatives are interviewed, a patient is examined, and data from a card of an inpatient (outpatient) patient is taken into account.

### **Waterlow scale for assessing the stage and risk of bedsores**

1. Build: average - 0, above average - 1, obesity - 2, below average - 3.

2. Skin type, visual risk zones: healthy - 0, tissue paper, dry - 1, edematous - 2, sticky (fever), discolored, cracks, spots - 3.

3. Gender: male - 1, female - 2.

4. Age: 14-49 years - 1, 50-64 years - 2, 65-74 years - 3, 75-81 years - 4, older than 81 years - 5.

5. Special factors: smoking - 1, anemia - 2, heart failure, peripheral vascular disease - 5, terminal cachexia - 8.

6. Incontinence: full control - 0, periodic - 1, urination through a catheter and non-holding feces - 2, urinary and fecal incontinence - 3.

7. Mobility: full - 0, anxiety, fussiness - 1, apathy - 2, limited mobility - 3, inertia, wheelchair - 4, confined to the chair - 5.

8. Appetite: medium - 0, poor - 1, probe nutrition or only liquid - 2, parenteral - 3, anorexia - 4.

9. Neurological disorders: diabetes, multiple sclerosis - 4, stroke, motor and sensory disturbances, paraplegia - 6.

10. Surgical interventions (orthopedic, traumatological, i.e. lasting more than 2 hours) - 5.

11. Drug therapy: cytostatic drugs - 4, glucocorticoids, non-steroidal anti-inflammatory drugs - 5.

Waterlow scores are summarized, the degree of risk is determined by the following totals:

1-9 points - there is no risk of bedsores.

10 points - there is a risk.

15 points - a high degree of risk.

20 points - a very high degree of risk.

In motionless patients, the assessment of the risk of pressure sores should be carried out daily, even if the initial examination assessed the degree of risk as 1–9 points. The results of the assessment are recorded in the map of the inpatient (outpatient) patient. Anti-decubitus measures begin immediately in accordance with the recommended plan.

### **8.4.2. Patient problems**

Possible problems (both existing and potential):

- risk of developing or exacerbating existing pressure sores;
- dependence on the implementation of certain types of daily life activities (eating, physiological functions, the ability to dress and undress independently, maintain a safe environment, communicate, etc.);
- development of stiffness (ankylosis) of the joints;
- a state of depression caused by the loss of independence in the implementation of daily life;
- inability to determine the amount of adequate physical activity;
- lack of motivation to change physical activity;
- non-compliance with the regime of motor activity, etc.

### **8.4.3. Nursing Objectives**

When discussing with the patient (if possible) the nursing care plan in connection with impaired physical activity, one or more goals should be achieved:

- the patient can move around (using special devices, nursing staff and relatives, or independently);
- the patient can hold objects in his hand (a spoon, a toothbrush, etc.), carry out simple actions with their help;
- the risk of developing pressure sores is minimized;
- bedsores disappear (decrease);
- the patient is completely independent in daily activities;
- the patient observes the regime of motor activity;
- the patient is ready to discuss issues related to changes in motor activity;
- the patient determines adequate physical activity, etc.

### **8.4.4. Nursing**

Interventions performed by the sister on her own can significantly change the patient's condition.

Measures for the prevention of pressure sores are determined by the OST "Protocol for the management of patients. Pressure sores" approved by the Expert Council

veto on standardization of the Ministry of Health of the RF. This OST also regulates care plans for the risk of pressure sores in a recumbent and sedentary patient.

Care plan for the risk of pressure sores (in a lying patient)

**Nursing interventions.**

1. Conduct a current risk assessment for the development of pressure sores at least 1 time per day (in the morning) on the Waterlow scale.

2. Change the position of the patient at least 12 times during the day every 2 hours:

- 8-10 h - Fowler's position;
- 10-12 h - position on the left side;
- 12-14 h - position on the right side;
- 14-16 h - Fowler's position;
- 16-18 hours - Sims position;
- 18-20 h - Fowler's position;
- 20-22 h - position on the right side;
- 22-24 h - position on the left side;
- 0-2 hours - Sims position;
- 2-4 hours - position on the right side;
- 4-6 h - position on the left side;
- 6-8 hours - Sims position.

The choice of position and their alternation may vary depending on the disease and the condition of the patient.

3. Wash contaminated skin once daily.

4. Check the condition of the bed when changing position at least 12 times a day (every 2 hours).

5. To teach relatives the technique of the correct movement of the patient (lifting him above the bed).

6. Determine the amount of food eaten (the amount of protein is not less than 120 g, ascorbic acid 500-1000 mg per day) daily at least 4 times.

7. During the day, ensure the use of fluid at least 1.5 liters per day: 9-13 hours - 700 ml; 13-18 h - 500 ml; 18-22 h - 300 ml

8. As necessary, use foam pads under body areas that exclude pressure on the skin.

9. In case of urinary incontinence, change diapers every 4 hours. In case of fecal incontinence, change diapers immediately after defecation, followed by a gentle hygiene procedure.

10. If pain intensifies, consult a doctor.
11. Encourage the patient to change position in bed, to teach to use the crossbeams, handrails and other devices.
12. Massage the skin near the risk areas daily 4 times.
13. Train the patient in breathing exercises and encourage them to perform them throughout the day.
14. Observe skin moisture and maintain moderate humidity.
15. Coordinate the care plan with the attending physician (daily), get his signature.

The results of the activities of nursing staff in accordance with the care plan are recorded in the registration sheet for anti-decubitus measures (Appendix? 2 to OST) [28]. OST "Protocol of management of patients. Pressure ulcers "provides for the active participation of both the patient and his relatives in the prevention of pressure ulcers.

Nursing staff teaches the patient how to move, breathing exercises, principles of nutrition. An important component of the planned care is teaching patients how to independently monitor the condition of vulnerable parts of the body and relieve pressure at regular intervals. To increase patient autonomy, the following can be undertaken:

- communicate to the patient and carers the risk of developing pressure sores and indicate ways to prevent further damage;
- maximize the patient's ability to move independently, using auxiliary means: crossbars above the bed, handrails so that the patient can lift himself on the bed, chair or move to relieve pressure from the risk areas after certain periods of time;
  - provide devices and devices for relieving pressure;
  - analyze environmental factors that limit the patient's ability to move;
- conduct more effective treatment of any concomitant diseases that aggravate tissue damage, such as urinary and fecal incontinence.

In order for the patient to consciously participate in the prevention of pressure sores, he must obtain from the doctor and nurse full information about the amount of self-help and give an informed consent to participate.

The amount of material for obtaining informed consent and additional information for the patient and his family members are given in the "Patient Management Protocol. Pressure ulcers. "

The patient should know:

- risk factors for bedsores;
- goals of all preventive measures;
- the need to implement the entire prevention program, including manipulations performed by the patient or his relatives;
- on the consequences of non-compliance with the entire prevention program, including a decrease in the quality of life.

Additional information for relatives:

- places of possible formation of pressure sores;
- moving technique;
- features of placement in various positions;
- diet and drinking regimen;
- technique of hygiene procedures.

Relatives of the patient should also be informed of the proposed care plan.

The training will be more effective if, after discussing the care plan with the patient, a reminder is given to the patient's hands below.

## **MEMORY FOR THE PATIENT**

Prevention is the best treatment. In order to help us prevent the formation of pressure sores in you, you must follow these rules:

- eat enough (at least 1.5 liters) of the amount of fluid (the volume of fluid should be checked with your doctor) and at least 120 g of protein; such an amount of protein needs to be “recruited” from various foods of your favorite both animal and vegetable origin. So, for example, 10 g of protein contain: - 72.5 g of fatty cottage cheese;

- 50.0 g of low-fat cottage cheese;

- 143.0 g of condensed milk without sterilized sugar; - 42.5 g of Dutch cheese;

- 37.5 g of cheese of Kostroma, Poshekhonsky, Yaroslavl;

- 68.5 g of feta cheese from sheep's milk;

- 56.0 g of feta cheese from cow's milk;

- 78.5 g chicken eggs;

- 48.0 g of low-fat mutton;

- 49.5 lean beef;

- 48.5 g of rabbit meat;

- 68.5 g of pork;

- 51.0 g of veal;
- 55.0 g of chicken;
- 51.0 g of turkey;
- 57.5 g of beef liver;
- 64.0 g of flounder;
- 54.0 g of river perch;
- 53.0 g of halibut;
- 59.0 g of herring;
- 56.5 g of herring;
- 55.5 g of mackerel;
- 52.5 g perch;
- 57.5 g of cod;
- 60.0 g hake;
- 53.0 g of pike.

Protein is also found in plant foods. So, in 100 g of the product contains a different amount of protein: - wheat bread - 6.9 g; - pasta, noodles - 9.3 g; - buckwheat - 8.0 g; - semolina - 8.0 g; - rice - 6.5 g; - green peas - 5.0 g.

- consume at least 500-1000 mg of ascorbic acid (vitamin C) per day;
- move in bed, including from bed to chair, excluding friction; use aids;
- use an anti-decubitus mattress or chair cushion;
- try to find a comfortable position in bed, but do not increase the pressure on the ulcerated areas (bone protrusions);
- change your position in bed every 1-2 hours or more often if you can sit;
- go if you can; do exercises, bending and unbending arms, legs;
- do 10 breathing exercises every hour: a deep, slow breath through the mouth, out through the nose;
- take an active part in caring for you;
- if you have any questions, ask them to the nurse [28].

Relatives of the patient are taught the technique of moving him, hygiene procedures, skin care. They are given a memo.

## REMINDER FOR RELATIVES

What should you do?	Why would you do this?
Each time you move, any deterioration or change in condition, inspect the skin in the area of the sacrum, heels, ankles, shoulder blades, elbows, neck, large trochanter of the femur, the inner surface of the knee joints.	Getting the right information for care. If pale or reddened skin areas are found, notify the nurse immediately and begin preventive and therapeutic (as directed by the doctor) measures.
Do not rub vulnerable parts of the body. Wash vulnerable areas at least 1 time per day, if you need to follow the usual rules of personal hygiene, as well as with urinary incontinence, sweating. Use a mild cream or liquid soap. Make sure that the detergent is in place, dry this area of the skin. If your skin is too dry, use a moisturizer.	Friction causes maceration and skin degeneration, especially in old age. Frequent use of soap can harm the skin. Solid soap injures the skin. Careful drying carefully gives a feeling of comfort and inhibits the growth of microorganisms. Cracks in the skin contribute to the penetration of microorganisms into the tissues.
Use protective creams if indicated. (They treat pressure ulcers of the first degree and risk areas.)	Special creams create a water-repellent effect, prevent damage to the epidermis and are useful for preventing aging. At the same time, they impede excessive skin moisture.
Do not massage in the area of the bone protrusions.	Massage can disrupt the integrity of the skin.
Change patient position every 2 hours (even at night). The types of provisions depend on the disease and the condition of the particular patient. Discuss this with your nurse and doctor.	The duration of pressure is reduced. The patient movement schedule will ensure the correct alternation of positions. Fowler's position to plan for meals.
Change the position of the patient, lifting him above the bed.	Skin friction during movement and shear force factor are excluded.

Check the condition of the bed (folds, crumbs, etc.).	An elastic, non-creased bed reduces the risk of bedsores.
Avoid skin contact with the hard part of the bed.	The risk of bedsores due to pressure is reduced.
Use the foam in the case (instead of cotton-gauze and rubber circles) to reduce pressure on the skin.	Cotton-gauze circles are hard, quickly become dirty and become potential reserves of infection. Rubber circles squeeze the skin around the risk area, impairing blood circulation in this area. Foam rubber protects the skin more effectively from pressure.
Lower the head of the bed to the lowest level (angle not more than 30 °). Lift the headboard briefly to perform manipulations or feeding.	The pressure on the skin in the coccyx and sacrum decreases, crawling from the cushions is excluded (shearing force).
Avoid uninterrupted sitting in an armchair or wheelchair. Remind the patient of the need to change position every hour, examine vulnerable areas of the skin. Advise to relieve pressure on the buttocks every 15 minutes: lean forward, to the side, and lift up, leaning on the arms of the chair.	The risk of pressure sores is reduced. Points under pressure are shifting. Skills and skills of self-help are planned and developed.
Control the quality and quantity of food and fluid consumed.	A reduced amount of fluid leads to the release of concentrated urine, which contributes to irritation of the skin of the perineum. Inadequate nutrition (low protein, vitamins, fluids) contributes to the development of pressure sores.
Maximize the activity of your relative. If he can walk, encourage him to walk every hour.	Tissue damage is reduced, blood circulation is improved, and the patient's in-

	dependence is expanded.
Use waterproof diapers, diapers (for men - external urinals) for incontinence.	The risk of developing diaper rash and infection of pressure sores is reduced. Wet, contaminated skin causes itching, calculus, and infection [28].

In order to maintain mobility in the joints, to reduce the risk of contractures and muscle hypotrophy with limited mobility or complete immobility, nursing interventions should be directed to the musculoskeletal system. An effective element of nursing care is exercises within the limits of joint mobility, which can be either active (the patient independently performs movements) or passive (movements in the joints are carried out by a nurse or trained relatives).

In picture 8-3 shows the amplitude of exercise within the range of joint mobility. Passive exercises are extremely important for people with some degree of immobility. In order not to bore the patient, it is necessary to perform at least a minimum number of different types of exercises for individual groups of joints: shoulder - 4; elbow, wrist - 3; fingers and joints of the hand - 4; hip and knee - 3; ankle, foot joints - 2.

If the patient needs exercises for all (or most of) the joints, always start from the upper joints on one side, going down, then (if necessary) switch to the other side and start again from the upper group of joints.

- Exercise slowly and smoothly.
- Support each joint while moving.
- When doing passive exercises, do not go beyond the pain tolerance limit; observe the patient's facial expression.
- Follow proper body biomechanics.

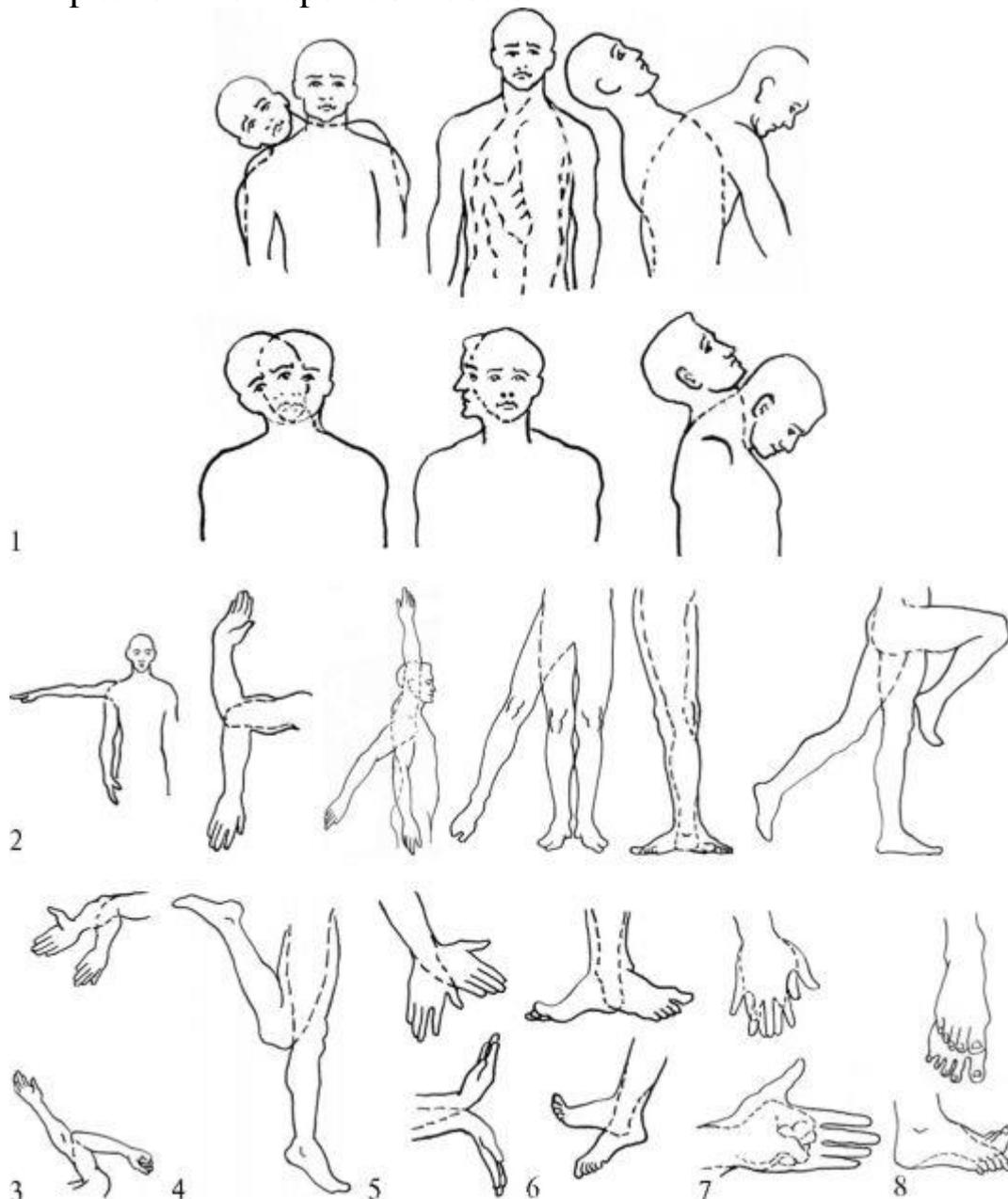
Complexes of exercises are performed regularly several times a day, not only in a medical institution, but also at home. Relatives should be taught the technique of conducting exercises within the limits of joint mobility. Before starting the exercises, the doctor explains to the patient the meaning of the upcoming exercises and obtains consent to carry them out. Before starting the exercise, the nurse must ensure that there is informed consent.

Joint mobility exercises

- Cervical spine, cylindrical joint:

μ Flexion: lowering the chin to the chest, angle 40 °, effect on the sternocleidomastoid muscle.

μ Extension: returning the head to normal position, angle 40 °, impact on the trapezius muscle.



**Picture 8-3.** The amplitude of the exercises within the mobility of the joints. 1 - cervical spine and torso (lateral flexion, rotation, flexion and over extension); 2 - shoulder and thigh (abduction and adduction, flexion and extension, turning outwards and inwards); 3 - forearm and hand (supination and pronation, flexion and extension); 4 - knee (extension, bending); 5 - wrist (abduction and adduction, back and palmar flexion, dilation and pinching of fingers together); 6 - foot (abduction and adduction, back and plantar flexion); 7 - fingers of the hand (dilation, fist compression); 8 - toes (flexion and extension, spreading)

μ Re-extension: backward deviation of the head, angle 40 °, impact on the trapezius muscle.

μ Lateral bending: tilting the head towards the shoulder, angle 40-45 °, impact on the sternocleidomastoid muscle.

μ Rotation: head rotation, 180 ° angle, effect on the sternocleidomastoid and trapezius muscles.

• Shoulder, spherical joint: μ Flexion: lifting the arm hanging along the body forward and up,

angle of 180 °, the impact on the biceps of the shoulder, beak-shoulder, deltoid, pectoralis major muscle.

μ Extension: lowering the arm to the hip, angle 180 °, involved the large circular muscle, the widest muscle of the back, three - the main muscle of the shoulder.

μ Re-extension: pulling the arm back without bending the elbow, angle 45-60 °, involved the large round, deltoid muscles, the latissimus dorsi.

μ Lead: raising the arm across the side above the head with the palm inward, angle 180 °, deltoid, supraspinatus muscles are involved.

μ Bringing: lowering the arm across the side and putting it as far behind the back as possible, angle 320 °, the pectoralis major muscle is involved.

μ Internal rotation: bending the arm at the elbow with rotation of the shoulder, lowering it until the thumb is behind the body, angle 90 °, involved the pectoralis major, major round, subscapularis, latissimus dorsi.

μ External rotation: bending the arm at the elbow and lifting until the thumb is pointing up and out, angle 90 °, the infraspinatus, the big round, deltoid muscles are involved.

μ Circumduction: hand description of a full circle, angle 360 °, involved deltoid, beak-shoulder, large round muscles, latissimus dorsi.

• Elbow, articulated and cylindrical joints: μ Flexion: raising the hand to the shoulder joint so that it is at shoulder level, angle 150 °, the shoulder, brachioradial muscles, biceps muscle of the shoulder are involved.

μ Extension: lowering and straightening the arm, angle 150 °, involved the triceps muscle of the shoulder.

μ Supination: turning the forearm and hand so that the palm of the hand is facing upward, angle 70-90 °, the arch support is involved, the biceps of the shoulder.

μ Pronation: turning the forearm so that the palm is facing down, angle 70-90 °, round and square pronators are involved.

• Wrist, condylar joint:

μ Flexion: lowering the palm to the inner surface of the forearm, angle 80-90 °, ulnar and radial flexors of the wrist.

μ Extension: bringing the fingers, palms and forearms to the same plane, angle 80-90 °, ulnar extensor of the wrist, short extensor of the wrist, long radial extensor of the wrist are involved.

μ Re-extension: lead the hand to the rear of the forearm as far as possible, angle 80-90 °, involved a short radial extensor of the wrist, a long radial extensor of the wrist, ulnar extensor of the wrist.

μ Abduction (radial flexion): abduction of the wrist in the direction of the thumb, angle up to 30 °, involved the radial flexor of the wrist, short radial extensor of the wrist, ulnar extensor of the wrist.

μ Reduction (ulnar flexion): abduction of the wrist in the direction of the little finger, angle 30-50 °, the ulnar flexor of the wrist, the ulnar extensor of the wrist are involved.

• Fingers, spherical and condyle joints:

μ Flexion: flexion of the hand into a fist, angle 90 °, involved the vermiform muscles of the hand, the rear, palmar and interosseous muscles of the hand.

μ Extension: straightening of the fingers, angle 90 °, extensors of the fingers are involved.

μ Re-extension: backward bending of the fingers as far as possible, angle 30-60 °, finger extensors are involved.

μ Lead: finger extension, angle 30 °, dorsal interosseous muscles are involved.

μ Reduction: bringing fingers together, angle 30 °, palmar interosseous muscles are involved.

• Thumb, saddle joint:

μ Flexion: approaching the thumb to the palmar brush surface, angle 90 °, a short flexor is involved

thumb up. μ Extension: retraction of the thumb from the palm, angle 90 °,

involved long and short extensors of large finger.

- μ Lead: pulling the thumb from the palm to the side, angle 30 °, involved the muscle that moves the thumb.
- μ Reduction: approaching the thumb to the palm, angle 30 °, involved the muscles leading the thumb.
- μ Contrast: touching with the thumb to the tip of each finger of the same hand, involved muscles that oppose the thumb and little finger.
  - Hip, spherical joint:
    - μ Flexion: lifting the leg forward, angle 90-120 °, involved the large lumbar, iliac, iliac-lumbar, tailor muscles.
    - μ Extension: lowering of the leg, angle 90-120 °, involved the gluteus maximus, semitendinosus, semi-membranous muscles.
    - μ Forced flexion: abduction of the leg, angle 30-50 °, involved the gluteus maximus, semitendinosus, semi-membranous muscles.
    - μ Lead: leg lift to the side, angle 30-50 °, middle and small gluteal muscles are involved.
    - μ Adduction: lowering of the leg, angle 30-50 °, involved long, short and large adductors.
    - μ Internal rotation: turning the foot inward towards the other leg, angle 90 °, involving the middle and small gluteal muscles, tensor of the wide fascia, thighs.
    - μ External rotation: turning the foot outward from the other leg, angle 90 °, involving the internal and external obturator muscles.
    - μ Circumduction: foot movement in a circle, involving the large lumbar, large and middle gluteal, large abducting thigh muscles.
  - Knee, condylar joint:
    - μ Flexion: lifting the heel to the back of the thigh, angle 120-130 °, involved the biceps femoris muscle, semi-tendon, semi-membranous, tailor muscles.
    - μ Extension: lowering the leg to the floor, angle 120-130 °, involved the rectus femoris muscle, lateral, medial, intermediate and broad thigh muscle.
  - Ankle:
    - μ Back flexion: foot movement, in which the fingers rise upward, an angle of 20-30 °, involves the anterior tibial muscle.
    - μ Plantar flexion: foot movement in which the fingers fall down, angle 45-50 °, gastrocnemius, soleus muscles are involved.
  - Foot, flat joint:
    - μ Inversion: turning the sole inward, angle less than 10 °, the anterior and posterior tibial muscles are involved.

μ “eversion”; turning the sole outward, angle less than 10 °, involved long and short peroneal muscles

- Toes:

μ Bending: lowering the fingers down, angle 30-60 °, involved finger flexors, vermiform muscles of the foot, short flexor of the thumb. μ Extension: extension of the fingers, angle 30-60 °, involved

long and short extensors of the fingers. μ Lead: finger extension, angle less than 15 °, involved

abductor muscle of the thumb, dorsal interosseous the muscles.

μ Reduction: bringing fingers together, angle less than 15 °, involved the muscle leading to the thumb, plantar interosseous muscles.

The classification is based on materials provided by the Pacific University of Azusa (USA).

### **Memo for teaching relatives how to perform exercises within joint mobility**

- A set of exercises for the shoulder joints:

μ with one hand take the patient’s wrist (his hand should lie palm down), and with the other support him under the elbow;

μ raise the patient’s hand and extend it (flexion in the joint);

μ stretch the patient’s hand to the side, palm down (abduction), return it to its original position (adduction);

μ put the patient’s palm on the opposite shoulder (horizontal adduction);

μ raise the patient's elbow so that it is at the same level with the shoulder, raise and lower his forearm to a horizontal plane;

μ repeat all exercises 5 times.

- A set of exercises for the elbow joints:

μ with one hand take the patient’s wrist, put the other under the elbow;

μ bend the patient’s arm in the elbow so that the hand rests on the shoulder of the same name (flexion), straighten the arm so that it touches the hip (extension);

μ turn the hand of the straightened arm inward (pronation), then turn it outward (supination);

μ repeat all exercises 5 times.

- A set of exercises for the wrist joints:

μ with one hand take the patient's wrist and the other with his fingers;

μ raise the patient's hand above the bed;

μ bend the brush down (bending), straighten his wrist (extension), then move the brush back (overbending);

μ straighten the patient's wrist, move it from side to side (abduction and adduction);

μ Hold the patient's wrist so that the hand hangs down freely and the thumb is forward. Bring the hand forward so that the patient's thumb is directed upward (radial flexion), then move the hand back so that the thumb is directed downward (ulnar flexion);

μ repeat all exercises 5 times.

• A set of exercises for the fingers:

μ with one hand take the patient's wrist and the other with his fingers;

μ bend the patient's fingers into a fist so that the thumb is above the other fingers (flexion). Straighten the patient's hand, one after the other, unclenching his fingers (extension);

μ Grasp the patient's thumb with one hand and grip the other fingers with the other. Shift your fingers one at a time from one hand to another, spreading and again bringing them together;

μ press the patient's thumb against his palm and return to the starting position (abduction and adduction);

μ press the thumb to the tip of each of the other fingers (contrasting thumb);

μ repeat all exercises 5 times.

• A set of exercises for the hip and knee joints:

μ put one hand under the patient's knee and the other under his ankle joint; μ bend the patient's knee and press it against the abdomen (flexion joints);

μ Flatten the patient's knee to extend the knee joint. Lower his foot on the bed (extension of the joints);

μ take the patient's leg to the side (abduction), return the patient's leg to its original position (adduction);

μ turn the patient's leg inward and then outward (rotation in the hip joint);

μ repeat all exercises 5 times.

• A set of exercises for the ankle joints:

μ put one hand under the patient's ankle joint and take his foot with the other;

μ pull the patient's foot to the lower leg (back flexion), and then from the lower leg (plantar flexion);

μ turn the patient's foot inward (adduction inward) and then outward (abduction outward);

μ repeat all exercises 5 times.

- A set of exercises for the toes:

μ put one hand under the patient's foot and cover the fingers with the other;

μ bend the patient's toes down (bending), and then straighten them up (extension);

μ holding two fingers of the patient together, separate each finger as you did with the fingers of your hands;

μ repeat all exercises 5 times.

Immobility can cause complications in various body systems. To reduce the risk of cardiovascular complications, you should:

- maximize patient self-care;
- recommend that the patient use elastic stockings;
- regularly change the position of the patient (horizontal - sitting with legs down);
- instruct the patient to move in bed while exhaling and not to hold his breath;
- prevent constipation;
- try to avoid overworking the patient.

The risk of complications in the respiratory system can be reduced by the following interventions:

- offer the patient to periodically occupy a position on his side (if there are no contraindications);
- prevent flatulence;
- ensure regular emptying of the intestines and bladder;
- remind the patient of the need to change the position of the body and breathe deeply every hour;
- offer sufficient fluid (avoid dehydration);
- apply vibration massage (in the absence of contraindications and after consulting a doctor);
- apply (if possible) postural drainage (in the absence of contraindications and after consulting a doctor).

When a patient develops problems in the psychosocial sphere, the following interventions are recommended:

- activate the patient as much as possible;
- note any progress in recovery, restoration of self-care functions, etc .;
- provide the patient (if necessary) with glasses, a hearing aid, etc .;
- put a clock in the room and hang a calendar; help the patient navigate during the time;
- provide the most comfortable environment;
- involve the patient in the process of treatment, care and rehabilitation;
- Encourage communication with family, colleagues, friends, etc.

Patients who are completely dependent in their movements on other people have a high risk of developing UTI, especially with careless hygiene procedures of the perineum.

Often patients have problems due to insufficient or excessive physical activity. Inadequate physical activity can be one of the serious risk factors for many diseases and their exacerbations (see chapter 10).

#### **8.4.5. Assessing Nursing Results**

The current and final assessment of the results of care is considered positive if:

- no bedsores;
- the skin is not damaged;
- existing bedsores heal quickly;
- muscle tone saved;
- joint contracture is absent;
- joint stiffness is adequately restored;
- there are no blood clots in the peripheral veins, there are no signs of pulmonary embolism;
- the patient is aware of the possible effect of bed rest on the cardiovascular system;
- there is no respiratory tract infection;
- there is no significant loss of body weight;
- daily stool (or regular);
- the amount of urine is not less than 30 ml / h (in the presence of a permanent catheter);
- orientation saved;
- psychological adaptation and physical activity are adequate.

The current daily assessment of the effectiveness of anti-decubitus measures in a hospital setting is recorded on a specially designed form “Anti-decubitus registration sheet”.

## **8.5. NEED FOR DREAM AND REST**

For a long time, researchers in many countries have been studying the phenomenon of sleep. Although there is no complete answer to the question “what is a dream?” Today, thanks to the EEG, data have been obtained to identify several stages of sleep. It is believed that the functions of sleep are to process the information received and restore the energy expended.

A sufficient sleep duration for an adult is 3-12 hours (an average of 7.25 hours), although it is individual. If a person does not get enough sleep, debt for sleep accumulates, but can be compensated by a longer sleep. Drowsiness, felt as a result of lack of sleep, is extremely dangerous, since the risk of injury to both the person himself and those around him increases.

The negative effect of insomnia can affect even with a lack of sleep for 2-3 hours.

According to statistics, annually lack of sleep is the cause of more than 100 thousand accidents on the roads, in which 71 thousand are injured, and 1.5 thousand die. Most often, victims are under the age of 20.

Paradoxically, too long sleep also does not contribute to well-being. It is possible to note this fact: some people do not sleep for a long time or sleep 2-3 hours a day, but at the same time they feel good.

Even if a person does not sleep, working capacity and drowsiness can appear and disappear through every 100 minutes. As a rule, most people do not notice this, although some feel anxiety every 100 minutes.

To maintain performance, both physical and mental, a person must rest properly. Rest is the art of relaxation. In modern conditions, when the pace of life has increased significantly, many people have forgotten how to relax. It should not be taken literally that rest is lying on the couch (although such a rest is also possible). Sport, reading, art, a change of occupation is also relaxation, but active. The art of yoga and meditation also allows a person to quickly feel a surge of strength, clarity of thought.

### 8.5.1. Initial assessment

In people of different ages, the duration and quality of sleep are different. The chronology of sleep changes throughout life. So, adolescents and young people need more time to sleep than adults, since the duration of stages III and IV of sleep (deep sleep) is longer. By the way, it is during these stages that children produce the maximum amount of growth hormone ("grow in a dream"). By the age of 15, the average duration of sleep is 7-8 hours. At a young age, people usually sleep soundly, however

they may complain of sleep disturbance. Elderly people have less sleep and wake up more often.

Studies conducted in the USA indicate that at the age of 75 people spend more time in bed (they do not have to sleep), they want to lie down during the day. By the age of 85, they often use sleeping pills, complain of sleep disturbances, so they should be serious about their problems.

Many factors influence sleep quality. So, depending on the biological rhythm, some people are "larks" (they prefer to go to bed early and get up early), and some are "owls" (they can fall asleep no earlier than 1-2 hours at night, wake up late). In violation of the usual rhythm of sleep, they have serious problems.

Food or drink can also affect sleep quality. Some people cannot fall asleep hungry, others prefer the last meal 3-4 hours before bedtime. Tea, coffee can also interfere with falling asleep (and some people have the opposite reaction: strong coffee causes drowsiness).

The quality of sleep is affected by snoring, from which snoring itself suffers, often waking up, as well as those who are nearby. You should know that snoring is dangerous for the life of a snoring person, since snoring can cause the so-called sleep apnea syndrome - a temporary stop of breathing in a dream. With snoring, the risk of developing a stroke and myocardial infarction increases. Considering snoring more often in the supine and abdominal position, snoring should be carefully moved to the position on the side.

The quality of sleep is influenced by mood, worries, and worries. Dreams that arise in the stage of REM sleep can also negatively affect a dream: a person wakes up against a background of disturbed dreams. If you wake a person who is in the stage of REM sleep, he will for a long time retain a feeling of weakness and fatigue.

Almost everyone has dreams, but not everyone remembers them. Immediately after waking up, 80% of people remember them, after 5 minutes of wakefulness, most remember individual fragments of sleep, and after 10 minutes they usually forget sleep.

The comfort of the bed, sleepwear, and the presence of another person (s) in the room are factors that determine the quality and duration of sleep. Fresh air, comfortable temperature (about 18 ° C) can improve the quality of sleep. Body temperature century is significantly reduced during sleep and becomes minimal from 2-6 hours in the morning. Therefore, at a room temperature below 18 ° C, a person wakes up from the cold and cannot fall asleep until he is warm.

A high bed with which a person (especially the elderly) is afraid to fall, noise, bright light, reading exciting detective stories before bedtime or watching exciting programs can significantly impair the quality of sleep. Many people sleep well, despite the noise and light, in the usual place for them, but do not fall asleep well even in comfortable conditions in the unusual.

The duration of sleep, as a rule, does not depend on the length of daylight: in white and in polar nights, the duration of sleep is the same.

When conducting an initial assessment of the satisfaction of the patient's need for rest, it should be borne in mind that this assessment is always subjective. But still you need to find out:

- what time a person usually sleeps;
- what factors affect sleep quality;
- whether he sleeps well;
- whether there are difficulties with sleep for a long time or at the moment;
- whether additional pillows, blankets, etc .;
- Does the patient take sleeping pills?

### **8.5.2. Patient problems**

Patient's problems with unmet need for sleep are both real and potential.

Many people who fall into a hospital cannot fall asleep due to the changing environment for them. It is important for nursing staff to understand the cause of such violations:

- the need to sleep on a hospital bed;

- unusual microclimate in the room (hot, stuffy, cold);
  - noise, bright light, darkness (some people are afraid of the dark);
  - a change in the usual activities of a person preceding sleep at home (walking, showering, sex, etc.);
  - the need for a forced position during sleep (depending on the specific disease or injury);
  - unfamiliar environment (especially on the first night of hospital stay);
  - snoring;
  - change in the usual biological rhythm (the need to observe hospital mode);
  - pain (in the presence of pain, about 96% of patients suffer from sleep disturbance due to inadequate analgesia at night);
  - certain diseases accompanied by sleep disturbance.
- Rest problems, as a rule, are associated with a violation of the stereotype of life that is familiar to a person.

### **8.5.3. Defining Nursing Care Goals**

When discussing with the patient the actual or potential problems associated with sleep and rest, realistic goals should be formulated for both the patient and the nurse. For example: “the duration of sleep at night is at least 7 hours,” “the patient realizes the need to refuse to watch the evening news,” etc.

### **8.5.4. Nursing**

Depending on the causes of sleep and rest problems, the nurse’s intervention is as follows:

- creating a patient comfortable bed conditions: optimal bed height, high-quality mattress, a sufficient number of pillows and blankets;
- providing a comfortable microclimate in the ward and ward;
- providing comfortable conditions to the patient, who, due to the disease, takes a forced position;
- familiarization of the patient with the location of the toilet, nursing post, existing means of calling a nurse;
- providing the necessary illumination for a particular patient in the ward at night;

- moving the patient to another position with severe snoring;
- reduction of patient anxiety associated with unfamiliar surroundings, upcoming examinations or surgery;
- discussion with the doctor of night analgesia;
- creation of conditions for adequate rest.

Regardless of the reason that caused the sleep disturbance, it is better to let the person sleep until he wakes up himself, because even a slight lack of sleep will affect his well-being during the day. Naturally, you can follow this recommendation if you do not have emergency procedures or examinations planned for the morning.

Medicines prescribed by a doctor can also improve sleep quality. It is very important to give them on time. When prescribing both analgesic and sleeping pills, analgesic drugs should be taken 15-20 minutes earlier than sleeping pills.

#### **8.5.5. Assessing Nursing Results**

Sleep assessment is always subjective. Sometimes a person says that he did not sleep all night, but in reality he did sleep (proved using EEG).

However, when conducting a current or final assessment of the results of care, one should not ignore the patient's complaint of insomnia and fatigue, it is necessary to re-examine the possible causes of sleep disturbances and consult a doctor.

### **8.6. NEED FOR CLOTHES AND PERSONAL HYGIENE**

For many centuries, people have been paying particular attention to personal hygiene. In each historical period, objects and means used to care for skin, hair, nails, and teeth are constantly being improved.

Currently, most people have a high interest in clothing, their appearance. The choice of clothes gives people pleasure. Already in childhood, the child is taught hygiene skills: brushing your teeth, washing your face, washing your hands, head, combing hair, etc. As a rule, the child knows that personal hygiene is carried out in the bathroom (shower) room (if there is one), and the change of clothes, especially underwear, should not take place in front of other people (except for relatives).

Optimally, when the rules of hygiene are respected by all people. Neatness and fit, carefulness in clothes and accuracy in appearance impress others. Untidiness, unpleasant odor, pediculosis discredit a person.

Most people wash themselves regularly, although the frequency of hygiene procedures is different: from 1-2 times a day to 1 time per week or more.

- Washing in a bathtub or shower, in addition to a feeling of freshness and vigor, helps prevent the growth of microorganisms on the skin, including pathogens of diseases such as hepatitis B and HIV infection. In order to prevent these diseases when another person's body fluids enter the body, immediate full hygienic treatment of the skin should be recommended.

- Hand washing is a necessary component of a person's daily personal hygiene. As a rule, hands are washed with hot, warm or cold water using lumpy or liquid soap.

It should strive to use disposable paper towels, especially outside the home. Electric hand dryers in public places cannot be considered completely safe, since pathogenic microorganisms can get into clean hands with hot air. Dry skin on the hands requires special care, since microcracks of the skin are the entrance of the infection.

- Care for the perineum (especially in women) is important both for maintaining health, and for maintaining comfort, preventing unpleasant odors. Women should perform this procedure from front to back, especially after bowel movements. Microbiological studies indicate that most often the causative agents of cystitis (inflammation of the bladder) in women are microorganisms that are constantly present in the colon. With incorrect care of the perineum, they can enter the urinary tract through the urethra.

- Hair care (washing and combing) is necessary to maintain good health. Combing is carried out daily and repeatedly, and the frequency of washing depends on the contamination and type of hair.

- Nail care is to maintain cleanliness (especially under the free edge of the leg-foot plate) and the health of the skin around the nail bed, as burrs and cracks can serve as entry gates of infection. The length of the nails, manicure, nail polishing is a matter of taste.

- Dental and oral care starts from the age of two, when the child is taught to brush his teeth first with the help of adults. To avoid inflammation of the gums and caries, a person should regularly and

correctly brush his teeth and maintain oral health. Toothpastes containing fluoristat protect teeth from caries and gums from inflammation. It is imperative to apply the correct brushing technique, use special threads to clean the interdental spaces from food debris. Ideally, if a person removes food debris between his teeth after each meal. It is recommended to rinse your mouth with water or special solutions.

- Clothing is a means of non-verbal communication. Dressing in one way or another, a person self-expressed. With good health, he contains clothes in perfect condition, with a worsening condition, the patient is careless in clothing. A complete dependence on the choice and putting on clothes, personal hygiene is inevitable in infancy and early childhood. Full independence occurs in adolescence and remains throughout adulthood (except in situations of reduced physical and mental abilities in old age). Dependence in meeting these needs in adults is observed only with diseases and injuries.

In addition to the simple skills of putting on and taking off clothes, a person should pick it up according to the season. Clothing directly adjacent to the skin is soaked with sweat, sebaceous glands, desquamous epithelium and microorganisms present on the skin. In this regard, a person must change clothes in a timely manner.

### **8.6.1. Initial assessment**

Knowing a person's individual habits is a prerequisite when drawing up a care plan. Finding him in the unusual conditions of a medical institution, a person feels uncomfortable due to a violation of the usual routine of life, some patients persistently strive to ensure that the familiar lifestyle is maintained and guaranteed.

When conducting an initial assessment of the patient's condition, one should find out:

- what habits a person has in personal hygiene and clothing;
- what factors influence these habits;
- when and how often a person is used to taking a bath (shower), washing his hair;
- what a person knows about the impact of personal hygiene and clothing on health, how he relates to this information;
- Does the person have any long-term difficulties, as he usually copes with them;

- what problems a person has with regard to personal hygiene and the choice of clothing is presently available, and what may appear.

Questions should not always be formulated exactly as they are stated above. Often information can be obtained indirectly when assessing patient satisfaction of other needs. In some cases, the degree of satisfaction of this need is obvious even without a survey, but this does not mean that it is not necessary to discuss these issues with the patient and to provide nursing care.

For an initial assessment of a person's needs for personal hygiene and clothing, age is taken into account, and for these reasons:

- in adolescence there is increased sweating, especially in the axillary areas; often there is acne on the skin of the face (acne); oily hair; clothes, hairstyle, cosmetics - a way of expressing individuality, independence, sexuality;

- in adulthood, a certain routine of work and rest is established, habits associated with this arise; with the help of clothes, hairstyles and cosmetics, a person often expresses his image;

- in old age, dry skin is often observed, there are difficulties with bathing, caring for nails on hands and feet, putting on clothes due to the progression of physical weakness

When conducting the initial assessment, you should pay attention to the following:

- disorders of physical condition associated with age;
- individual characteristics of the physical condition;
- color and skin lesions, areas of peeling and weeping;
- clean hands and nails;
- condition of the oral cavity (dryness, smell), teeth or dentures, the regimen and technique of brushing;

- hair condition: type (dry, oily), hairstyle, presence of dandruff, pediculosis;

- state of clothing: style, style, appropriateness of clothing, its neatness, perfume, cosmetics, convenience of shoes;

- woman's awareness of the rules of personal hygiene, including during menstruation;

- Awareness of men about the peculiarities of hygiene of the foreskin.

### **8.6.2. Patient problems**

Dissatisfaction with the need for choosing and putting on clothes, personal hygiene causes a variety of problems and requires sensitivity, empathy, inventiveness from the nurse. If it is not possible to solve all existing problems, then we must strive to at least reduce their impact on the patient.

Problems most often arise when limiting the patient's mobility, lack of limb, involuntary hand movements, decreased function of the sensory organs, unconscious state, and mental disorders. Nursing staff should pay special attention to patients suffering from the above diseases.

Difficulties in oral hygiene arise:

- in case of violation of fluid and food intake;
- with exhaustion;
- if necessary, breathe through the mouth (impossibility of nasal breathing);
- with inflammatory processes in the oral cavity;
- when using drugs that cause dry mouth.

Potential problems associated with the unmet need for hygiene include the risk of infection of pressure sores and other wounds (including postoperative), intestinal infections, the occurrence of pediculosis, UTI. People, who do not have mental disorders, as a rule, very keenly experience their dependence in solving personal hygiene problems and choosing clothes. Even partial dependence (the inability to bend over to put on socks or shoes, difficulty fastening a zipper or buttons, etc.) makes some people nervous and suffering.

Dependence on putting on and taking off clothes can lead to a potential problem of hypothermia or overheating.

Problems can be formulated as follows:

- the patient refuses to take help with washing;
- the patient does not know how to brush his teeth;
- the patient does not know how to fasten buttons on the shirt with one hand;
- the patient is not able (afraid) to cut toenails correctly.

### **8.6.3. Nursing Goals**

The tasks of nursing care in the event of a person's need for personal hygiene and clothing are as follows:

- Prevent potential problems from becoming real;
- reduce patient dependence;
- create the conditions for satisfying personal hygiene needs.

The goals can be formulated as follows:

- the patient agrees to accept assistance with washing;
- the patient will be able to wash himself after 2 days;
- the patient will be able to independently put on and fasten the trousers after 7 days;
- the patient understands the need to wear shoes without heels;
- the patient learns (will not be afraid) to cut toenails;
- the patient does not have an oral infection;
- the patient will not have UTI.

#### **8.6.4. Nursing**

Taking into account individual habits, one should fully encourage a person's desire to independently carry out personal hygiene, even if it takes more time than if all the measures were carried out by a nurse. This will allow a person to maintain self-esteem and self-esteem. After assessing the physical abilities of a person, you should convince him to perform certain hygiene procedures and dress himself.

#### **8.6.5. Assessing Nursing Results**

Assessing the results of nursing care, you should make sure that the goals recorded in the care plan are achieved, potential problems have not turned into real ones, and the patient has become less dependent (or completely independent) in the implementation of hygiene procedures, choosing and putting on clothes.

### **8.7. NEED FOR SUPPORTING NORMAL BODY TEMPERATURE**

It is well known that a person maintains a certain body temperature, different from the ambient temperature. Under normal conditions, people do not feel the temperature of their body due to the center of thermoregulation, which provides a balance between heat production and heat transfer.

When the ambient temperature rises or falls, it becomes hot or cold, which prompts a person to take some action (open or close a window, close the curtains, undress or dress, turn on or off the heater, etc.).

To keep warm, a person does vigorous physical exercises (running on the spot, jumping, rubbing his palms, etc.). Thus, by his behavior, he ensures the constancy of the normal temperature of his body.

The human body also regulates heat production and heat transfer using physiological mechanisms, because most biochemical reactions occur only at a certain body temperature. With significant fluctuations in body temperature, the work of the nervous, endocrine and other body systems is disrupted.

Body temperature depends on age: in newborns it is 36.8-37.2 °C, in older people it can be lower than normal and is subject to rapid changes in case of illness, extreme heat or cold. In women, after ovulation and 2 days before the onset of menstruation, an increase in body temperature is noted, which, as a rule, is not noticed?

With a particular disease, body temperature can increase, in this case a person of any age can become dependent, but most often a person depends on others while maintaining a constant body temperature in childhood and in old age.

Factors affecting the maintenance of normal body temperature:

- intense physical activity is accompanied by the formation of heat. Body temperature is maximum during the period of greatest physical activity, minimum during sleep;

- hormonal levels also affect body temperature. In addition to female sex hormones, thyroid hormone thyroxine also affects body temperature. With hyperthyroidism, accompanied by an increase in thyroxine level and accelerated metabolism, an increase in body temperature is observed, hypothyroidism is accompanied by a decrease in body temperature;

- Large doses of caffeine, smoking (nicotine) can cause an increase in body temperature. Alcohol, on the contrary, lowers body temperature by increasing heat transfer;

- eating, especially protein, enhances metabolism and raises body temperature (a starving person freezes faster);

- at different times of the day, body temperature is different: at 5 p.m. - 8 p.m. it is maximum, at 2.00-6 a.m. (8.00) h it is minimal. Moreover, in people who are accustomed to work at night and sleep

during the day, the time of maximum and minimum body temperature changes accordingly;

- stress, agitation, anxiety, anger contribute to an increase in body temperature, and apathy and depression are accompanied by its decrease;

- religion, national customs dictate the features of clothing and hats that affect body temperature;

- a significant change in ambient temperature can affect a person's body temperature;

- moving a person from one climate zone to another causes his acclimatization, which may be accompanied by temperature fluctuations.

### **8.7.1. Initial assessment**

During the initial assessment, the nurse should find out:

- how the patient perceives his body temperature at the moment (comfortable, high, low, etc.);

- what factors influence the change in the patient's body temperature;

- what the patient knows about the behavior and physiological mechanisms that affect body temperature;

- are there potential problems of hyperthermia, hypothermia, or frostbite;

- what importance does a person attach to adequate (rational) nutrition, comfortable clothing to maintain normal body temperature;

- whether there are financial difficulties that violate the ability to maintain normal body temperature;

- how long have problems in this area, how does the patient cope with them;

- Are there any problems at the moment?

An objective criterion for the correspondence of a person's body temperature to normal is its measurement.

### **8.7.2. Patient problems**

Information obtained after measuring body temperature, during observation, from a conversation with the patient or his relatives, allows you to identify actual or potential problems of thermoregulation. Problems arise if there is a risk of an increase or decrease in

temperature. Their occurrence can be caused by dependence in maintaining normal body temperature or by changes in the environment and habitual way of life. The patient in these situations depends on the nurse (at the hospital) or on relatives (at home).

An increase in body temperature (fever) has three periods.

I period of fever. The temperature rises to 37.5 ° C, accompanied by a feeling of chills, the patient "curls up," which reduces heat loss. Despite the fact that the onset of a fever is sudden, sometimes a person feels its precursors: headache, decreased appetite, drowsiness, and fatigue.

The patient's problems in the first period of fever can be, for example, the inability to take refuge on their own, to provide themselves with warm drinks, etc.

II period of fever. The temperature stabilizes at a high level. The patient feels dis-comfort, he is hot, perspiration begins. A man takes off his clothes, throws off the blanket and lies almost without moving. Due to perspiration, thirst occurs, dehydration can quickly develop. A prolonged decrease in appetite in this period leads to loss of body weight, drowsiness, weakness (potential problems). A person becomes irritable, restless, rushes about in bed, complains of a headache, photophobia. Drowsiness can lead to disorientation in time: it seems to the patient that time is too slow. There may be hallucinations and delusions in this period of fever.

The patient's problems in the II stage of fever may include reluctance to use a lighter blanket or clothes, lack of appetite, lack of knowledge of the principles of adequate nutrition for fever, inability to change clothes (underwear, bedding), risk of injury due to delusions (hallucinations), risk of dehydration, etc. .d.

III period of fever. Temperature decreases (critical or lytic).

Inadequate nutrition, inadequate physical activity, etc. can become a patient's problems in the III period (with a lytic decrease in body temperature). With a critical drop in body temperature, the patient's problems may be a high risk of injury, the inability to change underwear (bedding), and to provide yourself with enough fluid and etc.

### **8.7.3. Nursing Objectives**

Nursing care is aimed at the following tasks:

- prevention of further increase in body temperature;

- decrease in body temperature to normal (within the framework of nursing competence);
- prevention of dehydration;
- injury prevention;
- relief of discomfort;
- restoration of independence in self-care;
- prevention of weight loss, etc.

#### **8.7.4. Nursing**

Nursing interventions should be based on knowledge of the mechanisms of heat transfer and heat formation.

In the I period, accompanied by a spasm of blood vessels of the skin and a feeling of cold, nursing interventions are aimed at warming the patient (clothes, blanket, hot drinks).

In addition to solving the actual and potential problems of a particular patient, the medical sister performs generally accepted procedures that make the patient feel better with fever.

In the II period, accompanied by an increase in heat production, nursing interventions increase the possibility of heat transfer. This is achieved by increasing the radiation path (undressing a person, replacing a blanket with a light sheet), creating convection capabilities (using a fan that increases the speed of air movement in the immediate vicinity of the human body), increasing the pathways (rubbing the skin with a sponge, wrapping in a damp sheet, applying a bubble with ice to the head, etc.). Taking a warm bath also helps lower body temperature (cold water can cause severe tremors and fever). Given that heat production increases with physical activity, with hyperthermia, the patient is recommended to relax and sleep more.

Nursing assistance is also needed when performing personal hygiene, dressing and undressing procedures. Particular attention should be paid to the care of skin folds and external genitalia.

To prevent dehydration and discomfort associated with dry mouth, frequent drinking, rinsing the mouth and mandatory brushing of teeth (at least 2 times a day) are recommended.

If the II period of fever lasts more than 2 days, you need to convince the patient to eat, despite the lack (loss) of appetite. Due to the fact that at high body temperature, the metabolic rate is significantly increased, starvation will lead to loss of body weight. Food should be balanced.

In the II period (at a body temperature above 38 ° C), the patient can not walk, so he is dependent on the nurse during urination and bowel movements.

Given the state of a febrile patient, one should treat his requests with understanding, taking into account possible time shifts. The nurse should not wait for requests, it is necessary to be punctual, especially in relation to the patient's meal time and his physiological departures.

The air temperature in the ward is unlikely to be equally comfortable for all patients: for some it will seem normal, for others it will be high, for the third it will be low. Planning and Caring for

for elderly and immobile patients, it must be remembered that they often freeze, so if necessary they need to be covered additionally, especially at night.

A nurse who is at work and is taking action must remember that when she is hot, patients can be cold.

### **8.7.5. Assessing Nursing Results**

Care is considered successful if the following conditions are met:

- potential problems have not become real;
- independence in self-care has been restored;
- body temperature dropped to normal;
- the patient's relatives know how to provide him with a comfortable environment;
- the patient's relatives know how to care for him;
- a person knows how to behave to maintain normal body temperature.

## **8.8. NEED FOR SUSTAINABLE ENVIRONMENT**

Even under normal conditions, people can be exposed to hazards associated with exposure to radiation, chemical waste, the use of low-quality food, the uncontrolled use of drugs, etc. It is important to remember that on any stretch of life, from birth to death, human security is the main condition for survival, development, and preservation of health. Most often children and the elderly are in danger. Environmental safety issues for the child are addressed in other disciplines. Helping to maintain a safe environment is espe-

cially necessary during the period of aging, when there is a gradual deterioration of physical and intellectual abilities, a loss of sensation.

Elderly people are more prone to falls due to diseases of the musculoskeletal system, dizziness, they are more likely to become victims of traffic accidents due to visual impairment, hearing impairment, and suffer more from natural disasters due to a delayed reaction. In old age, a person is more dependent on surrounding people, devices that ensure safety.

### **8.8.1. Initial assessment**

Following a holistic approach, it can be said that the fundamental need associated with maintaining a safe environment is influenced by biological, psychological, sociocultural and political-economic factors.

Factors affecting the ability to maintain a safe environment:

1. Independence and age. The state of dependence (independence) is closely related to the age: dependence in childhood, independence in adulthood, and the likelihood of dependence in old age.

In adulthood, people are generally well aware of risk and personal responsibility for maintaining safety. In the elderly, even if the perception of the outside world is sharp enough, the ability to react quickly (with a fall or burns) is reduced.

2. Biological mechanisms (anatomical and physiological) actively function in everyday life to maintain safety, especially if it is associated with food and fluid intake. A person determines an external threat to safety by means of sight, hearing, touch, smell and taste. Any weakening of perception with the help of these senses makes a person more defenseless in the world around him. A weak person (of old age, suffering from a serious illness or with physical disabilities) under certain circumstances is physically unable to avoid an accident. At the same time, a person has internal (reserve) capabilities that often help maintain a safe environment.

So, a person has two eyes, two ears, two kidneys, functioning independently of each other. The bones of the skull protect the brain, the spine - the spinal cord, and the chest - the heart and lungs. Intact skin protects the internal environment of a person from dangerous external factors, and tonsils do not pass the infection into the gastrointestinal tract. Thanks to the reflex arc, the hand instantly

pulls away from the hot object; the eye closes as soon as a foreign body falls into it, and tears help wash it off the cornea. One of the most important defense mechanisms is immunity.

3. Psychological factors. People with weakened cognitive abilities are not able to acquire sufficient knowledge and quickly respond to a threat to their safety. Having serious learning difficulties, they become dependent on others under adverse external conditions and need to be monitored and timely help.

The attitude of a person to safety and the prevention of dangerous situations is an important factor in the initial assessment of a person's condition. Unfortunately, many believe that accidents, fires and infectious diseases occur only with others, hoping that nothing like this will happen to them.

Features of the character and temperament of a person are also important in determining his role in the safety of the environment. Taking into account a person's mood is of particular importance, since angry people are often aggressive and even prone to violence, and therefore can injure themselves or others.

People in a state of depression are a potential source of danger for themselves and for others, since apathy, loss of the meaning of life lead to a decrease in attention. Concerned and preoccupied people can become victims of an accident, even under normal conditions. Uncertainty or arrogance also affects safety.

4. Physiological factors are often associated with life circumstances (crises). For example, for a child stress can be weaning, for a teenager - puberty, for an adult in case of a sudden illness - learning how to use the toilet. Certain periods of life are accompanied by circumstances leading to inevitable tension and anxiety (change of place of work or study, marriage, death of a loved one).

5. Sociocultural factors. A serious problem in the world is deliberate violence against children, family members, and elderly people.

The destructive consequences of insults, insults and violence, especially in relation to children. So, N. Roper gives the following data: "In his annual report for 1993-1994. The National Society for the Prevention of Cruelty to Children reports that in the UK every week, out of four deaths, three children die due to abuse and neglect by their parents. To this organization for 1992-1993. 14 624 people asked for help: sexual abuse (violence) - 28%; physical violence -

27%; lack of care for children - 19%; other types of insults and violence - 20%.”

Children who experience physical, emotional, or sexual abuse grow up with an inferiority complex. Research conducted in the UK suggests that “children who experience violence are more likely to become addicted to alcohol, drugs, or take the path of crime, and they are more likely to abuse their own children.” [53].

Women also experience violence. The rights of victims of violence are dealt with by many organizations around the world, but there is still no radical solution to this problem.

There are frequent cases of violence against elderly people (physical, sexual, psychological or financial violence). It may be intentional or unintentional. Against the backdrop of the economic, financial, political crisis, unemployment, the general tendency to tighten relations between people, medical workers are faced with the fact that some families, in fulfilling their obligations to care for elderly relatives, first show sincere care and compassion, however, they then become hardened, inflict on the old man not only physical, but also mental harm. Sometimes there is a complete neglect of a living person (denial of food, drink, bathing, etc.). Financial violence is manifested in the misappropriation of pensions, savings, property. Psychological violence against the elderly is expressed in the form of ridicule, humiliation, etc.

Nursing researchers urge medical staff to pay due attention to the issue of violence against the elderly in order to assess their ability to maintain their safety.

It has now been proven that victims of violence suffer from persistent psychiatric disorders called “post-traumatic stress disorder”. The American Association of Psychiatrists gives the following definition of this concept: “Clinical syndrome, manifested by characteristic signs that arose after psychologically traumatic events that are beyond the limits of normal human experiences” [53].

A person suffering from post-traumatic stress disorder is not able to provide a safe environment. In some cases, it poses a potential danger to others (for example, driving a car). Stress disorder can develop not only in the victim (victim), but also in rescuers and medical personnel who assisted him. Information about in which cases a post-traumatic stress disorder develops and how it manifests is necessary for the full training of a nurse.

In the journal *Nursing Times* (1994), Ralph and Alexander published diagnostic criteria for post-traumatic stress disorders:

▲ a person went through a test that is beyond the limits of human experiences, for example, a serious threat to the life or health of a child;

▲ an incident that previously injured a person is again constantly (steadily) experienced by him in the form of periodically repeating, obsessive, disturbing memories, dreams of this event;

▲ in a state of wakefulness or intoxication, a person experiences sensations or performs actions as if this event happened again;

▲ a person stubbornly avoids the influence of stressors associated with a past event, or inadequately (slowly) reacts to the effects of these stressors (which was not previously observed);

▲ a person tries to get rid of thoughts or feelings associated with an injury, avoids activities that are reminiscent of a past event;

▲ a person cannot remember an important aspect of that tragic event;

▲ interest in favorite hobbies is noticeably reduced, estrangement and alienation appear, the range of feelings (excitement, experience, love) is limited, hope for the future is lost (career, having children, long life);

▲ persistent signs of excessive agitation (absent before the tragic event): insomnia, irritant

nausea or outbursts of anger, inability to concentrate quickly, excessive vigilance, exaggerated fear, inadequate physiological reaction to events resembling a tragic event (severe sweating, tachycardia).

Assessing the possibility of satisfying the need for maintaining safety, one should pay attention to the following: what is the state of the environment (quality of drinking water, clean air, noise intensity), is a person able to prevent an accident (at home, at work, on vacation), to avoid infection, fire .

Carrying out an initial environmental safety assessment together with the patient, it is necessary to consider:

- what measures to ensure safety, he knows;
- What measures does he take to ensure his safety;
- what factors affect patient safety;
- how he relates to this need;
- difficulties experienced by a person in the past in connection with ensuring safety, ways to overcome them;

- actual or potential problems associated with maintaining a safe environment.

### **8.8.2. Patient problems**

Having received information about a person's usual way of life, about what he can and cannot do for his safety, it is necessary to formulate the problems of care. Actual problems arise if a person partially or completely loses independence, the environment and the usual routine of life change.

The state of forced dependence (short-term or long-term) occurs as a result of:

- diseases or injuries (taking sleeping pills, hemiplegia, paraplegia, tetraplegia, plaster casts, crutches, a wheelchair, etc.);
- mental (congenital or acquired) pathology - disorientation in space, delirium, hallucinations, etc .;
- impaired perception (impaired vision, hearing, decreased sensitivity to pain, temperature, touch, smell and taste).

As a result of these problems, the patient has (increases) the risk of uncontrolled medication, falling, burns, hypothermia or frostbite, creating a fire-hazardous situation.

Due to changes in the usual environment and routine of life, often associated with hospitalization, a person feels insecure, sometimes anxious, which increases the risk of an accident. In a troubled state, he may bump or fall if his hands are shaking (tremors), and he may spill liquid or hot food on himself. Older people often lose their orientation in unfamiliar surroundings.

As a rule, the problems associated with maintaining a safe environment are potential. The actions of nursing personnel largely determine whether they will become valid, whether the patient's need for safety will be satisfied.

Foreign studies on changes in the patient's condition in the hospital indicate that noise causes serious health problems. Its sources are patients themselves, employees, equipment, slamming doors and windows. Under the influence of noise, some patients began to have sleep disorders, hallucinations, which forced doctors to increase their doses of sedative drugs [53].

In a certain category of patients, the risk of infectious diseases increases (it is difficult to regularly wash hands, there is no supply

and exhaust ventilation, etc.), which also indicates a violation of the satisfaction of the need for security.

An overdose of drugs, their untimely intake (in a hospital, a violation of the technique of distribution and administration of drugs is possible) seriously affects the safety of the patient.

Problems can be formulated as follows:

- high risk of falling;
- high risk of infection;
- high risk of burns;
- high risk of electrical injury, etc.

### **8.8.3. Nursing Goals**

The goals and nursing interventions related to the need for security are likely to be precautionary, for example:

- prevent falling out of bed;
- avoid burns;
- prevent infection of wounds, etc.

### **8.8.4. Nursing**

The sister must secure the patient's stay in the hospital:

- Prevent potential problems from becoming real; find solutions to real problems;
- Prevent problems that have already been resolved from reoccurring;
- develop an adequate patient attitude to problems that cannot be completely solved.

Determining the volume of interventions, the sister takes into account the patient's age, degree of independence, factors causing problems with maintaining the safety of the environment. Nursing staff visiting patients at home should assess the degree of danger at home and educate the patient or his relatives on how to maintain a safe environment. So, to maintain fire safety, you should make sure that the patient does not smoke in bed, near fire hazardous objects. Electrical appliances should only be used in good condition, with insulated cords.

For chemical safety, it is recommended that medicines, colorants, bleaches, acetone, repellents and sprays be stored separately.

To prevent burns, the patient must be taught to handle hot liquids and surfaces with care.

You can reduce the susceptibility to infectious diseases if there are conditions for washing your hands and bathing, the ability to use safe food and water, eat right, sleep and rest, and lead an active life-style.

Nursing interventions in medical hospitals, in addition to training, are aimed at reducing (if possible, eliminating) the risk of falling, burns, nosocomial infections, and violence.

### **8.8.5. Assessing Nursing Results**

Considering that most of the problems within the framework of the need for security are by nature often potential, the assessment of the result of nursing care is determined by the effectiveness of preventive measures and preventing the transformation of potential problems into real ones.

## **8.9. NEED FOR COMMUNICATION**

Communication is an essential need for most people. There are many cases when it is not necessary to study or document the patient's ability to communicate in detail. Very often, this information is combined with information about other types of human activity. Only during the educational process does it make sense to consider each need separately; in real life, all types of human activity are interconnected and intertwined [53].

### **8.9.1. Initial assessment**

Each person shows individual communication features that should be considered when nursing. When assessing the need for communication, one should take into account some factors that influence this process.

- **Age of the person:**
  - ▲ intrauterine period - fetal movement, cry of the baby at birth;
  - ▲ infancy and childhood - the development of communication skills and the formation of relationships;
  - ▲ youth - expansion of communication and relationship skills;
  - ▲ mature age - a variety of forms of communication;

▲ old age and old age - loss of activity, fading communication skills, breakdown of relationships.

• **Dependent or independent state in case of physical activity and physiological functions.**

• **Biological (anatomical and physiological) features:**

▲ intact organs and stored functions;

▲ features (timbre) of speech;

▲ hearing features (ability to hear and listen);

▲ features of vision (narrowing of the fields of vision, blurred lens);

▲ ability and ability to read and write;

▲ ability and ability to gesticulate.

• **Psychological factors:**

▲ intelligence (vocabulary range);

▲ self confidence;

▲ self-esteem;

▲ prevailing mood;

▲ perseverance;

▲ relationships with others.

• **Sociocultural factors:**

▲ mother tongue;

▲ dialect and accent;

▲ ethnicity and racial discrimination;

▲ appearance of a person (clothes);

▲ familiar gestures;

▲ beliefs.

• **Environment:**

▲ temperature, clean air in the room;

▲ light;

▲ noise;

▲ area of the premises;

▲ furnishings (furniture).

• **Political and economic factors:**

▲ income;

▲ profession;

▲ used media;

▲ computer use.

**Given these factors, a nurse should pay attention to the following:**

• what type of communication does a person usually use;

- how the factors affecting communication change the entire daily life of a person;
- how a person relates to communication;
- Does he have constant difficulties with communication and how does he deal with them;
- What communication problems are currently available or may appear.

The nurse receives answers to these questions from a conversation with the patient and his family, as well as observing his behavior.

### **8.9.2. Patient problems**

Discussing the results of the initial assessment together with the patient, one can find out how communication problems affect the satisfaction of other fundamental needs.

The process of communication is important regardless of where the patient is (at home, in a medical institution). Communication is of particular importance for children, people with learning difficulties, and mental health problems.

In the hospital, communication is the only way to obtain information about your condition, communication with relatives and other patients.

Among the factors contributing to the occurrence of communication problems, a special place is occupied by the problem of dependence, which can occur at any age (including due to a congenital disease) suddenly (spinal cord injury, stroke) or gradually (loss of friends and relatives). Difficulties caused by the disease can be partial or complete, reversible and irreversible. The nurse, working in collaboration with other medical and social workers, should help the patient maximize his potential communication capabilities.

Children who are not capable of learning due to congenital diseases often do not have sufficient cognitive abilities for the verbal (verbal) form of communication; therefore they are significantly behind in development. However, some children, as a result of painstaking instruction, may learn to respond to such simple verbal messages as greeting, prohibition, or instruction. Nonverbal communication is more important for them than is commonly believed. Games, touch, gestures, facial expressions help them achieve an optimal level of communication.

A child with autism repeats only limited, simple stereotypes of behavior, and therefore the human world and communication with other people are often unpredictable for him, incomprehensible and frightening. Education for such children requires special training.

Cognitive impairment often occurs as a result of a disease or accident. Due to the fact that before the tragic event, communication was not a problem for a person, such an unexpected loss of cognitive ability can lead to significant changes in lifestyle (loss of work, habitual income, loss of self-esteem). Assessing the condition of the patient, the nurse must find out how fully he is aware of what is happening, how he transfers what happened. Such patients need conversations about what these changes mean, whether they will be able to communicate at such a level that they continue their previous work or return to their usual leisure time. If the patient is not aware of his failure, one should not convince him of this, on the contrary, one should express positive remarks that will help him to maintain a sense of dignity.

Eterioration of cognitive abilities and memory are the main signs of Alzheimer's disease. This disease can begin in people over the age of 50 and is one of the main causes of dementia. Alzheimer's disease creates problems associated with communication, and for almost all fundamental needs for both the patient and the caregiver. In old age, in connection with atherosclerotic changes in the brain vessels of the brain, memory loss and a decrease in cognitive ability are also observed.

Speech disorders can also create communication problems. For example, the pronunciation suffers due to dry mouth (due to dehydration, inadequate fluid intake, excitement and anxiety, taking certain medications). Sometimes (to reduce saliva secretion), dry mouth is deliberate. Violation of salivation is also observed with parenteral nutrition. A glass of liquid (if there are no contraindications), rinsing the mouth, and lollipop can reduce dry mouth and make communication possible. Laryngitis, pharyngitis, tonsillitis can cause speech disorders (temporary and reversible).

More severe and prolonged speech disorders are observed in children born with cleft lip or cleft palate. These defects are corrected surgically, then a treatment course is prescribed by a speech therapist.

Stuttering can also keep a person from communicating.

Most people have difficulty imagining what would happen if they could not speak. Do not forget that in this case the ability to see and hear read and write, i.e. communicate using other methods. Therefore, if a person suddenly loses his speech, nursing personnel should be trained in alternative communication, including written communication.

Temporary loss of the patient's ability to communicate is observed with hysteria, tracheostomy - an operation in which the patient is usually conscious. Permanent (long-term) loss of voice may occur during operations on the vocal cords,

larynx. In these cases, you need to help the patient realize the irreversibility of voice loss. Specialists can teach a person to speak using the ventriloquism method.

Loss of speech function (aphasia) can develop with a stroke, a brain tumor. There are two types of aphasia:

- motor (verbal) apraxia - loss of ability to articulate articulate. The patient cannot pronounce the words, although he moves his lips. This situation occurs with damage to the left hemisphere of the cerebral cortex. With this localization of the stroke, the function of the right hand is impaired. Intelligence and hearing are not affected (older people may have hearing problems before a stroke);

- sensory (verbal) agnosia - loss of ability to understand spoken and written language, although the patient may loudly pronounce individual words that are not related to the conversation.

Hearing problems often occur in childhood. A child born deaf or hard of hearing can communicate aloud only after classes with a specialist, since he never heard (or heard hard) words spoken by another person. If a child at an early age develops otitis media, there is a risk of hearing loss in the future. In some cases, the cause of hearing loss may be the accumulation of sulfur in the ear canal, the solution to this problem is the responsibility of the doctor.

With some diseases, a person loses hearing suddenly. Once in the world of silence, a person feels intolerable loneliness. In this state, other organs of the senses are especially aggravated, including vision. It may seem to a person that they didn't look at him that way, they said something about him, signs of paranoia, irritability and bitterness may appear. A person who has hearing loss acutely feels his lack in the society of other people.

Patients experience tinnitus much worse than complete deafness. A person feels a ringing in his ears as coming from within, and

not from the outside world. Monotonously buzzing and ringing sounds can cause a person to have insomnia, depression, and also completely change his lifestyle.

Vision problems can be caused by both blindness and decreased visual acuity. Nursing staff should

It is important to note that vision plays a crucial role in the sense of independence. It is not difficult to notice the difficulties a person has in connection with the loss (decrease) of vision.

Blindness can be either congenital or acquired. People who lose their eyesight suddenly face serious problems, including communicating. They do not see the surrounding objects and the person with whom they are talking, cannot maintain contact of views so necessary for communication, write and read a letter, thus losing privacy during correspondence. A person who suddenly loses sight goes through all stages of the experience of loss.

People who undergo eye surgery and have a blindfold may also experience anxiety and fear for several days. This condition is especially difficult for people of advanced age, experiencing also disorientation.

People suffering from long-term visual impairment try to adapt to daily life in conditions of blindness without any hope of improvement. Often they worry, believing that they become a burden for loved ones.

Touch is the most primitive form of communication used from the first days throughout life. Touch conveys both positive and negative messages encoded by cultural traditions, age and maturity of a person.

The results of foreign scientific studies show that “therapeutic touch” (the term was first used by Krieger in 1960) has a beneficial effect that alleviates acute and chronic pain, which helps to reduce the time of birth and reduces the number of complications. At the same time, the use of conscious (therapeutic) touches can create problems associated with the invasion of a person’s comfort zone.

Touch happens: instrumental (when performing certain procedures, bathing or dressing), expressive (expressive, meaningful) and soothing (for example, when a nurse holds a patient by the arm or shoulder to express his attention, participation, support).

In some cases, patients, especially the elderly, may misinterpret the purpose of the touch and react negatively, sometimes even ag-

gressively. You need to be especially careful when touching a person who has lost independence.

In case of cerebrovascular accident (stroke) and some other diseases of the central nervous system, skin sensitivity is disturbed, including the sensation of touch. As a rule, this occurs against the background of a loss of ability to move, i.e. full or partial dependencies.

If the patient's ability to move is lost, the possibility of non-verbal communication may be impaired. If the patient has hemiplegia, especially right-sided, he loses the possibility of full non-verbal communication. Moreover, in some cases, hemiplegia is accompanied by paresis of the muscles of the face. The angle of the mouth is omitted (and this is not a sign of sadness or depression), the eyelid sometimes drops, which can interfere with communication, impairing eye contact.

In a patient with paraplegia, the ability to communicate is also almost half impaired. Since paraplegia, as a rule, is the result of an injury (sports, car) or an accident, in this situation young people most often find themselves. Given that such patients cannot walk, and their pelvic organs function is impaired, many communication problems are also related to the sexual sphere. Tetraplegia deprives a person of many channels of non-verbal communication, only the possibility of eye contact and communication through facial expressions is preserved.

Communication problems can also be caused by getting the patient in unusual conditions. A person who first finds himself in a medical institution finds himself in an environment unusual for him, since there are no family members, friends, or acquaintances next to him. It is not surprising that even self-confident people experience certain difficulties in such conditions. A communication problem also arises if the patient does not speak the language of the country. But even native speakers of the same language may misunderstand each other because of the accent.

### **8.9.3. Nursing Goals**

Everything that happens within the walls of a medical institution is taken for granted by the staff, and the patient may seem incomprehensible. It is not surprising that he feels anxiety and anxiety, which researchers view as a reaction to stress. At present, it is

considered proven that most often gloomy foreboding and anxiety visit the patient due to the lack of familiar communication and suspense (lack of information about his disease, prognosis, etc.).

The main purpose of communication is to provide the patient with factual information, which reduces anxiety, reduces the amount of necessary painkillers, reduces the risk of postoperative complications and accelerates recovery. Lack of (or lack of) communication skills among nursing staff leads to negative consequences.

The next goal of nursing care is to reduce the anxiety and anxiety of the patient's relatives. Training and advice to patients and their relatives suggest adjusting their behavior both during stressful situations and in everyday communication. When identifying problems, the nurse, together with the patient, must set realistic goals:

- Prevent potential problems from becoming real;
- mitigate the impact or find a solution to real problems;
- help put up with problems that cannot be resolved.

So, for a person who does not remember events well, the goal can be formulated as follows: maintaining patient independence at an optimal level in the home. To achieve it, you need to teach members of his family to communicate effectively with him, to tell how to use his memory and familiar landmarks in a given situation. For a patient with serious speech impairment resulting from trauma, one of the goals is to achieve effective communication. For this, the nurse also needs to establish close contact with the patient's family, to determine his potential communication capabilities.

#### **8.9.4. Nursing**

Bernard recommends that all nurses learn to use the minimum communication skills and makes recommendations for developing these skills [53].

Recommendations for teaching communication skills:

- Listening and paying attention: pay attention to the person, avoid the habit of judging the correctness and incorrectness of what is being said - listen without making

final sentence (do not be the ultimate truth).

- Use open-ended questions: start a conversation with the words “what”, “how”, “when”, “where”, which facilitate a detailed presentation of all problems and exclude a uninformative, unambiguous answer “yes”, “no”.

- Expression of thoughts and feelings: be sympathetic to the patient's statement about certain events or emotions.
- Summing up: analyze the various (non-matching) facts of the conversation and help the patient organize his thoughts; end the conversation so that he sees your interest.
- Testing of understanding: to understand the meaning of what was said, ask, for example, the following questions: "If I understood correctly, you say ...", or "You seem to say that ..."

In another article, he compares the concepts of empathy and sympathy. "Empathy means giving up one's own perception of things and trying to think the way another person thinks, or feel the way he feels. Sympathy implies a feeling of regret and sadness about another person or our idea of how we might feel when we were in our place"[53].

Any advice to the patient or his relatives is just a recommendation. The patient (relative) makes a decision on his own, considering the proposed options.

The main function of a nurse is to continuously provide the patient with moral support and other forms of care. Family, friends, and acquaintances together can also provide effective patient care, especially if recovery is very slow.

When caring for a patient with motor aphasia, it is important to pay attention to whether the patient manages to pronounce the words. In this case, the speech therapist is engaged in the restoration of speech, and the nurse stimulates the patient to study: he teaches to pronounce syllables, single words, then short sentences, etc. When a person cannot speak, he experiences irritation, disappointment, and sometimes the collapse of all hopes, especially if neither the nurse nor relatives can understand the essence of speech disorders and speak to the person as with a child.

When caring for a patient with sensory aphasia, he is taught to associate words with specific subjects (toothbrush, toothpaste, cup, plate, etc.). It is useful to keep them nearby so that the nurse can repeat the "lessons" at any opportunity.

Long-term hearing impairment does not deprive the patient of the opportunity to remain a full and full-fledged personality. In this case, non-verbal methods of communication should be used more often. In such patients, cognitive ability and speech are usually not lost, so he gradually begins to "read" on the lips. To do this, he needs to see the face of the nurse. In practice, using sign language

and facial expressions is more convenient than writing phrases. Moreover, the suffering person can still respond normally to the interlocutor. With a certain patience, kindness and humor, communication problems can be minimized or completely overcome.

If the patient has a minimal ability to hear, then his condition can be improved using a hearing aid. However, one should know that such a device amplifies any sounds, including those that can annoy the patient until he learns to “filter” them. It takes a lot of effort and patience to teach him how to use a hearing aid.

Caring for people with sudden visual impairment requires a nurse to know what psychological problems (stages) a person goes through. Such people still have visual memory for color, shape, size, so the nurse and relatives recreate images of the environment in the person’s memory, describing in detail what is happening around, focusing on the features of the objects. A description of the events is especially important for the patient if he has to undergo any procedure. The patient must know what awaits him. It is useful to do the same for ordinary daily activities, such as eating. It is recommended to describe the contents of the dish on a plate (tray) using a visual image. For a person with a sudden visual impairment, it is important that the nurse gives a sign of his approach before touching him. The nurse should speak in an undertone, as unexpected loud speech can frighten a person.

Visually impaired people face many inconveniences. For training, for example, they use special books with a special Braille (invented in 1824), a tape recorder and a computer.

In assisting people with mobility problems, such as hemiplegia or paraplegia, the nurse should support the patient in experiencing several emotional stages of loss. The nurse should be able to notice sadness and depression and do what she sees fit. When communicating with the patient, it is better for the nurse not to be on the side of the lowered eyelid; otherwise the patient will not be able to use the visual channel to communicate enough.

Whatever degree of mobility restriction is observed in the patient, the actions of the nurse should be aimed at convincing the patient to learn again, to control paralyzed muscles. In this way, other fundamental needs can be satisfied.

A person with tetraplegia is usually either in bed or in a wheelchair. His face is at the belt level of most people. The nurse's task is to help the patient restore eye contact at the same level so that the

patient does not feel that they are talking to him, looking down at him. Often such patients, unable to speak and write words with their hands, learn to write by holding a pencil in their mouth. Nowadays, communication with these people is facilitated by the computer.

It is not possible to maintain contact with a patient in a coma. Nevertheless, the manner in which the nurse communicates with the patient, her attention and care during hygiene procedures are very important. The constant influence of a familiar voice or the repetition of a familiar melody can cause a certain reaction in the patient over time and help him recover.

In reality, the patient sometimes has to adapt at the same time to change several ways of communication. For example, a patient with right-sided hemiplegia (with a lesion in the dominant hemisphere) has both motor and sensory aphasia. If the patient is also an elderly person with impaired vision and hearing, helping to maintain life through communication is a serious problem. First of all, the nurse should provide the patient with the opportunity to use the usual devices (glasses, lenses, hearing aids). Patients often themselves are interested in talking, which is the best way for a nurse to establish a trusting relationship with them. However, the nurse should plan and focused communication.

In case of emergency admission to a hospital of a patient in serious condition, the main thing for a nurse is to help him restore his life. First of all, he is informed only of the necessary information: he is in a medical institution; his relatives are informed about how to call a nurse, etc. As the condition improves, a more complete exchange of information should begin between the nurse and the patient.

When a patient enters a hospital in a planned manner, the nurse should introduce him to the people who are next to him. A person who is anxious, and even if he is intelligent enough, cannot immediately remember a lot of information. In this regard, the medical sister writes only the information that is needed for the next day.

When meeting a nurse, the patient is introduced to the patient by name and patronymic even if he wears a plate with the surname, name, patronymic and position, since it can be difficult for farsighted people to read the text on the plate. The nurse should pay attention to any signs indicating poor vision of the patient. It is imperative that the nurse treats the patient as they ask.

### **8.9.5. Assessing Nursing Results**

Assessment of the success of nursing care is carried out in accordance with the goals. This may be an assessment of the degree of independence of the patient, the ability of relatives to communicate effectively with him. Achieving the goal of effective communication means that the nursing staff and family members of the patient understand both verbal and non-verbal information, correctly respond to his various requests and can predict them.

### **8.10. LABOR AND REST NEED**

It is well known that a person spends one third of his life in a dream, most of it is in labor, and the rest of the time is spent on vacation. Work and rest are complementary concepts that are equally important aspects of life. The term “work” in the generally accepted sense means the main activity of a person during the day for the sake of earning, which allows ensuring a certain standard of living. Since work is a vital necessity, it is often spoken of with a negative connotation, although it often determines the meaning and sometimes the purpose of life, allows you to communicate with people, and increases family and social status.

Work at home (not to be confused with housework) has both its advantages (saving on transportation costs, less wear on clothes and shoes, there is no strict schedule), and disadvantages (there is no communication).

Even when people work for money, money is not the only argument for which a person works. Thus, most of the nursing staff, receiving a small salary, work because of the need to help people, journalists need to self-actualize through publications in the media, i.e. people, choosing this or that profession, see in it not only a source of income. It is important to remember that a woman raising children and not receiving wages for this also works.

Any work (paid or free) is a meaningful useful pastime. Rest is what a person does after hours: games, sports, music, traveling, walking, etc. The purpose of rest is to have fun. Often the concepts of “work” and “rest” are intertwined. For most people, sport is relaxation, and for athletes is work. Many examples can be given when work for some is relaxation for others and vice versa.

As a rule, a person achieves success in the profession in his mature years (40-50 years), at the same time, for athletes, this peak occurs in 20-30 years, for politicians and leaders more often after 50 years. In these same periods, a person has maximum opportunities for relaxation. In old age it is better to do the usual work and provide yourself with the usual look of rest.

The goals that an adult sets for himself when choosing one or another type of recreation are different: some consider staying in the fresh air as rest, others as maintaining physical fitness, others as thrills (mountain climbing, slalom, etc.), fourth as communication, fifth, aesthetic development and enlightenment (literature, museums, theater, music, etc.). The main purpose of relaxation is to enjoy and prevent boredom.

Theoretically, a person retiring has more time to relax. However, given the small size of pensions, people often work while they have the strength and opportunity. When people stop working, many have certain problems:

- loss (change) of social status and role in society, family;
- loss of ability to communicate;
- loss of earnings;
- loss of the meaning of life.

Thus, the dynamics of work and rest change at different stages of life: the beginning of studies at school - the end of school - the beginning of work - the change of work - career advancement - pension.

It should be remembered that work in adulthood and rest in childhood are important components in life and the violation of their balance is harmful to health. Work brings person money, which often gives him independence. Often, the independence of people of mature age is precisely financial in nature, which allows you to choose one or another type of vacation, although this choice does not always contribute to better health.

Naturally, weakness and deterioration of health in old age increase the dependence on other people or devices (cane, glasses, hearing aid, etc.) both during work and during rest, although some people of retirement age consider they more independent than before.

People with physical disabilities (congenital diseases or injuries), learning disabilities, with mental illnesses or impaired sensory function are dependent on their choice of work and type of rest

throughout their life. The choice of a particular type of activity is influenced by many factors, primarily physical data and health. For example, the profession of a nurse requires the applicant to be in good physical shape and health, although in some departments of the hospitals nursing work is quite monotonous and sitting-tea.

Diseases that lead to poor physical health (obesity, diseases of the respiratory system, blood vessels and heart, musculoskeletal system, diabetes mellitus) often do not allow a person to engage in a certain type of activity and rest.

The choice of the type of work and rest is also influenced by psychological factors. Game forms of education in childhood and productive work of adults contribute to the intellectual, emotional and general development of the personality, which is an important factor that allows a person to choose a profession. Temperament and character (patience, irritability, sociability, desire for loneliness, self-discipline) influence the choice of work and rest. Thus, lack of discipline leads to the creation of dangerous situations in the workplace that pose a threat to health. A nurse who does not observe safety precautions when working with electrical equipment, the correct biomechanics of the body when moving the patient or lifting heavy objects, universal precautions when working with body fluids or infected care products, endangers only herself, but also patients, colleagues and others people, including members of their family.

In the slogan “Observe safety measures at the workplace”, many people first of all put the concept of physical security, but you should think about reducing the real and potential risk of emotional stress. In nursing, as in many medical professions, emotional stress is a professional risk, since most people working in the healthcare system often see pain, death and empathize with those who suffer. They are next to patients in a state of depression, doomed, often present at the death of the patient. Diseases such as diabetes mellitus, coronary heart disease, peptic ulcers, headache and depression often occur amid stress.

Lack of work has equally important psychological consequences, both for the person himself and for his family. People who have lost their jobs are more likely to suffer from insomnia, depression, experience anger, their worthlessness. Unemployed more often commit suicide, they are more often observed somatic and mental illness. Fear of dismissal creates serious psychological problems for

a person (especially for a man). For some, dismissal from work is tantamount to an early death.

Nursing staff, conducting an initial (current) assessment of the patient's condition, must take into account the impact of work on health status. It is necessary to clarify the conditions in which a person works:

- whether safety is ensured at the workplace (safety glasses, gloves, clothing), whether others smoke;
- whether the noise level is controlled (increased noise level leads to stress, irritation, fatigue, decreased attention, injuries, increased blood pressure, stroke. At a noise level of 90 dB or more, a person must be provided with headphones);
- Is a comfortable temperature ensured, etc.

The literature describes the so-called sick building syndrome, a long stay in which, due to exposure to noise, heat, cold, high humidity, electromagnetic radiation, causes headaches, fatigue, decreased attention, tearing, runny nose, and tickling throat.

The impact of adverse environmental conditions on women and men of reproductive age leads to serious consequences. Women have infertility, spontaneous abortions, stillbirths, the birth of children with birth defects, and oncological diseases. Men can develop infertility, impotence, and their children - cancer.

### **8.10.1. Initial assessment**

A nurse can obtain data on meeting the need for work and rest during a nursing assessment using her erudition and knowledge. Find out:

- what type of activity the patient engages in, what type of rest he prefers;
- the length of the working day and rest;
- where does the person work and by whom;
- what factors affect a person at work and rest;
- what a person knows about the health effects of his working and resting conditions;
- how a person relates to his work and leisure;
- whether there are problems at work and during rest and how he copes with them;
- what problems with work and rest exist at the moment and what problems may arise.

Answers to these questions can be obtained simultaneously during the initial assessment of the patient's needs for movement, maintaining a safe environment, since all these needs are closely related.

### **8.10.2. Patient problems**

Solving problems arising from the unmet need for labor may fall outside the competence of nursing staff. In this case, the nurse attracts competent specialists to solve this problem or gives advice on where to turn for help.

It should be remembered that new work, dismissal, and retirement play an important role in human life. People with such problems will be happy to receive psychological and emotional support from any person, especially from a nurse.

All problems arising within the framework of this need should be grouped as follows:

- changes in the state of independence;
- changes in work and rest associated with the use of drugs and alcohol, with unemployment;
- changes in the environment and habitual activities due to stay in a medical institution.

Independence in work and leisure activities is highly desirable for any adult. Those who cannot keep it feel destitute because they become dependent on their family or state.

The reasons for dependence are associated with physical or mental illnesses, impaired function of the sensory organs. Physical diseases, depending on the nature and degree of damage to organs and systems, lead to the fact that the performance of habitual work is often unrealistic, and rest is only possible passive. This is especially true for patients with diseases and injuries leading to disability due to impaired mobility.

The degree of dependence of patients is different, they need different adaptation to new working conditions and types of recreation. For example, people who worked before the disease outdoors, sports shifts experience significant difficulties in adapting to the conditions of sedentary work and passive rest. At the same time, people who were previously engaged in sedentary work are easier to adapt to new conditions of work and rest. Sports for people with disabilities, including even the Paralympic Games, allow people

who are accustomed to an active lifestyle to realize their need for a particular form of recreation.

Loss (decrease) in the function of the senses often leads to difficulties in communication, which also affects the choice of work and type of rest. Decreased vision (blindness) creates problems associated with the need to change jobs. Special courses provide an opportunity to master the reading skills of literature published using a special Braille. Radio, telephone, tape recorder, computer (typing with a blind method) and mastering new professions allow these people to some extent maintain independence both at work and on vacation.

With a decrease in hearing, even at the very beginning, a person learns to read lips, in order to maintain his previous work and habits for a while. If the work of a person who has lost hearing is not associated with intensive communication and does not jeopardize his safety, the use of a hearing aid makes it possible to maintain some independence in work and leisure (theater, cinema, television, travel, etc.). The above speech disorders can also create problems in the field of independent choice of work and rest, especially in cases where oral speech is a necessary condition for work.

The loss of independence at work and on vacation due to chronic diseases leading to disability often changes the patient's habits. The use of drugs, for example, for the purpose of anesthesia, often forces a person to leave work and a previously favorite form of rest.

"Experiments" with drugs often begin in their free time from school and work. Teenagers want to experience a sense of excitement, emotional uplift, more vivid than usual sensations. Sometimes, after the first use of a narcotic substance, an addiction appears that creates physical, psychological, social and legal problems.

Unemployment, like drugs, changes a person's usual way of life. Loss (absence) of work entails a variety of problems: excess free time, idleness, the impossibility of a full (active) rest due to financial difficulties. If this period is delayed, a person may lose motivation to find work that brings pleasure. Apathy and depression force a person to sleep a lot in order to escape from reality. All this leads to poor health, and more mental than physical. Such a person is anxious and preoccupied, quickly loses faith in himself, self-esteem, suffers from disturbances of sleep. All this predisposes to mental disorders.

Families of the unemployed are also at risk: they often have divorces, child abuse, abortion, malnutrition, high infant mortality.

Having identified these problems, the nurse is unlikely to be able to solve them on their own. However, an understanding of the problem and its connection with a health disorder should arouse sympathy for both the patient and his family members.

Changes in the environment and daily activities also create problems with work and leisure. Of course, a patient care facility is not a place to work and breathe. Problems are often associated with the fact that patients usually get bored of monotony, monotony, are often forced (sometimes there is no reason for this) to stay in the room all the time. Thus, if a nurse plans to help a person cope with a fort disk caused by environmental changes, she must, taking into account the nature of work and the usual type of rest of a person, plan activities that replace the usual ones: reading books, magazines, television and radio programs, physical exercises, walks through the territory of a medical institution, etc.

Changing the daily routine often causes a person anxiety. The lifestyle of an adult is usually determined by his work, or rather, the ratio of time spent on work and rest. In many departments of the medical institution, there are good reasons for a tough daily routine; for most patients this gives a feeling of calm. It should be remembered that each person is worried about the unknown, so the nurse must always inform the new patient about the degree of severity of the daily routine.

Patients have serious problems due to the inability to make decisions on their own treatment. Sometimes the staff of a medical institution deprives a person of this opportunity, forgetting that a person in this case loses his sense of dignity. For example, if adult patients are required to stay in bed during the daytime, especially male leaders and women who are used to being the head of the family resist the decision of the young sisters to make decisions and feel uncomfortable in such situations. Thus, the staff often causes the person unnecessary, sometimes harmful to his health grief. This violates the patient's usual role in everyday life and renders poor service upon subsequent restoration in professional activity. If there is a possibility (the patient's health does not deteriorate, the interests of other patients are not violated), a person can be allowed to continue his work activities. Some patients may need an explanation of

why they should not work while in the hospital. Surely there will be patients who will be delighted with temporary idleness.

Visiting patients with close people, acquaintances and friends more often helps to smooth out the feeling of loneliness and abandonment. F. Nightingale, in her *Notes on Care*, wrote that for young children and patients, each other's society is ideal. Of course, it is necessary to manage such communication so that none of the participants is hurt, which is quite possible. If there is concern that the air in the room where the patient is located is harmful to the small child, then it is also harmful to the patient. Of course, this needs to be fixed in the interests of both. But the very sight of the baby invigorates a sick person if they spend together not too long.

Visiting patients, both children and adults, is very important. Stay outside the family (in a medical institution) injures the patient. However, family members are not always those whom the patient really wants to see. In some cases, the patient needs to be protected from a large number of (or undesirable for him) visitors. Reception days and hours in a medical institution can turn into stress for both visitors and patients, and, conversely, can serve as a means to minimize discomfort caused by the absence of a person in the family.

There are patients who should not be visited for one reason or another. In these cases, you need to arrange communication by phone (if possible) or by mail.

A lonely or elderly patient that no one visits can be helped by a nurse if he just finds the time to talk with him when the person expresses a desire to talk.

### **8.10.3. Goals and assessment of nursing outcomes**

The goals set when planning nursing care should, as usual, be coordinated with the patient. In accordance with the problems discussed above, the goals should be formulated approximately as follows:

- restoration of independence in choosing a job;
- getting pleasure from the chosen work and affordable rest;
- reduction of the harmful effects of psychological problems associated with unemployment;
- changes in environmental conditions in a medical institution, contributing to the selection of activities and recreation that are feasible for the patient, etc.

The Appendix presents the situational task and the option of filling in the nursing documentation for all fundamental needs.

## CHAPTER 9 STRESS AND ADAPTATION

### **After reading this chapter, you will learn:**

- determination of the nature of stress;
- on the effect of stress on the human body;
- on the types of physiological and psychological adaptation to stress;
  - about the features of the nursing process in the presence of stress in the patient;
  - about the concept of “I-concept”, the characteristic of its main aspects (role-function, body diagram, identity, self-esteem);
  - about stressors that threaten “I-concepts”;
  - about the nuances of nursing care in violation of the self-concept.

### **Concepts and terms:**

- *adaptation* - adaptation;
- *anorexia* - lack of appetite;
- *homeostasis* - the constancy of the internal environment of the body;
- *distress* - pathologically developing stress;
- *relaxation* - relaxation;
- *stress*: 1) non-specific physiological reaction of the body to a change in environmental conditions; 2) the term used to refer to a number of human conditions that occur in response to extreme influences (stressors);
  - *stressor* - a factor that causes a state of stress in a person;
  - *frustration* - a feeling of collapse;
  - *egocentrism* - a person’s tendency to consider reality solely from the point of view of utility for himself;
  - *eustress* - normal stress.

### **9.1. ESSENCE OF STRESS**

Before exploring stress, you need to clarify the concept of "stressor". The stressor can be real or potential, physiological or sociocultural. Most stressors acting on patients are negative irritants, but there are also positive stressors (marriage, exercise, or having a baby). It is important that some of the stimuli will be perceived as a stressor by one person, and for another they are not at all. Stressors that are viewed negatively are very likely to become distresses. For

example, a woman who considers achieving sexual pleasure very important will have a harder time experiencing breast removal than a woman who places less importance on how her body looks. A person's well-being is often achieved by his ability to effectively deal with internal and external stressors. Nursing staff can help patients adapt to environmental changes, thereby preventing or reducing the effects of stressors and the severity of reactions to them. Not knowing the theory of stress, not understanding what is happening to a person, it is difficult to provide adequate psychological support.

Woolf, studying the interaction of people with pathogenic pathogens (1955), presented stress as a "protective reaction system." Canon, investigating the maintenance of homeostasis during changes in the external environment, drew attention to how the nervous system responds to a threat from outside, and introduced the concept of "flight from battle" (1963). G. Selye focused on the biological aspects of stress and described the general adaptive syndrome (1971), indicating that a person under stress responds to it thanks to the "united unified protective mechanism" [41].

The term "stress" is used often because many people experience this condition day after day throughout their lives. Paradoxically, stress is essential for normal development and survival. The term "stress" for many years was used only to mean mental (mental) stress and overwork (being in a state of stress).

In this manual, stress is defined as a complex reaction of the body (including intellectual, behavioral, emotional, and physiological components) to irritants that are perceived by the consciousness or subconscious as dangerous or threatening. This reaction is a protective mechanism and allows a person to adapt to harmful or threatening stimuli. The type of stress depends on the type, strength and duration of action of a given stimulus and the characteristics of a particular person (age, gender, etc.). People respond to life events based on personal experience and their own interpretation of what is happening.

The term "nonspecific reaction" means that a similar body response is observed in all healthy people. For example, when a person is hot, he sweats, when he trembles coldly; during physical exertion, the muscles need more energy, so the heart beats more often and stronger, improving their blood supply.

Medicines and hormones secreted by the endocrine glands have a specific property. However, no matter what changes in the body

they cause, all these agents present the body with non-specific requirements for restructuring, adapting to a new situation, whatever it may be. So, in addition to the specific effect, all factors affecting the body also can be cause a non-specific need - to adapt and restore the usual state. These functions are independent of each other.

The essence of stress is the nonspecific response of the body to changing environmental conditions.

It is hard to imagine that cold, heat, drugs, hormones, sadness, joy cause the same biochemical processes, but studies show that physiological reactions are nonspecific and approximately the same for all types of exposure. Thus, the idea that stress is just a nervous strain is totally wrong. It is negative and positive, constructive and destructive. On the one hand, stress helps a person achieve maximum success in comparison with other biological species, on the other hand, he constantly wears out the body. For example, a person experiences pain (stressor). Pain can cause ano-rexia, emaciation up to cachexia and, as a consequence, immobility. This will be a negative reaction to the stressor. On the other hand, pain can cause a person to seek medical help and eliminate the cause of the pain - a positive reaction to the stressor.

Therefore, a certain level of normal stress (eustress) is necessary for adaptation. For example, microorganisms can upset the function of the body at the cellular level, leading to impaired homeostasis and death. However, exposure to a limited number of microorganisms (or weakened ones) can help the body develop immunity to protect itself from their subsequent exposure. Similarly, their exposure to daily turmoil helps develop coping methods that will help in similar situations. Malicious or unpleasant stress is called distress.

Stress can be pleasant or unpleasant. Distress is always unpleasant and harmful.

“Self-concept” is a subjective image of a person, including the perception of one’s physical, emotional and social qualities, a psychological picture of oneself. It depends on a combination of the following factors:

- perceptions of the person around him, his reaction to this perception;
- own life experience, the experience of others;
- personal qualities;
- self-esteem.

One of the aspects of the “I-concept” is the body scheme - a person’s idea of his appearance, which is formed throughout life and reflects the changes that occur with a person throughout life, as well as the experiences associated with it. Sociocultural attitudes and values influence the formation of ideas about the body pattern. The stressors that influence this view can be:

- violation or absence of any organs or physiological functions;
- a chronic disease leading to disability (arthritis, stroke, etc.);
- normal physiological changes in the body (puberty, pregnancy, menopause, old age);
- urinary or fecal incontinence;
- obesity, significant emaciation, etc.

The next aspect of the “I-concept” is identity, defined as the process of combining oneself with another individual (group) on the basis of an established emotional connection. Identity is formed in a person from childhood and depends on the social environment in which he grows and is brought up, on the culture adopted in this environment, norms of behavior and roles. Sexual identity (male or female) is an integral part of the general identity, appears at the age of 3-5 years.

The stressors that threaten a person’s identity include:

- Sexual problems;
- Alcohol or drug abuse;
- Pressure from others, conflicts at work;
- Death of a loved one;
- Commission of crime;
- Violence or insult.

The third aspect of the “I-concept” is self-esteem (self-esteem, importance, acceptable level of self-esteem). It depends, as a rule, on the social environment (family, school, work, and friends). Of the stressors that affect self-esteem, the most serious are:

- Job loss;
- Poor performance at school or college;
- Family scandals, divorce;
- Insult, beatings, violence;
- Sexual problems (infertility, impotence);
- Inattention of parents.

The fourth aspect of “I-concept” is the social role of a person (role-function), implying his behavior in the family and society.

The stressors of this group include conflict and overload. An example is the condition of a middle-aged woman taking care of her elderly parents, children and her husband, and working at the same time. If she fulfills all these roles with full dedication, then she will inevitably be overloaded.

The results of various studies have shown that stressors can be physiological (biochemical), physical, psychological, social, related to the surrounding or cultural environment. The stressors that a nurse has to deal with vary depending on the patient population. The nurse of the clinic, caring for patients at home, is more often confronted with the daily routine care of patients and the problems of first aid. An in-patient nurse may encounter more severe stressors.

## **9.2. STRESS RESPONSE**

A person reacts to a stressor as a whole, i.e. Diversified compensatory or protective mechanisms are launched to help the body cope with stress.

### **9.2.1. Complex psychophysiological reaction**

It is important to remember that physiological, psychological or behavioral manifestations of a reaction to stress often occur simultaneously. For example, anxiety can cause sweating of the palms, pallor of the skin, a desire for loneliness, a decrease in the amount of attention, a decrease in the ability to learn, and immobility. However, for educational purposes it is more convenient to distinguish between physiological and behavioral reactions.

### **9.2.2. Physiological Stress Response**

The body's ability to maintain homeostasis underlies the physiological method of adaptation. Physiological adaptation mechanisms include changes in heart rate, blood pressure, body temperature, hormone secretion, and water-salt balance. These mechanisms are mainly regulated by the nervous and endocrine systems.

As a result of research, G. Selye identified two types of physiological reactions to stress: local and general adaptation syndrome. Examples of local adaptation syndrome are stopping bleeding as a result of blood coagulation, wound healing, designed to restore ho-

meostasis in a certain part of the body. The physiological response to stress of the whole organism as a whole, in which several physiological systems take part, is called the General Adaptation Syndrome (GAS). It consists of several phases (reactions): anxiety, resistance and exhaustion. The first two phases are constantly repeated throughout life during each collision of a person with stressors. When the phase of exhaustion sets in, resistance ceases, and as a result the functioning of organs and systems is disrupted.

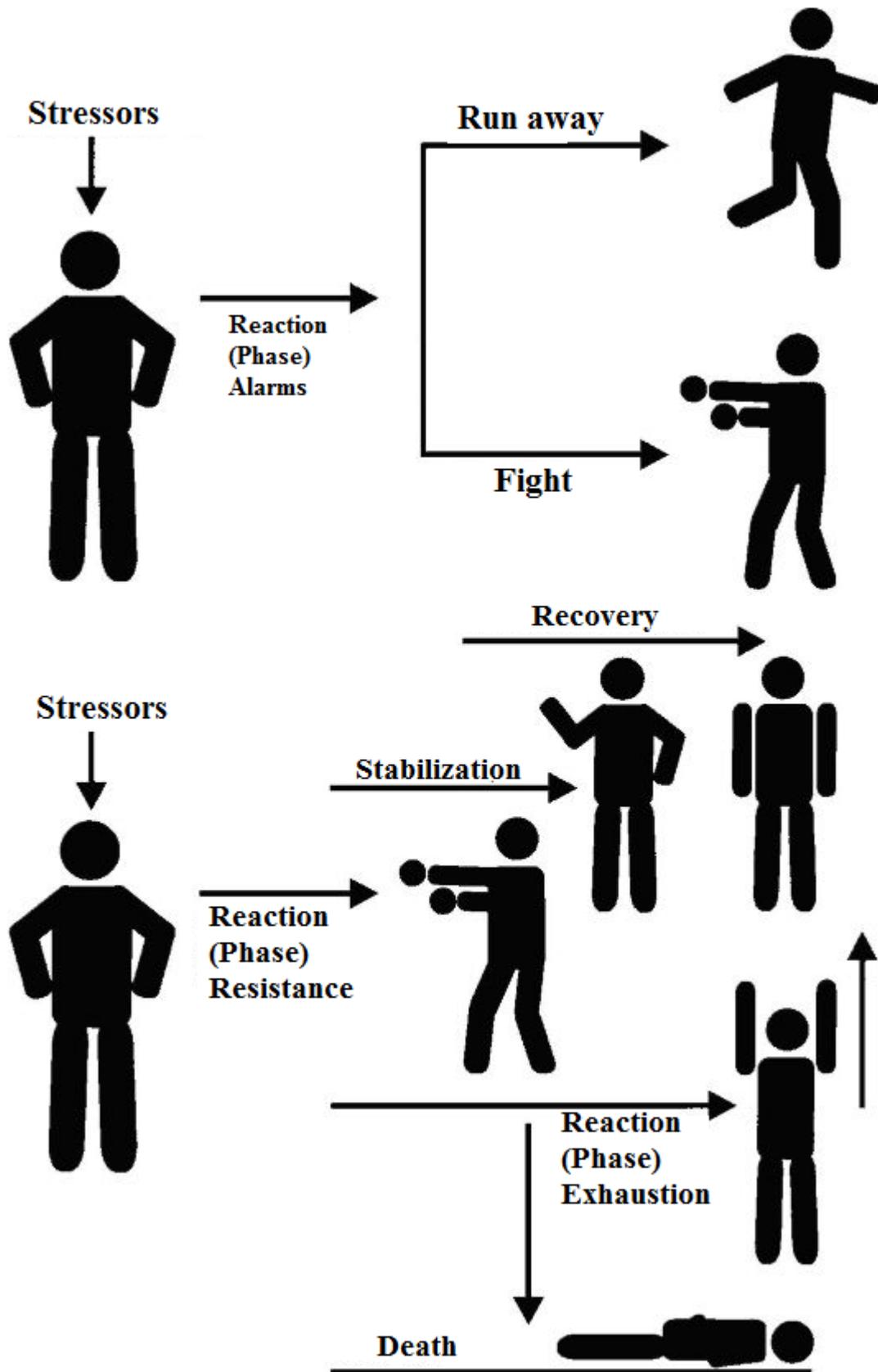
During the anxiety phase (first phase of GAS, a fight or flight reaction begins. A person is preparing to counteract a specific stressor or to withdraw from its effects (Picture 9-1).

If the anxiety is too strong, a “freeze” reaction occurs: the reaction is suppressed; a person can neither fight nor run away.

During the anxiety phase, neuroendocrine mechanisms are activated. This phase can last from several minutes to several hours. If the compensatory mechanisms are sufficient to cope with the stressor, the individual returns to the pre-stress level. If the stressor continues, a person develops a resistance phase (second phase of GAS), the ending of which may be ambiguous. When the stressor ceases, the stabilization phase begins, accompanied by normalization of the function of the nervous and endocrine systems. If the initial stressor is highly aggressive (compensatory mechanisms are ineffective) or is not eliminated for a long time, the phase of exhaustion (the third phase of GAS) occurs. A person loses the ability to resist against the background of exhaustion of the body's reserves.

Examples of extreme stressors include arterial bleeding, severe infection, myocardial infarction, or sudden death of a loved one. It should be noted that under the influence of intense stress, anxiety, resistance, and exhaustion reactions quickly succeed one another. G. Selye noted that, apparently, there are two types of adaptive energy: surface (easily accessible and quickly recovering) and deep, replenishing the spent surface energy after resting or switching to another activity [41].

A person's cognitive ability, communication skills, past experience, interpersonal relationships, and significant reactions of others influence a person's stress experience.



**Picture 9.1. Human reactions to stressors**

A sense of control over the stressor helps reduce stress response. For example, patients who are warned in advance about measures to reduce postoperative pain (i.e., who have gained the

ability to control pain) are usually better able to cope with it in the postoperative period. Thus, people who had to cope with numerous intense stresses in the past are able to cope with the next crisis faster and more efficiently.

Deterioration of health disrupts the recovery of adaptive energy; therefore, stress responses in patients can be ineffective. Malnutrition also increases the risk of inadequate adaptive reactions.

Some individuals respond to most stressors in the same way, but this limits their ability to adapt when a brand new stressor occurs. For example, people who usually respond to stressors with increased physical activity are at a loss if a new stressor limits it. People who have developed several adaptation options are better able to cope with new stressors.

The protective mechanism is an unconscious process used by a person to adapt to a stressor. Protective mechanisms change in the process of personality development and serve to protect, satisfy needs, reduce stress and anxiety. The exception is suppression (inhibition) - a protective mechanism, often used deliberately.

Denial is a defense mechanism often seen in hospitalized patients. This mechanism begins to act at the beginning of the disease. Denial of the disease helps a person cope with increased stress by hiding his "I" from reality. The behavior of that person resembles a game when a child closes his eyes and believes that no one sees him. "This does not exist because I do not see it." For example, patients with coronary heart disease may deny that they have heart attacks and blame digestive upsets for their discomfort. Patients may even deny severe pain and behave as usual. Denial is pronounced in an independent, strong person who looks at his illness as a sign of weakness. Denial can be full or partial and is manifested by a mismatch of thoughts, feelings and actions.

Regression is a frequently observed protective mechanism in patients. The disease forces patients to surrender to medical workers. Such patients become self-absorbed, concerned only with their own needs and interests. Often, regression helps patients retain adaptive energy.

### 9.2.3. Psychological (behavioral) reactions to stress

In addition to physiological, psychological adaptive reactions are possible that help a person resist the stressor. A person reacts to the action of a stressor with anxiety, tension and frustration. Adaptive behaviors are also a mechanism for adapting to stress, and they are oriented either towards the fulfillment of a task (attacking behavior, stress avoidance, compromise behavior), or self-defense. In the table picture 9-1 show behavioral responses to stress.

Anxiety is a psychological reaction expressed in a sense of horror (fear) or anxiety that arose for unclear reasons. Different levels of anxiety and the corresponding types of behavior are presented in table. 9-2.

**Table 9-1. Stress Behavioral Response Options**

Adequate Behavioral Reactions	Inappropriate Behavioral Reactions
Attacking behavior	Anxiety
Stress avoidance	Aggressiveness
Compromise behavior	Depression
	Secretive behavior
	Suspicion

**Table 9-2. Anxiety Levels [50]**

Anxiety level	Type of behavior
Mild anxiety	Increased alertness. Rapid eye movements, exacerbation of hearing. Acceleration of understanding (grasping)
Moderate anxiety	Reduced understanding of the details of the environment. Focusing on one's own experiences, illness
Severe anxiety (panic)	Disorder of thinking. Inconsistency of thoughts, feelings and behavior. Narrowing the field of perception, distorted perception of the environment. Unpredictable reactions, promiscuous motor activity

Understanding, which increases with mild anxiety, almost disappears at the level of panic, in which the perception of the environment becomes distorted. A person's condition can fluctuate between several levels of anxiety. The level of anxiety and its manifestation depend on the person's age, understanding of the need for treatment, level of self-esteem and maturity of stress control mechanisms. People with high anxiety can transmit feelings of anxiety to others. For example, a very anxious patient can increase the anxiety of a family member, and vice versa. The manifestation of anxiety may be the result of the release of energy necessary to restore mental balance. These reactions can be expressed in adaptive or inappropriate behavior. The types of emerging behavioral reactions are influenced by mental, social and cultural factors, the overall development of the individual, past experience, values and economic status. In patients and their families, anxiety is very common.

Aggressiveness is a reaction that gives a person the opportunity to feel less helpless and stronger, to relieve anxiety. Manifestations of aggression are possible with the threat of a person's "I-concept". People often get angry about losing their health, not understanding what is happening to them, so they become irritable, overly demanding.

Depression is a common reaction to information about a serious illness. A feeling of sadness or grief can manifest itself as follows:

- the desire to communicate with other people disappears;
- interest in active activity, environment disappears;
- there is concern about the disease and the amount of necessary assistance (care);
- a desire to die or disturbing thoughts of death are revealed;
- behavior becomes predominantly dependent;
- activity decreases;
- complaints of fatigue or insomnia appear;
- tearfulness occurs [50].

Any talk of suicide should be taken seriously, and you should immediately inform your doctor.

Secretive behavior (stealth) often appears during illness. It helps the patient preserve mental and physical energy to cope with stressors and accelerate recovery and recovery. Secretive patients usually do not create problems, they are often called good patients. They are undemanding, often have low self-esteem, so they can be "missed".

Suspicion may appear due to a feeling of helplessness, lack of control over circumstances. Suspicious patients are incredulous (for some this may be a character trait). They are often wary of personnel, routine manipulations, and procedures. Conversations in a whisper within the ears of such a patient may arouse suspicion that others are hiding something important.

Somatic behavior is a common reaction to stress, which can also be called running into a disease. People express anxiety by complaining of many symptoms (pain, shortness of breath, constipation, diarrhea, etc.). Vague complaints of lower back pain, headache, or fatigue are used by the patient to attract attention. Health workers often get angry with patients with somatic behavior, due to frequent and fuzzy complaints. Nursing staff may make a mistake by not responding to complaints from such patients, because they may well prove to be false.

### 9.3. NURSE ASSISTANCE AT ADAPTATION TO STRESS

Nursing staff working in hospitals are constantly faced with stress. The environment is often stressful for the patient. For example, a limb is amputated in a patient as a result of an injury or operation, or a face is disinfected due to a burn. To cope with such experiences, patients need professional help: they can be given to the patient to express their concerns, help him formulate immediate and long-term care goals. In this way, a nurse helps the patient to participate in the organization of treatment and care.

#### 9.3.1. Initial assessment

Some people solve problems without hesitation for a long time, while others, on the contrary, do it very thoughtfully. Problem solving is a way to overcome a stressful reaction that will be more effective if you follow these steps:

- data collection;
- definition of the problem (exposure to the stressor);
- identification of factors affecting the problem (stressor);
- setting goals;
- study of alternative goals and the consequences of their achievement;
- intervention;
- assessment of the effectiveness of nursing care.

Some behavioral reactions that indicate the presence of stress in a person:

- continuous forward-backward movement;
- decrease in activity, even among people who are fond of entertainment (passivity, prolonged stay in one position, etc.);
- changes in everyday life (loss of appetite, constipation, diarrhea);
- a change in the perception of reality and social relationships;
- change in attitude to work.

In a medical institution, stressors can become isolation and the inability to communicate with relatives on a daily basis, a large flow of information, excessive noise, a change in the usual way of life, etc. Sometimes a nurse's manipulation without explaining the reasons and goals becomes a stressor. Therefore, the nurse, trying to relieve the patient's anxiety, helps him withstand stress. Assessing the patient's condition, one must be able to identify physiological, psychological, and sometimes spiritual indicators of stress.

Physiological stress indicators include:

- increase or decrease in blood pressure;
- increased heart rate and respiration;
- dilated pupils;
- sweating palms or cooling hands and feet;
- drooping posture, fatigue;
- changes in appetite, nausea, vomiting, diarrhea, bloating;
- change in body weight;
- a change in the frequency of urination;
- pathological changes in the results of laboratory, instrumental and hardware studies;
- anxiety, insomnia.

Psychological stress indicators include:

- anxiety;
- depression;
- lethargy;
- abuse of psychotropic drugs;
- change in habits related to food, sleep, favorite activities;
- mental exhaustion, irritability;
- lack of motivation, emotional outbursts and frequent tearfulness;

- decrease in working capacity and quality of work, forgetfulness, deterioration of attention to details, distraction (“daydreaming”, “soaring in the clouds”), absenteeism;
- increased disease, apathy, exposure to accidents.

Some authors also note spiritual indicators of stress: anger at higher powers, perception of the stressor as a punishment from above, search for the meaning of life.

Signs of stress in the framework of the "I-concept":

- refusal to meet friends and acquaintances;
- unwillingness to look in the mirror, touch the affected part of the body or look at it;
  - negative perception of references to impaired function, deformation or deformity;
  - unwillingness to use prostheses in the absence of a limb;
  - refusal of efforts aimed at rehabilitation.

During the initial assessment of the patient’s condition, the nurse should identify signs of a “self-concept” violation by asking the patient the following questions:

- How has the disease (violence, divorce, etc.) affected your life?
- How do you adapt to the changes that have occurred to your life?
- How can you and your loved ones cope with the changes?

### **9.3.2. Patient problems**

Nursing anxiety analysis is best categorized by levels of anxiety. Possible causes of concern:

- threat of “I-concept”;
- death threat;
- health hazard;
- change in socio-economic status, role functioning, environment or types of familiar interactions.

### **9.3.3. Nursing Goals**

The goals of care depend on the behaviors demonstrated by the anxious patient and should be accompanied by a reduction in the behavior inadequacy. For example:

- the patient will feel more relaxed and less anxious;

- the patient notes that sleep has improved;
- pathological symptoms (increased heart rate, increased blood pressure, etc.) will disappear;
- regular stool will be improved;
- the patient's muscles will be relaxed;
- the patient will better fulfill the recommendations of staff, etc.

The nurse (together with the patient) makes an optimal care plan. In its implementation, social support from relatives and friends is important. Nursing care is aimed at achieving the following goals:

- reducing the incidence of stressful situations;
- elimination of physiological, psychological and spiritual reactions to stress (stress symptoms);
- optimization of behavioral, emotional and spiritual responses to stress.

When planning nursing care in case of deformation of the "I-concept", the patient with the help of a nurse must change the situation: start sharing his thoughts and feelings in relation to himself, change the attitude

to your own "I". Keep in mind that the goal can be long-term, sometimes multi-year. In many respects, the success of nursing intervention will depend on the ability of the nurse to establish a trusting relationship with the patient and his relatives.

The nurse defines and formulates the goals of nursing care:

- the patient agrees to discuss the changes;
- the patient will be able to discover positive qualities, etc.

If the patient's self-esteem decreases, the nurse must earn his trust. Her art of communication, together with the efforts of relatives, a psychologist, and a rehabilitation specialist, will allow the patient to talk about herself, adequately interact with other people, make her agree to treatment, rehabilitation procedures, abandon bad habits that destroy the body (smoking, alcohol), and etc.

If role behavior is violated, the nurse seeks to ensure that the patient can discuss ways to cope with the new role; affects his behavior, returning him to his former role.

Nursing interventions designed to deal with prolonged stress are aimed at achieving the following goals:

- change in the patient's lifestyle;
- providing the patient with a strict daily routine, a balanced diet, and an adequate physical load;

- restriction or complete refusal of the patient from bad habits (alcohol, smoking);
- maintaining or developing self-esteem, suppressing unpleasant thoughts;
- training in methods of psychophysical self-regulation (overcoming pain, fatigue and loss of strength, fear, depression, shyness, shyness), consisting in special exercises for concentrating the psyche at rest. This skill contributes to breaking the regularities of the modern way of life - stressful situations - mental overloads - diseases [12];
- training family members, friends and colleagues in social support techniques (listening, understanding, advising).

The approach used when working with a patient who is denial:

- Explore the causes of fear and anxiety underlying denial;
- avoid direct confrontation;
- assist the person in carrying out planned nursing interventions;
- assure the patient of his values as an individual, despite his dependent state;
- encourage behavior that indicates acceptance of reality;
- correctly, but firmly outline the permissible limits of denial, the violation of which interferes with treatment.

The approach used when working with a patient exhibiting regression:

- investigate observed behavior;
- discuss the goals pursued by the patient;
- make appropriate changes to the care plan [50].

The approach used when working with a patient who is aggressive:

- provide the patient with opportunities to express their feelings and discuss their causes;
- leave the hostility of the patient unanswered and not force a person to feel guilty;
- predict the problems of the patient;
- maintain contact with the views when communicating with the patient;
- approach the patient calmly, openly, without showing aggressiveness;
- reduce the intensity of stimuli in the environment;
- establish limits (frameworks) of aggressiveness;

- use drugs or physical means of retention only if all other measures are ineffective and the patient is dangerous [50].

The approach used to care for a patient with depressive behavior:

- take the patient seriously;
- make it clear to the patient that you understand his feelings;
- help the patient express their feelings;
- recognize the patient's right to negative emotions;
- listen to the patient to give vent to negative emotions.

The approach used when working with a secretive patient:

- spend time with this patient at least in silence in order to increase his self-esteem;
- gently encourage the patient to talk, express their feelings and make contact with other people [50].

The approach used when working with a patient who is suspicious:

- allow the patient to talk about their concerns, but not insist on it;
- keep promises made to the patient in order to arouse his trust;
- Avoid excessive zeal, which can cause increased suspicion;
- explain the course of procedures and routine manipulations;
- avoid whispering or discussing the patient in his presence [50].

The approach used when working with a patient with somatic behavior:

- believe all the symptoms and report them to the doctor;
- devote time to this patient;
- listen to patient complaints about health [50].

#### **9.3.4. Nursing**

Nursing interventions in relation to a person under stress can be general, designed to reduce the influence of a stressor, and crisis, carried out in a panic to manage stress. General interventions are aimed at maintaining the adaptive mechanisms of the body, combating stressors and providing an optimal environment that allows a person to mobilize his forces.

Support mechanisms to overcome stress.

Rest (rest, sleep) is absolutely necessary to deal with the effects of strong stressors. The patient should be warm, but not overheated,

as this causes vasodilation and interferes with adequate blood supply to vital organs.

Even a minor stressful reaction can cause back pain, muscle cramps and headaches, which can become additional stressors. The patient is shown calming (relaxing) effects: rubbing the lower back, repositioning, massage of tense muscles. You should alleviate pain as much as possible by coordinating measures with your doctor, reduce noise and other potential irritants. With a severe stress reaction, it makes sense to refrain from eating until nausea passes and the activity of the gastrointestinal tract normalizes.

Informing patients reduces their anxiety (with mild or moderate anxiety). It should be accompanied by detailed explanations. Patients should explain each new sensation; if possible, associate it with already familiar experiences. The higher the level of anxiety, the simpler the explanation should be. Any diagnostic and therapeutic procedures should be performed only with the informed consent of the patient [26], which the doctor must provide. However, the patient often has many questions, even after talking with the doctor. Lack of patient awareness may reflect a violation by a nurse of his rights [25, 26].

Explanations should be given to the patient using terms that he understands, at the appropriate time, if necessary, repeatedly, especially for the elderly and children. It is useless to give explanations to patients with very strong anxiety, fever, severe pain, or who are under the influence of sedatives.

The time allotted to explain to relatives will not be wasted. Such a measure will not only significantly reduce their anxiety, but also protect them from the consequences of incomplete or incorrect information. Often the family helps the nurse interpret the instructions to the patient in a manner that is accessible to him.

Part of the work of a nurse is to help the patient understand new feelings, encourage him to express his anxieties, push him in search of a way out of his fears and negative emotions whenever possible. The nurse can give the patient the opportunity to talk, but should not insist on obtaining specific information so as not to seem too curious. If the nurse is not ready to talk and excited, it should be postponed.

You should not show groundless optimism if the patient expresses disturbing thoughts. It is more appropriate to ask the patient to argue their fears. This nurse response helps the patient think

about the situation and leaves the opportunity to rethink the reasons for their concern.

The nurse helps patients analyze the problems that they are able to recognize. She needs to recognize anxiety reactions and report too strong manifestations to the doctor. When the patient's anxiety rises to a high level, the nurse should sit around the patient, her presence is likely to calm the patient. The nurse helps the patient recognize anxiety by asking him: "Is something bothering you?" When the patient can talk about his anxiety, the nurse should help him describe what is happening to him now, what has happened and what he is afraid of.

There is no concrete ideal way to resolve a specific stressful situation, because what suits one person may not be acceptable to another. It is most effective to help the patient overcome stress in the usual ways. It is important to obtain information from the patient to develop a strategy, for example, asking the question: "What do you usually do when it is tight?" Weismann offers 7 simple questions with which you can get basic information about the solutions to the problem used by these patients:

- "What problems did you have in connection with the disease?"
- "How do you intend to deal with them?"
- "What do you usually do in such cases?"
- "What does this usually lead to?"
- "Who do you contact when you need help?"
- "What happened before when you asked for help?"
- "What kind of problems are upsetting or oppressing you now?"

The answers to these questions help the nurse clarify the patient's perception of current problems, find out the usual ways to solve problems, the sources of problems, the patient's ability to overcome stress. Stress management is strengthening the mechanisms for overcoming it and helping a person to find alternative mechanisms if the usual mechanisms in this particular situation are ineffective.

If a stressor is detected, the nurse helps the patient examine the feelings and reactions caused by the stressor. Sometimes patients do not understand their feelings and may choose the wrong actions. It should be remembered that not everyone is able to easily formulate their problems and is ready to discuss feelings. If the patient is

forced to talk about his problems, communication with the nurse becomes superficial (formal).

### **Training in relaxation techniques.**

Relaxation exercises are developed based on a concept that states that the stress response of anxiety is not supported when the muscles of the body are relaxed.

Relaxation exercises do not remove the effects of a stressor or a stress response, but help to minimize the negative effect of a stress reaction, inspire a person with a sense of control over stress. Daily relaxation exercises affect the normalization of physiological symptoms of stress (blood pressure, blood glucose) and psychological (stress anxiety level) reactions. There are 4 main components of relaxation techniques:

- calm environment: eliminate any possible noise and other irritants;
- comfortable posture: to sit, without straining muscles, relaxing;
- passive attitude: “throw out” all thoughts from the head;
- mental image: focus on the sound, word, phrase, subject or breathing rhythm in order to distract yourself from thoughts associated with the stressor [50].

Each relaxation session should take approximately 20 minutes. For progressive relaxation should:

- take a comfortable position in a quiet room;
- focus on free breathing;
- strain different muscle groups in a certain sequence for 5-7 s, then quickly relax;
- concentrate for 1-10 s on the sensations of relaxed muscles.

It is important to observe the sequence, repeating the exercise for each muscle group, stretching the muscles 2-3 times:

μ brush and forearm: clench your fist, sharply press your elbow to yourself;

μ face: wrinkle your forehead, tightly screw your eyes shut, wrinkle

nose, tighten lips, smile with tightly clenched teeth; μ neck: pull the chin to the chest;

μ torso: bring the shoulder blades together, tighten the muscles of the abdomen and buttocks;

μ lower leg and foot: make a movement with the lower leg, as if pushing the ball away, raise the toes of the foot up.

Repeat all movements in all areas where increased stress is noted [50].

### 9.3.5. Assessing Nursing Results

Assessing the effectiveness of nursing care, the nurse and the patient together determine the change in the severity of stress symptoms. An important criterion is not only a decrease in the physiological indicators of stress, but also the patient's subjective feeling of a feeling of relaxation, improved sleep, appetite, etc.

## CHAPTER 10 NUTRITION AND PHYSICAL EXERCISES

### After reading this chapter, you will learn:

- on the importance of good nutrition in the prevention of certain oncological diseases;
- on the importance of good nutrition in the prevention of diseases that are often the cause of disability and mortality;
- about the main food groups;
- about recommendations for good nutrition;
- on the concept of "ideal body weight";
- on the importance of physical activity in the prevention of serious diseases.

### Concepts and terms:

- **Absorption** - absorption (penetration of substances through a layer of cells into lymph and blood);
- **Alimentary (diseases)** - diseases caused by a mismatch between the body's needs for nutrients and composition, as well as the amount of food consumed;
- **WHO** - World Health Organization;
- **CHD** - coronary heart disease;
- **stroke** - acute circulatory disturbance in the brain or spinal cord with the development of persistent symptoms of central nervous system damage;
- **caries** - destruction of the dense tissue of the tooth;
- **starch** - a complex carbohydrate (polysaccharide);

- **lipids** - a class of fats and fat-like substances (lipoids), insoluble in water;

- **lipoproteins** are complex compounds whose molecules are built from lipids and proteins.

Lipoproteins are conventionally distinguished: free, or water-soluble, insoluble fat is enveloped with a water-soluble protein [plasma lipoproteins - chylomicrons, very low density lipoproteins (VLDL), low density lipoproteins (LDL), lipoproteins high density (HDL)] and structural (lipoproteins of cell membranes, myelin sheath of nerves, etc.);

- **monounsaturated fats** - vegetable fatty acids (for example, olive oil) having one double bond (one less hydrogen atom);

- **motivation** - a set of factors that determine behavior;

- **saturated fats** - fatty acids of animal origin that do not have double bonds in carbon chains: the fatty acid is filled (saturated) with hydrogen atoms;

- **osteoarthritis** - a heterogeneous group of diseases, which are based on the defeat of all components of the joint (primarily the hyaline cartilage and subchondral bone) and periarticular tissues;

- **osteoporosis** - a syndrome characterized by generalized progressive loss of bone tissue volume, leading to a decrease in bone strength;

- **polyunsaturated fats** - vegetable fatty acids (for example, sunflower oil) having two or more double bonds (less hydrogen);

- **triglycerides** - esters of trihydric alcohol glycerol and higher or medium fatty acids;

- **fitness** - ot angl. fitness - (if) fitness, compliance - health-improving (club);

- **cholesterol** - a lipid (sterol) of animal origin, present in the blood and most tissues of the body. Basically, cholesterol is synthesized in the liver, transferred to the blood stream, attached to LDL;

- **Self-concept** - a subjective image of a person; the perception of one's physical, emotional, social properties and qualities, the psychological idea of oneself.

One of the tasks of nursing is to help people maintain an optimal level of health, which ensures high performance and well-being. Why do some people lead a healthy lifestyle, while others do not? The choice of behaviors that promote health is influenced by ideas about both one's own health and oneself.

- **Ideas about own health:**

$\mu$  value attached to health;  
 $\mu$  the desire for the highest level of health, and not the desire to leave everything as it is;  
 $\mu$  constant self-esteem of health;  
 $\mu$  understanding of the right choice of behavior aimed at promoting health.

• **Self-image:**

$\mu$  conscious control of their own behavior (internal rather than external control);  
 $\mu$  desire to control the situation;  
 $\mu$  I-concept;  
 $\mu$  self esteem.

It is well known that people who do not value it and who have no motivation to improve it are engaged in strengthening their health to a lesser extent. The main factors that determine a person's behavior in this regard are family habits and / or friends's habits and rules. It can be expected that people who have an idea of a healthy lifestyle will be taking care of their health. Teaching patients a healthy lifestyle is effective with the active support of family and friends.

## 10.1. NUTRITION

Excessiveness in food (overeating), violation of the ratio of some components of food, as well as nutritional deficiency, have a serious impact on health.

Overeating and unbalanced nutrition are the leading risk factors for the development of serious diseases. These include atherosclerosis, arterial hypertension, diseases of the digestive tract, kidneys, endocrine system, musculoskeletal system, etc.

WHO experts are increasingly paying attention to diseases resulting from poor nutrition. Diseases of the cardiovascular system associated with atherosclerotic vascular changes in many countries of the world occupy a leading place among the causes of death. In the Russian Federation, they annually account for 52.8% of cases, including mortality from heart attacks is 36% (in the United States - 1.5 million heart attacks, of which more than 35% end fatally [38]). Cerebrovascular diseases (strokes) annually cause 80,000 deaths in the Russian Federation and 150,000 in the United States [38]. Hypertension, another disease with the same risk factors, is observed in

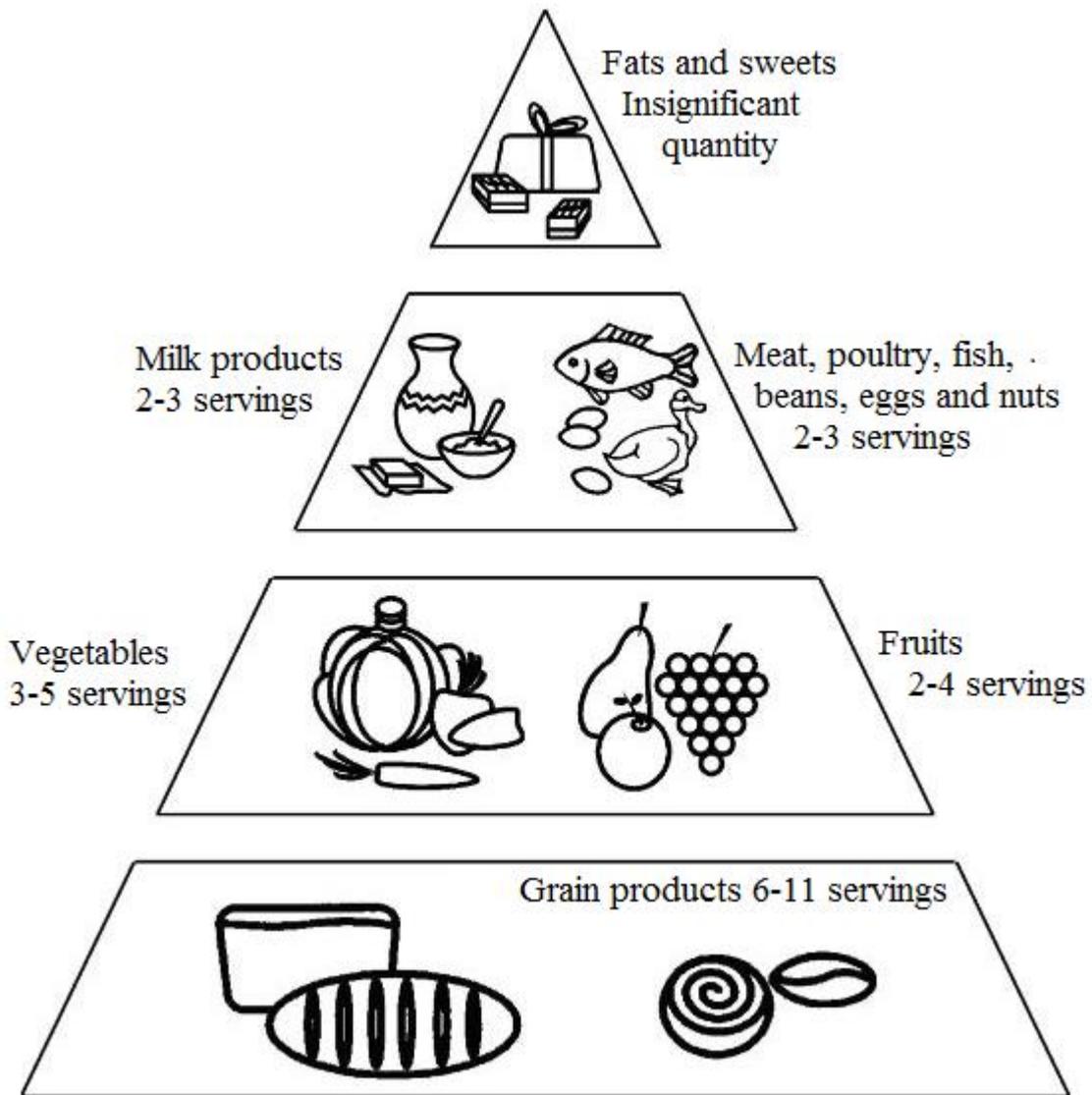
19.3% of women and 14.3% of men in the Russian Federation and 56 million Americans [38].

32 million Americans between the ages of 25 and 77 are obese. [38] This is one of the risk factors for the development of atherosclerosis, arterial hypertension and type II diabetes mellitus, which is observed in 11 million people in the USA and causes 130,000 deaths annually or contributes to them [38]. Breast, colon, and prostate cancers are epidemiologically closely related to nutritional risk factors and are observed in 11 million people in the United States [38].

The influence of nutritional factors on the development of osteoporosis has been established. Every year, 1.4 million fractures occur in the Russian Federation due to osteoporosis, in the US - 1.3 million, in Western Europe - 70 000. Rational, i.e. reasonable, nutrition is an essential part of a healthy lifestyle, it helps to maintain health and realize the body's longevity reserve. Nowadays, an obstacle to rational nutrition is not only the low standard of living of a significant part of the population, but also the lack or lack of knowledge about how to eat, what should be preferred, and what to refuse.

### **10.1.1. Major Food Groups**

People use different types of food and cook it in different ways. Each has an individual taste. One does not like cabbage, the other - chocolate. The tastes and preferences of a person in food often depend on culture and traditions, religious customs, forming the person's attitude to food, possibly for life. Unfortunately, the annoying advertising of all kinds of confectionery, drinks, dietary supplements or drugs produced under the guise of such additives is rendering people a bad service.



**Picture 10-1. Food Pyramid**

American scientists present to the population the correlation of food products necessary for a healthy diet in the form of a pyramid divided into 4 parts [13, 27] (picture 10-1).

The lower, widest level of the pyramid is cereal products (bread, cereals, pasta, etc.). The next part of the pyramid is occupied in equal shares by vegetables and fruits. The next level is followed by a level, also divided in half into dairy products and products such as meat, fish, poultry, beans, eggs, nuts. The upper, smallest part of the pyramid is the allowable amount of sugar and fat.

In the table. 10-1 presents the number of foods needed for a balanced diet.

**Table 10-1. Balanced diet**

<b>Basic food</b>	<b>Number of servings per day</b>	<b>Unit units examples</b>
Cereals	6-11	1 slice of bread, ½ cup boiled rice, ½ cup porridge, ½ cup boiled pasta
Vegetables	3-5	½ cup of vegetables (ready-made), 1 cup of fresh herbs (vegetables without thermal processing)
Fruits	2-4	A small apple (orange, banana, pear), ½ cup sliced fruit, ½ cup small berries, ¾ cup fruit juice
Meat	2 (85g each)	½ breast of chicken, cutlet (schnitzel) (85 g ready-made), 85 g cod, 85 g pork (ready-made)
Milk	2-3	1 cup milk, 1 slice of cheese, ½ cup cottage cheese, 1 cup yogurt, fermented baked milk or kefir

In 1990, WHO presented its nutritional recommendations in tabular form. It gives the ratio necessary for a person according to the energy value of the most important components of food and, which is clear to everyone, the amount of some products per day. Modern people often violate this ratio of food products necessary for health: in the diet there is often too much animal fat and sweets, few vegetables and fruits, and lack of vegetable fat.

Due to the consumption of bakery products and other products made from flour, which lost bran during grinding, as well as the lack of vegetables and fruits in the diet, a person does not receive the amount of dietary fiber, vitamins, and minerals he needs to protect him from diseases. The fascination of many people with fatty foods (lard, fatty meat, fatty dairy products) overloads the body with animal fat and cholesterol, contributes to the development of obesity, atherosclerosis and related diseases of the cardiovascular system. The lack of vegetable oil in the diet exacerbates this situation. Some people are sensitive to excessive intake of salt in their body: because of its excess, their blood pressure rises [13].

### **10.1.2. Nutrition recommendations**

The nutritional recommendations developed in the USA are presented in table. 10-2 [50]. Everyone can use them.

**Table 10-2. Nutrition Guidelines**

<b>Goals</b>	<b>Ways to achieve</b>
Eat a variety of foods	
Maintain Ideal Body Weight	Reduce body weight to perfect
Avoid consuming too much fat and cholesterol.	Reduce the amount of energy derived from fats (from 38 to 30%)
Eat adequate starch and fiber	Increase your intake of unrefined carbohydrates (fiber) (from 20 to 30%)
Avoid too much sugar.	Reduce your intake of refined carbohydrates (sugar)
Avoid too much sodium.	Reduce salt intake
Drink moderate amounts of alcohol	Alcohol should provide no more than 4% of the energy received

Let's consider in more detail all recommendations.

1. Diverse food: the greater the variety, the more likely it is that a person will receive the necessary components of food (proteins, fats, carbohydrates, mineral salts, vitamins and water). All of these substances are equally important, although they are required in varying amounts. The constituent components of food that provide energy (proteins, fats, carbohydrates), and water are required in much larger quantities than vitamins that regulate various biochemical processes in the body. A person's need for various components of food is determined by his growth, development and physical activity.

2. Ideal body weight is the main concern of many people, at least every 4th adult adheres to a diet during one time or another, leading to a decrease in body weight.

Most people know that the simplest way to determine your optimal body weight in kilograms is to subtract the number 100 from the height (in centimeters). However, this calculation has a number of disadvantages. Its result, for example, does not say anything about what is the acceptable range of body mass, the most favorable for health. A more accurate indicator is the body mass index (BMI), it is sometimes called the Quetelet index by the name of the scientist who proposed it. To calculate the index, you need to divide your body weight (in kilograms) by height (in meters), raised to the second degree. So, for example, with a height of 1.7 m and a body weight of 70 kg, the Quetelet index will be as follows:

$$K = 70 / (1,7 \times 1,7) = 24,22.$$

Optimal values of the Kettle index for men and women [WHO, 1985]

Index value	Men	Women
Average value	22	20,3
Minimum value	20,1	18,7
Maximum value	25,0	23,8

An index of more than 30 in men and 28.6 in women indicates obesity. The value of the index, taken as the initial indicator of obesity, varies slightly in different countries.

In 1990, a WHO expert group recommended that, as optimal for both men and women, the index values should be set between 20-22. It is with these values that the risk of disease and death is minimal in each age group. With the same body mass index, the risk of illness and death is higher in smokers than in non-smokers.

Answering the question what energy value of food a person needs, WHO experts in 1990, without giving specific values, answered: a person needs so many calories so that his body weight does not go beyond the stated limits of the Kettle index. An excess of body weight of 20% or more from the norm is defined as obesity [37]. In addition to diseases, the risk of developing which increases among obese people, their quality of life deteriorates as a result of social discrimination of an obese person, a decrease in his mobility, and the ability to tolerate physical activity. Many obese people have a reduced sense of self-esteem.

However, the desire to reduce body weight should have reasonable limits. A decrease in body weight of 20% or more from the norm is regarded as malnutrition and leads to impaired growth and development, biochemical processes, and the formation of protective mechanisms.

In our country, the population by age and work performed (energy consumption) is divided into a number of groups, for each of which the necessary energy value of the diet and its composition are determined. The daily set of products proposed by the specialists of the Institute of Nutrition for people with low energy consumption is presented in table. 10-3. The recommendation given in this table for consuming 5 grams of legumes per day may be surprising. In this case, we are talking about average daily consumption, i.e. 35 g per week.

**Table 10-3. An approximate daily list of foods for a person who consumes 2500 kcal per day**

<b>Food products</b>	<b>Amount, gram</b>
Bread	330-360
Pasta	15
Cereals	25
Legumes	5
Potatoes	265-285
Vegetables, gourds	385-450
Fruits, berries	200-220
Sugar (including sugar in food)	50-100
Vegetable oil	30-40
Meat and meat products	190-215
Fish and fish products	50-55
Dairy products (in terms of milk), including milk	980-1050 350-450
Eggs	2 pcs. for 3 days

How many calories should a person receive daily to cover his energy expenditures? For example, an average woman 1800 kcal is enough for a woman of 40-59 years old who is predominantly engaged in mental work, and for a man aged 18-29 years with especially hard work 4200 kcal is required. Scientists suggested that the population calculate calories consumed, to create a variety of calorie counters to facilitate this task, but the human body itself turned out to be the best counter: you need to monitor the ratio of your body weight and height.

3. The use of too much fat, including saturated fat and cholesterol. The body cannot use an excess of these substances, they are deposited in the tissues, increasing body weight. In addition, according to various studies [18, 37], there is a clear relationship between excess fat from food and cancer, especially the mammary gland, colon and rectum, and prostate gland.

In most European countries and the United States, the population is becoming more informed about the consequences of eating large amounts of fat. High serum triglycerides are an additional risk factor for CHD.

Atherosclerosis and related diseases of the cardiovascular system are most often observed in people who consume a lot of animal fat and cholesterol, but little polyunsaturated fatty acids, plant fibers and seafood. Smoking, as well as non-moderate consumption of

coffee contribute to the development of atherosclerosis. WHO experts believe that you should consume no more than 300 mg of cholesterol per day, which means that the consumption of animal products should be moderate. Examples of cholesterol in food products are presented in table. 10-4.

**Table 10-4. 300 mg cholesterol foods**

<b>Products Quantity, g</b>	
<b>Cottage cheese:</b>	
fatty	500
lean	750
Milk	3000
<b>Sour cream:</b>	
20% fat	230
30% fat	375

**Continuation of the table. 10-4**

<b>Products Quantity, g</b>	
<b>Cheese:</b>	
Kostroma	20
Russian	26
Dutch	60
Butter	160-170
Beef category I, veal, chicken category I	380
Cooked sausage	675
<b>Liver:</b>	
beef	110
pork	230
<b>Kidneys:</b>	
beef	100
pork	150
Pork brains	15
<b>A fish:</b>	
cog	70
flounder	130
herring pacific	150
pollock	270
<b>Egg:</b>	
large chicken	1 ps
quail	1 ps

A survey conducted in 1990 in the USA [50] indicates that out of 65% of adults who know that they have high cholesterol in their blood serum, only 24% tried to lower it with a diet.

Residents of developed countries remove a layer of fat from the broth, melt it and remove the fat from the meat, and remove the subcutaneous fat of the chickens with the skin. It is estimated that the energy value of a portion of chicken (about 140 g) is reduced by 200 kcal.

Only 40% fat is visible in foods. A person who knows about the dangers of excess fat will prefer sausages without excess fat. However, in any sausages, including sausages, fat is, but only in an emulsified state, so it is invisible. In these products, up to 40% of energy value may be in fat.

Coffee lovers claim that the taste and aroma of coffee is due to the foam that forms on its surface. It is in the foam and coffee sediment that the substances (cafestol and cafeyl) are concentrated that increase the cholesterol level in the blood.

The soluble plant fibers found in many fruits and vegetables, as well as cereal products, help remove excess cholesterol from the body. Along with the polyunsaturated fatty acids present in liquid vegetable oils, monounsaturated oleic acid, which is found in olive oil, nuts, and fish fats, also has anti-atherosclerotic properties. Anti-sclerotic effect: soy and garlic. In order to regulate cholesterol levels, healthy people over the age of 39 years should be recommended to determine its level every 3 years and, if necessary, take measures to reduce it.

4. The use of products with an adequate amount of starch and fiber is one of the prerequisites for a balanced diet.

Starch is found mainly in cereals, legumes, vegetables, especially potatoes. This is an important source of carbohydrates, giving the body most of the energy. It is recommended to use cereals and legumes 6 or more times a day.

Plant fiber contains cellulose and other dietary fiber, which are not digested in the digestive tract, stimulate intestinal motility and promote excretion of feces. Vegetable (dietary) fiber binds cholesterol, preventing its absorption. The use of a large number of foods containing plant fiber reduces the risk of colon cancer [18, 50]. Such products include whole grains (wheat, rice, and oats), bran, fruits and vegetables used in cereals and bread. It is recommended to consume 18-32 g of dietary fiber per day, i.e. up to 5 servings of fruits or vegetables and up to 6 servings of cereals (legumes) per day (see table. 10-1).

5. The use of a large number of sweets significantly increases the number of calories. Artificial sweeteners do not always lead to a decrease in calories consumed, because after them there is a desire to eat something, including sweet or fatty, to be full.

In this regard, it is complex carbohydrates (starch, vegetable fiber) that are preferable for a balanced diet. Reduced and rarer consumption of refined sahara reduces the risk of tooth decay.

6. The use of excessive amounts of sodium is one of the risk factors for arterial hypertension. It is enough for a healthy person to consume half a teaspoon of salt per day. But at the same time, one should not forget that salt is already found in large quantities in such products as ham, bacon, sausages, including hot dogs, sausages, salted and smoked fish, chips, crackers, salted nuts, hot spices and spices.

7. Excessive drinking has a negative effect on health. At the same time, this is a serious social problem. A large number of accidents on the roads associated with the use of alcohol. Many experts oppose the establishment of a protective or safe amount of alcohol. First, alcohol increases the risk of hormone-dependent tumors in women. Secondly, even with small amounts of alcohol addiction to alcohol is possible [18].

The need for various components of food depends on age, gender, height, body weight, mental and physical activity. A properly composed diet should provide support for the optimal functioning of the body.

The effectiveness of dietary recommendations to help change patient habits has been proven in many studies, and most of them indicate that the consultant, as a rule, is not a doctor, but a nurse, nutritionist or psychologist [39]. Advising the patient on nutrition issues, the sister should convey her advice to him in an understandable form, talk about a set of products, and not about the chemical components that make up them. In addition, it is necessary to take into account the psychological characteristics of a person: most people find it difficult to keep more than 5-7 objects in their minds at the same time.

The patient should recommend the most appropriate ways that contribute to changing eating habits, offer concrete help in choosing food. If these tips are perceived as unattractive and uncomfortable, patients will not be able to follow them for a long time.

In order to successfully solve these problems, the patient and his family need to be given more information about diets that promote healing (here we are not talking about therapeutic diets). In some cases, an individual nutritional advice may be provided by a dietitian or dietitian.

In some cases, when consulting patients on nutrition, recommendations are needed on eating only safe foods. For example:

- do not buy products in places not allowed for trade;
- wash hands before and after meals;
- do not try food outside the home;
- when preparing homemade canned foods, follow official recommendations;
- use separate knives and cutting boards for cutting meat and poultry;
- wash hands between the simultaneous preparation of meat and other dishes;
- Do not use eggs that have an unpleasant smell or are broken;
- use only pasteurized milk and dairy products;
- do not eat raw fish, shrimp.

Bacteria (salmonella, tubercle bacillus, etc.), parasites (echinococcus), toxins (botulinum toxin) can cause not only diseases, but also death.

## **10.2. PHYSICAL EXERCISE**

An obligatory component of any wellness program is physical exercises corresponding to the state of health and a person's lifestyle.

Adequate physical activity helps maintain an ideal body weight due to the loss of adipose tissue, the prevention of many serious diseases, and improve the quality of life. Exercise should be one of the main components of a healthy lifestyle.

### **10.2.1. Consequences of Inadequate Physical Activity**

Inadequate physical activity, as well as poor nutrition and smoking, is a risk factor for the development of atherosclerosis, including such manifestations as coronary heart disease (angina pectoris, myocardial infarction and other forms), as well as arterial hypertension, which can go up with kidney diseases, retinopathy,

stroke. Atherosclerosis can also develop in diseases such as type II diabetes mellitus. Inadequate physical activity leads to the progression of osteoporosis and, as a result, to severe fractures, including the neck of the femur and spine. It has been established that the actual number of adults performing moderate physical activity or vigorous exercise 3 times a week daily is much lower than desired.

Despite the fact that in recent years there has been a certain positive trend of increasing physical activity, especially among people aged 20-40 years, many adults, including older people, lead a sedentary lifestyle. They understand and know that physical exercise is necessary for health, but do nothing to fulfill it, finding various pretexts and excuses for this.

### **10.2.2. Exercise effectiveness**

Studies show that men who lead a physically active lifestyle have a lower overall mortality rate than those who are physically inactive [39]. Regular physical exercises prevent the development of obesity, reduce the risk of diseases associated with excess body weight, lower blood pressure by an average of 10%.

Physically active people have a higher level of self-esteem. Due to their ideal body weight, they are in a good mood, depression and anxiety are less common [39].

The health benefits of exercise can be achieved even under low conditions of intensity and frequency. Moreover, sometimes intense exercise may be contraindicated due to the risk of physical injury or complications of cardiovascular disease, so even brisk walking, climbing stairs, gardening can have a negative effect. People suffering from arterial hypertension, obesity, can greatly benefit from exercises that are not contraindicated in cardiovascular diseases (for example, exercises increase the strength and flexibility of joints and bones, improve mood).

However, the benefit can only be from regular classes. It is known that to improve the state of the cardiovascular system it is not enough to perform physical exercises sporadically, only in winter or summer. In addition, if a person performed exercises in the past, but then stopped, lack of physical activity again becomes a risk factor for many diseases for him.

In recent years, people have realized that activity and mobility are necessary for health, but many do not make efforts to increase them. Those who do not appreciate exercise as a means of maintain-

ing optimal health often find reasons, excuses not to participate in the planned regular training program. If you do not realize that exercises are necessary, and do not make efforts to perform them, then their value will be minimal. Any program of regular exercises provides both psychological and physiological benefits: a physically strong person is usually more resilient and recovers faster after an illness.

Exercise is important for everyone regardless of age. Some older people think they are too old to start any kind of active wellness program. However, these programs are planned individually and are based on the interests of the person, his abilities and limitations. A number of programs are designed for people with chronic diseases. Exercise increases stamina, muscle strength and provides control over body weight. They have a positive effect on the musculoskeletal system, on the circulatory system, respiration, urination, the neurosensory system and the digestive tract.

Exercise should become part of a lifestyle (for example, climbing stairs instead of an elevator), a person should attach the same importance to it as eating or sleeping. Regular exercise provides you with good health, which is part of feeling healthy. Feeling healthy contributes to a longer life.

## CHAPTER 11 PAIN AND NURSING PROCESS

### **After reading this chapter, you will learn:**

- about various aspects of pain;
- about factors affecting the sensation of pain;
- about the characteristics of a person's reaction to acute and chronic pain;
- about types of pain;
- about the nursing process with pain;
- on methods for the initial assessment of pain;
- on the definition of the goal of pain care;
- about nursing interventions;
- on the assessment of the results of care, the recommended care plan for pain.

### **Concepts and terms:**

- *analgesia* - otgrich. analgesia - absence of pain;
- *antidepressants* - medications that improve mood and general mental state;
- *irradiation* - the spread of pain;
- *localization* - the place of development of the pathological process;
- *myositis* - inflammation of the skeletal muscles;
- *neuritis* - inflammation of the peripheral nerves;
- *paraplegia* - paralysis of both limbs (upper or lower);
- *placebo* - a pharmacological neutral compound used in medicine to simulate drug therapy;
- *tranquilizers* - drugs that reduce the state of anxiety, fear, anxiety.

### **11.1. FEELING OF PAIN**

Of the many different symptoms of disease, pain is probably the most common. The sensation of pain depends solely on the individual characteristics of each person. Since pain is a subjective sensation, it is difficult to measure, and only the person experiencing the pain can convey his feelings to us and describe the intensity of the pain. M. Caffery believes that pain is what a person experiencing it talks about it when it is, and pain exists where the patient says that it acts [12]. Many people know what pain is. They perceive it as an unpleasant sensation.

For more than twenty centuries, people have been continuously trying to unravel the mystery of pain and find means to ease it. However, even today, some types of pain are not treatable. No wonder there is an opinion that pain is the ruler of mankind, which is worse than death [29].

Pain is not only what a person physically feels, but also emotional experience. The perception of pain can vary depending on what importance a person attaches to it, on his mood and morale.

There is a concept of total pain, which is based on a holistic approach to people, indicating that pain has different aspects: physical, psychological, social, spiritual.

The physical aspect. Pain can be one of the symptoms of the disease, a complication of the underlying disease, as well as a side effect of the treatment. Pain can lead to the development of insomnia and chronic fatigue.

The psychological aspect. Pain can be the cause of the patient's anger, his frustration with doctors and treatment results. Pain can lead to despair and isolation, to the appearance of a feeling of helplessness ("I can no longer be helped"). A constant fear of pain leads to a feeling of anxiety. A person feels abandoned and useless if friends stop visiting him for fear of disturbing him.

The social aspect. A person who is constantly experiencing pain (especially for patients suffering from cancer in the terminal stage) can no longer perform his usual work. Due to dependence on others (including financial), a person loses confidence in himself and feels his own worthlessness. All this leads to a decrease in self-esteem and quality of life.

The spiritual aspect. Frequent or constant pain, especially in patients with cancer (or heart pain with coronary artery disease), can cause fear of death and fear of the process of dying. A person may feel guilty before others for the unrest caused by him. He is losing hope for the future.

## **11.2. PHYSICAL SIDE OF PAIN**

The nervous system is responsible for causing a sensation of pain. Studies conducted in recent years, in general terms describe the mechanism of pain development: in the place where the pain is felt, certain chemicals are released that cause irritation of the nerve endings, the nerve impulse is transmitted to the spinal cord, from where it is relayed to the brain. The first sensations of pain arise

when the signal is analyzed in the midbrain, pain becomes more definite when the signal is processed in the hypothalamus, but only when the cerebral cortex is reached, the type, intensity and localization of pain are determined.

Recent studies have helped find answers to questions such as:

- why the strength of perceived pain is not necessarily related to the intensity of pain irritation;
- why the emotional state affects the process of feeling pain.

Feeling pain is one of the most important aspects of the theory of pain. The sensation of pain depends on the following factors:

- past experience. Attitude to pain of children often depends on the example of parents. For example, some parents show excessive anxiety even with minor injuries to their child, while others pay attention only to more serious cases. As a result, different children will respond differently to pain;
- individual characteristics of a person. Studies in the theory of pain indicate that a person who is focused on his inner world experiences more intense pain, but complains less of it than a person who is only interested in the outside world;
- anxiety, fear and depression, which increase pain. In their absence, the patient speaks less of pain;
- suggestions by which pain can be reduced. Harmless drugs (placebo) can play the same role. Giving them to patients (as prescribed by the doctor), the sister suggests that they relieve pain;
- religion and religious beliefs that affect the feeling of pain. For example, pain can be regarded by man as punishment for sins;
- beliefs and attitudes to pain, due to the sociocultural characteristics of a person, and both sensation and reaction to pain are formed throughout life. For example, in Western cultures, childbirth is usually regarded as a painful process requiring pain relief. At the same time, in some countries women experience minimal pain during childbirth. (We do not consider here the opinion of some people that “a child should be born in agony”).

It is often said that the degree of pain sensation is the result of various pain thresholds: with a low pain threshold, a person feels even relatively weak pain, with a high pain threshold, only severe pain. It is the threshold of pain perception - the point at which pain is felt - that is what distinguishes one person from another. The ability to feel pain depends on the level of functioning of the nervous system. Therefore, any damage to nerve endings, pathways, or areas

of the cerebral cortex participating in the analysis of information will affect the level of pain sensation. For example, with lower paraplegia, the patient may not feel pain in the lower extremities. At the same time, with inflammatory processes such as neuritis and myositis, the sensation of pain intensifies. In case of impaired consciousness (from confusion to an unconscious state), the threshold for pain perception decreases.

Different factors affect the threshold of pain [29]:

- the threshold decreases (pain perception is faster): discomfort, insomnia, fatigue, anxiety, fear, anger, sadness, depression, boredom, psychological isolation, social abandonment;
- the threshold rises (pain perception is slower): resistance to pain, relief of other symptoms, sleep, empathy, understanding, company (with other people), creativity, relaxation, anxiety reduction, uplifting, painkillers, tranquilizers and antidepressants.

The natural defensive reaction of a person experiencing pain is the desire to get rid of it or at least alleviate it. When the pain becomes unbearable and prolonged, a person loses the ability to carry out daily activities.

D. Bonica [12] described pain as “beneficial, useless, and dangerous.”

He considered acute pain useful, as it is an alarm. He considered chronic pain useless, since the source of the pain is already known.

He called the pain dangerous or potentially dangerous, which does not carry any useful information and leads to serious complications (cardiogenic shock, traumatic shock, etc.), in which a person can die. Pain experienced after trauma, burns, surgery, is dangerous and requires immediate removal.

Nursing staff should remember that it is not always possible for a person to report pain to others. He may be deaf-mute, stutter, not know the language of the country, difficulties may also arise in children and the elderly, etc. The knowledge and skills of a nurse will help relieve such patients from pain.

### **11.3. PAIN RESPONSE**

Both the sensation of pain and the reaction to it are different for all people. To some extent, they depend on upbringing, individual characteristics and socio-cultural factors.

Differences in response to acute and chronic pain are presented in table. 11-1.

<b>Signs</b>	<b>Sharp pain</b>	<b>Chronic pain</b>
Pain duration	Relatively short	More than 6 months You can set the moment of onset of pain
Localization	Usually has a clear localization	Less localized
Start	Sudden	It starts quietly
Objective	HR increase Increase AP RR increase Pale wet skin Muscle tension in the area of pain Expression of anxiety on the face	Are absent
Subjective	Decreased appetite Nausea Anxiety Irritability Insomnia	Anxiety Depression Irritability Helplessness Fatigue Impaired ability to carry out daily activities Lifestyle change

**Table 11-1. Differential diagnosis of acute and chronic pain**

Note. HR-heart rate; AP-arterial pressure; RR-respiratory rate.

#### **11.4. KINDS OF PAIN**

Depending on the location, cause, intensity and duration, several types of pain are distinguished.

Superficial pain often appears when exposed to high or low temperatures, cauterizing poisons, as well as mechanical damage.

Deep pain is usually localized in the joints and muscles, and the person describes it as a continuous dull pain or excruciating, tormenting pain.

Pain in the internal organs is often associated with a specific organ: “heart ache”, “stomach ache”, etc.

Neuralgia is pain that occurs when a peripheral nervous system is damaged.

**Irradiating pain** - for example, pain in the left arm or shoulder with angina pectoris or myocardial infarction.

**Phantom pain** - pain in the amputated limb, often felt like a tingling sensation. This pain can last for months, but then it goes away.

Psychogenic pain is pain without physical irritants. For a person experiencing this kind of pain, it is real, not imaginary.

## **11.5. SISTER PROCESS AT PAIN**

### **11.5.1. Primary pain assessment**

It is quite difficult to give an initial assessment of pain, since pain is a subjective sensation that includes neurological, physiological, behavioral and emotional aspects. In the initial, current and final assessment conducted with the participation of the patient, the subjective sensations of the patient should be taken as the starting point. "A person's description of pain and the observation of his reaction to it are the main methods for assessing the condition of a person in pain" [12].

H. Roper et al. [53] give three main methods for conducting an assessment:

- description of pain by the person himself;
- study the possible cause of pain;
- monitoring a person's response to pain.

First of all, the localization of pain should be determined. At first, as a rule, a person indicates a sufficiently large area affected by pain. However, with a more detailed questioning, this section is smaller and more localized.

Next, you should find out the possible cause and time of the onset of pain, the conditions for the disappearance of pain, as well as its duration, factors that strengthen or weaken the pain.

The intensity of the pain should be evaluated based on the patient's sensation of the pain, and not necessarily determined by his response to the pain. To do this, the pain rating scale can be used (verbal comparative pain rating scale):

- 0 - pain is absent at rest and during movement;
- 1 - pain is absent at rest, slight pain during movement;
- 2 - mild pain at rest, moderate pain during movement;
- 3 - moderate pain at rest, severe pain during movement;

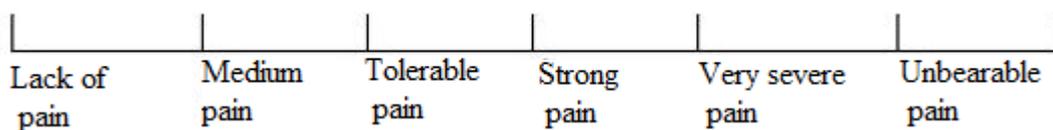
4 - severe pain at rest and during movement. Experience has shown that patients often do not report pain or provide inadequate information, underestimating their sensations. A number of researchers found that medical professionals often overestimate the degree of pain relief as a result of analgesia and underestimate the level of pain experienced by the patient.

The most effective way to establish the intensity of pain in a patient before and after analgesia is to use rulers with a scale that measures the strength of the pain in points.

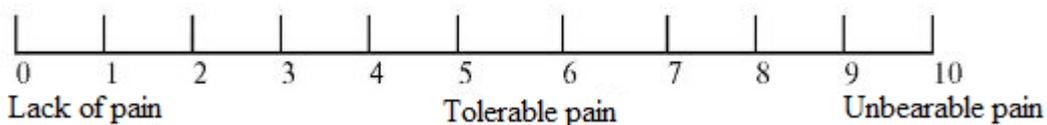
These rulers are a straight line, at one end of which there is a point of absence of pain (0 points), and at the other end there is a point corresponding to unbearable pain (10 points). The sister explains to the patient what the strength of the pain is 10 points, 8 points, etc. Then the patient marks on the ruler a point corresponding to his sensation of pain. Examples of such rulers are given.

### Examples of rulers with a scale for determining the intensity of pain

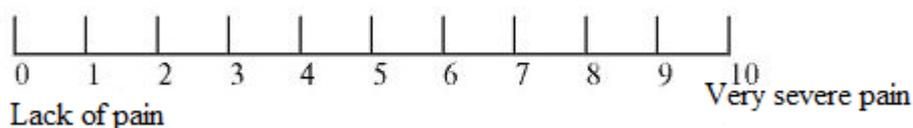
#### 1. The simplest descriptive scale for pain intensity.



#### 2. Digital scale of pain intensity from 0 to 10.

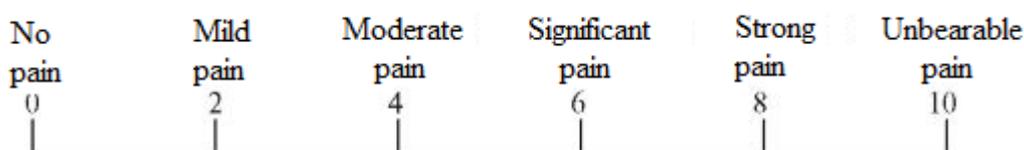


#### 3. Visual-analogue scale.



Note: 2,3 - when using digital and visual analogue scales, it is recommended to use a baseline of 10 cm.

#### Pain intensity scale

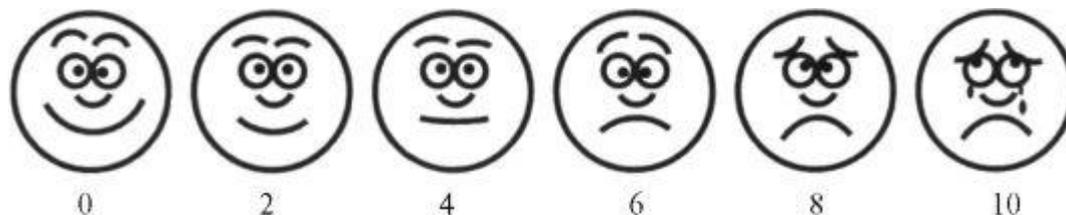


The use of such rulers gives more objective information about the level of pain than the phrases: “I can’t tolerate pain anymore,”

“It hurts terribly,” “It's unbearable.” (To assess the intensity of pain in children, a scale can be used that depicts individuals expressing different emotions, Pic. 11-1.)

If you carefully monitor the reaction to pain, you can get useful information about the patient's condition, especially when it is impossible to verbal communication or in case of clouding of consciousness. Pallor, rapid breathing, increased blood pressure, increased sweating can testify to severe pain, a person can gnash his teeth, bite his lower lip, and wrinkle his forehead. A reaction to pain can be a change in behavior, a decrease (loss) in appetite, a decrease in the volume of daily activity. The patient's compelled position, anxiety, crying, moaning, and sometimes a piercing scream can also be a reaction to pain. At the same time, researchers dealing with this issue argue that “some patients need sisters to tell them that their pain-related behavior is normal and appropriate and that other people also respond to pain” [ 12].

Conducting an initial assessment of pain, it is necessary to find out from the patient its nature (dull, sharp, burning, compressive, and stitching, etc.)



**Picture 11-1. Visual scale of pain intensity.**

0 - pain does not bother the patient; 2 - pain bothers slightly; 4 - the pain is a little worrying; 6 - pain significantly disturbs; 8 - the pain is significant, the patient's consciousness is focused on pain; 10 - the pain is as severe as the patient can imagine; he is barely holding back

and causes. So, pain in the stomach can occur before, during and after eating, joint pain can be at rest and / or when moving, etc. Noise, bright light, as well as feelings of fear, anxiety, can also cause pain. A person, as a rule, easily indicates factors that cause pain.

And finally, one should find out from the person how he endured such pain earlier. For self-assessment of pain, one of the descriptive scales may be offered to the patient.

Compare the word (s) that corresponds to your pain with the number on a straight line that will show the severity of your pain. Draw an arrow from the word to a number or tell a nurse.

Gradation of pain	Severity of pain scores	Pain characteristic
Excruciating, unbearable pain	10-9	Intolerant
		Aching
Extreme pain hindering daily activities	8	Crushing
		Stitching
	7	Compressive
		Shooting
Mild pain	6	Sharp
		Burning
	5	Sensation as in electroshock
		Throbbing
Light pain	5	Convulsive
		Spastic
	4	Dumb
Tormenting		
No pain	5	Gnawing
		Sensation as if crushed by heavy weight
	4	Holding in tension
Inconvenient		
		Troubling

It is very important that the sister draws conclusions after the initial assessment, not only based on the results of the examination of the patient and his behavior, but also on the basis of the description of the pain and its assessment by the patient: pain is what the patient says about her, and not what they think others.

Below is one of the maps recommended for self-assessment of chronic pain, including in cancer patients [29] (picture 11-2).



A study of the use of the pain assessment card used at the Royal Marsden Hospital (Great Britain) showed that this card is a valuable method of pain assessment in 98% of cases [12]. “The initial pain assessment guide below is based on the pain assessment map developed at Marsden Royal Hospital. You may need to change this card to suit the needs of the area in which you work.” [12]

**Example.**

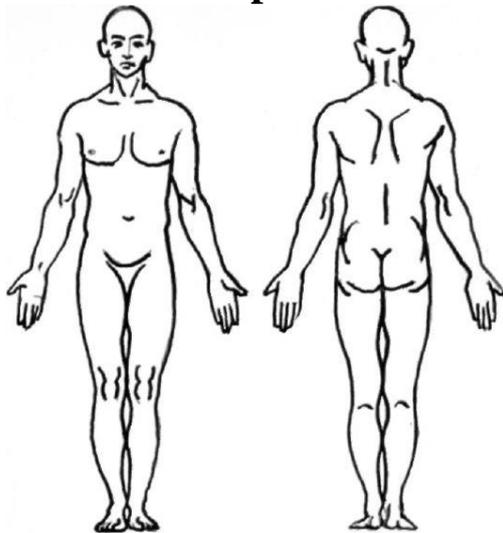
**Guidance on baseline assessment of a patient with pain using a pain score card.**

<b>Actions Rationale and Purpose</b>	
1. Explain the purpose of the card to a patient in pain	Obtaining patient consent for cooperation
2. If possible, ask the patient to fill out a card.	Involvement
3. If the nurse fills in the card, write down how the person describes the pain	Make sure that the patient’s own feelings are taken as the basis for the assessment, so that the patient sees that his feelings are believed. Reducing the risk of misstatement
4. a) Record any factors that affect the intensity of the pain. For example, actions or procedures that help reduce or increase pain, such as distractions, use of a heating pad	Establishing how and when a person experiences pain allows the nurse to plan realistic goals
b) Record if the person is in pain at night, at rest, or while moving	For example, pain relief at night, when a person is at rest, is usually easier to achieve than when moving
c) Mark in the figure where the person is in pain and watch its intensity	
5. Rate the intensity of the pain in each place where it is felt, according to the scale. Mark the time when recording	To assess the effectiveness of drug therapy and determine the most optimal analgesic, its dose, frequency of administration and route of administration

### Pain Score Card

<b>Surname</b>	<b>Branch?</b>	
Name	date	
middle name		
Assessment Source		
Description of pain (s) by the patient		
What helps relieve pain?		
What makes the pain worse?		
Do you have pain?		
1. At night	Yes	Not
Note (if necessary)		
2. At rest	Yes	Not
Note (if necessary)		
3. When driving	Yes	Not
Note (if necessary)	Branch?	
Places of pain	date	

**Indicate in the figures below the body where you feel pain. Designate each site of pain with the letters: A, B, C, etc.**



#### 11.5.2. Defining Nursing Care Goals

If there is pain in the patient, the main goal of nursing care is to eliminate the causes of its occurrence and alleviate the suffering of the patient. It should be borne in mind that eliminating chronic pain is an intractable task and often the goal can only be to help a person overcome pain.

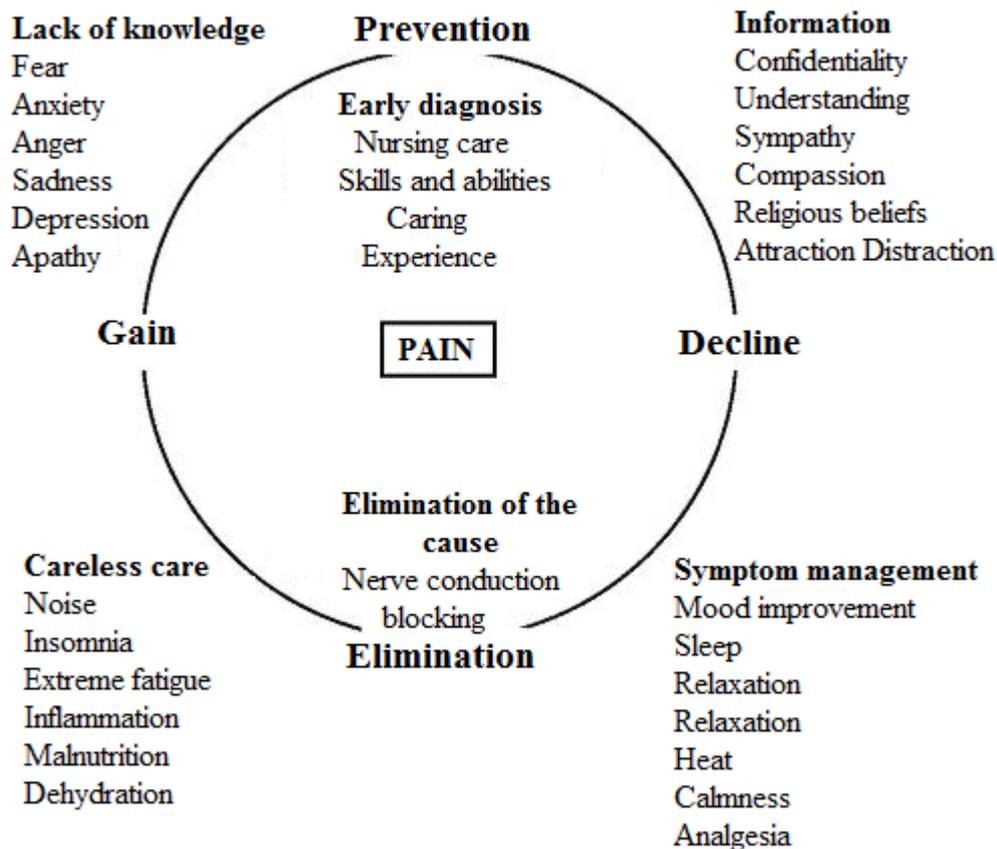
### 11.5.3. Nursing Interventions

To achieve the goals and assess the effectiveness of anesthesia, the sister must accurately imagine the whole cycle of phenomena associated with pain, shown in Picture 11-3.

Despite the fact that medical nurses do not prescribe medication, their role in conducting drug therapy is huge.

As directed by the doctor, the nurse must monitor the correct use of the drug (by mouth, under the tongue), and also administer the drug subcutaneously, intramuscularly, intravenously.

It is very important that the sister understands how a particular painkiller works. In this case, she will be able, together with the patient, to conduct a current assessment of the adequacy of pain relief.



**Picture 11-3. The cycle of phenomena associated with pain [12]**

I. Roper et al. [52] cite data from studies conducted by Kloss (1990), which state that “from the inadequate use of narcotic painkillers, adverse effects for the patient can be expected, both physical and psychological”. At the same time, Kloss notes that the reasons for the insufficient use of narcotic analgesics are:

- “an exaggeration of the belief that, firstly, opiates addictive to the patient, and secondly, they have a side effect, inhibiting the respiratory center;

“Difficulties in conducting an initial assessment of pain due to the reluctance and fear of many patients to request prescribing drugs.”

Unfortunately, in our country, special devices have not yet been used, which, being connected to the patient’s vein, allow him to inject himself with a simple button at a predetermined time intervals immediately after he feels intense pain. At the same time, a mechanism is provided that excludes drug overdose.

If there is pain in older people, it should be remembered that they often have more than one source of pain, as well as possible communication difficulties associated with impaired vision, hearing or a decrease in cognitive abilities.

In addition to the drug therapy conducted by the sister as prescribed by the doctor, there are other methods of pain management within her competence. Reduce pain can be distraction, changing body position, applying cold or heat, teaching the patient various relaxation techniques, rubbing or lightly stroking a painful area.

We have already said that chronic pain changes a person’s lifestyle. People who are doomed to live in chronic pain need a special complex treatment, which many of them can receive in special medical institutions - hospices. At the hospice, the patient is taught how to cope with and live with pain, and not how to cure this pain. A person is helped as much as possible to improve the quality of his life. The methods of pain relief used in hospices can be divided into three groups:

- physical (changing body position, applying heat or cold, massage and vibration, acupuncture);
- psychological (communication, distraction, music therapy, relaxation and stress relief technique, hypnosis);
- pharmacological (local and general analgesics, tranquilizers).

The search for new ways of pain relief is ongoing. However, when drugs in certain cases are not effective enough or inaccessible to patients (as a rule, if the patient is outside the hospital), paramount importance should be given to other, non-pharmacological methods of pain relief.

### 11.5.4. Assessment of the results of nursing intervention

Objective criteria are needed to conduct a final assessment of the success of nursing interventions. Many countries are constantly researching in this area.

The above examples of rulers and scales for determining the intensity of pain can serve as one of the criteria for both the current and the final assessment. It should be recognized that the medical sister is not the only person helping the patient achieve the effect of pain relief.

The two scales below will also help an objective assessment of pain reduction:

**Scale for characterizing pain relief:**

- A - the pain has completely disappeared;
- B - the pain has almost disappeared;
- B - the pain is significantly reduced;
- G-pain decreased slightly;
- D - there is no noticeable decrease in pain.

**Calming Scale:**

- 0 - no sedation;
- 1 - mild sedation; drowsiness, quick (easy) awakening;
- 2 - moderate sedation, usually drowsiness, quick (mild) awakening;
- 3 - strong sedation, sedative effect, it is difficult to wake the patient;
- 4 - the patient is sleeping, deep sleep.

**We offer a possible plan for caring for a patient who is in pain [42].**

**Recommended Pain Care Plan (for an adult patient)**

<b>Patient problem</b>	<b>Objectives / Expected Result</b>	<b>Nursing Interventions</b>
1. Pain in the area	1. The patient will not experience pain (pain will decrease)	1. Conduct a non-verbal assessment of pain intensity using a ruler of pain or a scale for assessing pain (when assessing, indicate on which scale the pain intensity was evaluated). Indicate who assessed the pain (sister, patient)
		2. To evaluate the intensity of pain, observing the behavior of

		the patient
		3. Giving (administering) anesthetics in accordance with the prescription of the doctor and conducting a nursing assessment of the effectiveness of the use of these drugs, consulting with the doctor in case of inadequate analgesia
		4. Help the patient take a position that reduces pain
		5. Explain to the patient all the procedures performed, give him the opportunity to express his fears and concerns.
		6. Use known relaxation procedures to relieve pain

Pain and the desire to reduce it are the main reasons for people seeking medical help. Many people realize that it's always possible to completely remove a pain. However, each patient has the right to adequate pain relief declared to him in the "Law of the Russian Federation on the protection of public health" [25, 26].

## CHAPTER 12 QUALITY OF MEDICAL CARE - ONE OF THE COMPONENTS OF QUALITY OF LIFE IN A SCHOOL OF PATIENTS – WAY TO INCREASE THE QUALITY OF LIFE

### After reading this chapter, you will learn:

- on the concepts of quality of life and quality of care;
- on the main aspects of quality of life and the quality of medical care;
- on the methodology for ensuring and managing the quality of medical care in accordance with international standards (ISO 9000: 2000 series);
- about the quality system in healthcare facilities;
- about schools for patients;
- on the role and tasks of medical personnel in ensuring the quality of medical care.

### Concepts and terms:

- ***medical care*** - activities aimed at improving and treating patients, carried out by professionally trained employees who are entitled to it in accordance with applicable law. Medical care includes a certain set of medical services;

- ***the process of providing medical care*** - an activity based on the ISO 9000 standard for the development of quality systems in medicine and implying the need for a wide range of measures at the state level in order to ensure quality, prevention, diagnosis and treatment;

- ***quality of medical care*** - a set of characteristics confirming the conformity of the medical care provided to the existing needs of the patient (population), his expectations, the current level of medical science and technology;

- ***Quality system*** - a combination of resources, organizational structure and methods necessary to achieve quality;

- ***Medical service*** - the result of the actions of persons and institutions providing medical care to meet consumer needs. Medical service - an identified element of medical care;

- ***Patient-oriented care*** — a medical care approach that takes into account the patient's position. This is a medical care system in which the patient is subject to the influence of all its elements;

- ***Rights of patients*** - a set of rights and privileges of people who seek medical services and use these services. Each patient

has the right to better health, high-quality and timely accessible medical care, awareness, safety, prevention, etc.

- **Health** - a state of complete physical, mental and social well-being, and not just the absence of diseases and physical disorders (WHO Constitution, 1946);

- **state of health** - a characteristic of the state of health or unhealth of an individual, individual groups or the population as a whole, assessed on the basis of the study of special indicators;

- **Prevention** - a set of targeted actions aimed at reducing the likelihood of illness or accident, or the consequences associated with similar situations. Distinguish between primary, secondary and tertiary prevention.

- **diagnosis** - the determination of the presence of a disease or condition by its symptoms, syndromes, signs, laboratory results or other data in accordance with the accepted classification of diseases;

- **Diagnosis** - the process of identifying symptoms, syndromes and diseases by conducting a patient examination;

- **Treatment** - a process designed to achieve the desired state of health for the patient. During treatment, various medical technologies are used;

- **Rehabilitation** - a process aimed at restoring or improving a patient's functional state.

## 12.1. THE CONCEPT OF QUALITY OF LIFE (BASIC ASPECTS)

Famous modern Russian philosopher and economist A.I. Subetto noted: "Quality is the dignity of a nation." Humanity at the threshold of the third millennium has determined for itself the path of evolutionary development of the quality of life. The quality of life is a concept that is important not only for health care, but also for all spheres of life in modern society, since the ultimate goal of all institutions of society is human well-being. Human well-being is a humane and noble goal, the realization of which is possible if, on the one hand, the structures of society really make some efforts to achieve it, and on the other, there are clear and strict criteria for evaluating and measuring the effectiveness of these efforts.

The quality of life on planet Earth was dedicated to the famous United Nations (UN) international conference in Rio de Janeiro in 1999, at which the international community was asked about the need for international cooperation to ensure a modern quality of life.

Quality of life indicators in different countries are systematically monitored by the UN.

Since 1990, the UN Development Program unit, specially organized at the UN, annually prepares reports on human development, reflecting the situation in 174 countries of the world. Based on these materials, the quality of life of the population of individual countries and the population of the world as a whole is evaluated. In total, about 400 indicators are used to analyze and assess the quality of life. The annual publication of such reports allows a comprehensive assessment of the quality of life of the population of countries with the calculation of the human development index (HDI) and the determination of the international rating of quality of life for each country.

In 1997, the HDI in Russia was 0.747 (in Canada - 0.932, in the USA - 0.924). Our country by the HDI took in 1997 the 71st place in the world [1].

By 2005, the value of the HDI in Russia increased to 0.793 due to the increased life expectancy, the level of education achieved and the higher real gross domestic product per capita.

Leading scientists in the field of quality of life believe: in order to achieve success in a key area of development, Russia needs, firstly, to recognize that quality of life is the main priority of the state's social, economic, scientific and technical policy; secondly, to include indicators of quality of life in strategic programs and development plans of Russia in the form of the main guidelines for the socio-economic development of the country; thirdly, to create effective mechanisms for the formation of the quality of life of the population and the socio-economic development of Russia and its regions.

Humanity is increasingly realizing that only the quality of life can most express the target aspirations of the world community, for humanity is on the verge of transition to a new century - the age of quality as opposed to the outgoing century of productivity [2]. The words of the famous Russian philosopher I.A. Ilyin, who claimed back in 1928 that Russia would reborn and flourish "only

after the Russian people understand that salvation must be sought in quality."

In realizing the need for a transition to a new civilized paradigm, Russia has progressed quite far. Many scientists are engaged in the study of quality problems, seeing in the slogan "Quality of life - for everyone!" The most realistic version of a clear and accessible national idea for Russia.

It is enough to look into the works of such scientists as B.V. Boytsov, Yu.I. Bokanov, A.V. Glichyov, Yu.V. Kryanov, N.N. Lukyanenko, N.V. Mikhailova, M.B. Plushchinsky, A.I. Subetto, A.P. Fedlev and many others to realize the depth, versatility and versatility of understanding the category of quality of life. Serious scientific and organizational work in the field of quality of life is carried out in the State Standard of Russia and its institutes, the company "Quality".

The topic of quality of life is increasingly raised on the pages of the media, in Russian and international forums. The quality of life and one of its components - the quality of medical care - became the topic of the international forum held in Moscow on November 8-10, 2006. The exhibitions held within its framework, round tables aroused wide public interest.

This indicates our self-sufficiency, intellectual readiness to embark on the development path proclaimed by the world community.

Russia, despite the situationally conditioned illness of growth, is spiritually prepared and intellectually open for the transition to a "civilization of quality".

Scientists interpret the concept of "quality of life" differently depending on the goal set by the authors of numerous works on this topic.

The first president of the Academy of Quality Problems A.V. Glichyov believes that the quality of life depends on:

- the state of the material environment (quality of goods and services);
- state of the environment (conservation, rational use and reproduction of the environment);
- health status of citizens and their active longevity;
- moral and psychological climate in society;
- education and culture of citizens.

Obviously, these 5 components are interconnected, but strengthen the connection between them primarily the state of the environment, health, education and culture of citizens.

Indeed, while philosophers, sociologists, economists, natural scientists and science fiction writers argue about what quality of life is and offer their vision of the future, new generations of people are growing up on Earth who are called to live, work and equip the planet in the third millennium . And one does not have to be a prophet to affirm: the future will become the way they build it. It is clear that the fate of each country depends on how it prepares its youth for adulthood, what it will teach, what moral principles it will be able to instill, and how it will be able to maintain their health.

The primary role in this is played by both the education system and the healthcare system.

Next, we will focus on the quality of life in medicine. The term "health-related quality of life" is widely used in modern medicine [3]. The definition of the concept of "quality of life" is logically and structurally related to the definition of health given by WHO: "Health is the complete physical, social and psychological well-being of a person, and not just the absence of a disease" [4]. The concept of "quality of life" in medicine is multidimensional. This is a holistic characteristic of the physical, mental, emotional and social functioning of the patient, based on his subjective perception.

Three main components of the concept of health-related quality of life should be distinguished.

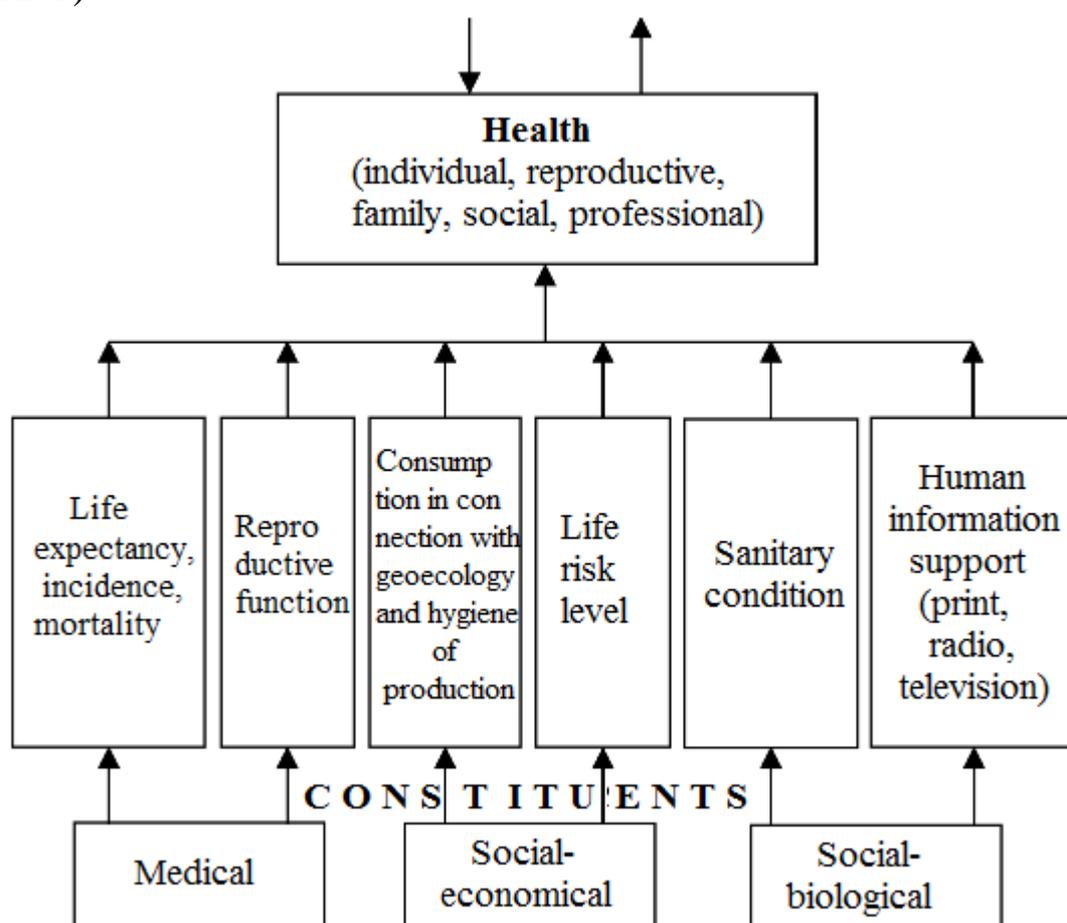
**Multidimensionality.** The quality of life can be judged based on the information received about the main areas of human activity: physical, psychological, social, spiritual and economic. The quality of life associated with health depends on many factors that are not related and related to the disease, which makes it possible to differentially evaluate the effect of the disease and treatment on the patient's condition.

**Variability over time.** The quality of life varies over time depending on the condition of the patient, due to a number of endogenous and exogenous factors. Data on the quality of life allow constant monitoring of the patient's condition and, if necessary, to carry out correction of therapy.

Patient participation in assessing their condition. This component of the concept of quality of life is especially important. An assessment of the quality of life made by the patient himself will be a valuable and reliable indicator of his general condition.

Currently, the study of quality of life is carried out in almost all areas of medicine. The patient should evaluate the quality of life, since the results of numerous studies show that the patient's assessment often does not coincide with the assessment given by medical personnel.

So, the quality of life is primarily a medical and psychological concept, which also affects aspects of the socio-economic sphere: spiritual, cultural and other life values of a person, as well as the level of civilization and industrial development of society (Picture 12-1).



**Picture 12-1. The system-forming factor in the quality of life and its main components**

The quality of life includes a combination of natural and social conditions that provide (or do not provide) a complex of human health, i.e. the correspondence of life parameters to the needs and socio-psychological attitudes of the personality, inextricably

linked with the life expectancy and health status of a particular population.

According to I. B. Ushakov and P.S.Turzin [5], the basic factor of quality of life is health, first of all professional, as the ability of the human body to maintain compensatory and protective properties that ensure its high performance in the course of labor activity, individual, reproductive, family, public health. The following main components characterize the quality of life: morbidity (mortality), consumption (due to geocology), environmental, hygienic and ergonomic conditions at the workplace and at home, level of risk of life, health status, state of offspring (family), information support, etc. Consumption and health - socio-economic indicators; life expectancy and offspring - biomedical; risk and information support - socio-biological; conditions at the workplace and at home - environmental-hygienic and ergonomic indicators of quality of life. According to a number of researchers, the lifestyle and conditions of life and activity have the greatest impact on human health, heredity has a 2-fold lesser effect, and health depends on the healthcare system even less.

The person is also influenced by the internal (at the workplace or at home) and external (biosphere) environment. In other words, a complex of physical, chemical, biological, psychological and other factors directly affects the human body at work, in an apartment, in nature. The impact of some can lead to minor adverse consequences for humans, others - to cause occupational diseases, allergies, affect labor productivity and social comfort. It must be emphasized that a person feels the influence of not all adverse factors, however, it can lead to certain changes in the state of health and pronounced emotional reactions of a person.

A number of domestic and foreign researchers note, for example, that the destructive anthropogenic impact on the atmosphere is increasing, and its size is already comparable to the dimensions of catastrophic natural phenomena. Among the most global environmental consequences of human activities, one can name an increase in the content of carbon dioxide and various aerosols, a decrease in the concentration of oxygen and ozone in the atmosphere, a warming climate, an increase in seismic and volcanic activity, an increase in droughts and floods and, as a result of such environmental disturbances, acid rain, the greenhouse effect and various natural disasters, becoming increasingly widespread. The reason

for all these phenomena is missile launches, flights of jet planes, nuclear explosions, pollution by products of technological production (chlorins, freons, etc.), the consequences of the functioning of nuclear and thermal power plants, heat generation in megacities, exploration of the North, pollution of seas and oceans with oil products, and much more. A person experiences a negative effect of various anthropogenic factors (excess concentration of harmful substances and noise level, pollution of the atmosphere, water bodies, excess of the level of electromagnetic radiation, etc.). The situation is compounded by the fact that one environmental change can initiate a chain reaction, leading to the emergence of new changes. For example, due to the formation of so-called ozone holes, the power of cosmic radiation and magnetic storms penetrating through the atmosphere increases.

The human body is not evolutionarily prepared for the effects of new ionizing and non-ionizing radiation, as well as harmful substances fundamentally new in structure. In addition, cumulative effects of anthropogenic natural (natural) factors are possible. The development of adaptive reactions of the body is limited by human capabilities, which leads to a metamorphosis in the structure of morbidity and the appearance of stress reactions, various types of allergies, as well as previously unknown so-called environmental diseases.

Recently, a methodology for studying the quality of life has been developed in medicine that opens up unique possibilities for measuring the key components of human health: physical, psychological and social functioning, described by A.A. Novik and T.I. Ionova in the "Guide to the study of the quality of life in medicine" [6].

## **12.2. QUALITY OF MEDICAL CARE (BASIC ASPECTS AND METHODOLOGY OF ITS SUPPORT)**

The most important value of any state is human health. Most people consider health a key indicator of quality of life.

In recent years, the health indicators of the population of Russia continue to deteriorate, despite the intensive development of world and domestic medical science. Mortality and disability increased, including for children and people of working age. Health

care as a state institution does not focus on the main object of medicine - the patient - the consumer of medical care.

**Medical care** - activities aimed at improving and treating patients, carried out professionally trained employees entitled to it in accordance with applicable law.

The quality of medical care is a set of characteristics confirming the correspondence of the medical care provided to the patient's needs, his expectations, the current level of medical science and technology.

The main characteristics (indicators) of the quality of medical care include:

- adequacy;
- availability;
- continuity and continuity;
- effectiveness;
- performance;
- effectiveness;
- security;
- timeliness;
- ability to meet expectations and needs;
- stability of the process and result;
- continuous improvement and improvement.

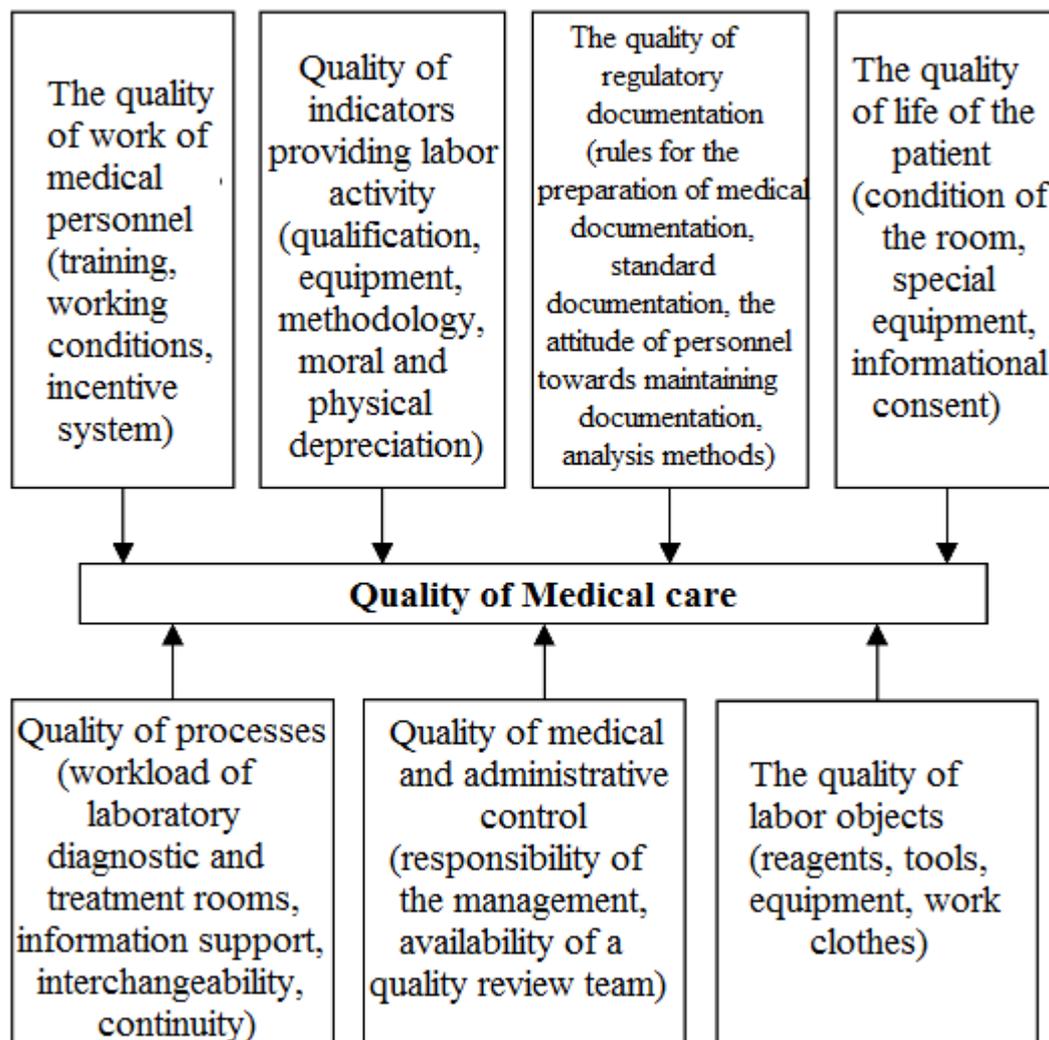
Ensuring the quality of medical care is one of the main elements of improving public services and the effectiveness of health care facilities.

The effective operation of health facilities depends on:

- quality of medical services and their organization;
- quality of equipment, tools;
- quality of drugs;
- quality of information support;
- optimization of documentation of medical care.

More clearly the main factors affecting the quality of medical care are presented in Fig. 12-2 (Mikhailova N.V., 2004).

In the context of the protracted economic crisis, our health care was late in the search for methods and means that could improve the medical and demographic situation in Russia and the health of the population raise them to the appropriate level in developed foreign countries.



**Picture 12-2. The main factors affecting the quality of care**

Improvement of the medical and demographic situation and the health of the population in our country can be achieved through the early introduction of modern medical care organization methodologies based on the ISO 9000: 2000 Quality Management System.

The purpose of the standard is to satisfy the needs and expectations of the consumer (patient) and all interested parties. In quality management, the standard declares a principle - an approach as a process. The recommendations of the standard are aimed at ensuring the productive work of healthcare facilities by simultaneously efficiently managing numerous interconnected processes. All processes and activities of healthcare facilities are subject to evaluation, analysis and improvement, which guarantees continuous improvement of the quality management system,

all areas of activity and, as a result, reduction of unjustified losses.

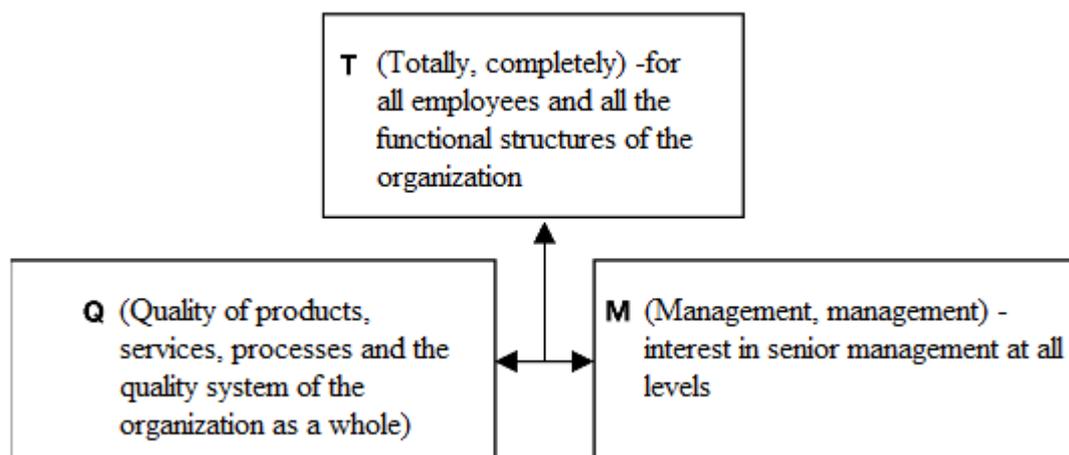
The standard of MS ISO 9000: 2000 is based on 8 principles of quality management:

- Consumer orientation (in medicine - for the patient).
- The role of the leader as a leader.
- Involvement of all staff.
- Approach to quality management as a process.
- Systematic approach to management.
- Continuous improvement.
- Approach to decision making based on the analysis of facts, information.
- Mutually beneficial relationships with suppliers.

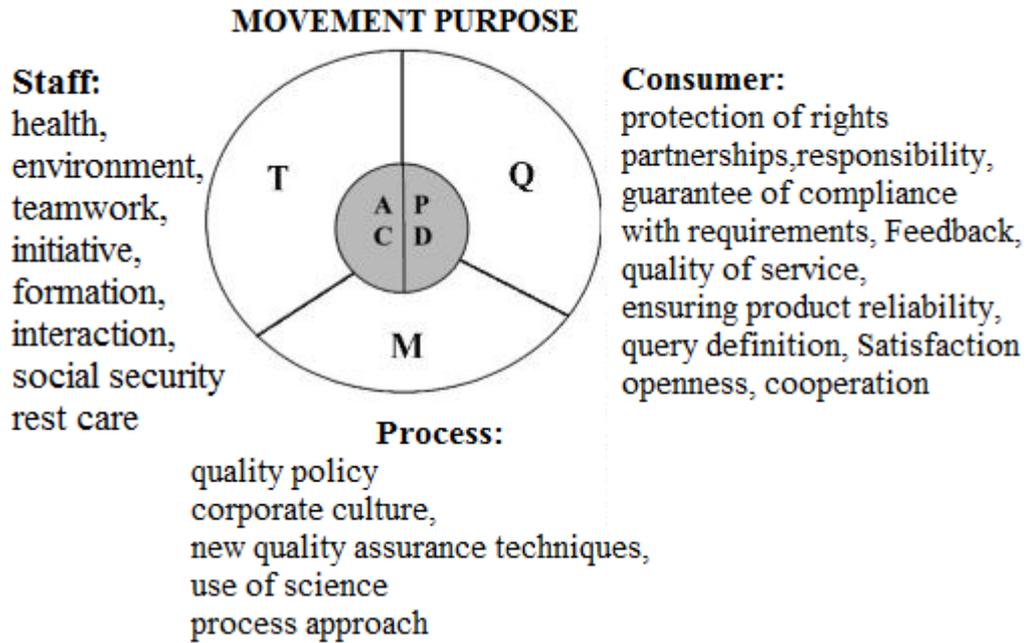
ISO standards of the 9000 series of 2000 edition are based on the concept of TQM (Total Quality Management - universal management based on quality) as the most progressive and effective concept of quality management.

TQM is based on modern concepts of theory and practice in the field of quality. With the help of two schemes, the meaning of TQM can be simplified.

The first diagram (Picture 12-3) explains the meaning embodied in the letters T, Q, M.



Picture 12-3. TQM



**Picture 12-4 Fundamental Principles TQM**

The second diagram (Picture 12-4) presents the three fundamental principles of TQM, which you should pay attention to when implementing the quality system

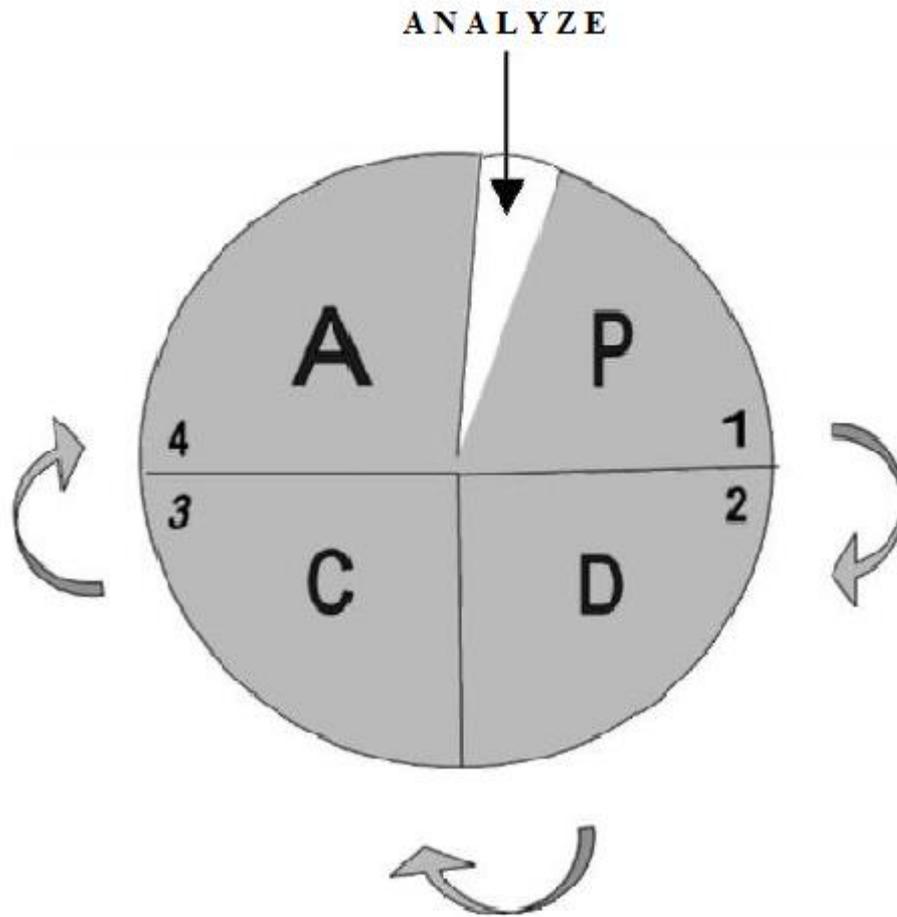
In the center of picture 12-4 presents the so-called PDCA - E. Deming cycle, consisting of 4 phases:

- P (plan)
- D (do)
- C (Check)
- A (Act)

Before embarking on a specific action or process according to this scheme, an analysis of the existing situation in any production, in particular in medical facilities, is necessary (Fig. 12-5).

### **12.3. HOSPITALITY QUALITY SYSTEM (BASIC PROVISIONS)**

The application of the standard to ensure the quality of care includes 6 stages.



**P** (plan)— planned nature of actions and type of improvements

**D** (do)— planned changes are put into practice

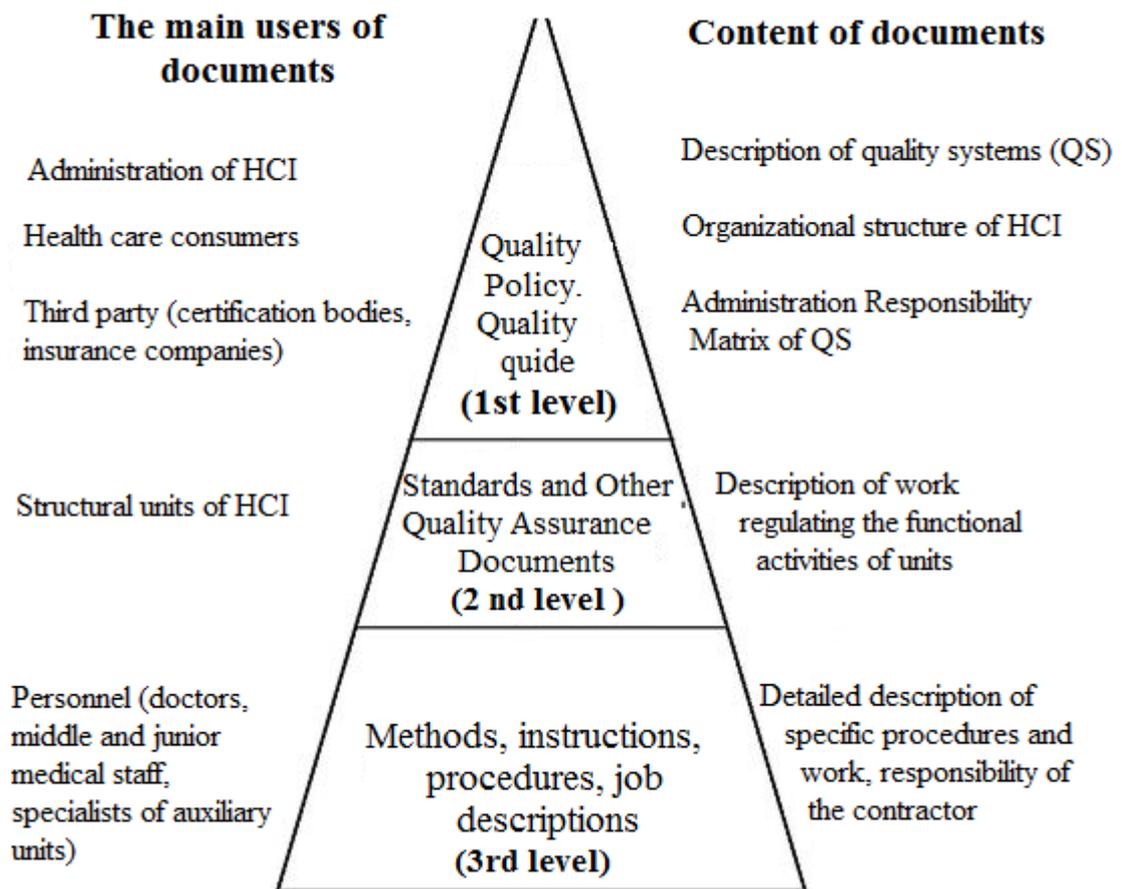
**C** (check)— the results of the changes are checked

**A** (act)— improved solution is applied in continuous practice

**Picture 12-5. E. Deming's cycle**

- Training of medical personnel (administration, doctors, paramedical and junior medical personnel) and other specialists of healthcare facilities in ensuring the quality of medical care in accordance with the requirements of MS ISO 9000: 2000 on the developed differentiated programs taking into account the specifics of professional activity.

- Analysis of the starting state of the quality system in the healthcare facilities according to the developed technique.
- Development of documentation on the quality system in accordance with the requirements of MS ISO 9000: 2000, taking into account all aspects of medical technology.
- Preparation of an internal audit team to evaluate and analyze the quality of healthcare facilities with the aim of maintaining and improving it.
  - Implementation of developed documentation.
  - Quality system certification.



**Picture 12-6. Hierarchy of documents of the quality system of medical facilities**

To ensure the quality of medical services of any healthcare institution, it is necessary to develop documentation for the quality system in accordance with the requirements of ISO standards, observing the requirements for the hierarchy of documents of the quality system (Picture 12-6). The documentation development process should be preceded by the training of HCI specialists on

quality assurance issues, since the developed documentation should describe the regulation of all the procedures performed, based on the existing real capabilities of the HCI and the experience gained. The hierarchy of quality system documents (see Picture 12-6) provides for three levels of documentation.

The documentation of the quality system of the treatment and prophylactic unit should strictly and professionally regulate all types of health care facilities. The documents describing the quality system have their own hierarchy and are focused on a certain circle of specialists involved - from the administration to the junior medical staff.

Each document has its own regulations in order to ensure quality. This always minimizes risk, which is especially important for medicine.

**1<sup>st</sup> level.** Quality policy (the main directions and goals of hospitals in the field of quality, formally formulated by senior management) and the quality manual (document describing the quality management system of hospitals). The quality manual is developed in accordance with the guidelines for the development of quality manuals. The quality manual can be common for the entire health care facility, while the feasibility of the existence of differentiated quality manuals taking into account the specifics of departments, such as dental, functional diagnostics departments, etc., cannot be ruled out. The quality management manual is accompanied by the organizational structure of health facilities and the administration responsibility matrix. The users of the 1st level documentation are the administration of medical facilities, consumers of medical services, a third party (certification bodies, insurance companies).

**2<sup>nd</sup> level.** Methodological instructions and other quality assurance documents governing the functional activities of units. This type of documentation provides work algorithms with the necessary degree of detail, which decodes the sequence of actions reflecting responsibilities and all requirements (in the form of links to documents and / or specific instructions) to perform the required actions. Users of documentation of the 2nd level are specialists of structural divisions of the medical institution.

**3<sup>rd</sup> level.** Algorithms for specific procedures and medical services (simple, complex and complex). Several types of algorithms are provided depending on the specifics of the procedures and

medical services. The algorithm decodes the technological process of the procedure and / or service, strictly observing the sequence of actions, indicates the responsibilities and conditions necessary for the implementation of all provided actions, including the development of an algorithm for interaction with the patient. It provides for the training of the patient or his relatives (in pediatrics and in cases where the patient is inadequate), informed consent of the patient, medication and procedure, patient behavior and lifestyle, patient diary, ethics of communication with the patient and / or his relatives, the rights of the patient. When describing these actions, one should strictly observe the requirements of medical technologies and refer to the necessary documents, instructions, regulations, forms. Practice has shown that this approach dramatically reduces the risks of providing medical care.

When describing specific procedures, the following principles may be recommended.

- If several specialists and / or departments participate in the procedure, it can be presented in the form of a certain algorithm. Thus, the entire process of rendering a medical service will be depicted with the necessary degree of detail, indicating the responsibility of the involved individuals and units, as well as instructions that are mandatory. The degree of detail is determined by the complexity of the procedure (process) and the qualifications of the staff.

- If the procedure is performed by one person, the procedure for its implementation and the necessary comments are specified in the methodological recommendations (Picture 12-1).

The users of documentation of the 3rd level are doctors, paramedical and junior medical personnel, specialists of auxiliary units. Each level of documentation is supplemented by the development of specific job descriptions for working personnel with an indication of rights, obligations, and responsibilities.

In the hierarchical order below are the fundamental documents of the quality system for healthcare facilities:

- federal laws;
- Decisions of the Governments of the Russian Federation;
- state standards (SS);
- international standards (ISO);
- industry standards (IS);
- Interstate Standards (ISS);

- medical and economic standards (MES);
- patient management protocols;
- guidance documents (GD);
- industry guidelines (IG);
- guidelines (G);
- methodological instructions (MI);

**Table 12-1. Methodological recommendations for nursing care at a risk of bedsores in a hospital patient**

Problem	Goal	Nursing Interventions
The risk of pressure sores	Elimination of bedsores	Conducting a current assessment at least 1 time per day (in the morning) on the Waterlow or Norton scale
		Change in patient position every 2 hours 08-10h Fowler position 10-12h position on the left side 14-16h position on the right side 16-18h Fowler position 18-20h Sims position 20-22h position on the right side 22-24h position on the left side 00-02h Sims position 02-04h position on the right side 04-06h position on the left side 06-08h Sims position
		Daily in the morning at _____ hours embracing the following parts of the body
		Checking the condition of the bed when changing position (every 2 hours)
		Teaching relatives the technique of moving the patient correctly (lifting him above the bed)
		Determination of the amount of food eaten by the patient (protein intake of at least 120g / day)
		Ensuring the use of at least 1.5 liters of fluid per day: 09-13h 700ml 19-18h 500ml 18-22h 300ml
		The use of foam linings for areas of the body that exclude pressure on the skin
		In case of urinary incontinence: change of diapers every 4 hours. In case of fecal incontinence: change of diapers immediately after defecation, followed by a gentle hygiene procedure.
		If pain intensifies, consult a doctor
		Encouraging the patient to change the position in bed (to change the pressure) with the help of crossbars, handrails and other devices

Note. The patient lies on a special mattress and / or bed. \* The choice of positions and the sequence of their alternation may vary depending on the disease and the condition of the patient.

- recommendations of the Ministry of Health and Social Development of Russia;
- orders of the Ministry of Health and Social Development of Russia;
- other regulatory documents.

The proposed methodology has several advantages.

- The productivity of each employee (from the junior medical staff to the highest administration) and healthcare facilities as a whole is increasing.

- Minimizes risk.

- Most decisions and conclusions (appointments, recommendations, analyzes, procedures, etc.) are formulated correctly the first time, accordingly, the number of repeated examinations decreases and the time and money spent on one patient are reduced.

- Contact with the patient and / or his relative improves, and the degree of trust increases.

- An objective assessment and analysis of the work of various departments and healthcare facilities as a whole, relationships with insurance companies, the health status of an individual patient and the dynamics of the treatment and / or rehabilitation process, the effectiveness of the drugs used, diagnostic, treatment and rehabilitation methods are carried out.

- The current quality system is constantly improving.

- The effectiveness of medical care is increasing.

Thanks to this approach, the needs of all interested parties will be satisfied: patient, doctor, family, insurance company, society, state.

Thus, a quality system is a combination of resources, organizational structure and methods necessary to achieve quality.

The process of providing medical care is an activity based on the ISO 9000 standard for the development of quality systems in medicine and implying the need for a wide range of measures at the state level to ensure the quality of prevention, diagnosis and treatment, since currently in some cases medical care does not meet modern requirements.

In accordance with the adopted decisions [9, 10], all health facilities must provide timely adequate medical care. But at the

same time hospitals are placed in such conditions that the volume of medical care provided depends on the actual funding.

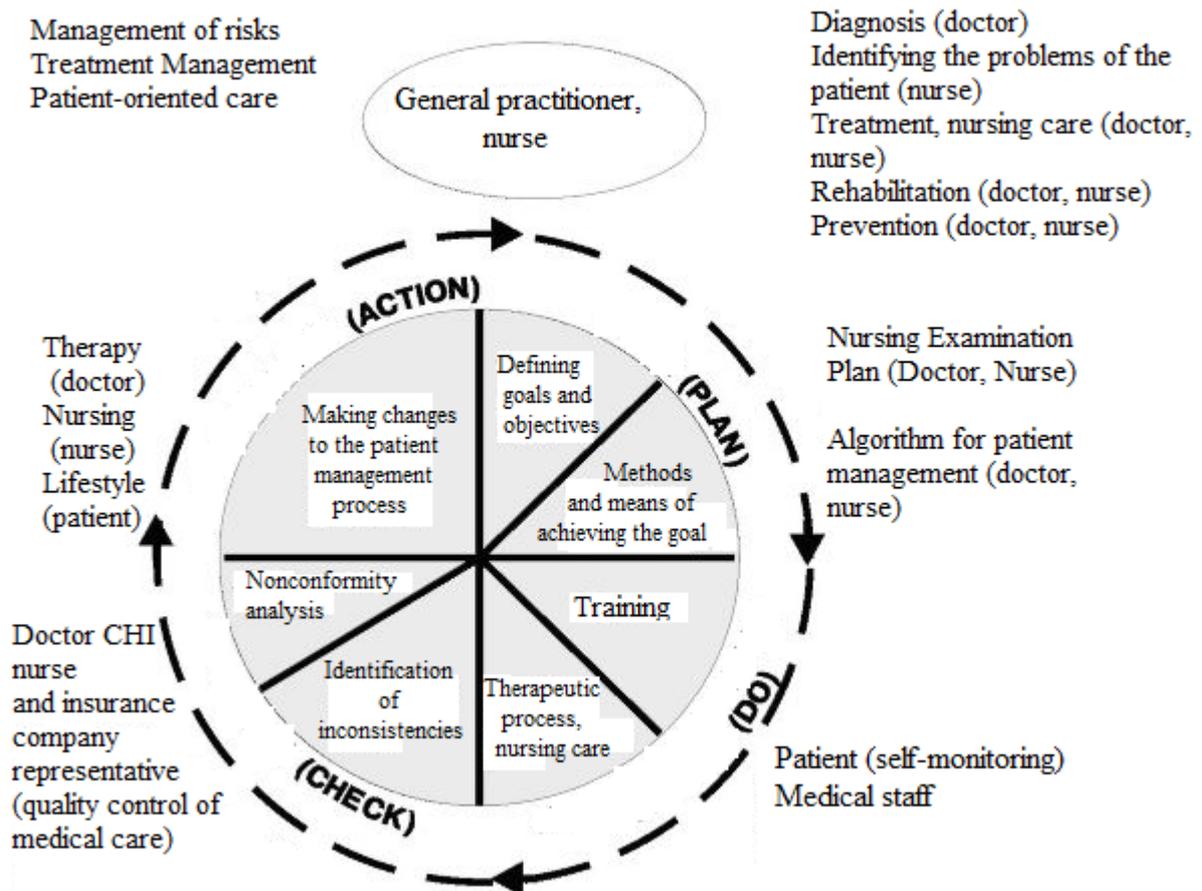
It is known that exceptions to the rules and non-standard situations are a very common occurrence in medicine (unlike other areas of activity), since the process of providing medical care is extremely specific for each patient, and the individual characteristics of the human body are diverse and unpredictable. Under these conditions, in the absence of a quality system, the degree of risk for both the patient and the medical staff increases sharply. And even when the medical care system is at first glance well-established, it does not guarantee the patient adequate timely medical care. The maximum possible risk minimization in the provision of medical care is a problem that modern healthcare must solve. To do this, each health care facility should have clear operating procedures for various structures, guaranteeing compliance with all indicators of the quality of care provided above.

The only correct approach to solving this problem is the implementation of international standards ISO 9000. Certification according to ISO 9000 is a guarantee and confirmation that the treatment and prophylactic process management system is up to standard, eliminates errors in normal situations and minimizes risks in unusual cases.

The quality system guarantees the clarity and accuracy of the implementation of medical technologies in those cases where hospitals have a clear quality policy, trained personnel, clear standard documented procedures and an approved system of personal responsibility (responsibility matrix along the entire route of medical services provided). This allows us to guarantee that everything necessary will be done to provide timely adequate medical care to the patient and ensure the therapeutic and prophylactic process within the capabilities of a particular medical institution.

The modern methodology of quality management, including the methodology of international standards ISO 9000, is based on two principles: the concept of continuous improvement of E. Deming (Picture 12-7) and the chain reaction of E. Deming (Picture 12-8).

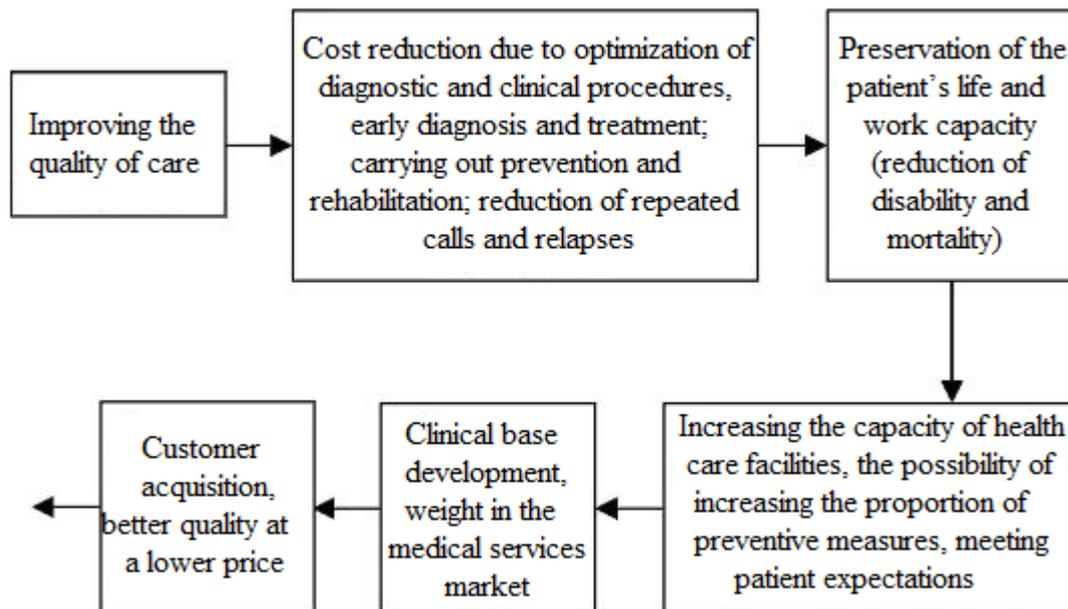
## CYCLE PDCA



**Picture 12-7. The concept of continuous improvement (in relation to health facilities)**

Quality management in the provision of medical care is very clearly implemented using the approaches laid down in the concept of continuous improvement of E. Deming. These approaches include:

- definition of goals and objectives;
- determination of ways to achieve goals;
- education and training;
- provision of medical services;
- verification of the results of medical care;



**Picture 12-8. Chain reaction of E. Deming in the provision of medical care**

- Analysis of identified discrepancies;
- making adjustments.

The main goal in the provision of medical care is the timely and professional identification of inconsistencies (deviations from the norm), analysis, adoption and implementation of correct decisions in order to eliminate inconsistencies (or reduce their impact on the patient's condition).

Using the PDCA cycle of medical care (see Picture 12-7) as an algorithm for substantiating the fundamental principles of the quality of healthcare facilities, we can draw the following conclusions that fully comply with the recommendations of ISO 9000 standards.

- When providing medical care, the most important factor should be taken into account - the consequences of treatment. It is necessary to ensure the best possible result of the quality of life of a particular patient from the point of view of himself or his relatives, the correct prediction of this result (the law of informed consent).

- All stages of the life cycle, without exception, affect the quality of care. Quality must be ensured at every stage.

- The transition from one stage to another is accompanied by some loss of planned quality (as a rule, the end result is more modest than expected).

At all stages, it is important to ensure:

- High level of qualification of specialists;
- Systematic and advanced training for all categories of medical staff, including on issues of ensuring the quality of medical care;
- Strict cost accounting;
- Strict accounting of costs (losses) in order to minimize them;
- The focus of the health care economy on a sufficient quality of care, the impossibility of harming the patient.

In order to meet the needs of consumers and ensure the economic viability of healthcare facilities, marketing is necessary.

An adequately organized healthcare system based on the principle of the chain reaction of E. Deming (see. Fig. 12-8) can and should be cost-effective. This is not about saving on the patient, but about the thoughtful and balanced use of resources provided by medical and economic standards, with maximum benefit for the patient. This problem can only be solved if there is a modern quality system in healthcare facilities.

The above approaches are combined in the recommendations of ISO 9000 standards. If you follow these recommendations, adapted to the specifics of the health care facilities, you can guarantee such medical care that will meet the established and declared quality indicators and ensure that the patient's quality of life is maintained at the proper level, taking into account restrictions associated with the initial state of the patient.

The main advantage of this approach is that by specifying the functions and delegating responsibility, we facilitate the work of medical personnel, sharply reduce the risk and create the basis for ensuring the quality of medical care.

A package of methodological instructions on the procedures to be completed, supplemented by the necessary work and job descriptions, will be the basis of the documented regulation of the quality of medical facilities. Such regulations will create the prerequisites for the mandatory fulfillment of the full range of requirements along the entire technological chain of the medical services provided, relieve attending physicians of empty and exhausting fuss, and ensure verifiability of actions and personal responsibility of all medical personnel.

The description of procedures (in the form of manuals) greatly facilitates the work of surgical departments, intensive care units, intensive care units, treatment rooms, dressing rooms, etc. This

applies not only to the conditions of the hospital. A similar approach gives positive results when used in clinics (municipal, departmental, commercial), for example, in the work of general practitioners, narrow specialists, physical therapy rooms and treatment rooms.

The description of the procedures also provides guarantees of full compliance with the technological regulations in the provision of medical care: when the procedure is clearly defined, the likelihood of its high-quality implementation will significantly increase with the specification of the responsibility of all medical personnel. The attending physician may not be distracted from his direct work, he is calm for the necessary actions of the nursing staff accompanying his work. This package of documents guarantees the quality of medical services provided by direct contact with the patient. That is why it is fundamental to the quality system of healthcare facilities.

It should be noted that in medicine, in order to ensure the productive work of medical personnel and high-quality patient care, it is important to observe the norms and requirements for such resources as personnel, infrastructure, and the working environment. Therefore, training and the development of documentation on the quality system in healthcare facilities should already be carried out in accordance with ISO 9000: 2000

### **12.3.1. Prospects for the application of MS ISO 9000 in the medical industry**

The goal of any health care facility is to provide timely and adequate medical care, use existing medical technologies, make the right decisions and implement them in extreme conditions and in unusual situations, which implies high professionalism of the staff and its clear, well-coordinated work.

We will try to answer the following questions: “What is the role of ISO 9000 standards in medicine?”, “What can ISO standards give medicine?”, and “What are the ways of integrating medical technologies and international ISO 9000 standards?”

Without a unifying beginning and a systematic approach to the process, laid down in the ISO 9000 standards, despite the development and improvement of medical technologies, medical ethics and the action of other favorable factors, it is impossible to eradi-

cate accidental failures and errors in the work of medical personnel and minimize risks for a particular patient. Analysis of the work of health facilities or case histories of specific patients does not allow to clearly assessing the level of functioning of the system as a whole.

To date, criteria for assessing a quality system have not been established for healthcare facilities. According to Juran, 85% of quality problems are caused by system deficiencies and only 15% are caused by workers. This rule confirms the need to use the methodology of MS ISO 9000 in medical practice.

MS ISO 9000 allows you to evaluate by objective criteria the whole picture of the quality management of medical care in health facilities, including the available documentation, as well as create, monitor, adjust and constantly improve the quality system and thereby continuously reduce risks and increase the level of medical care. ISO 9000 standards regulate methods, processes and technologies used in the medical industry, and do not replace them.

The introduction of a quality system in hospitals helps to optimize the treatment process as a whole. The declared rule that the patient and the doctor are like-minded people and employees takes on an organizational basis in the form of institution standards and documented procedures governing these relationships. The use of a quality system based on the requirements of ISO 9000 guarantees the concretization and optimization of relationships with parents (in pediatrics) and relatives (in healthcare facilities for adults) in accordance with existing laws and standards protecting the rights of patients and relatives, while also providing the possibility of optimized organization of treatment process.

Finally, when applying the quality system in hospitals, the efficient use of resources and the ability of a particular institution to carry out its functions, perform medical and diagnostic procedures for the stated number of patients at a level that meets modern medical requirements are guaranteed. All technological processes associated with medical equipment, the work of laboratories, various auxiliary units of hospitals (laundries, transport services, catering, etc.) get a finished look only after the implementation of the quality system.

### **12.3.2. Advantages of using MS ISO 9000 in healthcare facilities**

Analysts, concerned about the quality of medical care, believe that one of the best ways to improve quality is to introduce ISO 9000 in medical practice. In almost all countries of the world, certification of quality systems in medical institutions pay special attention. Already in 1994, at the International Conference on Quality, held in Jerusalem, most of the reports were devoted to the quality of medical care.

Analyzing all of the above, we can conclude that when using ISO 9000 in medical facilities, the entire system of medical care is radically changing for the better.

- The productivity of each individual employee (from junior medical personnel to senior management) and the institution as a whole is increasing.

- Reduced repetitions in the examination and reduced time spent on one patient, due to the fact that most decisions and conclusions (appointments, recommendations, analyzes, procedures, etc.) are performed correctly the first time, since all basic procedures are clearly regulated.

- A more relaxed and stable environment for the patient is created. The degree of patient confidence is increasing.

- Analysis of the quality system opens up wide opportunities for objective and comprehensive assessment:

- μ work of various departments;

- μ the work of the institution as a whole;

- μ the health status of the individual patient and the dynamics of the treatment and / or rehabilitation process;

- μ the effectiveness of the drugs used;

- μ the effectiveness of the applied methods of diagnosis, treatment and rehabilitation.

- The requirements of internal audits in order to maintain the quality system and its development, as well as external audits in order to confirm the compliance of the quality system with the requirements of MS ISO 9000, guarantee a continuous improvement in the quality of medical care in health facilities.

- The culture and level of work of the entire team are growing sharply: people know what is required of them, since there are approved job descriptions. They are clearly informed of the re-

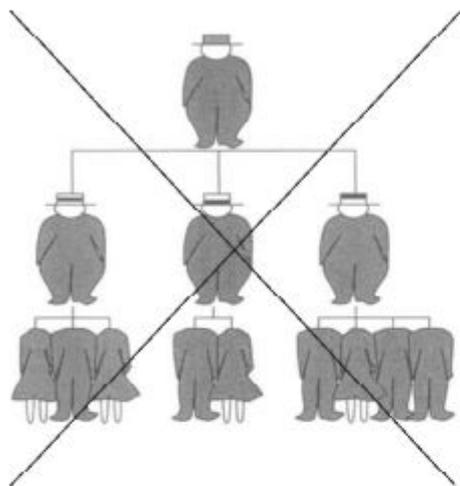
quirements for the procedures to be performed and the degree of personal responsibility, professionally prepared for the performance of official functions. The documented quality system is focused on the professional implementation of all procedures, guarantees the continuity of medical care processes, the interconnection of units and specifically determines the role of each in the work of the entire medical institution.

- Contact with the patient and / or his relatives is improved due to communication ethics, clear instructions and regulations aimed at protecting the rights of the patient and ensuring honest medical care.

- The effectiveness of medical care increases, as patients (or their relatives) become literate (have clear instructions from a doctor) and are active participants in the treatment and rehabilitation process.

Thus, the essence of quality management is to rationally use the intellectual resources of the entire staff of healthcare facilities (Fig. 12-9), so that the whole team works as one team in achieving common goals. The quality management system should be planned, developed, put into operation, documented. All information about production processes, procedures, manipulations should be set out in writing in accordance with their complexity.

So, it is safe to say that the management of quality of care in XXI is focused on the patient.



The essence of quality management is not to extract ideas from the boss's head and transfer them into the hands of employees



The essence of quality management is to rationally use the intellectual resources of each member of the team - the basis of a modern quality management system

**Picture 12-9. The essence of quality management, laid down in ISO standards 9000 series (N.V. Mi-Khaylova)**

Due to historically established positive traditions and experience, the healthcare organization system in Russia can be quickly reanimated and brought to a high level only with the implementation of ISO 9000: 2000 standards.

**12.4. SCHOOLS OF PATIENT - WAY TO QUALITY OF MEDICAL CARE**

The famous Russian philosopher I.A. Ilyin at the beginning of XX century. wrote: "... Treatment, healing is a joint business of the doctor and the patient himself. In each individual case, a certain medical and healing "we" must be created: he and I, I and he, we must together conduct his treatment. "Indeed, it is impossible to achieve high quality medical care without close interaction between the medical staff and the patient .

The introduction of the methodology of MS ISO 9000: 2000 into the practice of healthcare facilities is a direct and, perhaps, the only way to speedily solve quality problems in healthcare, the main principle of which in healthcare settings is patient orientation. All activities of healthcare facilities should be carried out taking into account the needs and expectations of the patient. At the same time, the creation of patient's schools in hospitals for patients with major non-communicable diseases (diabetes, coronary heart disease, arterial hypertension, post-stroke conditions; chronic diseases of the gastrointestinal tract, multiple sclerosis, cancer, etc.) is of particular relevance.

The most important factor in improving the quality of care and quality of life should be the patient's school. The author of the concept development is N.V. Mikhailova, expert on quality systems.

The school (university) of the patient covers the sphere of interests of all interested parties: the patient, family, doctor, society, state. Its structure is shown in picture 12-10.

The goal of the patient's school is to recognize the mutual social responsibility of medical personnel and the patient in the treatment, care, rehabilitation and prevention, develop mutually beneficial cooperation between both sides, create trusting rela-

tionships, increase the culture of communication, maintain and improve health.

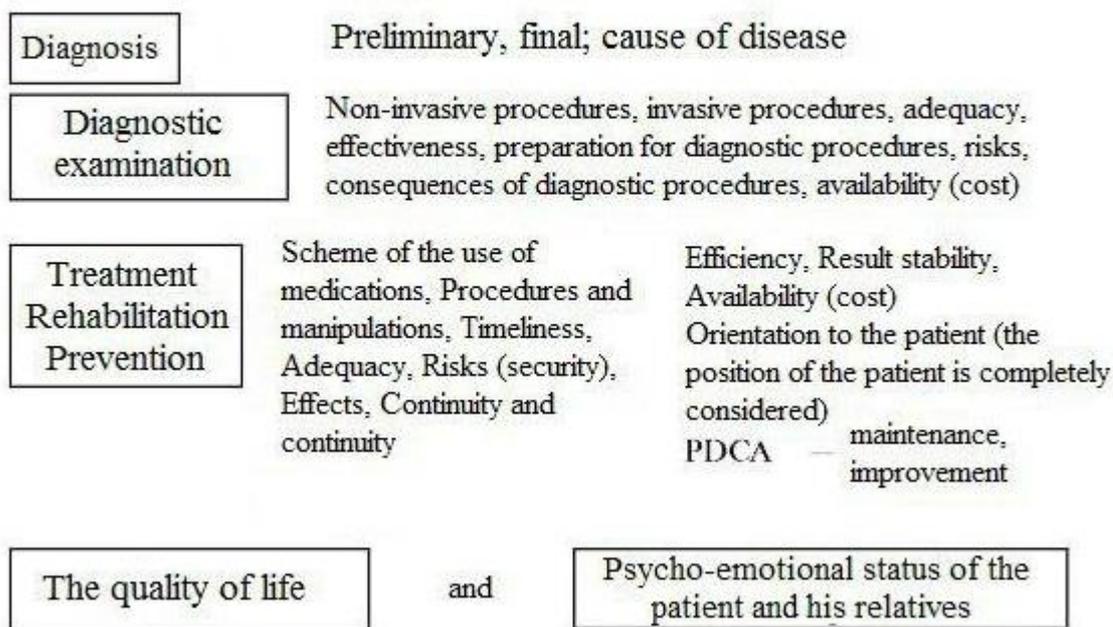
It should be noted a fundamental feature of achieving the quality of medical care in patient's schools. This training of himself or his relatives (if the patient is a child or he is inadequate), maintaining the patient's state of health at the proper level.

The patient cannot and should not be a passive and weak-willed “swallower of drugs” and a consumer of various procedures. You can make him an active participant in the treatment process using the PDCA concept (see picture 12-5). Patients or their relatives should understand that the prescribed therapy represents methods and means to achieve specific goals. It is necessary not only to faithfully comply with all the requirements of the doctor and nurse, but also to actively participate in the process of their rehabilitation, monitoring all the nuances of their condition and timely informing the attending physician and nurse about negative and positive facts to make adjustments to the patient management program.

The PDCA cycle should be the usual patient algorithm. It is the concept of continuous improvement as a philosophical category that allows you to activate the volitional qualities of the patient and make him an active assistant to the doctor and nurse in the process of treatment, care, rehabilitation and prevention.

## SCHOOL (UNIVERSITY) OF THE PATIENT

What the patient and / or his relatives should know



Mode

Food (availability)

Communication with nature

Communication with others

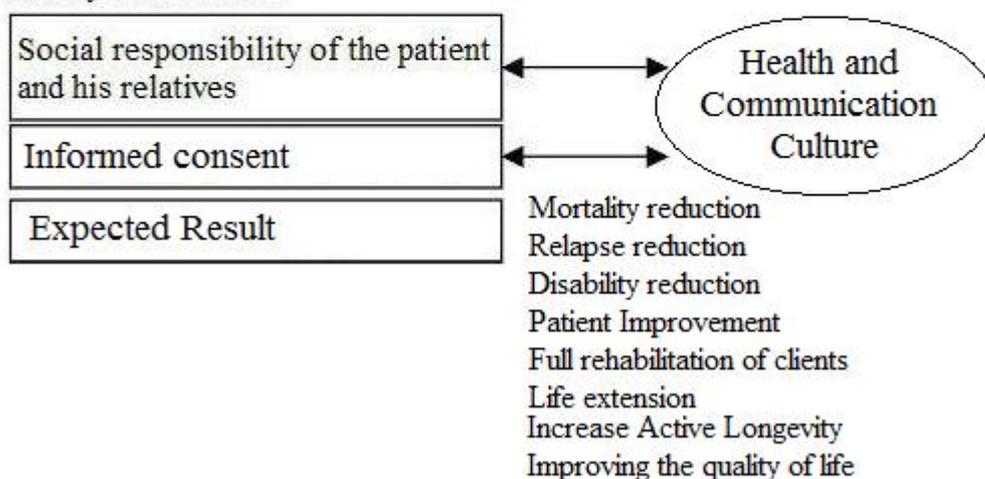
Communication with oneself

Difficult conditions

Medication Intervention

Psychotherapy

*What will the introduction of patient schools give to the patient, doctor, society and the state*



**Picture 12-10. The structure of the school (university) of the patient**

It is necessary to teach the patient to fight and bear responsibility for his health. There are no trifles in this process. That is why doctors and nurses pay great attention to the history and conversation with the patient (or his relatives).

In addition, active monitoring of their condition and awareness of positive and negative points move the patient to the need to

change some habits and lifestyle. When he does this according to his inner convictions, there is always an effect. The goal of medical care is to maintain the patient's stable state at the highest possible level for each particular case. Its quality depends not only on the quality of health care facilities, but also on the quality of life of the patient outside the walls of the medical institution.

Only such an approach will make it possible to fully realize the concept of quality of medical care, increase the role of preventive measures, and make medicine cost-effective and efficient. This approach requires a correctly regulated procedure for maintaining (improving) the condition offered to the patient as a method of achieving the goal. Such regulation should be extremely specific, understandable, real from the point of view of the possibility of its implementation and focused on the capabilities of the patient (and / or his relatives).

This device, while providing medical care, fully complies with the requirements of MS ISO 9000: 2000, since it is aimed at meeting the needs of all interested parties (patient, family, doctor, society, state).

According to the modern concept of health, it is necessary to involve the patient in solving his problems. In 1986, under the auspices of the WHO in Canada, the Ottawa Charter for Improving Health adopted 5 areas of action:

- development of public policies that promote health;
- creating a healthy environment;
- development of personal skills;
- public participation;
- reorientation of health services.

The idea of the Ottawa Charter for Improving Health [24] is to create structures and mechanisms that would allow people to use all their potential health potentials, to take control and improve it.

Thus, health is not just life without disease, it is a socially active life for the largest number of people.

The WHO global strategy "Health for All in the 21st Century" proposed increasing the priority of health promotion and disease prevention, and involving individuals, families, and population groups in public health activities. Moreover, special attention in this document was paid to improving the quality of medical care. According to the authors of the idea of creating patient schools,

such schools are a modern effective and promising means of improving the quality of medical care.

This is not about shifting all responsibility to the patient and / or his relatives. The primary responsibility for the quality of medical care, taking into account the starting capabilities of medical facilities, is undoubtedly borne by medical personnel. Nevertheless, one should not allow the patient to be irresponsible in their health. Practice shows that very often the titanic efforts of doctors and nurses are nullified through the fault of the patient or his relatives.

The creation of patients' schools involves the imposition of new additional responsibilities on the staff of healthcare facilities: patient education, development of the patient's diary. This leads to an increase in the duration of communication with each specific patient. However, more than 90% of the population receives medical care in municipal hospitals, where the patient's admission is limited by strict time frames, and only about 10% - in commercial ones, where the doctor works in more comfortable conditions and, as a rule, is not limited in time. This is due not only to the high prices of medical services in the commercial sector, but also because the high cost of medical services does not always guarantee the high professionalism and integrity of medical personnel.

The commercialization of medicine in Russia is still at such a level that it is impractical to rely on the organization of patient's schools by commercial structures. In addition, with the emergence of schools of patients, the latter will go to the doctor less, as they will learn to manage their state of health, and this is not in the interests of most commercial hospitals. It is likely that those commercial structures, headed by morally oriented leaders, aimed at the future, will join the idea of creating such schools.

It is more realistic to count on supporting the idea of creating patient schools by the municipal health sector and compulsory health insurance companies (HIC), since improving the quality of medical care, including thanks to patients' schools, will reduce costs and allow the funds to be used to develop health care. The chain reaction of E. Deming acts in healthcare as effectively as in other sectors - improving the quality of medical care leads to a reduction in costs. Convincing evidence was the experience of diabetes patient schools that have been operating in Dubna for 10 years.

The organization of patient schools requires a modern approach to nursing. When organizing such schools, a significant part

of the work with the patient should be assigned to nursing staff. For example, a nurse can explain and schedule a schedule for taking medications prescribed by a doctor, suggest a patient diary form for self-monitoring, tell how to prepare for the upcoming procedure, explain the content and purpose of the concept of continuous improvement, etc. The nurse should work with the patient taking into account his condition, mentality, age, abilities, capabilities, desires and intelligence.

The patient's school implements an approach to the provision of medical care in which the patient's position is fully taken into account. This position implies respect for the values, preferences and expressed needs of the patient; coordination and integration of assistance; information support, communication and educational work; providing physical comfort; emotional support and the elimination of fear or anxiety of the patient; involving family and friends; continuity and continuity. In this system of medical care, the patient is the object on which the activities of all elements of the medical care system are directed.

At the patient's school, medical personnel are concerned with the health of a particular individual. The attending physician, who knows his patient and his attitude to the disease, marital status and social conditions, will consider his illness as one of the aspects of a larger and more complex problem - health problems and disease prevention. A purely medical approach to the disease must be supplemented by knowledge of the multidimensional nature of ill health, i.e. knowledge of the hidden aspects of the patient's life, his reactions to adversity, etc. Indeed, in medicine, prevention is most important.

Therefore, not only a specific disease, but also ill health in the broad sense of the word should be the focus of attention of medical professionals. By unhealth is understood the medical, psychological and social aspects of the course of the disease in all its diversity. However, it is impossible to single out any one main aspect. Between them there are various causal relationships, and each in its own way affects the patient's condition.

It is important that medical workers know all aspects of the patient's life, take into account his ideas about the disease and health, his attitude to the treatment process (an active desire to participate in it, or a passive attitude to treatment, or even a desire to avoid it), explain to the patient the importance of sanogenesis prevention.

The patient's school promotes a correct understanding of the responsibilities of medical personnel, the rights and obligations of the patient. Patient rights are a set of privileges for people who access and use health services. Every patient has the right to better health, quality timely care, awareness, etc.

The English philosopher and psychologist G. Spencer wrote: "Supporting health is a duty. Few, it seems, are still aware that there is something that could be called physical morality ... Any disobedience to the laws of health is a physical sin." Each patient should be responsible (moral, financial, and in some cases legal) for their behavior, leading to poor health and working ability [8].

Let us single out several priority tasks that can be solved when organizing patient schools.

- Training of medical and nursing staff on the basic issues of the quality of medical care, the principles of the organization of the patient's school, and the ethics of communication.
- Motivation of medical personnel to improve the quality of medical care.
- Strengthening the preventive orientation in the activities of bodies and health care institutions with an emphasis on the implementation of screening programs for the secondary prevention of major noncommunicable diseases.
- Participation of the population in general medical programs.
- Raising public awareness and literacy regarding health issues.
- Motivation of the population to improve their health.
- Responsibility of the population for their health.
- Adequacy of the response of the healthcare system to leading indicators of population health differentially by region.

Undoubtedly, the organization of patient schools for patients with major non-infectious diseases will lead to an increase in the effectiveness of healthcare, cost reduction and an increase in the quality of life of each individual patient, and therefore will favorably affect the situation in the family and subsequently lead to recognition by the patient of responsibility for his the health and health of family members.

The psychoemotional status of the patient and his relatives to a large extent influences the result of the work of the patient's schools (see picture 12-10).

### **12.4.1. Psycho-emotional status of the patient and his relatives**

Each person experiences joyful, bright minutes of inner inspiration and delight - minutes of a comfortable major attitude. These are the fulcrum in the life of any person. But in modern society, human life is fraught with difficulties that lead to stress, depletion of the nervous system and even more serious consequences. A person's state is especially serious when his or her relatives are overtaken by a disease, and the more complicated and more serious the disease, the greater difficulties they encounter with their relatives.

When the process of treatment, rehabilitation and prevention is built humanely and correctly, in addition to medical personnel, the patient himself participates in it. In some cases, medical personnel communicate not only with the patient, but also with people close to the patient (for example, when the patient is a child or when he is not responsible for his actions). In the interests of all parties involved in the treatment (doctor, patient, relatives), to build communication and interaction in such a way that everyone actively participates in the treatment process, and achieve the maximum possible result. First of all, it is necessary to stabilize the psycho-emotional state of both the patient and his relatives (to help cope with stress, activate strong-willed qualities, inspire faith, optimism, the will to win and thirst for life). The patient must spend a lot of mental, mental and physical strength to restore his own health. Many doctors say that for some patients, especially the elderly and the elderly, it can be difficult to help regain the meaning of life.

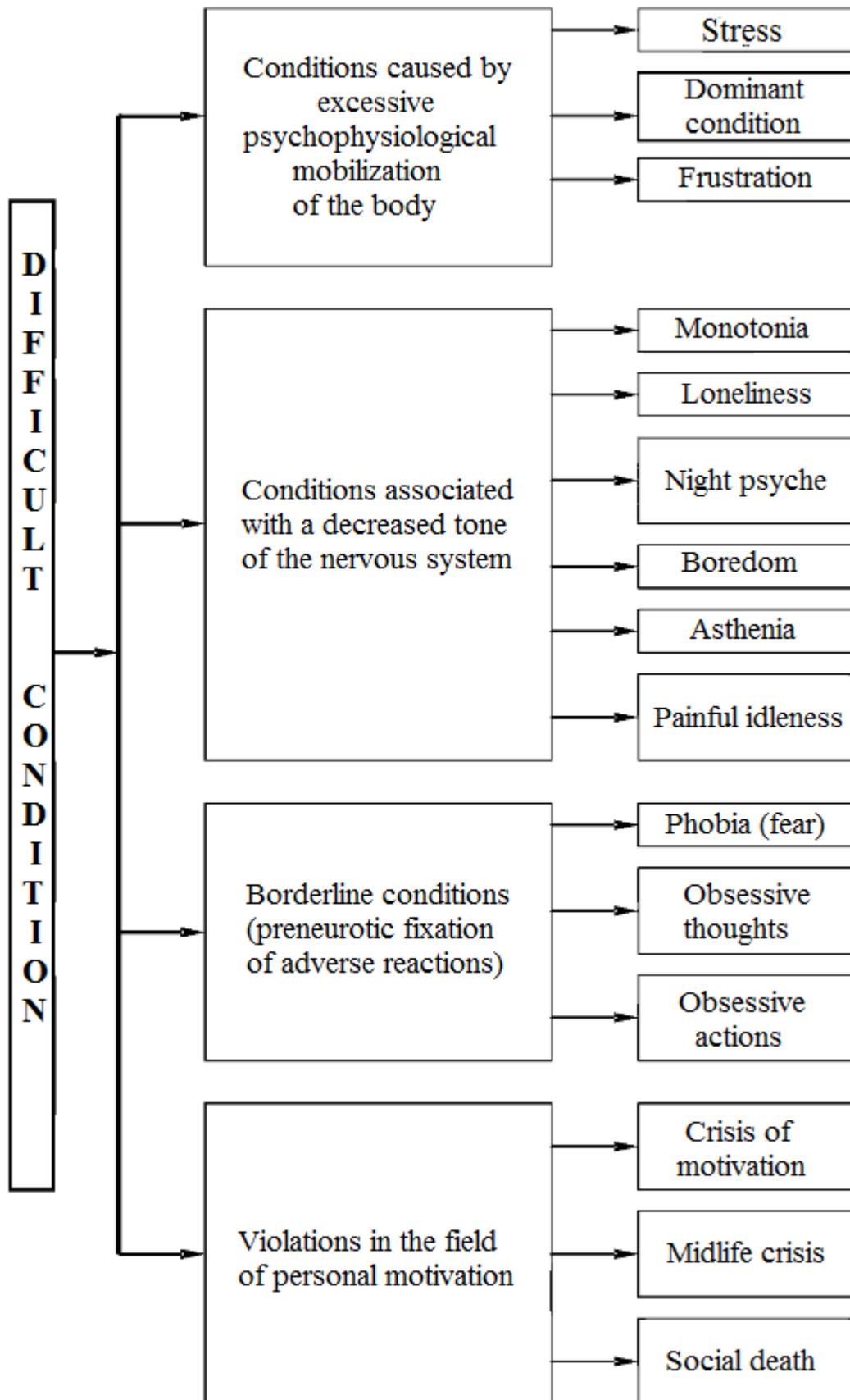
The health status of any state and family can be determined in relation to children, the disabled and the elderly. Unfortunately, in Russia these populations are the most vulnerable. In addition to the help of medical specialists, patients belonging to these groups really need the support of psychologists and psychotherapists who help to cope with difficult conditions (Fig. 12-11) or alleviate them. The patient's school provides for the mandatory systematic participation of a psychologist and psychotherapist.

The most dangerous difficult condition is social death, when a person realizes his complete social lack of demand. This state is especially acute for people in creative professions.

Human life along with joyful moments is full of bitterness and dramas. But even in the most difficult situations it is necessary to

continue it and continue with dignity, preserving your "I". It is difficult, but possible.

Psychologists argue that the successful resolution of "difficult conditions" is possible only if a person consciously and thoughtfully corrects his life goals and objectives within the framework of the new prevailing conditions, recognizing the limited time available to each person. To do this, he needs to have patience, be content with what he has (put up with his life situation) and think less about what he will never be able to achieve (be adequate). The psychology of activity (formal science) proves: communicating with yourself and understanding your own difficulties will help a person find a new meaning in life.



**Picture 12-11. The tree diagram of “Difficult conditions” (L.P. Grimak)**

## 12.4.2. Communication with oneself

Life is a journey in space and time, in which our position and our capabilities, our health and the health of our loved ones, situations are external and internal. We rejoice, win, grieve, worry, grieve. The palette of our experiences has a lot of different tones and shades. Almost everyone goes through the thorny path associated with the disease. We are ill, our relatives and friends are ill. Life has many faces. A disease that fits into the register of patients' schools is usually quite problematic and requires the patient and his family to mobilize mental and vitality. A general practitioner, psychologist, psychotherapist and other medical workers will certainly help the patient cope with it. However, his active participation, awareness of his real capabilities, an adequate assessment of the situation and the right orientation are necessary conditions for achieving the goal and gaining the level of health that the patient can really count on.

Most of the misfortunes that a person suffers from come either from despair or from the illusions that he has in relation to his condition, his own abilities, current circumstances and goals that he can achieve. When evaluating themselves, people often make serious mistakes that cause dissatisfaction, despondency, irritation, and sullenness. Such conditions do not contribute to the recovery of the patient; in this state, healthy people cannot help him. To avoid despair, you need to force yourself to believe in your own capabilities and hope for the best.

At the same time, each person needs to be critical of himself. This will save him from dangerous illusions. This does not mean low self-esteem, leading to a weakening of an active life position, but a clear awareness by a person of their real capabilities and aspirations. This applies to each of us, especially in difficult and critical situations. The success of recovery and subsequent life largely depends on the mental state of the patient and his relatives.

A person can understand his state of mind only through communication with himself. Psi-Physiologist L.P. Grimack writes: "Communicating with oneself is undoubtedly something that nobody teaches us anywhere. To the extent possible, we are taught communication skills with

Other people, behaviors in the family, society. But we have no idea about the rules of communication with ourselves, even in the most elementary situations. Moreover, many do not suspect that this type of communication exists and in one form or another is a prerequisite for normal mental activity of a person, largely determines our working capacity, mood, well-being, and often our state of health ”[27].

According to medical experts, man is a perfect self-regulating creation of nature, unique in its capabilities. The human nervous system is also unique. Medical workers unanimously argue that the treatment process should begin with the restoration of internal peace and balance of the patient. Neurotic disorders appear when a person breaks the highest level of self-regulation, which is characterized as self-control, self-control, self-control. And often this happens because a person does not have basic knowledge and communication skills with himself.

That is why special programs should be provided for the patient’s school aimed at the psychological rehabilitation of the patient (and in some cases relatives) and training in the psychology of activity - communication with oneself [27]. It is necessary to teach the patient self-control, self-control, self-management as much as possible in each particular case, taking into account the starting state of health, mentality, intelligence and age of a person. The tasks of medical psychology at the institute of patient's schools will expand significantly and acquire a deeper therapeutic and educational character [28].

P.V. Kolomeytsev claims: “If we want to survive on our own, to preserve our society and the state, we must clearly recognize and clearly articulate our own values and goals and invariably follow them” [29].

Public health is an essential factor in national security. That is why in most civilized countries, federal ministries of health are responsible for health promotion and disease prevention. In recent years, there have been negative trends in the health indicators of the Russian population. That is why the population of Russia is more and more clearly forming a social order for health, culture and the quality of medical care, a healthy lifestyle, and the upbringing of the general culture of somatic and spiritual

health as the most important component of human existence in the modern world.

Only a society in which there is an understandable and recognized by the absolute majority ideology set forth in the language of natural biological, material, intellectual, spiritual, psychological, social, and practical needs of a person, society, and the state is self-sufficient and stable. The basis of such an ideology is a clearly and uniquely formulated system of values (goals) of society. P.V. Kolomeytsev offers a system of values of man and society for modern Russia, which collects the ideas accumulated by the peoples of Russia about what a person needs, what society and the state, should be [29]. He writes: "... The formation of a system of values and goals cannot be trusted by politicians in power, because by virtue of their position and certain characteristics of the psyche, they cannot but distort it in favor of their personal and corporate interests. Only the citizens of Russia themselves, in the process of wide discussion and coordination, can correctly pose tasks for themselves and the authorities that they contain with their labor ... ”

The proposed value system is based on our domestic experience, mentality, traditions and our own, national all-Russian value system. It contains 72 points, where an urgent and important goal is set, the implementation of which is necessary to achieve the well-being of people, the security and independence of Russia.

We give only the first 7 points of this system of values:

- Improving the level of personal safety of a person. Protection from the actions of private and official persons, state and public organizations that pose a threat to life, physical and mental health of people.

- Improving the physical, mental and spiritual health of people, their adaptability to the environment.

- Increased life expectancy and active longevity.

- Improving the level of medical care for the entire population.

- Independence of medical services from the material security of people.

- Creation of economic, social, environmental, moral, spiritual, psychological, aesthetic, optimal adaptive and other conditions that ensure a healthy lifestyle of people.

- Elimination of all types of social pathology (drunkenness, drug addiction, etc.).

I would like to hope that this concept of health will be implemented in Russia in the near future. Patient schools will contribute to this.

Today, the main task of the medical and scientific community and all thinking people is to join forces to urgently stop destructive trends in the organization of the domestic health care system, to create real prerequisites for implementing TQM while maintaining the enormous historically developed unique potential of domestic medicine. We have no other way [30, 31].

## APPENDICES

### 7-1. SHEET OF SISTER ASSESSMENT OF PATIENT STATE

Office: Chamber:

Medical diagnosis: Name of patient: Home address: Date and time of admission: Date and time of admission: Height: Age:

Body mass index:

Status at admission (in the presence or absence of a patient's problem, mark "Yes" or "No")

#### 1. Allergy

On medicine Notes:	Yes, No
For food Notes:	Yes, No
Other allergens Remarks:	Yes, No
Remarks Remarks:	Yes, No

#### 2. Breath

Are there respiratory problems? Remarks:	Yes, No
Dyspnea Remarks:	Yes, No
The number of breaths per minute:	
Is a smoker? Remarks:	Yes, No
Cough Remarks:	Yes, No
Is a special bed required? Remarks:	Yes, No
Is oxygen required? Remarks:	Yes, No

#### 3. Blood circulation

Heart Rate Per Minute  
Pulse: rhythmic, irregular arterial pressure, mmHg

#### 4. Food and drink

Is your appetite good? Remarks:	Yes, No
Can I eat on my own? Remarks:	Yes, No
Is special diet advice required? Remarks:	Yes, No
Is a diabetic? Remarks:	Yes, No

How the disease is regulated	Remarks:	Diet insulin Sugar-lowering drugs
Does he drink enough fluids?	Remarks:	Yes, No
Can I drink the liquid myself?	Remarks:	Yes, No
Water balance is positive.	Comments:	Yes, No
Alcohol use	Remarks:	Yes, No
Do you have teeth:	upper lower	Yes, No
Are removable dentures available:		Yes, No
on the upper jaw		
on the lower jaw		
on both jaws		
5. Physiological administration		Yes, No
The functioning of the bladder (frequency at night)		Yes, No
Intestinal functioning (regularity) Are mild laxatives used?		Yes, No
Artificial hole:		Yes, No

## 6. Physical activity

		Yes, No
Dependence in activity on others:		
completely		Yes, No
partially		Yes, No
independent	Notes:	Yes, No
Are walking gadgets used?	Remarks:	
Walking: with the help of 2 people with the help of 1 person without assistance		Yes, No

## Remarks:

7. Sleep, rest		
The usual picture of sleep (hours, time, sleeping pills, alcohol)		Yes, No
	<b>Sleeps:</b>	Yes, No

8. Self-service ability		
Able to dress and undress independently		Yes, No
Are there difficulties in dressing and undress-		Yes, No

ing? Remarks:

Dependence on dressing and undressing Yes, No

Does help under normal conditions? Yes, No

Does it have a choice of clothes? Remarks: Yes, No

Does she take care of her appearance in normal conditions? Remarks: Yes, No

Is it capable of independently:

Is it able to independently (emphasize) care for the oral cavity, brush your teeth?	
Skin condition: pressure sores ulcers dryness Humidity Remarks:	Yes, No
Assess the risk of pressure sores (in points) Remarks:	
<b>9. The ability to maintain normal body temperature</b>	
Body temperature: increased lowered at the time of examination	
<b>10. The ability to maintain a safe environment</b>	
Can he support his own security Remarks:	Yes, No
Are there motor or sensory abnormalities? Remarks:	Yes, No
Are there any difficulties in understanding? Remarks:	Yes, No
Is it oriented in time and space? Remarks:	Yes, No
If necessary, conduct a risk assessment of the fall. Notes:	
<b>11. Labor and rest</b>	
Is the disability preserved? Remarks:	Yes, No
Is there a need for work? Remarks:	Yes, No
Does work bring satisfaction? Remarks:	Yes, No
Hobbies, preferred type of vacation	

Is it possible to relax? Remarks:	Yes, No
<b>12. Ability to communicate</b>	
Spoken Language	
Are there any difficulties in communication? Comments:	Yes, No
Do you have difficulty hearing?	Yes, No
Do you need a hearing aid?	Yes, No
Is there any visual impairment? Uses for correction: glasses contact lenses Remarks:	Yes, No

## ANNEX TO CHAPTER 8

### Task

Patient V.A., 70 years old, was admitted on 10.20.01 at 13.00 to the neurological department with a diagnosis of acute ischemic cerebrovascular accident, right-sided hemiplegia, motor aphasia; type II diabetes mellitus; prostate adenoma of the first degree.

According to his wife, they live together on the 2nd floor of a 5-storey building. There were no allergies to any drugs or products. Regularly takes only hypoglycemic drugs. A stroke happened in the country, where they usually live from April to October. On the day of hospitalization, the patient, waking up, could not get out of bed due to the fact that his right leg and arm “did not obey”. When he tried to call his wife, he found that he could not say anything; the language “did not obey.”

The patient cannot speak, but understands the questions that are answered by facial expressions and gestures. There are tears in my eyes.

The skin is dry. Right arm and leg without movement. Active movements of the left limbs in full, small objects (cup, spoon, etc.) are difficult to hold.

The patient can hardly turn on his right side, holding the hand-rail with his left hand. He looks overweight: approximately growth 165 cm, body weight 84 kg. BMI 30.9. The patient’s wife understands that the husband must lose weight, but she does not know how to “organize” it.

The patient has removable dentures on the upper and lower jaw that remained at home. He cannot take off his pajamas, but he can take off his toe from his left foot. You can’t put anything on your

own. Ready to take help when putting on pajamas, socks. Stool is usually daily in the morning. The patient's wife fears that she will not be able to raise her husband and serve the ship. She is afraid that her husband will never get on his feet.

Typically, the patient's urination is slow, including at night. He sleeps on two pillows, hiding in two blankets, as he always freezes. Used to fall asleep in the darkness and silence at 22-23 hours. He does not take hypnotics. The patient usually shaves once every 2 days with a safety razor. No razors with you. Used to take a shower and wash my hair on Sunday.

According to his wife, he reads with glasses (glasses with himself).

The patient is conscious, adequate, oriented in time and space, but looks confused.

Respiratory Rate (RR)\_18 per minute, Heart Rate (HR)76 per minute, Arterial Pressure (AP)180/100 mmHg., Body temperature 36,7 °C.

### **Tasks.**

1. Conduct an initial nursing assessment of the condition of V.A.
2. Identify problems.
3. Create a nursing care plan.

When filling out the nursing assessment sheet, it should be noted with a + sign "Yes" or "No". Accordingly, if the patient does not have a problem, then there will be no comments.

When filling out the "Remarks" column of the nursing assessment sheet, remember that commenting is not a problem. So, within the framework of different needs, various comments may arise. However, when analyzing them, it may turn out that they ultimately characterize one problem (for example, patient ignorance of risk factors).

## **Patient Assessment Sheet**

Branch	Neurological
Ward	306
Diagnosis	Acute cerebrovascular accident according to ischemic type, right-sided hemiplegia, motor aphasia. Type II diabetes mellitus. Grade I prostate adenoma



Remarks: help will be required when shaving, washing, cleaning dentures, hygiene procedures

Can I wash myself (bath, shower)?	Yes	No+
Oral care	Yes +	No
Remarks: needs help with personal hygiene and organizing daily washing; needs to be provided with denture care items		
Skin condition (ulcers, dryness): the skin is dry, especially on the legs and feet, no trophic disorders		
Remarks: Needs monitoring of the skin condition, especially areas vulnerable to pressure sores.		
Assess the risk of pressure sores		
There is a risk of developing pressure sores on the Waterlow scale of 21 points (high risk)		
Remarks: needs measures to prevent the formation of pressure ulcers in the OST		
Is there pressure on the bone protrusions: sacrum, right heel, right elbow, shoulder blade, right ankles, hip joint?	Yes +	No
Remarks: needs measures to prevent the formation of pressure ulcers in the OST		

### **7. The ability to maintain normal body temperature**

Body temperature at the time of examination 36.7 ° C	Promoted	Lowered	Normal
Remarks: Needs help to maintain normal body temperature.			

### **8. The ability to maintain a safe environment**

Can maintain its own security?	Yes	No+
Remarks: Needs handrails on the bed		
Are there motor or sensory abnormalities (deficiencies)? Right hemiplegia	Yes +	No
Remarks: the dominant right hand, needs to be trained in self-care with the left hand		
Are there any difficulties in understanding?	Yes	No+

Remarks: confirms with facial expressions or gestures that he understands his wife and medical staff		
Is it oriented in time and space?	Yes +	No
Remarks: daily needs time information		
Perform a fall risk assessment if necessary.		
The risk of falling out of bed, and when expanding the mode, it may fall while walking		
Remarks: needs help when moving in bed and when walking in case of extension of the regime		

### **9. Labor and rest**

Labor ability saved	Yes	No+
Notes: Needs psychological adaptation to the potential change in the volume of physical activity and the possible restriction of the usual type of rest		
Is there a need for work? Retired	Yes (according to the wife word) +	No
Does work bring satisfaction?	Yes (according to the wife word) +	No
Remarks: as you recover, needs advice on optimal physical activity		
Hobbies: likes to read. In summer works in the country	Yes (according to the wife word)	No+
Remarks: needs to be provided with the usual literature for him (when there is a need to read)		
Remarks: will need to discuss the amount of safe exercise		
Is it possible to realize my hobbies?	Yes	No+
Remarks: Needs psychological adaptation to the changing conditions of his usual vacation		
<b>10. Communication Ability</b>		
Spoken Language: Russian		
Remarks: no		
Are there any difficulties in communication: pro-	Yes +	No

nounces individual sounds, very nervous that he can not speak		
Remarks: it is necessary to develop a technique for effective communication. Needs a speech therapist consultation		
Are there hearing difficulties?	Yes	No+
Remarks: no		
Do I need a hearing aid?	Yes	No+
Which ear		
Remarks: no		
Are there any visual impairments?	Yes +	No
Points +1.5	Yes +	No
Contact lenses	Yes	No+
Remarks: provide the opportunity to use glasses as needed		

Nurse Signature

Initial Assessment Date

### Care plan and protocol (current and final assessment)

#### 1. Breath

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2001	The risk of pneumonia due to a decrease in physical activity and the risk of infection of the oral mucosa	There will be no pneumonia	Breathing exercise training	2 times a day daily	30.10.2001
		There will be no oral infection	Carry out dentures in the evening after they are removed	1 time a day daily	30.10.2001
			To make sure that comrade B has everything necessary for the care of dental prostheses	1 time a day daily	
			Make sure that the wife of comrade B knows how to care for dentures	1 time a day daily	

			Offer to rinse your mouth after each meal	5 times a day daily	
			To ask his wife to bring comrade B.'s removable dentures		

### Protocol (flip side)

Date	Evaluation (current and final) and comments	Signature
21.10.2001	1. Carried out dentures in the evening at 21 h	I. Petrova
	2. Valentin Alexandrovich studied breathing exercises. Able to carry them out independently. Needs a reminder	I. Petrova
	3. Comrade A. has everything you need to care for dentures	I. Petrova
	4. After each meal, she offered to rinse her mouth with water	I. Petrova
	5. I asked my wife to bring removable dentures to Valentin Alexandrovich	N. Grishina
22.10.2001	1. Comrade A. performs breathing exercises under the supervision of a nurse	I. Petrova
	2. Checked and made sure that the wife of comrade A. knows how to care for dentures	I. Petrova
	3. After each meal, she offered to rinse her mouth with water	I. Petrova
	4. Carried out care for dentures in the evening at 21 hours	N. Grishina

## 1. Food and drink

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2001	1. He can't take food and liquid on his own, since Comrade B has right hemiplegia and cannot	1. Eats food and fluid with the help of a nurse / wife	1. Training comrade B to eat and drink with his left hand	5 times a day daily	25.10.2001
			1. Help with food and fluid	5 times a day daily	25.10.2001
		Eat food and liquid on its own in accordance with the recommended diet.	Feeds in a high position of Fowler (danger of choking and asphyxia)	5 times a day daily	25.10.2001
			Nutrition Consultation	If necessary	

## 1. Physiological administration

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2001	1. Constipation associated with immobility	1. The chair will be daily	1. Offer to drink liquid (water, juices, tea): from 8 to 14 hours - 1000 ml, from 14 to 20 hours - 700 ml, from 20 to 8 hours - 300 ml	Daily, 5 times a day	22.10.2001
			2. Give recommendations to the wife about the nature of the programs	Once	
			3. Train Comrade A. self-massage of the abdomen with the left hand	Daily, 5 times a day	
			4. If there is no effect, consult a doctor		22.10.2001
	2. Comrade A. feels discomfort associated with nocturia and the need to urinate while lying down	2. There will be no discomfort	Every 2 hours (when moving, suggest urinating)	Daily morning	20.10.2001

### Protocol (flip side)

Date	Evaluation (current and final) and comments	Signature
20.10.2001	1. Conducted a conversation with his wife about the nature of the programs	I. Petrova
	2. Urinated at night when moving 2 times. Takes the help of a nurse	
21.10.2001	1. Comrade A. drank 1.5 liters of liquid. On the nightstand there is always a glass with liquid (water, tea) and a drinking pipe	N. Grishina
	2. She taught VA self-massage of the abdomen with the left hand	N. Grishina
2.11.2000	1. In the morning there was a decorated chair	I. Petrova

## 1. Physical activity

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2001	1. The risk of pressure sores	1. No bedsores	1. Prevention of pressure sores according to OST "Protocol of management of patients.	Pressure sores. Change of position	Daily every 2 hours
			8-10 h - on the left side; 12-14 h - the position of Sims on the right; 14-16	Daily every 2 hours	By the time the regime expands

			h - Fowler's position; 16-18 h - on the left side; 18-20 h - Fowler's position; 20-22 h - on the left side; 22-24 hours - Sims position on the right; 24-2 h - Sims position on the left; 2-4 hours - on the left side; 4-6 h - Sims position on the right; 6-8 h - Sims position on the left		
			2. Conduct a current morning assessment on the Waterlow scale	Daily once a day	
			3. Wash daily at 8 o'clock: the area of the shoulder blades, spine, sacrum, elbows, heels, knees	Daily, once a day	30.10.2000
			4. Check the condition of the bed when changing position	Daily every 2 hours	
			5. The amount of protein with food should be at least 120 g per day	5 times a day daily	
			6. Provide drinking at least 1.5 liters per day	5 times a day daily	
			7. Use foam pad under the bony protrusions of the right arm and leg and sacrum	Daily every 2 hours	
20.10.2001	2. Does not understand the need to perform passive and active exercises in the joints	2. Understands the need for passive and active exercises	1. Conversation with Comrade A. about possible complications associated with immobility	Daily once a day	21.10.2001
			2. Train Comrade A and his wife a set of exercises for the arms and legs	Daily once a day	30.10.2001
			3. To help to perform passive exercises with the right hand and foot within the range of joint mobility	Daily 3 times a day	
20.10.2001	3. Risk of development of the "horse foot" (suspended flexion)	"Horse foot" will not be	1. Observe the correct placement of the right foot (with emphasis at 90 °)	Daily every 2 hours	By the time of discharge
	4. There may be difficulty walking after expanding the activity mode	Will walk within the allowed mode	1. To teach his wife the technique of correctly placing the right foot	Daily once a day	

			2. Teach safe movement	Daily 3 times a day	10.11.2001
--	--	--	------------------------	------------------------------	------------

### Protocol (flip side)

21.10.2001	1. At 8 o'clock in the morning, the risk of developing pressure sores on the Waterlow scale is 21 points (high risk). The bed is comfortable	I. Petrova
	2. At 8 a.m., washed the area of the shoulder blades, spine, elbows, sacrum, heels, knees, hip joints	L. Isakova
	3. Changed the position of the body every 2 hours, used a special mattress and foam padding (in the area of the sacrum, shoulder blades, elbows, heels, right hip joint and ankles; in the Sims position - knees, a roller in the right hand; in the Fowler position - under the lower back and knees laid roller), foot - at an angle of 90 °	L. Isakova
	4. Every 2 hours when moving Comrade A. checked the condition of the bed. The bed is comfortable	L. Isakova
	5. Comrade.A. drinks through a straw with the help of a nurse and independently: 8-12 hours - 1000 ml,	L. Isakova
	13-20 hours - 700 ml, 20-8 hours - 300 ml.	I. Petrova
21.10.2001	6. Comrade.A. ate the whole daily diet	I. Petrova
	1. Conducted a conversation with Comrade.A. about possible complications associated with immobility	I. Petrova
	2. Consultation with a doctor regarding the volume of active-passive exercises	I. Petrova
	3. Conducted a set of exercises (passive) for the right leg and arm within the range of joint mobility	I. Grishina
22.10.2001	1. Taught Comrade.A. a set of exercises for the left arm and leg. Praised by Comrade.A. for diligence and patience	I. Grishina
	2. Conducted a conversation and taught his wife a set of passive exercises for the right arm and leg	I. Grishina
	3. I taught my wife the technique of placing the right hand and foot	I. Petrova
23.10.2001	1. Taught Comrade.A. a set of exercises for the left arm and leg. Praised by Comrade.A. for diligence and patience	L. Isakova
	2. The wife performed a set of passive exercises for the right arm and leg under the supervision of a nurse	I. Petrova
	3. Traced the correct placement of the right foot and arm (brush)	I. Grishina

### Sleep and rest

Date	Evaluation (current and final) and comments	Signature
20.10.2001	1. Comrade A. lies on a functional bed on a foam mattress	I. Grishina
	2. Every 2 hours moved Comrade A, examined the risk areas on the skin, checked the bed	I. Grishina
	3. Additional protein nutrition has been prescribed	I. Grishina

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2000	1. Violation of falling asleep due to the inability to inde-	1. Valentin Aleksandrovich falls asleep in his usual position	1. Give Comrade A Sims position on the right at 22 h	Daily once a day	30.10.2000

	pendently take the usual position on the right side				
			2. Shelter Comrade.A. two blankets	Daily once a day	
	2. Sleep disturbance associated with an unusual environment, noise, inability to change body position	Night sleep will be	1. Help Comrade A. move	Daily every 2 hours	30.10.2000
			2. To resolve the issue of transfer to a separate chamber	Once	
			3. Warn about the need to move at night		

### Protocol (flip side)

Date	Evaluation (current and final) and comments	Signature
20-21.10.2000	1. At 10 p.m., she placed Sims on the right side.	I. Grishina
	2. Sheltered Valentin Aleksandrovich with two blankets	I. Grishina
	3. I didn't wake up, but helped to move at 24 o'clock	I. Grishina
	4. I didn't wake up, but helped to move at 2 o'clock	I. Grishina
	5. I didn't wake up, but helped to move at 4 o'clock	I. Grishina
	6. I didn't wake up, but helped to move at 6 o'clock	I. Grishina
	7. I didn't wake up, but helped to move at 8 o'clock	I. Grishina
21-22.10.2000	1. Valentin Aleksandrovich transferred to a separate chamber	N. Petrova
	2. At 22 o'clock she gave Sims a position on her right side	N. Petrova
	3. She covered Valentin Aleksandrovich with two blankets	N. Petrova
	4. I didn't wake up, but helped to move at 24 o'clock	N. Petrova
	5. I didn't wake up, but helped to move at 2 o'clock	N. Petrova
	6. I didn't wake up, but helped to move at 4 o'clock	N. Petrova
	7. I didn't wake up, but helped to move at 6 o'clock	N. Petrova
	8. I didn't wake up, but helped to move at 8 o'clock	N. Petrova
22-23.10.2000	1. At 10 p.m., she placed Sims on the right side.	L. Mikhaleva
	2. Sheltered Valentin Aleksandrovich with two blankets	L. Mikhaleva
	3. I didn't wake up, but helped to move at 24 o'clock	L. Mikhaleva
	4. I didn't wake up, but helped to move at 2 o'clock	L. Mikhaleva
	5. I didn't wake up, but helped to move at 4 o'clock	L. Mikhaleva
	6. I didn't wake up, but helped to move at 6 o'clock	L. Mikhaleva
	7. I didn't wake up, but helped to move at 8 o'clock	L. Mikhaleva

### The ability to maintain normal body temperature

Date	Patient problem	Objectives / Expected Result	Nursing Interventions	Assessment Frequency	Goal Date
20.10.2000	The risk of hypothermia due to the inability to cover yourself with a blanket	There will be no overcooling	1. Maintain a comfortable air temperature indoors	Daily	30.10.2000
			2. Every 2 hours, check whether V.A.	Daily every 2 hours	

### Protocol of Nursing Activities (flip side)

Date	Evaluation (current and final) and comments	Signature
20-21.10.2000	1. The temperature in the room is comfortable -	I. Grishina
	20 ° C	I. Grishina
	2. Ensured that comrade V.A. the blanket did not fall at 8 o'clock. Feels comfortable	I. Grishina
	3. I ensured that comrade V.A. the blanket did not fall at 10 o'clock	I. Grishina
	5-12. It is similarly filled with an interval of 2 hours	I. Grishina
	13. Ensured that comrade V.A. the blanket did not fall at 6 o'clock	I. Grishina
21-22.10.2000	1. The temperature in the room is comfortable - 20 ° C	N. Petrova
	2. Ensured that comrade V.A. the blanket did not fall at 8 o'clock. Feels comfortable	N. Petrova
	3. I ensured that comrade V.A. the blanket did not fall at 10 o'clock	N. Petrova
	4. I ensured that comrade V.A. the blanket did not fall at 12 o'clock	N. Petrova
	5-12. It is similarly filled with an interval of 2 hours	N. Petrova
	13. Ensured that comrade V.A. the blanket did not fall at 6 o'clock. Feels comfortable	N. Petrova
22-23.10.2000	1. The temperature in the room is comfortable - 20 ° C	L. Mikhaleva
	2. Ensured that comrade V.A. the blanket did not fall at 8 o'clock. Feels comfortable	L. Mikhaleva
	3. I ensured that comrade V.A. the blanket did not fall at 10 o'clock	L. Mikhaleva
	4. I ensured that comrade V.A. the blanket did not fall at 12 o'clock	L. Mikhaleva
	5-12. It is similarly filled with an interval of 2 hours	L. Mikhaleva
	13. Ensured that comrade V.A. the blanket did not fall at 6 o'clock. Feels comfortable	L. Mikhaleva

**Protocol (flip side)**

<b>Date</b>	<b>Evaluation (current and final) and comments</b>	<b>Signature</b>
20.10.2000	I asked comrade V's wife to bring an electric razor, wall calendar and clock	I. Grishina
21.10.2000	Shaved comrade V.A. safe razor and at the same time trained his wife	N. Petrova
22.10.2000	Comrade V.A.'s wife brought an electric razor. Now at comrade V.A. no risk of cuts. Inspected the shaver for safety when using	L. Mikhaleva

**Work and rest**

<b>Date</b>	<b>Patient problem</b>	<b>Objectives / Expected Result</b>	<b>Nursing Interventions</b>	<b>Assessment Frequency</b>	<b>Goal Date</b>
20.10.2000	The risk of complications due to inadequate exercise after discharge	No complications	To hold a consultation comrade V.A. and his wife about the ratio of physical activity and rest	Once before discharge	9.11.2000

**Protocol (flip side)**

<b>Date</b>	<b>Evaluation (current and final) and comments</b>	<b>Signature</b>
1.11.2000	Consultation held with comrade V.A. and his wife about the ratio of physical activity and rest after recovery	I. Grishina
2.11.2000	V.A. consulted by a psychologist regarding adaptation to changing conditions of rest	L. Mikhaleva

**Communication opportunity**

<b>Date</b>	<b>Patient problem</b>	<b>Objectives / Expected Result</b>	<b>Nursing Interventions</b>	<b>Assessment Frequency</b>	<b>Goal Date</b>
20.10.2000	1. Verbal communication in connection with motor aphasia is difficult	The staff, relatives and the patient understand each other	1. Attach comrade V.A. to the bed. poster with pictures (food, drink, phone, paper, pen, vessel, urinal)	Once	21.10.2000
			2. Provide VA paper and pen	Daily once a day	
			3. Discuss with VA non-verbal communication methods, indicating "yes", "no", and other situations	Once	

			4. Ask closed questions (requiring an answer of yes or no)	Daily	
	2. Comrade V.A. cannot get points if necessary	Points are accessible to comrade V.A. place	Provide a permanent, convenient and affordable place for glasses	Daily once a day	21.11.2000

**Protocol (flip side)**

<b>Date</b>	<b>Evaluation (current and final) and comments</b>	<b>Signature</b>
21.10.2000	1. I taught my wife how to communicate with comrade V.A. in connection with his motor aphasia	I. Grishina
	2. Comrade V.A. can get a pen and paper out of the nightstand	I. Grishina
	3. Discussed with comrade V.A. non-verbal communication methods, indicating “yes”, “no”, “drink”, “ship”, etc.	I. Grishina
	4. Attached a poster near the bed comrade V.A. with pictures (food, drink, phone, paper, pen, vessel, urinal, etc.)	I. Grishina
	5. I ask questions closed to comrade V.A. could answer non-verbally “yes” or “no”. Comrade V.A. understands the questions and answers them with a nod of the head adequately	I. Grishina
	6. The glasses are on the nightstand, accessible to comrade V.A. place	I. Grishina
21.10.2000	1. Put pen and paper on the bedside table	N. Petrova
	2. I ask closed questions to comrade V.A. could answer non-verbally “yes” or “no”. Comrade V.A. understands the questions and answers them with a nod of the head adequately	N. Petrova
	3. The glasses are located on the nightstand, accessible to comrade V.A. place	N. Petrova
	4. Discussed with comrade V.A. prognosis of his disease; listened interestedly	N. Petrova

## Glossary

### DIGESTIVE SYSTEM

Anaciditis	Absence of free hydrochloric acid in meda juice
Anorexia	Complete loss of appetite
Achilles	Absence of proteolytic enzymes and hydrochloric acid in meda juice
Axlorhydria	Absence of chloride kilos in gastric juice
Abdominal pain	Pain felt when the abdominal organs are damaged
Bryushnaya jaba	Occasional pain in the groin
Gastritis	Inflammation of the meda mucosa
Gastroptosis	The meda expands and elongates and descends
Gastroscopy	Examination of the mucous membrane of the medusa using a gastroscope
Gastroenterology	The science that studies the digestive organs
Hyperaciditis	Increased release of free chloride in meda juice
Hypersalivation	Excessive bone separation
Hypersecretion	Excessive secretion of meda juice
Gastrocardia l niy syndrome	Occurrence of congestion and pain in the heart after eating
Bolezn Gipshpringa	Constipation is the result of idiopathic enlargement and elongation of the colon
Hypoaciditis, hypochlorhydria	Decrease in free hydrochloric acid in meda juice
Hyposalivation	
Hyposecretion	A small amount of bone separation
Defecation	Low secretion of meda juice
Diaria	Diarrhea
Dyskenesia of the intestine	Diarrhea in liquid departure
	Impaired bowel movement

Dyspepsia brodilnaya	Bitter dyspepsia is diarrhea associated with impaired carbohydrate digestion in the gut. In this case, the patient has abdominal distension, edema in the abdomen, resulting in a liquid state and a bitter reaction, as well as an increase in plant tissue and starch granules.
Dempink syndrome	Me Are resected patients after cessation of food or feeding time, just to stay in power, the heart often clickthrough rates
Dyspepsia gnilostnaya	It is a pathological condition associated with insufficient digestion of proteins in the intestine due to the absence of hydrochloric acid in the meda juice. The reaction is characterized by diarrhea with indigestible pieces of food containing an alkaline odor,
Gastric dyspepsia	Impaired meda function, which is followed by pain, decreased appetite, wheezing, nausea, vomiting, vomiting.
Dysphagia	Difficulty in passing food through the esophagus
Duodenitis	Inflammation of the duodenum (duodenitis)
Dolixosigma	Congenital elongation of the sigmoid colon
Zapori	Constipation
Irrigoscopy	X-ray imaging of the colon
Izjoga	Heartburn
Cal	The mass that comes out of the lower part of the small intestine during respiration, defecation, deficiencies
Colitis	Inflammation of the mucous membrane of the colon
Collonoscopy	Examination of the mucous membrane of the colon using a colonoscope
Colloptosis	Dropping of the colon
Creatopia	The appearance of a large number of undigested muscle fibers in the stool
Melena	Black stools, this symptom indicates bleeding from the upper part of the intestine
Flatulence	Abdominal bloating, gas accumulation in the intestines
Pancreatitis	Inflammation of the pancreas. There are acute and chronic pancreatitis
Proctite	Inflammation of the mucous membrane of the

	rectum
Peritonitis	Inflammation of the peritoneum
Polyphagia	Eating too much
Toshnota	Nausea
Salivation ( Ptializm )	Increased salivation
Pvota	Involuntary vomiting of food mixture through the esophagus (vomiting)
Recto romanasco p	And sigmoid colon mucosa are encouraged to test
Salivation	Saliva separation
Defective symptom	Defective symptom. In this case, an X-ray shows an image of a gastric tumor.
Symptom "nishi"	The "shelf" is a simon symptom. This symptom appears on X-ray in the form of a lump formed in the wall of the stomach and duodenum. It indicates that a wound has formed. It fills the stomach and duodenum with barium to diagnose the disease.
Srigivaniye	Quick return of food from the esophagus to the heavy cavity
Steator	Excess fat in the stool
Tenezmi	Strengthening. Inflammatory disease of the rectum. Frequent contractions of the bowel result in stiffness and pain. This symptom is most common in dysentery.
Fibroendoscopy	Examination of the mucous membrane of any internal organ using a fibroscope, marked biopsy, and imaging. Examination of the mucous membrane of the esophagus using an esophagoscope
Enteroptosis	Down fall into the small bowel
E n t e rit	Inflammation of the mucous membrane of the small intestine
Yazvennaya bolezn jeludka I dvenadsatiperstnoy kishki	It is a common chronic and recurrent disease, continuing with the appearance of a sore on the wall of the stomach and duodenum.

**HEPATOBIILIAR SYSTEM.  
HEPATOBIILIAR SYSTEM.**

Axolichniy kal	Discoloration of feces occurs as a result of bile (bile) not entering the intestine .
Bilirubinuria	Separation of bilirubin with urine
Gapatargiya	It caused damage to the central nervous system due to liver failure
Hepatitis	Inflammation of the liver cells
Hepatography	Radioisotope examination of the liver. This method is based on a graphical representation of the rate at which the isotope enters the liver, the rate of entry, the rate of accumulation, and the rate at which the radioactive substance passes from the liver to the intestine. Bengal rose dye and labeled iodine 131 are used as radioactive substances
Hepatolienalniy syndrome	Simultaneous enlargement of the liver and spleen for various reasons. This syndrome occurs, for example, in blood diseases, hepatitis, cirrhosis, and portal vein thrombosis.
Hepatology	The science that studies diseases of the liver, gallbladder and bile ducts
Hepatomegaly	Enlargement of the liver
Hyperbilirubinemia	Increased bilirubin in the blood
Medusa head i	“Jellyfish head” is a scattering of dilated, swollen worm-shaped venous collaterals around the umbilicus. "Jellyfish head" occurs as a result of increased pressure in the vein and the anastomosis (fusion) of the portal vein network with the hollow veins. Medusa head is found in liver cirrhosis.
Dyskenesia	Impaired motor function of the gallbladder and bile ducts. There may be hypermotor and hypomotor dyskinesia
Interus	As a result of increased levels of bilirubin in the blood, the skin and mucous membranes turn yellow.
Bile ducts o bturasia	Blockage of bile ducts
Bile ducts o bturasia	Examination of the structure of the liver. In this method, Vim-Silverman took a small piece of liver tissue with a Mengini needle and examined it under a microscope.
Puncture biopsy	
Portal hypertension	Increased blood pressure in the portal vein

Scanning cookies	Examination of the structure and functional status of the liver using a scanner (or gamma-topograph). 198 and bengal roses were first used as radioisotopes.

**MOCHEVIDELITELNAYA SYSTEM  
URINARY SEPARATION SYSTEM**

Azotemia	Increased nitrogen waste in the blood
Nitrogen slag	The final products of nitrogen (protein metabolism) excreted from the body along with urine
Anuria	Incomplete urination (anuria)
Amyloidosis	In the intermediate substances of the iron walls accumulate amyloid masses, which are composed of a special protein rich in diamond acids. These masses are formed as a result of severe disruption of protein metabolism. Amyloid kidneys appear in the form of enlarged, shiny, pale yellow. Renal amyloidosis often persists with amyloidosis of other organs (liver, spleen, intestines) (amyloidosis)
Acetonuria	Occurrence of ketone bodies in urine. These include acetone, acetoacetic acid, beta-oxymoic acid. Acetonuria is a symptom of diabetic coma.
Hematuria	Urinary excretion of blood (hematuria)
Hemodialysis	Purification of blood from nitrogen waste (hemodialysis)
Hyperstenuria	Increased specific gravity of urine (more than 1026) (hyperstenuria)
Hypostenuria	Decreased urinary specific gravity (less than 1015) (hypostenuria)
Hydronephrosis	Fluid in the kidneys due to obstruction of the urinary tract
Stranguria	accumulation
Glycosuria	Painful urination
Diuresis	Kanal D with development of hardware damage caused B, urine glucose ajaralishi .
Isostenuria	The amount of urine excreted over a period of time (daily diuresis normally varies from 1 to 2 l ) diuresis)
Dysuria	
A nuriya	

<p>N efrif</p> <p>N efroz</p> <p>N ephralogy</p> <p>Nephrosclerosis</p> <p>nephrotic syndrome</p>	<p>Variable, almost identical specific gravity (isosthenuria) in different portions of urine equal to the specific gravity of blood plasma</p> <p>Disorders of urinary excretion</p> <p>Urinary retention (anuria) is an inflammation of the renal glomerular apparatus of infectious-allergic origin .</p> <p>Nephritis is accompanied by albuminuria, hematuria, hypoproteinemia, hypertension and edema (nephritis)</p> <p>Dystrophic changes of the renal tubular epithelium (nephrosis)</p> <p>The study of kidney disease (nephrology)</p> <p>Syndrome that develops as a complication of atherosclerosis, hypertension, nephritis. Characterized by damage to the renal vascular system, ending in organ curvature and uremia (nephrosclerosis)</p> <p>Syndrome characterized by the presence of expressed proteinuria and tumors (nephrotic syndrome).</p>
<p>Nephrocalcinosis</p> <p>Nephroptosis</p> <p>Nikturia</p> <p>Oxalaturia</p> <p>Oliguria</p> <p>Paranephritis</p> <p>Pyelonephritis</p> <p>Pielit</p> <p>Pionephritis</p>	<p>Accumulation of calcium salts in the renal tissue (parenchyma) (nephrocalcinosis)</p> <p>Decreased renal function (nephroptosis)</p> <p>Excretion of urine mainly at night (nocturia)</p> <p>Excessive excretion of oxalate salts and calcium salts in the urine (oxalaturia)</p> <p>A sharp decrease in the amount of urine excreted per day (oliguria)</p> <p>Inflammation of the tissues around the kidneys (paranephritis)</p> <p>Bacterial inflammation of the renal pelvis and parenchyma (pyelonephritis)</p> <p>Inflammation of the renal pelvis (pyelitis)</p> <p>Purulent inflammation of the kidneys (pionephritis)</p>
<p>Polyuria</p> <p>Pollakiuria</p> <p>Protenuria</p> <p>Renin</p> <p>Pasternaskogo symptom</p> <p>Uraturia</p> <p>Piuriya</p> <p>Glomerulonephritis</p>	<p>Increased urine output per day (polyuria)</p> <p>Frequent urination (pollakiuria)</p> <p>Formation of protein in the urine (proteinuria)</p> <p>Renin, a vasoconstrictor produced by the hypothalamic apparatus of the kidneys</p> <p>Pain in the lumbar region when tapping the hand (pasternasky symptom)</p> <p>Excessive excretion of amorphous ammonium salts and uric acid in the urine (uraturia)</p> <p>Urine pus (multiple leukocyte excretion with urine (pyuria))</p> <p>Inflammation of the glomeruli (glomerulone-</p>

Glucosuria	phritis) Urinary excretion of sugar (glucosuria)
Uremia	Symptomatic complex (uremia) that develops as a result of accumulation and poisoning of nitrogen wastes in the body
Urolithiasis	Presence of stones in the bladder (urolithiasis)
Cystitis Cylindruria	Inflammation of the bladder (cystitis) Formation of cylindrical proteins in the patient's transverse urine Hyaline granular, epithelial and waxy cylinders (cylindruria)
Excretory urography	X-ray examination of the urinary tract by means of contrast agent delivery. The shapes and sizes of the renal pelvis and cups, the urinary tract are examined. Excretory urography allows to determine the rate of introduction of a contrast agent into the bladder (excretory urography)

### BLOOD SYSTEM

Anaplasia	Loss of cell maturation (anaplasia)
Anemia	Anemia. A pathological condition characterized by a decrease in the number of erythrocytes in the blood and the amount of hemoglobin. 1 mm cubic blood erythrocyte count 4 000 to less than 4 000 (anemia)
Aniocytois	Formation of erythrocytes of different sizes in the blood (anisocytosis)
Anisochromia	Erythrocytes of different colors (light and dark) due to different amounts of hemoglobin (anisochromia)
Anesinophilia	Absence of eosinophils in the blood (aneosinophilia)
Aplastic anemia	Decreased or damaged regenerative function of the bone marrow, atrophy (aplastic anemia)
Aleukemia	Decreased levels of leukocytes in the blood (aleukemia)
Bolezn Shenleyn Genoxa	Leakage of blood into the mucous membranes and skin as a result of impaired permeability of the vascular walls
Hepatomegaly	Enlargement of the liver (hepatomegaly)
Hematology	Science that studies blood and blood-forming tissue diseases (hematology)
Hemolysis	Rupture of the erythrocyte membrane, in which hemoglobin is released into the blood plasma and turns red (hemolysis)
Hemopoiesis	The process of development of blood cells in hematopoietic tissues (hemopoiesis)
Hemorrhagic capillary toxicosis	Hemorrhagic diathesis is a type of disease characterized by hemorrhage into the skin and mucous membranes due to excessive permeability of the vascular wall (hemorrhagic capillary toxicosis).
Hemorrhagic diathesis	A disease that is mainly caused by bleeding. verlorf, Shenlein-Genox, and hemophilia may be present (hemorrhagic diathesis)
Hemolytic anemia	Hemolytic anemia melting, rupture of erythrocyte membrane (erythrocyte breakdown)
Hemorrhage	Bleeding, hemorrhage (hemorrhage)
Hemophilia	Characterized by blood to xtamasligi , one of the diseases tug ' ma bo held on sus-

	this disease, blood clotting disorders , blood clotting factors 8, 9, 11, Bo ' lmasligidan from the ( anemia )
Geophagy	The diagnosis of marbling , cuts sick , Bo ' consumer goods ' o ' l has a tendency to feel ( geofagiya )
Hyperplasia	Rapid and abundant production of blood cells in blood-forming tissues (hyperplasia)
Hyperproteinemia	Excess protein in the serum (more than 8%) is called hyperproteinemia.
Hyperchromia	Excessive staining of erythrocytes (hyperchromia)
Hypoproteinemia	Serum protein deficiency (less than 6%) (hypoproteinemia)
Hypochromia	Decreased erythrocyte staining
Dysproteinemia	Changes in the number and quality of protein cells in the blood serum (similar to dysproteinemia ( decreased albumin, increased globulins ) )
Ko y lonexii	Artificial spoon like shape (co lonexiyalar)
Leukoma (leukemia)	A systemic disease of the tissue that produces white blood cells, it is characterized by hyperplasia, metaplasia, anaplasia, and the appearance of immature forms of leukocytes in the blood.
Leukopenia	Decrease in the number of leukocytes, less than 5 00 (leukopenia)
Leukemia	The process of development of white blood cells in the bone marrow (leukemia)
Leukocyte formula	Present ratio of leukocytes a half forms
Leukocytosis	1 mm cubic in the number of blood leykositlar 9 exceed 000 (leykositoz)
Lymphopheny	Decrease in total number of lymphocytes in 1 mm <sup>3</sup> of blood by 20%
Lymphocytosis	Excess of more than 35% of lymphocytes in 1 mm <sup>3</sup> of blood (lymphocytosis)
Macrocytosis Megalocytosis	Predominance of erythrocytes in the blood with a large diameter (9-10 microns) (macrocytosis) In the blood, in contrast to erythrocytes, the formation of megalocytes in the form of ellipses and hemoglobin saturated with a large diameter (10-12 microns) (megalocytosis)
Medulla Metaplasia	Growth of myeloma tissue (medulla) Transformation of some types of tissue into other types of tissue (metaplasia)
Mielogram Microcytosis	Record the elements of bone marrow cells in the present ratio (myelogram) Excess of erythrocytes in the blood with a small diameter (6 microns and less) (microcytosis)
Myeloma Mieloz Monocytosis Neutropenia	Growth of the coccyx. Bone marrow, bone marrow Increased monocytes ( more than 8% in 1 mm <sup>3</sup> of blood). Decreased neutrophil count ( less than 50% in 1 mm <sup>3</sup> of blood)
Neutrophilia Neutrophilia	Increase in the number of neutrophils in the blood ( more than 70% of neutrophils in 1 mm <sup>3</sup> of blood)
Normoblastosis	Rvation blood normoblastlarning Yavne nuclear applying red (normoblastoz)
Poikilocytosis	
Polychromatophilia	Formation of various forms of erythrocytes in the blood (poikilocytosis)

Reticulocytosis Splenomegaly	Occurrence of large numbers of erythrocytes in the blood, which turn gray-purple with acid and alkaline dyes (polychromatophilia) An increase of more than 1% of reticulocytes in 1 mm <sup>3</sup> of blood (reticulocytosis)
Transfusiology	Enlargement of the spleen (splenomegaly)
Thrombocytosis	Science that studies the methods of placement, preparation and storage of blood and blood substitutes (transfusiology) An increase of more than 400,000 platelets in 1 mm <sup>3</sup>
Thrombocytopenic purpura (Verligofa disease)	of blood (thrombocytosis) It is a type of hemorrhagic diathesis characterized by a decrease in the number of platelets in the blood or the appearance of immature platelets (Werlhof's disease, thrombocytopenic purpura)
Thrombocytopenia Thrombocytopoiesis	Less than 220,000 platelets in 1 mm <sup>3</sup> of blood (thrombocytopenia)
Funukual Chlorosis	Platelet formation and development in the bone marrow (thrombocytopoiesis) Thin cord, rope (funical)
Schizocytosis	Iron deficiency anemia (chlorosis)
Eosinophilia	Formation of small, malformed erythrocytes in the blood (schizocytosis)
Erythropoiesis	Increase in the number of eosinophils in the blood by more than 4% (eosinophilia)
Erythrocytosis	The process of formation and development of erythrocytes in the bone marrow (erythropoiesis)  1 mm cubic blood cells number 5 000 from more than 000 (erythrocytosis polisitemiya)

### ENDOCRINE AND METABOLISM.

Addisonova bolezn	This disease is caused by a lack of blood or total production of hormones in the adrenal glands (Addison's disease)
Adynamics	Severe weakness (adynamism)
Adinase-genital dystrophy	The disease is associated with damage to the hypothalamic-pituitary system and is characterized by underdevelopment and sebaceous glands.
Acromegaly	Acromegaly is a neuroendocrine disease associated with damage to the pituitary and hypothalamus, manifested by enlargement of the limbs, facial skeleton, internal organs, and metabolic disorders (acromegaly)
Bolezn Isenko Kushinga	The disease, which results from damage to the pituitary and adrenal glands, is characterized by overproduction of AKTG glucocorticoids and mineralocorticoids.
Bulimia	Constant hunger (bulimia)
Hypothyroidism	Decreased thyroid function (hypothyroidism)
Hyperthermia	Exacerbation of thyroid function (hyperthy-

	roidism)
Hypotension	Decreased blood pressure (hypotension)
Hyperglycemia	Increased blood sugar above 120 mg% (hyperglycemia)
Hypoglycemia	Decreased blood sugar less than 80 mg% (hypoglycemia)
Hypertrichosis	Forced hair growth on the body and face in women (hypertrichosis)
Glucosuria	Urinary excretion of sugar (glucosuria)
Diaseptic rubeoz	Redness is observed on the face, forehead, upper eyelid area, and chin as a result of dilation of the skin capillary network.
Diastema	Enlargement of the interdental space (diastema)
Zob	Enlargement of the thyroid gland
Xantomatosis	Accumulation of histiocytes as a result of increased fat in the blood, resulting in accumulation of yellow nodules on the palms of the hands, feet, elbows and shoulders (xanthomatosis)
Klimaktericheskiy	Accumulation of fat on the neck, VII cervical vertebrae, climacteric bulge
Cushingoid teloslogeny	The patient's face (crescent face) is the accumulation of fat in the chest, abdomen, neck, where the limbs are relatively thin. Kushingsimon gavda.
Ellineka symptom	Occurrence of pigmentation on the eyelids
Krauss symptoms	Blurring of the whites of the eyes (Krauss's symptom)

Nanism	A disease caused by a lack of growth hormone in the body, it leads to stunted growth of skeletal, organ and tissue. Adult males are less than 130 cm tall and females less than 120 cm (nanism)
Hypothyroidism	The patient's tongue becomes enlarged and swollen, the labia thicken, and the vocal folds thicken and speech becomes slurred as a result of swelling of the vocal cords.
Neuropathy	Nerve-feeding vessels of the peripheral and autonomic nervous system (Neuropathy)
Diabetes mellitus	A disease that develops as a result of damage to the hypothalamic-pituitary area and a decrease in the release of antidiuretic hormone. Continues with polyuria and polydipsia (diabetes mellitus)
Polyuria	Excessive urination per day (polyuria)
Gi rsutizm	Mustache and hair growth in women, hair loss on the head ( Gi rsutizm)
Pigmentation	The appearance of dark gray and black spots on the lines of the palms of the hands, lips, gums, face, mucous membranes and in areas of high friction.
Polydipsia	
Pollakiuria	

Prognatism Symptom Da Irimpelia	Severe thirst and need to drink plenty of fluids (Polydipsia) Frequent urination (Pollakiuria) The lower jaw is enlarged and protrudes (Prognatism) Conjunctivitis ( Da Irimpel's symptom)
------------------------------------	---

**SOEDINETELNAYA TKAN.  
CONNECTIVE TISSUE.**

Amylidosis	Disorders of protein metabolism due to the accumulation in tissues of proteins with characteristic physicochemical properties (amyloidosis)
Ankylosis Ant and gen lar	Lack of joint mobility (ankylosis) Iodine in the blood. Substances that enter the body and cause an immune response, produce specific antibodies (antigens)
Antibody	Protein immune substances (antibodies) formed in the blood and tissues when antigens enter the body
Biopsy	Cutting a small piece of tissue or organ for examination under a microscope for diagnostic purposes (biopsy)
Destruction Dermatomyositis	Destruction of an organ or tissue Inflammatory process (dermatomyositis) affecting muscles, skin, mucous membranes, and sometimes nerves and blood vessels, one of the types of DBST
Cachexia	Clinical anatomical syndrome (cachexia) characterized by excessive weight loss, physical weakness and general events
Pneumosclerosis	Growth of connective tissue in the lungs, in which the function of the lungs is impaired (Pneumosclerosis)
Puncture	Puncture of the tissue with a needle (or trocar) to diagnose or treat the disease
Scleroderma	In diseases of the skin and subcutaneous tissue - scleroderma
Soedinitelnaya tissue	It is a tissue that develops from the mesenchyme and performs basic, trophic and protective functions.
Phagocytosis	The process by which cells actively capture particles and digest them if these particles are organic (phagocytosis)
Xeylit	Inflammation of the red lips, mucous membranes and skin of the lips (cheilitis)
Eosinophilic	Increased number of eosinophils in the blood (Eosinophilia)

## LITERATURE

1. Качество жизни. Сущность. Оценка//Монография/Под ред. Л.А. Кузь- мичёва, М.В. Фёдорова.- М., 2000.
2. *Бойцов Б.В., Кронеv Ю.В., Кузнецов М.А.* Системная целостность качества жизни//Стандарты и качество.- 1990.- ? 5.
3. Quality of life assessment in clinical trials I Sd. MJ. Staguet - Oxford University Press: Oxford, New York, Tokio, 1988.
4. World Health Organization Cancer pain relief. - Geneva: WHO, 1986, p. 5-26.
5. *Ушаков И.Б., Турзин П.С.* ГНИИ военной медицины Морф. - М.
6. Руководство по исследованию качества жизни в медицине. - М.: Олма-Пресс.
7. *Фёдорова Л, Михайлова Н., Комаров Ю.* ИСО 9000:2000 - золотой стандарт качества медицинской помощи//Медицинская газета. - 2001.- ?91(6219).
8. Качество медицинской помощи. Глоссарий Россия - США. Российско-американская межправительственная комиссия по экономическому и технологическому сотрудничеству. Комитет по здравоохранению. - 1999.
9. Постановление Правительства РФ от 22.08.98 г. ? 1002.
10. Приказ Министерства России и Федерального Фонда медицинского страхования от 19.01.98 г. ? 12/2 «Об организации работ по стандартизации в здравоохранении».
11. ИСО 9004:2000. Системы менеджмента качества. Руководящие указания по улучшению деятельности. Проект. 3-я редакция. Приоритеты реформы//Медицинский вестник.- 2000.- ? 15.
12. *Михайлова Н.В., Гилязетдинов Д.Ф.* Обеспечение качества медицинского обследования//Стандарты и качество.- 1999.- ? 3.
13. *Мартынова Н.М.* Органическая система как новая парадигма здравоохранения.- М.: Инфэрсэн, 1999.
14. Обеспечение качества медицинской помощи. Руководство//Под ред. проф. Ю.М. Комарова.- М.: Издательско-полиграфический центр ФГУП ВНИИ ЖГ РЕИНФОР, 2004.
15. М. С. ИСО 9001:2000 (ГОСТ Р И СО 9000:2000). Система менеджмента качества. Требования.
16. М. С. ИСО 9001:2000 (ГОСТ Р И 9000:2000). Система менеджмента качества. Рекомендации по улучшению деятельности.
17. Соглашение международного семинара IWA 1:2001 «Система менеджмента качества. Рекомендации по улучшению процессов в организации здравоохранения», (регистрационный номер IWA 162001 (R)).
18. М. С. ИСО 13485 Медицинское оборудование. Системы менеджмента качества. Нормативные требования. Вторая редакция 2003-07-15.
19. *Фишман Б.Б.* Научное обоснование комплексной программы профилактики инфекционных заболеваний на региональном уровне//Материалы конференции «Практические аспекты укрепления здоровья и профилактики заболеваний». 18-20 апреля 2000 года.- М., 2000.
20. *Тарновская И.И.* Объект стандартизации-технологии выполнения услуг сестринским персоналом//Проблемы стандартизации в здравоохранении.- ? 1.- 1999.
21. *Галумко А.М.* Определение понятия «Здоровье» и проблема профилактики: Сб. статей и рефератов: Здоровье человека, общества и природы.- М.: ТОО «Поматур», 1999.
22. *Грилюк Л.П.* Общение с собой: начала психологии активности.- М.: Политиздат, 1991.
23. *Конечный Р., Боухал М.* Психология в медицине.- 2-е изд.- Прага: Авиценум, 1983.
24. *Коломийцев П.В.* Система ценностей человека и общества: Сб. статей и рефератов: Здоровье человека, общества и природы.- М: ТОО «Поматур», 1999.
25. *Михайлова Н.В.* Стандарт SA 8000. Инновационная ответственность. Некоторые комментарии к стандарту//Стандарты и качество.- 1999.-?5.
26. *Михайлова Н.В., Фёдорова Л.* Основной фактор улучшения качества жизни//Стандарты и качество.- 2004.- ? 10.