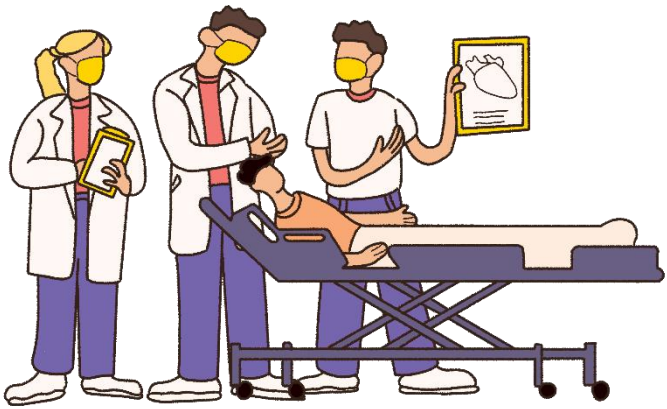
NICOLAE TESTEMITANU
STATE UNIVERSITY OF MEDICINE AND PHARMACY

Department of Family Medicine

UNIVERSITY COURSE

PRACTICAL CARE SKILLS IN NURSING. INTERPROFESSIONAL EDUCATION

for second year students,
integrated higher education program 0912.1 Medicine



Chisinau, 2025

UNIVERSITATEA DE STAT DE MEDICINĂ ȘI FARMACIE
„NICOLAE TESTEMIȚANU” DIN REPUBLICA MOLDOVA

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CONTENTS

LIST OF ABBREVIATIONS

FIP – International Pharmaceutical Federation
GCP – Good Clinical Practice
GDP – Good Distribution Practice
GLP – Good Laboratory Practice
GMP – Good Manufacturing Practice
GPP – Good Pharmacy Practice
GSP – Good Storage Practice
GTP – Good Transport Practice
GXP – the totality of good practices applicable in the field of medicinal products and pharmaceutical activity
HI – Healthcare Institution
PHI – Public Healthcare Institution
IPE – Interprofessional Education
IPEC – Interprofessional Education Collaborative
MH – Ministry of Health
WHO – World Health Organization
RUM – rational use of medicines

1. INTERPROFESSIONAL EDUCATION AND HEALTH COLLABORATION

Author: *Virginia Salaru*

The phenomenon of globalization, overburdened health systems, insufficient resources compared to the increased demand for quality health services has led to the need to strengthen health systems. The human resources for health crisis has been unanimously recognized as a critical barrier to achieving the health-related Millennium Development Goals. Thus in 2006, at the 59th World Health Assembly, resolution WHA 59.2 was adopted in response to the crisis in human resources for health. This called for a rapid expansion of health workforce production through various strategies, including the use of "innovative approaches to teaching in industrialized and developing countries". One of the most promising solutions was inter-professional collaboration.

The World Health Organization (WHO) and its partners have stated that interprofessional collaboration is an innovative strategy in both training and practice settings that will play an important role in alleviating the global health workforce crisis. Thus, interprofessional education (IPE) is the educational process in which students from 2 or more specialties (professions) learn about and from each other and together, enabling effective collaboration and health improvement. IPE is an essential pedagogical approach in health education and is considered crucial in equipping health professionals to provide safe, high-quality and optimal patient care.

In conjunction with the WHO, the National Academies of Practice, the American Public Health Association, and the Institute of Medicine are just a few of the many organizations that have supported implementation and development. The next step after interprofessional education would be collaborative practice. Data presented in the systematic review by Reeves and coauthors, showed improved patient outcomes, better clinical processes, and increased patient satisfaction when the interprofessional approach is utilized. Early exposure of students to IPE as future health professionals is necessary for their positive attitude toward interdisciplinary teamwork.

KEY DEFINITIONS

Health Professional/Health Worker is a comprehensive term referring to all persons involved in actions whose primary intention is to improve health. Included in this definition are professionals who promote and maintain health, those who diagnose and treat disease, and support workers, professionals with distinct/unique, regulated or unregulated, conventional or complementary areas of competence (WHO, 2006).

Interprofessional education occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. The term 'professional' includes individuals with knowledge and/or skills that contribute to the physical, mental and social well-being of a community (WHO, 2010).

Collaborative practice in health care is when multiple health workers from different professional backgrounds provide comprehensive services, working with patients, their families, caregivers and communities, thus ensuring the highest quality care at various levels of care and/or in the community. "Practice" includes both clinical and non-clinical health-related activities, such as diagnosis, treatment, supervision, health communication, health management and engineering, etc. (WHO, 2010)

Health and education systems are the totality of organizations, persons and actions whose primary purpose is to promote, restore or maintain health and to facilitate learning about health.

* Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organization, 1948).
* Education is any formal or informal process that promotes learning which is any improvement behavior, information, knowledge, understanding, attitude, values or skills (United Nations Educational, Scientific and Cultural Organization, 1997).

The first mention of IPE appears in the 1969 article "Interprofessional Education in the Health Sciences", which reported that health professionals are using their talents inappropriately, as a result limited human resources are wasted. Evidence also points to fragmentation, compartmentalization and inefficient communication between those delivering different components of health services. Thus, a committee for IPE in health sciences was set up to promote interprofessional education and to experiment with educational programs, thereafter, it could provide

appropriate recommendations on what and how students should learn together. With roots in the 1960s and 1970s, mainly in the UK and the United States, the IPE movement gained momentum in the late 1980s through two WHO reports: 'Continuing Education for Physicians' and 'Learning Together to Work Together for Health'. IPE's early efforts were based largely on the premise that teamwork and collaboration not only help to better meet the needs of patients and clients, but also help to resolve tensions between professions working in close proximity. The plethora of concepts and opinions with reference to IPE have limited the widespread application of these principles in medical education. The full range of definitions and approaches were systematized by the WHO in 2008, which noted that, in many situations, health professionals already work in different types of teams and actively communicate to plan and deliver care.

Although IPE is an old concept in the health profession, it gained momentum in 2009 when six national education associations of U.S. health professions schools formed an Interprofessional Education Collaborative (IPEC) to promote and encourage efforts that foster interprofessional education to help prepare future health professionals. Experts from the Interprofessional Education Collaborative (IPEC) first formulated the IPE competencies in 2011, which were updated in 2016 *(Fig 1.)*

The IPEC Expert Group has developed four core interprofessional competencies, namely, ethics, communication, roles and responsibilities, teams and teamwork, to improve collaboration between health professionals and health outcomes. The core competencies and sub-competencies shown in *Fig. 1* include: patient and family centeredness, community and population orientation, relationship focus, process orientation, connection to learning activities, instructional strategies, and behavioral assessment that are developmentally appropriate for the learner; able to be integrated along the learning continuum; sensitive to system context and applicable to clinical practice; applicable across professions; common definitions and outcome driven.

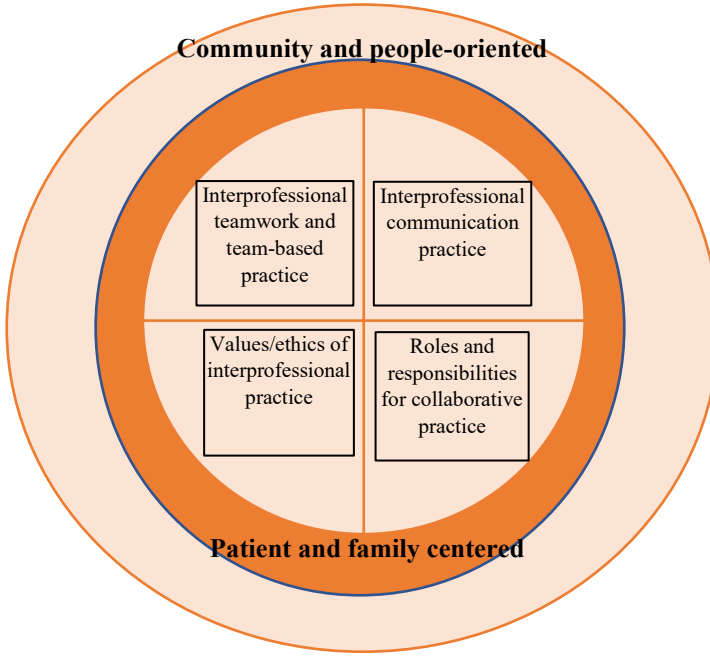


Fig. 1. **Area of competence of interprofessional collaboration**
(Adapted from: Core competencies for interprofessional collaborative practice: 2016).

Thus, the 4 core competences include:

1. Work with people from other professions to maintain a climate of mutual respect and shared values (Values/Ethics for Interprofessional Practice).

2. Use knowledge of own role and that of other professions to appropriately assess and address patients' health care needs and health promotion (Roles/Responsibilities).

3. Communicate with patients, families, communities, and health and other professionals in a responsive and accountable manner that supports teamwork to promote and maintain health, prevent and treat disease (Interprofessional Communication).

4. Apply the values of relationship building and principles of team dynamics to effectively function in various team roles to plan, deliver, and evaluate patient/population-centered care, programs, and population

health policies and programs that are safe, timely, effective, and equitable (Teams and Teamwork).

In 2023 the tertiary review process was launched. The key drivers for this process are: the need to empower the IPE community with the best available evidence and research in the field, review the common definitions for competences and ensure that the Qualifications Framework meets the requirements of the labor market, existing evidence and scientific and technical advances in health.

Numerous research studies in medical education and public health have demonstrated that patients received safer and higher quality care when health professionals worked effectively in a team, communicated productively and understood each other's roles. However, IPE is not the norm for most medical universities or other health professions schools. Some experts believe that IPE is a mandatory component for medical students because the physician is most often the coordinator of the care team and this would require knowledge and skills of teamwork as well as a clear view of each team member's role and responsibilities. Harden R.M. and co-authors recommend introducing IPE in medical education at the beginning of the training course. His proposal rationalizes that the early introduction of IPE will mold young minds and instill the proper attitude towards other health professionals before any bias develops.

Interprofessional education involves teachers and students from 2 or more health professions creating and promoting together a collaborative learning environment. The goal of these efforts is to develop knowledge, skills and attitudes that result in interprofessional team behaviors and competencies. Ideally, interprofessional education is incorporated across the curriculum in a vertically and horizontally integrated manner.

The goal of the IPE is for students to learn how to function in an interprofessional team and to transfer this knowledge, skills, and values into their future practice, ultimately providing integrated services centered on patient needs. An interprofessional team is composed of members from different health professions who have specialized knowledge and skills. The goal of an interprofessional team is to provide patient-centered care in a collaborative manner. The team sets a common

goal and, using the individual expertise of each team member, works together to achieve the goal. Team members synthesize their observations and profession-specific expertise to collaborate and communicate as a team for optimal patient care. In this model, shared decision-making is valued and each team member is empowered to take the lead in patient care issues appropriate to their expertise. For example, determining the therapeutic regimen or operative technique is the prerogative of the doctor, but aspects of ongoing care, supervision and monitoring, and health education are the prerogative of the nurse. In contrast, health professionals from different disciplines are not considered as an inter-professional team, as they carry out individual assessments of a patient and independently develop a treatment plan. In this traditional model, the physician usually orders services and coordinates care, and the lack of collaboration can contribute to duplication or fragmentation of services.

Medical practice increasingly relies on interprofessional collaboration to deliver high-quality patient-centered care. Thus, incorporating early IPE into the medical education curriculum would ensure that medical professionals are well prepared to work in teams.

2. COMMUNICATION AS A TOOL IN CARE WORK

Author: *Natalia Zarbailov*

> *"Extensive research has shown that no matter how much knowledge a doctor has, if he or she is not able to initiate open communication with the patient, he or she cannot be of help to the patient."*
>
> **Asnani M.R.**

The word communication comes from the Latin word '*communis*', which means '*in common*'. It means that we try to establish "community" with someone in communication. *Literally, communication means to inform, tell, show or spread information.* Thus, it can be interpreted as an exchange of thoughts or information that brings understanding and trust for smooth functioning of industrial relations. The essence of the process is to transfer or send information from sender to receiver.

Definitions of communication

COMMUNICATION is the process of transmitting information, thoughts, opinions from a sender to a receiver by speech, writing or signs.

- The transfer of information from one person to another, whether or not it elicits trust. (*Koontz and O Donell*)
- Communication is an exchange of facts, ideas, opinions or emotions by two or more people. (*George R. Terry*)
- Communication is the process by which information is conveyed between people, and/or organizations through previously agreed symbols (*Peter Dittle*).
- Communication is an exchange of thoughts, opinions or information by speech, writing or signs. (*Robert Anderson*)
- Communication is any behavior that results in an exchange of meaning. (*American Marketing Association*)
- Communication is the transfer of information from one person to another. It is a way of reaching others through the transmission of ideas, facts, thoughts, feelings and values (*Keith Davis*).
- Communication can be broadly defined as a process of meaningful interaction among human beings, or the process by which meanings are perceived and understanding is reached among human beings. (*D.E. McFarlad*)

Why is communication needed?

Today, every small or multinational organization needs effective communication. According to *Koontz* and *Weihrich*, communication is necessary to:

- increase the performance and effectiveness of employees by updating their knowledge;
- promote a sense of belonging and employee engagement;
- produce the effect of slight change;
- motivate and create a sense of identification with the organization and its objectives;
- inform and convince employees of the decisions and the reasons behind those decisions;
- develop a clear understanding among employees about future growth opportunities in the organization;
- empower employees with information about development and relevant activities.

What is the communication process?

Through communication: we send messages – we receive messages – we initiate and maintain relationships.

Communication could have several purposes, depending on the context and the person involved. Communication within the family, medical institution, seminar and practice has different purposes to be achieved.

The purpose of communication is:	Inform	Persuade
Educate	Train	Motivate
Integrate	Relate	Entertain

Information

The basic purpose of communication is to keep people informed. Various important facts and information must be provided in a timely manner. Peter F. Drucker said, "The manager has one specific tool: information." Communication can be to inform people about ideas, views, suggestions, etc. Managers need complete, accurate and precise

information to plan and organize. Employees need the manager to make planning a reality.

Persuasion

Persuasion can be defined as an effort to influence the attitudes, feelings or beliefs of others. Persuasion consists of four important steps:

1. Situation analysis
2. Preparing the receiver
3. Message delivery and
4. Prompt action

All this depends on effective communication. Informing people is not enough, they need persuasion to achieve common goals.

Education

Communication can have a purpose to educate people. It is a conscious process of communication. It involves both teaching and learning with an object of extending knowledge as well as improving skills. To this end, knowledge, skills and attitudes are developed through communication.

Training

Training is the act of increasing knowledge and skills for a given task, communication is an integral part of training. To achieve proficiency in a particular area, lectures, demonstrations, practice and discussions are required as part of communication.

Motivation

Motivation is the creation and release of work energy within an individual. High morale and motivation is a necessity to ensure high levels of achievement. Communication provides a means to keep people motivated. Besides money, various factors such as job satisfaction, prestige, sense of belonging, recognition can motivate a person to work sincerely and effectively. Motivation as a form of communication deals with these factors.

Integration

Where large numbers of people work together, communication helps them to work in an integrated way. Sharing opinions, problems and other information can create a better understanding between team members.

Relating

Human beings are social creatures, so people need communication, including for developing relationships. Communication is not just about building a relationship, it is also about a mutually beneficial relationship.

Entertainment

Communication can have an entertainment purpose. Communication also facilitates social connections, including stress relief.

The importance of communication

Communication is a vital force, it is an important aspect of effective organization of activities of any kind.

Communication ensures:

- effective functioning of the organization;
- making decision-making easier;
- proper planning;
- minimizing organizational conflicts;
- job satisfaction and higher productivity;
- democratic management;
- establishing better working relationships;
- efficient organization;
- boost motivation and morale;
- strengthening human relations.

Effective functioning of the organization:

- facilitating decision-making: an organization's desired results depend largely on the right decision at the right time. A communication system is a prerequisite for sound decision-making.
- good planning: communication is necessary not only for effective planning, but also to ensure better implementation.
- minimizing organizational conflict: good communication reduces conflict by developing understanding. Communication helps people get to know each other's views, problems and thoughts.
- job satisfaction and higher productivity: effective communication promotes better performance because people are able to understand their functions and roles better.

- democratic management: modern business organization follows the democratic management system. Good communication channels are needed so that employees, consumers and other stakeholders share information and participate in discussions, consultations and decision-making.
- effective organization: organization involves delegation of authority, assignment of responsibility, decentralization, and establishing the relationship between members, which cannot be done without communication.
- increasing motivation and morale: effective communication creates better management and working relationships. it helps to improve employee morale as they are aware of their role in the organization.
- strengthening human relations: the root cause of workplace disputes is a communication gap. With effective communication, strong relationships can be maintained as it promotes mutual understanding, cooperation and goodwill.

Forms of communication

Communication involves an exchange of information. It can be in different forms, can be categorized on the following basis:

A. The way you express yourself:
- Formal communication
- Informal communication

B. Address:
- Top-down communication
- Bottom-up communication
- Horizontal communication
- Diagonal communication

C. Types of communication:
- Nonverbal communication (paraverbal and metaverbal)
- Verbal communication (oral and written communication)

Communication process

Communication is a process in which the sender of a message tries to provide information to the receiver. The process is a dynamic and

constantly changing concept. Communication is a process, which can be unidirectional or bidirectional.

The two-way communication process is superior to one-way communication in the following ways:

- Two-way communication is more effective.
- Feedback allows the sender to refine their communication to make it more accurate.
- Recipients' self-confidence is higher in two-way communication, as they are allowed to ask questions and seek clarifycations from senders.

Sequencing the communication process:

- *Idea*: Conception of the idea by the sender or source.
- *Encoding*: message encoding.
- *Transmission*: Message transmission.
- *Receiving*: The receiver's reception of the message.
- *Decoding*: Decoding the message.
- *Action*: Behavior or action on the message.

There are **six phases** in the whole communication process:

- In *phase* I, the sender has an idea or information.
- In *phase* II, the sender encodes the idea for transmission.
- In *phase* III, the coded idea is transmitted by the sender through the strategically selected transmission channel or medium.
- In *phase* IV, the receiver receives the message.
- In *phase* V, the receiver decodes the message and finally
- In *phase* VI, feedback is sent by the receiver.

Elements of the communication process

The main elements of the communication process are: *message, sender, encoding, medium and channel, receiver, decoding and opinion.*

A message is information, written or spoken, to be sent from one person to another. The most important characteristic of a message as an element of communication is that it is organized, structured, shaped and selective.

The sender is the person who transmits, disseminates or communicates a message or operates an electronic device, i.e. the one who conceives and initiates the message. The sender transmits the message with the purpose of informing / persuading / influencing / changing the attitude, opinion or behavior of the receiver (audience / listener).

Encoding is the method by which a message is expressed. The message appears in the mind as the Idea. This idea is conveyed by the sender to the receiver in the form of words, symbols, pictures, everyday language, etc. Otherwise the receiver may not understand it. Keeping in mind, the purpose of communication, the selection of words or symbols for coding should be to make the receiver understand the communication correctly.

Method or channel means that a message is transmitted from a sender to a receiver called a medium or channel. For example, a letter is a medium and the postman or messenger a channel. If a message is communicated by telephone, then an oral message is a medium and the telephone a channel.

The receiver of communication is a person or a group or an organization that receives the message. They are the destination of the message. In his absence, the communication process is incomplete. He not only receives the messages but also understands what is involved in it. He is a decoder of the message who responds to it or provides the necessary feedback.

Decoding is a mental process by which the receiver draws meaning from the words, symbols or images of the message. The receiver decodes or understands it. This is why it is also called a decoder. If the receiver correctly understands the meanings of the words or symbols, then his decoding is perfect.

Opinion or feedback is the receiver's response to the message. Feedback is the final link in the communication process. On receipt, the receiver expresses his/her response by acknowledging to the sender. Feedback is the key element in the communication process as it allows the sender to evaluate the effectiveness of the message.

Nature of the communication

Communication is a process of encoding, sending and decoding. It is the basis for action and cooperation for it to be a two-way process, there must be at least two people, i.e. sender and receiver. Communication is not a constant as it is dynamic in nature and is always changing according to circumstances.

Effective communication

There are 7 Cs of effective communication that are relevant to both written and oral communication.

- *Clarity:* involves emphasizing one message or objective at a time, rather than trying to achieve too many at once.
- *Completeness:* communication must be complete. It should convey all the facts required by the audience.
- *Concision:* it means communicating what you want to express in as few words as possible without sacrificing the other C's of communication.
- *Consideration:* involves 'walking in other people's shoes'. Effective communication needs to consider the audience.
- *Concrete*: concrete communication means being particular and clear, rather than vague and general. The aspect of making the message as concrete as possible strengthens the confidence of interlocutors.
- *Kindness:* in the message implies the message should show the sender's expression as well as respect the receiver. The sender of the message should be sincere, polite, judicious, reflective and eager.
- *Correctness:* no grammatical errors in communication.

Communication barriers

Communication barriers are anything that interferes with the communication process.

- Noise.
- Differences in perception and language: perception is generally how each individual interprets the world around them. People generally want to receive messages that are meaningful to them.
- Information overload: with a large volume of information it is possible for information to be misinterpreted or forgotten, or overlooked. As a result, communication is less effective.

- Inattention: sometimes we don't listen, we just hear.
- Time pressures: frequently in an organization, objectives must be achieved within a specified time period, failure to achieve which has negative consequences.
- Emotions: the emotional state at a particular moment in time also affects communication. If the receiver senses that the communicator is upset, he understands that the information sent is very bad.
- Complexity in the organizational structure: the greater the power structure in an organization, the more likely it is that communication is lost.
- Poor retention: human memory cannot function outside a limit. One cannot always retain what he is told especially if he is not interested or not paying attention.

Assertive communication

Assertive communication involves expressing personal intentions clearly and directly, while taking into account the other person's opinion. Assertiveness is based on the idea that we are equal in rights and freedoms and that we are no more or less important than others. At a common-sense level, assertiveness is confused with passivity and aggressiveness and is often seen as a form of selfish communication. This is because of the general belief that the welfare of others is more important than one's own welfare, or that a competitive situation or conflict can only be resolved if one party wins at the expense of the other.

Assertive communication has a non-confrontational orientation: while the aggressive communication style is based on the objective of dominating the interlocutor, the assertive communication style is based on the objective of clearly expressing one's own ideas and feelings about an issue, without the need to dominate or submit to the other person.

Using assertive communication has many benefits in both the short and long term. Thus, an assertive person:

- communicates openly and honestly about their needs;
- negotiates with each other on a win-win solution to a common problem;

- effectively solves the problems they face;
- has low stress levels;
- gets more involved in solving tasks.

Everyday medical practice is essentially a basic task to ensure or provide the patient with accurate and truthful information about the disease, its symptoms, the quality of treatment and appropriate instructions for health care.

Medical deontology - is the professional ethics of medical workers and the principles of behavior of medical personnel, directed towards the maximum benefit of treatment. Medical deontology includes issues of respect for medical confidentiality, the question of the extent of the medical worker's responsibility for the life and health of the patient and issues of relationships between medical workers. According to medical deontology, the health worker in his relationship with the patient must show the utmost care and apply all his knowledge to restore the patient to health or to relieve his suffering; he must convey to the patient only information about his health that will be beneficial to him and establish contact between the patient and the doctor.

Communication and collaboration with the patient

Effective, timely, accurate, complete, unambiguous communication reduces errors and improves patient safety.

The objectives of communication with the patient are to identify the health problems and risk factors to which the patient is exposed. This requires a logical sequence of questions, language that the patient understands, wording that does not induce false answers, but reveals aspects that the patient does not find enlightening, does not remember or does not wish to hide. Obtaining consent for medical interventions by informing about: the diagnostic and therapeutic pathway the risks of non-compliance.

Informing the patient about their health problems

It should be aimed at alerting the patient to the importance of a correct understanding of their health status and their relationship with the health care system. Informing the patient about the course of the disease

and how to recognize clinical manifestations reflecting a favourable or unfavourable course in relation to compliance with medical advice - Therapeutic Patient Education (TPE).

Circumstances that can be critically affected by poor communication:

- verbal or telephone communication of critical test results;
- patient handover/transfer communications;
- patient care recommendations given verbally and over the phone;
- unintelligible handwriting;
- failure to follow medical forms;
- different dialects and pronunciations can make communication difficult, for example, names and numbers of drugs that sound the same, such as erythromycin instead of azithromycin or fifteen instead of fifty can affect the accuracy of the order.

As we have seen, a culture involves both material and non-material aspects and has several defining elements:

1. cognitive components (knowledge, opinions);
2. axiological components (values);
3. normative components (norms, customs, mores, taboos, laws);
4. symbolic components (signs, symbols, language, gestures).

We will emphasize, however, that whatever its components, culture has a very diverse background. In other words, the diversity of culture is obvious. Man, human nature is itself diverse. This diversity leads to the idea of culture as a system of signs, of signified practices, to be analyzed according to the axes of paradigm and syntagm.

In the medical field cultural diversity is limited by a set of standards/ norms that are assigned to the field. For example, the distance that is recommended for communication with patients, their relatives, between medical staff and from subordinate positions. The typology of interpersonal space is also related to the code of intercultural manners. According to E. T. Hall the distances are as follows:

1. intimate area – 0-45 cm
2. personal area – 45-122 cm
3. social area – 122-350 cm
4. public area – over 350 cm.

The first zone, the intimate zone, is by definition the zone that belongs to our body. It is the intimate dance distance, the zone we usually defend fiercely. Only very close people are allowed to enter the intimate zone: relatives, friends, lovers. This is why women accept having their hands kissed, but not their cheeks, neck or eyes. Intimacy is about a person's self-confidence. In this way, touching the intimate area of the person's body triggers unconscious mechanisms, the feeling of acceptance. We can manipulate the person more easily by penetrating their intimate area.

The personal zone is a second invisible circle. The degree of familiarity of the interlocutors is equally high, because wives, children, and friends can live well in it. This explains why we become jealous. The moment a stranger violates the personal zone of our partners, our ownership instinct is activated. In different cultures, the personal zone is different. Anglo-Saxons have a hard time with crowds, so their personal zone is bigger than that of the Japanese, who are used to small spaces.

The social zone is reserved for social contacts, professional relationships. This is where work colleagues usually meet. If you take the risk of interfering in your partner's social zone at an inappropriate time, you may be irritated or disturbed. If we learn to respect social distance we can dominate or intimidate someone.

The public zone is the most open and most removed from the person. It is public discourse rather than interpersonal communication.

The religious and political contexts are very important when two representatives of different cultures communicate. Here we can also include the way we dress. We cannot afford to wear low-cut clothes in Arab countries, and in China and Japan we will not wear clothes of white colour, because it signifies mourning. It is also advisable to pay attention to the form of address. With a German we communicate from official positions. With the Americans or French we can quickly switch to using small names, and the Japanese are very formal in everything they do, including communication.

Disruptive factors in communication between healthcare professionals:

1. External factors:
   - phone calls;
   - requests from staff on issues other than those discussed;
   - other distracting external events.
2. Individual factors:
   - record;
   - personal, dominant concerns;
   - fatigue.

Interprofessional communication and collaboration

Interprofessional communication and collaboration is the assumption of complementary roles and team cooperation, sharing responsibility for problem solving and decision making in formulating and carrying out treatment plans for the patient.

Communication patterns between professionals

The SBAR model

SBAR is a structured communication model for providing patient information that ensures the complete transfer of information and gives the receiver a structure to remember the details they have heard.

S (Situation) – B (Background) – A (Assessment) – R (Recommendation)

SAED template (address to colleague regarding the patient's health status)

CURRENT SITUATION: I am Name First Name, position, health facility, I am asking for Mr/Mrs. N and P, age, reasons for admission or presentation, current clinical examination, pathological elements and vital signs, etc.

BACKGROUND – it makes reference to the antecedents related to the current context: it specifies the date of presentation, medical interventions performed in this period, investigations with results, treatments, current condition, the time of onset of the manifestations for which the conference is requested.

EVALUATION: you state the problems you are thinking about, what you have done.

REQUESTS (DEMANDS): – to come and see the patient - to recommend a certain attitude, etc. The interlocutor's response: he/she must briefly repeat what he/she has understood, to convince him/herself of the correctness of the information, and then communicate his/her decision.

To successfully practice a medical profession you need to consider the following:

- Communication is a manageable process based on knowledge, skills and attitudes.
- Communication is the essential tool in the process of interpersonal and interprofessional activities and collaboration.

3. TEAMWORK

Author: *Virginia Salaru*

Healthcare delivery is a team effort, the effectiveness of which can influence patient outcomes and safety. The need for effective teams is increasing due to the growing complexity of cases, the multi-morbidity of patient diagnoses and the specialization of care. It is already no longer current that a healthcare professional, regardless of specialty, is able to provide quality and comprehensive medical services and care that meet all patient needs.

The evolution in patient health care and the global demand for quality health services, this can only be achieved by placing the patient at the center of care. Thus, there is a need for the development of diverse health professionals, with a particular focus on a patient-centered teamwork approach. This will help to form and develop an effective team capable of providing patient care. With this objective in mind, the motivation of team members should be supported by practical strategies and skills to achieve goals and overcome challenges.

Team = a group of people who form and work together to achieve a goal.

The **main purpose of** the team is to facilitate communication between individuals and to coordinate interdependent tasks. Thus, the team is a group of people who are formed with a common purpose, with individual interests subordinate to the interests and achievement of the team's purpose.

In contrast to teams, professional groups are - two or more people possibly with different interests, from the same or different organizations, who frequently interact and work together for a common goal/interest without giving up their individual or home organization's goals/interests (different *stakeholders*). For example, initiating working groups to develop relevant standards or policies (*e.g. Health 2030 Strategy Working Group*).

Teams can be temporary, which are created and operate for a defined period of time, relatively short from a few hours (e.g. operating team) or days/months (e.g. project team). We also distinguish permanent teams, which operate for a long period of time, years (e.g. chronic care team).

Depending on the purpose and functions of the team, they can be distinguished by the duration of operation, the number and type of specialists employed as team members.

Team models depending on the team's common purpose:

- Execution of various medical services => **operating team** (surgeons, anesthesiologists, assistants, nurses, etc.);
- Projects => **project team;**
- Implementation of new strategies, programs or methodologies => **intervention team**;
- Leadership => **management team**, consisting of senior managers.

The way the team is formed, develops and functions is an important part of the work environment because it influences: goal achievement, work climate, team performance, individual performance, employee stability and the organization's reputation.

Table 3.1. **Benefits of effective teamwork**

Organizational benefits	Team benefits	Patient benefits	Team member benefits
Reducing hospitalization time and costs	Better coordination of care services	Raising the satisfaction level with health services and care	Increased job satisfaction
Reducing unexpected unplanned hospitalizations	Efficient use of health system resources	Accepting treatment	Greater clarity of your own role in the team
Making services more accessible	Improving communication and professional diversity	Improved health outcomes and quality of care; Reduced medical errors	Increased well-being and reduced burnout syndrome

The benefits of teamwork are described in *Table 3.1.* They are perceived at various levels at the individual (provider or patient), organizational, and system levels. Effective teams can improve care at the level of the organization, the team as a whole, the individual team member, and the patient.

The team is a dynamic organism which, according to Tuckman's model *(Fig. 3.1.),* goes through several stages in its development:

- formation;
- storm;
- norming;
- tasks execution/achieving goals;
- dissolution.

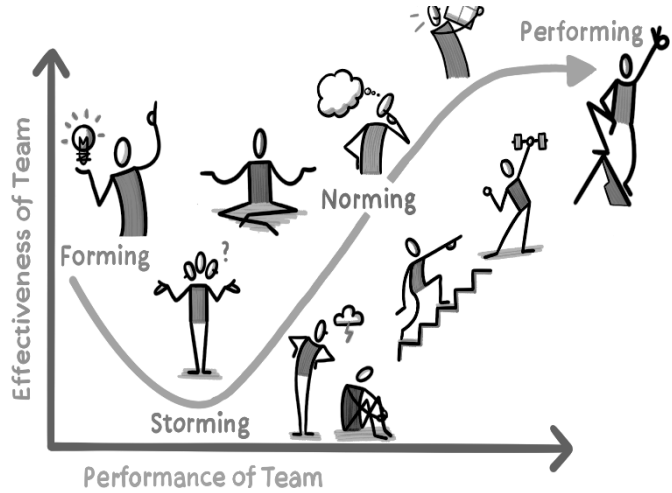


Fig. 3.1. **Team development model (Tuckman model)**
[adapted from source https://www.thevisualfacilitator.co.uk/blog/tuckmans-model-of-team-development/].

Stages of team development:

Stage 1 – Forming (immature team). It has the following characteristics: getting to know and assessing each other; discussing goals and objectives; establishing working procedures. At this stage the coordinator or manager of the team has the following tasks: presentation of the aim, objectives, presentation of roles and responsibilities in the team. Thus, the roles of each team member are to be described and presented, specifying the functional position needed to fulfil the purpose (Who?) and the responsibilities, i.e. what each team member should do (What?).

Stage 2 – Storm (fractured team). This is a conflict-generating stage and has the following characteristics: priorities, objectives, the way of working, leadership are discussed; the struggle for asserting and imposing personal points of view begins. At this stage the team coordinator or manager has the following tasks: mediates conflicts and facilitates communication between team members.

Stage 3 – Norming (harmonization): At this stage the team manages to reach a consensus on how to work, how decisions are made, how communication is carried out; norms of behaviour and performance are established; team spirit emerges. The responsibilities of the team manager at this stage are: coordinating the process of setting the rules and reaching consensus, explaining the rules on possible incentives or penalties.

Stage 4 – Task execution (functional stage). This stage is also considered the maturity stage of the team. Each team member has already understood and accepted his or her role and can concentrate on accomplishing the tasks. At this stage, teams reach productivity and efficiency, a high level of strength and cohesion. The responsibilities of the team manager at this stage are: coordinating the work, monitoring the fulfilment of tasks and objectives.

Stage 5 – Dissolution. Teams are not permanent, therefore they can disband. The causes of dissolution can be: fulfilment of objectives, especially in the case of teams formed for limited periods of time (e.g. operating team for a surgical intervention; project teams, etc.); change in team structure, when one or more members leave the team, voluntarily or involuntarily; loss of purpose or change of context (e.g. death of the patient), change of priorities, etc.; depletion of resources (e.g. disappearance of funding line, closure of a ward or hospital, etc.).

At the same time, it should be noted that teams can have different levels of performance, depending on a number of factors.

Factors that determine team performance:

1. team size
2. clear and meaningful purpose and objectives
3. how team members are selected
4. team roles (correctly defined and understood)

5. external environment – working conditions, climate, organizational culture
6. access to resources - material, financial, time
7. team behaviour and communication
8. manager

If the team's capabilities are inferior to the factors affecting its performance, dysfunctions may occur. According to the literature, more than 70% of medical errors are due to dysfunctions in team dynamics. The healthcare environment is a very complex and demanding one. If communication and cooperation of health care providers is impaired, the patient suffers. Dysfunctions in the health care team can lead to overwork, stress, decreased work capacity, irritability, demotivation, which can negatively affect team members.

To increase the efficiency of the healthcare team it is important to improve communication between team members. Members of the healthcare team communicate with each other to provide efficient and coordinated care.

Medical team members should communicate about:

- What was done to the patient
- What needed to be done
- Patient response to care and treatment.

For a better communication within the team, it is important to follow some general principles: use words with the same meaning for the person receiving the message, use familiar words, it is important that the message is short and concise, the information is presented in a logical and structured way, facts are presented.

Communication within the healthcare team can be **done verbally (reporting)** or **in writing by recording** data in the patient's medical record. In inpatient settings both reporting and data recording are continuous and take place 7 days a week, 24 hours a day.

Reporting is the process of orally communicating care/observations and can be accomplished using several techniques. The SBAR technique is one of the most applied in medical practice. Its name is an English acronym: *S* – Situation, *B* – Background, *A* – Assessment and R – Request.

The initial presentation will describe the situation, e.g. you introduce yourself and inform about the patient's problem (e.g. *Hello! My name is_____ (name, profession) from_____ (unit, hospital). The patient I am contacting you about is _____ (first name, last name), has been admitted _____ (diagnosis, problem) and the reason for the call is _____ (transfer, aggravation* etc). When presenting the background (background), general but relevant to the given situation (e.g. *date of hospitalization, presenting complaints, allergies, treatment, medical history, dates of previous examinations*, etc.). Subsequent to the Assessment will explain and describe the professional assessments performed (e.g. *clinical examination dates, changes in patient's condition, current vital signs, treatment given, complimentary clinical problems, problems in planning and coordination of further services*, etc). At the last step, Recommendation (Request), instructions or recommendations for further management of the case will be requested.

In everyday practice, various communication models can be used within the healthcare team, but to make it effective, it is important to respect the following principles: accurate and complete information about the care provided, the patient's current situation and possible changes in the patient's condition.

Recording is the written presentation of information about observations and care. This is done in medical forms, which in the Republic of Moldova are established by order of the Ministry of Health. By normative acts will be established: who has the right and responsibility to fill in the form, when to record, accepted abbreviations, how to errors, ink colour (in case of paper forms), application of signature and initial.

The patient's medical records differ depending on the level of medical care (pre-hospital urgent care, outpatient, inpatient, inpatient, etc). Each medical form will have the patient's name, ward, etc. or other identifying information. Each medical record is organized into compartments. Each medical institution or ward records information in its own forms. All entries in the patient's medical record should be clear and reflect what was objectively identified, what was performed and what was the patient's response. In paper-based forms, a blue or black ink pen should be used;

abbreviations should be avoided, other than those unanimously accepted, should be written legibly, the compartments of the medical record should be respected, also any entry should be dated compulsorily and with the signature of the person making the entry affixed.

Whatever mode of communication the healthcare team selects, it needs to be assertive and effective. Poor communication in healthcare teams is detrimental in the workplace. It leads staff to expect imperfect exchanges of information. A culture of low expectations and imperfections puts patients at risk for medical errors, but effective communication has positive outcomes including: better information flow, effective interventions, improved safety, boosted employee morale, patient and family satisfaction, shorter hospitalizations, etc. Healthcare team members can have more confidence in their work efforts and can save time with efficient and safe systems. Patients can feel better with a changing staff if the healthcare team communicates well enough to provide quality care.

The goal of providing quality patient care is underpinned by high performance through patient-centered teams. Healthcare providers can only achieve this by adopting a culture of teamwork in which values and principles are shared and communicated transparently among team members, including patients who should be placed at the center of care.

4. ROLES OF TEAM MEMBERS

Authors: *Postica L., Suveica L., Chihai J., Tabirta A., Adauji S.*

The health system of the Republic of Moldova aims to ensure the health of the whole society and of each individual citizen, as well as to prolong the longevity of human life. It is a composite system, which includes all medical institutions and enterprises, medical staff, supplementary and maintenance services, necessary information, medical and information technologies, scientific research in this field and the most important component - the individual and his or her individual health.

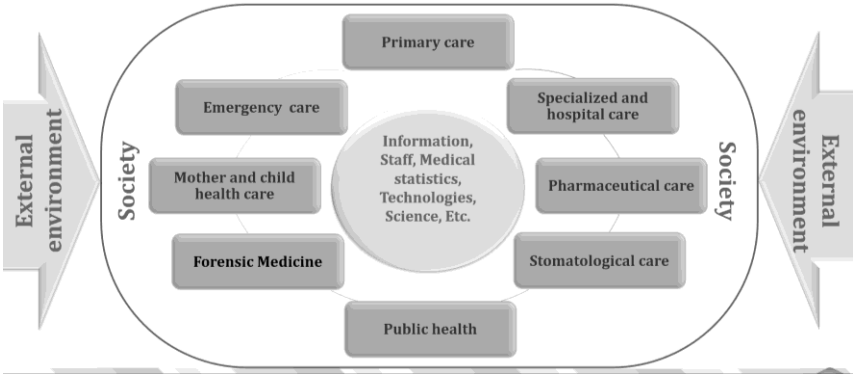


Fig. 4.1. **Health system of the Republic of Moldova**

Primary healthcare.

The central element in the primary health care system is the family doctor. Today family medicine has become a specialty by law, and primary care is considered a priority and the 'gateway' to the health system.

As decided by the World Organization of Medical Colleges and Academies of General Practitioners, the family doctor is the person who provides and coordinates personal, primary and continuing health care for the individual and the family. They provide comprehensive, bio-psycho-social health care for both sexes and all ages. The types of primary health care institutions include: the Health Office (HO), the Office of the Family

Physician (OFP), the Health Center (HC), the Family Physicians Center (FPC) and the Medical-Territorial Associations (MTA).

Specialized outpatient healthcare is provided by the specialist doctor together with the average staff involved in the performance of the medical act and includes all activities, including organizational-methodical activities, which are within the competence of the specialist and the respective staff and are provided for in the normative acts of the Ministry of Health.

Dental care subsystems are an indispensable part of specialized ambulatory health care and play an important role in ensuring public and individual health through ***prevention, diagnosis and treatment of diseases and abnormalities of the mouth, teeth, jaws and adjacent tissues***. The dental service includes the following structures:

- ✓ State institutions (outpatient and inpatient services)
- ✓ Private dental practices (I, Ltd, Ltd, Ltd etc.)

Inpatient (hospital) healthcare.

This is provided by a wide network of institutions of various types: home residential care; outpatient day care and hospital. The hospital is a complex medical institution. It provides comprehensive medical services (preventive, curative and rehabilitative) to the sick in an assigned urban and rural territory. The hospital's technical-medical services (laboratories) ensure the accurate diagnosis of hospitalized patients.

In relation to the assigned territory, the specialties it has in the internal structure and depending on the subordination, hospitals can be:

- ✓ republican, including scientific-practical centers, research and clinical institutions – directly subordinated to the Ministry of Health;
- ✓ departmental – subordinated to other Ministries (National Defense, Interior, etc.);
- ✓ municipal or city hospitals located in municipalities or cities. Through its internal structure, it provides comprehensive medical care to the population in the urban and rural territory assigned to it;
- ✓ clinical;
- ✓ profiled (tuberculosis, infectious diseases, psychiatry, etc.).

Pre-hospital emergency healthcare

Emergency medicine is the specialty that diagnoses, treats and stabilizes the vital functions of the sick or injured person at the scene of the request, during transport as well as in the AMU and NCHMPR stations. Within the health system of the Republic of Moldova operates the Emergency Medical Assistance Service (hereinafter - AMU service).

The AMU service provides emergency medical assistance to the population in the territory at the pre-hospital stage through its subdivisions (AMU zonal/municipal stations, AMU substations and PAMU). The AMU service works in collaboration with the Ministry of Interior, the Department of Exceptional Situations of the Republic of Moldova, municipal and district directorates for exceptional situations, municipal and district police directorates, units of the Ministry of National Defense on the basis of protocols, agreements concluded by the Ministry of Health.

Public health system (preventive medicine).

It is responsible for ensuring the sanitary-epidemiologic well-being of the population. Depending on the fields of application, the activity of the public health system is carried out in the following areas: hygiene of the environment and human habitat; food hygiene; food hygiene; occupational hygiene; transportation hygiene; hygiene of children and adolescents; hygiene of the use of toxic substances, pesticides, radiation; hospital hygiene; hygiene of infectious and highly contagious diseases; epidemiology of HIV/AIDS; epidemiology of nosocomial diseases; control of non-communicable diseases; medical parasitology; microbiology and virology.

The public health system currently includes:

- ✓ National Public Health Center (NPHC);
- ✓ Municipal and Public Health Centers (Chisinau and Balti);
- ✓ District public health centers.

The pharmaceutical system is the totality of enterprises, organizations and institutions that carry out pharmaceutical activity with their material, human, financial, technological and information resources, the ultimate aim of which is to provide pharmaceutical care with effective, high quality, harmless and affordable medicines

Thus different levels of healthcare may involve different health professionals, who have different roles and responsibilities in maintaining the health of the population.

The following chapters describe their roles and functions within the healthcare team.

4.1. The general nurse – roles and functions

Health care is a self-contained specialty that is an important part of an individual's health care system and comprises three important elements: health promotion, disease prevention and care of sick people of all ages, in all health care institutions, at community level and in all forms of social care. The nurse is a person who has completed a nursing education program authorized by the competent body. Basic nursing education provides a solid foundation in the behavioural sciences of nursing for general and advanced practice, for the leadership role, and for post-primary specialty education.

Definitions

The nurse is the person who cares for, encourages and protects the individual, the person trained to care for the sick, the injured and the elderly.

Florence Nightingale (1820-1910) – The role of the nurse is to bring the patient into the best condition for nature to act on him.

Virginia Henderson (1897-1996) – "Let the nurse be the conscience to the conscienceless; the eye to the one who has recently lost his sight; the hand to the one who has had his hand amputated; the love of life to the one who is trying to commit suicide."

International Council of Nurses (ICN) – A nurse is a person who:

- has completed a comprehensive training program approved by the ICN,
- successfully passed the exams set by ICN,
- meets the standards set by the ICN,
- is authorized to practice this profession according to her training and experience,
- is authorized to perform those functions and procedures which are required by health care in any situation, and which are consistent with his or her qualifications.

The Nurse is prepared through a program of study including:

- health promotion
- disease prevention
- caring for the physically and mentally ill, the mentally handicapped, the disabled, regardless of age and in any health facility or in any situation at community level.

This definition has become known and accepted all over the world and is now also used in the Republic of Moldova.

The Code for Nurses also describes four responsibilities that define important directions, namely:

- health promotion
- disease prevention
- restoring health
- the removal of suffering.

The general nurse requires:

- multi-disciplinary training – social, technical, practical (in health facilities and in the field in the community);
- learning basic skills, not just knowledge;
- have a knowledge of psychology (being an encourager);
- have the right attitude towards the patient and his/her family;
- have a concern to understand how others feel (empathy).

ROLES AND FUNCTIONS OF THE GENERAL NURSE

Whether working in a hospital or other type of care center or healthcare institution, the nurse has three fundamental roles:

A. Practitioner role: this is the most common role in the profession and encompasses the activities and interventions that the nurse carries out in the direct care of the patient as part of the care process.

B. The leadership role: involves those activities and interventions that are carried out by a nurse who is accountable for the activities of other nurses caring for patients, and the process has four components:

- take decisions;
- communicate;

- influence;
- provide support.

C. Researcher role: can mean a formal research position in a research institution, faculty or organization or activities and research contributions in the field based on direct observations from medical practice.

There are also other roles of nurses, such as nursing lecturer in specialized nursing education, practice tutor of pupils and students doing their clinical internship in the hospital.

The **essential role of** the nurse is to help the individual to maintain or regain their health, to assist them in their last moments by performing tasks that they would have performed themselves if they had the strength, willpower or knowledge. The nurse must perform these functions so that the patient regains independence as quickly as possible.

Depending on the activities they carry out, the nurse's role can be:

Own role:

- It aims to partially or fully compensate for the lack or reduced autonomy.
- Protecting, maintaining, restoring and promoting the health or autonomy of the individual.
- Easing suffering and assisting the individual in the last moments of life.
- Establishing the care process.
- Fostering integration and reintegration into the family or society.
- Fulfilling the role requires professional skills and abilities.
- In terms of the care process, the interventions applied are of a technical, relational and educational nature, depending on the physical, psychological, social, economic, economic, cultural or spiritual information concerning the individual.

Delegated role:

- It assesses the nurse's ability to perform tasks and apply nursing care under medical prescription.
- Clinical monitoring of the patient and therapeutic effects.

- Participation and collaboration in the application of various invasive care techniques.
- Prescription enforcement.
- In the doctor's absence, the nurse can provide life-sustaining interventions and care until the doctor arrives.

Functions of the nurse

The functions of the nurse derive directly from the role of health care in society. They are universal and constant functions, regardless of where or when care is provided, regardless of the status of the patient or the resources available.

The functions of the nurse are:

1. Functions of an independent (autonomous) nature
2. Functions of a dependent (delegated) nature
3. Functions of an interdependent nature.

1. Functions of an independent nature:

- The nurse assists the patient temporarily or permanently in comfort care, depending on age, illness, physical, mental or intellectual, social impairments.
- Establishes trusting relationships with the patient, family and/or entourage.
- Provides information, listens and supports the patient.
- Takes an active part in promoting better living conditions and health.
- Plans, organizes and implements care for sick and healthy people.

2. Functions of a nature dependent on doctor's recommendations:

- Applies treatment methods.
- Applies investigative methods.
- Observes changes in the patient caused by illness or treatment and reports them to the doctor.
- Applies specific rehabilitation methods.

3. Functions of an interdependent nature:

- The work is carried out in the context of complex interdisciplinary team in the health, social, educational.

- Screening for physical, psychological and social disorders.
- Health education actions.
- Actions to solve psychosocial problems.
- Organization and management of care centres and units.
- Research and education actions.

Professional titles and fields of activity:

- general nurse,
- obstetrics and gynecology nurse,
- pediatric nurse,
- balneologyand physiotherapy nurse,
- clinical laboratory nurse,
- radiology and imaging nurse,
- nutrition and dietetics nurse,
- dental nurse.

These titles also correspond to most areas of nursing:

- inpatient and outpatient health services;
- education, culture;
- research;
- education;
- food;
- hygiene .

Qualifications required for the profession

In order to perform their tasks, nurses need to develop a number of skills and aptitudes, such as: attention, dexterity, observation, power of analysis and synthesis, precision, promptness, communication, decision-making, thoroughness, team spirit, adaptability to new situations, speed of reaction, creativity, responsibility, reliability, confidentiality and objectivity.

All this can paint a picture of professional competence. It involves a balanced combination of professional knowledge, skills and attitudes in order to achieve the results expected at work.

Job knowledge is the information that a job holder needs to have in order to better understand what he or she has to do.

Skills are an automatized component of human activity that are performed with minimal conscious effort and facilitate spontaneous and rapid activity. Habits are formed through exercise, as a result of which a dynamic stereotype is formed (e.g. washing hands).

Attitude is the constant way of relating to certain aspects of social life or to oneself by which a person's behaviour is evaluated. For example, attitudes towards people can be benevolent, authoritarian, superior, friendly, hostile. Attitudes towards work can be: serious, responsible, committed, superficial, indifferent and have an impact on work efficiency.

Nurses work in different settings, areas or places to prevent or treat illness - to care for the sick or potentially sick.

The profession requires certain inclinations and aptitudes, coupled with good professional training – translated into moral traits that will positively influence professional conduct.

Proper conduct contributes to:

- relief;
- reducing the period of illness;
- rapid reintegration into society.

Moral qualities:

- Empathy - the ability to understand how others feel
- Altruism
- Kindness
- Attention
- Principled attitude
- Good housekeeper
- Goodwill
- Calm
- Communicative
- Conscientiousness
- Collegiality
- Ingenuity
- Initiative
- Interest in novelty
- Lucidity
- Humanity
- Optimism
- Professional secrecy
- Prompt decision-making
- Punctuality
- Patience
- Respecting the patient's modesty and sensitivity

- Firmness
- Moderation
- Dignity
- Devotion to self-sacrifice
- Serenity
- Critical and self-critical thinking
- Team spirit
- Self-control

Physical qualities:

- physical strength - to transport materials, mobilize the sick;
- physical endurance - shift work, prolonged orthostasis;
- safe and coordinated movements.

Professional qualities:

- multidisciplinary training - social, technical, practical;
- basic skills;
- correct knowledge of general and specific care techniques;
- knowledge of apparatus and instruments used in medical practice;
- knowledge of infection prevention methods;
- desire to continuously improve their professional training;
- knowledge of general and special care techniques;
- adopting the right working style;
- organize and systematize their work - plan medical care, develop care plan;
- cultivates the spirit of observation;
- regularly checks the effect of the work provided;
- prevents in-hospital infections, self-contamination/self-infection;
- ensures handover and pick-up of the service.

4.2. Role of the Psychologist in the multidisciplinary team

The role of the psychologist or psychotherapist in a healthcare team is essential in ensuring comprehensive and effective patient care, particularly in the context of mental health services.

Definition
A psychologist or psychotherapist is a mental health professional who is trained and qualified in the assessment, diagnosis and treatment of patients' mental health problems.

Normative Activity Framework: In the Republic of Moldova, the role and activities of the psychologist or psychotherapist are regulated by the MH Order 100 of March 10, 2008, which sets up the regulations for medical personnel. This regulatory framework recognizes the importance of mental health services and promotes collaboration between mental health and medical professionals.

Psychologist's roles and responsibilities as a team member:

- **Assessment of Patients**: The psychologist or psychotherapist is responsible for the assessment and diagnosis of patients' mental health problems. This process involves interviewing patients, administering psychological tests, and observing behaviour to identify specific needs and problems.
- **Developing the Treatment Plan**: Based on the assessment, the psychologist or psychotherapist works with the rest of the medical team to develop a personalized treatment plan for the patient. This plan may include psychotherapeutic interventions, medication therapy, or a combination of both, depending on the patient's needs.
- **Psychotherapy and Counselling**: the psychologist or psychotherapist provides individual or group therapy to help patients manage their mental health problems, improve their well-being and develop coping and resilience skills.
- **Interprofessional Collaboration**: the psychologist or psychotherapist works in close collaboration with other members of the healthcare team, including physicians, nurses, and social workers, to ensure integrated and holistic care of patients.
- **Education and Information**: the psychologist or psychotherapist provides information and education to patients and their families about their mental health conditions, treatment and symptom management strategies.
- **Progress Monitoring**: During treatment, the professional monitors patients' progress and adjusts the treatment plan accordingly to ensure the best possible results.

- **Mental Health Promotion**: the psychologist or psychotherapist contributes to the promotion of mental health in the community and to the reduction of stigma related to mental health problems.

As a member of the healthcare team, the psychologist or psychotherapist plays a crucial role in a comprehensive approach to patients' health, helping to improve their mental health and quality of life. Interprofessional collaboration is essential for providing the highest quality care and ensuring patients' physical and mental health.

4.3. Role of the nutritionist in the multidisciplinary team

"I am convinced that any physician who studies human nature must carefully investigate the relationship between man – food and drink...and what influence they exert on him. If we can find for each man the balance between diet and exercise, so that it is neither too much nor too little, we have discovered the means of health maintenance"

Hippocrates

Ever since the time of the father of medicine, Hippocrates, the idea has been around that nutrition influences the lives of both sick and healthy people. And nowadays, this idea is confirmed in the best possible way by the multitude of diseases and pathologies that can be prevented, improved and even treated through a dietary program. These dietary measures are aimed at compensating for metabolic deficiencies, but also at appropriate techniques for administering the food required by the body in a state of illness. Forms of diet that fulfill these requirements are considered biochemical interventions in metabolism. The doctor and the dietician will have to follow some general principles in this case through a close relationship:

1. Each diet must be modeled according to the patient's habits, adapting within therapeutic limits to the patient's preferences. The therapeutic diet is, in the final analysis, a normal diet modified qualitatively and quantitatively to combat a process. In prescribing a diet, the patient's entire behavior (emotional, economic, social, work, family) and

medical history must be taken into account through interaction with the medical staff.

2. Unbalanced metabolic diseases, chronic consumptive diseases, prolonged fevers, stress lead to a negative nitrogen balance. All these must be known to the nutritionist by interpreting laboratory tests and the diagnosis made by the specialist.

Nutrition can be considered as part of public health, as an area of community intervention, as a preventive measure or as a therapeutic diet and has intrinsic links with almost all clinical medical fields.

Definition
The nutritionist is a health specialist, who aims to provide nutrition counselling to the population and patients, develop individual nutrition programs, educate and promote a healthy lifestyle and healthy diet.

The nutritionist is a health professional, already with a tradition in EU countries and also gaining meaning in Eastern European countries, growing in importance and respect year by year

Responsibilities of the nutritionist as a team member:

- to assess, analyze various nutritional states of individuals and communities;
- to provide nutritional counseling according to the individual's health status;
- to use specific food quality and safety assessment techniques and tools to inform nutritional recommendations;
- to apply the conditions of hygienic, anti-epidemic and occupational safety;
- to develop and implement a complex of educational activities for the promotion of balanced nutritional behaviour and healthy lifestyle at individual and community level;
- to recognize and correct the effects of food on health.

Healthy lifestyles significantly reduce the risks of many diseases, organs and organ systems. Diabetes mellitus, cardiovascular disease, cancer, gastro-intestinal disorders are just a few categories of diseases

that can be prevented by a healthy lifestyle. So any lifestyle improvement can add a few extra years to your life!

Nutritional counselling should take place in an atmosphere based on trust and confidentiality, in which the patient is given information about nutrition and how our body works depending on the "fuel" it is being fed.

Beliefs and rules about food and nutrition will be tested and debated with the nutritionist so that the patient develops a correct and rational perspective on how to eat. The nutritionist's intervention in the treatment of eating disorders starts with the nutritional assessment. The nutritional assessment should be detailed, and may take more than an hour, so it may extend to more than one appointment. On the basis of the nutritional assessment, together with the rest of the treatment team, the goals and the individual intervention plan will be established and discussed with the patient.

Nutritional evaluation of the patient is an essential step in the process of nutritional monitoring and care, aiming to identify subjects who require careful dietary treatment and monitoring of the results obtained, thus assessing whether the nutritional status is adequate, depending on the diagnosis and existing complications. The nutritional assessment will take into account both aspects of the patient's health status and psychological aspects concerning eating habits, the patient's fears or fears related to nutrition, knowledge about nutrition, motivation for change.

Nutritional monitoring aims to: identify individuals in need of aggressive nutritional support; maintain or restore nutritional status; identify appropriate nutritional treatment; monitor the effectiveness of these measures. Nutrition monitoring is based on: medical, social and dietary history; anthropometric data; clinical examination and biochemical data.

Nutritional status management is oriented towards objective assessment of a person's nutritional status as well as early identification of pathological conditions influenced by eating behavior. Nutritional status assessment involves the objective assessment of nutritional status as well as the early detection of diet-related diseases, undernutrition and nutritional deficiencies. This complex procedure includes two types of indicators: subjective and objective.

4.4. Role of the Physiotherapist in the multidisciplinary team

Physiotherapy is an independent specialty in the field of medical rehabilitation that deals with functional rehabilitation for prophylactic or therapeutic purposes. Although the meaning of the word Physiotherapy can be translated as *"movement therapy", the specialist – the physiotherapist's* role extends beyond this definition, encompassing teaching, scientific research and practical application. In the process of learning and application, the physiotherapist studies the structures responsible for normal motor function, assesses movement impairments and implements corrective strategies. Physiotherapy can be applied preventively to healthy individuals to prevent the risk of developing certain impairments or to people with medical conditions and disabilities to prevent deterioration and enhance functional capacity. Areas of activity include: rehabilitation for individuals with neurological, musculoskeletal, cardiovascular and respiratory conditions, as well as support in specific life stages (pregnancy, childhood, elderly).

Because disabilities and chronic conditions (e.g.: hemiplegia, amputations, Down syndrome, diabetes mellitus, etc.) often involve complex challenges, rehabilitation requires the involvement of multiple healthcare professionals. The ultimate goal is to improve both clinical outcomes and functional independence in children, adults and elderly individuals. The multidisciplinary team- tailored to each patient's needs may include doctors, nurses, occupational therapists who facilitate the recovery of functional abilities and promote independence in daily activities.

Definition
A physiotherapist is a healthcare professional specializing in the assessment, diagnosis and treatment of musculoskeletal, neurological and cardiorespiratory disorders through therapeutic exercises, manual therapy and other evidence-based physical interventions. The primary role of a physiotherapist is to enhance mobility, relieve pain and support overall physical recovery, ultimately improving patient's quality of life.

Education and Training

Becoming a physiotherapist requires you need to complete a four-year bachelor's degree program in physiotherapy or physical therapy and

rehabilitation. It includes theoretical courses, laboratories and clinical practice followed by supervision of professionals.

Fields of Activity

A physiotherapist can work in various healthcare settings, including:

- hospitals and clinics;
- rehabilitation centers;
- private practices;
- educational institutions;
- home healthcare services;
- community health centers;
- fitness and wellness facilities.

What is the role of a physiotherapist?

A physiotherapist's mission is to help individuals improve their physical function and quality of life, manage pain and prevent further injury. This is achieved through a personalized approach, tailored to the needs of each patient, based on medical diagnosis and functional limitations.

Role of the physiotherapist in the multidisciplinary team

The **physiotherapist** is an essential member of the multidisciplinary team caring for patients with various conditions. The multidisciplinary team includes physicians, nurses, occupational therapists, psychologists, nutritionists and other health professionals who work together to provide holistic and comprehensive care.

Contributions of the Physiotherapist

1. **Assessment and Treatment Planning**: Physiotherapists assess patient's functional status and develops a personalized treatment plan in collaboration with other healthcare professionals. These plans may include strengthening exercises, mobilization techniques/mobility trainings, and lifestyle education and counselling.
2. **Implementation of Rehabilitation Programs**: Within the team, the physiotherapist plays a crucial role in the implementation of rehabilitation programs. They monitor patient's progress and adjust treatment's plans according to individual needs and responses.

3. **Patient Education:** Physiotherapists educate patients and their families about the importance of exercise, proper posture and other aspects of physical health. This helps prevent relapses and maintain optimal long-term health.
4. **Interdisciplinary Collaboration:** Physiotherapists work closely with other healthcare professionals to provide integrated and effective care. This includes participating in case discussions, attending team meetings and coordinating rehabilitation plans.

Examples of Collaboration

1. **With physicians**: Physiotherapists work with medical specialists (orthopedists, neurologists, rheumatologists) to understand medical diagnosis and develop an appropriate rehabilitation plan.
2. **With occupational therapists**: When patients require assistance in regaining independence in activities of daily living, physiotherapists work alongside occupational therapists to develop effective strategies.
3. **With psychologists**: Physiotherapists collaborate with psychologists to address the emotional and psychological aspects of recovery, ensuring that patients receive the support they need to cope with physical and emotional challenges.
4. **With nutritionists**: In some cases, nutrition plays a critical role in recovery, and the physiotherapists can work with nutritionists to develop eating plans to support the rehabilitation process.

A physiotherapist is a professional dedicated to improving and maintaining physical health of patients through non-invasive and personalized methods. Their role in the multidisciplinary team is crucial, ensuring a holistic and integrated approach to patient care. By collaborating with other healthcare professionals and being actively involved in patient education, physiotherapists ensure not only physical recovery, but also enhance overall quality of life.

4.5. Role of the pharmacist in the multidisciplinary team

The social orientation of the pharmaceutical service determines the role of the pharmacist in the health system. The updating of the

pharmacist's role in contemporary society was initiated at the World Health Organization (WHO) session in Tokyo, 1993 under the title "*The role of the pharmacist in the health system*". The WHO report to this international forum states that effective medicine can only be practiced where there is effective drug management.

Definition
A pharmacist is a health professional working in a pharmacy or other public health unit, whose main purpose is the preparation, control, dispensing, dispensing, dispensing and giving advice on medicines, and is the only accredited health professional in this field.

WHO emphasizes that the pharmacist, as a partner in the health team, by virtue of his or her high-level scientific and multidisciplinary training, is the only qualified specialist whose competence has already been approved in:

- managing the activity of pharmaceutical establishments and their subdivisions (planning, economic analysis, record keeping and management, organization, control, information);
- management and administration of pharmaceutical services;
- developing medicines legislation and monitoring its implementation;
- realization of technological processes of drug production in pharmaceutical factory conditions and pharmaceutical microproduction laboratories;
- carrying out the technological processes of drug preparation under pharmacy conditions;
- work within the system of control and certification of the medicinal product;
- inspecting and assessing drug manufacturing sites;
- participating in the registration process of medicinal products to certify their quality, efficacy and safety;
- ensuring the quality of pharmaceutical products throughout their circulation;
- procurement of medicines;
- addressing issues of rational, effective and safe use of medicines;
- the work of institutionalized national profile committees.

- carrying out chemical forensic investigations as forensic experts;
- conducting the merchandizing analysis at all stages of the promotion of medicinal products and other pharmaceutical products (from the manufacturer to the consumer);
- providing first aid to the sick in emergencies;
- conducting scientific research in the field of medicine and other directions of pharmacy;
- teaching in higher pharmaceutical education institutions;
- informing doctors and the general public about the role of pharmacists and the medicines on the market.
- compliance with the rules of ethics and deontology when preparing, analyzing, storing, transporting and releasing medicinal remedies to the population, medical institutions;
- individual study of didactic, scientific, normative and information literature.

The pharmacist's responsibility in relation to drug therapy was endorsed by the joint FIP (International Pharmaceutical Federation) and WMA (World Medical Association) document developed in The Hague in 1998) and includes:

1. ***Ensuring*** proper supply, storage and dispensing of medicines.
2. ***Providing information*** to patients on the name and action of prescribed drugs, potential drug interactions, side effects, correct mode of administration, correct storage.
3. ***Prescription analysis*** in order to identify drug interactions, allergic reactions, contraindications, poly-pragmentation; the results of the analysis must be communicated to the doctor.
4. ***Participation in the development and modification of*** the therapeutic plan in collaboration with the physician and other healthcare professionals.
5. Therapy ***monitoring***.
6. Adverse reaction ***reporting*** through the pharmacovigilance system.
7. ***Providing information*** about medicines to doctors and other healthcare professionals.

8. ***Maintaining*** a high level of knowledge about medicines through joint professional education.

Pharmaceutical legislation is the orbit of health legislation, represented by the following laws:

- ***Law on Health Protection*** No. 411-XIII of 28.03.1995:
- ***Law on Pharmaceutical Activity*** No. 1456-XII of 25.05.1993;
- ***Law on Medicinal Products*** No. 1409-XIII of 17.12.1997:
- ***Law on the Circulation of Narcotic and Psychotropic Substances and Precursors*** No. 382-XIV of 06.05.1999.

Definition
Pharmaceutical activity – the scientific-practical field of health protection, which includes drug development, standardization, registration, production, manufacturing, preparation, quality control, storage, information, delivery and dispensing to the population, as well as the management of pharmaceutical companies and their subdivisions, activities performed only within the pharmaceutical company, with the exception of research for the development and testing of medicinal products, carried out in accordance with the legislation in force.

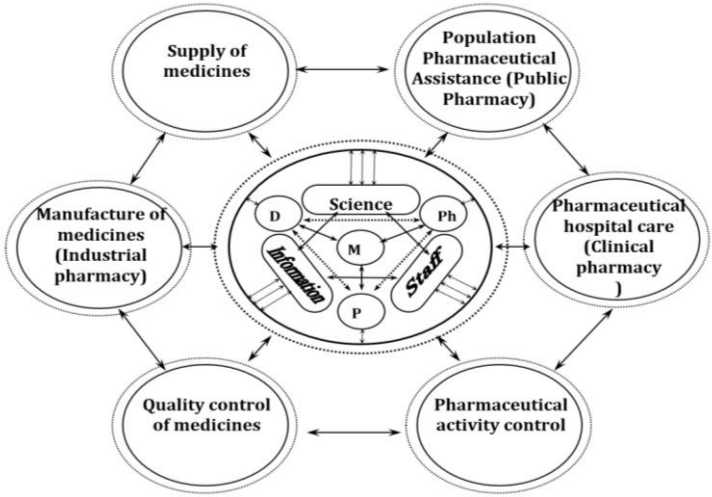


Fig. 4.2. **Main subsystems of the pharmaceutical system**

Conventional signs:

DR – drugs; *D* – doctor; *Ph* – pharmacist; *B* – patient;

– Interactions and interdependencies.

– Areas of subsystems and elements.

– Connection with the external environment

From the point of view of systems theory, the pharmaceutical system in the Republic of Moldova is considered as a subsystem of the health system, being in turn a composite system, consisting of a series of subsystems, each in turn consisting of several specific elements with certain common features that constitute an organized whole *(Fig. 4.2)*.

Definition
Pharmaceutical system **–** the totality of enterprises, organizations and institutions carrying out pharmaceutical activity with their material, human, financial, technological and informational resources, the ultimate goal of which is to provide pharmaceutical care with effective, high quality, harmless and affordable medicines.

The principles of pharmacist's profession are the following:

1. ***Principle of legality*** - all activities, rights, actions, powers can be carried out only based on permission, authorization, license, certificate or/and other legal documents, issued by state bodies entitled to provide them:

- exercise (practice) the profession;
- founding the pharmaceutical company;
- producing/manufacturing/preparing medicines;
- importing medicines;
- quality control of medicines;
- advertising of medicines;
- use of medicines;
- accreditation of pharmaceutical companies;
- respecting the rights of the consumer of medicines;
- promoting ethical pharmacy;
- professional organizations - their role and place in the profession and pharmaceutical activity;

2. ***The principle of quality assurance of the pharmaceutical act*** - (conditions of activity, competences, (categorical) restrictions, rules, instructions, standards and other regulations, which must be respected in order to ensure the quality of the pharmaceutical act, ethical and deontological aspects):

- good practice rules (GPP, GDP, GMP);
- equipment with furniture, techniques, equipment, utensils, etc..;
- division of skills and functions according to the level of training (education);
- pharmaceutical services - requirements, conditions of provision, etc.;
- operational procedures - mandatory existence and implementation;
- ban of destructive factors;
- places where the pharmacy is prohibited;
- salaries for specialists commensurate with their skills and responsibilities;
- protecting the profession and quality pharmacy;
- management of the pharmaceutical enterprise (pharmacy) – the managing pharmacist, requirements, working conditions, responsibilities;
- peculiarities of pharmaceutical activity in hospital pharmacy;
- pharmaceutical care;
- implementation of the RUM concept.

3. ***The principle of guaranteed access to medicines*** (all legal rules aimed at ensuring the physical and economic accessibility of medicines):

- establishing regulations on the mandatory minimum assortment of medicines for pharmaceutical companies;
- guarantee access to community pharmacy;
- ensuring access through rational/proportional expansion of pharmacies;
- ensuring access to medicines in rural areas;
- ensuring affordability;
- pricing policy for medicines (setting rules that will prevent unjustified/ unlawful price increases for medicines);
- various ways to guarantee the affordability of medicines (compensation, free medicines, state programs, etc.).

4. ***The principle of ensuring the storage conditions of medicinal products*** (general and specific rules, compliance with which ensures the quality, harmlessness and efficacy of medicinal products):

- rules GSP – need to be developed and implemented;
- general requirements for keeping medicines in pharmacies in hospital wards;
- compliant transportation of medicines (GTP);

- norms (rules) on citizens' obligations to keep medicines at home;
- ensuring the harmless destruction of medicines;
- sanitization of the medication storage space.

5. ***The principle of unity between the medical and pharmaceutical acts*** (medicine and pharmacy – components of the health system, the purpose of the pharmaceutical system, the interdependence and collaboration between doctor-pharmacist, PHI - pharmacy, clinical pharmacy – for the benefit of human health):

- doctor-pharmacist collaboration;
- collaboration between medical institution - pharmacy;
- prohibiting doctors, nurses and other specialists from practicing pharmacy;
- electronic prescription - documents that would unite the activities of the doctor and pharmacist for the benefit of the patient;
- obliging healthcare institutions and community pharmacies to have the position of pharmacist-clinician on their staff;
- the role of the clinical pharmacist in the healthcare institution;
- realizing the concept of rational use of medicines;

6. ***The principle of balanced regulation of the pharmaceutical market*** (rules that would minimize the risks of disruptive factors in the pharmaceutical market):

- supporting local drug producers;
- stimulating the development of the pharmacy network in rural areas;
- prohibition of monopoly on the drug(s);
- fighting unfair competition and ensuring competition on the basis of professionalism;
- prohibition of monopoly/oligopoly of pharmaceutical companies;
- implementation of a single (general) automated information system;
- pharmaceutical market monitoring;
- rules to ensure that the risk of pharmaceutical market imbalance is minimized;
- drug brokering;
- parallel import of medicines;
- protection of free competition (prohibition of capital concentration in the pharmaceutical market).

7. ***The principle of ensuring effective coordination and control of the pharmaceutical system*** (general rules of a directive nature, the need to respect managerial legalities and management theory, delegation of powers, hierarchization, etc.):

- the authorized body with rights and responsibilities in the field of pharmaceutical activity and pharmaceutical system coordination;
- the right to delegate powers;
- the need for decentralization through the creation of the regional level (county, interregional, district);
- ensuring effective control of pharmaceutical activity and companies;
- sanctions under the Contravention Code, Penal Code, additional (specific, license withdrawal);
- inspection, the status of the pharmaceutical enterprise, ensuring the activity on the basis of the Regulation approved by the Government on the basis of legislative norms).

The relationship between the doctor and the pharmacist, from the historical moment of their appearance, has always been one of collaboration and has always been oriented towards ensuring the successful medication of patients.

From the point of view of official regulations, the doctor - pharmacist relations are approached in an ethical-deontological manner. Thus, the Code of Ethics of Pharmacists of the Republic of Moldova specifies that "*pharmacist – doctor relations must be based on cooperation in the interest of patients*":

- the pharmacist must refrain from any act which would be prejudicial to the dignity of the doctor, and the doctor must not undermine the authority of the pharmacist;
- the pharmacist will respond to doctors' requests for pharmaceutical products and will provide the necessary information on the medicines available in the unit;
- the collaboration between pharmacist and physician is to be oriented towards the selection of effective drugs, optimal pharmaceutical forms, rational treatment regimens, etc.;
- the pharmacist's high professionalism is an essential criterion in establishing collegial relations between pharmacist and doctor.

The doctor – pharmacist relationship for the benefit of the patient is manifested in the following processes:

- prescribing medicines;
- dispensing medicines from the pharmacy;
- taking medication;
- analysis of prescriptions.

5. THE HUMAN BEING AND THE BIO-PSYCHO-SOCIAL DIMENSION. THE CONCEPT OF VIRGINIA HENDERSON

Author: *Maria Muntean*

Theories, models, concepts of care

The concept underlying many social and human sciences and underpinning the scientific theories of nursing is holism. Holism, also present as an idea in Antiquity, is the theory that emerged at the end of the last century. According to it, living nature is understood as a unitary whole resulting from the interaction of its components. The whole, a component of reality, is more than the sum of its parts. Consequently, in biology, medicine, psychology and sociology, holism postulates that the object of study (the individual, the psyche, etc.) must be approached as a whole and not as the sum of its parts.

In the medical and socio-human sciences, the approach to the human being, beyond the biological individual, as an indivisible bio-psycho-socio-cultural and spiritual entity, starts from holistic theory.

In nursing, the human being must be approached as a whole, as a unitary whole, and not by its component parts, even if they are affected. For example, if a person has difficulty in breathing, care will not be limited to respiratory function, but will also take into account the other components of the human being, including psycho-social aspects. Difficulty breathing may cause impaired communication with other people, a change in self-image, or a decrease/ cessation of activity followed by social isolation.

Another concept to which nursing pays tribute is that of the "concrete human being". The notion of the concrete human being is taken from the humanist ideas of the 20th century in the United States of America, which promote the centrality of man with all his needs. These theories assert that society must take into account and satisfy all human needs, not just those of survival. These ideas have spread to the present day, with governments in developed countries obliging societies to provide adequate living conditions for their citizens and to participate in maintaining and promoting their health. The nature of the human being

encompasses biology, psychology and society, for this reason, the human being is considered to be a bio-psycho-social being.

The development of beings is framed in these three aspects (biological, psychological and social), and there are different elements that are part of the essence of being human and allow you to develop and progress in all these areas.

The concept of a human being. Body and soul, sensibility and reason, nature and culture, earthly and divine being, man has a privileged position in this existence. He has been defined in several ways:

1. rational being (homo cogitans; B. Pascal – "thinking reed"; M. Heidegger – "rational animal") – rationality being a feature of all human activities; a definition that retains its explanatory value; however, man – Heidegger argued - is more than a rational animal, he is the only one who benefits from the perfection of Being; and Comsky defined man by rationality conditioned by language.
2. bio-psycho-socio-social-historical being – a unity of biological, psychological, social determinations as a support of free and demiurgic activities characteristic of the individual; man is the representative of the undefined, all responses being in his freedom; he can be defined as a being situated at the confluence of all natural (physical and biotic), social, actional and conceptual possibilities [L. Pană, 2002]; using metaphor as a figure of speech, L. Blaga emphasized that unlike animals, which are tangent to the surface of the earth, man has a perpendicular position in relation to it, being an extension of the earth's radius.

Characteristics of human dimensions

Physical - the physical dimension relates to the bodily nature of the human being. The human dimension may be more structural, because the body is the basic instrument for the functioning of the human being in every domain. This dimension manifests itself in the attention given to the care of the body, both inside and outside. Developing the human bodily dimension means promoting good nutrition and having sufficient physical activity to keep the body in a state of well-being.

The psychological determinations of human nature constitute the set of psychological structures, processes, traits and functions characteristic of the human being in general; determinations which are either positively appreciated and encouraged in their development, or are appreciated as negative and, consequently, are discouraged.

Social - in the social dimension the human being is considered as part of a group and the relationships that exist between the members of this group are considered.

Spiritual - man has a deep need for spiritual meaning and purpose, and these emotions can only be elicited (satisfied) through religious experience (Ed. Burke). Some people relate this dimension to their idea of God or of a supernatural being; some people relate it to maintaining positive thoughts that generate well-being; and others relate it to cultivating the so-called "inner self," that very deep personal referent that each person holds within him or herself.

Man is constantly striving for a kind of harmony with his fellow human beings in his social life and with himself in his inner life. Any activity that claims to be professional seeks to be scientifically based. For all the diversity of theories and concepts of care (in our profession), they all have a certain understanding of the cared for person, health and care (nursing).

The concept of the individual according to Virginia Henderson: "The individual is a bio-psycho-social entity forming an indivisible WHOLE (notion of the globality of the individual)". He has fundamental needs (common to all) with specific manifestations which he satisfies himself if he feels well. He tends towards autonomy in satisfying his needs.

Conceptions of health. Several definitions of health have been formulated. *WHO definition of health:* 'Health is a state of physical, mental and social well-being and not merely the absence of disease or infirmity'.

Other definitions:

"Health is a state in which needs are satisfied autonomously, not limited to the absence of disease" (Virginia Henderson) "Health is a state

of bio-psycho-social, cultural and spiritual balance, a state of autonomy and independence, without being equal to the absence of disease or infirmity, it is a dynamic state that enables an organism to remain in balance with the external and internal environment". Dynamic refers to the individual's capacity to adapt to changes in the internal and external environment.

"Health is all the biophysical, physical, affective, psychological and social forces that can be mobilized to face, compensate and overcome illness."

The concept of illness - is the disruption of equilibrium, harmony, a warning signal in the form of physical or mental suffering, a difficulty or maladjustment to a new, temporary or permanent situation. It is an event that can go as far as social rejection of the person in his or her environment.

Virginia Henderson's conceptual model

Virginia Henderson is called the "modern legend" of nursing, "the most important figure of the 20th century" in the field. She compares herself to Florence Nightingale in terms of her representation of the nursing profession, due to the beneficial effects her work has had. The holder of numerous doctoral degrees, she has received the International Council of Nurses (ICN) most prestigious award, the Christianne Reimann Award, in recognition of her influence on nursing practice, education and research. Among other activities V. Henderson taught at the College of Columbia University from 1930-1940 and after 1953 at the Yale School of Nursing, where he made his greatest contribution to the development of nursing. In 1939 he published "Principles and Practice of Nursing". In 1966 he published "Basic Principles of Nursing", which was revised and completed in 1972. This work has been translated into 27 languages (in 1991 translated into Romanian) and published by ICN. Virginia Henderson's conceptual model is a theory that defines the approach to nursing practice. It focuses on increasing the patient's independence in the recovery process with accelerated healing during hospitalization.

Virginia Henderson's model emphasizes basic human needs as the focus of nursing practice. This has led to the development of numerous

other models in which nurses are taught to assist patients in terms of their needs.

The conceptual model views the individual as a unitary whole characterized by physiological needs and aspirations generically referred to as - basic needs. Virginia Henderson's conceptual framework is based on the definition of the 14 basic needs, with their bio-psycho-social and cultural components.

Values and beliefs

V. Henderson considers nursing action primarily as a completion of what the patient lacks; the action is meant to supplement what the patient needs to function in the direction of the 14 basic activities, giving the patient the strength, will or knowledge. The Nurse is to be a substitute (to fill in what the patient lacks), a helper and partner for the patient. "The Nurse is, temporarily, the consciousness of the unconscious, the love of life for the suicidal, the amputated limb, the eye for the blind, the locomotion for the infant, and the knowledge for the young mother."

Conceptual Model

Non-relational aspects

- The patient is an individual who needs help to achieve independence.
- The caregiver assists the individual, whether ill or not, to carry out activities that contribute to health preservation, recovery or to dying in peace, by giving them the strength, will or knowledge to do so.
- The nursing process will be initiated as quickly as possible.
- The goal is independence.
- The nurse will conduct its research, education and all its work in pursuit of this goal.
- The nurse manages this process independently of the doctor.
- The nurse is and should be an independent practitioner, working under legal (licensed) conditions and making decisions, making judgments, but not making medical diagnoses, prescribing treatments for illnesses or making prognoses.
- The nurse is the authority for basic nursing care.

Relational aspects

- The role and functions of the nursing profession differ and relate to the specific situation.
- Empathy, understanding and the amount of knowledge are the central points in providing care to achieve patient independence.
- Empathic understanding and honest support help the family to identify the patient's needs.

Education

In this field, Virginia Henderson is an adept of lifelong learning, which means accumulating new, up-to-date knowledge and refining the skills acquired. The Nurse must keep up to date with what's new in her field and improve her performance.

Research

„„...the nurse working in a specific area of independent practice or in a superspecialized area must take responsibility for identifying problems for the continuous validation of her function, for improving the methods she uses, and for evaluating the results obtained in practice...in no field does the work improve without research". Virginia Henderson remains, ultimately, the theorist who laid the foundations of modern nursing in education, and her theory, improved upon, is found as a foundation in nursing theory and practice.

The essential components of a conceptual model are the following:

– postulates;
– values;
– elements.

Postulates. They are the theoretical and scientific underpinning of the conceptual model. Statements to support other statements. They are recognized and accepted (do not need to be proved). The postulates on which Virginia Henderson's model is based are:

– **every human being strives for independence;**
– **the individual forms a whole characterized by fundamental needs;**
– **when one of the needs remains unsatisfied, the individual is not "complete", "whole", "independent".**

Values or beliefs. Virginia Henderson's model is underpinned by three values:

1. the nurse possesses functions that are his/her own;
2. when the nurse takes over from the role of the doctor, he or she relinquishes part of his or her duties to unqualified staff;
3. society expects a service from nurses that it cannot get from any other professional.

Elements that give meaning to professional life are:

1. **Purpose of the profession:**
   - to help the patient maintain or restore his or her independence so that he or she can meet his or her needs on his or her own;
   - to promote healing;
   - to assist the dying to a dignified end.

Members of this profession tend towards an ideal. But they are realistic and cannot reach it – they accept limited activities aimed at preserving or restoring the independence of the people they care for.

2. **The focus of professional activity is the beneficiary** – the person or group of people to whom the activity is directed. In achieving the objective, account is taken of the fact that the individual, sick or healthy, forms a whole with needs common to all human beings, but also of the fact that the manifestation of needs differs from one individual to another.
3. **Role of the profession** – designates the social role that members of the profession have.

The nurse's role is to substitute for dependency (what the person cannot do), to try to replace the need so that the person can fulfill his or her requirements more easily and without disability.

4. **Source of difficulty.** The difficulties encountered in the patient, which make the person unable to respond to one of his/her needs, are caused by a lack of:
   - force;
   - will;
   - knowledge.

These difficulties are related to the competence of the nurse and it is important to know the source of the difficulty. But the difficulties encountered by the patient are not all related to the nursing profession.

5. **Intervention on the person** – the nurse must not lose sight of the whole person. The intervention will be "deprivation" oriented and consists in enhancing (increasing) the person's independence.
6. **Consequences** – are the results obtained – "relieving" the dependence or – "gaining" independence + achieving the goal.

In order to apply Virginia Henderson's conceptual model, it is necessary for health professionals to know that a basic need is a vital, essential need of the human being to ensure wellbeing, in physical and mental defense.

The 14 basic needs are:

1. The need to breathe and have good circulation
2. The need to feed and hydrate
3. The need to eliminate
4. The need to move and have good posture
5. The need to sleep and rest
6. The need to dress and undress
7. The need to maintain body temperature within normal limits
8. The need to be clean, neat, to protect the skin and mucous membranes
9. The need to avoid dangers
10. The need to communicate
11. The need to act according to beliefs and values, to practice religion
12. The need to be fulfilled and useful
13. The need for recreation
14. The need to learn to stay healthy.

Each of these needs involves different dimensions of human being, namely:

- a biological dimension
- a psychological dimension
- a sociological dimension
- a cultural dimension
- a spiritual dimension

The 14 basic needs take very different forms depending on the individual, his/her state of health, maturity, personal and cultural habits. Each need has bio-physical-socio-cultural components. According to Virginia Henderson's concept, the ideal goal of the nursing profession is the person's independence in meeting the 14 basic needs. Independence and dependency in the satisfaction of basic needs in order to maintain a physiological and psychological balance, the patient must achieve a minimum level of satisfaction of his/her needs.

Independence is the fulfilment of one or more needs through one's own actions, carried out by the person themselves.

Adult independence is the attainment of an acceptable level of meeting needs through actions that the adult accomplishes for him/herself (alone), without the help of another person.

Independence for children is also considered when needs are met with the help of others depending on the child's stage of growth and development.

Dependency is the person's inability to adopt behaviours or perform actions alone, without the help of another person, that allow him or her to an acceptable level of needs satisfaction, so as to be independent.

The probable origin of this dependency is:

– a lack of strength (when the patient cannot);
– unwillingness (when they don't want to);
– lack of knowledge (when the patient does not know how to act to meet basic needs).

Manifestation of dependency. When a fundamental need is unsatisfied due to a source of difficulty, one or more manifestations of dependency occur. These are observable signs of a certain inability of the person to meet this need himself.

Classification of dependency levels

The level of dependency (severity index) of the person being cared for can be determined after assessing the independence/dependency function of each basic need according to the following table:

Table 5.1. **Correspondence of dependency levels**

Level of dependency	Level - 1	Level - 2	Level - 3	Level - 4
	The person is **independent and autonomous**	The person is **moderately dependent**	The person represents a **major dependency**	The person is **totally dependent**

Each basic need can be categorized into one of four categories. The total points obtained allow patients to be classified into four categories of dependency:

Table 5.2. **Classification into four categories of dependency**

The person is independent	up to 14 - Level 1
Moderately dependent person	15 to 28 - Level 2
Person represents major dependency	29 to 42 - Level 3
Person is totally dependent	43 to 56 - Level 4

Assessing the patient's level of dependency serves as a measuring tool to guide us in the care process. Thus, recording and tracking the level of dependency allows us to assess the outcome of treatment and care interventions.

The determination and recording of the level of dependency can only be done for one or more of the unmet needs, giving the respective need a score from 1 to 4, without totaling the points.

Types of dependency and level of intervention

Dependency requires addressing the biological, psychological, social, cultural and spiritual aspects of the human being. The patient can present four forms of addiction:

- potential;
- current;
- decreasing;
- permanent.

1. Potential – when the problem of dependency is likely to occur due to predispositions, and in this case an intervention should be planned.

2. Current – when the problem is present, the dependency is current, and in this case the actions will be corrective.

3. Decreasing – when the patient's dependency is reduced or decreasing, and the role of the case nurse is to support this progress and help the patient to regain the optimal degree of autonomy.

4. Permanent – when, despite care from the nurse, the problem cannot be corrected and the dependency is permanent or chronic. The nurse's role in this case is to supplement what the patient cannot do independently and to help him or her adjust within those limits.

Sources of hardship are defined as the cause of dependency, i.e., any major obstacle that prevents one or more basic needs from being met.

Sources of difficulty can be caused by factors:

1. physical
2. psychological
3. social
4. spiritual
5. related to insufficient knowledge.

1. ***Physical sources of difficulty*** include all physical obstacles of an intrinsic or extrinsic nature that adversely affect the fulfilment of one or more basic needs. Intrinsic sources of difficulty come from the individual him/herself (e.g. paralysis, metabolic problem, infection, etc). Extrinsic sources of difficulty include external agents that in contact with the human body prevent normal functioning (e.g. nasogastric or bladder tube causing irritation, compressive dressing, immobilization, etc).
2. ***Psychological sources of difficulty*** include feelings and emotions, i.e. emotional and intellectual states that can influence the fulfilment of certain basic needs (thought disorders, anxiety, stress, crisis, grief, etc.). Manifestations of dependency at this level can affect all needs.
3. ***Sources of social difficulties*** include problems of fitting into the community. They may take the form of changes in social role (new job, unemployment, communication difficulties, problems adapting to a culture, feelings of rejection, etc.). Sources of social difficulties can affect quality of life and can be sources of stress, depression, malnutrition, etc.

4. ***The sources of spiritual difficulties are*** spiritual aspirations, a person's revolt about the meaning of life, religious, philosophical questions, limits in practicing religion that give the person dissatisfaction. They particularly affect the elderly or the dying.
5. ***Sources of difficulty related to lack of knowledge***. It is necessary to provide the patient with information for self-knowledge, knowledge about health and illness, knowledge of other people, knowledge of social environment.

The nurse's intervention can be on the source of the difficulty directly or on the manifestations of addiction. Sometimes, however, the source of difficulty cannot be acted upon.

Example

In the case of an operated patient with a problem of urinary retention, due to the effect of anesthesia the nurse cannot act on the source, but he can only act on the problem, which is the patient's dependency problem. On the contrary, when it is a matter of insufficient knowledge, the nurse's actions can directly target the source of the difficulty – through appropriate learning (education) of the patient. Other situations in which it is not possible for the nurse to intervene on the source of the difficulty: *intellectual deficit.*

But there are situations where the nurse's intervention can be at both levels: for example, *a patient with bedsore due to immobilization* (the nurse deals with the wound, but also with the source of difficulty - by changing the patient's position).

6. THE NURSING PROCESS

Author: *Ludmila Postica*

The nursing process is a clinical, planned, pragmatic method of providing individualized care according to the particular reactions of each individual (community) to an actual or potential change in health

Stereotypical, standardized care is thus abandoned. It will be applied on an individualized basis, after analyzing the degree of dependency that has arisen/has the potential to arise in meeting the person's physical or psychosocial needs (through the conceptual framework of Virginia Henderson). This type of care also involves changes in dynamics, based on continuous reassessment of the patient and his/her response to the care provided.

Steps in the care process

The nursing process has four components:

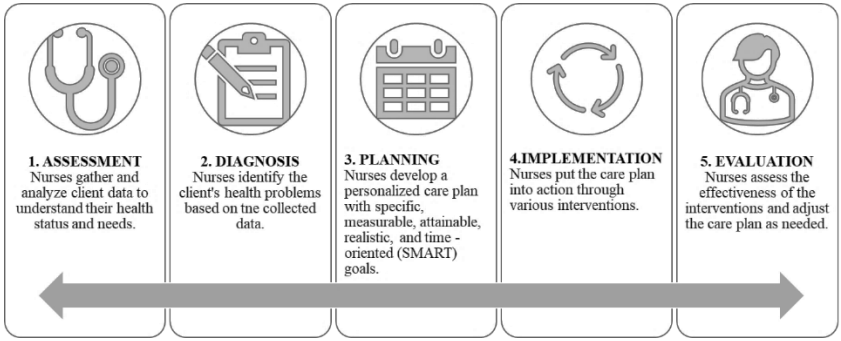


Fig.6.1. **Nursing process (ADPIE)**

- patient/community assessment – to establish the existing health or disease status, identify current, potential health problems leading to the formulation of the care diagnosis;
- elaboration of a logical care plan – specific to the assessed patient or community, strictly individualized and directed according to the diagnosis/diagnoses of care formulated;

– realization of the developed care plan – its implementation in order to solve the care problems of the patient and the community;
– assessment of the effectiveness of the care actions carried out and permanent recorrelation/reformulation of the initial plan with the evolution of the patient's health status.

The concept of health is not limited to the absence of disease, therefore health can be defined as:

✓ a state in which needs are autonomously satisfied (Viginia Henderson);
✓ physical, mental and social well-being (WHO).

Health is considered a property of biological beings. The existence of health is recognized when all components of the individual organism are functioning properly. Health is considered to be lost when disease occurs, which can be defined as a change in organic functions caused by a decrease in potential or shortening of lifespan. It is caused by specific factors/internal, physiological processes of the organism or its invasion by pathogens.

Nursing has an important role to play in protecting and maintaining health, and nursing has its roots in the fundamental needs of the individual, namely in the code of principles developed by Virginia Henderson.

The care plan can be defined as a theoretical code or systematic, organized, systematic method of individualized care aimed at identifying the unique responses of the individual or community to actual or potential health alterations.

Care problem identification = essential phase of the care plan. The implementation of care must be based on all those considerations that form the basis of the nurse's actions. This introduces the concept of "methodical work" into care, work that is well thought out in order to achieve the intended goal as effectively as possible. The whole of these nursing activities is carried out methodically, as a structure of the nursing process = care plan.

The care plan has five steps:

1. data collection and assessment;
2. identifying care problems;

3. planning care by setting goals and objectives and determining interventions;
4. putting the care plan into practice through autonomous and delegated interventions;
5. care assessment.

Data collection

Data collection includes patient assessment and is the first step in the care process, which starts with the nurse's first encounter with the patient or the cared for community and continues throughout the care process, as the health status of those being cared for is continuously changing.

Following the entire care process, patient assessment is a **continuous, dynamic and strictly individualized process.**

Purpose:

✓ assessment of the present/potential health or illness of the person being cared for;

✓ specifying and prioritizing patient care needs.

The purpose of the patient assessment phase is to formulate the nursing diagnosis. Several steps are necessary to realize this stage:

1. data collection;
2. data recording;
3. data analysis;
4. formulating the care diagnosis(es) – this forms the rational and pragmatic basis for the further development of the care plan

Each of these stages has a specific content and a different way of practical implementation.

1. Data collection

Data collection is the nurse's first contact with the patient and involves the collection of subjective and objective information about the assessed patient's health status and fulfilment of personal needs, both currently and prior to the time of assessment.

Data collection is done by:

– anamnesis of the patient, relatives – interview;

– physical examination of the patient;
– laboratory tests;
– consultation of existing previous medical records.

This data, information is obtained through communication – the process by which one, two or more people express their thoughts or feelings and understand each other's meanings. Thus therapeutic communication – a dynamic process of elaboration, transmission and reception between the patient and the nurse – is realized between the nurse and the patient. Thus, communication is based on skill, sympathy and warmth.

Data types:

A. by the source of the information:
- primary (direct) data, information obtained from the patient;
- secondary (indirect) data, information from the entourage or from previous medical documents and literature.

B. by the nature of the information contained we have data:
- subjective (symptoms – the patient's complaints);
- objective data (signs – changes detectable by the senses + information obtained by laboratory tests).

C. by the temporal nature of the information contained:
- current data (present information valid at the time of assessment and potentially variable);
- previous (past – family and personal medical history information).

D. by the information content's potential to change:
- Stable (invariable) data are general data (name, age, sex), demographic data (race, religion) or physical data (blood type, prostheses, allergies, genetic diseases);
- variable data – general and psycho-social data (marital status, behavioral habits, friends; physical examination data (age, blood pressure, pulse, temperature, weight, waist); laboratory examinations at a given time (electrocardiographic appearance, blood glucose, urea, etc.).

Anamnesis (interview):

Definition: a direct way of collecting data, through direct discussion with the person being cared for, plus additional information provided by caregivers and data recorded in the patient's various previous medical records. After introducing oneself to the interlocutor, it is advisable for the nurse to explain in simple and general terms how the discussion will be carried out, its purpose and how the data obtained will be used: in the patient's interest, for the care process and the medical act.

Obtaining these data is a real art and requires, in addition to professional rigor and attention, certain psychological qualities from the nurse.

The interview makes it possible to detect the person's unmet needs and the various manifestations of dependency they cause. The interview is a tool par excellence for personalizing care (personality knowledge tool).

Interview requirements	Some important factors need to be taken into account: – timing for the patient; – respecting meal times; – respecting rest and fatigue times; – respecting periods when the patient is feeling very distressed; – the nurse should organize her work in such a way as to allow sufficient time for the patient to express himself at his own pace; – the nurse must also create all conditions taking into account the privacy to which the patient is entitled and the patient's comfort; – the interview is based on the nurse's ability to establish effective and clear communication; – the interview involves the nurse's ability to show a behavior that reflects: an attitude of acceptance and respect, listening and empathy.
The nurse's interview facilitation skills	The nurse demonstrates this behavior by: – maintaining a serene facial expression, smiling (if appropriate); – through a comfortable posture and language that demonstrates to the patient their willingness to listen and make it easier for them to follow the interview;

	– guarantee the confidentiality of the data provided by the patient. Ability to facilitate (favor) the interview: a) the ability to ask appropriate questions – Questions can be closed or open: • closed questions – give a limited 'yes' or 'no' answer. Ex: *"Did you sleep well?"* (monosyllabic answer). • open questions – allow the patient to express themselves. Ex: "*Tell me about the problem that brought you to the hospital*." or "*Can you describe your sleeping habits?"* Open questions can be of different types: ➢ Narrative (e.g. "*Tell me what problems your illness still causes you*"), "*Tell me what happened*" (the unfolding of an event); ➢ descriptive (e.g. "*Describe your way of doing things*"); ➢ by skill type (e.g. *"Why do you never eat meat?*"). b) the ability to confirm (validate) his/her perceptions of the patient in such a way as to eliminate the subjectivity of his observation (e.g. "*You told me it's been two days since you've been vomiting*."). Ask him to repeat back to you what you think you did not understand. c) the ability to bring the patient back to the answers when digressing (e.g. "*I can see that you are very concerned about your digestion, but could you tell me about your sleep*?"). d) the ability to synthesize (e.g. "*What you told me shows that you can never relax because of your nervousness*"). e) the skill (ability) to apply active listening: - by repeating the last part of the patient's sentence, by extracting and rephrasing the emotional content of the patient's utterance and responding in such a way that you demonstrate that you understand what he/she is feeling (experiencing).

This accessibility is necessary in order not to make the patient close in on him/herself and stop responding. The nurse needs to know how to ask additional questions or to keep silent about issues that put the patient in uncomfortable situations.

Aim	– obtaining information on the patient's past and current health status; – the beginning of the patient-nurse therapeutic relationship, a relationship favored by the exchange of information, ideas and emotions; – obtaining information on the five "dimensions" of the patient: physical, affective, intellectual, spiritual, social, of the patient's collaboration in setting goals, planning interventions and their realization; – observing the patient's reaction: the interactions between the patient and his family, how he evolves in the hospital environment; – providing patient input that will prompt the patient to ask questions and participate in setting goals and carrying out care.
Types interview	– *structured* – to obtain basic data on each patient. E.g. "*What is your name?*", "*What do you do*?"; – *semi-structured* – conducted with pre-specified objectives and milestones. Ex. "*Tell me about your suffering from constipation*."
Interview stages	a. Starting the interview: – introduction - the nurse introduces herself/himself by stating her/his name, position, the purpose of the interview and its duration. Ex: "*Hello, Mr.... My name is... and I'm a nurse. I'd like to talk to you for 10 minutes about your health and ask you to answer a few questions that will allow me to plan your care. Is that okay*?" – the patient will be assured of the confidentiality of the interview - the way in which these data will be used, in the patient's best interest, for the realization of the care process will be presented. b. Conducting the interview: – the nurse asks open or closed questions, the answers to which will form the patient's 'profile'; – During the interview, the nurse and the patient become, one by one, sender and receiver. Eg: Patient: "*Why is the oxygen source on the wall above my bed? Does that mean I am seriously ill?"* Nurse: "*No, it doesn't mean that. All the wards in this ward have oxygen supplies. The hospital has a central oxygen distribution system and if a patient needs oxygen we can*

	administer it quickly. Is that why you were anxious?" Patient: "*No, I was just curious*." Nurse: "*In this situation, do you have any other issues that are troubling you?"* Patient: "*Yes*." – it is preferable to signal the approaching end of the interview. E.g. "*I'm going to ask you two more questions.*" or "*We'll be done in two minutes*.". c. conclusion of the interview: – at the end of the interview, the nurse will draw the conclusions of the interview, thanking the patient for his/her cooperation Ex: "*Thank you for answering these questions*." "*Your answers will help me plan your care.*"

Types of interlocutors

Depending on the patient's personality type, age, level of education and culture, social background and, last but not least, the patient's previous contacts with medical personnel, we can describe three types of interlocutors:

1. a first category are the patients that we need to make them talk to us through repeated and precisely formulated questions (introverts, shy or those lacking the ability or desire to dialog);
2. the second category are those we have to let them do the talking, they give us the essential facts we need to know, correctly and quickly;
3. the third category are those we have to politely stop them from talking, because they deviate from the substance of the questions asked and do not give us the relevant information we need.

In general the interview questions follow the structure of the type of database in which the patient information will be recorded. The discussion may follow the chapters of these medical documents, to which data on the patient's psycho-social and cultural profile are added.

The PATIENT PROFILE is made up of the information gathered through the interview and includes the following basic elements:

Info **General**	– name, first name – sex – civil status – occupation – religion – sources of support
Medical history	– childhood diseases, immunizations, trauma; – hospitalizations (patient's experience of previous hospitalizations); – surgery; – allergies - drug, food; – use of empirical treatments.
Family background	– chronic illness, mental illness of family members
Lifestyle, habits	– use of alcohol, tobacco, drugs; – work, sleep, eating habits; – exercise.
Current health problems	– Onset of symptoms: – their nature; – characteristics (localization, duration, intensity, etc.); – triggers (cold, damp, exertion, etc.); – measures taken to alleviate them and their effect; – health literacy.
Environment	– risk factors (pollutants, noise, vibrations); – physical security (compliance with labor protection measures);
Profile **Psycho-social and cultural**	– language spoken, ethnicity; – cognitive abilities; – emotions, feelings, states of mind that can influence the fulfillment of needs; – problems generated in relation to family, entourage.

Watch

Definition: Observation involves a special intellectual ability to directly perceive information about the patient by the nurse with the aid of his or her own sense organs during the interview and physical examination on machines and systems.

Observation remains the primary, basic element that the nurse uses

throughout the activity and is an active, ongoing mental process. It is based on the subjectivity of the observer, which determines its great 'fragility'. Observation is filtered through our sensory, perceptual and emotional mechanisms. Perception is a selective process that leads us to see what we have learned to see and what there is to see. Our focus must therefore be on diminishing subjectivity (through intellectual effort).

Engaging the senses in the course of her work for the patient, the nurse uses the sense organs of sight, hearing, touch and smell.

Sight (vision): brings us a wealth of information about a person's physical characteristics (physiognomy, looks, behavior, etc). It also informs us about certain signs and symptoms that indicate an unsatisfied need, a health problem:

- facial expression: sad or distressed face;
- restlessness or discouragement;
- the color of the skin and mucous membranes, rashes, jaundice, etc., possible deformities or deficiencies of various appliances and systems, prostheses, etc.

Hearing. Through the sense of hearing, we receive information directly (non-indirect) or instrumentally mediated by the stethoscope (auscultation):

- identification of the patient's verbal reactions, communication with the patient, intonation of voice, moaning, whining, complaining;
- identification of certain pathological data that point us towards a certain medical distress (noises emitted by the patient, heartbeat, gas, dysphonia, bitonal voice, wheezing, etc.).

Tactile sense. Touching: plays an important role in physical examination or palpation of certain parts of the body, allowing details to be known (induration, thickness of a mass, warmth of limbs, etc.).

The smell allows:

- detecting an odor relevant to the patient's degree of cleanliness;
- pathological processes (e.g. infection of a wound that gives off a bad odor);
- halena – fetid breath (lung abscess), uremic halena or acetonemic (in a diabetic patient).

The physical examination also involves the use of specific medical instruments: meter, scales, thermometer, stethoscope, various monitoring devices.

Using observation

In order to be effective, observation must be done with great care, the nurse must develop her observational skills, she must, as far as possible, disregard her own preoccupations and focus on the patient and everything around him/her.

The conceptual framework of fundamental needs constitutes a grid for systemic and practical observation. This grid with the 14 needs of the patient from a bio-psycho-social, cultural, spiritual point of view allows to observe the patient as a whole – i.e. to have a holistic view of the person. It also involves detecting the sources of difficulty which are the cause of the patient's addiction.

The examination on devices and systems will follow:

- ✓ general condition – good, satisfactory, influenced, altered mediocre, serious;
- ✓ temperature – hypothermia, fever, afebrile, subfebrile;
- ✓ integument – appearance, elasticity, rash, lesions; mucous membranes (appearance, sloughing, moisturization, lesions);
- ✓ subcutaneous cellular tissue – adipose tissue, edema;
- ✓ lympho-glionar system – inspection, palpation;
- ✓ bone system – integrity, mobility, examination of lesions;
- ✓ muscular system – trophicity, muscle tone, muscle strength;
- ✓ respiratory system – chest conformation, cough, patient's breathing movements, RF, abnormal breath sounds, signs of respiratory failure;
- ✓ cardiovascular system – CHF, BP, heart rhythm, signs of right/left heart failure;
- ✓ digestive system – appearance of the abdomen, mobility, suppleness, pain, vomiting, constipation, diarrhea, stoppage of bowel movements;
- ✓ genitourinary system – diuresis, appearance of urine, pain, rhythmicity of urination;
- ✓ central nervous system and sense organs: consciousness, temporo-spatial orientation, various complaints and impairments, prostheses.

The data obtained about the patient is recorded in the patient observation record.

The use of obtained and recorded data aims to identify the circumstances of onset of the condition as well as the manifestations of dependency (signs, symptoms) that occurred in the patient's health status. Once the manifestations of dependence are identified, we will be able to formulate and prioritize the care problems of the evaluated patient, we will analyze the degree of independence or dependency of the patient in meeting his/her needs.

Nota Bene! Items to avoid during the objective examination or data collection stage:

- subjectivism;
- preconceived judgments;
- routine and superficiality;
- lack of concentration and continuity in observation.

2. Analyzing data and identifying care problems

The obtained data are analyzed in terms of the degree of satisfaction and fulfilment of the basic needs of the assessed patient. The purpose of analyzing and interpreting the data is the formulation of the care diagnosis and the care plan.

The nursing diagnosis (ND) has a number of advantages for the patient and the nurse. These are:

a) *for the patient:*
- individualized care;
- specific selection of interventions;
- establishing criteria for analyzing the results obtained.

b) *for the nurse*:
- more effective communication between her and the patient;
- communication with other members of the medical team;
- continuity and planning of activities with the aim of ensuring the quality of the team's work.

The components of the Nursing Diagnosis are:

P – actual and potential health problems. It is important that the identification of potential problems is specific to each individual, so data collection should be individualized.

E – the cause (etiology) is the identification of environmental, sociological, spiritual, psychological, physiological factors. A problem may be related to a variety of etiologic factors, but which is generated by a single problem; e.g. arrhythmias (problem) may be caused by – an abdominal pain or lack of sleep or rest; anxiety (problem) may also be caused by financial worries or continuous noise, stress.

The care plan – after fixing the patient's problems, secondly includes the etiology (cause of this problem) – but etiology does not mean using the medical diagnosis as a cause of the Nursing Diagnostic (ND) e.g. seizures (problem) can be caused by epilepsy – in this case do not hold the ND because they cannot be treated by the nurse (strictly medical problems). In the case of epilepsy – ND – should be – as a potential problem – "possible injury " or "anxiety" in seizures - and then the nurse will decide what to do to prevent these problems.

S – the existing **signs and symptoms** are those that reflect the existence of observable features of the defined health condition. An assessment of progress is also made. If these signs and symptoms remain unchanged an evaluation of strategies is necessary.

Four categories of care diagnoses are currently accepted by international consensus:

1. **current diagnosis;**
2. **high risk diagnosis** for a care problem;
3. **possible diagnosis;**
4. **the diagnosis of well-being;**

E.g.: In the framework of mobility, the nurse proposes to mobilize her patient after appendectomy, in the postoperative care, without help in the first 24 hours, until the bathroom, but the patient can only mobilize himself until the table in the ward – he "gets dizzy" – so it takes several hours to achieve the proposed goal.

Nursing Diagnosis = PES Problem

Ex. Patient in the postoperative period - mastectomy.

P = non-acceptance of altered body image

E = no breast

S = crying, not communicating, not wanting to see her husband and family.

If the problems have been identified, they must be solved, so the most appropriate possible solutions must be found, with the means we have, thus moving on to the third stage of the care plan.

3. Care planning

For this planning we need to set objectives to be achieved in two phases:

- objectives to solve;
- means of solving.

Objectives aim to solve existing problems and identify potential problems. To achieve this, a goal must be set for each existing or potential problem. Goals must be realistic. E.g. the problem is pyrexia, the goal is to bring the body temperature to normal; or if the problem is dry mouth with deposits, the goal is to toilet and maintain the oral cavity.

The objectives are centered on the patient in terms of three dimensions – ***biophysiological,*** when it will observe changes in the physical and physiological state of patients and will follow the patient's behaviour: motor, cognitive – ***psychological*** will follow the affective behavior (emotions, feelings, motivations) – ***socio-cultural*** in which it will follow interpersonal, religious relationships.

Before setting goals, resources – equipment, staff, physical environment, and other ancillary services – will be reviewed. Once the available resources have been seen, action objectives are set to be agreed upon by both parties involved (nurse/care team and patient/family). The objectives are set in timeframes and we will have:

- short-term objectives: include urgent actions, to be achieved immediately;
- medium- and long-term objectives: these include prolonged actions aimed at preventing complications, rehabilitating the

patient's health/compensation and medical education of the patient and his/her family.

As far as possible an objective should answer five questions:

1. Who does the action?
2. What does the patient do, what can be done for him?
3. How is the action done?
4. When is the objective achieved?
5. To what extent have the desired results been achieved?

Starting from these questions we define the characteristics of the objectives:

1. SPECIFICITY – who to do the action?
2. REALISM – to what extent (what result do we get)?
3. INVOLVEMENT – how (means of achievement)?
4. OBSERVATION – when (time)?
5. PERFORMANCE – do what (expected change)?

Thus, the ultimate goal of all care is summarized in the concept of "helping the patient to help himself". The set objectives will be achieved through interventions within the specified timeframes.

4. Interventions

They can be defined as the planned set of acts to be performed in order to achieve a set objective to solve a patient care problem. Interventions can be:

– *independent* (autonomous) – specific to the nurse: ensuring/ assisting the patient's hygiene, ensuring/assisting respiratory function, elimination, fluid and food intake, ensuring the patient's physical and psychological comfort, external environmental conditions; health education of the patient and his/her family.

– *dependent* – delegated-indicated by the doctor – carrying out medical prescriptions: tests, procedures, medication, treatments; delegating own responsibilities to other members of the care team.

– *interdependent* – in collaboration with other members of the care team or with other disciplines: raising potential complications; raising collaboration issues.

The interventions applied depend on the patient's degree of dependency:

- independent and autonomous person – health maintenance benefits;
- person with moderate dependency – partial help;
- person with major dependency – permanent help;
- person with total dependency – full supplementation.

5. Assessment

It is permanent and is an exact response translated by the process made by the patient – or lack of progress – in achieving the proposed goal, which sometimes leads to modifying the care plan by reviewing all the steps. If the proposed goals have been achieved in a shorter time, we can readjust the plan, or if there have been changes in the patient's condition, we add new goals according to the new needs that have arisen. Because of this, the care plan is cyclical but constantly renewed.

Ongoing assessment leads to a series of observations that will be recorded in the form of notes on the patient's progress under the care provided.

The recording of these notes should be dated, containing a clear, concise, orderly wording of the observations, for each care problem/ diagnosis in the list of care problems. The ordering of these progress notes may be structured according to the "SOAPIE" formula,
waves:

S = symptoms – subjective data reported by the patient;
O = objective data **–** signs observed by qualified personnel;
A = data **assessment –** the nurse's conclusion about the significance of subjective and objective data recorded in the patient's progress;
P = immediate or long-term action **plan** initiated to address the situation reported;
I = the **intervention** performed on/for the patient under care;
E = assessment of the patient's evolution under the care interventions performed.

Evaluation is of **two types:**

- **formative –** refers to the care plan;
- **summative** – the assessment describes the patient's progress – or lack of progress – in relation to the goal or objective.

Advantages of the care plan:

- identifies the patient's specific problems;
- helps set real goals;
- ensures a holistic approach to the individual;
- ensures individualized interventions;
- resolves the reactions of the people cared for to illness;
- ensures systematic care and eliminate reactions
- promotes flexibility and independent thinking;
- facilitates communication, information and continuity of all actions in a ward or community;
- highlights the unique role of the nurse;
- realizes nurse's satisfaction.

Evaluation of care outcomes allows the following aspects to be assessed:

- assessment of the appropriateness and effectiveness of the care provided;
- identifying any problems the service may have in providing quality care;
- assessment of the economic efficiency of the care provided in that service by the bodies/commissions of economic-financial control;
- provision of data for scientific studies, teaching or research activities in the field of nursing;
- enabling managers to analyze and rethink strategies for developing/ optimizing nursing services;
- constituting medical-legal documents on the care given and the evolution of the patient.

7. BASIC NEEDS

7.1. The need to breathe and have good circulation

Author: *Ludmila Postica*

"Proper breathing is as necessary as food"
Old Hindu proverb

Definition
Breathing is the human need to take in oxygen from the environment, which is necessary for the oxidation processes in the body, and to remove carbon dioxide from cellular combustion.

I. Independence in satisfying the need to breathe

It is determined by maintaining the integrity of the airways and respiratory muscles, their efficient functioning.

Stages of breathing:

a) *Ventilation* – is the entry of oxygen-laden air into the lungs and the removal of carbon dioxide-laden air. Ventilation has two times: inspiration and expiration. It is influenced by:
   – airway permeability;
   – oxygen concentration in the air you breathe;
   – maturity of the bulbar respiratory center;
   – chest expansion;
   – normal functioning of the centers that regulate breathing.

b) *Gas diffusion* – is the process by which oxygen from the pulmonary alveoli passes into the perialveolar capillaries and CO_2 from the capillaries passes into the pulmonary alveoli. It is influenced by:
   – the pressure difference of O_2 in the alveolar air and the O_2 concentration in the blood;
   – the condition of the alveolar wall;
   – the size of the alveolar surface.

c) *Circulatory phase* – consists of the delivery of O_2 through the arterial vessels to the tissues and CO_2 delivered from the tissues through the venous vessels to the lung for elimination. It is influenced by:

- the amount of hemoglobin in the blood;
- cardiac output;
- red blood cell count;
- peripheral arterial network permeability.

d) *Tissue phase* – the exchange of gases between blood and tissues, with the help of a complex enzyme system.

The nurse comments on the ventilatory stage of breathing.

Biological factors that influence the need to breathe:

- *Age* – children take more breaths per minute than adults.
- *Sex* – in women, the respiratory rate values are at the maximum limit of normal, in men at the minimum limit.
- *Height* – shorter people breathe more breaths per minute than taller people.
- *Sleep* – during sleep, the breathing rate is lower than during wakefulness.
- *Posture* – correct chest position allows the lung to expand during breathing. Healthy individuals can breathe orthostatically, sitting and lying down. The position that favors breathing is sitting and orthostatic.
- *Nutrition* – influences the maintenance of airway moisture and, through the intake of glucose, favors a good functioning of the diaphragm and other respiratory muscles.
- *Exercise* – influences breathing rate – untrained people show signs of fatigue at lower exertion than trained people.
- *Emotions* – influence the frequency and amplitude of breathing. So does crying, laughing.
- *Environment* – adequate oxygen content (21%) in the atmospheric air favors breathing; polluted environment, laden with microbial, chemical particles, negatively influences breathing; inhaled air humidity of 50-60% creates a comfortable environment.
- *Climate* – influences the frequency of breathing; heat increases the frequency, cold – decreases the frequency; wind disrupts breathing; altitude, by thinning the air, increases the frequency.
- *The workplace* – through chemical or microbial pollution, becomes an environment unfavorable to good breathing.

Manifestations of independence:

Breathing frequency	It represents the number of breaths per minute and is influenced by age and gender newborn – 30-50 r/min. every 2 years – 25-35 r/min. at 12 years – 15-25 r/min. adult – 16-18 r/min. elderly – 15-25 r/min.
Amplitude	It is determined by the volume of air that enters and leaves the lung with each breath. In this respect, breathing can be deep or shallow.
Rhythm	The equal pauses between breaths. It can be rhythmic or arrhythmic.
Breathing noises	Breathing is normally quiet; in sleep, it can become noisy (snoring).
Symmetry of breathing movements	Both hemithoraxes have the same up and down movement during inspiration and expiration.
Breathing type	There are three types of breathing: – upper costal, found in women, by raising the upper part of the rib cage, due to the enlargement of the anteroposterior diameter during inspiration; – lower costal, found in men, by increasing the lateral diameter of the rib cage; – abdominal, found in children and the elderly, by increasing the vertical diameter of the rib cage.
Mucosity	The respiratory mucosa is moist, secretions reduced, clear, dense.
Cough	It is a forced exhalation of secretions out of the airways; it is a protective phenomenon.

Nurse interventions to maintain independence in meeting the need to breathe:

- ✓ explore the patient's breathing skills
- ✓ teach the patient:
  - do breathing exercises;
  - do walking exercises, relaxation exercises;
  - have proper posture that encourages breathing;
  - break harmful habits (tight clothing, smoking, heavy meals).

II. Dependency in need satisfaction

In meeting the need, the following problems arise:

1. voice alteration;
2. dyspnea;
3. airway obstruction.

Sources of difficulty, causing the need to breathe to be unsatisfied:

Physical sources	– alteration of nasal, pharyngeal, bronchial, tracheal mucosa or lung parenchyma; smoking; – airway obstruction; obesity; chest bandages; hydroelectrolyte imbalance; pain.
Psychological sources	– anxiety; stress; – crisis situation.
Sociological sources	– polluted, humid air - high altitude.
Lack of knowledge	– self-knowledge – environmental awareness; – getting to know other people.

Voice alteration

It can be caused by inflammatory processes in the upper airways - nose, pharynx, larynx, but also by allergens in the environment.

Manifestations of dependency:

Dysphonia	– disorders of vocal emission, affecting the pitch, intensity and timbre of the voice. It manifests as hoarseness, hoarseness, dullness, harshness.
Aphonia	– unable to speak.
Feeling suffocated	– lack of air.

Dyspnea

It manifests as labored breathing. It is caused by many things, most commonly heart and lung diseases and upper airway disease. Air enters the lungs with difficulty, resulting in poor oxygenation of the tissues and accumulation of CO_2 in the blood. The patient is anxious.

Manifestations of dependency:

Orthopaedics	– forced position, with the arms hanging by the side of the body, the patient sitting (a position that encourages breathing)
Apnea	– stopping breathing
Bradipnea	– reduced breathing rate
Tahipnee	– increased breathing rate
Modified amplitude	– shallow or deep breathing
Hyperventilation	– large amounts of air entering the lungs
Hypoventilation	– a small amount of air entering the lungs
Cough	– forced exhalation to clear the upper airways of accumulated secretions
Hemoptysis	– externalized bleeding through the oral cavity from the airways - lungs
Mucus (sputum)	– a mixture of secretions from the tracheo-bronchial tree, consisting of mucus, pus, blood, desquamated cells

Airway obstruction

It can be caused by inflammatory processes of the airways, but also by the presence of foreign bodies accidentally entering the airways – particularly in children – as well as by deformities of the nose.

Manifestations of dependency

Difficulty breathing through the nose	– the patient breathes through the mouth
Profuse nasal discharge	– mucous, purulent or bloody secretions that prevent breathing
Epistaxis	– nosebleed
Nose deformities	– deviated septum, trauma
Sneak	– forced expiration
Aspiration through the nose	– whined
Cough	– with a persistent dry or wet cough
Honking	– wheezing, whistling, inspiratory noise heard at a distance
Pulling	– inspiratory depression of the soft parts of the suprasternal thorax, epigastric, intercostal

Nursing interventions in the respiratory impaired patient

OBJECTIVE	AUTONOMOUS AND DELEGATED
The patient to breathe freely through the nose	*on the nose:* – removes nasal secretions; – moistens the air in the room; – ensures sufficient fluid intake for 24 hours.
The patient not to become a source of infection	– educates the patient to use an individual, disposable handkerchief; – educates the patient to avoid spilling nasal secretions.
Stopping epistaxis	– positions the patient with the head in anterior flexion approximately 15^0; – compresses the nasal septum with the thumb and index, nostril that bleeds for 10-15 minutes; – applies cold compresses to the forehead, nose or back of the neck; – advises the patient not to blow their nose.
The patient to have moist and intact respiratory mucosa	*in the pharynx and larynx:* – moistens the air in the room; – recommends absolute vocal rest; – encourages non-verbal communication.
The patient to swallow without difficulty	– stops solid food; – recommends gargling with antiseptic solutions; – feeds the patient with warm drinks.
The patient to be mentally balanced	– mentally prepares the patient to apply care techniques and to aspirate bronchial secretions.
The patient to have increased resistance to infection	– teaches the patient to avoid sudden temperature changes and also crowds; – recommends immunization.
The patient to have a patent airway and good breathing	*in the lungs and bronchi:* – teaches the patient to cough, expectorate and collect sputum; – moistens the air in the room with alcoholized water; – aspirates bronchial secretions, if necessary; – teaches the patient to do breathing exercises; – provides a sitting or semi-sitting position for patients with dyspnea; – teaches the patient to give up harmful habits (smoking);

	– administers the prescribed treatment: antitussives, expectorants, bronchodilators, tracheobronchial decongestants.
The patient to be mentally balanced	– provides analgesic position; – teaches the patient to use relaxation techniques; – mentally prepares the patient for any technique he or she will undergo (punctures, radiologic, endoscopic examinations).

The need for good circulation

"Everyone has the age of their arteries
(Cazali)

Definition
Circulation is the function of blood movement within blood vessels to transport nutrients and oxygen to the tissues, as well as to transport catabolic products from the tissues to the excretory organs.

An important role is played by the blood and lymph, contained in the circular system, and the heart, which is anatomically and functionally intact. The nurse monitors the circulation by monitoring pulse and blood pressure.

I. Independence in satisfying circulation

a) ***PULSE*** – is the rhythmic expansion of the arteries, which compress on a bony plane is synchronous with the ventricular systole. The pulse arises from the conflict between the blood existing in the arterial system and the blood pushed during systole. This conflict is externalized by the rhythmic relaxation of the artery.

Factors that influence the pulse:

Biological factors	– *age* – in young children, the frequency is higher than in adults; also in the elderly; – *body height* – shorter people have a higher pulse rate than taller people; – *sleep* – the pulse rate during sleep is lower; – *nutrition* – during digestion, the pulse rate increases; – *physical exertion* – causes an increase in pulse rate, which decreases after exertion stops.
Psychological factors	They increase the pulse rate by such factors as: – emotions; – crying; – fury.
Social factors	– *the environment* – through the oxygen concentration of the inspired air, influences the pulse rate.

Manifestations of independence

Spirogram frequency	The number of beats per minute: – newborn 130-140 puls/minute; – in young children 100-120 beats/minute; – at 10 years 90-100 beats/minute; – in adults 60-90 beats/minute; – elderly over 80-90 beats/minute; a) anacrotic; b) catacrotic; c) dicrotic inflection.
Rhythm	– the pauses between pulsations are equal, the pulse is rhythmic.
Amplitude (volume)	– is determined by the amount of blood in the vessels; – is higher the closer the vessels are to the heart; – in symmetric arteries, the pulse volume is equal.
Pulse pressure	– is determined by the force required to compress the artery so that the pulsatile wave disappears.
Speed	– is the rising and falling speed of the pulsed wave.
Skin color	– pink discoloration of the skin including the extremities; – the skin is warm.

ARTERIAL PRESSURE – the pressure exerted by circulating blood on the arterial walls. Factors that determine blood pressure:

– cardiac output;
– the force of contraction of the heart;

– vessel elasticity and caliber;
– blood viscosity.

The pressure decreases from the center to the periphery.

Factors that influence blood pressure:

1. Biological factors:
   – *age* – the blood pressure is lower in children and increases with age; it stabilizes in adults; increases slightly in the elderly;
   – *sleep* – blood pressure during sleep is lower than during wakefulness;
   – daytime *activity* produces an increase in blood pressure; physical exertion also produces an increase in blood pressure, returning to baseline values after cessation.
2. Psychological factors:
   – *emotions,* joy, anxiety cause high blood pressure
3. Sociological factors
   – *climate:* cold produces vasoconstriction and therefore increases blood pressure, and heat produces vasodilation and therefore lowers blood pressure.

The maximum pressure is obtained during ventricular systole, the minimum during diastole.

Age-dependent normal BP values

Age	max BP	min BP
1-3 years	75-90	50-60 mmHg
4-11 years	90-110	60-65 mmHg
12-15 years	100-120	60-75 mmHg
adult	115-140	75-90 mmHg
elderly	over 150	over 90 mmHg

Nursing interventions to maintain independent blood circulation

Educates the patient:
– to ensure hygienic conditions in the room (ventilation);
– keep their complexions clean, intact;
– have a balanced diet, without excess fat, sodium chloride;
– avoid tobacco, excessive alcohol consumption;

– avoid a sedentary lifestyle;
– wear light clothing that does not hinder movement.

Dependency in need satisfaction – Inadequate circulation

Manifestations of dependency:

Altered integuments	– cold, pale due to insufficient skin irrigation; – cyanotic - purple discoloration of the nails, lips;
Pulse rate changes	– tachycardia = increased pulse rate; – bradycardia = decreased pulse rate;
Pulse volume changes	– filiform pulse, with very low volume, barely perceptible; – asymmetric pulse - different pulse volume in symmetric arteries;
Changes in pulse rhythm	– arrhythmic pulse = uneven pauses between beats; – dicrot pulse = two pulses, one strong and one weak, followed by a pause;
Blood pressure changes	– hypertension = high blood pressure above normal values; – hypotension = a drop in blood pressure below normal; – differential BP changes = max and min BP changes are not parallel; – different BP in symmetric segments (left arm, right arm).
Hypoxemia **Hypoxia**	– decreased oxygen in the blood; – decreased oxygen to the tissues.

Nursing interventions in the patient with inadequate circulation

OBJECTIVES	AUTONOMOUS AND DELEGATED INTERVENTIONS
The patient to have adequate circulation	– teaches the patient: • stop using tobacco, alcohol; • have a diet rich in fruits, vegetables; • reduce fat and sodium chloride in the diet; – administer the prescribed medication: cardiac tonics, antiarrhythmics, diuretics, vasodilators, hypotensors, antianginolytics, anticoagulants; – tracks the effect of medicines; – apply techniques to promote circulation: active, passive exercises, massage.
The patient to be mentally balanced	– informs the patient about the stage of their illness, the degree of effort they can make, the importance of continuing their medication.

7.2. The need to feed and hydrate

Author: *Luminita Suveica*

It is necessary for every body to ingest and absorb good quality food in sufficient quantity to ensure its development, the maintenance of its tissues and to maintain the energy it needs to function properly.

The purpose of the need to feed is:

- ensure the intake of vitamins and minerals;
- provide the body's basic energy needs for development recovery;
- provide the body with the necessary nutrients (therapeutic);
- prevention of chronic non-communicable diseases.

To stay healthy, human beings need an adequate amount of food containing the nutrients essential for life. The amount and nature of nutritious food depends on: gender, age, weight, height, activity, state of health or illness.

An adequate diet should contain all the factors necessary to maintain life and ensure all body functions in normal conditions: carbohydrates, proteins, lipids, vitamins, water, minerals.

Protein, fat and carbohydrates

Protein, fats and carbohydrates, including fiber, are essential nutrients for a growing body, including a developing adolescent.

Proteins are made up of amino acids, which are the basic building blocks of the body. They are essential for building and repairing tissues, especially muscles, bones, skin, internal organs and the immune system. During adolescence, when growth is accelerated, adequate protein intake is crucial to support the body's harmonious development, as well as to maintain a proper balance of hormones. Protein is also involved in the production of enzymes and antibodies. Recommended protein sources include: lean meat, fish, eggs, dairy products, legumes and nuts. The recommended amount of protein varies depending on age, sex, activity level and other individual factors, but in general, it is recommended to consume about 0.8-1 gram per kilogram of body weight.

Proteins are the body's plastic materials, replacing substances destroyed by physiological or pathological wear and tear. At the same

time, they are an important source of energy and the raw material for ferments and hormones. **Requirement: 1-1.5 g/kg body/24h.**

Insufficient long-term intake of protein substances leads to a decrease in plasma protein, destruction of the hepatic parenchyma, anemia and, by reducing the colloid-osmotic pressure of the blood, water retention in the body, with the formation of edema. An increase in protein is indicated in pregnancy and lactation, burns, anemia, pleural and abdominal discharges, postoperative. Decreased amounts are indicated in kidney disease, febrile illnesses.

Fats (lipids) are a concentrated source of energy that provide essential fatty acids involved in the development of the nervous system and brain. They are involved in: absorbing fat-soluble vitamins (A, D, E, K); producing hormones; providing thermal insulation and protecting vital organs (heart, lungs, brain and skin). It is important to avoid saturated and trans fats and choose healthy sources of lipids such as unsaturated, mono- and polyunsaturated fats. Unsaturated fats are found in vegetable oils, avocados, fish, nuts and seeds. Omega-3 found in fatty fish such as salmon is beneficial for cognitive development and reducing the risk of cardiovascular disease. Teenagers should get about 25-35% of their total daily calories from healthy fat sources.

Lipids have a high caloric value, foods based on them have high energy qualities in a small volume. In addition to their energetic role, lipids are also part of the nervous tissue and erythrocyte stroma, and in storage form they are the body's energy reserves and supporting tissue for internal organs. **The requirement is 1-2 g/kg body/24 h.**

Carbohydrates (carbs) are the main source of energy for the body. They are an important source of glucose for the brain, which is its main fuel. Adolescents, especially those who are physically active, need an adequate amount of carbohydrates to sustain their energy needs. It is recommended to choose complex carbohydrates such as wholegrain cereals, vegetables and fruit, as they release glucose gradually into the bloodstream and provide a steady supply of energy. They provide the glucose needed to fuel the brain, muscles and other tissues. Complex carbohydrates are also

an important source of fiber, which helps maintain a healthy digestive tract, regulate blood sugar levels and keep you feeling full.

Dietary fiber (a type of non-digestible carbohydrate) is important for maintaining digestive health, preventing constipation and regulating blood sugar levels. They also help maintain a feeling of fullness, which can be helpful for a healthy body weight. Dietary fiber is found in foods such as fruits, vegetables, whole grains, legumes and seeds. About 25-30 grams of dietary fiber is recommended daily. To meet their needs for vitamins, minerals and antioxidants, teenagers need to eat a balanced and healthy diet rich in fruit, vegetables, wholegrains, lean meat and dairy products.

Carbohydrates (carbs) are the body's main source of energy. Their digestion and assimilation do not place too much demand on the body, which is why it is recommended that 50% of the body's calorie requirements should be provided by carbohydrates, unless there is a contraindication to their intake (diabetes mellitus, obesity). In children, carbohydrate intake should be increased in febrile illnesses, cachexia, malnutrition, liver and kidney disease. **Requirement: 4-6 g/kg body/24h.**

Vitamins, minerals, antioxidants

Vitamins are organic compounds needed in small amounts for the normal functioning of the body. They are involved in a variety of processes, such as metabolism, the immune system, the production of energy and the functioning of the nervous system. Some vitamins, such as vitamin C and vitamin E, are also antioxidants, which means they protect cells against oxidative stress and free radical damage. **Vitamins** are needed to maintain the body's normal metabolism. The need for vitamins increases during excessive cellular activity (most illnesses).

Vitamins can be classified into:

- **water-soluble vitamins;**
- **fat-soluble vitamins.**

Normal vitamin requirements can reach up to 150 mg vitamin C; 25 mg vitamin B, 6 mg vitamin B6, 8 mg vitamin PP and 20 mg vitamin K, which is provided by eating fruits, vegetables, salads, fruit juices.

Vitamin A is essential for vision, skin and immune health. People should eat foods such as carrots, sweet potatoes, spinach and mango to ensure adequate vitamin A intake.

Complex B vitamins, including B1, B2, B3, B6, B3, B6 and B12, play a crucial role in energy metabolism, nervous system function and the production of red blood cells (erythrocytes). Good sources of B vitamins include: whole grains, legumes, nuts and seeds.

Vitamin C has powerful antioxidant properties and helps strengthen the immune system. Citrus fruits, strawberries, kiwi fruit and bell peppers are excellent sources of vitamin C.

Vitamin D is essential for healthy bones and teeth as well as calcium absorption. The main way to get vitamin D is through sun exposure, but foods such as fortified dairy and oily fish can also be good sources.

Vitamin E has antioxidant effects and contributes to skin and circulatory health. Vegetable oils, seeds, nuts and spinach are rich sources of vitamin E.

Vitamin K is essential for blood clotting and bone health. Green leafy vegetables (spinach) are good sources of vitamin K.

It is important to note that mineral needs (mineral salts) may vary depending on gender, age, level of physical activity, etc. Therefore, it is always advisable to consult a doctor to get a personalized assessment of nutritional needs and to receive specific recommendations.

Water and mineral salts – all the biochemical reactions in the body take place in water, and mineral salts are needed as structural and catalyzing substances. The daily water requirements of a healthy body vary between 2500-3000 ml, which are covered by ingested fluids and the burning of carbohydrates and fats. Along with water needs, mineral salt needs are also met. The healthy body needs in 24 hours: 4 g Na; 3-4 g K; 2 g Ca; 0.15 g Mg; 18 mg Fe; 6 g Cl.

Calcium is an essential mineral for healthy bones and teeth. During adolescence, when bones are growing and developing rapidly, the need for calcium is increased. Adequate calcium intake at this crucial stage can help build strong bones, preventing bone-related problems such as osteoporosis in later life.

Magnesium is involved in over 300 enzyme reactions in the body and plays an important role in maintaining a healthy nervous and muscular system. It also helps maintain normal heart rhythm and regulate blood glucose levels. An adequate intake of magnesium can help reduce stress and maintain a healthy mood.

Sodium and potassium are essential electrolytes involved in the body's water and electrolyte balance. They play a crucial role in the proper functioning of the nervous and muscular system, in the transmission of nerve impulses and in maintaining normal blood pressure. During adolescence, when the body is undergoing rapid growth, the need for sodium and potassium may increase.

Iron is necessary for the production of hemoglobin, which carries oxygen to all the body's cells. During adolescence, iron requirements increase, especially in girls, due to the menstrual cycle and rapid growth . Adequate iron intake is important to prevent anemia and fatigue.

Zinc plays a crucial role in the development and functioning of the immune system, as well as in wound healing. In addition, this mineral contributes to normal sexual development during adolescence and the functioning of the reproductive system.

Antioxidants (vitamin C, vitamin E, beta-carotene and selenium) are natural or synthetic chemicals that protect the body's cells from the damaging effects of free radicals. Free radicals are unstable molecules that can be generated in the body as a result of normal metabolic processes, but also as a result of exposure to environmental factors such as tobacco smoke, air pollution, radiation or poor diet. These free radicals can cause cell damage and contribute to disease and ageing. Antioxidants help neutralize free radicals and prevent cell damage. They also help boost the immune system, preventing infections and diseases (diabetes, cancer, heart disease, etc.).

Adolescence is often associated with dermatological problems, such as acne, pimples or skin irritation, and antioxidants can help reduce inflammation and keep skin healthy.

Foods rich in antioxidants include fresh fruit and vegetables, nuts and seeds, whole grains and legumes.

Beta-carotene is a precursor of vitamin A and has powerful antioxidant properties. It is found in orange and dark green fruits and vegetables such as carrots, pumpkin, spinach and kale. Lycopene is an antioxidant that can help protect cells against free radical damage. Tomatoes, watermelon and pink grapefruit are rich sources of lycopene.

Selenium is an essential mineral that acts as an antioxidant and supports the functioning of the immune system.

Water is the universal solvent of compounds in the human body, necessary for the functioning of all cells, tissues, organs and for the elimination of waste products from the body.

The percentage of water in the body varies depending on: age (infants' bodies contain around 78% water, and adolescents and adults around 60%); gender (men have more water in their bodies than women because they have more muscle mass); body composition (people with more fat have less water compared to people with more muscle mass).

Drinking enough fluids every day is particularly important for your health. This habit will help the body maintain its water-electrolyte balance and rid the body of toxins and other unwanted substances. Water is the universal solvent of compounds in the human body, necessary for the functioning of all cells, tissues, organs and for the elimination of waste products from the body. The percentage of water in the body varies depending on: age (infants' bodies contain around 78% water, and adolescents and adults around 60%); gender (men have more water in their bodies than women because they have more muscle mass); body composition (the bodies of those with more fat mass contain less water than those with more muscle mass). Every day, through the process of breathing, sweating, urination and digestion, the human body loses around 1.5 liters of water. So the daily fluid intake should not fall below this figure.

The main functions of water in the body include:

- is the 'building' material of each cell;
- regulates body temperature by sweating and breathing;
- carbohydrates and proteins that serve as food for the body are transported by water into the bloodstream and then to the cells;

– eliminates waste from the body through urine;
– forms saliva;
– lubricates joints;
– protects organs and tissues;
– normalizes blood pressure;
– aids digestion.

Foods that hydrate / dehydrate

Around 20% of fluid intake is provided by food, and the other 80% by water and other fluids. Thus, the daily requirement includes water consumed from food, beverages, but also separately (as such). An adequate daily intake, within portion limits, of food and beverages will ensure effective hydration of the body. Foods and drinks that hydrate the body include:

– drinking water or natural mineral water (still or carbonated);
– herbal teas;
– milk and acido-lactic drinks;
– soups, broths, smoothies;
– fruits, vegetables, fresh greens.

** **Note:** if soups are high in salt and smoothies contain added sugar, they do not promote hydration, but vice versa.*
** **Note:** "Champions" by water content are lettuce and spinach leaves (96%), cucumber (95%), courgette and tomatoes (94%), watermelon, cauliflower, cabbage, broccoli and sweet peppers (92%), strawberries (91%), peaches (89%), oranges and grapefruit (88%).*

Water content in different food categories (%):

- 100% – water;
- 90-99% – tea, coffee, skimmed milk, greens;
- 80-89% – juices, yogurt, apples, pears, pears, oranges, carrots, juicy fruits;
- 70-79% – bananas, avocado, baked potatoes, cheese;
- 60-69% – fish, meat, ice cream, legumes, prepared pasta;
- 30-39% – bread and pastries;
- 1-9% – nuts, chocolate, cereals, biscuits;
- 0% - sugar and oils.

At the same time, a number of foods and drinks should be listed at the opposite pole, as their consumption causes accelerated fluid loss from the body. These include coffee, green and black tea, alcohol, sodas and sweet drinks.

Signs of dehydration

Dehydration is defined as a situation in which the body loses more water than it takes in, so it doesn't have enough fluid to perform its functions.

The color of your urine or the sensation of thirst are two indicators that can be used to assess how hydrated your body is. If the urine is lemonade-colored (pale yellow) then the body is sufficiently hydrated, and if the urine is apple-juice-colored (concentrated yellow) then a glass of water is recommended for hydration.

A slight sensation of thirst indicates the need for a glass of water. This indicator is not for older people as they do not feel thirsty and need to ensure a constant fluid intake throughout the day.

Signs of dehydration usually appear according to the percentage of fluid lost. So when fluid loss is between 3-4% – no significant changes occur in the body. There may only be dark urine or a slight feeling of thirst.

If fluid loss from the body is 5-8% then the following signs may occur: headaches or confusion; dizziness, fatigue and weakness; dry mouth and/or cough; frequent heartbeat but low blood pressure; swollen soles and muscle cramps and constipation. In this case, the basic recommendation is to hydrate by drinking natural mineral water, as it is necessary to make up not only for fluids but also for lost electrolytes.

If 10% or more of the body's fluids are lost, mental and physical imbalance and severe thirst occur. Concentrated oral rehydration solutions are recommended and should only be administered on the advice of a doctor.

Rules for drinking mineral water:

– within the daily allowance, especially in case of severe dehydration;
– children – only after 2 years, occasionally, poorly mineralized;
– within 3 days after opening the cylinder.

Depending on their mineralization, we distinguish waters:

– rich in mineral salts – over 1.5 g/l;
– poorly mineralized – less than 0.5 g/l;
– very poorly mineralized – below 0,05 g/l.

Recommendations:

To a large extent, the amount of fluid intake depends on: age, gender, ambient temperature and humidity, physical activity, eating style, health, etc. A general rule of thumb for fluid intake is: 30 ml/kg body weight for women and 40 ml/kg body weight for men. Recommended daily fluid intake:

– men: 3.7 liters of fluid (including 0.74 liters from food);
– women: 2.7 liters of fluid (including 0.54 liters from food);
– in pregnancy: 3 liters of fluid (including 0.6 liters from food);
– breastfeeding: 3.4 liters of fluid (including 0.68 liters from food).

There are a number of situations in which the volume of fluids is to be increased: climatic conditions, high-calorie and high simple carbohydrate diet, salt and spice intake, high altitude, physiological conditions (pregnancy, breastfeeding), physical activity, pathological conditions (vomiting, diarrhea, fever, diabetes mellitus), etc.

Factors influencing the need to eat and hydrate

1. **Biological factors**

– age and development – dietary needs vary according to the period of growth and development: child, adolescent, adult, elderly;

– infants need 117 kcal/kg body weight in the first half of the year and 108 kcal/kg body weight in the second half;

– calorie needs increase directly with age;

– teenagers: girls need 2000-2500 kcal/day and boys 2500-3000 kcal/day;

– Adults have relatively stable nutritional needs in terms of caloric value and nutritional factors. Growth ceases, and nutrition must be adapted to the other variables that mark adulthood. Nutrition fits the patterns described in the nurse's interventions.

– in people over 65 years of age the involution processes limit the protein and caloric needs; also the need of vitamins from group B is reduced; in women calcium supplementation is recommended; due to degenerative processes the diet should contain food supplements;

– physical activity - the greater the muscle activity, the higher the metabolic rate and therefore food intake;

– professional activity;

– body mass;

– health, dentition, swallowing, digestion, absorption;

– meal times and mealtimes – a regular meal program is recommended for all individuals; the interval between meals is age-appropriate;

– particular physiological states:

– pregnancy: depending on each trimester of pregnancy; the amount of protein is increased by 30g, calcium intake is increased by 50%, iodine by 25 mg, vitamin A by 20-25%, vitamin C by 30%, B vitamins and vitamin D should be provided in excess.

2. **Psychological factors:**

– affective state;

– emotions – (worry or joy) influence food intake, so some people lose their appetite and others react by eating more food;

– anxiety – feeding is closely linked to satisfying a need for security, love and well-being.

3. **Sociological factors**

– climate – in winter, individuals need more calories (warm, nutritious meals), while in summer, light meals and increased fluids are preferable;

– eating habits;

– socio-economic status – good eating habits are formed from early childhood and can sometimes be influenced by social group membership, poverty has a negative influence on the satisfaction of the need;

– religion and traditions – depending on their religious affiliation, individuals have certain food rituals: fasting followed by major holidays, prohibition of certain foods (pork, coffee, alcohol), but also preparing and serving food according to a certain ritual;

– material state;
– eating habits and personal preferences;
– culture and education – nutrition is closely linked to the traditions and superstitions of each culture.

Demonstrations of independence:

1. **Oral cavity**
   – good teeth;
   – dentures fitted and in good condition;
   – pink and moist mouth;
   – pink tongue;
   – pink and adherent gums;
2. **Chewing**
   – easy, effective, slow;
   – mouth closed;
2. **Swallowing reflex** present;
3. **Digestion**
4. **Eating habits**
   – meal program (3 meals and 2 snacks);
   – 10 hours night rest;
5. **Appetite**
   – appetite – a pleasant sensation, translated as the desire for food;
6. **Hunger**
   – an unpleasant sensation, translated as the urge to eat;
7. **Satiety**
   – a feeling of fullness, experienced by the individual when the need for food is satisfied;
8. **Hydration**
   – fluid intake as needed;
9. **Sense of taste**
   – must be present;
10. **Food and fluid intake**
    – in quantity and quality appropriate to age, activity;
11. Healthy **eating habits**.

Nurse interventions to maintain independence in meeting need

1. Nurse calculates your calorie needs over 24 hours, based on activity:
   - at rest, 25 cal./kg body/ 24 h;
   - light activity: 35-40 cal./kg body/24h;
   - average activity: 40-45 cal./kg body/24 h;
   - intense activity: 46-60 cal./kg body/24 h.

1. by age:
   - increase calorie needs by 20-30% for children;
   - 10-15% for the elderly;
   - in women is 10% lower than in men;
   - in febrile states the caloric requirement is increased by 10%;
   - in athletes, during pregnancy, breastfeeding, calorie requirements are increased by 30%;
   - calculate your balanced diet;
   - ensures balance between energy and non-energy elements (water, vitamins, minerals);
   - ensures balance between the fundamental nutritional principles as follows: 50-55% carbohydrates, 10-15% protein, 30-40% lipids.

2. ensures exchange between products of animal and plant origin:
   - 60% animal protein;
   - 40% plant protein;
   - 65% lipids of animal origin;
   - 35% vegetable lipids.

3. ensures the balance between acidity and alkalinity;

4. calculates the number of calories/kg body/24h in physiological states: athletes, pregnancy and breastfeeding: + 30%;

5. checks the food ration to include foods from all food groups of the food guide, knowing the energy value of the food principles:
   - carbohydrate: 4.1 cal. by metabolizing one gram;
   - lipids: 9.3 cal. by metabolizing one gram;
   - protein: 4.1 cal. by metabolizing one gram.

6. Nurse investigates an individual's eating habits and tastes;
   - chooses foods according to the patient's preferences, habits and needs;

– replaces one food with another, if necessary, according to the quantitative and qualitative equivalence of the different food principles.

Dependency in need satisfaction

When this need is not met, the following **dependency problems** arise:

1. inadequate nutrition and hydration through deficiency (less than the body needs);
2. Inadequate nutrition and hydration through excess (more than the body needs);
3. digestive intolerance.

Physical sources:

– altered mucosa of the digestive tract and intestinal peristalsis;
– alteration of the liver parenchyma or bile ducts;
– obstructions, tumors, strangulations;
– nasogastric tube;
– overload: alcohol poisoning, drug abuse;
– pain;
– metabolic, electrolyte, endocrine, neurological imbalances.

Psychological sources:

– mental illness;
– thought disorders;
– anxiety;
– stress;
– crisis situations;
– anorexia – lack of appetite;
– polyphagia – the excessive need to eat;
– dysphagia – difficulty swallowing.

Social sources:

– hunger;
– insalubrity;
– malnutrition – unsatisfactory nutrition;
– income;
– social taboos and interactions;
– food customs, traditions, religion.

Inadequate nutrition and inadequate hydration through deficiency

Inadequate nutrition: less than the body needs. Deficiency is an insufficient intake of nutrients, an insufficiency in quantity and quality, which affects the nutritional status of the individual. A number of factors are involved, including: poor eating habits, organic and mental illness, alcohol intoxication, drug intoxication, etc. Insufficient food and fluid intake leads to disturbances in the functioning of all the body's organs and systems (malnutrition, dehydration).

1. **Manifestations of dependency:**
   - anorexia – lack of appetite;
   - dysphagia – difficulty swallowing; difficulty swallowing;
2. **Oral cavity condition:**
   - missing teeth, tooth decay, gingivitis;
   - ulcerations of the lips, oral mucosa;
   - loaded tongue, sabural deposition, glossitis;
   - difficulty chewing;
3. **Skin condition:**
   - dry skin, loss of elasticity;
   - acne, dermatitis;
4. **Digestion:**
   - difficulty digesting and absorbing food;
   - nausea, vomiting;
   - regurgitation;
   - aerophagia – removal of air through the mouth;
   - pyrosis;
5. **Eating habits:**
   - food preparation mistakes;
   - mistakes in food choices;
   - unsatisfactory meal times;
   - loss of habituation through changing environmental conditions;
6. **Insufficient hydration** – low fluid and mineral salt intake;
7. **Reduced amount of food** – the amount of food does not meet the caloric needs of the patient;

8. **Hydro - electrolyte imbalance:**
   - weakness;
   - dry skin and mucous membranes;
   - concentrated urine;
9. **Dehydration** – turgor – present, dry skin and mucous membranes, hypotension, tachycardia;
10. **Malnutrition** – poor nutrition, inadequate food;
11. **Cachexia** – extreme weakness in the terminal phase of some diseases;
12. **Weight loss**;
13. **Apathy** – a state of indifference, lack of interest in any activity and world around you;
14. **Decreased energy** – exercise intolerance;
15. **Edema** – accumulation of serous fluid in the tissues.

Nurse interventions in the patient with inadequate nutrition deficit

Objectives – Autonomous and delegated interventions.

The patient to achieve a feeling of well-being without nausea and vomiting:

- places the patient in a semi-recumbent, sitting or supine position, with the head to the side;
- protects the underwear with muslin and underpads, depending on the position of the patient,
- helps the patient during vomiting, supporting him, teaching him to take deep breaths; serves him with a glass of water to rinse his mouth;
- applies medication: antiemetics, vitamins, mineral salts;
- encourages the patient;
- reduces or stops fluid and food intake.

The patient to be hydro-electrolyte balanced:

- parenteral nutrition, instituting glucose infusions (5%, 10%, 20%, 33%, 40%); protein hydrolysates and amino acid mixtures, vitamins and electrolytes, as indicated by the physician;
- calculates calorie counts for different pathological states; add 13% for each degree of temperature above 37°C; 20-30% for agitation, convulsions, cell destruction;

- after the vomiting stops, gradually rehydrate the patient with small amounts of cold fluids by spoon;
- explores the patient's tastes and eating habits;
- makes the patient aware of the importance of diet in maintaining good health;
- takes stock of fluids ingested and eliminated.

The patient to be nutritionally balanced:

- explores the patient's preferences on allowed and forbidden foods;
- serves the patient with food at a moderate temperature, at regular times and presented appealingly;
- teaches the patient the food categories in the food guide and the quantitative and qualitative equivalences of the food principles in order to substitute one food for another:
- 100g of carbohydrates are contained in: 100g sugar; 120g rice; 135g noodles; 200g bread; 450g dried fruit; 200g dried vegetables; 500g potatoes; 650g fresh fruit;
- 100 g protein is made up of: 3000 ml milk, 450 g white meat (poultry, veal), 650 g fish, 400 g cheese;
- 100 g lipids are contained in the same amount of vegetable oil, butter, lard;
- lets the patient choose the food according to his or her taste, respecting the contraindications of the diet.

The patient to be mentally balanced:

- provides a warm, comfortable climate;
- encourages the patient;
- explains the purpose of the interventions.

Inadequate nutrition and hydration through over-hydration

Inadequate nutrition: more than the body needs. Excess is food intake that is excessive in quantity and quality. All Indi visii who consume nutrients in excess of the body's energy needs become overweight and obese. Excess weight has repercussions on the functioning of the body's organs and systems. An individual may overeat for a number of reasons: stress, anxiety, loneliness, psychological disorders, endocrine imbalance or other organic disorders.

Manifestations of dependency:

- **bulimia** – an exaggerated feeling of hunger: eating out of control;
- **polyphagia** – an exaggerated need to eat and lack of satiety;
- **nausea and vomiting** – some or all of the gastric contents are eliminated by mouth.
- **Obesity** – the body mass index (BMI), a measurement obtained by dividing a person's weight in kilograms by the square of that person's height in meters, is greater than 30 kg/m2.

Nursing interventions in the patient with inadequate food intake through overfeeding

Objectives – Autonomous and delegated interventions.

Patient's body weight according to height, age, sex:

- the nurse explores the patient's tastes in different food categories;
- teaches the sick person the energy value of food and what is needed according to physical activity and age;
- makes up a low-calorie diet;
- it aims for the patient to eat only the foods included in the diet;
- follows the schedule and distribution of meals;
- tracks your body weight regularly.

Increased physical activity:

- makes the patient aware of the importance of moderate physical activity;
- sets up a program of physical activity, according to taste and ability, together with the patient.

The patient to be mentally balanced:

- nurse allows the patient to express his/her emotions and feelings;
- teaches him ways to relax;

Digestive intolerance

Manifestations of dependency:

- nausea – feeling of vomiting, followed or not by vomiting;
- spillage;
- physical fatigue;
- pale skin;

- inappetence;
- bloating;
- regurgitation – reflux of small amounts of fluid from the gastric cavity back into the oral cavity.

Sources of difficulty:

- upper limb disorders, upper limb injuries;
- stress, anxiety, confusion, mental disorders;
- visual impairment;
- deformity of hand joints, paralysis;
- ill-fitting dentures;
- loneliness;
- endocrine or organic imbalances.

Other dependency issues:

- Difficulty or inability to stick to a diet.

Manifestations of dependency:

- do not drink or drink prohibited liquids;
- skip meals or eat forbidden foods;
- dizziness;
- pallor:
- malaise;
- constipation.

Sources of difficulty:

- different eating habits linked to culture and religion;
- stress, anxiety, confusion;
- lack of knowledge of foods that are prerequisite or prohibited in the patient's condition;
- food disgust;
- poor eating habits in the family;
- unable to procure or prepare their own food;
- food intolerance;
- not accepting the disease.

Nurse interventions

The patient to follow the diet alone:

- helps the patient feed;

– explains the necessity of the diet;
– administers the medication prescribed by the doctor.

Refusal to feed/ hydrate

Manifestations of dependency:

– refusing to eat;
– refusing to drink.

Sources of difficulty

– major depression;
– anxiety, stress;
– unfavorable attitude;
– entourage;
– insalubrity;
– weakness;
– loss of self-esteem;
– thought disorders;
– loneliness (divorce, death);
– social losses (unemployment, etc.).

Nursing interventions

1. The patient to express the wish to eat and drink alone
2. The patient to have mental and physical comfort with the help of the permanent nurse – who stimulates the patient to express anxiety, emotions that caused the decision of negativism;

– works with caregivers in situations of loneliness in order not to leave the patient alone;
– explains to the patient the need to drink and eat, boosts the patient's morale, restores the patient's zest for life;
– administers the medication prescribed by the doctor (antidepressants).

7.3. The need to eliminate

Author: *Ecaterina Scoarta*

Elimination is the body's need to get rid of unhelpful, harmful substances resulting from metabolism.

The excretion of waste *occurs* through several pathways:

- ✓ renal apparatus – urine;
- ✓ skin – perspiration – perspiration;
- ✓ respiratory system – breathing;
- ✓ digestive system – stool;
- ✓ female genital tract – menstruation;
- ✓ in **pathologic conditions,** elimination occurs in the digestive tract in the form of vomiting and respiratory tract - sputum.

Overview

Keeping the composition of the internal environment constant is achieved by the process of homeostasis. All changes in extracellular volume lead to changes in the composition of cellular fluids, hence the importance of keeping the composition of the internal environment constant.

The kidneys, being the main organs of homeostasis, maintain the chemical composition of body fluids at a normal level, maintain the water, hydro-electrolyte-acid-base balance of the internal environment and rid the body of toxic products resulting from metabolism.

Substances useful to the body (sodium and water) are absorbed by osmosis. Through its exceptional role, the skin complements renal elimination. An important role is played by the lungs, which control CO_2 and O_2. The body also has to get rid of digestive waste (cellulose fibers, bile pigments, sloughed cells from the digestive tract, etc). Other unhelpful substances also need to be eliminated; for example, in women, from puberty to menopause, a menstrual blood secretion is excreted at the end of each menstrual cycle if the egg has not been fertilized.

Factors influencing need satisfaction

1. Biological factors:

- *Diet* – the quantity and quality of food ingested by the individual influences the need for elimination;
  - good hydration and a diet rich in fiber (vegetables, fruits, cereals) facilitate bowel and bladder elimination;
  - meals taken at set times favor the rhythm of elimination.
- *Exercise* – physical activity improves muscle efficiency, strengthens abdominal and pelvic muscles, which play an important role in bowel elimination;
- *Age* – has an important role in satisfying the need if we take into account sphincter control
  - in children, control is achieved in 2-3 years;
  - in older people, decreased abdominal muscle tone can cause lack of control of elimination;
  - in men, hypertrophy of the prostate gland leads to micturition disorders.
- *Bowel elimination program:*
  - the regularity of the elimination program is a factor in meeting this need;
  - the time chosen for defecation can vary from individual to individual.

2. Psychological factors:

- *stress;*
- *anxiety;*
- *Strong emotions* – can change the frequency, quantity and quality of urinary and bowel elimination;

3. Sociological factors:

- social norms – each society sets its own hygiene measures so that individuals respect the cleanliness of public places;
- education;
- culture.

Independence in meeting need

URINE: an aqueous solution, through which substances resulting from intermediate protein metabolism, which are useless and toxic for the body, are eliminated

General: Toxic substances are eliminated from the body through urine. These substances are excreted in aqueous solution together with mineral salts and other de-assimilating substances that are not needed by the body. In addition to the kidneys and the digestive tract, the liver, the internally secreting glands, the functional state of the circulatory system – all of which are influenced by the activity of the nervous system – are involved in the elimination mechanism. This shows the interaction between the need to eliminate and other basic needs.

Terminology:

– micturition = emission of urine, conscious physiological act of elimination.
– diuresis = the amount of urine eliminated from the body over 24 hours.

Manifestations of independence

quantity	varies with age: – newborn 30-300 ml/24 h – children 500-1200 ml/24 h – adult 1200-1400 ml/24 h
frequency of urination	– newborn - frequent urination – child 4-5/day – adult 5-6/day – elderly 6-8/day
the rhythm of urination	– 2/3 urination during the day, 1/3 at night
urine colour	– light yellow to dark yellow. The more dilute the urine is, the lighter it will be, and vice versa (dark yellow to brown). • change according to food: – dark colour = meat-rich diet; – light colour = vegetarian; • medicines change colour like this: – pink, brick-red = pyramid treatment; – blue-green = methylene blue treatment; – brownish-red or brownish-black = treatment with quinine or salicylic acid;

smell of urine	– broth = fresh urine; – ammoniacal = after some time due to alkaline fermentation;
urine reaction	normal = acid reaction = pH between 4.5-7 – The reaction of urine depending on diet: a meat-rich diet - acidifies the urine, a vegetarian diet - decreases the acidity of the urine. ***Note.*** The hyperacidic or alkaline reaction favors the precipitation of dissolved substances in the urine and the formation of calculi in the urinary tract.
appearance of urine	– normal = clear, transparent at first. After a while it can become normally cloudy - due to clotting of mucin and entrained epithelial cells from the urinary tract and mucus from the genitals.
urine density	– is determined immediately after emission, because cooling changes the density; – normal 1010-1025 - mixed regime; at 15°C (lower or higher temperature changes the density).

STOOL = food remains undergoing digestion, eliminated from the body by the act of defecation. The stool is made up of:

- the residues left after digesting food;
- desquamated cells on the surface of the digestive tract and digestive glands;
- excretory products of the digestive tract and adnexal glands;
- large numbers of microbes.

Terminology: – defecation = elimination of feces through the anus.

Manifestations of independence

frequency	– normal for adults - 1-2 a day or once every two days – 1-2 stools per day in newborn
timetable	– rhythmically, at the same time of day, in the morning after waking up
quantity	– daily 150-200 g feces
consistency	– pasty, homogeneous
form	– cylindrical, 3-5 cm in diameter, variable length

colour	– brown, in adults, due to stercobilin; • Diet-related colour change: – light-yellow = milk diet; – dark brown = meat diet; – black = prepared foods containing blood; – green = green vegetables; – characteristic food colour = blackberries, chocolate, blueberries; • Change color depending on the medication: – brown-black = bismuth; – greenish-black = iron; – white = barium; – matte black = charcoal;
smell	– fecaloid - differs from individual to individual.

For toddlers

colour	– first 2-3 days after birth = dark green-brown (meconium) ➢ In infants, the appearance and color change depending on how they are fed. – golden-yellow = breast-fed infant, in contact with air, oxidizing bilirubin; – turns greenish or green; – light yellow = artificially fed sugar; – brown = after introducing flour into the diet;
number	– 3-4 times a day until the 5th month when it is reduced to 2-3 times a day. If the infant is artificially fed, the number of stools is 1-2 per day.
smell	– slightly sour, acid reaction = breast-fed infant; – fad, alkaline or neutral reaction = artificial nutrition.

TRANSPIRATION = the physiological phenomenon by which the body intensifies its heat loss and excretory function through the sweat glands.

Terminology – sweat = aqueous solution, consisting of water 990 g‰ and 10 ‰ dry residue (urea, urates, fatty acids, volatile organic acids, mineral salts).

Manifestations of independence

reaction	– acid pH = 5.2 or slightly alkaline
quantity	– minimum to maintain the moisture in the folds
smell	– varies according to diet, climate and an individual's hygiene habits
perspiration	– insensible water loss through evaporation through the skin and exhalation Composition of exhaled air: – O_2 - 16 % – CO_2 - 3% CO – N - 74% – H_2O - 7% H_2O

MENSTRA = temporary or periodic loss of blood through the genitals - occurs at puberty, disappears at menopause and during pregnancy.

Manifestations of independence

rhythm	– 28-35 days
duration	– 3-5 days
look	– mucus mixed with blood and cell debris; – doesn't clot;
colour	– dark red at first, then light red
quantity	– 50-200 g
smell	– disagreeable
developments	– no pain, mild physiologic embarrassment.

Nursing interventions to maintain independence in meeting the need to eliminate

– investigates the patient's elimination habits;
– plans the disposal program, taking into account its activities;
– plans exercise;
– teaches him relaxation techniques;
– investigates the patient's eating habits;
– recommends consuming foods and fluids that promote elimination.

Dependency in need satisfaction

In pathological conditions there are large fluid losses through: polyuria, diarrhea, vomiting, drainage, diaphoresis, profuse expectoration.

Sources of difficulty that lead to unmet need may be the following (depending on the problem – some examples):

Physical sources	– alteration of the intestinal lining (diarrhea, constipation); – decreased intestinal peristalsis (constipation); – weakening or relaxation of the sphincters (incontinence); – lack of sphincter control (incontinence); – alteration of nerve centers (incontinence); – stroke (incontinence); – bladder spasms (urinary retention); – urinary tract abnormalities (urinary retention, inadequate urinary elimination) – alteration of the urinary tract (inadequate elimination); – alteration of the renal parenchyma (inadequate elimination); – tumors (constipation); – food and drug intoxication (diarrhea, urinary retention) – metabolic, electrolyte, endocrine, neurological imbalance (inadequate urinary elimination, diaphoresis); – pain (inadequate urinary elimination);
Psychological sources	– anxiety (diarrhea, constipation...); – stress (diarrhea, constipation...); – crisis situation (inadequate urinary elimination, diaphoresis, constipation); – thought disorders (urinary and fecal incontinence);
Sociological source	– water pollution (diarrhea); – altered food (diarrhea); – lifestyle changes (constipation); – inadequate working hours to meet the need (constipation); – environmental unhealthiness (inadequate urinary elimination); – too high ambient temperature (diaphoresis);
Lack of knowledge	– lack of knowledge; – insufficient knowledge of others, of the environment.

When the need for elimination is not satisfied, a range of *addiction problems* arise*:*

1. inadequate quantity and quality of urinary elimination;
2. urinary retention;
3. incontinence of urine and feces;
4. diarrhea;

5. constipation;
6. vomiting;
7. inadequate menstrual elimination;
8. diaphoresis;
9. expectoration;
10. dehydration.

Quantitatively and qualitatively inadequate urinary elimination

Manifestations of dependency

PATHOLOGICAL CHANGES IN DIURESIS	
Poliuria	– urine output greater than 2500 ml/24 h. It can be fleeting or lasting.
Transient, durable or permanent	➢ Appear: – during the outbreak of infectious diseases (pneumonia, epidemic hepatitis, etc.); – after renal colic, attacks of angina pectoris, epilepsy and hysteria; – during the period of resorption of edema, transudates and serous exudates; – in renal sclerosis, when the kidney has lost its ability to concentrate. ➢ It can grow up to 5-6 liters in 24 hours: – in diabetes mellitus: the elimination of large amounts of glucose in the urine requires a large amount of water (according to osmotic laws); – in diabetes insipidus; – lack of secretion of pituitary antidiuretic hormone prevents tubular reabsorption of water. The amount of urine can reach up to 10-30 liters per day. – in pyelitis, pyelonephritis, renal tuberculosis (defense reflex character of the body).

Oliguria	– urine excretion less than 800 ml/24 hours. Oliguria can be due to renal and extrarenal causes. Appears in: – conditions accompanied by dehydration of the body by: ● profuse sweating ● vomiting; ● severe diarrhea; – heavy bleeding; – the period of formation of serous collections; – circulatory insufficiency with edema formation; – the acute period of infectious diseases (pneumonia, hepatitis, etc.); – acute glomerulonephritis accompanied by edema;
Anuria	– lack of urine in the bladder can be due to kidney and extrarenal causes. Appears in: – acute glomerulonephritis, toxic nephrosis; – widespread burns; – traumatic and surgical shock; – lumbar trauma; – the engagement of a stone in one of the ureters.
URINARY OUTPUT DISORDERS	
Polakiuria	– very frequent urination, very little urine output. Causes can be: – irritant actions on the bladder mucosa – intravesical and neighboring processes: cystitis, tuberculosis and bladder neoplasm, bladder calculosis, pelvic inflammations, uterine disorders, urethritis, prostatitis, – hyperexcitability of the bladder mucosa in neuropathy;
Nicturia	– reversal of the ratio between the number of micturitions and the amount of urine passed during the day versus the amount of urine passed during the night; – occurs in left ventricular failure - it is due to the fact that during the day the heart has not ensured that the necessary amount of blood has passed through the kidneys.
Disuria	– passing urine is painful and very difficult. Appears in: – acute inflammation of the urethra; – urethral strictures; – edema of the urethral mucosa; – prostate hypertrophy, etc

OTHER MANIFESTATIONS OF DEPENDENCY	
Hematuria	– presence of blood in the urine - light red, dark red or reddish-brown. Sometimes in case of hematuria the urine is cloudy similar to meat washing.
Albuminuria	– protein in the urine
Glycosuria	– the presence of glucose in the urine
Hypersthenuria	– highly concentrated urine (increased urine density).
Hypostenuria	– very dilute (low-density) urine = in kidney disease when the kidney loses its ability to concentrate.
Isosthenuria	– low-density urine is maintained at the same values at all times regardless of the regimen.
Note. Quantity, color and density are closely related. – in polyuria = light color = low density (exception, in diabetes mellitus, although it is polyuria and the color is light, the density is high); – in oliguria = dark color = high density.	
Edema	– accumulation of serous fluid in the tissues, manifested by an increase in volume of the edematized region, obliteration of the natural creases, loss of elasticity of the edematized tissue, with the preservation of traces of digital pressure (the "dildo" sign); the skin is pale, shiny and shiny.
Cloudy urine	– the urine is pathologically cloudy due to mineral salts, pus or microbes.
Urine with ripe fruit or chloroform odor	– in diabetes, due to the presence of acetone.
Low back pain	– lower back pain.
Intense thirst	– is a constant and intense need to drink fluids.
Nausea and vomiting	– nausea is the sensation of vomiting, and vomiting is an uncontrollable reflex to orally expel gastric contents.

Nursing interventions
Patient with quantitative and qualitative inadequate urinary elimination

OBJECTIVE	NURSING INTERVENTIONS, AUTONOMOUS AND DELEGATED
The patient to be hydro-electrolyte and acid-base balanced	– the nurse does daily water balance, conscientiously measuring intake and excretion; – weighs the patient daily; – corrects fluid imbalance by hydrating or reducing fluid and electrolyte intake, depending on serum and urine ionograms; – corrects the acid-base imbalance, depending on the alkaline reserve, on the doctor's indication;
The patient not to have skin, respiratory, urinary complications	– collects urine for chemical and bacteriologic examinations; – administers urinary antiseptics, sulfonamides, antibiotics, according to the antibiogram, on the doctor's orders - ensures rigorous body hygiene; – serves the patient in bed (where appropriate) with urinal and basin; – changes bed linen and underwear as often as needed;
The patient to be mentally balanced	– provides a warm atmosphere, responds promptly and solicitously to calls – encourages the patient to express their thoughts and feelings about the addiction problem (communication plays a very important role).

Urinary retention - ischiuria

Ischiuria or urine retention is the inability of the bladder to empty its contents. It should not be confused with anuria, which is the lack of kidney secretion. Ischiuria may be due to an obstruction in the pathway of urine elimination, such as: scar strictures, calculi enclaved in the urethra, prostatic hypertrophy or other neighboring processes, which compress the pathway for urine evacuation, or a paralysis of the bladder or sphincters, as in myelitis, tabes, poliomyelitis, spinal trauma, or a tanzitoritic paresis in the course of severe infections (e.g. typhoid fever, meningitis, encephalitis, septicemia, after intra-abdominal surgery) and coma.

Urinary retention causes extreme distention of the bladder, which will pump, a situation that will be evidenced by palpation above the symphysis

pubis, while in anuria the bladder remains empty. As a result of the increased pressure in the bladder, if there is no mechanical obstruction, the urethral sphincter collapses and urine begins to pass drop by drop. This phenomenon is called paradoxical ischiuria or regurgitant (overflow) incontinence.

Manifestations of dependency

Vesicular lobule	– bladder distension above the pubic symphysis caused by urinary retention
Micturition	– absent
Polachiuria	– frequent, small amounts of frequent urination (too full)

Nursing interventions
Patient with ischiuria - urinary retention

OBJECTIVE	Nursing interventions, autonomous and delegated
The patient to have spontaneous urination	– checks for the presence of the bladder - try to stimulate evacuation, otherwise: ● inserts the warm basin under the patient; ● puts warm compresses (butiota) on the pubic area; ● leaves the tap running (so that the sick person can hear it); ● places the patient's hands in warm water; – performs a bladder catheterization for urine output on doctor's orders.
The patient to have psychological balance	– teaches the patient that there needs to be a relationship between the needs to drink, eat, exercise and eliminate in order to set their own schedule of intake and elimination; – teaches the patient the correct position for easy urination and complete emptying of the bladder; – reassures the patient and encourages them to express their feelings about their problem; – provides a warm, comfortable climate.

Urinary and fecal incontinence

Urinary and faecal incontinence can result from a number of conditions (urinary or bowel infection), spinal cord trauma, loss of

consciousness, impaired sphincter activity, increased abdominal pressure, obstetric injuries, etc. Children and elderly people are prone to incontinence either through lack of sphincter control or through the disease process. A particular form of urinary incontinence in children is nocturnal enuresis, with multiple causes requiring complex care.

Manifestations of dependency

Urinary incontinence	– involuntary and unconscious urination. Appears in: – spinal cord injuries; – end of epileptic seizures; – neurological disorders; – weakening of sphincter function; – trauma;
Enurezis	– involuntary, unconscious, nocturnal urination, which is more common in children with neurotic disorders after the age of 3;
Fecal incontinence	– involuntary and unconscious leakage of feces.
Skin irritation of the anal region	– inflammation of the integuments in the anal region, and depending on the time of evolution, it can be swelling, hyperemia, desquamation, etc.

Nursing interventions

Patient with incontinence of urine and feces

OBJECTIVE	NURSING INTERVENTIONS, AUTONOMOUS AND DELEGATED
The patient's skin and mucous membranes to be intact and clean	– changes bed linen and underwear after each elimination; – if possible, recommends wearing underpants with padding that absorbs urine and doesn't cause unpleasant odor and skin irritation; – ensures rigorous local hygiene after each disposal; – applies protective cream; – installs a bladder catheter, as directed by your doctor;
The patient to regain sphincter control	– ensures adequate fluid intake, depending on the water balance (higher in the first half of the day); – sets up a disposal schedule; – forms elimination habits at fixed times (at first, at a shorter interval, and as sphincter control is achieved, the interval increases) – wakes the patient from sleep to urinate;

	– teaches the patient the proper position that favors complete emptying of the bladder; – aims to increase the pressure by massaging the bladder or sitting and bending forward, which helps trigger urination and pass the remaining urine; – teaches the patient exercises to strengthen the perineal muscles; – contraction of the posterior muscles of the pelvic floor, as to prevent defecation; – contractions of the anterior muscles of the pelvic floor, as to stop urination; – muscle contraction is done before and after urination for 4 seconds, then their relaxation is repeated 10 times - 4 times a day, or more often if it is useful; – stopping the urine stream during micturition and resuming elimination several times; – increase of bladder capacity by waiting for about 5 minutes from the sensation of urination to the time of elimination.
The patient to be mentally balanced	– the nurse ensures an environment where the patient's privacy is respected; – encourages the patient to express their feelings about the problem; – shows sympathy, tolerance, patience, responds solicitously – administers symptomatic medication as directed by the doctor.

Diarrhea

Accelerated intestinal transit causes diarrhea. When the number of stools is too high, significant losses of water and electrolytes occur, leading to a hydro-electrolyte imbalance and prolonged diarrhea.

1. *Determinants:*
   - exacerbation of intestinal peristalsis;
   - increased intestinal secretion;
   - decreased resorption;
   - food mistakes;
   - stress;
2. *Triggers:*
   - nervous causes;
   - inflammatory causes;
   - intestinal contents with excitatory effect (chemical or mechanical);

Manifestations of dependency

Frequency	large number in 24 h: – 3-6 stools/day in enteritis and enterocolitis, – 20-30 stools/day in dysentery syndrome; – 80-100 chairs/day in cholera;
Consistency	– low, soft, mushy, semi-liquid stools; – watery, after saline purgatives;
Quantity	– increased in achlorhydric gastric diarrhea; – low, very low in dysentery, 10-15 g.
Colour	– golden yellow, in diarrhea (depending on the speed of intestinal transit, bilirubin does not have time to reduce, due to accelerated intestinal transit); – green, when bilirubin oxidizes in the large intestine; – clay-white - mechanical jaundice, due to lack of bile pigments; chronic pancreatitis due to large amounts of undigested fat; – hypercolored - dark brown = hemolytic jaundice; – pitch-black, soft and shiny = hemorrhages in the portion upper digestive tract; – stool mixed with fresh blood = bleeding in the lower portion of the digestive tract;
Smell	Depending on fermentation and putrefaction processes in the large intestine: – acid = excessive fermentation; – putrefactive = exaggerated putrefaction; – rancid = undigested fat (steatorrhoea); – very fetid = cancer of the colon and rectum; – spoiled cabbage = colibacillus infections;
Special appearance with abnormal elements	Looks similar to: – melon juice or lentil soup = typhoid fever; – rice sods = poisoning, lamblia, cholera; – cow dung = in colitis; Containing pathological elements: – mucus, pus, blood = ulcerative colitis, rectal or intestinal cancer, dysentery; – undigested muscle tissue = creatorea - in gastric achilles, chronic pancreatitis; – stools with intestinal parasites or parasite eggs;
Cramps	– painful, involuntary contractions of the abdominal muscles
Colic	– pain caused by exaggerated peristaltic movements
Local pain	– pain in the anus and irritation of the perianal teguments
Signs of dehydration	– dry skin and mucous membranes, tiredness, weakness; – nausea and vomiting.

Constipation

Constipation is characterized by infrequent stools one every 2-4 days, or more infrequent - sometimes even with a regular rhythm; but at intervals greater than physiological. The feces are of regular consistency, low in volume, without digestible food debris. Constipation may have functional (accidental or habitual), mechanical (intestinal stenosis, colon cancer), sigmoid activity disturbances or may be symptomatic (in pelvic, gastrointestinal, esophageal, endocrine disorders). Lifestyle, insufficient hydration, a diet low in residues, some medications, strong emotions can cause constipation.

Ileus is characterized by complete suppression of the elimination of faeces and gas. Ileus can have functional causes, namely: paralysis of the intestinal wall musculature, when peristalsis is abolished, or intestinal wall spasm, when intestinal contractions are so strong that the bowel is immobilized in the form of rigid tubes. In these cases, we speak of dynamic ileus, as opposed to mechanical ileus, which is caused by mechanical causes such as occlusion, intestinal obstruction, strangulation.

Manifestations of dependency

Frequency	– stool every 2-4 days due to delayed transit; – complete suppression of the elimination of feces and gas (ileus);
Schedule	– loss of the usual evacuation schedule
Quantity	– reduced constipation; – large (several kilograms), in abnormalities of colon development (megadolocolon);
Consistency	– dry, raised (scibales, coprolite)
Form	– hard, olive-sized balls in spastic constipation; – abundant fecal mass in atonic constipation; – conglomerated, multiglobular bile, when fecal matter has stagnated long in the rectum.
Colour	– dark
Cramps	– painful, involuntary, transient, involuntary contractions of the abdominal muscles
Weather	– accumulation of gas in the intestine due to insufficient absorption, excessive gas production, a diet high in cellulose, or aerophagia;
Flatulence	– frequent elimination of gas from the bowel

Have me	– painful sensation of defecation without elimination of feces
Fecalom	– accumulation of feces in the rectum
Anorexia	– lack of appetite, dislike of food
Headache	– localized pain anywhere in the head
Irritability	– the property to irritate easily

Note: Pathologic stool changes in young children can be:
- Muco-granular – inhomogeneous semi-liquid consistency with solid particles (granules). Mucus consisting of a stringy, gelatinous substance.
- liquid-semi-liquid – has a foamy character – due to fermentative processes in the intestine;
- muco-purulent – pus is eliminated, stool is very fetid;
- muco-bloody – contains blood.

Nursing interventions

Patient with diarrhea or constipation

OBJECTIVE	Autonomous and delegated interventions
The patient to have bowel transit within physiologic limits	➢ *in constipation* causes the patient to swallow sufficient fluids: – recommends foods high in residues; – establishes a regular elimination schedule with the patient, based on their activities; – leads the patient to exercise regularly; – tracks and notes on the observation sheet the consistency and frequency of stools – performs simple or oily evacuating enema if necessary; – administers laxative on indication; ➢ *in diarrhea* prepares the patient for endoscopic examinations: – the first 24-48 hours of the first 24-48 hours, the diet is hydric; – the nurse serves the patient with unsweetened tea (mint, horn horn, chamomile) carrot soup, rice juice; – gradually introduces small amounts of lean, boiled meat, cottage cheese, toasted white bread, strained soups, vegetables – after 4-5 days, switch to a more complete diet; – administers on doctor's indications, symptomatic, spasmolytic, antimicrobial, digestive ferments, sedatives;

The patient to have clean and intact perianal mucosa and integument	– cleans and dries the anal region after each stool; – apply protective creams; – cleanse the anus several times a day and disinfect with 2-3% boric acid;
The patient to satisfy other basic needs	– provides bed rest when the general condition is altered; – keeps body temperature constant (energy loss occurs); – warms the patient with heaters, blankets, electric pillows; – protects the bed with the shad and moss; – serves the patient with a basin;
Patient to be hydroelectrolyte balanced	– hydrates the patient orally and through infusions, aiming to replace water and electrolyte losses; – collects blood for blood culture and stool for stool culture; – monitors vital and vegetative functions and notes them in the observation sheet; – calculates how much fluid is ingested and infused and how much is excreted.
The patient must be mentally balanced	– shows understanding and patience, showing consideration for the patient's modesty; – reassures and encourages them to express their emotions and feelings about their condition.

Vomiting

Vomiting is the evacuation of stomach contents through the mouth. Vomiting is a reflex act, centered in the medulla oblongata, and is a means of defense against stomach contents that are harmful to the body. When vomiting, the stomach wall muscles, abdominal muscles and diaphragm contract simultaneously. At the same time, the pylorus closes and the stomach contents, under pressure, reach the cardia, which is now opening. Following intrastomachal pressure, the gastric contents pass into the esophagus, then into the pharynx, the tongue is pulled down, the nasopharynx and larynx close, and the stomach contents are evacuated through the mouth. Vomiting is not to be confused with regurgitation, which is a reflux of food from the stomach or esophagus into the mouth, without nausea and without contraction of the abdominal muscles. Vomiting is also not to be confused with nasal discharge – which is the

expulsion of massive collections of pus or exudate through the airways arising from a lung abscess, hydatitic cyst, etc. The expulsion is explosive and profuse.

The causes of vomiting can be:

- **of central (cerebral) origin** = the bulbar center is directly influenced by increased cerebrospinal fluid pressure = increased intracranial pressure (meningitis, encephalitis, tumors, etc). They occur without any effort, are not preceded feelings of nausea and altered general state.
- **of peripheral origin** = excitation of the bulb comes from the periphery. It is of digestive or urogenital origin, infectious diseases, metabolic and endocrine disorders**,** chemical agents, drugs, etc.

  Vomiting of peripheral origin presents with preceding symptoms:
  - nausea;
  - profuse salivation;
  - dizziness;
  - tachycardia;
  - headaches.

Manifestations of dependency

Frequency	– occasional (food poisoning or acute infectious diseases); – common (pyloric stenosis); – unbearable (pregnancy and mental illness);
Schedule	– morning (pregnant women and alcoholics); – early postprandial (neuropaths) or late postprandial (ulcers and gastric cancer);
Quantity	– large, in pyloric stenosis (to the food consumed, add the exaggerated secretion of the gastric glands and the leftovers from previous meals) – small (a few tens of ml);
Content	– food; – mucous, watery (ethyl and pregnant); – fecaloids (intestinal obstruction); – gallbladder (cholecys; – purulent (phlegmonous gastritis); – bloody;

	Blood can come from: – the stomach (ulcers, gastric cancer, chronic gastritis, poisoning with caustic substances, etc); – neighboring organs (lungs, esophagus, nose, gums, etc). The blood is swallowed and then eliminated by vomiting. In the stomach, with the blood digested - the brownish-brown "coffee grounds" (coffee yeast) color of the sputum appears. This color is due to hematin hydrochloride - which arises from hemoglobin under the influence of hydrochloric acid in the stomach. If the hemorrhage is profuse, the evacuation of the stomach contents is faster, the blood does not have time to be digested, then the vomit will be made up of fresh-red blood.
Colour	– greenish-yellow (bile vomiting); – red (hematemesis); – dirty yellow (occlusions) – brown - looks like coffee grounds (gastric cancer);
Smell	– bland, sour, in hyperchlorhydria; – fecaloid (ileus); – rancid (gastric fermentation);
Projection force	– suddenly, in a jet, without exertion, without food, without nausea - vomiting in intracranial hypertension;
Symptoms accompanying vomiting	– abdominal pain; – nausea - salivation; – headache; – cold sweats, tachycardia; – dehydration.

Nursing interventions

Patient with vomiting

OBJECTIVE	NURSING INTERVENTIONS, AUTONOMOUS AND DELEGATED
The patient to be physically and mentally maintained during vomiting	– depending on the patient's condition, the nurse places the patient in a semi-recumbent, sitting or supine position, with the head on one side, close to the edge of the bed – calms him psychologically; – helps during vomiting and keeps the product out; – offers her a glass of water to rinse her mouth after the spill; – on the doctor's indication, they administer symptomatic medication; – suppresses mouth-feeding and feed the patient parenterally, through infusions of hypertonic glucose, protein hydrolysates, amino acid mixtures, vitamins and electrolytes;

Patient to be hydro-electrolyte and acid-base balanced	– corrects electrolyte disturbances and alkaline reserve; – oral rehydration will start slowly, with small amounts of cold fluids offered by spoon; – balances in and out liquids; – monitors vital and vegetative functions.

Inadequate menstrual and vaginal discharge

Menstra is a loss of blood through the genitals, which occurs at the end of each menstrual cycle, if the ovum has not been fertilized (from puberty to menopause). Menarche, the first menstrual period, occurs between the ages of 11 and 14 and is influenced by the environment, climate, outdoor life. The glands of the genital mucosa secrete a small amount of fluid, which contributes to the process of self-defense of the genital tract against infection – physiologic leukorrhea. When this secretion becomes abundant, it is externalized in the form of an irritating discharge in varying amounts – pathological leucorrhea.

Manifestations of dependency

Amenoree	– absence of menstruation; – complete absence of menstrums;
Dysmenorea	– painful menstruation; – the onset of labor pains;
Metrorrhagia	– irregular, acyclic bleeding between successive menstrual periods;
Menorrhagia	– prolonged menstrual bleeding
Oligomenorrhea	– long intervals between menstrual periods
Polymenorea	– short intervals between menstrual periods
Hypomenorea	– reduced quantity
Hypermenorea	– increased amount
Pathologic leukorrhea	– from a few ml when staining linen to 200-400 ml
Hydrorea	– heavy vaginal discharge: 200-400 ml
The color and appearance of vaginal discharge	– milky white in the leucorrhea of young women; – greenish yellow, in gonococci; – watery red or brownish in tumors – serous, muco mucous, muco-purulent, purulent;
Rhythm of menstrual flow	– continuous or sporadic, especially fatigue

Nursing interventions
Patient with inadequate menstrual and vaginal elimination

OBJECTIVE	NURSING INTERVENTIONS, AUTONOMOUS AND DELEGATED
The patient to feel well, comfortable and secure	– provides bed rest; – performs vaginal washings with antiseptic solutions (after vaginal secretions have been collected for bacteriologic and cytologic examination); – applies absorbent dressing and fix it in a "T"; – changes the dressing often; – teaches the patient relaxation techniques – protects the bedding with moss and aleza when needed – relieves pain with painkillers;
The patient to be mentally well	– reassures the patient about her problem; – explains the purpose of the interventions (genital examination, vaginal discharge examination, radiologic examinations); – administers sedative medication on doctor's orders.

Diaphoresis. Profuse sweating

Sweating contributes to the elimination of water and wastes such as urea, ammonia, uric acid and others, thus complementing renal elimination. In excessive amounts, it has pathological significance and can sometimes lead to dehydration. Perspiration is produced depending on a number of factors: ambient temperature, physical and intellectual exertion, fluid intake, kidney activity, physiological state of the body. The sweat glands are under the control of the sympathetic vegetative nervous system, supporting thermoregulation, the evaporation of liquids from the surface of the skin (in perspiration), which helps to lose heat; by evaporating each ml of sweat, 0.58 cal.

Manifestations of dependency

Schadule	– more or less regular
Quantity	– 600-1000 ml/24 h, up to 10 liters/24 h in extreme cases
Location	– generalized, when the ambient temperature is increased - atmospheric critical significance; – localized to palms and soles (Basedow's disease, chronic alcoholism, rickets, AIDS, preclimacteric disorders).

Nursing interventions

Patient with diaphoresis

OBJECTIVE	NURSING INTERVENTIONS: AUTONOMOUS AND DELEGATED
The patient to feel well, physically comfortable	– helps or keeps the patient's skin clean and dry; – washes your skin whenever necessary; – changes bed linen and underwear; – teaches the patient to wear cotton (absorbent) socks and changes them frequently; – maintain strict hygiene of envelopes and interdigital spaces; – provides light and comfortable clothing;
The patient to be mentally balanced	– tactfully and gently asks the patient to wash; – encourages them to express their feelings about their addiction problem;

Expectation

By expectoration, we mean the removal of sputum from the airways. Sputum is all the substances that are expelled from the airways by coughing. Under physiological conditions, the lining of the airways secretes only a small amount of mucus, which is necessary to protect the inner surface of the respiratory organs from dryness and the harmful effects of air and dust. This mucus is not expelled and does not trigger the act of coughing. In pathologic conditions, a variable amount of sputum accumulates in the airways, which acts as a foreign body and causes coughing. Sputum is formed by secretion, transudation and pathologic exudation of the bronchopulmonary mucous membranes, desquamation of the lung epithelia and airways, products of the decomposition of lung tissue and inhaled foreign substances. Saliva, nasal and pharyngeal secretions and nasal and pharyngeal secretions are also added during pharyngeal and oral discharge.

Manifestations of dependency

Colour	– red, bloody, bloody, airy and frothy - hemoptysis; – hemoptoic - striated with blood; – rusty (plum juice color) - pneumonia; – reddish-brown, when blood stagnates in the lungs; – gelatinous red, in lung cancer; – pink in pulmonary edema; – greenish-yellow pulmonary suppuration; – white or gray-white, in bronchial inflammation and bronchial asthma; – black in pulmonary infarction.

Smell	– fetid in bronchial dilatation, tuberculous cavernosa; – penetrating fetiditis in pulmonary gangrene; – the smell of earth or damp straw, in pulmonary suppuration;
Consistency	– frothy; – aerated; – gelatinous – viscous; – liquid;
Form	– pearly, in bronchial asthma; – numular, in pulmonary caverns; – isolated grayish masses in saliva; bronchial casts;
Look	– mucus in bronchial asthma, bronchial inflammation; – purulent, in pulmonary suppurations; – muco-purulent; – serious in pulmonary edema – pseudo-membranous, in laryngeal diphtheria; – bloody, in pulmonary edema, cancer, pulmonary infarction;
Quantity	– 50-100 ml/24 hours in bronchitis, pneumonia, TB; – up to 1000 ml/24 hours, in bronchiectasis, TB cavernosis, pulmonary gangrene and pulmonary edema – vomiting - removal of a massive amount of pus or exudate (in lung abscess, hydatitic cyst);

Nursing interventions

Patient with expectoration

OBJECTIVE	NURSING INTERVENTIONS, AUTONOMOUS AND DELEGATED
The patient not to become a source of nosocomial infections	– educates the patient how to expectorate, to cough with the mouth closed, teach him not to swallow sputum, to collect sputum in a spittoon (disinfected with lysol solution, phenol 3%); – not to splash around; – not to throw foreign objects into the spittoon; – clean his/her mouth and teeth with swabs; – empties and cleans the spittoons after they have been disinfected; – handles spitters with care, wash and disinfect.

7.4. The need to move and have good posture

Author: *Buta Galina*

Definition

The NEED TO MOVE is a need of the human being to be in motion, to mobilize all parts of the body through coordinated movements, to keep different body segments in a posture that allows comfort and bodily functions.

Maintaining independence of body movement and good posture is determined by the integrity of the locomotor system and the central nervous system. Thanks to the components described above the individual can maintain:

- stability, whatever the position;
- balance, either at rest or moving;
- relationships between the body and the external environment;
- relationships between muscle mass and joint mobility;
- upper limb relationships;
- relationships between the lower limbs;
- relationships between the upper and lower limbs.

This need is strictly related to the need for good circulation. Movement and physical activities promote and condition blood circulation. In Virginia Henderson's categorization of needs, circulation is next to the need to move. However, given the physiological link between the cardio-respiratory function, some people prefer to associate the circulatory function with the need to breathe.

MOBILITY is an individual's ability to move freely, to coordinate their movements.

We distinguish the following types of appropriate movements:

- *reflex* – the body reacts to a traumatic agent (overheated object);
- *automatic* – the vast majority of human motor activity;
- *voluntary* – complex, previously memorized in the cerebral cortex, based on visual and kinesthetic representations;
- *abduction* – moving a body segment away from the midline;
- *adduction* – bringing a segment close to the centerline;

- *flexion* – bringing two arm/forearm or leg/thigh segments together;
- *extension* – removal of two arm/forearm or leg/thigh segments;
- *rotation* – the movement of a joint around its axis;
- *pronation* - a rotational movement of the hand in which the palm of the hand faces downwards; a rotational movement of the lower limb in which the sole of the plant looks sideways, with the outer edge facing downwards;
- *supination* – a rotational movement of the hand in which the palm of the hand faces upwards; a rotational movement of the lower limb in which the sole of the lower limb faces medially, with the inner edge raised;
- *circumduction* – a complex movement that combines flexion, extension, abduction and rotation;
- *active* – performed by the individual;
- *passive* – performed by another person to help the individual;
- *influenced by muscle contractions: isometric* – the length of the muscle remains unchanged, only the tension increases (e.g. contraction of muscles to maintain head posture) and *isotonic* - muscle tone increases, muscle length changes;
- *coordinated; harmonious; complete* – according to the characteristics of the exercises.

Maintaining posture, changes of position, execution of voluntary movements, self-service ability and autonomy of movement are the components of good posture and movement.

Proper **posture** is the function of the human body, based on the synergistic and coordinated action of the elements of the locomotor apparatus, the nervous system and the vestibular apparatus, which maintain stability, balance and constant relations between the different segments of the body and the environment. The bones act as levers, playing a fundamental role in the movements. Muscles act through their properties of excitability, contractibility and elasticity. The vestibular apparatus maintains the static and dynamic balance of the body. The nervous system, the cerebellum, together with the vestibular apparatus, contributes to the regulation of balance and muscle tone and fine movements.

Proper posture or attitude means keeping the correct relationships between different body segments:

– *orthostasis (standing):* head straight forward, back straight, arms by the side of the body, hips, calves straight, leg at right angle to the calf
– *sitting:* head straight, back straight, arms supported, thighs horizontal, thighs vertical, leg at a 90^0 angle with the calf, resting on the floor and *semi-sitting*: lying on the back, thorax forming a $30\text{-}45^0$ angle with the horizontal line;
– *clinostatism (lying):* dorsal decubitus (on back), left or right lateral decubitus (on one side), ventral decubitus (on abdomen).

Factors that influence whether the need to move and have good posture is satisfied:

1. Biological factors:
   - *age and physical development:*
   – the toddler's movements are less coordinated, but as he matures he gains control, is very active and adopts sometimes bizarre positions;
   – the adult is active in full physical strength, gives suppleness to movements and coordinates them;
   – the elderly have reduced physical strength, reduced mobility, but remain active in moderate movements;
   - *physical capabilities and constitutional type*:
   – influences movement in the sense of the intensity of physical exertion;
   – depends on innate and acquired physical abilities;
   – normotensive, hypertensive and asthenic constitutional type depends on age and gender;
2. Physical factors:
   – *fractures, sprains, sprains, dislocations:* pain, altered integrity of the musculoskeletal system;
   – *Stroke, paralysis:* muscle spasms, altered nerve centers;
   – *bandages, plaster cast,* continuous *extension:* hindrances to movement;
   – *diseases:* serious organic or functional, infections;

- *metabolic problems:* overweight/weight loss;
- *deregulated outgrowth:* blockage of the passage of air, food, feces;
- *environmental factors:* temperature, humidity, weather conditions, circadian rhythm e.g. physical activity is lower in the morning;
- *long-term forced position:* travel, working conditions;

3. Psychological factors:
   - *emotions:* emotional and intellectual states expressed through body movements;
   - *personality and temperament:* determines whether an individual is active, calm or passive;
   - *stress, anxiety:* can cause hyperventilation;
   - *thought disorders, fear:* changes movement, posture;
   - *anorexia, repulsion to certain foods:* it creates changes in the realization of the need to move and have good posture;
   - *crisis situations, change of body schema, mourning:* expressed by involuntary body movements;
4. Relational, cultural and economic factors:
   - *cultural:* individuals practise physical activities according to the society in which they live;
   - *social roles:* new job, unemployment, family role;
   - *social organization:* every society has laws and regulations for the individual to maintain his/her health even if he/she is exerting effort/overexertion. Activities are organized in society for individuals to spend their leisure time actively.
   - *traditions:* the individual can take accepted positions/positions linked to traditions;
   - *failure, communication difficulties, problems adapting to a culture;*
   - *feeling rejected, social isolation, etc.;*
   - *knowledge of oneself, the people around you, the environment;*
   - *family climate*: at mealtimes, at rest;
   - *eating habits:* family or cultural;

5. Spiritual factors:
   - *spiritual aspirations:* movements and postures characteristic of religious rituals/ customs;
   - *the person's revolt about the meaning of life;*
   - *religious, philosophical questions;*
   - *limits in practicing religion that give the person dissatisfaction;*
6. Factors related to insufficient knowledge about:
   - *self, about health and illness;*
   - *the people around you;*
   - *social environment.*

Showing independence in the need to move and have good posture

It is a physiological and psychological balance that of the individual, without the help of another person, acceptable in satisfying the need to move and have good posture. For children, independence is also when needs are met with the help of others/by others depending on the child's stage of growth and development.

Nursing interventions to maintain independence of movement and good posture:

- determines exercise needs with the patient;
- plans, together with the patient, an exercise program appropriate to the patient's age and physical capacity, teaches the patient to practice movement and relaxation techniques;
- educates the patient to avoid trauma, smoking, heavy meals, alcohol.

The nurse cannot always directly influence the problems generated by cultural and economic relational factors, but she must be able to recognize them and help the patient. The sources of difficulty include socialization and community problems generated by the person in relation to his or her environment, partner, family, friends, work colleagues, etc. Social sources of difficulty can affect quality of life (with repercussions on all needs) and can be sources of stress, depression, malnutrition, etc. A person who is unable to move will have a poor appetite, reduced lung capacity, slowed bowel motility, low psychological tone and disturbed homeostasis of physiological and psychological processes. When insufficient knowledge

is involved, the nurse's actions can directly target the source of the difficulty by teaching (educating) the patient appropriately. There are situations where it is not possible for the nurse to intervene on the source of the difficulty. For example, intellectual impairment or amputation of lower extremities. But there are situations in which the nurse's intervention can be at both levels: for example, a patient with a bedsores due to immobilization (the nurse deals with the wound and the source of difficulty by changing the patient's position).

Dependency is the inability of a person to adopt behaviors or perform actions alone, without the help of another person, that allow an acceptable level of satisfaction of the need to move and have good posture. The origin of the patient's dependence is a lack of strength (can't), a lack of will (don't want to), a lack of knowledge (don't know how) to move and have a good posture. The nurse, according to her competence, will observe the patient's inability to satisfy the need to move and have good posture. If necessary, she will recognize the competence of other professionals with whom she will work interdependently. The notion of 'acceptable level of need satisfaction' means that there can be some degree of dissatisfaction without this implying dependency. For example: a person is independent if he or she uses an appliance, device, prosthesis (cane, crutch, artificial limb, etc.) in an appropriate way without the help of another person, which allows him or her to manifest a state of well-being, and is therefore independent. Dependency arises from the moment the person has to rely on another person to move around, use an appliance, support device or prosthesis. It is considered erroneous to describe the patient as "dependent", so it is preferable to say "dependency problem".

Manifestations of dependency. When the fundamental need to move and have good posture is unsatisfied due to a source of difficulty, one or more manifestations of dependency occur. These are *observable* signs of a certain inability of the person to meet this need himself. The dependency of the person with the need to move and to have a good posture must be assessed in relation to its intensity and its duration (days, years). Thus dependency can be: moderate or total, temporary or permanent.

We distinguish 4 (four) categories of person dependency:

1. patient with independence;
2. patient with moderate dependency;
3. patient with major dependency;
4. patient with total dependency.

Determining and documenting the level of dependency allows care interventions to be assessed. The patient may be biologically, psychologically, socially, culturally and spiritually dependent. We distinguish 4 dependencies:

1. potential;
2. current;
3. decreasing;
4. permanent.

Each dependency has 3 levels of intervention: primary prevention, secondary prevention and tertiary prevention. The sources of difficulty can be caused by physical, psychological, socio-cultural, economic, economic, spiritual and factors related to insufficient knowledge.

DEPENDENCY ON SATISFYING THE NEED TO MOVE AND HAVE GOOD POSTURE

Dependency problems:

- ✓ immobility;
- ✓ hyperactivity;
- ✓ uncoordinated movements;
- ✓ inappropriate posture;
- ✓ inadequate circulation.

IMMOBILITY is a decrease/restriction of movement of the individual to perform physical, mental and social activities. Immobility may sometimes be recommended as a therapeutic method during convalescence or may be caused by trauma, organic or functional disease and/or surgery.

Forms of immobility:

– *social:* interruption or withdrawal from social activity due to emotional or physical problems;

– *emotional:* stressors exceed the individual's possibilities in activities and mobility;
– *physical:* disorders of joints, bones, skeletal muscles, manifested by pain, fatigue, weakness, causing partial or total immobility;
– *temporary:* therapeutic restriction of movement of varying lengths of time, caused by trauma, organic or functional diseases and surgery;
– *permanent:* immobility cannot be compensated for, the patient requires a cane, crutch, prosthesis or other support;
– *total/complete:* lack of movement;
– *partial:* immobility of an extremity or part of the body;
– *progressive:* muscular dystrophies, multiple sclerosis, arthrosis, myelopathies;
– *voluntary lifestyle restriction.*

Bed rest is the term used for immobilized patients who can sit in bed, chair, armchair depending on the degree of immobilization.

Sources of difficulty causing immobilization:

– stroke associated with muscle hypotrophy/atrophy;
– trauma, bandages, plaster, continuous extension;
– fractures, sprains, sprains, dislocations, associated with decreased muscle strength;
– pain: chronic osteoarticular pathologies with ankylosing and joint stiffness;
– digestive complications: unbalanced eating with hypo eating, anorexia or bulimia;
– physical handicap, disability, lack of extremity;
– thought disorders, anxiety, stress, loss, separation;
– failure, social isolation/ crowding with lack of privacy, aggression, depression;
– lack of interest in exercise, feelings of guilt, ineffective communication;
– lack of responsibility for your own health;
– lack of self-awareness, lack of knowledge of the staff, lack of knowledge of the environment;

- anemia, decompensated chronic diseases, associated with orthostatic hypotension, imbalance;
- uncomfortable position, nerve compression or calcium deficiency;
- varicose disease/ postoperative conditions, lower extremity edema, pain;
- complicated organic diseases with long-term immobilization;
- taking medicines (painkillers, sedatives, tranquilizers) in an uncontrolled way;
- pathologies accompanied by urinary stasis, constipation, catheters, constipation;
- serious illness/cancer with hospitalization immobilization/reduced physical activity;
- venous thrombosis, varicose disease, peripheral artery pathology.

Manifestations of dependency in immobility:

- *difficulty of moving*: getting up, sitting down, walking;
- *decreased or absent movement*: pareses, paraplegia (mono, para, tetra pareses or paralysis);
- *muscle contracture*: involuntary/permanent muscle contraction;
- *muscle hypotonia/atonia*: decreased muscle tone;
- *muscular hypotrophy/atrophy*: decrease in muscle volume and tone;
- *muscle hypertrophy*: increasing muscle volume and tone;
- *an involuntary and permanent contraction of one or more muscles* that causes an awkward posture;
- *ankylosis:* the slowing or inability to move a joint;
- *cramp: an* involuntary, painful spasmodic contraction of one or more muscles (calf, leg) caused by an awkward position, nerve compression or calcium deficiency;
- *decubitus bedsore:* tissue ulceration/necrosis as a result of local nutritional deficiency, usually through vascular injury or continuous compression;
- *decreased interest:* a mental disorder that causes a lack of interest in movement.

Nursing interventions in the immobile patient (autonomous and delegated

1. *The patient to have preserved muscle tone and muscle strength:*
   - plans a program of exceptions, depending on the cause of the immobilization and the patient's capacity;
2. *The patient to maintain integument integrity and joint activity:*
   - changes the patient's position in bed every 2 hours;
   - massages the areas at risk of bedsores, powder them with talcum powder;
   - performs or ensure perfect hygiene of areas prone to bedsores;
   - perform passive exercise at 2-hour intervals;
   - teaches the patient proper posture and how to perform active muscle exercises
3. *The patient to maintain respiratory function:*
   - educates the patient to practice deep breathing exercises;
   - educates the patient to cough and expectorate (remove) secretions;
   - take the medication prescribed by the doctor;
   - performs chest taping on the patient;
   - educates the patient to quit smoking or reduce the number of cigarettes;
   - take the medication prescribed by the doctor;
4. *The patient to be mentally balanced:*
   - mentally prepares the patient to perform any care technique;
   - gives the patient confidence that their immobility is a transitory state and that they will be able to resume walking/movement;
5. *The patient to keep other basic needs satisfied:*
   - supervises the patient in meeting their needs;
   - serves the patient at the bedside with the necessary.

HYPERACTIVITY is manifested by an increase in the individual's pace of movements and activities, caused by emotional instability and loss of ideas. Attention Deficit **Hyperactivity** Disorder (ADHD) is the most recently introduced term, to define a specific developmental disorder of both children and adults, composed of defects in sustaining attention, impulse control and regulating activity level to situational demands.

Forms of hyperactivity:

- hyperactive reaction to external and internal stimuli of childhood;
- hyperactivity or child hyperactivity syndrome;
- minimal brain dysfunction;
- attention deficit hyperactivity disorder;
- hyperkinetic conduct disorder.

Sources of difficulty causing hyperactivity:

- endocrine imbalance;
- drug reactions, alcoholism;
- senility, thought disorders;
- separation, crisis, loss;
- lack of self-knowledge.

Dependency manifestations of hyperactivity:

- talking a lot, precipitantly;
- hyperactive reactions to light, auditory stimuli, etc.;
- fast, frequent, unconscious movements;
- involuntary contraction of one or more muscles (spasms);
- involuntary movements of the eyes, mouth, arm or leg (heels);
- psychotic behavior, sometimes with physical aggression (anger);
- good mood (unjustified euphoria);
- self-aggression (self-harming);
- heteroaggressiveness (hitting others);
- tissue damage (bedsores) as a result of local nutrient deficiency, usually through vascular damage or continuous compression.

Nursing interventions for the patient with hyperactivity (autonomous and delegated):

1. The patient to have safe, normal mobility:

- removes stimuli from the surrounding environment (provides semi-darkness of the room, soundproofing, reducing the number of visitors);
- provides conditions for warm, relaxing baths, relaxing massage;

2. The patient to maintain physical integrity:

- keeps an eye on the patient at all times to prevent injury;
- removes blunt objects;

– applies physical restraints, where appropriate (straps, stra straitjacket);
– takes the treatment prescribed by your doctor.

UNCOORDINATION OF MOVEMENTS is the difficulty or inability of an individual to coordinate the movements of different muscle groups.

Sources of difficulty that cause uncoordinated movements:

– sensory deficit, central nervous system damage (stroke), Parkinson's disease;
– hydro-electrolyte imbalance;
– side effects of medicines, drugs, alcohol;
– thought disorders;
– anxiety, stress;
– unknown working/living environment;
– Insufficient/lack of knowledge of self and surroundings.

Dependency manifestations of movement uncoordination:

– *akinesia:* decreased/absent voluntary movements
– *ataxia:* disorders of coordination of active voluntary movements. There are "choreic movements" characterized by rapid, disordered, sudden movements of variable amplitude, on any muscle group. They produce dancing gait. There is grimacing, rigid face.
– *convulsions:* repeated, involuntary contractions of a muscle or muscle groups, followed by relaxation;
– *tremors:* repeated, involuntary shaking of a part of the body (hands, head or whole body);
– *difficulty moving from* standing to sitting;
– *characteristic facial expression* - rigid face;
– *gait disturbances*:
  ➢ slow walking, tired, with frequent stops accompanied by asthenia, Addison's disease, myasthenia, propulsive walking;
  ➢ intermittent claudication: muscle pain (cramping, cutting, tingling or a feeling of fatigue), predominantly of the calf muscles, which occurs during physical exertion and improves after a period of rest. It occurs in obliterative arteriopathies.

- unsteady gait: inconsistent movements, forward/backward head movements. It occurs in alcohol or barbiturate intoxication;
- cerebellar gait: uncertain, broad-based support;
- precipitant gait: small steps, body leaning forward. It occurs in Parkinson's disease;
- senile gait, with small, shuffling, unsteady, unsteady steps - characteristic of the elderly, patients with atherosclerosis and patients with pseudobulbar syndrome;
- step gait, equin. The patient touches the ground with the tip of the foot and then with the heel, like a circus horse. It is seen in paralysis of the pretibialis and peroneus muscles (due to paralysis of the sciatic nerve, external popliteus) in paralytic sciatica poliomyelitis;
- spastic gait, due to spastic hemiplegia: bringing the leg forward in a circumduction movement (in bow), due to the inability to flex the lower limb;
- disordered gait - occurs in chorea;
- analgesic walking in rheumatic pain;
- duck-waddle gait. It occurs in severe myopathies.

Nursing interventions for the patient with uncoordinated movements (autonomous and delegated**):**

1. *The patient to be mentally balanced* – prepare the patient mentally for any care technique (e.g. EEG); remove stimuli from the external environment; provide the patient with TV, press, reading;
2. *The patient to have the appropriate muscle tone for the activity performed* – plans, together with the patient, a program of active and passive physical exercises, walking exercises according to the patient's capacity; teaches the patient to use different assistive devices for daily activities; helps the patient to take warm baths, physical exercises; if necessary, massages the patient's extremities; administers the medication prescribed by the doctor.
3. *The patient* will be helped to *satisfy all* his *or her* physiological *needs.*

POOR POSTURE is any posture that does not respect the principles of anatomical body position and predisposes the individual to various deformities.

Forms of inappropriate posture:

- *spinal deformities* (kyphosis, lordosis, scoliosis)
- *lower limb deformities* (genu valgum; genu varum; equinus, talus, varus, valgus; flat foot);
- *hip deformity (*dislocation);
- *therapeutic positions* (Trendelenburg, Fowler, draining, ″cat's back")*;*
- *pathognomonic postures* (opisthotonus, pleurostotonus, "coc cockerel" position, torticollis).

Sources of difficulty with poor posture:

- pain caused by some diseases, dyspnea, manifested by fatigue, muscle weakness/contraction;
- prolonged immobilization in bed, when the patient cannot change his position on his own and is prone to alterations in skin integrity, pressure points, deformities, pulmonary complications;
- prophylactic measures to prevent complications (raising the lower limb on a cushion in thrombophlebitis);
- therapy necessary for healing in bone structure defects (treatment of fractures by continuous extension);
- first aid measures (in acute post-hemorrhagic anemia);
- the conscious/unconscious reaction of the individual (the "coc cockerel" position in meningitis);
- bone and muscle injuries, plaster casts, splints, splints that prevent anatomical posture;
- anxiety, stress, crisis situation, thought disorders;
- inadequate working conditions;
- insufficient/lack of knowledge of self and surroundings;
- positions during endoscopic examinations, etc.

The dependency manifestations of inadequate posture:

1. *muscle fatigue* – temporary decrease in muscle tone, caused by chronic diseases; temporary reduction in the functional capacity of muscles as a consequence of prolonged excessive physical activity
2. *spinal deformities:*
   - kyphosis: deviation of the spine at different levels with an outward (posterior) convexity;
   - lordosis: deformation of the spine at different levels with concavity at the front (accentuation of the lumbar vertebral curvature);
   - scoliosis: lateral deformation of the spine at any level.
3. *lower limb deformities:*
   - genu valgum: knees together, legs apart;
   - genu varum: knees apart, legs close together;
   - equine foot: supported on toes;
   - talus foot: resting on the heel;
   - varus leg: resting on the outside;
   - valgus foot: resting on the inside;
   - flat foot: collapsed plantar arch;
4. *deformities of the hip* –dislocation: the femoral head protruding from the hip joint;
5. *inappropriate (forced) positions* for examination: endoscopic, gynecologic, rectoscopy;
6. *therapeutic positions* for interventions, to improve the patient's condition, for healing:
   - Trendelenburg position: trunk, lower limbs higher than the head (this position ensures blood circulation to the brain);
   - Fowler position: semi-sitting position. It is achieved by elevating the patient's back and head at an angle of $45\text{-}60^0$. The knees may or may not be bent. This position is used to facilitate breathing, drainage and feeding.
   - postural drainage position;
   - position of patients immobilized in a cast;

- the "cat's back" position, in lateral decubitus in bed, with the back at the edge of the bed, thighs bent on the abdomen, chin touching the chest; it is indicated in lumbar puncture;

7. *Pathognomonic positions* are disease-specific:
   - opisthotonus: arched position of the patient leaning on the occiput (cephalic extremity) and heels, due to prolonged spasm of the back muscles, the body is in extension (in tetanos);
   - pleurostotonus: a sideways, arched posture of the body, caused by contracture of the muscles of one half of the body, resting on the lateral edge of the sole and shoulder, the body is in extension (in tetanos);
   - the "coc cockerel" position, with the head in hyperextension and the lower limbs flexed from both the coxofemoral and knee joints (in meningitis);
   - torticollis: a more or less painful contracture of the neck muscles that limits the rotational movements of the head, tilts the head to one side;
8. *Difficulty in changing position* when the patient cannot change position on their own:
   - half lying in bed (patients with dyspnea);
   - ventral decubitus (patients with pleurisy).

Nursing interventions in the patient with inadequate posture (autonomous and delegated):

1. *The patient to have proper posture* – arranges the patient in bed, respecting the anatomical positions of the different body segments; uses auxiliary and comfort equipment to maintain the anatomical position.
2. *The patient to have a position that favors breathing, blood circulation, drainage of bronchial secretions* – positions the patient with respiratory disorders (dyspnea) in a semi-sitting position; place the patient with acute post hemorrhagic anemia in Trendelenburg position; arrange the patient with bronchial secretion in a postural drainage position; use equipment for patient comfort in these positions.
3. *The patient not to present complications such as: decubitus scars, ankyloses, contractures:* changes the patient's position every 2 hours;

checks the skin in the regions with bony protrusions; massages the pressure points at each change of position, performs chest tapping; ensures hygiene of the integuments and of the bed and body linen; performs passive and active exercises (as appropriate); teaches the patient the appropriate position and supervises if the recommenddations are followed.

POOR CIRCULATION has been explained under the addictive issues of the need to breathe and the need for good circulation.

INTERDEPENDENCE WITH OTHER NEEDS. Not satisfying the need to move and have good posture affects other fundamental needs, such as:

- *Need to communicate*: ineffective communication and isolation through limited movement or disability.
- *The need to maintain theirbody temperature within normal limits*: decreased/ inability to move and mobilize, leading to vulnerability to weather factors and hypo/hyperthermia through immobilization.
- *The need to breathe*: decreased recreational physical activity, motor deficits, poor posture, leading to functional and respiratory disorders.
- *The need to feed and hydrate:* damage to the integrity of the locomotor system (fracture, amputation, etc.) or neurological disorder with motor deficit (exacerbated pain on mobilization) causes food and hydro-electrolyte imbalance.
- *The need to eliminate*: poor mobilization makes it difficult to move to the bathroom/toilet. Prolonged immobilization in bed is the cause of the onset of voiding disorders (urinary incontinenceand fecal , urinary lithiasis, chronic urinary tract infection).
- *The need to sleep and rest:* decreased/ inability to mobilize affects rest and sleep through lack of activity, lack of physical exertion.
- *The need to be clean, neat and to protect the skin and mucous membranes:* addiction problems cause trophic skin disorders.
- *The need to dress and undress*: discomfort caused by pain on mobilization, as well as joint disorders, limit or make it impossible to dress/ undress oneself.

- *The need to avoid dangers:* inability to maintain balance, orthostasis and gait disturbances create potential risks of fall trauma.
- *The need to live according to beliefs and values, to practice religion:* limitation or lack of participation in religious services, cultural gatherings, due to reduced/unable to travel.
- *The need to be fulfilled and useful:* limitation of social concerns and inability to participate actively in professional life due to locomotor impairment and disability.
- *The need for recreation:* impaired mobility reduces the ability to participate in recreational activities.
- *The need to learn to stay healthy:* decreased/ inability to mobilize causes the patient to limit or give up school activities and intellectual pursuits, as well as non-acceptance of the disability.

ASSESSMENT AND CARE TECHNIQUES ASSOCIATED WITH THE NEED TO MOVE AND HAVE GOOD POSTURE

Patient bed

Satisfying the patient's need for movement and good posture, whether in hospital or at home, requires the creation of comfortable conditions. Because the patient spends most of their time in bed during illness and convalescence, they need to have certain qualities.

Bed qualities:

- *It should be comfortable,* with appropriate dimensions to meet the comfort requirements of both the patient and the caregivers: length 2 m, width 80-90 cm, height from the floor to the mattress 60 cm.
- *It should allow the patient to be able to move around freely,* not to restrict their movements, to be able to get out of bed if necessary, to be able to sit up, with their legs resting comfortably on the floor.
- *The nurse (or other personnel) should be able to perform the techniques of care,* investigation and treatment as comfortably as possible, be easy to handle and clean, be made of light metal tubing (painted white) on castors with rubber tires, or on a convenient lifting device with castors.

➢ *The qualities of the box spring (the main part of the bed)* should be made of stainless wire, strong, elastic, taut, so as not to sag under the patient's weight; weak box springs give the patient a concave surface which makes the position tiring.

Fig. 7.4. **Medical bed models.**

Types of beds:

– *single bed with one-piece bed base;*
– *single bed with movable head-rest*, where the cephalic third of the mattress can be raised at an angle of up to 45°;
– *orthopedic bed with movable bed frame: orthopedic bed* – has a bed frame made of several pieces, 3, 3 or 4 hinged together; thus, the patient can be placed and maintained in different positions: semi-sitting with bent legs, Trendelenburg, etc.;
– *children's bed, universal bed* – usable for most categories of patients;
– *universal bed for most categories of patients* with movable bed frame, where the cephalic third of the bed frame can be raised in an oblique position up to 45^0;

– *bed with special equipment* for orthopedic treatment: extension;
– *bed with removable bed guard*, bed used in the intensive care unit;
– *bed for infants and small children with movable rails with* safety devices;

Bed accessories:

– *mattress(s):* are made of one/two/three pieces of sponge that are easy to clean and disinfect. They can be rubber or plastic mattresses, filled with water or air (compartmentalized air mattresses). These have the advantage that they allow the compartments to be inflated successively as needed (to prevent scalding).
– *pillows* (two pillows are needed per patient) - size of pillows: 50 cm wide and 70 cm long, filled with sponge or down.
– *the blanket* will be made of soft wool, easy to wash.
– preferably *linen* with as few seams as possible. Required linen: two sheets (or a sheet and an envelope), two pillowcases, a pillowcase, a bolster or bolster, a muslin. The sheet is seamless, in one piece, measuring 2.60 m x 1.50 m so that it can be securely fastened under the mattress. The muslin will be made of rubber or plastic material to protect the mattress from various types of droppings. It is only used for certain patients; size 1.50 m x 1.10 m. The cover is made of canvas, of the same length, but 15-20 cm wider than the mattress cover in order to cover it perfectly. The pillowcases, made of the same material as the rest of the linen, with the opening overlapping.
– *Auxiliary equipment:* if necessary, patients use a pillow support, leg support, side supports, ankle or head support; tables adapted to the bed, bed rails, hooks to facilitate active mobilization.

Preparing and changing the bed.

Bed preparation without patient.

Materials needed: plain sheet, envelope sheet, two pillowcases, one blanket, two pillows. Method: remove the bedside table. Place a chair with a back at the end of the bed. Place the clean linen, pillows and blanket, folded correctly, on the chair in the order of use. The sheet is placed in the

middle of the mattress; it is unrolled and one side of the sheet is spread towards the head of the bed, the other towards the opposite end. Insert the sheet deep under the mattress at both ends. The corner is executed: the person sitting facing the head of the bed, with the hand next to the bed, grasps the side of the sheet at a distance from the corner equal to the length of the hanging part and lifts it upwards next to the mattress (over the mattress). The part of the sheet under the lower edge of the mattress is inserted under the mattress. Then lower the raised part of the sheet. Insert the part of the sheet that hangs under the bottom edge of the mattress under the mattress. The other three corners follow the same procedure. Then insert the whole side of the sheet under the mattress. Starting at the corners of the mattress, stretch the sheet so that there are no creases. If necessary, place the muslin (across the middle of the bed) and cover it with the flyleaf. Next, place the second sheet on top of the blanket; fold the edge of the sheet towards the head over the blanket. In order that the blanket does not constitute a burden on the patient's toes, a crease is made in both the sheet and the blanket. The palm of the hand facing the feet is placed on the blanket and the other hand is placed under the sheet, lifting the sheet and blanket over the opposite palm, thus forming a crease. The sheet and blanket are then tucked under the foot end of the mattress, and the corners are then tucked in using the procedure described above. If the envelope is used instead of the sheet, then the blanket is inserted into the envelope after folding it lengthwise. Place the inserted pillows in the clean pillowcases.

Changing linen with the patient in bed. Changing bed linen with the patient in bed takes place in cases where the patient's general condition does not allow getting out of bed.

Objectives for the patient and the nurse: The patient to present: a state of well-being, physical and mental comfort and a state of permanent hygiene. For the nurse it is an opportunity to communicate with the patient (verbal, nonverbal), to give the patient the opportunity to express his feelings, to relieve his state of mind. By performing this procedure, the nurse has the possibility to observe and mobilize the patient to prevent skin complications. The nurse will ensure appropriate conditions of hygiene, relaxation and rest.

Changing the bed linen with the patient in bed is usually done in the morning, before cleaning, after taking the patient's temperature, pulse and toileting, but may be done several times a day if necessary. The linen changing procedure is performed in 2 methods, taking into account the patient's general condition and the possibilities to move the patient. Thus, when the patient is able to turn in the lateral decubitus position, the linen is changed along the length of the bed. When the patient can be supported in a sitting position, the change of linen is done in width.

Material needed: same as for preparing the bed without the patient, in addition, we need a laundry bag screen if necessary, clean underwear and material to wash the patient if necessary. The bed linen is placed on a chair in order of priority, folded as follows: the blanket and the sheet under the blanket are each folded in threes in the form of a harmonic. The aleza is rolled together with the muslin either widthwise or lengthwise. The sheet is rolled lengthways (when changing the bed linen lengthways) and widthways (when changing the bed linen widthways). Environment: dra draughts are avoided, patient privacy is ensured by protecting the patient from prying eyes. Ensure aseptic measures, including hand washing. The patient is informed about the procedure. He reassures himself that the maneuver will be done gently, that he will not be moved unnecessarily, that the maneuvers will not cause pain. The nurse asks for the cooperation of the patient or his/her companion.

Procedure (execution): The linen change is done in the length of the bed and always requires two nurses. The patient will be turned in lateral decubitus. The two nurses sit on either side of the bed. The patient remains covered until the sheet is changed under the blanket. The edges of the soiled sheet are pulled away from under the mattress. Place the patient in lateral decubitus position towards the edge of the bed. The nurse on the right side grasps the patient in the right armpit with her right hand. Gently lift him up. The left hand is placed under his shoulders, resting the head on the forearm. Then, with the right hand (withdrawn from under the armpit) gently pulls the pillow towards the edge of the bed; the patient is also moved slightly in the same direction. He then places his right hand in front of the patient's knees, inserts his left hand under the patient's knees,

touching them slightly, and with his right hand gently flexes the patient's calves on his thighs. From this position, turn the patient in right lateral decubitus, supporting him in the region of the shoulder blades and knees. The patient remains covered. The nurse on the left side rolls the sheet with the muslin and the soiled linen to the patient's back; the soiled linen roll is now next to the clean linen roll.

On the free half of the bed, unroll the clean sheet, the muslin and the previously prepared muslin. Spread the clean sheet flat on the free half of the bed and place a dressed pillow in front of the clean pillow, then very gently bring the patient supine, supporting him in the region of the shoulder blades and below the knees. To return the patient to the left lateral decubitus, the nurse on the left side proceeds in the same way as for the right lateral decubitus turn. She grasps the patient by the left armpit, lifts him gently, inserts her right hand under his shoulders, rests the head on the forearm and, following the same procedure, turns the patient to the left lateral decubitus by bringing him beyond the two rolls of underwear. The nurse rolls the soiled linen forward from the right side and removes it, placing it in the laundry bag. She then unrolls the clean linen and stretches it out well. The patient is returned to the supine position, supported by the two nurses. Next, the corners are turned using the familiar technique, and the sheet under the blanket is changed. The blanket over the patient is folded in three and placed on a chair. The patient remains covered with the sheet used before. On top of this, the nurse places the clean sheet folded in thirds in the shape of a harmonic, so that one of the loose edges reaches under the patient's chin. The two nurses, who are on either side of the bed, grasp with one hand the lower corners of the clean sheet and with the other hand the upper corners of the soiled sheet and, by a movement in the direction of the patient's legs, remove the soiled sheet and cover the patient with the clean sheet at the same time. Place the blanket over the sheet, turn the head edge over the blanket, and continue arranging the bed. Fold the blanket with the sheet over the patient's toes.

Another method of changing bed linen with the patient in bed is used when the patient can be in a sitting position. In this case, the linen is changed across the width of the bed. The preparation (rolling, folding) of

bed linen has been described above. The procedure is also carried out by two persons: one person supports the patient, the other rolls the soiled linen, lays and unrolls the clean (previously prepared) sheet. WARNING! After each procedure, the nurse should make sure that the patient is as comfortable as possible. In some cases, the bed linen may need to be changed several times a day without changing the sheet. The change can be performed following the same patient movement procedure described above or using one of the following two methods:

1. ***Method of lifting the patient with the shoulder.*** The method is carried out with the help of two nurses: the nurses sit on either side of the bed, facing the patient's pelvis. They place the patient in a sitting position according to the known methods. The two nurses bend their spine towards the patient (without squatting). They try to widen the base of support by spreading their legs apart, bending their knees slightly. The nurse on the right side locks her right shoulder into the patient's right armpit. The nurse on the left side pins her left shoulder into the patient's left armpit so that the patient's arms rest on the nurses back. The nurses then try to insert their forearm (from the upper limb, which has the shoulder pinned under the armpit) as far under the patient's thigh as possible. The nurses' free hand rests on the surface of the bed above the patient, providing an extra support (fulcrum) when lifting. At the command of one of the nurses, lifting of the patient is started by gradually raising the patient's spine and transferring the weight to the leg on the cephalic side of the bed. When seating the patient, the nurses again bend their knees, thus lowering the spine and seating the patient comfortably.
2. ***Another method of lifting, used when the patient is unable to cooperate*** The nurses, seated on either side of the bed, lean towards the patient, keeping the spine straight, widening the base of support by spreading the legs. The arms on the cephalic side of the bed are placed around the patient's back, as close to the pelvis line as possible. The arms from the legs are inserted under the patient's sitting position, the nurses' hands are joined. The patient is asked to cross his arms over his chest. At the command of one of the nurses, the patient is lifted,

gradually raising the spine and transferring the weight to the leg located towards the cephalic side. We emphasize the importance of bending the knees with the lowering of the spine, keeping the back straight (without twisting), as this is the only way to protect both the spine and the abdominal muscles.

Patient positions in bed depending on the patient's general **condition** and their condition, the position can be:

- *Active position* – the patient moves on his own, does not need to show independence (help).
- *Passive position* – the patient is unable to change position on their own, has lost physical strength, needs the help of another person; seriously ill, adynamic.
- *Forced position* – the patient has an unusual (inappropriate) posture, the position may be caused by the underlying disease (tetanus, meningitis), as a defense reaction of the body (in painful ulcer crises or biliary colic), as a prophylactic measure in the prevention of embolism (in thrombophlebitis), as a therapeutic measure (use of appliances), etc.

Immobilization can cause complications due to the pressure on the tissues between the bony planes and the hard surface of the bed. It can cause local circulatory disturbances through ischemia (redness, oedema, scars, necrosis). Slowing of the circulation in clinostatic (supine) position favours thrombosis, hypostatic pneumonitis, etc. Preventive measures are necessary. Nurses should be familiar with the positions patients take in bed. The position in which they should be brought for special care and examinations and the maneuvers to ensure changes of position.

Dorsal decubitus - Fowler position. It is more comfortable with bent knees in the Fowler position. It is the most relaxed position, prevents contraction of the abdominal muscles.

Source: after lumbar puncture, some spinal disorders, posthemorrhagic anemias, some brain disorders (weak, adynamic, operated patients)

Maneuver. The patient lies on their back face up with their head on the pillow (the usual, comfortable position). This position for a long time can cause lower back pain. A thin roll may be inserted into the lumbar spine.

Semi-sitting position: lying on the back, the thorax forms an angle of 30-45 degrees with the horizontal line. It is realized: with a larger number of cushions with a movable support with an articulated bolster so that the patient does not slip. Place a folded pillow or a roll of blanket wrapped in a sheet twisted at the ends and tucked under the mattress under the popliteal region. A support is placed under the feet.

Source: heart and lung diseases, convalescence, some categories of operations, elderly patients, first aid for patients with respiratory disorders

Maneuver. Prolonged positioning requires measures to prevent bedsores. For this the nurse arranges rubber pads under the patient's buttock region. The position is forbidden for patients with swallowing disorders, comatose patients.

Sitting position: the trunk forms a right angle with the lower limbs. The patient's thighs are flexed on the pelvis and the calves are in semi-flexion on the thighs. The knees are thus raised. The position is realized: with the pillow support or 4-5 pillows placed in steps. The head is supported with a small pillow. A pillow can be placed under the patient's arms to prevent slipping. The procedure is the same as for the semi-recumbent position. In the chair: the patient is comfortably seated. The patient will be dressed and covered with a blanket.

Source: patients with severe dyspnoea, pneumonia, heart failure, bronchial asthma attacks, the elderly after certain types of surgery.

Maneuver. For examination of the patient, the sitting position achieves full expansion of the lungs and allows better examination of the upper body. Physically weak patients may not be able to sit in this position. They will be lying supine with the cephalic end of the head with the somiere elevated. Patients with heart failure during attacks of nocturnal dyspnoea, sit several times at the edge of the bed with the legs hanging over; a stool is placed under the footboards.

Lateral decubitus can be: right or left; lying on one side with the head resting on one pillow. Lower limbs slightly flexed or the lower limb in contact with the surface of the bed stretched out and the other bent. The back supported with a pillow or roll or with special supports.

Source: in pleurisy, meningitis, after intrathoracic interventions, after renal interventions, in case of pleural cavity drainage, during toileting, linen change, administration of clusters and suppositories, rectal temperature measurement, for lumbar puncture, during duodenal probing, postural drainage, etc.

Maneuver. To prevent eschar from developing between the knee and malleolus, rings of cotton wool are inserted under the greater trochanter, a rubberized, dressed collar. Elderly, adynamics will be turned at regular intervals of 2-3 hours to prevent complications. If the patient has a paralyzed, fractured or operated lower limb it will be held during the turning maneuver by the nurse and placed on a support prepared in advance.

Trendelenburg position supine, possibly lateral, with the head lower than the rest of the body This is achieved by raising the distal end of the bed. The difference between the two ends of the bed can vary from 10 to 60 cm. A thin pillow may be placed under the patient's head. Protect the patient's head with a pillow placed vertically at the head of the bed to avoid slipping off the operating table. The patient is secured in straps or special shoulder straps.

Source: on the operating table, in case of syncope during general anesthesia, in acute anemia, for autotransfusions to stop bleeding in the lower limbs and female genital organs, after gynecological interventions, after spinal anesthesia, to promote drainage of secretions from the upper respiratory tract. It promotes good circulation to the vital centers. It is placed in lateral decubitus when there is danger of aspiration of secretions.

Position (reverse Trendelenburg). It is an oblique position with the head higher. It is practiced for cervical spine extension in orthopedic treatment.

Ventral decubitus. Lying on the abdomen, head on one side on a thin pillow, upper limbs placed to the left and right of the head with the palmar face on the surface of the bed, toes extended. Under the ankles a cylindrical cushion. Thin, soft pillows may be placed under the thorax and abdomen

Source: in paralysis of muscle groups, in hemiplegia, in extensive scans, drainage of purulent collections, unconscious patients. It is the

night position for infants and young children. Not possible without cushion for certain heart and lung diseases.

Gynecologic position supine with knees bent, thighs apart. It can be performed in bed, on the gynecological examination table, which has a support for the lower limbs and a movable tray under the seat board.

Source: for gynecological or obstetrical examination. Facilitates insertion of vaginal speculum, valves for rectal examinations (rectoscopy, rectal cough). The examination is done after emptying the bladder and rectum. This is an awkward and uncomfortable position, so do not prolong the examination too long. The patient should be kept well covered.

Genupectoral (knee-chest) position. Patient sitting on knees, knees slightly apart. The patient leans forward with the chest touching the horizontal plane (examination table). This is an awkward and uncomfortable position. Patients with arthritis or other joint deformities will not be able to practice it.

Patient position changes can be active and passive. Active ones are performed by the patient alone. Passive ones are performed with the help of the nurse. Indications: passive changes are performed in adynamic, immobilized, unconscious, paralyzed, cast, etc. patients.

Principles to follow. One or two nurses are needed to perform position changes. They must adopt a suitable position so that they can lift the patient more easily and with less physical effort. Thus the patient is grasped precisely and securely with the whole hand, placing the palm on the surface of the patient's body so that the contact surface is as large as possible. The nurse arranges as close to the patient's bed as possible, with the legs spread apart to provide as wide a base of support as possible, with the knees bent and the spine slightly bent. This position protects the nurse's spine by minimizing compression on the intervertebral discs and the vertebral body, allowing the nurse to use the strength of the thigh and calf muscles. By bending the knees, the center of gravity automatically lowers so that the position is much more comfortable to more easily perform a lower and upper limb effort. More frequent passive movements, turning the patient from supine to lateral decubitus and back, placing patients in a sitting position, returning patients who have slipped down from the cushion.

There are several techniques to perform patient repositioning. The methods described here are by way of example for turning the patient from supine to lateral decubitus. The nurse sits at the edge of the bed to which the patient will be turned. She folds the patient's opposite arm across the patient's thorax. Place the opposite lower limb over the other. The nurse faces the patient's chest with the foot on the head of the bed placed in front of the other. She bends her knees slightly, bends down and grasps the opposite shoulder with one hand and the patient's hip with the other. From this position, the nurse shifts her body weight from the lower limb in front to the limb behind and turns the patient towards her. During this movement, the nurse flexes her knees well.

Return to dorsal decubitus. The patient is returned from the lateral to the supine position by two nurses. Both sit on the same side of the bed behind the patient. The nurse seated at the patient's head grasps the patient under the armpit closest to the surface of the bed and rests the patient's head on the forearm. The other nurse inserts one hand under the patient's pelvis. With the remaining free hands they turn the patient.

Raising the patient from dorsal decubitus (supine) to sitting position. We will exemplify three methods:

I. The nurse sits at the edge of the bed facing the patient. She places the leg that is next to the bed, further behind the other leg, the nurse's bed-side arm remains free until the patient is lifted, the other arm, the nurse drapes it over the patient's shoulder and places her hand (palm) between the patient's shoulder blades to lift the patient, the nurse shifts her body weight from the leg placed in front to the leg placed further back, bending the knees at the same time with the free arm she fixes as I point of support (counter – 1 weight) the edge of the bed in this way, the center of gravity of the nurse counterbalances the weight of the patient.

II. Raising from supine to sitting position can also be done in the following way, the nurse sits at the edge of the bed with the hand from the distal end of the bed grasping the axillary region of the patient, and with the other hand you embrace him from behind, resting the head on the forearm The patient if his condition allows it can lean on the nurse's arm or neck, hugging her.

III. Sitting up of the patient in critical condition is performed by two nurses. The nurses sit on either side of the bed, they cross their forearms in the patient's dorsal region, placing their palms on the patient's shoulder blades, with the other hand they grasp the patient under the armpit. On the command of one of them, they raise the patient to a sitting position in a single movement.

Pillow lift. Two persons sitting on either side of the bed, facing slightly towards the head of the bed – widen the base of support by spreading their legs apart and placing them in front of each other (the one at the distal end of the bed being placed further back), fold the patient's arms over the abdomen (neutralizing them), place the hand on the head of the bed under the patient's shoulder blades with the palm facing upwards, place the other hand under the patient's buttock region, where the hands of the two persons join, bend the knees on the command of one of the assistants, and lift the patient, using the force of the lower limbs by shifting the weight from one leg to the other. To ease the lifting effort, the two people can support each other 'head to head'. The technique can also be performed by a single nurse if the patient is able to help him/herself by bending the knees and pushing with the legs resting on the surface of the bed.

Change from sitting to supine position, it can be seen how to make it easier to change the patient from sitting to supine position, using the force of the lower limbs to ease the patient's movement it is important to swing the nurse's body from one leg to the other in the direction of mobilizing the patient, transferring weight by pushing. It is important to always explain to the patient clearly what is being done to him and the cooperation expected from him. It is necessary to follow the patient closely throughout the maneuver, making sure that he is in a comfortable position.

Patient mobilization. The aim of mobilization is to move the patient in order to prevent complications that may arise from immobilization and to regain independence. The objectives are to normalize muscle tone, maintain joint mobility, ensure the patient's well-being and independence, stimulate metabolism, promote the elimination of urine and faeces (the patient can urinate and evacuate stools better out of bed than in the presence of others or lying on the bedpan), stimulate blood circulation to prevent

thrombosis, pneumonia, eschars, contractures. Mobilization is carried out according to the nature of the disease, the general state of the patient's type of reactivity, etc. The period of passive and active exercises to restore muscular condition and range of movement should be started slowly, gradually increasing, depending on the patient's physiological response (increased pulse rate, signs of muscle weakness, diaphoresis). Exercises are done before meals the patient should be taught to intersperse the movement exercises with breathing exercises also relaxation exercises should be planned with the patient. The timing and pace of mobilization and getting out of bed will be decided by the doctor – it is up to the nurse to ensure that this is done properly. The preparation of materials is done taking into account the type of movement required (gown, slippers, chair, crutches). Preparing the patient: the nurse informs the patient: procedure, purpose, etc. She checks the patient's pulse, blood pressure, observes the patient's condition, facial expression, skin coloration, breathing. The degree of joint flexion can also be determined with the goniometer.

Types of movements and how to mobilize

Mobilization is part of the therapy prescribed by the doctor, depending on the patient's condition and condition; mobilization is done progressively, gradually increasing the range of movement. It starts with head movement, passive and active movements, movement of the fingers, wrists, ankle. Movement and change of position of upper and lower limbs, flexion and extension movements, with the patient maintaining the decubitus position. Sitting in sitting position, passively at first, following known methods. Active sitting several times a day, increasing the number of minutes. Sitting the patient in a sitting position at the edge of the bed, in an armchair, passively, then actively. Raise the patient to orthostatic position and first steps. Movement should be associated with breathing movements. It can also be combined with massage.

Sitting at the bedside. How to place the patient in a sitting position at the edge of the bed, the nurse sits at the edge of the bed with legs apart and knees bent, places one hand behind the patient's back under the shoulder blade and the other hand under the popliteal region. The patient can cooperate by either leaning against the edge of the bed or by hugging

the nurse's neck. As the patient is raised to a sitting position, the lower limbs are rotated to a 90° angle and the correct position of the patient's spine is observed.

The method can also be performed for patients who cannot support or grasp with their hands. In this case, the position of the nurse is the same, except that she places the patient's arms across the abdomen with the lower limb on the nurse's side and passes it over the other on the opposite side. The nurse then places one hand under the patient's shoulder blade with the back of the palm and the other under the patient's knees, continuing as above. The patient's first sitting position at the edge of the bed should only be for a few minutes, observe the patient carefully, measure the pulse in the following days, the length of the stay may be extended. Placing the patient in the armchair: the nurse places the armchair with the side of the armchair against the side of the bed places a blanket on the armchair puts a dressing gown and stockings on the patient puts the patient in a sitting position at the side of the bed, following the familiar method the nurse sits in front of the patient and places her hands under the patient's armpits. The patient is supports himself with his hands on the nurse's arms or shoulders, the nurse lifts the patient to his feet and, turning his back towards the chair, slowly places him in it, covers him with the blanket under the legs, a stool can be placed. When sitting in the armchair is done by two nurses, they place themselves on either side of the patient who is in sitting position on the edge of the bed, – insert the hand next to the patient under the patient's armpit and lift him to his feet. Then, by turning him, they place him in the armchair and cover him.

Raising into orthostatic position. After the patient is in a sitting position on the edge of the bed, the bedside nurse stands with her back to the bed, supports the patient from under both armpits and lifts the patient. The first lifting in this position can be maintained for several minutes. If the patient can be walked around the ward, he will be supported, under the armpits, by two nurses. Another frequently used method, with good results, is as follows. The nurse sits down, facing the patient, who is in a sitting position, at the edge of the bed secures, with her knees, the patient's knees

and with her hands grasps him from under the armpits - the patient gripping the nurse's shoulders or neck – by pushing into the patient's knees, the nurse's center of gravity descends, thus increasing the patient's lifting force.

Patient transportation. Transportation in good conditions, with great care and attention to the patient, taking into account the patient's condition, avoids worsening of the condition and other complications, such as: worsening of the condition, traumatic shock, transformation of a closed fracture into an open one, bleeding, etc. Transportation may be necessary in the following situations: evacuation of trauma victims from the scene of the accident transportation from one hospital to another, from home to hospital or home after discharge, etc. transportation from one ward to another; to diagnostic and treatment services; to and from the operating room; from ward to ward; from bed to bed, etc.

Categories of patients to be transported:

- injured, in shock, with lower limb injuries;
- the unconscious, drowsy, oblivious;
- febrile, operations;
- with severe cardiopulmonary failure;
- mental.

Means of transportation:

- ✓ stretcher bearer;
- ✓ stroller;
- ✓ armchair and patrol;
- ✓ with improvised means in case of emergency;
- ✓ special vehicles: ambulances, medical airplanes.

STRETCHER TRANSPORTATION

Preparing the stretchers. Cover the stretcher with a blanket and a sheet. If necessary, cover with muslin; thin pillow. Both the patient and the stretcher bearers are informed of the purpose of the transportation and the place to be transported. The "stretcher positioning" procedure is explained. The nurse instructs the patient on how to cooperate if the patient has an infusion, catheters, drains, etc. Safety precautions are taken. The infusion set is put on a support, the catheters are fix or clamp

etc. depending on the duration and conditions of transport. Do not clamp the chest drain in ventilated patients. In case of vomiting, renal tray is fixed. Prepare patient's documentation.

Positioning the patient on the stretcher. The patient will be seated facing in the direction of walking. He should see where he is going, especially when climbing stairs. The stretcher will be lifted to the horizontal level by the stretcher bearer. If the slope is too steep, the patient can be carried head first. Also, when the patient has to be supervised at all times, it is better to carry the patient head forward so that he can be supervised while facing the stretcher bearer. The patient will be held by the healthy side. The stretcher is held at both ends by two stretcher bearers, only by one handle each so that the stretcher hangs along the edge of the bed. Placing the patient on the stretcher requires three people. They will sit along the side of the bed on the hanging stretcher. They insert their hands, palm and fingers extended, under the patient. First: support the head and thorax, resting the back of the patient's head on the forearm. Second: supports the patient in the lumbar region and under the sitting position. Third: supports the lower limbs. The first person controls the movements:

1) suddenly picks up the patient;
2) after the patient has been lifted, takes a step back;
3) the stretcher bearers also lift the other edge of the stretchers, bringing them into a horizontal position under the patient
4) the patient is placed on the stretcher, covered.

Offloading follows the same method, but in reverse.

Patient's positions on the stretcher by condition:

– thoracic-pulmonary accidents, patients with cardiorespiratory insufficiency – in semi-sitting position;
– injured with abdominal injuries (Fowler position) – with bent knees;
– comatose patients in prone position;
– patients with facial (craniofacial) injuries, a makeshift sheet is placed under their forehead, or the traumatized person's forearm is flexed;
– unconscious patients – in semi-ventral decubitus;

– in case of swallowing disorders or salivary hypersecretion – in Trendelenburg position with maximum tilt of 10-15°;
– injured people in shock in peripheral collapse, to ensure increased blood supply to vital organs;
– agitated psychiatric patients are calmed down with medication and transported immobilized;
– in spinal injuries, patients will be carried on a hard surface.

Note! Patients should be transported in the position in which they were found. In very exceptional cases, when it is impossible to secure a hard stretcher, even an improvised one (door, wide plank), transport is admitted on a blanket, lying face down, except in those suspected of cervical spine fracture.

STROLLER TRANSPORTATION. The strollers used for patient transportation are generally the height of operating tables, so that the patient can easily be moved from the stroller to the table and vice versa.

Sitting on the stroller. The stroller is placed with the cephalic side perpendicular to the distal end of the bed (at the foot of the bed). The wheels of the stroller must be locked. For lifting the patient, three persons are needed to perform the technique in the following times. The three persons sit next to the edge of the bed. Each places their stretcher leg further forward. All three bend their knees, tucking their arms under the patient: the first, under the back of the head and shoulders the second, under the lumbar region and the buttocks – the third, under the thighs and calves then, the three persons turn the patient towards them, bring him as close as they can to squeeze him – they straighten their bodies, taking a step backwards (with the foot in front) and move towards the stretcher next to the stroller, they gently fix their knees and place the patient on the trolley, they extend their arms so that the patient is lying supine - the three persons retract their arms. When lifting the patient, the persons must hold the patient tightly to themselves and use as much lower limb strength as possible to protect their own spine. Wheelchair transport has been described when mobilizing the patient. Wheel-bed transportation is the ideal form of transportation; on all four legs, the beds are fitted with wheels or can be connected to a wheeled device, any bed can thus be made wheeled. By using this transportation system, the patient does not

always have to be transferred from the bed to the trolley, from here to the operating table or to other examinations, but will be transported directly with the bed. The bed with rolling device is waiting for the patient right at the reception desk. This method cannot be applied in all hospitals, as it requires corridors and doors to be properly dimensioned, there to be no thresholds, and the elevator to be able to move between floors.

TRANSPORTATION OUTSIDE THE HOSPITAL

The patient will be prepared in advance for transportation. The means of transportation shall be communicated to the patient. The patient shall be dressed appropriately for the season, duration of transportation and means of transportation. The patient shall be positioned as comforttably as possible. The nurse will be at the patient's side at all times. She will follow the patient throughout the journey. The nurse will be the one to hand the patient over to the doctor on duty at the institution to which he/she has been transported. The patient's position will be as comfortable as possible. The patient transported to other health services or institutions will be accompanied by the necessary documentation. The nurse must be provided with everything the patient may need on the way to give first aid. She supervises the patient during transportation. The patient is handed over by the nurse to the doctor on duty in the institution to which he has been transported. For the patient's peace of mind, it is advisable for the nurse to remain at the patient's bedside until he is placed in his bed. The means of transport should be disinfected after the transport of infectious patients.

WHEELCHAIR TRANSPORTATION

Wheelchairs are trolleys in which patients can be moved in a sitting position by supporting their legs on appropriate supports. They are used for moving patients within the hospital. The patient will be seated in the chair by 2 nurses who are on either side of the bed. Initially the clothed patient is brought to sitting position. The nurse at the patient's back will support him from under the armpits and pull him towards her until his back reaches the edge of the bed. The other nurse arranges the position of the legs, and then brings the chair to the edge of the bed behind the patient. The nurses will position themselves on either side of the chair

and support the patient from under the armpits. They will insert the other hand under the knee. They will lift him up and place him in the chair. The nurses will arrange the legs on the leg support. The patient's lower limbs will be covered with a blanket. The armchair will be pushed from behind by the nurse/kid so that the patient is positioned in the direction of walking.

TRANSPORTATION BY DRIVE MEDICAL BED (weel bed)

It is ideal for moving the patient around the hospital. The patient can be moved from the bed to the trolley and then onto the operating table/exam table. The bed can be fitted with a wheeled system or be connected to a wheeled device. In this way any bed can become a roll-away bed. Proper sizing of hallways, hospital doors, no thresholds, and elevator movement between floors is required.

TRANSPORT BY ELEVATOR

Elevators must be roomy enough to allow the patient to move about in his means of transportation. The stretcher bearer will push the bed into the elevator and enter after the patient. On exit, he will pull the bed, leaving the elevator before the patient. When transporting the patient by wheelchair/chair trolley the nurse/operator will enter the elevator first and pull the wheelchair/chair trolley behind him/her. He/she will orient the wheelchair so that the patient can see the elevator door. At the exit, the wheelchair will be pushed out and the nurse will remain behind the patient.

7.5. The need to sleep and rest

Author: *Lora Gitu*

The need to sleep and rest is the need of every human being. In order to satisfy the need to sleep and rest, good conditions and sufficient time are needed to allow the body to achieve maximum performance.

The role of sleep. Sleep is essential for life. Over a 24-hour period, the human body's basic effort requires energy – for example, the heart beats about 100 000 times, we breathe 20 000 times and utter an average of 4 000 words, training nearly 14 million neurons. All this hard work

requires periods of rest and conditions for cell regeneration. Rest and sleep thus become indispensable to life, and human beings devote a large part of their lives to sleep and rest – almost a third of our lives are spent sleeping. Sleep is an important aspect of rest, as many bodily functions regenerate during sleep. But rest is more than just sleep; it's relaxation, a change of activity pattern, a release from the pressures of current problems. Rest does not necessarily mean rest, but it can also be another activity, a walk in the fresh air or anything else that maintains intellectual capacity and can relax the muscles.

Lack of rest and not getting adequate sleep reduces the performance and efficiency of activities leading to overwork. It is well known that shorter rest and sleep periods ultimately mean shorter lives. Sleep deprivation can affect people's health and even their lives. A study by the American Cancer Society showed a 1.8-fold increased risk of death in healthy people who slept only 6 hours a night compared to people who slept 7-8 hours a night. The human body is set up in such a way that each organ has its own time for rest and recovery, the so-called biological rhythm. However, repair and regenerative processes are at their peak during sleep, children grow during sleep and adults recover. Certain hormones are secreted during sleep, showing that biochemical processes are sometimes more active during sleep. Growth hormone, for example, is largely produced during the quiet sleep before midnight. This hormone is renowned for its very important role in growth (it's no coincidence that children sleep longer than adults), but it also has an effect on the brain, increasing its size and efficiency. Growth hormone also stimulates the transportation of amino acids from the blood to the nerve tissue, allowing nerve cells to make learning a lifelong process. Studies show a directly proportional relationship between sleep duration and cognitive abilities, and when sleep duration is prolonged, both attention and intellectual, emotional and physical performance significantly increase throughout the day. Another important hormone, cortisol has its peak production between midnight and early morning. Cortisol plays a key role in the body's ongoing struggle to cope with stressors, reducing inflammation and fatigue. Late night sleepers do not give their body the opportunity to

recover from the wear and tear of the day and so reduce their energy and vitality for the next day. Sleep replenishes epithelial tissue cells and maintains brain neurons through better irrigation, especially during dreams.

Sleep physiology

Research has shown that sleep is not simply a state of abolition of consciousness, but a modified form of consciousness, but with some relations with the environment. **Sleep** is a very complex physiological process in which the human brain and body alternate between very active and quiet periods, but in which activity never ceases. **There are two distinct types of sleep:**

1. **Slow sleep,** also called *non-rapid* eye movements (**NREM**) sleep, also known as *dreamless sleep*.
2. **Rapid sleep**, also known as **rapid** eye *movements* (**REM**) sleep or *paradoxical sleep*, is dream sleep.

Slow sleep, or classic sleep, is a period of true rest for the body (but partly for the brain), it has a restorative, restorative, fortifying role, with a function in the growth and renewal of body tissues. It has been divided by Loomis into four phases and is characterized by slow waves, periodically interrupted by rapid (paradoxical) sleep, and is based on dynamic cortical activity. Subjects awakened during fast sleep all report dreaming. Slow sleep accounts for 60-70% of all sleep, while fast sleep accounts for about 30-40%. While the EEG waves in slow sleep are represented by high-amplitude spindles, fast sleep is characterized by rapid, desynchronized electrical activity. Today, thanks to research, it is now possible to distinguish exactly the two sleep periods.

NREM (*nonrapid eye movements)* sleep relaxes and rests muscles and the body in general. During it, there is a drop in body temperature and blood pressure. Breathing cools and becomes very regular. It is now known that this type of sleep is divided into four stages. **Stage I** is a period of **drowsiness**, in which the brain's electrical activity is similar to that during wakefulness. It is a stage when the person feels very relaxed and may feel as if they are dreaming, although they are still aware of

everything going on around them. As the muscles relax, muscle twitches and spasms may occur, sometimes intense enough to temporarily banish sleep. These more violent twitches are called 'myoclonic jerks' and are completely harmless.

As sleep deepens, **stage II progresses**, with changes in the electroencephalogram in the form of a reduction in its wave frequency. Stages I and II of NREM sleep are progressively deeper levels of sleep in which the subject loses conscious contact with what is going on around them, but can be easily awakened. **Stage III** is deep or slow-wave sleep. In the first cycle, the duration is about 20-40 minutes. It accounts for about 13-18% of all sleep

After about forty minutes after entering stage I, the subject moves to **stage IV**, from which awakening is more difficult. This is the stage in which the body relaxes, rests and physically recovers. This stage is also responsible for certain undesirable phenomena such as snoring, sleepwalking, nocturnal urination in children (enuresis), etc. If a person is awakened during deep sleep it takes longer to wake up and then they continue to feel hung over, sleepy and disoriented for a period of 10-15 minutes, also called sleep inertia.

REM (paradoxical - *rapid eye movements*) sleep occurs after about ninety minutes of NREM sleep, when there is a slight return to **stage I, shallow**, going through the other stages in reverse order. However, instead of reaching stage I and waking up, REM sleep is entered. This is characterrized by twitching and rapid muscle contractions, including eyeball muscle contractions, alternating with periods of relaxation. Pulse and blood pressure show significant variations during REM sleep. The electroencephalogram (EEG) records characteristic waves that show increased bioelectrical activity in the brain. The REM (rapid eye movement) period is associated with extreme brain activity (dreaming) while most locomotor muscles are paralyzed. If the person is awake during this period they can recount the dream in great detail. All people dream during REM sleep, although not all people remember their dreams. While stage IV NREM sleep restores the body physically, REM sleep restores and rests the body mentally and is very important for memory and learning. That is why it is

very wise to ensure that you sleep efficiently before making an important decision or solving a difficult problem. Variations in the occurrence of sleep cycles are large from individual to individual. In order to maintain a state of independence, it is necessary to respect the sleep-wake rhythm.

Sleep adjustment

Sleep is induced by **serotonin**, a neurotransmitter secreted by specialized neurons in the bulb, pons and midbrain. This area can be controlled by impulses from lower (e.g., sounds, light stimuli, pain) or higher (thoughts) levels. Emotions through the limbic system can also influence the area responsible for sleep induction. When a person wants to fall asleep, he or she adopts a relaxed position in a quiet environment without bright light, closes the eyes, thus suppressing the activity of the reticular system.

Circadian rhythm and sleep-wake cycle regulation

The regulation of the sleep-wake cycle also involves the **pineal gland (epiphysis)**. It is known that the pineal gland, in addition to being the rhythm-maker and time recorder, is a photosensitive organ that interprets sensory messages transmitted by the retina.

Melatonin secretion by the pineal gland peaks at night. This is one of the ways in which the epiphysis establishes communication with other organs and acts as a daily time-measurer for the whole body. It has great antioxidant potential by destroying free radicals in the body that are responsible for degenerative diseases (cancer, Alzheimer's disease, Parkinson's disease).

Melatonin is probably the only antioxidant capable of penetrating into every single cell of the human onanism, preventing and reducing the damage caused by free radicals brought on by carcinogenic foods or produced by stressors. When it is produced in sufficient quantities (during the night), it ensures deep and efficient sleep, whereas low production causes heavy drowsiness, shallow, restless sleep or even insomnia.

Changing time zones or working shifts causes changes in blood pressure, blood glucose, vitality, mental state, endocrine system, accompanied by insomnia. The use of sleeping pills can induce sleep, but other symptoms remain unchanged. The return of the pineal gland's ability to

secrete melatonin will reset the biological clock and restore the entire physiological balance of the body to those who change time zones or work shifts.

Attention and performance are affected by the circadian rhythm, which is controlled by the hypothalamus and can be observed by analyzing the evolution of body temperature. Thus the lowest level of body functioning is between 3-5 in the morning (when, along with body temperature, attention and performance are at their lowest), and people who work at night are at their most sleepy. Then there is a risk of accidents at work. The maximum of attention and performance is between 9-11 in the morning, followed by a second minimum between 3-5 in the afternoon and a new maximum between 9-11 in the evening. Daytime sleepiness (between 3-5 in the afternoon) occurs even if no lunch has been served, but if lunch has been served, between these hours sleepiness is exacerbated.

INDEPENDENCE IN MEETING NEED

REST is the period during which the body's altered structures are restored, used energy resources are replenished, the products formed during exertion are transported, either in the liver – lactic acid, or in the kidneys, an excretory organ.

SLEEP is the particular form of rest through the absence of wakefulness. Sleep frees the individual from psychological and physical tensions and allows him or her to find the energy needed for daily activities. During sleep, physiological activities decrease, basal metabolic rate decreases, muscle tone decreases, respiration rate, pulse rate and blood pressure decrease. The secretion of growth hormones increases, especially during the first year of life and puberty. These are more evident during nocturnal sleep and lower during daytime sleep.

Factors that influence whether you get enough sleep are:

1. **Biological factors** include:

– *age* - the need for rest and sleep varies with age: for example, a child, while growing up, needs more hours of sleep, which progressively decreases until adulthood, when it stabilizes, while in the elderly, the

need for hours of sleep remains unchanged, the quality of sleep changes (it becomes superficial, difficulties falling asleep occur, the frequency of night wakings increases, which facilitates daytime napping), the body's own needs, there are people who sleep less, keeping their good mood, energy and work power, while others require a large number of hours of rest and sleep.

– *activity* - adequate physical activity predisposes the individual to restorative sleep.
– *sleep-related habits*. Sleep has its own rules, its own rituals, which need to be taken into account; going to bed at the same time, sleeping at night, comfort, certain habits before or at bedtime such as: reading a good book, having a warm bath, drinking a hot or cold drink; in children, bedtime stories or playing with a favorite toy encourage sleep.
– *the sleep-wake rhythm* is a biological process whose periodicity is linked to the alternation between day and night; changes in this alternation can explain disturbances in the sleep-wake function in cavers (people who explore and study caves); cosmonauts; workers, including medical staff working shifts. This disturbance in sleep-wake function leads to disturbances in many biological systems. Night sleep is more restful than day sleep.
– *the ability to unwind* is the release of nervous tensions, daily worries, physical and mental relaxation favors the onset of sleep; if not released from them, it is possible to fall asleep with great difficulty.

2. **The psychological factors** are:

– *depression; anxiety; fear; stress,* etc. The state of anxiety, which is more or less conscious, which produces a strong inner tension, manifested by insecurity and neurovegetative disturbances, alters the quality and duration of sleep.
– *psycho-active substances* (alcohol, drugs, coffee, tea, some medicines, etc.) influence the quantity and quality of sleep.
– *some sleeping pills* can alter the quality of sleep.

3. **Sociological factors** refer to:

– *activity schedule*, just as people who have a variable work schedule also have a modified sleep-wake rhythm, which influences the

satisfaction of the need to sleep and rest. Night sleep provides the body with the rest it needs, which is why it is necessary to go to bed at set times

– *where you rest*: the comfort, the number of people you share the room with, the privacy and quietness of your resting place can affect how you rest and sleep.

MANIFESTATIONS OF INDEPENDENCE relate to the characteristics of sleep in terms of quality and quantity, rest periods, periods of relaxation and leisure time, the ways used for rest and relaxation.

The aspects of **sleep** that need to be assessed in independence displays are its *duration* and *quality*.

Sleeping needs

Normal sleep duration values vary with age, as follows:

– newborn: 18-20 hours;
– children up to 1 year (infant): 14-16 hours, including daytime sleep;
– toddler sleeps throughout the night and has one or two daytime sleep episodes, on average: 10-14 hours, the second daytime sleep episode is sometimes eliminated; preschooler: 10-11 hours, daily;
– 5-11 years: 9-13 hours;
– schoolchild: 10-12 hours; teenager: sleeps an average of 8 to 10 hours a day, but spends a longer period lying in bed
– adults have the most individualized sleep needs: 7-9 hours, while some people need 9 hours of sleep to recover, others need only 6 hours daily;
– older people sleep less because they recover less: on average 6-8 hours.

To assess *the quality of* sleep, the basic functions should be taken into account: regenerative, calm, no nightmares, no interruptions, easy falling asleep and restful awakening; in a child, continuous, nocturnal sleep is installed after the 3rd month, and by the end of the 10th month, the organization is similar to that of an adult. The characteristic of dreams, which must be pleasant and/or pleasant, also refers here.

Rest periods:

• To avoid physical and mental overwork, periods of activity should be interspersed with periods of rest.

- The duration of these periods, the intervals at which they occur, the judicious scheduling in relation to the work done and the body's needs have a beneficial, recreational effect on the body. Example: break after class.

Periods of relaxation and free time are necessary to be well-timed and well-timed alternating with well-organized activity, allowing the restoration of physical strength and intellectual capacity. Example: weekend days, school holidays, vacation periods, holidays, etc.

Modes used for rest and relaxation are equally important for assessing independence in satisfying the need to sleep and rest. Of the means of relaxation and rest, of great variety and complexity will often be the most appropriate to the character and possibilities of the individual. It is advisable to avoid methods that do not offer the possibility of relaxation and do not contribute to maintaining health. The most effective form of rest is active and combined: after physical activities, intellectual activities should be followed by intellectual activities, and after intellectual activities, light and pleasant physical activities.

Nursing interventions to maintain the need to sleep, rest are to:

– maintain the necessary conditions for sleep, respecting the person's wishes and habits;
– observe whether the periods of relaxation and rest are in relation to the body's needs and the work done;
– explain the need to maintain an orderly life with a set schedule and stick to it;
– learn relaxation techniques and ways to promote sleep through discussions, demonstrations, documentary material, bibliotherapy, etc.

Sleep deprivation

Short-term **insufficient sleep** leads to gradual and cumulative degradation of intellectual performance, attention and behavior. At the same time reaction time to events increases, alertness is reduced, thinking becomes slow and confused, and problem-solving time increases. Long-term insufficient sleep leads to or worsens health problems, thus shortening life expectancy. Sleep experts have developed a simple rule of thumb to assess whether a person has had enough sleep: if the person

is not sleepy but alert and rested during the following day, then the sleep requirements of the previous night have been met.

REM sleep deprivation is more unpleasant than **NREM** sleep deprivation. Two American researchers (N.R. Culler and H.B. Cohen) have shown that sleep deprivation for one night has effects on mood and memory in healthy people, while REM sleep deprivation leads to decreased efficiency and integration. These individuals became confused, insecure, fearful and showed a marked increase in appetite, with corresponding weight gain.

Those deprived of deep NREM (stage IV) feel physically unfit, tend to withdraw from society, are less outgoing and friendly, often preoccupied with physical symptoms. Research has shown that the body prioritizes deep sleep when it has to choose between it and dream sleep. So the need for deep sleep is satisfied first and only then the need for dream sleep.

These two types of sleep alternate several times (repeat about 4-6 times) during the course of a night in a cyclic pattern, characterized by variations in sleep depth, as well as in brain electrical activity, eye movements and muscle tone. Throughout a night's sleep, the NREM and REM phases occur in cycles of about 90-120 minutes (60-90 minutes NREM sleep followed by 30-45 minutes REM sleep). Daytime sleep does not follow the same pattern as night sleep. REM sleep predominates during morning sleep and deep sleep (stage IV) predominates during afternoon and evening sleep. Each person shows individual, not too great, variations from those described above.

Good quality, restful sleep is the guarantee of physical and mental health both for the child, during growth and development, and for the adult, for self-fulfillment and maximum contribution to the community.

DEPENDENCY PROBLEMS in satisfying the need to sleep, rest are insomnia, hypersomnia, discomfort, discomfort, fatigue and difficulty or inability to rest. Because these terms have not been explained previously the following is their interpretation. Thus, *insomnia* is the difficulty in sleeping or resting while asleep, *hypersomnia* are excessive hours of sleep, with prolonged duration and intensification of the depth of sleep,

discomfort is the feeling of embarrassment, physical and mental discomfort, *fatigue* is a painful sensation, accompanied by inactivity, nervous and muscular exhaustion.

The sources of difficulty are of the following nature:

- *physical* – organic disorders – brain, endocrine, physical constraints, imbalances, pain, overwork;
- *psychological* – impaired thinking, anxiety, frustration, stress, crisis, loss, separation etc.
- *social and lack of cognition* – failure of function, lack of knowledge, lack of self-awareness, inadequate temperature, inadequate environment, increased sensory stimuli in the home and more.

Next we will present 4 most common problems of addiction in satisfying the need to sleep, rest.

Insomnia: difficulty sleeping or getting rest by sleeping

This problem manifests *as disturbed sleep*: insufficient number of hours of sleep – total duration of 6 hours, initial insomnias – the patient falls asleep very slowly and then sleeps until morning, terminal insomnias – after a normal falling asleep, wakes up and cannot fall asleep, quality of sleep which is either interrupted, or restless, or shallow, dormitional insomnias - the occurrence of multiple waking periods, which occur during the night, fractionating the night's sleep; awakenings last for a long time, are distressing; these awakenings can be after unpleasant dreams or nightmares, pre-sleepless insomnia – prolonged waking until sleep onset, post-sleepless insomnia – occurs in the elderly and especially in those who go to bed early. Another problem are *daytime naps*, characterized by short naps of short duration; depending on their duration and number, they may or may not complete the lack of night sleep; some patients sleep during the day and night sleep is short but totals the required number of hours of sleep (false insomnia). *Nightmares* are distressing, dominant dreams, when the patient wakes suddenly from sleep, restless, agitated, falls asleep again with difficulty. *Somnambulism* is a paroxysmal sleep disorder, usually occurs in the first part of the night, the patient gets out of bed and starts wandering around the room, streets, dangerous places; has wandering eyes, disorderly movements, does not speak, does not answer questions; after a

while turns over, goes to sleep, falls asleep. The next dependency problem is *apathy*, which is lack of interest in one's surroundings and one's own person; may stay in bed for a long time in search of sleep. *Sleep terror* or night terror is a state of intense fright, which occurs during sleep, more common in children; the patient wakes up suddenly from sleep, is semi-conscious, gets up in a sitting position, screams, may have hysterical crying, gesticulates, has wandering eyes, tries to run away; after a few minutes, this state disappears, the patient falls asleep. In such states, the child cannot and should not be woken up, as the seizure may get worse. Seizures can last from a few minutes to half an hour, after which the child calms down and falls asleep on its own, and the next day cannot remember the episode. Another problem is *restlessness* – unjustified fear that occurs against the background of emotional instability, disturbing the patient's rest; thought disorders, manifested by the appearance in the patient's consciousness against his will of representations, ideas, feelings that he is trying to suppress. Here again we list *confusion,* which are false perceptions (he perceives an object or phenomenon), being convinced of their reality; these states prevent him from resting. *Irritability* is when the patient is in a state of continuous mental tension, manifested by restlessness, restlessness, restlessness; falls asleep with difficulty, has a shallow, interrupted sleep. *The feeling of depression – sadness* is then when patients, sometimes dissatisfied with their rest, are convinced that they have not slept all night. *Decreased power of concentration* is when the patient is unable to concentrate on an activity, attention is diminished, has uncertain gestures. *Tiredness* as a problem of dependence in satisfying the need to sleep, to rest presents itself when the patient feels tired, more tired than when going to bed, gloomy facies, dark eyes, slurred speech, trembling of extremities, etc.

Measures taken by medical staff to meet the need in the patient with insomnia.

The nurse's interventions, autonomous and delegated in nature, aim at the basic objective, that the patient benefits from adequate sleep in terms of quantity and quality:

– teaches the patient to practice relaxation techniques, breathing exercises a few minutes before bedtime;

– offers the patient a cup of warm milk before bedtime, a warm bath;
– teaches the patient who wakes up early to get out of bed for a few minutes, read, listen to music, then go back to sleep;
– identifies the level and cause of anxiety in patients with insomnia;
– observes and notes the quality and timing of sleep and the degree to which other needs are met;
– draws up an appropriate rest program for your body;
– administers the drug treatment – observe its effect on the body, etc.

Hypersomnia - excessive hours of sleep, prolonged sleep duration and increased sleep depth

Manifestations of addiction are:

– ***Modified sleep -*** *the number of hours of sleep at night* are more than 10 hours in adults and 12 hours in children (excluding the particular conditions of fatigue after excessive exertion, convalescence or insomnia, which require sleep recovery); *sleep quality* – differs from normal sleep in depth, duration, suddenness of onset. The duration, mode of onset, course depend on the nature and localization of the causative disorder.
– ***Somnolence (daytime sleep attacks)*** Anipitations; patient hears words spoken aloud, may respond somewhat abruptly, laconically. Fall asleep without a stimulus. May last for days, weeks, may be followed by reversals of nocturnal rhythm.
– ***Lethargy*** is a deeper, continuous hypersomnia; may be briefly awakened by violent excitement, while retaining a degree of obnubilation and intellectual sluggishness. It may last for hours, days, months or years. Vital functions are diminished.
– **Narcolepsy** - presents sudden need for sleep, preceded by loss of muscle tone. Occurs during periods of inactivity or postprandially, but patients may also fall asleep during activity. Sleep is shallow, interspersed with awakenings, unpleasant dreams, vegetative reactions, sweating, hot flushes.
– **Verbal and nonverbal behavior** is slow, sluggish, the patient responds with difficulty to questions.

– **The fatigue** that the patient is suffering from is a state of both muscular and nervous exhaustion.
– **Inactivity –** the patient's permanent state of sleep deprivation reduces the possibility of physical activity.

Nursing interventions (autonomous and delegated) in the *patient with hypersomnia* aim to achieve 2 objectives:

▪ ***The patient to receive an age-appropriate number of hours of sleep:***
  – identifies the cause of hypersomnia by talking to the patient or family;
  – identifies ways to reduce the causative factors together with the patient;
  – builds trust;
  – encourages and reassures the patient to regain his or her mental balance;
  – observes and notes any changes in the patient's condition;
  – administers drug treatment;
▪ ***The patient to be active and cooperative:***
  – identifies which activities the patient likes;
  – develops together with the patient an activity program that corresponds to the patient's condition and the body's possibilities;
  – observes sleep, its quality, the ratio between wakefulness and sleep.

Discomfort: feeling of embarrassment, physical and mental discomfort

Manifestations of dependency are:

– *irritability*, i.e. the patient's inability to remain calm and behave calmly and appropriately in the situation;
– *indisposition, embarrassment* is the state of not being in a good mood, of sorrow;
– *state of discomfort*, it is an unpleasant state of discomfort;
– *diaphoresis* – profuse sweating that causes discomfort;
– *muscle pain* – the uncomfortable position causes prolonged muscle contractions, which are painful for the patient.

Nursing interventions (autonomous and delegated) will be appropriate to the objective, so that the patient is physically and psychologically comfortable.

– discusses with the patient to identify the causes of the discomfort (fear etc);
– helps the patient to rest by suppressing the sources of discomfort and irritability;
– makes the patient feel at ease, by talking
– facilitates contact with other patients, family members;
– applies routine care techniques necessary to achieve satisfaction;
– observes and notes changes.

Fatigue: feeling tired, accompanied by inactivity, nervous and muscular exhaustion

Manifestations of dependency can be objectified by examination:
– *face* – pale, expressing sadness;
– *eyes* – strained, blurred;
– *pulse* – rare, slow, weakly beating;
– *blood pressure* – the tendency to fall below normal;
– *sleep* – daytime sleepiness;
– *skin appearance* – pale, cold sweats;
– *mental state* – boredom, apathy;
– *body weight* – lowering;
– *asthenia* – decreased strength.

Nursing interventions (autonomous and delegated) will be directed towards the goal that the Patient will be rested with good physical and mental tone within ... days.
– identifies the cause of fatigue;
– helps patients plan their daily activities;
– sees if rest periods match your body's needs;
– boosts the patient's confidence in themselves and their caregivers
– teaches the patient how to perform relaxation techniques;
– helps you apply them correctly;
– observes and notes vital and vegetative functions, sleep-rest period, patient's behavior – administers the medication indicated by the doctor
– observes its effect.

Assessment and care techniques associated with the need for sleep and rest:

For most people, adapting to a new environment impacts on rest and sleep. Thus stationary is necessary:

1. ***To assess the patient's degree of adaptation to the hospital environment:***
   - activity in the hospital environment may have the effect of altering the sleeping and resting habits/rituals of hospitalized patients;
   - the extent of the changes depends on the patient's physiologic and mental state and where the patient is placed;
   - knowledge of patients' physiological sleep needs;
   - sleep monitoring in terms of quantity and quality;
   - recognizing signs that you are not getting enough rest;
   - detecting the causes and remove them.
2. ***Noise reduction in the hospital environment***:
   - closing the doors to the lounges;
   - reducing the volume of some appliances near the rooms (telephone, radio, TV, compressors, etc.);
   - wearing shoes with rubber soles, not metal heels
   - avoiding loud talking, slamming doors;
   - careful handling of trolleys, tool kits and cleaning materials (buckets);
3. ***Ensuring comfort:***
   - reducing sources of physical irritation;
   - pain relief;
   - ensuring good personal hygiene
   - keeping bed linen clean and dry;
   - ensuring an appropriate temperature in the salon;
   - adopting a comfortable position on comfortable mattresses
   - reducing care interventions during periods of sleep;
   - promoting a daily activity (e.g. participating in care)
   - creating a physically and mentally safe environment (bed side rails, night light)
   - advising the patient to empty their bladder before bedtime;

4. ***Favoring bedtime rituals:***
   - airing the room;
   - relaxation exercises
   - reading;
   - watching TV;
5. ***Patient education***:
   - setting a sleep and rest schedule;
   - explaining the role of sleep and rest in restoring the body
   - the need to avoid factors that influence sleep and rest (fatigue, stress, coffee, alcohol, alcohol, sensory overload).

Relaxation exercises

- Relaxation exercises are based on a holistic model of illness and health based on the assumption that the individual is a unitary bio-psycho-social entity.
- Different types and techniques of relaxation can be used.
- The patient will first be asked if they want to learn a certain relaxation technique, which they can then apply themselves.
- If the patient expresses a willingness to learn, the nurse will give an overview of what they will be asked to do.
- They will be shown how important it is that the large muscle groups and joints are not tense; while applying the relaxation technique, the nurse will use a calm, soothing voice.

The patient will be asked to:

- lie very still so that your arms, legs, back and neck are in a comfortable position;
- remember a time or occasion in his life when he felt very peaceful and happy;
- close his eyes and focus his thoughts on this memory;
- breathe in slowly and deeply, five times, slowly exhaling the air through pursed lips;
- relax his chest and stomach

The patient is advised to:

- tense their muscles (counting up to 8-10), then relax (for the same amount of time);

- start at the feet and continue with the whole body up to the head as follows:
  - Strongly flexes the toes, then relaxes them;
  - stretches and relaxes the ankles;
  - continues with legs-strung-relaxed, imagining that the limbs have become very heavy and the mattress is pressing them up
  - tenses and then relaxes the knee.

Meditation is a common method of relaxation and can be used by anyone in need of relaxation.

1. Sit or lie down with eyes closed and try to relax all your muscles, starting with your legs.

2. Inhale slowly through the nose (you can count to four); exhale slowly through the lips (you can count to six) in a natural rhythm.

3. Watch the body for areas of tension and consciously relax these areas; the body to be relaxed and rested.

4. Continue the breathing as described above, becoming aware of the body's sense of well-being; this stage can be continued for 10-20 minutes or, after five minutes, move on.

5. Listen to a sound or visualize a picture for relaxation while continuing the described exercises.

6. At this point, autosuggestion can be used; for example: 'I am in control of my whole body; when I am tense, I can stop, to breathe in all the air I need and to release the tension'.

7. After mental autosuggestion, continue slow breathing and gradually return to normal mental state.

8. Meditation can be used at any time when it is necessary to achieve a state of relaxation (for example, to induce sleep).

7.6. The need to dress and undress

Author: *Lora Gitu*

The need to dress and undress is an individual's own need to wear appropriate clothing according to the circumstances, the temperature of the day, the activity, in order to protect the body from the action of the

climate (cold, heat, humidity), allowing freedom of movement.

Clothes provide a good requirement and protection of sexual intimacy and also have a special meaning for a group, ideology or social status.

Clothing can become an extension of personality, the choice of an ornament, expressing individuality, a sense of dignity and self-respect.

Lack of clothing can be a loss of freedom (when he is forced to wear what he doesn't like) and a means of punishment.

Much research has been done on clothing. For example, sociologists have studied the psychological effects, and physiologists have looked at the characteristics that cause clothes to protect us from cold, damp or heat. In the view of mental health specialists, clothing is a sign of health. Bizarre, gaudy, over-adorned clothing can even express mental illness.

INDEPENDENCE IN MEETING NEED

Man needs clothing to protect himself from the harshness of the climate; concerned about his health, he chooses clothing appropriate to his circumstances and needs. Clothing testifies to the individual's integrity and protects his sexual intimacy. In addition, clothing, through its generally aesthetic concerns, contributes to bodily expression and selectively participates in communication.

Factors influencing need satisfaction:

1. Biological:

– *Age:* body temperature varies with age; the individual acquires appropriate clothing to protect against variations in ambient temperature. Young children and elderly people have lower body temperatures than adults, so they need to use warmer clothing (children are more prone to temperature loss due to a weaker self-regulatory system due to their developing body, and the elderly due to reduced body functions).
– *Waist, height:* to ensure wellbeing, people choose clothes according to their waist and height.
– *Activity:* for comfort and freedom of movement, depending on the activity, individuals wear appropriate clothing.

2. Psychological:

– *Belief:* individuals who adhere to a religion or ideology wear clothing or objects that are meaningful to them or to the community to which they belong. In addition, wearing uniforms allows individuals to distinguish themselves in society as part of a particular group.
– *Emotions:* influence the choice and wearing of clothes that allow the expression of feelings and a state of psychological comfort

3. Sociological and cultural:

– *Climate:* the warm *climate* forces individuals to choose clothing that allows them to maintain body temperature; to prevent heat and moisture accumulation, white, loose, loose, loose, light clothing should be worn, while dark-colored, thick clothing keeps body temperature within normal limits, preventing heat loss
– *Social status:* society, through its norms, imposes a status on individuals that obliges them to dress and wear items that prove their social rank. Depending on financial circumstances, there may be limits on the choice and wearing of clothing.
– *Work:* working conditions can also influence the choice and wearing of clothing. Safety in the workplace is ensured by equipping work clothing with special items of clothing to protect against accidents, cold, noise, etc.
– *Culture:* clothing can help to preserve traditions and that's why people adopt clothing that will set them apart from others (folk dress).

DEMONSTRATIONS OF INDEPENDENCE

- **The meaning of clothing –** it covers and protects the human body; it suggests membership or non-membership of a social, professional, cultural, religious, etc. group.
- **Personal choice** – clothes chosen according to taste and circumstances (individual personality, festive occasions, clothing preferences, fashion).
- **Sorting clothes –** appropriate to psychological functions in accordance with the importance given to clothing and personal attire.
- **Clothing quality** – appropriate to climate, socio-cultural status.
- **Ownership of clothes –** it reflects socio-economic level, social status.

- **Carrying significant objects**
  - Highlighting social rank;
  - Personal significance (through medallion, talisman);
  - Religious function, religious denomination;
- **Privacy demands:**
  - Fashion, social norms, tidy, clean all the time, in everything;
  - Aesthetic functional-activity.
- **Physical ability to dress and undress:**
  - Joint mobility, muscle tone;
  - Psychomotor maturity.
- **Waist and height –** age, pregnancy, degree of body fat development.

Nursing interventions to maintain independence

- Teaches the person to choose clothing appropriate to the climate, environmental temperature, activity, age;
- Explores each person's taste and the meaning of clothes;
- Encourages the person to choose their own clothes, ornaments, accessories.

DEPENDENCY AND SATISFYING THE NEED TO DRESS AND UNDRESS

Dependency problems are:

1. Dressing and undressing;
2. Disinterest in dress;
3. Clumsiness in choosing the right clothes.

Sources of difficulty:

1. Physical

1.1. Extrinsic disability:

- obstacles preventing upper limb mobilization;
- plaster appliances, immobilization systems – pins, tapes, bandages, dressings, wounds;

1.2. Intrinsic incapacity:

- physical injury, impairment of upper limb motor skills;
- absence of an upper limb/portion (blunt);

2. *Psychological:*
   - thought disorders;
   - anxiety;
   - stress;
   - loss of self-image;
   - loss/separation;
   - crisis situation;
3. *Social:*
   - failures;
   - conflict
   - poverty;
   - loss of consciousness;
   - insufficient knowledge of self, others and the environment.

DEPENDENCY MANIFESTATIONS are presented by:

1. *Difficulty/inability to dress and undress:*
   - difficulty buttoning and unbuttoning their buttons;
   - difficulty/inability to move their upper limbs;
   - difficulty putting on and taking off shoes.
2. *Disinterest in his outfit:*
   - apathy in getting dressed;
   - melancholy.
3. *Refusal to dress and undress;*
4. *Improper choice of clothing:*
   - exaggerated, silly clothing;
   - bizarre hairstyles.
5. *Uncomfortable clothing:*
   - inappropriate waist, body mass.

Nursing interventions will be oriented towards the following objectives:

1. ***The patient to know the importance of satisfying dressing and undressing:***
   - educates the patient on the importance of clothing in identifying personality;
   - notes the person's daily interest in dressing and undressing;

- supervises what the patient is wearing;
- explains the links between dress, image and self-esteem;
- encourages the patient;

2. The patient to dress and undress him/herself for a period of ...

- identifies the physical capacity and limitations of the person being cared for;
- gives him enough time to dress and undress, recommends that if he gets dizzy, he should get dressed in a sitting chair;
- suggests that caregivers provide the patient with loose-fitting, easy-to-dress, loose-fitting clothes with simple fastenings, shoes without laces;
- does daily fine motor exercises with the patient describing the gestures required for dressing;
- dresses and undresses the patient in case of limb paralysis, supporting the paralyzed limb during dressing, start dressing with the paralyzed and then the healthy one and undress in reverse;

3. The patient with mental health problems to regain the independence to dress and undress on a term of ...

- assesses the degree of confusion and observes changes in behavior, orienting it systematically in time and space;
- asks the person to get dressed, speaking clearly, distinctly, respectfully, patiently and at their pace;
- explains what to do when getting dressed in an accessible and clear way;
- arranges objects in the room in the same order all the time, and clothes in the order of use, and asks the patient to put them in reverse order when undressing.

Dressing and undressing the bedridden patient

The **purpose of** this maneuver is to protect the body and ensure privacy. To achieve this purpose the **objectives** will be followed:

– maintaining the patient's hygiene and comfort;
– prevention of pressure spikes;
– enhancing patient dignity;
– identity preservation.

Nurse interventions:

- the choice of underwear depending on gender (nightgown or pajamas), environmental temperature, age, waist and stature (to ensure ease of movement), physical and mental integrity of the patient (comfortable and easy to close);
- preparation of patient's hand linen;
- explaining all the actions to be taken;
- encouraging the patient to participate as much as possible within their physical limitations,
- congratulations on every progress;
- assisting the patient in performing the technique (if necessary, it is performed by 2 nurses).

Materials needed: pajamas (nightgown), blanket, talcum powder, bag for used underwear, disposable gloves.

Patient preparation:

– *psychological:* informing the patient, explaining the need for the technique, explaining participation in the procedure, obtaining consent;
– *physical:* providing privacy and ensuring physiological elimination before the procedure.

The procedure consists of:

– placing clean linen on a chair at the edge of the bed;
– the use of the patient's physical resources and the patient's mobilezation possibilities;
– folding the blanket at the patient's feet;
– covering the patient with a warm blanket;
– washing, disinfecting hands and putting on gloves.

The stages of undressing and putting on your pyjamas top:

– undoing buttons;
– turning the patient in lateral decubitus and removing the freed arm;
– turning the patient in reverse lateral decubitus and undressing the other arm by removing the blouse;
– keeping the patient in lateral decubitus;
– rolling up the sleeve and dressing the free arm;

– gently turning the patient to the reverse lateral decubitus position and dressing the other arm, stretching the blouse over the back;
– placing the patient in supine position;
– button closure;
– putting the worn blouse in the underwear bag.

Undressing and putting on pajama pants:

– lifting the lumbosacral region and carefully pulling the pants up towards the legs;
– gently lift the lower limbs and continue undressing;
– observing the appearance of the lower limbs;
– gentle lifting of the patient's lower limbs by the person assisting the nurse;
– putting on each limb in turn and pulling the pants up close to the seat;
– lower limbs lying on the bed;
– lifting the buttocks and pulling the pants up;
– checking bed linen for creases;
– putting the pants you are wearing in the used underwear bag.

Patient care after the procedure:

– positioning the patient in a comfortable position;
– observing the patient's facial features and condition;
– making the bed and wrapping the patient.

Reorganization of the workplace and registration of the procedure:

– removal of used materials;
– hand washing;
– noting the procedure in the care plan.

Evaluation of the procedure: it is done according to the expected/ unwanted results; the change was done without incident/the patient complains some inconveniences that need to be remedied (rough behavior, fatigue, pain, sore, stained underwear, etc.).

Important!

– in the case of upper limb disorders, the undressing of the healthy limb begins and dressing begins with the affected limb;

– for lower limb disorders, pyjamas are not recommended;
– it is recommended to support the paralyzed limb during the undressing-dressing procedure;
– the medical staff must allow sufficient time for the patient to perform the procedure;
– the healthcare worker must approach the patient with empathy, patience and calm.

7.7. The need to maintain body temperature within normal range

Author: *Maria Garabajiu*

Maintaining a normal temperature is the body's need to keep the temperature at a roughly constant level in order to maintain well-being.

I. Independence in satisfying the need

Independence in satisfying the need to maintain body temperature within the norm is achieved due to a balance between thermogenesis and thermolysis, a process called homeothermy. Thermoregulatory centers located in the hypothalamus are responsible for maintaining this balance. The heat created by the body is a by-product of metabolism, which is the chemical reaction in all the body's cells. Activities that require additional chemical reactions increase the metabolic rate.

THERMOGENESIS. Heat generation – thermogenesis, is provided by the internal organs.

– At rest, the liver is responsible for 30% of the resting heat, another source are hormones (thyroid, testosterone, etc). This process is basal metabolism.
– Exercise: skeletal muscle produces 90% of the energy for thermos-genesis. Muscle thermogenesis controlled by variation in muscle tone and voluntary muscle contraction provides 'warm-up'. Another type of muscle contraction – involuntary muscle contraction, called muscle spasm/shivering.

THERMOLYSIS. The mechanisms of heat loss are physical and physiological.

1. Physical mechanisms:
- radiation: heat loss through infrared electromagnetic radiation in cases where objects in the environment have a temperature lower than the body's temperature;
- conduction: the transfer of heat between two objects in direct contact; the mechanism plays an important role when immersed in water (cold baths, contact with ice cubes);
- convection: the loss of heat by cold air currents surrounding the body;
- evaporation: heat loss through evaporation of water at the surface of the skin; it is the most effective method of thermolysis in overheated environments and during intense physical exertion and implies insensible perspiration (evaporation of water through respiration) and sweating (evaporation of sweat fluid from the skin).

2. Physiological mechanisms are based on:
- mechanisms that increase heat loss: cutaneous vasodilation, increased sweat gland secretion;
- inhibition of heat-producing mechanisms: inhibition of shivering and reduction of muscle tone, reduction of chemical thermogenesis, inhibition of thyroid hormone secretion.

Factors influencing need satisfaction:

- **Biological factors**
  - ~ *Age:* newborns and young children have fragile thermoregulation due to the immaturity of the respiratory center.
- the newborn's normal temperature is between 36.1°- 37.8°C.
- the adult has a normal temperature 36°-37°C
- the elderly's normal temperature is 35°-36°.
  - ~ *Exercise* - during very intense muscular activity body temperature can rise 2.2°C-2.7°C above normal, but returns when activity ceases, after activity body temperature falls.
  - ~ *Diet* - food intake (protein, fat) raises body temperature.
  - ~ *Circadian rhythm*. Body temperature normally varies between 0.5° and 1°C in a 24-hour period. The temperature is lowest between

3-5 in the morning (morning remission) due to a decrease in metabolic processes during sleep*;* the temperature rises in the evening, being highest between 16-18 (evening exacerbation).

~ *Hormone levels.* Women have greater fluctuations in body temperature than men. Hormonal variations during the menstrual cycle cause body temperature fluctuations. Progesterone levels rise and fall cyclically during the menstrual cycle. Body temperature changes also occur in women during menopause.

- **Psychological factors.** Stress, anxiety, strong emotions can cause an increase in body temperature;
- **Sociological factors:** including living conditions, work, climate, influence thermoregulation. Environment influences body temperature. High, low or interfering temperatures and humidity levels influence thermoregulatory processes.

Independence demonstrations

1. Body temperature:

– new born and small child 36,1°C- 37, 8°C

– adult 36°-37°C;

– elderly person 35 - 36°C

2. Skin: pink color, warm temperature, minimal perspiration, pleasant feeling against cold or heat
3. Ambient temperature 18-25°C

Nurse interventions to maintain the independence in satisfying the need

When the ambient temperature is increased, the nurse teaches the patient to:

– cut back on high calorie foods such as fats;

– drink cold fluids and foods;

– have good ventilation in the room at work;

– have light, loose-fitting, white clothing;

When the ambient temperature is low, the nurse teaches the patient to:

– increase the amount of food in general and caloric foods in particular, to ingest hot fluids and foods;

– have a room temperature of 18-25°C
– wear warm clothing.

II. Dependency in need satisfaction

Dependency problems:

Hyperthermia

Hypothermia

The sources of difficulty of these dependency problems are

1. Physical:
   – functional disorders of the hypothalamus caused by brain abnormalities, pyrogenic toxic substances (bacteria, drugs);
   – immaturity of the thermoregulation system;
   – overload: excessive heat or cold to which the body is exposed;
   – hormonal disorders: thyroid hypo- or hyperfunction;
2. Psychological: anxiety, anger;
3. Sociological:
   – high humidity and temperature in the environment;
   – low humidity and temperature in the environment;
   – inadequate quality of clothing;
4. Lack of knowledge: - Insufficient knowledge about the environment, about oneself.

HYPERTHERMIA

The dependency problem is a higher than normal body temperature.

Manifestations of dependency
Subfebrile
Body temperature is between 37-38 °C (axillary)
Fever
Fever is an important defense mechanism, and is defined as a rise in body temperature above 38°C (axillary). A mild rise in temperature up to 39°C (*mild fever*) boosts the body's immune system. However, during fever, cell metabolism increases; for every 1°C rise in body temperature, the body's chemical reactions increase by 10%. Increased temperature leads to suppression of bacteria and viral infections. However, a prolonged fever or *moderate fever* (39-40°C) weakens the patient by depleting energy reserves

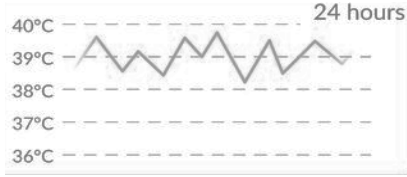
and leads to hypoxia, water loss, etc. Increases in body temperature above 40°C (*high fever* – 40°C, *hyperpyrexia* – 41°C) are life-threatening

The evolution of fever distinguishes 3 periods:

1. Initial period;
2. Period of status;
3. The period of decline.

The features of fever are diagnostic and differ according to the causative pyrogen.

Fever



Cause: Viral and bacterial infection

Remitting Fever

Cause: Viral infection, infective endocarditis

Intermittent fever

Cause: Focal infection, tuberculosis, juvenile idiopathic juvenile arthritis.

Undulant Fever

Case: Brucellosis

Biphasic fever

Cause: Dengue Fever

Recurrent Fever

Cause: Borreliosis, Hodgkin's lymphoma

Fever of unknown origin (FUO) refers to a fever with an undetermined cause.

Muscle stiffness / shivering.

Friction is a succession of involuntary tonic-clonic asynchronous or symmetrical, isometric involuntary muscle contractions that do not produce mechanical work so that all the energy generated is converted into heat.

Specific skin manifestations
Skin rashes specific to bacterial and viral infections: erythema, macules, papules, vesicles. Piloerection - goose bumps, feeling cold

Nursing interventions

Maintaining patient's body temperature

- Evaluates clothes (bed blankets) so they are not too warm. Removes excess clothing to promote heat loss. Encourages wearing loose cotton clothing.
- Provides air conditioning, dehumidifiers, fans, room ventilation; cool baths, cold compresses, ice packs as needed.
- Increases fluid intake during hot weather and exercise.
- In case of chills – warms the patient.

Maintaining hydro-electrolyte balance:

- Monitors and calculates of water-electrolyte balance (ingestion-excretion) in 24 hours;
- Educates the patient about the importance of maintaining adequate fluid intake (at least 20 mL/kg/body per day of cold fluids unless contra-indicated by heart or kidney disease). Explain the importance of not relying on the sensation of thirst as an indication of the need for fluids.
- Increases water intake in air temperatures above 25°C associated with moderate physical activity.
- Avoids caffeine and alcohol.
- Weighs the patient daily in the same clothes, at the same time. Weight loss of 2% to 4% indicates mild dehydration; weight loss of 5% to 9% indicates moderate dehydration.
- Monitors serum electrolyte parameters.
- If necessary, intravenous fluids should be maintained, as well as the administration of drugs indicated by the doctor (antipyretics, antibiotics).

Maintaining physical and psychological well-being:

- Changes bed linen and underwear as needed;
- Provides regular skin hygiene;
- Psychologically prepares the patient prior to examination techniques or collecting samples, providing necessary explanations.

HYPOTHERMIA

Hypothermia is a drop in body temperature below normal limits, caused by an imbalance between thermogenesis and thermolysis.

Manifestations of dependency
Hypothermia
Hypothermia can be unintentional - prolonged exposure to cold, endocrine disruption, abuse of sedatives and alcohol, or intentional - induced during surgery or emergency procedures. In elderly, hypothermia can be caused by slowing down of the nervous system, while in children it is caused by immaturity of thermoregulatory mechanisms. 32°- 35°C – mild; 28°- 32°C – moderate; <28°C – severe. Mild hypothermia 32-35°C. Manifestations can often be mild, with vague symptoms such as hunger, nausea, fatigue, chills and pale/cold/dry skin. Patients may have increased muscle tone, increased blood pressure, tachycardia and tachypnea, chills are possible. Decline in cognitive abilities, memory and judgment, ataxia and dysarthria may be observed. Moderate hypothermia 28-32°C. Patient continues to have cognitive decline to stupor. Increased CNS depression may lead to hypo-reflexia with less responsive and dilated pupils. Decreased heart rate and respiratory rate with possible bradycardia, hypotension and bradypnea are observed. Susceptibility to dysrhythmias increases. Severe hypothermia <28°C. Cognition continues to decline, patient's unconsciousness and dysreflexia. Increasing hypotension and bradypnea. Usually bradycardic but at increased risk of ventricular arrhythmias and asystole. In frequent cases, cardiopulmonary resuscitation must be initiated.
Characteristic skin manifestations
– cyanosis – purple discoloration of the skin (acrocyanosis – purple discoloration of the nose, ears, fingers); – skin rash in places exposed to cold, erythema (redness) of the face, hands; – frostbite – local necrosis of the skin after pronounced and prolonged exposure to cold;
Neurological manifestations
– Obnubilation – a state similar to drowsiness, apathy and is associated with reduced attention span, concentration and mild mental confusion; – Stupor – a state in which a stimulus of greater intensity and duration is needed to awaken the patient, and when the stimulus is interrupted, the patient returns to stupor;

– Coma – is the state of unresponsiveness and inability of the patient to regain wakefulness to the action of stimuli from inside or outside (lack of alertness).

Nursing interventions

Maintaining patient's body temperature

– Prevents a further drop in body temperature: removing wet clothes, replacing them with dry ones, and warming patients with blankets, thermophones.
– Gradually increases the temperature in the room to a target temperature of 20-23°C (for children and the elderly)
– Covers the patient's head, place the patient near a source of heat (radiator, electric heater) or in a warm room, or place heating pads near the areas of the body (head and neck) that lose heat most quickly.

Maintaining hydro-electrolyte balance

– A conscious patient benefits from drinking warm fluids (soup, tea) in small amounts at regular intervals. Avoids alcohol and caffeinated drinks.
– An unconscious patient will be monitored for hydro-electrolyte disturbances, hydro-electrolyte balance will be calculated, laboratory samples will be collected.
– The medication to be administered needs to be warmed in advance (to the extent possible).

Ensuring integument integrity

– The patient will be gradually warmed, the limbs can be placed in warm water up to 37°C.
– If there is no frostbite, the extremities can be massaged.
– Applies a light dressing to the frostbitten area. If fingers are touched, applies sterile dry gauze and rewarm the patient.
– Local or general treatment is given as needed.

Patient assessment techniques for maintaining need

Thermometry

Different methods are used to measure body temperature. Invasive methods can be used in intensive care wards (pulmonary artery, esophageal and bladder core temperature). Non-invasive measurement of

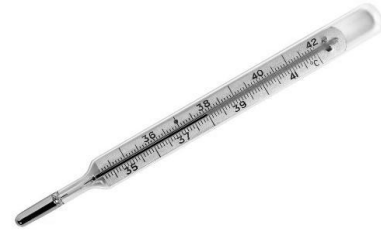
body temperature involves sites on the surface of the skin or in body cavities with easy access: forehead, groin, auricular area, axillary area, oral cavity, vagina, rectum.

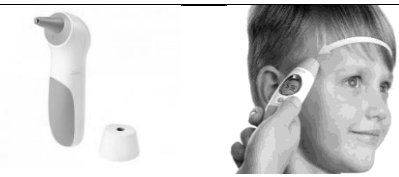
To ensure accurate temperature readings, correct measurement is necessary. The temperature obtained varies, depending on the site used, but is usually between 36°C and 38°C. Rectal temperatures are usually 0.5°C higher than oral temperatures. Each of the common temperature measurement sites has advantages and disadvantages. The safest and most accurate site is recommended for each patient. For repeated measurements the same site/sites are used.

Temperature measurement technique

Before the measurement the patient is physically and mentally prepared, consent is sought. Materials needed for the measurement are prepared (thermometer, wet wipes or wipe, compress, disinfectant solution for the thermometer, watch, lubricant for rectal and vaginal measurement). The nurse washes her hands.

Medical thermometers:

Mercury thermometers have been removed from health care facilities because of the dangers mercury poses to the environment and person. However, some patients still use mercury-in-glass thermometers at home, in this case the patient needs to be taught about safer temperature devices.	
The classic mercury-free thermosmeter (alcohol, special solution) is widely used in medical facilities because it allows accurate temperature measurement in different locations. It is not recommended for young children.	

Digital thermometers measure using an electronic temperature sensor. Measuring with this device is easy, doesn't take a long time to measure and usually has an audible indicator to signal the end of the measurement.	
Infrared sensor thermometers are used to measure temperature at close range. Thermometers for measurement in the tympanic, temporal area are often used in children.	
The disposable thermometer is made of strips of plastic with dots on the surface filled with chemicals that change color depending on body temperature.	

In the case of stationary, after measuring the temperature twice a day, the values are recorded on the temperature record sheet. The noted points are joined, which constitutes the temperature curve over a period of time. The temperature curve needs to be evaluated and may be useful for diagnosis. The temperature score sheet also contains other information about the patient, such as vital signs and water-electrolyte balance.

Axillary (armpit) temperature measurement

Place the patient in the supine or sitting position; Raise the patient's arm and wipe the armpit by swabbing; Shake the thermometer with a strong movement of the hand joint until the liquid drops below 36°C (in the case of a classic thermometer); Position the thermometer with the liquid reservoir in the center of the axilla; Bring the arm close to the trunk with the forearm flexed on the anterior surface of the trunk; If the patient is weak, support the arm; Hold the thermometer for 10 minutes; Remove the thermometer and read the gradation to be noted on the temperature sheet. Normal temperature range is 36-37°C. The axillary temperature represents the external body temperature, which is up to 0.5°C lower than the internal body temperature.

Measuring ear/tympanic temperature

It is performed with the special thermometer (with infrared sensor) which is placed in the ear or external auditory canal; The thermometer detects and measures the thermal and infrared energy radiated from the blood vessels into the tympanic membrane; Normal temperature range is 36.5-37.8°C.

Oral cavity temperature measurement

Prepare the thermometer; Insert it in the mouth under the tongue, or on the outside of the patient's dental arch; The patient is instructed to breathe only through the nose during the procedure and to keep the mouth closed; Hold the thermometer for 5 minutes; Remove the thermometer and read the value, note it on the temperature sheet; Normal temperature range is 36.5-37.2°C.

Oral cavity temperature measurement is contraindicated in children or patients with oral cavity diseases; 10 minutes before the oral cavity temperature measurement, the patient should be warned not to eat hot or cold food.

Measuring rectal temperature

Ensure the patient's privacy; Place the patient in lateral decubitus with the lower limbs in semi-flexion; Lubricate the thermometer and insert the bulb of the thermometer into the rectum, by rotating and forward movements (3.8 cm in adults; 2.5 cm in infants; 1.25 cm in infants; The thermometer will be held for 3-5 minutes after which it is removed and wiped; Read the value at which the mercury of the thermometer has reached; Wash the thermometer, shake it, place it in the container with disinfectant solution (sol. Chloramine 1%); Record the value obtained on the temperature sheet. Normal temperature range is 36.8-37.6°C.

Vaginal/bowel temperature measurement

To measure the temperature in the vaginal cavity, a thermometer with a graduation of at least one tenth (or two decimal places) of a degree is needed. The thermometer is inserted into the vaginal cavity to a depth of 4 cm and held for 5 minutes; the value obtained is recorded; often a chart or a mobile app is used for monthly monitoring.

The temperature used to monitor a woman's fertility is called basal body temperature. The basal body temperature measurement starts on the first day of the menstrual cycle, every morning after waking up without getting out of bed at the same time. In a typical cycle ovulation is observed around day 14, during this period the basal temperature will rise.

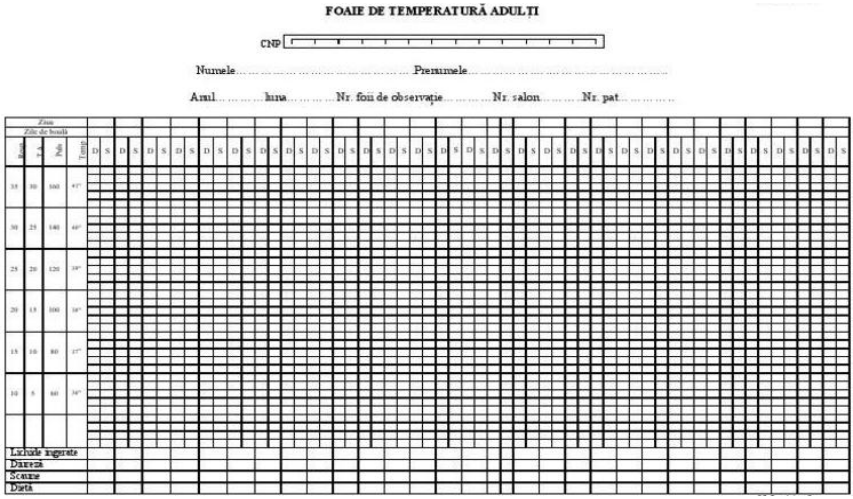


Fig. 7.7.1. **Temperature scoring sheet.**

Documenting body temperature

The temperature sheet *(fig.7.7.1)* is an appendix to the observation sheet and is completed by the nurse. It contains the following headings: breathing frequency, blood pressure, pulse and temperature. To fill in the temperature sheet, start with the patient's data, which will be noted at the top under the headings: first name, last name, year, month, observation sheet number, ward number allocated to the patient during the period of hospitalization. Temp column = TEMPERATURE, values start at 41 and decrease one degree toward 36. Each square represents 1 degree/5 i.e. 0.2, and 1/2 square = 0.1 degree. The temperature is recorded by applying a vertical dot corresponding to the date and time of the day, counting 2 divisions of a degree for each horizontal line of the sheet. The values are represented by dots in the square equivalent to the value measured. Record in blue pen. The dots of the days are joined to obtain the temperature curve.

7.8. The need to be clean, neat, to protect the skin and mucous membranes

Author: *Ecaterina Scoarta*

Definition:

Being clean, well-groomed and protecting your skin and mucous membranes are a must to keep you looking decent and your skin healthy so that it can perform its functions.

Independence in meeting need

Due to its diverse composition, the skin fulfils a number of functions, namely:

- protects the body against pathogens by preventing their entry;
- protects it against (ultraviolet) radiation through the pigments it contains;
- receives thermal, tactile and pain excitations;
- participates in the excretion of substances resulting from metabolism: through the sweat glands, it excretes water, sodium chloride, urea, glucose, ketone bodies;
- helps thermoregulation both by thermolysis and by maintaining temperature through the adipose layer, which acts as a thermal insulator;
- assists in absorption (some medicines can be absorbed through the skin and enter the general circulation);
- takes part in respiration, some O_2 can enter through the skin; a small amount of CO_2 is also released;

To fulfil these roles, the skin needs to be clean, healthy and well cared for. The skin extends through mucous membranes that cover the orifices (nose, eyes, ears, vagina, rectum), which in turn need to be clean and well cared for to ensure the well-being of the individual and the proper functioning of those organs.

Factors influencing need satisfaction:

1. Biological factors
   - *age* – in children and older people, the skin is more sensitive, less resistant to temperature variations, microbes and infections. As a

result of ageing, teeth can weaken in strength and fall out, hair becomes less resistant and so do nails.
   – *temperature* – due to temperature variations, the skin becomes dry and flaky. When the temperature is too high, the skin takes part in thermoregulation via the sweat glands, eliminating sweat (perspiration).
   – *exercise* – this improves circulation and eases waste out of the body through the skin;
   – *nutrition* – absorbing enough fluids gives skin elasticity;
2. Psychological factors
   – *emotions* – can increase sweating, the skin is covered in perspiration and requires specific hygiene measures;
   – *education* – depending on their upbringing, individuals have different hygiene habits, some paying particular attention to hygiene, others less;
3. Sociological factors
   – *culture* – the importance of cleanliness differs according to the level of culture, individuals have habits of hygiene and cleanliness that vary in frequency and manifestation;
   – *the social trend* – fashionable habits of hygiene and cleanliness (hairdressing, cosmetics, etc.);
   – *social organization* – hygiene habits according to physical, material or promiscuous conditions.

Manifestations of independence:

- Hair – length, suppleness, shine;
- Ears – normal configuration, clean;
- Nose – moist mucous membranes, clear nasal passages;
- Oral cavity:
  – white, complete dentition without cavities;
  – moist and pink mouth;
  – gums that are pink and adherent to the teeth;
- Nails – clean, short cut, pink colour
- Skin – clean, smooth, velvety, elastic, normal pigmentation;
- Hygienic habits:

- bath, shower (frequency, duration);
- brushing your teeth (frequency, correct brushing, products used);
- hair washing (frequency, products used).

Nurse interventions to maintain independence in meeting need

- explores the patient's habits;
- plans a hygiene program with the patient, depending on their activities;
- teaches him personal hygiene;

Dependency and need satisfaction

When this need is not met, five dependency problems arise:

1. Poor hygiene;
2. Alterations to the skin and fur;
3. Disinterest in hygiene measures (see Annexes 3 and 6);
4. Difficulty following hygiene prescriptions (see Annex 3);
5. Mucosal changes (see Annexes 6a).

Sources of difficulty

1. *Physical sources:*
   - intrinsic insufficiency:
     - weakness or paralysis of the upper limbs;
     - physical injury;
     - inadequate circulation;
   - extrinsic insufficiency
     - any hindrance to the movement
     - immobility;
     - pressure points;
   - imbalance:
     - pain;
     - weakness;
     - endocrine imbalance;
2. *Psychological sources:*
     - thought disorders;
     - anxiety, stress;
     - loss of body image;

- crisis situation;

3. *Sociological sources:*
   - poverty;
   - failure;
   - conflict;
4. *Lack of knowledge:*
   - lack of knowledge;
   - insufficient knowledge of self, others and the environment.

Poor hygiene

Carelessness in hygienic measures or inability to keep oneself clean, either because of illness or weakness, or by refusing to wash, results in the appearance of being untidy. The skin is dirty and leaves the door open to infection.

Manifestations of dependency

Hair:
- dirty and greasy and messy;
- pediculosis;

Ears:
- accumulated dirt in the outer ear canal;
- dirty pavilions;
- retro-auricular dirt;

Nose
- rhinorrhea, scabs;

Oral cavity:
- absence of teeth;
- tooth decay;
- yellow teeth;
- loose dentures;
- presence of tartar on the teeth (hard, sticky deposits);
- foul breath (unpleasant mouth odor);
- loaded language;
- cracked lips;

Nails:

- uncut;
- dirt built up at the end of your nails;

Skin

- gray or black in some places;
- dirty beard;
- harsh;

Hygienic habits:

- no wash
- no combing
- disinterest in hygiene measures;
- giving off an unpleasant odor.

Nursing interventions

Hygienically deficient patient:

1. *The patient to have clean skin and mucous membranes:*
   - helps the patient, depending on their general condition, to be bathed, showered or toileted by region;
   - prepares the bathroom supplies;
   - prepares the tub;
   - provides room temperature (20^0-22^0 C) and water temperature (37^0-38^0 C);
   - helps the patient to get dressed, comb their hair, clean the oral cavity, trim their nails;
   - to perform localised patient toileting, prepares the room and the materials, protects the patient with a screen and tactfully and gently persuades him or her to accept;
   - performs oral hygiene on unconscious patients
2. *The patient to regain self-esteem:*
   - identifies, together with the patient, the causes and motivation for concern about physical appearance and hygiene care;
   - helps patients change their attitude towards their physical appearance and hygiene care;
   - makes patients aware of the importance of keeping their skin clean to prevent illness.

Alterations to skin and fur

Skin lesions can be caused by reduced blood circulation to pressure points, irritation from clothing (inappropriate clothing) and dirt build-up.

The human body, through the defense function of the skin, is protected against external agents. However, depending on the degree of vulnerability, they sometimes manage to cause damage. A certain amount of pressure exerted over a certain period of time on a region, through the trophic disturbances it causes, leads to the appearance of scars or even tissue necrosis. Dirt accumulated on the skin produces scabs that can degenerate into ulcerations. Any skin lesion is a gateway for pathogenic germs, hence the importance of maintaining its integrity.

Manifestations of dependency:

1. Eritem:
   - congestive spot due to vasodilation;
2. Excoriation
   - loss of superficial substance following trauma (often after pruritus);
3. Crust:
   - secondary elementary lesions, due to drying of a serositis from an ulceration (vesicular, flictene); they present as small deposits of fibrin, derived from blood plasma;
4. Vesicles:
   - small, round, round, clear fluid-filled skin lumps (blisters) often accompanied by itching and pain;
5. Pustule:
   - tiny abscess on the surface of the integument, localized at the root of the hair and constituting so-called folliculitis lesions (pimples); they may be primary or secondary, by infection of the blisters that become pustulified;
6. Papules:
   - lesions characterized by a circumscribed and solid elevation on the surface of the skin; it is due to either a thickening of the skin (hypertrophy) or an aqueous infiltration (local edema);
7. Cracks:
   - linear disruptions in the amount of integument;

8. Decay:
   – detachment of superficial squamous cells from the epidermis (furfuraceous, pityriasis, lamellar, or flaky);
9. Acne:
   – pustula caused by a specific pathogen;
10. Boil:
   – Follicle-specific infection of the pilosebaceous pilosebaceous, caused by Staphylococcus aureus;
11. Intertrigo:
   – cutaneous mycosis, located at the level of the envelopes and interdigital, characterized by pruritic erythema, then epidermal discoloration, discharge and whitish deposit, by maceration of the horny epidermis with cracking of the bottom of the fold;
12. Vitiligo:
   – leuko-melano-dermatitis, probably neuroendocrine in nature, characterized by achromic spots, bordered by a hyperpigmented area;
13. Ulceration:
   – loss of substance resulting from a pathological process acting on the skin; it can be superficial (erosion) or deep (exulceration and ulceration proper);
14. Escare:
   – tissue damage as a result of local nutrient deficiency;
   – usually by vascular injury or continuous compression; they can also be caused by the direct action of infectious factors or their toxins, or by caustic chemicals;
15. Edema:
   – accumulation of serous fluid in the tissues;
16. Varicose veins:
   – permanent dilation of the superficial veins, accompanied by insufficiency of the valves of the venous wall; the sense of venous circulation is interesting in orthostasis;
17. Hemorrhoids:
   – disorders of the anal venous plexuses and the terminal part of the rectum, consisting in dilation of these veins, with the development of inflammatory processes;

18. Varicose ulcers:
    – Tissue erosion on varicose varicose terrain;
19. Alopecia:
    – partial or complete hair loss.

Nursing interventions

Patient with skin and skin changes

1. *The patient not to become a source of nosocomial infections:*
    – takes measures to prevent nosocomial infections;
    – lesions that have become superinfected will be protected with a dressing applied under perfectly aseptic conditions, both to the skin, materials and hands of the person performing the dressing;
    – The dressing will be done gently, so as not to destroy the newly formed tissues in the healing process;
    – Dressings will be loosened gently, moistening them as needed;
    – makes sure that the dressings are not too tight so as not to impede blood circulation;
2. *The patient to be nutritionally balanced to promote healing of skin lesions:*
    – many of the lesions are caused by the body's hypersensitivity to certain foods; as a result, the nurse guides the patient to eat non-irritating and non-exciting foods;
    – controls food from relatives;
    – teaches the patient to eat vegetables, flour, fruit and vegetables;
    – raises patient and family awareness about the harmful role of alcohol, coffee, spices, fried food, canned food, smoked food;
3. *The patient to be physically and mentally well:*
    – encourages the patient to be constantly in pain (lesions are annoying because of the itching they cause, their unsightly appearance and the possibility of scarring);
    – explains the need for intervention;
    – collects specific products for laboratory investigations (scabs, pus, hairs, nails).

7.9. The need to avoid dangers

Author: *Ludmila Postica*

Definition: The need to avoid danger is a necessity of the human being in order to be protected against all internal and external aggressions, to maintain his physical and mental integrity.

INDEPENDENCE IN MEETING NEED

The life of any human being can be threatened at some point by a sudden distress that will bring him or her to a critical situation. Throughout life, people are continuously assaulted by stimuli from their environment and surroundings.

The human organism is protected against aggressions of all kinds (physical, chemical, microbial or other agents), because it possesses numerous natural environments such as: hair at the orifices, skin secretions, as obstacles to the penetration of external agents. It is able to maintain its integrity through natural self-defense mechanisms (endurance and physical strength, immunity, physical and intellectual resources and the possibility of applying measures and strategies for prophylactic purposes.

Factors influencing need satisfaction

Physical factors	• *age:* ➢ The child perceives the meaning of danger and, depending on the pace of his or her mental development, gradually discovers self-protection against danger until adulthood. ➢ Adults have the ability to protect themselves. They have knowledge about themselves and their development. ➢ Elderly people have reduced sensory and motor functions and therefore need to take special self-defense measures. • *gender*: the female sex determines vulnerability and fragility; • *general health;* • *self-defense mechanism*: the individual has innate self-defense mechanisms (e.g. thermoregulation) or acquired through experience; resistance to disease is due to natural or acquired immune protection, through the creation of specific antibodies following infectious diseases or vaccination.

Psychological factors	• *emotions and anxiety* can cause the individual to use defense mechanisms that allow the preservation of integrity against psychological aggression; • *stress:* each stress state can influence the individual's adaptation to all forms of aggression stimulated by defense mechanisms.
Socio-cultural factors	• *environmental sanitation* - A healthy environment is essential for people to live safely at home, at work, in institutions for children and the elderly. The following conditions are necessary: – ambient temperature 18°-24° C; – humidity between 30%-60%; – light - neither too dark nor too bright; – noise - not exceeding 120 decibels; – the environment should contain a minimum of micro-organisms, chemicals, smoke; – safety conditions (caution when using appliances, objects that could be sources of accidents); • *social role* - Depending on the demands of the job and their work, individuals must use protective measures against all hazards. Thus, employees must have an environment and working conditions that enable them to fulfill their work needs; those in a responsible job must use rest time to prevent stress and overwork. • *social organization* - Society provides for legal measures to be taken for the protection of the individual against dangers; in all societies there are legislated measures to prevent accidents, to prevent illness; in addition, society also takes care of the well-being of the individual throughout the years of life, through protective and social insurance measures. These measures are aimed at: preventing illness and maintaining good health, using a wide range of education, information, publicity, etc. • *climate* - Depending on the climate, the individual uses methods of self-defense against unfavorable climatic conditions in the home or in collective places. • *religion* - Practicing certain religions is an ideological preoccupation that allows the individual to maintain psychological security. • *culture* - Measures to protect against hazards vary from culture to culture, they are emphasized in traditions as socio-economic measures of a society.

	• *education* - Parents inform the child about the safety measures to be taken during the long period of growing up; the school is in charge of children's education, the adult socially is obliged to know the possible dangers in order to establish the preventive measures to be applied.

Manifestations of independence

Physical security	Measures to prevent: – accidents; – infections; – diseases; – aggressions, physical (mechanical, thermal), chemical (chemical burns, poisoning), human, animal and self-aggressions (mutilation, suicide);
Psychological security	State of tranquility of the individual who feels safe from all dangers. The individual can realize free control over the environment. Measures: • ways to unwind, relax and control emotions; • using defense mechanisms in different situations; • effective and adapted response to the stressor; • practicing a custom, creed, religion;
Socio-cultural security	• healthy environment: – environmental health; – air quality and humidity 30%-60%; – ambient temperature between 18°-24°C; – no noise, chemical, microbial pollution; • safe environment; – social protection measures; – safety environment against human aggression; – safety environment reinforced by social protection measures; – safe environment provided by adequate sanitation; – proper housing limits accidents and illness; • social belonging; • activity; • material income • religious affiliation; • education.

Nursing interventions to maintain independence

1. To maintain a healthy environment: educates the patient to maintain proper housing, a proper work environment.

Housing should provide maximum security and have a number of mandatory features:

– provide sufficient and properly divided space (living room, bedroom, kitchen, bathroom, etc.);
– be airy, but insulated and dry (free from damp);
– have running water and efficient heating; be soundproofed; be cleaned and sanitized regularly;

The *workplace* must provide the same conditions. If more than one person works in a room, there must be enough space for each person.

– educates the patient to avoid air pollution with dust, microbial load by wet wiping of furniture and airing rooms;
– removes unpleasant odor sources;
– participates in programs of propaganda and control, education of the population to maintain a healthy environment in the community, educational establishments;

1. To prevent accidents:

– provides accident prevention education, checks that occupational safety and ergonomic rules are respected in accident-prone establishments;
– furniture should be appropriate (e.g. beds, chairs that are too high can lead to accidents);
– furniture should be placed in such a way that it does not become an obstacle for tenants;
– teaches to have protection at electricity or gas sources (sockets, gas taps, etc.);
– breakable and sharp objects should be placed in safe places;
– explores actual and potential hazards in the workplace and at home;
– institutions for children and the elderly shall be arranged in such a way that they fully comply with the safety rules in relation to the degree of risk determined by the age of the subjects.

2. To prevent infection:

– supervises that the rules of hygiene, sanitation, disinfection, disinsectization, pest control, pest control and functional circuits are respected;
– ensures public involvement in the implementation of programs to maintain and promote health;
– monitors the health status of the school population through regular check-ups; carries out regular check-ups of persons at high risk of infection;
– organizes - caries out compulsory immunizations;

DEPENDENCY IN NEED SATISFACTION

When the need to avoid dangers is not satisfied, more addiction problems can occur:

1. Vulnerability to hazards;
2. Harming physical or psychological integrity or both.

Other care diagnoses related to disruption of the need to avoid hazards from the list of care diagnoses developed by NANDA:

– acute and chronic pain;
– anxiety;
– fear;
– body image alteration;
– altering self-esteem;
– alter the integrity of the tissues, skin or oral mucosa;
– risk of infection, wounding, suffocation or trauma;
– activity intolerance;

Sources of difficulty

Physical sources	– sensory deficit; – physical impairment; – pain; – metabolic imbalance; – electrolyte imbalance; – overwork; – sensory-perceptual saturation;

Psychic sources	– thought disorders; – anxiety; – stress; – separation loss; – loss of body image; – crisis situation;
Sociological sources	– unhealthy environment; – pollution; – poor working conditions (lack of protective measures); – lack of sanitary facilities; – lack of social protection; – poverty; – promiscuity;
Lack of knowledge	– Insufficient knowledge about themselves, others and the environment, about protection and safety measures;

Vulnerability to hazards

Weak, tired, overworked bodies are at high risk of infections, accidents and diseases.

Sources of difficulty:

- *age* is one of the main factors responsible for accidents. From birth until the age when the child becomes aware of the dangers around him or her, he or she needs to be constantly supervised because he or she is continuously exposed to dangers. The elderly loses some of his/her ability to avoid aggressors due to a slowing down of the ability to react and reduced sensory acuity.
- *motor deficit: locomotor deficiencies* make it difficult to move around and contribute to falls and bumps.
- *sensory depravation* can be congenital (deafness, visual blindness, etc.) or acquired during life as a result of illness or trauma. It also occurs as a degenerative type of disorder in the elderly.
- *pain; metabolic and electrolyte imbalance; thinking disorders;*
- *immune distress – recognized as a leading cause of illness; anxiety; stress;*
- *overwork; mental disorders* lead to behaviors that are inadequate for the protection of others and self-protection. Aggressiveness, detachment from the surrounding reality, misinterpretation of events, etc., are factors that lead to an increased risk of incidents and accidents;

– *unhealthy environment, pollution; poverty; poor working conditions;*
– *insufficient knowledge of self, others and the environment.*

Manifestations of dependency:

– decreased body resistance;
– depression;
– risk of infection;
– risk of fatigue;
– carelessness;
– integument lesions;
– dehydration; pulmonary, cardiovascular, CNS manifestations;
– overexertion = excessive physical exertion that affects the body;
– fatigability = physical weakness, lack of strength;
– antisocial acts (murder, self-mutilation up to suicide).

Nursing interventions

Objectives	Autonomous and delegated interventions
The patient to be safe from accidents and infections permanently **The patient not to be vulnerable to dangers**	– nurse takes measures to ensure environmental conditions; – ensures physiological position and transportation appropriate to the patient's general condition (safely); – places the patient in the ward according to their condition, condition and responsiveness; – takes measures to prevent the transmission of infections; – chooses investigation and treatment procedures with minimal risk of infection; – applies non-specific and specific prophylaxis measures; – informs and makes the patient aware of the need to comply with accident protection measures; – ensures an adequate diet with extra vegetables and fruit to increase the body's resistance; – participates in the examination of the patient; – administers the medication prescribed by the doctor and monitor its effect;

Patient to be psychologically balanced as soon as possible	– helps the patient adapt to hospital conditions; – communicates with the patient and explains their condition; – answers the patient's questions and helps maintain trust in the care team; – ensures patient privacy – encourages the patient to express feelings, ideas, needs – teaches the patient relaxation techniques; – creates conditions for reading, activities, etc – ensures the patient's contact with the family; – supervises the patient and monitors the effect of the therapy; – administers the medication prescribed by the doctor and monitors its effect; – participates in the patient's reintegration into society.

Damage to physical or psychological integrity or both

Physical injury

Sources of difficulty:

1. Physical:

- accidents through injuries, trauma due to lack of protection and prevention measures (accidents at work, road accidents, domestic accidents, etc.);
- chemical and radioactive contamination through exposure to the environment without protective equipment or nuclear accidents;
- skin damage by handling irritants, thermal agents or (especially) children due to negligence and carelessness of supervisors, burns, ingestion of caustic substances, etc.
- physical mutilation by occupational hazard (firefighters, engineers, stuntmen, etc.) self-mutilation and suicide attempts;
- bites from human aggressors, animals, reptiles;
- ageing with physical disabilities:
  - sensory deficit (hearing, vision);
  - mobilization deficit
  - pain;
  - metabolic imbalance;

- electrolyte imbalance;
- self-care deficit;
- physical dependency;

– ageing with a decrease in the body's defense capacity:
  - increased vulnerability to disease;
  - unexpected, unwanted effect of medical therapy;
  - inappropriate use of medicines can affect certain organs or systems at the level of absorption, metabolization and elimination; can induce addictive reactions, drowsiness, restlessness, loss of balance, loss of consciousness;

– Excess physical exertion through work or exercise predisposes the body to fatigue, overwork, increasing the risk of injury and damage to physical integrity;

2. Psychological: anxiety, stress, anxiety, anxiety, thought disorders;

3. Sociological:

– inadequate physical environment, inadequate psychosocial environment;
– poor working conditions;
– lack of a secure income;
– absence of social contacts;
– lack of education and culture;
– unhealthy environment, pollution are the determining factors for the occurrence of accidents, diseases, contamination;
– lack of amenities, isolation, dependency and insufficient support from the society in which the individual lives exposes them to insecurity and lack of preventive and curative care;
– acts of verbal and physical aggression, abandonment by family and friends cause loss of self-confidence, physical, psychological and social damage;
– abuse of drugs and alcohol alters an individual's personality, behavior, physical and intellectual performance with direct damage to socio-cultural life and physical integrity;
– the lack of tolerance profile, safety and living resources induces in the

individual a permanent state of exposure to potential dangers, depressive symptoms and socio-cultural non belonging;
- lack of social activities, social non-integration, lack of motivation and resources affect the individual leading to antisocial behavior, self-mutilation and suicide attempts;
- lack of knowledge: insufficient knowledge about oneself, others and the environment, about protection and safety measures

Manifestations of dependency:
- signs of inflammation: pain, local redness of the affected area, swelling, limitation of movement of the affected segment, local warmth.

Objectives/ interventions:

1. The patient to be physically balanced.

Nurse interventions:
- assesses the degree of physical impairment;
- provides a safe and protective environment;
- ensures a physiologic position in bed;
- mobilizes and transports the patient;
- monitors general condition; observe asepsis/antisepsis measures;
- dresses the wound;
- helps and supplements the patient in meeting the body's needs;
- involves the patient in making decisions about care;
- administers drug treatment as directed by the doctor;

2.The patient to have psychological safety.

Nurse interventions:
- provides and maintains a psychological protective environment appropriate to the patient's state of illness;
- applies appropriate psychotherapy techniques;
- uses passive relaxation methods (massage, music);
- encourages the patient to communicate with others, to express emotions, needs, fears, opinions;
- answers the patient's questions and helps maintain trust in the care team;

- ensures the patient's contact with the family;
- teaches the patient to use self-defense.

Achieving psychological integrity

- loss of self-esteem, loss of self-image, loss of intellectual potential have a direct effect on one's own security by modifying the capacity for self-protection and the establishment of appropriate individual measures;

The main psychological causes of exposure to hazards are:

- emotions, anxiety, fear, stress, depression, loneliness, loss of hope;
- intellectual disorders, psychomotor disorders, mental disorders;
- other organic disorders (e.g. sexual activity disorders);

Adams and Hurwitz grouped *the most important disorders* as follows:

- mental disorders: depression, anxiety, fear, loss of initiative;
- intellectual disorders: amnesia, lack of perseverance;
- decreased powers of comprehension, decreased judgment;
- psychomotor disturbances: agitation, apathy, confusion, refusal to any offer, delusional states;
- other psychiatric disorders: agnosia (inability to recognize objects correctly - patient without sensory disorders);
- apraxia (inability to execute gestures correctly – patient without motor impairment);
- body schema disorders;
- proportional anomalies;
- neglect of paralyzed limbs;
- loss of personality;
- behavior disorders (aggressive towards others);
- the patient refuses to cooperate, becomes negative;
- the patient has temporo-spatial orientation disorders.

Manifestations of dependency:

- aggressiveness, antisocial acts, psychological insecurity, agitation, restlessness, anxiety, aggressiveness, distrust, fear, suicidal ideation.

Nursing interventions

- removes traumatizing objects around the patient with psychomotor agitation;
- in order to avoid injury in case of convulsive seizures the nurse removes the patient from the dangerous environment; if necessary resorts to immobilization (not forced) of the patient;
- combats patient confusion and disorientation and provide constant supervision;
- does not remove or dispose of objects that may provide the patient with sensory improvement: glasses, hearing aids, etc.
- if necessary, ensures the patient's accessibility to a cane, crutches, walking frame, wheelchair;
- personally administers oral medication to avoid confusion, errors, drug interactions;
- carries out parenteral administration of medicines in strict compliance with the prescribed doses, mode, schedule of administration, sterilization and asepsis rules;
- performs infusions, transfusions, catheterizations, catheterization, enemas with a high degree of professionalism and monitors the patient for possible post-intervention reactions;
- prepares the patient physically and mentally for any examination, intervention and treatment;
- puts in place all necessary measures to prevent nosocomial infections;
- ensures the mental integrity of the patient:
  - respects the patient's wishes and privacy;
  - avoids distant, verbally aggressive and holding the patient accountable behavior in case of patient's possible restraint in the event of patient's apprehension in the face of the collection, ward assignment, meal distribution, dishes, treatment and investigations;
  - establishes a climate of trust and hope in medical and personal therapy;
  - reduces emotional states and feelings of fear, anxiety through professional explanations and giving hope;

- encourages visits from family and friends which can provide beneficial moral support for the patient;
- prohibits conflict between patient and relatives;
- reduces the patient's stress and anxiety by informing and eliminating feelings of worthlessness, helplessness, devaluation;
- satisfies the patient's intellectual concerns;
- stimulates the patient's intellectual interest;
- educates the patient through appropriate psychotherapy;
- whatever the cause of the patient's agitation, the nurse makes him/her harmless so as not to endanger the safety of the patient and those around him/her;
- closely monitors the patient's behavior;

– on doctor's indication administers sedatives, tranquilizers, hypnotics, etc.
– educates the patient and family to:
  - remove feelings of dependence on care;
  - create a climate of closeness and empathy;
  - remove feelings of worthlessness and powerlessness;
  - avoide drug abuse;
  - restore hope in recovery and healing;
  - remove stress factors and self-image damage;
  - follow the dietary, therapeutic and lifestyle regimen imposed by the condition;
  - accept the illness and adjust to isolation precautions;
  - communicate needs and complications along the way;
  - avoid overdoing contact precautions;
  - avoid isolation and loneliness;
  - avoid exaggeration of functional disability;
  - maintain encouragement for activities completed by the patient;
  - plan routine and recreational activities;
  - maintain active re-education methods;
  - continue social or professional activities;

- social and professional reintegration according to the state of health and physical-psychical possibilities;
- exercise in a graded, gradual manner with self-assessment for ability and endurance;
- in the case of chronic conditions patiently explains to the patient and his family that it is a condition in which he can have a long activity and a relatively normal life = occupational therapy and social reintegration.

OTHER CARE DIAGNOSES RELATED TO DISTURBANCE OF THE NEED TO AVOID HAZARDS

One of the diagnoses refers to the assessment of acute and chronic pain, the problem that influences the individual and makes him/her vulnerable to danger or alters his/her physical and mental integrity

From the list of care diagnoses developed by NANDA, the following are significant:

- anxiety;
- fear;
- body image alteration;
- altering self-esteem;
- damage to the integrity of the tissues, skin or oral mucosa; risk of infection, injury, choking or traumatization;
- activity intolerance.

In the work of J. Fuller and J. Schaller-Ayers Health Assessment - A Nursing Approach, in addition to *anxiety*, similar diagnoses are found in the assessment of self-concept, such as:

- disturbed body image; temporary or permanent decrease in self-esteem;
- disturbed personal identity; disturbed self-esteem;

Self-care: cleanliness and hygiene reflect a person's self-image. People with low self-esteem neglect this need to take care of themselves. Clothing can give clues to self-image. For example, a person who dresses in an appropriate style may have a positive self-image. On the other hand,

a 45-year-old mother dressed as her only 10-year-old daughter may be an expression of an inability to accept her age or role as a mother.

Facial expression can give other details about the self-image, especially in the case of verbal, contradictory expression. For example, if a person says that everything is fine, but cries and avoids eye contact, it is an additional clue in gathering data about the person (and later in analyzing and interpreting it). Frowning, frightened, grimacing looks may indicate misunderstanding, pain in listening or a sudden reaction to what is being discussed. Staring indicates concern, distrust, pleasure or displeasure. Lack of eye contact may represent low self-esteem or may be a culturally specific response. Flushing, excessive sweating and pallor may be indicative of affective responses such as fear, anxiety, shyness, (embarrassment) or anger. Tears may represent sorrow, grief or joy – in essence, or intense emotion

Postures that indicate low self-esteem include bowing head, staring at the ground, sitting in a "slumped" position with slumped shoulders. A very rigid posture may indicate physical discomfort, lack of responsiveness or defensiveness.

Affective responses such as anxiety, irritability, irritability, anger, withdrawal (isolation) may be clues to disturbed self-concept or responses associated with loss of power.

Anxiety

Anxiety is a pathological state of anxiety, fear due to pain, trauma, overwork/loss, stress/failure/insufficient knowledge (source of difficulty characteristic of the patient/case under study). *Fear* and *anxiety* are affective reactions to potential or actual danger.

It is very important to correctly differentiate anxiety and fear, because care interventions are influenced by the care diagnosis. The person is *afraid of* pain, afraid of losing control, afraid of surgery. *Anxiety* is related to few situations and is not always associated with a specific threat.

In general, anxiety is a more primitive reaction to a threat. For example, a child may react to danger in a manner of anxiety rather than fear. Anxiety occurs when a threat is perceived but the person cannot understand or identify the source. Conversely, fear is the reaction to a clear, identified threat.

To summarize, fear is a reaction to an identified threat, whereas the specific threat is less evident in anxiety. Carpenito (1987) suggests that fear and anxiety usually co-exist and in this case the care diagnosis can be formulated as "Fear/Anxiety reported at....", a diagnosis at which direct or indirect care will be considered.

Sources of difficulty

- stress at work, at school, in a personal relationship such as marriage, financial, resulting from an emotional trauma such as the death of a loved one;
- stress caused by a serious medical illness;
- side effects of certain medicines;
- illicit drug use;
- manifestations of a medical illness (heart attack, stroke, hypoglycemia);
- lack of oxygen due to various circumstances (such as high altitude, emphysema, pulmonary embolism).

Manifestations of dependency:

- muscle tension;
- muscle aches;
- headache;
- fatigue;
- changes in eating habits (under/overeating);
- irritability;
- depression;
- palpitations;
- inability to concentrate;
- diarrhea;
- chest pain;
- dry mouth;
- excessive sweating;
- insomnia;
- feeling of suffocation, shortness of breath
- hyperventilation
- loss of sex drive.

Objective 1: Decrease/eliminate the degree of anxiety or the patient to stop being anxious.

Nursing interventions

Autonomous:

- ✓ provides a safe and protective environment;
- ✓ assesses the degree of impairment and identify stressors;
- ✓ identifies the source of the difficulty and works with the patient to remove it;
- ✓ monitors general condition and behavior;

Delegated:

- ✓ takes part in examining the patient;
- ✓ administers the prescribed medication;

Objective 2: To restore/maintain psychological balance or the patient to be psychologically balanced.

Nursing interventions

Autonomous:

- ✓ communicates with the patient and explains their condition;
- ✓ answer the patient's questions;
- ✓ makes it easier to maintain trust in the care team;
- ✓ encourages the patient to express their feelings;
- ✓ sets up activities with the patient to restore their sense of purpose and confidence in their personal beliefs;
- ✓ supervises the patient and monitors the effect of the therapy;
- ✓ facilitates contact with people close to you;
- ✓ prepares the patient for all investigation and treatment techniques;

Delegated:

- ✓ administers the prescribed medication.

Fear

Definition: a state of anxiety caused by real or imagined danger. Anxiety is often associated with fear. Fear is a feeling that a person has about a physical or psychological danger. We should not minimize the importance of this feeling towards treatment, interventions or death.

When the nurse knows how to detect fear in the person being cared for, it is important that she demonstrates understanding, a willingness to listen and to reassure.

Manifestations of dependency

- Unclear fear; fears; dread, terror; panic; psychosomatic reactions; terror;

Objectives

- to express their fear reduction within ... days;
- to express their fear within ... days;
- to diminish signs of fear within ... days;
- to demonstrate the absence of signs of fear within ... days.

Nursing interventions

- identifies with the person the nature, intensity and causes of the fear, if necessary;
- familiarizes the person with the new environment;
- provides brief, precise explanations of scheduled care;
- plans with a care team a period of ... minutes a day around the person;
- explores the object of fear, to identify precisely what the person finds threatening in this experience: means of investigation, anesthesia, intervention; fear of serious diagnosis, of pain, of being alone;
- identifies the person's level of anxiety;
- clarifies the misperception of the object of fear;
- explains to the person who fears loneliness that a member of the care team will be available if needed;
- ensures a safe environment: raise the sides of the bed, remove all objects that could hurt you or others.

Pain

Pain is the unpleasant sensation and emotional experience that accompanies an actual or potential tissue injury, or described as an injury. It is accompanied by psychological reactions, social concerns and religious questions intensify. There are various forms of pain, but we can classify them into two broad categories:

– **Acute pain** – considered a manifestation of dependency (a symptom) and announces a physiological dysregulation, it is an alarm terminal that announces a disease;

– **chronic pain –** is a dysregulation of the normal protective mechanism against internal and external aggressions, we can already call it a disease and it lasts for 1-6 months or even years;

The nurse's role in dealing with this difficulty is to administer medicines, to provide care to relieve physical discomfort, but therapeutic communication with the same suffering patients is of unique importance.

Manifestations of dependency

- increased or decreased breathing rate;
- scream, shout;
- profuse sweating;
- hypotension or hypertension;
- dilated pupils;
- facies;
- groaning; irritability;
- continuous movements;
- complaining, whining;
- crying
- tachycardia.

Care plan

a) acute pain

Objectives

- to express pain relief in ... hours;
- to reduce the signs of pain in ... hours;
- to demonstrate no signs of pain within ... hours;
- to express the absence of pain in ... hours.

Nursing interventions

- assesses the characteristics of pain: localization, intensity, duration, frequency, factors that increase or decrease its intensity;
- establishes the pattern of pain onset and pain relief in order to group care accordingly;

- observes the protective stance taken by the person;
- places the person in an antalgic position;
- uses additional means to reduce pain: warm baths, ice packs;
- advises the person to report the pain as soon as it occurs;
- combines analgesic medication with a massage, a therapeutic touch;
- causes the person to practice abdominal breathing 5-10 minutes after taking the pain medication;
- shows that they care about the person as a whole, not just their pain;
- informs the patient about the development of pain, pain relief and tolerance and the action of the drug;
- helps with daily activities, when needed, to conserve energy;
- changes position in bed at ..... hours;
- explains that the person is allowed to complain or be afraid, to express anger or frustration;
- teaches you how to take your medicines, their side effects and how long they last;
- for pain relief helps the person in daily activities, nutrition, hydration, hygiene, mobilization, etc. and progressively lets the person to perform them on their own;
- helps the person to get around when needed;
- causes the patien to exercise his/her muscles within tolerance;
- administers the painkiller 20-30 minutes before exercise or activity;

b) chronic pain

Objectives

- to express pain relief in ... hours;
- to express the absence of pain in ... hours;
- to reduce the signs of pain in ... hours;
- demonstrate no signs of pain within ... hours;

Nursing interventions

- uses means of relaxation of the person's choice: massage, reading, music, etc;
- immobilizes the painful area;

– schedules activities within the person's limits;
– suggests gradually increasing the duration of exercises and movements without overdoing it;
– massage your back, hands and feet;
– in case of a migraine, suggest lying down in a quiet room with an ice pack on your head and a cold washcloth over your eyes at the first signs of a migraine;

Altered self-esteem

Definition: diminished feelings of self-worth and competence.

Manifestations of dependency:

– pessimistic ideas; inability to make decisions; lack of self-confidence; psychosomatic reactions;
– feeling inferior; feeling devalued.

Objectives

– to express their increased self-esteem within ... days;
– to express their positive feelings within ... days ;
– to express their ability to cope with difficulties within ... days ;
– to make decisions related to day-to-day activities within ... days ;

Nursing interventions

– after listening to the person, limits the expression of negative feelings;
– identifies with the person the situations and events that are most threatening to them;
– explores with the person the coping mechanisms they use to deal with situations: information-seeking, reflection, confidences, rest, channeling energies into work, housework, alcohol, humor, drugs, medication, hypersomnia;
– strengthens healthy coping mechanisms;
– leads the patient to take part in recreational, educational activities that help him/her regain self-esteem;
– explains that all casual losses (divorce, unemployment, retirement) require a period of adjustment;
– emphasizes that every adjustment brings a feeling of insecurity at first;
– helps him/her to accept the situation by explaining that physical

dependence does not diminish his human value;
– makes the patient participate as much as possible in their own care to give them a sense of control;
– plans daily care with the person to gradually restore independence.

Altering body image

Definition: a negative perception that an individual experiences of physical appearance as a result of the loss of an organ or function or a threat to the integrity of the personality.

Manifestations of dependency:

– negative perception of your own body and its functions;
– psychosomatic reactions;
– feeling frustrated.

Objectives:

– to express positive feelings about their self-image within ... days;
– to express his/her agreement to touch the mutilated part of his body within ... days;
– to touch the mutilated body part without repulsion within ... days;

Nursing interventions

– assesses the degree of anxiety accompanying physical loss;
– allows the patient to express his/her denial at first, to help him/her adjust;
– after a while the nurse will limit denial and skillfully bring the patient back to reality;
– helps the person to enhance their appearance: new hairstyle, new clothes;
– explains that it is normal to feel angry, frustrated or depressed in this situation;
– progressively causes the person to look at their wound, amputation, colostomy, mastectomy, burn etc.;
– makes him/her progressively participate in care.

Activity intolerance

Definition: Insufficient energy/biological and psychological energy to perform or complete required or desired daily activities.

Defining features:

- ✓ your abnormal response to activity;
- ✓ abnormal heart rhythm response to activity;
- ✓ electrocardiographic changes reflect arrhythmias;
- ✓ electrocardiographic changes reflect ischemia;
- ✓ verbal reporting of fatigue;
- ✓ verbal reporting of weakness;
- ✓ discomfort on exertion;
- ✓ dyspnea on exertion;
- ✓ linking factors;
- ✓ bed rest;
- ✓ generalized weakness;
- ✓ oxygen/cerebrospinal fluid imbalance;
- ✓ immobility;
- ✓ sedentary lifestyle.

Objectives:

- – the patient to express well-being on exertion;
- – the patient to have vital functions adapted to exercise.

Nursing interventions

- – assesses the patient's exercise status;
- – allows the patient to express fatigue, weakness;
- – helps the patient adapt to the situation;
- – limits the patient's activities until rehabilitation;
- – helps the patient to meet basic needs;
- – progressively engages the patient in care;
- – monitors vital functions before, during and after activities, behavior, consciousness;
- – provides a safe environment;
- – administers the prescribed medication.

7.10. The need to communicate

Author: *Natalia Zarbailov*

Definition: The need to communicate is a human need to exchange information with others. It sets in motion a dynamic verbal and non-verbal process, enabling people to make themselves accessible to each other, to be able to share feelings, opinions, experiences and information.

The importance of effective communication in nursing practice is understandable because the nurse-patient relationship is primarily about communication.

Independence in meeting the need to communicate

Independence in satisfying the need for communication presupposes the integrity of the individual, of the sense organs, and sufficient intellectual development to understand the meaning of the messages exchanged.

Factors influencing the satisfaction of communication needs

1. **Biological factors:**

- age:
  - a child can be a powerful communication partner;
  - the elderly are marked by past experience, stereotypes and an inflexibility of thinking with reduced possibilities of adaptation;
- the integrity of the sense organs:
  - optimal functioning of sight, hearing, smell, taste, smell, touch;
  - hearing and seeing allow communication with the outside world; tasting and touching protect the individual from dangers in the surrounding world;
  - the integrity of the organs of phonation allows verbal communication;
  - the integrity of the locomotor system makes nonverbal communication (gestures, movements) possible;

2. **Psychological factors:**

  - intelligence - communication is influenced by the degree of Intelligence of the individual, the power of understanding the received stimuli, thinking, imagination, memory;

- perception: the personal reflection of a phenomenon, object, which is done with the help of the senses; the perceptible function is educable;
- memory: involves the ability to gather information events, reproduction of knowledge, cognition of knowledge, representation of knowledge in the immediate, short, long term;
- emotions, lack of confidence, vocabulary are expressed through facial expression, verbal flow (joy-sadness; laughter-crying) and often lead to misinterpretation of the message.

3. **Socio-cultural factors:**
   - the entourage is determinant in satisfying the need for communication; the harmonious climate in the entourage, in the family allows the individual to establish affective bonds; exchange is the passing of a message from one person to another;
   - culture and social status: education, level of training and knowledge play an important role in communication;
   - adapting the speech according to the client's level of knowledge;
   - speech difficulties: occur when the sender has trouble finding the right words to express their ideas;
   - personality: communication is influenced by the stage of development of the human personality; personality determines the individual to be confident in his or her ability to express him or herself, to assert him or herself, to establish meaningful connections with others;
   - social perception: there are differences in perception influenced by previous experiences that influence communication - people of different ages, education, gender, cultures, temperaments will have different perceptions and interpret situations differently;
   - value system: religion, beliefs, convictions are factors that determine a certain image of the world and influence interpersonal communication.

Independent displays of the need to communicate

1. Biological manifestations:

Proper functioning of sense organs – visual acuity;

- hearing acuity;
- fine taste and smell;
- tactile sensitivity.

Verbal debit – easy;

- moderate pace;
- clear, precise language.

Nonverbal expression – movements;

- postures and hand gestures;
- expressive facies;
- significant look;

appropriate sensory-perceptual mechanisms.

Psychological manifestations

Easy expression – of needs, wishes, ideas, emotions - clear expression of thoughts;

Positive self-image – knowing the material, spiritual and social self;

Objective perception of the message received and the ability to verify one's perceptions;

Appropriate use of defense mechanisms;

Receptive and trusting attitude towards others;

Ability to engage and maintain a stable relationship with others;

Sociological events;

Membership of interest groups;

Building harmonious relationships in the family, at work, in groups of friends.

Nursing interventions to maintain independent communication needs

- explores with the patient their means of communication;

Teaches the patient:

- to maintain the integrity of the senses (sight, hearing, taste, smell);
- to use specific means to express feelings and emotions;

- to have a receptive and trusting attitude towards other people;
- to maintain links with people close to you.

Effective communication consists of:

- content;
- understanding and responding from the other person's perspective;
- appropriate verbal expression;
- non-verbal communication.

Components of communication:

• elaboration, transmission, reception, message by:

- participation;
- listening;
- care
- sincerity;
- ability to accept: answers, questions;
- respect.

Initial contact:

- we introduce ourselves to the patient: who we are and why we are there;
- we address the patient by their last name;
- avoid intimacy, familiar tones, inappropriate jokes;

Effective contact

- we ask we ask "to the point" questions;
- we look the patient in the face without restraint;
- we try to be on the same level with the patient;
- all our attention is focused on the patient;
- look the patient in the eye;
- adopt a slightly forward leaning position;
- give the patient a sense of control;
- we respond with understanding in a way that shows our deep involvement and attention to the patient;
- maintain the assertive character of communication through: facial expressions, posture, tone of voice, gestures, verbal content;
- identify psychological factors: emotions, needs, fear, opinions;

- helping them to participate in various forms of relaxation and recreation;
- correctly assess the degree of poor communication;
- we show an interest in the patient and in what the patient says;
- the framework of communication is delimited by non-acceptance or aggression;
- we always greet the patient with a "welcome" face;
- we have a relaxed approach and an open attitude towards the patient;
- the facial expression is relaxed, maintaining eye contact by being at eye level with the patient's eyes and showing interest in the patient's reports;
- the tone of voice shows respect for the patient but is firm and confident and appropriate with the gestures and views expressed;
- verbal content is: sincere, honest;
- verbal content expresses: feelings of respect, understanding, acceptance towards the patient;
- the questions are: direct, open, in association with the purpose of the dialog;
- the answers are encouraging, avoiding a neutral note or by their nature to discourage conversation;
- we repeat or rephrase the key words to help the patient expand on the problem described;
- the pace of conversation should be adapted to the patient and clear in expression;
- all non-verbal activity can be supplemented by notes without interruption of narratives, and the level of language should be appropriate to the individual patient.

Dependency in satisfying the need to communicate

If communication is not satisfactory, the following addiction problems can occur:

1. inefficient sensory and motor communication;
2. intellectually ineffective communication;
3. ineffective emotional communication.

Sources of difficulty

1. **Physical sources:**
   - brain or nerve damage;
   - cerebral circulatory disorders; stroke;
   - degeneration;
   - trauma;
   - fatigue;
   - sensory deficit;
   - overwork;
   - obstacles in the functioning of senses and language (dressings, appliances);
   - pain;
   - hydro-electrolyte imbalance;
   - drugs;
   - taking certain medicines;
   - alcoholism.
2. **Psychic sources:**
   - thought disorders;
   - loss, separation, crisis;
   - anxiety;
   - stress;
   - emotions: as subjective feelings, they often lead to misinterprettations of the message;
   - prejudice: treating different people as one;
   - hasty conclusions: avoiding recognizing reality;
   - personality: communication is influenced by the stage of development of the human personality; personality determines the individual to be confident in his or her ability to express him/herself, to assert him/herself, to establish meaningful connections with others;
   - maladaptation to illness;
3. **Sociological sources:**
   - unsuitable environment (housing, workplace, recreation);
   - climate;
   - conflict;

- failure;
- social isolation;
- unfavorable social and economic status;

4. **Lack of knowledge**
   - insufficient knowledge of self, others and the environment;
   - lack of interest;
   - inadequate education.

INEFFICIENT SENSORY AND MOTOR COMMUNICATION

Manifestations of dependency:

1. Sensory disorders:
   - blindness: loss of vision;
   - decreased vision: decreased visual acuity;
   - deafness: loss of hearing;
   - hypoacusis: hearing impairment;
   - loss of taste (=ageusia) or diminished taste (=hypogeusia), loss of the combinations of the four basic taste sensations-sweet, bitter, sour, salty (sense of food control);
   - anosmia: loss of smell;
   - hyposmia: decreased sense of smell;
   - hypoaesthesia: decreased skin sensitivity;
   - hyperesthesia: increased skin sensitivity;
   - anesthesia: the absence or disappearance of one or more types of sensitivity, spontaneous or voluntary.
2. Motor disorders:
   - reflex disorders: cutaneous, osteotendinous, mucous, vegetative;
   - sensitivity disorders:
   - subjective:
     - prickling, tingling, numbness, pain;
   - objectives:
     - hyperesthesia = abnormal accentuation of sensitivity
     - hypoesthesia = decreased sensitivity;
     - anesthesia = loss of sensation;
     - astereognosia a = disorder related to the appreciation of volume and shapes of objects;

- motility disorders:
  - paresis: decreased muscle motor function;
  - peripheral paralysis: muscle tone decreases, passive movements can be performed with much greater amplitude;
  - central paralysis: muscle tone is preserved or even exaggerated, passive movements can be performed with reduced amplitude.

The following are distinguished:

  - monoplegia: paralysis of a single limb;
  - hemiplegia: paralysis 1/2 lateral body (right and left);
  - paraplegia: paralysis of the lower limbs;
  - tetraplegia: paralysis of all four limbs.

3. Coordination disorders:
   - ataxia - the inability to coordinate muscle groups during voluntary movements (uncoordinated movements) - imprecise, hesitant movements occur - occurs in cerebellar or spinal cord lesions;
   - intentional trembling = extensive trembling of the index finger in the index-nose sample.

5. Language disorders:

- depending on the type and location of the brain lesion are affected:
  - auditory-verbal reception;
  - verbal expression;

Analyze:

  - lexia - the ability to understand written words;
  - handwriting - the ability to write selectively;
  - calculia- the ability to perform calculations;
  - mimics.
- aphasia: total or partial loss of comprehension and the ability to reproduce words as a result of brain damage:
- sensory aphasia = talking but not understanding;
- motor aphasia = impairment/inability to express oneself verbally or in writing;
- dysarthria: difficulty articulating words, unintelligible pronunciation;
- stuttering: difficulty in pronouncing certain words, repeating or omitting syllables by prolonging sounds;

- mutism: the patient does not respond, does not communicate with the entourage;
- dyslalia: the inability to pronounce certain sounds that make up words; speech becomes unintelligible;
- acalculia = inability to perform calculations;
- anarthria = inability to articulate words;
- aphonia = loss of voice;
- alexia = inability to understand written words;
- agraphia = inability to write selectively;
- speech difficulties.

Affective reactions in sensory insufficiency or excess:

– restlessness: lack of peace of mind, restlessness;
– inactivity: lack of physical or intellectual activity, or both
– anxiety: a profound feeling of discomfort or tension, uneasiness that the individual experiences as a result of an uncertain situation. It is manifested by a state of dissatisfaction, uncertainty, agitation, fear and worry due to the anticipation of a danger or threat whose origin is not recognized and in the absence of any provoking cause. It may be acute or chronic.
  – *Acute anxiety* – an intense form of anxiety caused by an impending loss or change that threatens a person's sense of security and well-being.
  – *Chronic anxiety* – persistent anxiety manifested by uncertainty, restlessness, fear of future events.
– slower development of thinking: the rate of association of ideas is slower;
– hallucinations: perceptions without object; depending on the analyzers, they are auditory, visual, gustatory, olfactory, cutaneous hallucinations;
– isolation – loneliness: an individual's state of being alone, withdrawn;
– boredom.

Sources of difficulty (etiology of dependency)

1. **Physical sources**:
   – *intrinsic insufficiency due to*:
     – brain or neurological disorders;

- circulatory disorders;
- developmental deficit of the sensory organs;
- degradation of the sense organs;
- trauma;
- fatigue;

– *extrinsic failure by:*
- decrease in quality or quantity of stimuli;
- stimulus deprivation;
- any obstacle that impedes the functioning of the sense organs: bandages, appliances, tumors;
- sensory-perceptual overload and overwork;
- hydroelectrolyte imbalances and imbalances caused by pain or drug use;

2. **Psychological sources:**
   – thinking disorders;
   – anxiety, stress;
   – crisis situations – situations that mark a sudden and significant change in a person's life;
   – loss or separation from someone or something you love;
3. **Sociological sources:**
   – noise pollution;
   – unfriendly environment (home, workplace and recreational facilities);
   – low or increased ambient temperature, inadequate lighting;
   – absence of labor protection measures.

Nursing interventions – patients with ineffective sensory and motor communication.

Objectives – Autonomous and delegated interventions.

2. The patient to be mentally balanced:
   – reassures the patient about their condition, explaining the purpose and nature of the interventions;
   – familiarizes the patient with their environment;
   – provides a safe, peaceful environment;
   – administers the medication recommended by your doctor.

3. **The patient to use means of communication appropriate to his/her condition:**
   - explores the patient's communication possibilities;
   - provides the means of communication;
   - teaches the patient to use the means of communication according to his/her possibilities.
4. **The patient to be sensory compensated:**
   - provides care for the patient's sensory or motor disturbances (blindness, deafness, paralysis, etc.); it is intended to supplement the needs that the patient cannot meet independently (eating and drinking, moving around and maintaining good posture, keeping the skin clean and intact, avoiding danger);
   - administers recommended medication: ointments, ocular, nasal, auricular instillations;
   - performs passive and active exercises to prevent muscle and joint complications;
   - prepares the sick person for various sensory examinations and cares for them after the examination.

INTELLECTUALLY INEFFICIENT COMMUNICATION

Manifestations of dependency

1. **Difficulty remembering past events**
   - amnesia - total loss of the ability to memorize information and/or recall stored information:
   - amnesia of fixation, of retention of new facts;
   - amnesia of recall, lack of ability to reproduce or recognize past events;
   - difficulty to understand, to make a judgment;
   - hypomnesia - partial loss of memory;
2. **Incoherent language**
   - verbal communication unrelated to the given situation;
   - illogical in expression;
3. **Inappropriate behavior**
   - manifestations inappropriate to the given situation;

4. **Difficulty in understanding the message**
   – difficulties associated with processing speed, detail or organization of written or spoken information;
5. **Difficulty in getting the message across**
   – sending obscure and incomplete messages;
7. **Confusion**
   – pathological state characterized by disorders of temporal, spatial, perceptual, etc.;
8. **Obnubilation**
   – a disorder of consciousness in which mental functions are slowed down, the threshold of perception is increased, resulting in impaired perception and in general impaired contact and orientation in the environment, not accompanied by amnesia;
9. **Disorientation**
   – loss of sense of orientation in time and/or space.

Sources of difficulty

1. **Physical sources:**

– *intrinsic insufficiency by*:
   – damage to the cortex;
   – intellectual impairment due to illness or drug use;
   – development deficit;
   – degeneration of intellectual faculties due to ageing;
   – absence of stimuli.
– *extrinsic impairment* caused by unclear messages from outside the person;
   – hydro-electrolyte imbalances or due to pain, fatigue, overwork, overstrain and sensory-perceptual saturation.

2. **Psychological sources:**
   – anxiety;
   – stress;
   – thought disorders;
   – crisis situation;
   – loss or separation from someone or something you love;
   – maladaptation to the sick role;

3. **Sociological sources**:
   - difficulty learning new things;
   - devalued socio-economic status;
   - poor education;
   - conflict and/or role failure;
   - isolation.

Nursing interventions in a patient with intellectually ineffective communication

Objectives - Autonomous and delegated interventions

The patient to be oriented in time, space and to their own person

- helps patients to orient themselves in time, space and in relation to themselves;
- suggests the patient keep a diary;
- helps the patient complete the diary;
- helps them recognize their abilities and preferences;
- lets the sick person do the best he can with his own means.

INEFFECTIVE AFFECTIVE COMMUNICATION

Manifestations of dependency:

- **Aggression** – impulsive fighting, hitting, attacking others;
- **Mental alienation –** an individual's inability to control his or her own actions; he or she can neither appreciate his or her own suffering nor take responsibility for his or her actions;
- **Devaluation** – a negative perception that an individual has of their personal worth and competence;
- **Egocentrism –** an exaggerated preoccupation with oneself, one's health, clothing, occupation, and therefore one believes oneself to be persecuted;
- **Phobia –** an obsessive fear of something that the sufferer cannot escape;
  - agoraphobia **–** fear of open space;
  - claustrophobia – fear of being closed in a room;
  - nosophobia – fear of disease.
- **Euphoria** – a state of being in a very good mood, but without an object.

- **Delusion –** a disturbance of thought by an unmotivated presence, not consistent with reality, coupled with the patient's belief in its plausibility.
- **Suicide ideation.**
- **Hallucinations –** perceptions without object, auditory, visual;
- **Inadequate self-perception**, self-entity rejection – an individual's negative perception of their physical appearance.
- **Difficulty asserting themselves** – inability to do what they prefer to do.
- **Difficulty expressing feelings**, ideas, opinions – not expressing feelings, ideas, opinions.
- **Difficulty establishing meaningful connections with peers** – isolates, rejects connections with peers.
- **Sadness** – an overwhelming state of feeling; sorrow, bitterness; melancholy.
- **Apathy –** a state of indifference, lack of interest in any activity and in the surrounding world.
- **Internalization –** to reflect in consciousness, through the prism of one's own sensitivity, phenomena of external reality.
- **Feeling of rejection –** not consenting to receive; not satisfying; not admitting; refusing.
- **Depression –** grief, discouragement.

Nurse interventions in a patient with ineffective affective communication

Objectives – Autonomous and delegated interventions.

4. **The patient to be able to assert himself, to have a positive self-perception:**

- analyzes the patient's previous talents and achievements;
- enables the patient to express their needs, feelings, ideas and wishes;
- engages the sick person in different activities that make them feel useful;
- keeps the patient under constant supervision. Changes in:
  - the patient's disposition;
  - in verbal and non-verbal expressions.

5. **To increase the patient's responsiveness to others:**

- helps the patient to identify their opportunities to listen, to exchange

ideas with others, to create meaningful connections;
– provides a favorable climate for building relationships with their peers.

Changes in connecting with others will be noted daily.

6. The patient to be facilitated to assert the self:

– empowers the patient to make their own decisions;
– teaches the patient: assertiveness techniques, communication techniques, relaxation techniques.

Changes in the patient's behavior and communication with others will be noted daily.

7. The patient should be protected from internal or external dangers:

– administers prescribed medication: antidepressants, anxiolytics, tranquilizers.

Observes and notes the effect of anxiolytic, antidepressant, tranquilizing medication.

Deficient interventions:

- minimizes facts or emotions reported by the patient;
- personalizes the questions and problems reported;
- universalizes the understanding of problems;
- disagrees with patient reports;
- is prejudiced;
- causes confusion by not knowing how to use the questions;
- subjectively judges what is reported;
- offers no alternatives.

Interdependence of the need to communicate with other basic needs

Not satisfying the need to communicate affects the good relationship with other needs.

- *To move, to keep a good posture:*
  – discomfort and degradation of mobilization through poor communication.
- *Maintaining body temperature within normal limits:*
  – lack of data collection and implementation of interventions due to poor communication.
- *Breathing:*
  – diminished/unable to report ineffective breathing.

- *Eating and drinking:*
  - Eating deficit by decreasing/inability to communicate hunger/thirst.
- *To eliminate:*
  - Elimination deficit by diminished/inability to express the need.
- *Being clean, neat and protecting their skin:*
  - trophic and cutaneous disturbances by diminished/incapacity to report being wet-dead.
- *Sleeping, resting:*
  - Inability to express lack of rest, sleep, etc.
- *Dressing and undressing:*
  - inability to express clothing habits and preferences.
- *Avoiding dangers:*
  - inability to express needs, fears, opinions, etc.
- *Living according to their own beliefs and values:*
  - impaired communication functions make it impossible to participate in religious services.
- *Taking care of their own fulfillment:*
  - isolation through difficulty communicating.
- *Recreating:*
  - decreased/unable to participate in recreational activities.
- *Learning:*
  - ignoring the re-education of speech and communication disorders.

Care/nursing process

1. Data collection:
   - see data/information about the patient under care.
2. Data analysis and interpretation:

Possible dependency problems:

- ineffective sensory-motor communication,
- intellectually ineffective communication,
- ineffective emotional communication.

Manifestations of dependency: sensory disturbances, speech impairment, difficulty understanding, incoherent language, confusion, disorientation, difficulty expressing feelings, difficulty asserting oneself, difficulty or inability to establish meaningful relationships, etc.

Sources of difficulty: sensory deficit, overexertion, pain, drug use, hydroelectrolyte imbalance, anxiety, stress, maladaptation to the disease, unfavorable socio-economic status, social isolation, inadequate education, lack of knowledge.

3. Diagnosis of prerequisite care = P.E.S.
4. Care planning.

Potential patient goals:

- to demonstrate increased communication skills, communicate their observations daily;
- to demonstrate that they understand the need to communicate, trust the care team;
- to present good vision by correcting refractive errors;
- to correct deviations from correct speech early (speech therapy exercises);
- to be informed about the illness, its evolution or investigations;
- to promote communication with the family, demonstrate their own feelings;
- to be mentally balanced, communicate effectively with others;
- to reduce the anxiety related to communication difficulties, illness;
- to pronounce some common words correctly, express nonverbal messages;
- to formulate complete sentences, to initiate a conversation, to express improved communication;
- to recognize family members and care team members.

Nursing interventions:

– autonomous;
– delegated.

General interventions:

- observing the patient's behavior, observing facial expression;
- detection of sensory and motor, auditory, visual, sexual, endocrine, locomotor, hearing, sexual, endocrine, locomotor disorders;
- conducting the interview/survey, which collects data about the individual and allows for appropriate selection and assessment;
- normal or non-verbal communication with the patient;

- observation of disturbed communication, non-verbal communication methods.

Care assessment:

It will refer to:

– patient's level of awareness, dependency, complaints;
– type of communication: verbal or non-verbal, type of speech, language;
– attitude, may or may not control the environment, maintains contact with family, is understood;
– is able to express his/her wishes, needs, opinions, level of knowledge;
– other associated signs.

7.11. The need to act according to beliefs and values, to practice religion

Author: *Diana Chiosa*

Definition: The need to act according to one's own beliefs and values, to practice religion is an individual's need to do, express gestures, acts in accordance with their own thinking, of right and wrong, of justice, of following an ideology.

Independence in meeting need

No human being exists in isolation. It is in constant interaction with other individuals, members of society, and with cosmic life or the supreme/absolute Being.

This interaction brings out their life experience, convictions, own beliefs and values and, on the other hand, personality development.

The search for a unifying worldview that also helps us to see life as a whole and find meaning in every part of it is as old as mankind. This role was played by ancient religions as well as theologically oriented beliefs of later times. Anthropologists have consistently shown that even in primitive contemporary cultures there are world views that interpret people's experiences and guide their activities.

Worldviews differ in this respect. Some are more optimistic, others more pessimistic. Some are deeply ethical, others only incidentally moral. They do not all satisfy human desire equally and in the same way, but they all express a profound human need.

The worldview is needed as a guide to thinking, to categorize possible activities and to prioritize certain actions within a concrete activity (career decisions, moral decisions, how to use time, family life, etc.). A world full of things that we can think about and in which there are lots of ideas and theories about everything under the sun forces us to be selective. But the worldview is also necessary to guide our actions, as we have to decide among the countless things to be done and among the countless places to go, the many kinds of actions and the many possible vocations.

No society can live without an agreed set of standards; love, caring, honesty, integrity, trust, trustworthiness, forgiveness, freedom of choice, these are just some of them.

Factors that influence whether these needs are met include:

1. **Biological factors**

Body gestures and attitudes: allow the patient to satisfy this need, depending on their beliefs, religious affiliation or both

2. **Psychological factors**

The emotions and impulses of the individual, the desire to communicate with the Supreme Force, the search, the search for the meaning of life and death. These cause the individual to perform the gestures and rituals that respond to his/her beliefs and values.

3. **Sociological factors**

Culture: societies by their traditions, beliefs and values towards religious practices or the application of humanitarian ideologies. Some societies allow a specific religious practice while others adhere to completely different religious practices. People's culture and history greatly influence human beings and their relations with the Supreme Being or their relations with others.

Religious affiliation greatly influences the actions that individuals take to satisfy their needs. During the child's socialization, parents play an important role in accustoming the child to beliefs and values related to religious affiliation. The adult is also influenced by social norms towards religious affiliation, however, there is some choice as to whether or not to adhere to a religion, depending on personal beliefs. In older

people, religious practice intensifies or reappears if it has been abandoned later.

Today, the most popular religions in the world are:

– Christianity, the most widespread religion in the world;
– Islamism in the Middle East;
– Buddhism, common among Asian peoples;
– Hinduism, practiced by Hindus;
– Judaism, the religion of the Jews.

Attention to spirituality has been shown to lead to lower risk of mortality, better quality of life, better mental health, less smoking, less alcohol and drug use, fewer symptoms of depression and less suicidal behaviour.

Studies have shown that, especially in cases of serious illness, spirituality is important for many patients. Spiritual needs exist and religious services are requested by the sick. The lack of these concerns is associated with a low quality of life.

Religion and medicine are complementary

Some go straight to the doctor, others say prayers and hope that a miracle will take away their illness "like a miracle". Medicine and religion are complementary but also contradictory. While one looks after the soul of the sick, the other, the doctor, makes a pact with God (or the devil) to save a human life. It is very easy to fall into the hands of the priest when you refuse the doctor's help. Below are examples that go against religious principles.

Orthodox Church: abortion - premeditated murder by parents.

The Catholic Church: when a mother's life is in danger and doctors are faced with the choice of whose life to save, the ethical decision rests with the mother.

Muslim League: treatment with alcohol is forbidden and medicines containing animal substances are not allowed.

Bahai belief: only the family can decide on the number of children.

Jewish Religion/Jewish Synagogue: Saturday is very important, no surgery is made.

The Evangelical Baptist Church: forbids nothing where human life is concerned.

Hare Krishna: Yoga practice that explains the benefits of sperm retention in the male body.

Jehovah's Witnesses: the commandment to abstain from blood is very clear - it is above life.

Orthodox Church

- **Contraception.** God has blessed children to be born out of love, out of the love between mother and father, its followers believe that by using contraceptive methods, man is going against the life and will of the Creator.
- **In vitro fertilization.** Sounds like salvation for the childless. God has blessed a child to be born from the loving act of a mother and father. In vitro fertilization is forcing God's will.
- **Immunization.** The vaccine of vaccines is holy communion, but the Church is not against vaccination.
- **Organ transplantation**. If the organ is given to help someone, then it is considered an act of love for your neighbor. Organ transplantation for business purposes is not allowed.
- **Blood transfusion** is also an act of charity.

Catholic Church

- **Abortion.** Definitely against abortion which is considered murder.
- **In vitro fertilization.** The Church is for life, for its natural conception. Any attempt to copy life without the fundamental element of creation, where there is a family and a natural act of conception, is contrary to moral and natural law, contrary to faith.
- **Immunization.** Everything that aims at health, life and the physical quality of the body does not contradict man's desire to help his fellow men to live.
- **Transplantation.** The Church calls for an awareness of the act of donation, of charity, even in exceptional situations (brain death).

Muslim League

- **Organ transplantation.** Islam allows transplants only if the organ being donated is not a vital one.
- **Abortion.** Islam forbids abortion, which is a sin. Exceptions can be made in cases where the pregnancy endangers the life of the mother or child. If a medical board determines that the child is to be born with severe disabilities or congenital malformations that cannot be treated, then abortion is permitted. If the abortion is premeditated, deliberate - for fear of poverty or for other reasons, it is considered homicide.
- **Blood transfusion.** Islam prioritizes life. Thus, if one's life depends on this transfusion, it is not that it is allowed, but it is even obligatory.
- **Immunizations.** They are only allowed if they don't contain forbidden things, i.e. if they are not of animal origin or contain alcohol.
- **In vitro fertilization**. Islam allows in vitro fertilization.

Manifestations of independence

Beliefs

- an individual's personal beliefs about reality**;**
- attending religious ceremonies;
- use of religious objects;

Religion

- form of social consciousness, characterized by belief in beings, supernatural forces;
- observing the rules of a religion;
- browsing religious, spiritual or humanitarian writings;

Ritual

- the set of religious ceremonies of a religion;
- membership of religious or humanitarian groups;

Spirituality

- the soul's set of beliefs and practices;
- time for prayer and meditation;
- body gestures and attitudes;

Moral

- a set of rules of conduct and values considered valid in a society;
- participation in charitable works;
- participation in acts of humanity
- engaging in social, humanitarian or creative action;

Values

- the set of beliefs and skills that reflect not only what is desirable, but also what is beneficial to the individual; e.g. beauty, truth, goodness;

Freedom

- the ability to act according to one's own beliefs or desires; the individual has full freedom of action and optimal mental health (adapted).

Nursing interventions to maintain independence

- ✓ leads patients to express their own beliefs and values;
- ✓ plans religious activities with the patient;
- ✓ informs the patient about community services;
- ✓ mediates activities in accordance with the wishes and beliefs of the patient;
- ✓ encourages the patient to express their feelings about their problem;
- ✓ administers the medication prescribed by the doctor;
- ✓ cares for patients regardless of race, creed, ideology or color;
- ✓ confidences made by the patient are professional secrets, therefore they will not be disclosed.

Dependency in need satisfaction

Whenever this need is not fulfilled, guilt and frustration can arise.

1. Guilt - the painful feeling of having contradicted one's own beliefs and values, which makes the individual feel guilty. Every person is likely to be confronted with situations in which initiatives taken or unfortunate events may cause a feeling of guilt.

Nurse interventions

- ✓ encourages the patient to express their feelings about their problem;
- ✓ makes it easier to satisfy his beliefs;

- ✓ works to restore the patient's self-esteem;
- ✓ plans activities with the sick person to make them feel useful;
- ✓ puts him in touch with desirable, close people;
- ✓ administers, if necessary, antidepressant medication, tranquilizers (on the doctor's indication).

Manifestations of dependency

Feeling guilty	– bitterness – self-punishment – self-access – the mania for useless excuses – understanding illness as a punishment – feeling unworthy – curved position – slow movements
Manifestations of depression	– manifestations of anger against God – crying – insomnia – stuttering
Manifestations of anxiety	– tachycardia – cool, moist skin – hyperventilation – fury – anger

2. Frustration – the condition of an individual who feels denied or denies the fulfilment of a need. Obstacles in performing actions or deeds in accordance with one's personal view of right, wrong or good and difficulty in participating in religious activities give the individual feelings of frustration.

Nursing interventions

- ✓ helps the patient identify the cause of frustration;
- ✓ encourages him to express his feelings and needs;
- ✓ ensures his confidentiality and keeps his secrets;
- ✓ communicates often with the patient, showing solicitude;
- ✓ seeks ways of practicing religion (reading religious documents);
- ✓ administers sedative medication as needed.

Manifestations of dependency

Feeling a loss of freedom of action	activities (actions) offered by social norms, however, cannot be used by the individual, due to low cultural level, educational deficiencies, this leads to isolation. Actions against the individual's wishes
Feeling useless	– bitterness, sadness – crying
Under a regime	– unwanted treatment – medication – breastfeeding
Inability to exercise religious practices	– inability to read religious documents, to participate in group or membership activities, to follow the requirements of their own religion – lack of places or ways to practice, falling into bed – physical constraints – audio-visual deficit – side effects of a medication
Thinking disorders	– confusion – disorientation – hallucinations
Worrying about the meaning of one's own existence	– care about the meaning of his suffering – concern for the meaning of life and death concern for beliefs and their value

7.12. The need to be fulfilled and useful

Author: *Maria Garabajiu*

Definition: To be concerned with achievement is a need of every individual to carry out activities that enable him/her to fulfil his/her needs or to be useful to others. These actions allow him/her to develop his/her creative sense and fulfil his potential to the fullest.

Independence in meeting need

Man needs social prestige, the appreciation and esteem of others; but also confidence and self-esteem. The system of human life is particularly fragile. Its proper functioning is ensured by the trust of others and, in particular, by one's own self-confidence. Lack of trust, lack of appreciation, lack of respect is a negative influence on the person. On the contrary, the confidence that everyone has their own strengths, the esteem

of those around them, is a powerful stimulus, providing a supportive, encouraging environment for facing life's difficulties and uncertainties.

Factors influencing need satisfaction

- **Biological factors**

  – **Age and growing up**

Age of childhood. The child's dominant activity is playing. It allows the child to develop, to get to know the world around them and to integrate into society. Playing influences all aspects of a child's development: perception, memory, imagination, thinking, feelings, will.

Preadolescence is the age when his relations with society are significant. The dominant activity is learning, but the child also participates in games. Team games, competitive games, which require inventiveness and dedication, are preferred. Specific to the age is creative imagination as a form of self-assertion. Self-awareness is strongly affirmed, and they begin to get to know others by observing and comparing themselves with them.

Adolescence - the intellectual level and social experience allow for a greater independence in the realization and management of activities, as well as in the responsibility. Adolescence is the age of formation of an ideal in life, projection of the adolescent's personality into the future, being able to strive for its realization. Adolescents are more self-evaluating, begin to accept criticism and consider others point of view.

Maturity - the adult who plays multiple roles in society is valued according to the degree to which he or she chooses them and satisfies his or her aspirations. Interest and passion for work and the achievement of goals are a powerful source of enjoyment. Older people can also make the most of their activities according to their preferences and physical capabilities, using the experience they have gained. This is one of the most important factors in longevity.

  – **Body build and physical abilities**

Individuals must choose activities that they can perform in accordance with their physique and physical capabilities. Assigning great responsibilities or activities requiring special effort to unfit people overtaxes them and is the main cause of physical and nervous fatigue.

- **Psychological factors**

  – **Emotion**

They arise in the context of the activities that individuals carry out and involve the evaluation, the giving of value meaning to the activities carried out. Joy, excitement, hope, pleasure and well-being influence the satisfaction of these needs.

- **Sociological factors**

  – **General** and individual **culture** plays an important role in the development of the individual. People choose a profession which allows them to assert themselves by using the knowledge they have acquired.

  – **Social roles**

The individual has the freedom to choose his studies and work, he can fulfil himself according to social norms. The individual is also fulfilled according to the roles he or she plays in society according to his or her training, will and desire to ensure the maintenance of these roles.

Independence demonstrations

Physical and mental integrity. Optimal activity of physiological functions in relation to the individual's body. Harmonious development, physical and mental integrity allow the choice for any kind of activity and the fulfilment of social roles.

Manifestations of joy and happiness. Positive activity (states of contentment, joy, enthusiasm, love, charity) is usually creative, the source of organic and mental health, as it is associated with an increase in vital energy, with the creation of an atmosphere of relaxation.

Self-criticism. Adopting a critical attitude towards one's own ideas and actions and being receptive to the opinions of others.

Decision making. The speed with which the person deliberates in a complex situation and makes the most appropriate judgment.

Self-esteem. The objective appraisal of one's abilities, of predominant character traits in comparison with others; a trait of self-knowledge is dignity; dignity means awareness of one's own worth in the conditions of respect for others and the power to make decisions.

Self-image. the way we perceive our own physical, emotional, cognitive, social and spiritual characteristics.

Behaviour

- The child needs:
  - satisfaction with school success, the appreciation of his/her work by the teacher, parents, peers. This satisfaction stimulates the will to assert oneself.
  - In the case of sports activities are challenged inventive behaviours, determination, dedication to team success.
  - Social, family activity: realizes that the work done is important, performs with seriousness, responsibility.
- Adults and older people:
  - Love, interest in work and dedication influence the quality of work.
  - Recognition of the results of one's strengths, personal satisfaction from one's work, appreciation of the collective, etc., bring motivation to the individual's work.
  - Ambition - the burning desire to achieve as much as possible in your work.
  - Motivation - the totality of the motives that lead him or her to carry out the activities through which he or she achieves his or her goals.
  - Social roles - mastering, enhancing these roles, through actions that lead to the satisfaction of fulfilment, well-being (role in the family, at work, in society).
  - Use of free time - individual activity that allows to satisfy the need; expressed by belonging to a social group (cultural, sporting, political, etc.) gives the opportunity to use one's own beliefs and values in pleasant and useful pursuits.

Nursing interventions to maintain independence in meeting need:

- is informed about the person's intellectual and physical wishes and possibilities;
- helps him make a daily plan;

– directs the person towards activities that are appropriate to his/her capacity and that enable him/her to realize his/her potential;
– encourages any activity of interest;
– stimulates and supports them to achieve the desired performance.

II. Dependency in need satisfaction

Dependency problems:

1. **Devaluation**
2. **Helplessness**
3. **Difficulty in self-actualization**
4. **Difficulty assuming social roles**

The sources of difficulty of these addiction problems are:

– **Physical**: impairment of a function, disability, lack of sphincter control, physical disability, hindrance to movement, pain.
– **Psychological**: thought disorders, anxiety, stress, loss of self-image, loss - separation, crisis situation.
– **Social**: professional failure, professional conflict, social condition, laws and regulations at odds with the individual's values, lack of knowledge: insufficient knowledge of oneself, of others, of the environment.

1. **DEVALUATION:** the negative perception that an individual has of their personal worth and competence

Manifestations of dependency
Feelings of inferiority and loss of self-image The patient cannot accept his new state, the way he looks, his appearance
Difficulty participating in regular or new activities Hes dependent state prevents him from participating in activities
Discouragement, depression Feeling of sadness associated with dissatisfaction
Feelings of isolation, worthlessness, rejection Removal from the collective, not employed in various activities
Inability to overcome difficulties He can't overcome certain critical moments that have diminished his self-confidence

Drowsiness, passivity Feeling drowsy, unresponsive to what's going on around you
Aggressiveness Provocative behavior always put on the quarrel
Decreased motivation, interest, concentration The patient does not find it necessary to perform activities, is disinterested, inattentive
Inability to do what they prefer to do The state of physical, mental or social dependence does not allow the patient to carry out preferred activities
Desperation A state of despair, desolation, or special distress.
Obsessing about his problems The patient is constantly preoccupied with his or her problems, which take priority over the work being done to achieve

2. HELPLESSNESS: an individual's perception of lack of control of events in a given situation.

Manifestations of dependency
Personal conflict Patient's inability to demonstrate behaviors appropriate to chosen or imposed professional roles due to conflict between individual values and social norms or health status.
Career failure Does not carry out the compulsory tasks required of him/her, which are related to the professional role he/she has chosen or has been assigned
Difficulty making decisions and controlling events The patient is unable to make the most appropriate decisions in a timely manner, unable to know and correlate events.
Apathy A mood disorder characterized by a lack of interest in or enjoyment of usual activities or social relationships. People with apathy may have difficulty making decisions or completing tasks, low energy, and slowed thinking or speech.
Resignation, obedience Resigns from their job or position and is complacent about it.
Docility Easily obeys the decisions that are not their own.

Aggressiveness He is always looking for an opportunity to quarrel, is provocative towards the staff.
Fatality Believes that the course of events in life has been influenced by a pre-determined supreme force; the consequences are inescapable.
Lack of ambition He no longer wants to reach his goal, to achieve something.
Annoy Constant or periodic feeling of annoyance or irritation.
Sadness An overwhelming state of feeling, accompanied by sorrow, bitterness.
Feeling inferior A state of disadvantage that the patient perceives compared to others.

3. DIFFICULTY IN SELF-ACTUALIZATION

Manifestations of dependency
Inability to perform privileged activities/ Inability to perform significant actions Inability to take responsibility for important activities
Inability to finish their projects Taking on more responsibility than they are capable of/ unwilling to carry out the proposed activities
Feeling of being inconvenienced by constraints / Feeling useless Feeling worthless, which severely undermines their self-confidence and self-worth; disturbed self-esteem

4. DIFFICULTY ASSUMING SOCIAL ROLES

Manifestations of dependency
Inability to care for dependents **Inability to fulfill the functions of a social role** **Feeling of failure**
Physical or psychological inability to take care of someone or to have a specific social role: mother, father, husband, boss, etc. Depressed, manic Not accepting illness

Nursing interventions

The nurse helps the patient to be aware of their own value and competence:

- Actively listens to the patient, allowing him/her to express feelings about difficulties in self-realization;
- Assesses the patient's physical and intellectual abilities and helps the patient identify the reasons for his or her behavior;
- Identifies any form of interest in a particular activity and involves the patient in it;
- Guides the patient towards activities that are both attractive and useful;
- Observes and notes changes in the patient's behavior (depression, satisfaction);
- Applies caregiving techniques adapted to the patient's needs;
- Identifies, together with the patient, the factors that prevent him/her from achieving his/her goals: family, economic limitations, state of health.

Helps the patient to regain interest in themselves and others:

- Knows the wishes, feelings, interests and abilities of the patient;
- Assists in the re-evaluation of his or her skills and aspirations;
- Assists the patient in setting up projects;
- Helps the patient adapt to his new role or status;
- Assists in the realization of an accurate perception of reality, in the integration into the community;
- Observe the patient's reactions of satisfying or dissatisfying;
- Explains the need to be aware of the environment and the people around them.

Helps the patient to regain confidence and self-esteem

- Identifies the source of the patient's helplessness and the situations that make the patient feel worthless through observation and discussion with the patient;
- Through behaviour and conversation, gains the patient's trust;
- Assists the patient in the knowledge and reassessment of his or her abilities;

– Consult the patient in planning the proposed activities;
– Inform patients of their right to make decisions about their care;
– Observes patient's reactions to decision making;
– Convince them of their importance and responsibility.

Helps the patient to be able to objectively realize and appreciate their activities:

– Guides the patient to other activities than those that are appropriate to their abilities.
– Assists the patient in physical and mental recovery to reduce disability and achieve independence.
– Helps the patient to learn and master control criteria. This helps him to evaluate his daily activities, the goals he has achieved and his ideals.
– Monitors the objectivity of the patient's assessments.
– Notes any changes in the patient's behaviour or condition.

7.13. The need for recreation

Author: *Ecaterina Scoarta*

"To prolong life, man needs balanced gym, fresh air and walks"

(Hippocrates)

Definition: Recreation is a need of the human being to unwind, to have fun, to entertain himself, and to this end, to engage in pleasant activities in order to achieve physical and mental relaxation.

Recreational independence

The physical and mental development of man cannot be fully understood if one of the psycho-behavioral dimensions of personality - play and recreational-distractive activities - is taken into account. People have always been aware of the need to occupy a part of their time with recreational activities in order to achieve a certain emotional balance, compensating for their daily, responsible and sometimes stressful, chores. From the perspective of lifelong learning, leisure activities should be integrated throughout life and designed to be directly linked to their formative function.

In school, pupils must learn various rational ways of learning and practicing games, form favorable attitudes towards creative activities, appreciate their value, understand their importance and necessity for mankind.

Sedentary lifestyles, i.e. lack of exercise, monotonous and, above all, uncompensated professional demands, plus living in the polluted atmosphere of cities, to which other causes are added, predispose to a series of organic and mental disorders capable of shaking up health and ultimately leading to a decrease in *working* capacity.

Entertainment, fun, relaxation are the main functions of these types of activities accessible to all ages.

Factors influencing need satisfaction

Biological factors

– *Age* - Toddlers and preschoolers spend a large part of their time playing, which will favor their physical development and influence both the sphere of mental processes and their personality.

– The schoolboy divides his time between learning and playing.

– The adolescent continues the games of childhood and puberty in modified forms and makes the transition to the recreational activities of youth and adulthood. Physical and mental maturity enable adults to choose and organize their leisure activities according to their preferences, free time, possibilities and environment. Older people's less dynamic mentality limits their choice and explains why they are less interested in dynamic sporting activities and retreat to indoor activities.

– *Body type and physical abilities.* Recreational activities that require particular physical exertion should be selected and practiced according to each individual's constitution and physical capacities.

Psychological factors

– *Psychological development.* Play and other play activities contribute to the formation of the main traits of the child's personality and behavior, as well as to the achievement of emotional control.

– *Emotions.* Recreational activities allow the individual to externalize emotions and release tension. In order to achieve these goals, the individual opts for the entertainment that seems appropriate.

Sociological factors

– *Culture.* Each people, through its specific traditions, proposes, organizes and carries out recreational activities specific to that community. In our country, popular celebrations (e.g. the celebration of daffodils, tulips, etc.) and ceremonies (weddings, christenings, etc.) are widely attended, which demonstrates the effectiveness of these ways of satisfying the need for recreation.

– *Social roles.* People employed in an organized job that provides them with optimal time can satisfy this need through daily, periodic (weekends) and annual recreation (holidays, rest leave). Retirement increases the leisure time of individuals, who can organize their recreational activities according to their taste and possibilities.

– *Social organization.* Providing conditions and access to diversified leisure activities: rest, entertainment, learning and fulfillment, is conducive to meeting these needs. They differ from country to country depending on socio-economic conditions.

Manifestations of independence

– **Rest** - the state of relaxation, the cessation of nervous tension or tension.

– **Satisfaction** - a feeling of contentment, pleasure.

– **Pleasure** - the pleasant sensation or emotion, related to the fulfilment of a need, of relaxation**.**

– **Amusement** - fun, entertainment, cheering up.

Nursing interventions to maintain independence in the need for recreation

– explores patients' tastes and interest in recreational, leisure and leisure activities;
– plans recreational activities with the patient;
– ensures the necessary conditions;
– organizes individual or group recreational activities according to age, ability and location:
  - fun, formative-educational, balancing and toning games;
  - music auditions;
  - watching movies;

- meetings with artistic personalities;
- facilitates access to libraries, reading rooms or get books, magazines;
- trains and stimulates patients in these activities.

Dependency in satisfying the need for recreation

Not satisfying the need for recreation manifests as a state of dependency:

1. Disliking recreational activities.
2. Difficulty with recreational activities.
3. Refusal to perform recreational activities

Sources of difficulty:

1. **Physical sources**:
   - injury to physical integrity, disabilities, physical restraints (bandages, plaster casts);
   - decreased functional capacity of sense organs;
   - imbalances: pain;
2. **Psychological sources:**
   - impaired thinking, memory;
   - impairment of consciousness;
   - anxiety;
   - stress;
   - crisis situations;
   - maladaptation to the sick role and the illness**;**
3. **Sociological sources:**
   - loneliness, withdrawal, retirement;
   - old, routine work;
   - conflicts and failures in fulfilling social roles;
   - lack of knowledge about themselves and those around them.

Not enjoying recreational activities

Recreational dislike is defined as an unpleasant and distressing feeling that leads to inactivity, boredom and sadness.

Manifestations of dependency

- **Inactivity –** Lack of interest in the ordinary activities of life. The person is passive, disinterested in what is going on around them, not participating in activities.
- **Boredom** – A feeling of emptiness, sadness, lack of interest in current events or activities
- **Sadness** – An affective state manifested by malaise and dissatisfaction, which prevents the individual from cheering up.

Nursing interventions

Patient unwilling to engage in recreational activities

OBJECTIVE	NURSING INTERVENTIONS
The patient to be in a good mood	– The nurse explores what recreational activities the patient enjoys; – analyzes and determines whether they are consistent with his mental and physical state; – plans recreational activities with the patient; – organizes specific recreational activities for children, adults, seniors; – engages the sick person in activities and helps them; – provides the right environment; – sets up recreation rooms: for music auditions, movies, TV; – ensures that the activities do not overburden him, do not tire him, but create a good mood; – notes the patient's reactions and manifestations with direct reference to: – feeling bored and sad.
The patient to gain self-confidence	– causes the patient to express emotions and feelings; – gains the patient's trust and helps them through difficult times; – administers and monitors the effects of treatment indicated by the doctor: antidepressants, tranquilizers, etc.
The patient to get a restful sleep	– teaches the patient relaxation techniques; – helps him to do them and observes how he does them;

The patient to improve their physical condition	– is consistent in planning and organizing recreational activities; – perseveres in those recreational activities, which correspond to the psychosomatic constitution of the patient; – ensures a gradual increase in the difficulty of these activities.

7.14. The need to learn to stay healthy

Author: *Luminita Suveica*

Definition: The need to learn is the need for human beings to accumulate knowledge, attitudes and skills in order to modify their behavior or adopt new behaviors.

Independence in satisfying need.

Learning is a common problem of pedagogy, psychology, ethics, sociology and other sciences, which investigate human behavior from different points of view.

The process of learning is particularly complex and involves the organization of the individual's entire behavior in order to be able to direct his or her entire activity in a creative way, according to the conditions in which he or she finds him or herself, based on the knowledge, skills and abilities acquired previously.

Education and medicine are two interacting and analogous fields. The practical aim for medicine is to preserve health and/or cure. Throughout his or her life, a person must continually adapt to changes in the environment, which modify the measures needed to maintain health. Self-knowledge is essential in order to prevent and analyze certain habits so that one can check whether one has taken the appropriate measures to maintain health. As a result of this analysis, one may feel the need to learn the most effective means of health maintenance.

Having acquired the knowledge, attitudes and skills to stay healthy, they gain a sense of security, which enables them to fight illness, anxiety and the stress of everyday life.

Terminology

- ***Learning*** **–** the activity of acquiring knowledge and acquiring new skills in all areas of mental life (cognition, will, emotionality). The end product of learning can be: a theoretical concept, an attitude, a motor skill or it can be multidimensional.
- ***Skill*** **–** automatized component of activity. In order to maintain independence in satisfying the need to learn to maintain their health, patients are aware of the need to form the correct attitudes and habits necessary to achieve a state of well-being.
- ***Knowledge (information)*** **–** the reflection of objective reality in consciousness.
- ***Desire*** **–** interest in accumulating knowledge.
- ***Education*** **–** the set of actions for the transmission of knowledge, formation of skills and behaviour.
- The role of health education is to provide the patient with concrete, specific ways to maintain or regain their health (the nurse's role as educator).
- ***Thinking*** – a psychic process, which reflects directly - but abstracted and generalized - objects, phenomena, relations between them.
- ***Memory*** – the capacity to assimilate, fix and reproduce accumulated cognitive experience.
- ***Anxiety*** – the feeling of discomfort and tension that people feel when faced with life's problems.
- ***Stress*** – the imbalance between the experience the individual has to cope with and their ability to cope with it, with repercussions on health.
- ***Culture*** – the totality of material and spiritual values created by mankind in the process of social-historical practice.

Factors influencing need satisfaction

1. ***Biological factors***

   ➢ **Age**

- The child, during growth and development, easily learns the ways and means to maintain its health if it is trained, supervised and controlled.

– The adult learns and improves in order to use all the means necessary to maintain good health.
– It is harder for the elderly to accumulate new knowledge (fixation amnesia), but they have the ability to use and adapt what they have learned previously.

➢ **Physical capabilities.** Human beings, according to their physical conditions (somatic physical integrity and sense organs, intellectual faculties), make it possible to acquire knowledge, attitudes, skills for maintaining health.

2. Psychological factors

➢ **Motivation** - the totality of the dynamizing and directional factors that energize people, incite them to action, and guide their direction. Among the motivating motivating factors are: needs and desires. Learning, as a human activity, responds to a person's needs or interests, and is therefore subject to the law of motivation and is directed towards a goal, i.e. it is subject to the law of purpose: the practical purpose in medicine, which is to preserve health or to cure.

➢ **Emotions.** Anxiety-related emotions and feelings can accelerate cognition processes (the patient becoming aware of their own responsibility for their health).

3. Sociological factors

➢ **Environment.** A suitable environment, with normal light and temperature, calm and quiet, creates the right atmosphere for learning.

Manifestations of independence

– expressing a desire to learn;
– showing an interest in learning;
– state of receptivity;
– acquiring knowledge on your own through reading;
– learning with others through radio, TV, courses, conferences;
– acquiring new attitudes, skills and behavior modification to maintain health.

Nursing interventions to maintain independence

- nurse explores the knowledge needs of the patient;
- develops study objectives with the patient;
- informs about the means and resources it can provide: brochures, books, leaflets, leaflets, magazines, slides, etc;
- supports the patient's motivation for the knowledge to be acquired;
- organizes health education activities: talks, courses, conferences, films, practical demonstrations;
- presents materials with interesting, attractive topics, with means and procedures appropriate to the patients' level of culture and understanding.

Dependency in need satisfaction

If the need to learn is not satisfied, the following dependency problems arise:

1. Ignorance of acquiring new knowledge, attitudes, skills.
2. Knowledge deficit.

Sources of difficulty

1. Physical sources:

- physical injury;
- sensory deficits, especially auditory and visual, speech disorders (dyslalia, aphasia), diminished or abolished vocal sensory sense;
- pain, depending on its intensity, causes physical (changes in breathing and heart rate, A.T. up to shock) and psychological (anxiety, agitation, irritability, fear) manifestations;

2. Psychic sources:

- impairment of consciousness: clouding, delirium, coma;
- intellectual development; low interest limits knowledge accumulation;
- impaired thinking and memory;
- anxiety;
- stress;
- crisis situation - is caused by major life situations:
- the loss of a loved one;

- significant change in body schema;
- lifestyle changes;

3. ***Sociological sources***
   - unknown environment;
   - lack of interest in learning related to education and culture;
   - lack of knowledge or a low level of knowledge about general rules of physical and mental hygiene, health and its maintenance;
   - insufficient self-awareness – leads to negative behaviors and phenomena that go beyond the individual's ability to adapt;
   - insufficient knowledge of the environment.

Ignorance of acquiring new knowledge, attitudes, skills

Manifestations of dependency:

- ***refusal to learn –*** not accepting new knowledge;
- ***lack of receptivity –*** not prone to receiving outside impressions or influences;
- ***insecurity and fear of the unknown –*** due to unforeseen events, the patient has to face the need to change lifestyle and habits in order to regain health. He ignores measures that can be taken to regain independence;
- ***unusual approach to certain actions to regain health –*** the sick person does not give due importance to the illness, does not follow medical advice in treating or preventing illness;
- ***lack of interest in learning*** – is reluctant to take any action or acquire any knowledge necessary to maintain or regain health;

Knowledge deficit

Manifestations of dependency:

➢ ***Insufficient knowledge:***

The patient has no knowledge of:

- illness;
- preventing illness;
- the importance of treatment compliance;
- preventing complications;
- recovery period;
- socio-professional reintegration;

➢ ***Difficulty in learning preventive and curative measures.***

Does not understand the need to learn and is not receptive due to:

- thought disorders;
- the pace of thought can be accelerated - flight of ideas: ideas follow one another so quickly that they cannot be organized into a rational order;
- slowing of the pace of thinking: impaired judgment, inability to think;
- inoperative thinking: it concerns the logical connection between notions and ideas (mixture of unrelated words);
- memory impairment: fixation and/or recall amnesia;
- limited intellect;
- inability to assimilate, retain and reproduce knowledge;
- educational shortcomings: lack of hygienic habits, lack of rational nutrition, etc.;

➢ **Lack of information** - the patient does not have access to information, nor is he/she interested in obtaining it.

Nursing interventions

Objectives - Autonomous and delegated interventions

1. The patient to accumulate new knowledge:

- explores the patient's level of knowledge about the disease, its manifestation, preventive and curative measures, participation in interventions and the recovery process;
- identifies the manifestations of dependency, their sources of difficulty, their interactions with other needs;
- stimulates the desire for knowledge;
- motivates the importance of acquiring new knowledge;
- makes patients aware of their own responsibility for their health;
- organizes educational activities, using known teaching methods:
- exposes, conversates, demonstrates respecting pedagogical principles;
- checks that the patient has understood the message correctly and has absorbed the new knowledge;

2. **The patient to acquire new attitudes, habits and skills:**
   - identifies the patient's bad habits and habits;
   - correct unhealthy habits;
   - gives lessons on: hygiene training, rational nutrition, balanced lifestyle, administration of various treatments;
   - makes practical demonstrations;
   - develops rehabilitation and re-education programs for patients with sensory and motor impairments (medical gymnastics, physiotherapy);
   - encourages and helps the patient acquire new skills.

The role of the nurse in health education

The nurse encompasses actions that aim to promote health, prevent illness, helps the person become more independent, ensure continuity of care from hospital to home.

Characteristics of the educational process

Identification of patient education needs based on the information gathered will be assessed:

- the need to learn (what the patient knows about the current health status, the patient's experiences having an impact on the need to learn, the information family members need to respond to the patient's need);
- learning ability (patient's stage of development, physical strength, coordination of movements, presence of sensory impairments);
- learning environment (presence of sources of learning disruption, comfort of the room);
- learning resources (how the family perceives and understands the patient's illness and its consequences, the patient's willingness to involve the family in the educational program, the resources available to the patient at home);

Setting educational objectives

Educational objectives can be short term and long term;

Each educational objective will comprise three aspects:

- announcement and description of a behaviour (the patient will be able to perform a task within the learning period);

– identifying educational conditions (e.g. the patient will walk with crutches from the room to the bathroom);
– setting evaluation criteria (based on the degree of accuracy, success, satisfaction).

Educational principles

– choose the right moment (admission, discharge, hospitalization) when the patient is willing to learn;
– the duration should not exceed 20-30 minutes;
– repetition should be frequent enough to reinforce learning;
– structuring the material: elementary concepts, explanations; start with more important problems, recap;
– use the patient's own language and may use simple analogies;
– the patient's attention will be maintained and he/she will be induced to participate (several senses will be stimulated, the discussion will be in different tones and with different intensity, the most important aspect will be emphasized by gestures);
– existing knowledge will be complement;
– educational methods will be adopted according to the patient's needs.

The role of the nurse in the educational process:

– to respect the educational principles;
– to notice any behavior that indicates a decrease in interest or attention;
– to take into account the patient's attitude to having successfully performed a technique;
– to set educational goals with the patient;
– to guide and advise the patient, giving relevant information;
– observe the patient's progress in self-care and remain available to help;
– to demonstrate the techniques to be learned by the patient (step by step, without haste, explaining each gesture);
– before demonstrating a technique, remove the patient's anxiety through preparatory explanations;

– to use group education methods, which allow the exchange of ideas and participants learn from each other;
– to try to integrate education into the care process (e.g. health education while performing hygiene care or while dressing);

Interdependence with other basic needs

Not satisfying the need to learn affects the proper relationship with other basic needs.

– Communicating: irritability, non-acceptance, non-adaptation.
– Moving around, good posture, sedentarism, hyperactivity, poor posture and blood circulation.
– Breathing: changing the amplitude and rate of breathing by not knowing.
– Keeping body temperature within normal limits: lack of protective measures for heat and cold.
– Feed and hydrate: inadequate nutrition and hydration.
– Eliminate: improper disposal.
– Being clean, having healthy skin: poor hygiene habits.
– Sleep, rest, insomnia, discomfort, fatigue.
– Dress and undress: inappropriate clothing, footwear.
– Avoid dangers: vulnerability, physical or psychological harm.
– Acting on beliefs and values - frustration.
– Realizing (fulfilment)- powerlessness.
– Recreation - inability to engage in activities for relaxation.

Care process/ Nursing

1. **Data collection –** see data/information about the patient under care.
2. **Data analysis and interpretation**

Dependency problems: ignorance, knowledge deficit.

Manifestations of dependency: insufficient knowledge of his disease, preventive measures, treatment, unwillingness to learn, lack of receptiveness, learning disorders, misunderstanding of information, lack of interest in learning, difficulty in learning preventive and curative measures.

Sources of difficulty: physical touch, disability, pain, thought disorders, anxiety, stress, loss – separation, crisis situation, unfamiliar environment, lack of education, role change, lack of knowledge.

Diagnosis of prerequisite care = Problem. Etiology. Solution.

3. Care planning

- ***Potential patient goals:***
  - to enrich the patient's knowledge by applying pedagogical principles, about the disease, preventive and curative measures;
  - the patient to participate in their own care.

4. Care application

- ***Nurse's actions:***

- exploring the individual's learning needs;
- developing learning objectives with the patient;
- checking the person's motivation to learn;
- exposing to the individual the resources and means used to learn;
- helping the person during the learning process;
- observation and recording of the acquisition, gradual acquisition of knowledge, attitudes and skills, changes in behaviour, acquisition of new behaviour;
- checking with the patient that the proposed objectives have been achieved.

5. Care assessment

It will refer to:

- observing and recording the gradual acquisition of knowledge, attitudes and skills, changes in behaviour or acquisition of new behaviour;
- monitoring the fulfilment of the health education plan.

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Annex 1. **NURSING FILE**
GENERAL PATIENT DATA

Patient's first and last name:_____
Age_____ adress _____
Living: alone; with spouse; with children; with parents; institutionalized.
SOCIO-PROFESSIONAL SITUATION OF THE PATIENT:
Profession:_____ Marital status:_____
Children:_____
Occupation_____Hobby:_____
PERSONAL PHYSIOLOGICAL HISTORY:
Menarha_____number of pregnancies_____ number of births_____
Known allergies:_____ reactions _____
LIFE HABITS:
Alcohol: yes/no/occasionally; Tobacco: yes/no/occasionally
Drug: yes/no/name_____ mode of administration_____
Coffee: yes/no/occasionally
STATE OF DEPENDENCE:
Autonomous_____semidependent_____dependent_____
Prosthesis: dental/ocular/hearing aid/limb/valvular;
Cardiac pacemaker / since _____;
Contact lenses/eyeglasses-diopters _____
Activity limiting conditions: cardiac/respiratory/locomotor/sensory/other
_____
Medical diagnosis (to be taken from the clinical observation sheet, with the name of the diagnosing doctor): _____
Personal pathological history:_____
Hereditary – collateral antecedent:_____
Assessment of some vital functions and anthropometric landmarks on admission:
Breathing_____temperature _____P (puls)_____Blood pressure _____ height _____ weight _____kg.
Diet_____.
Subjective (self-reported) signs and symptoms:
_____
_____
_____
Objective signs and symptoms (identified by the nurse):
_____
_____
Critical test results, initial investigations that should be reported to the medical team:

Annex 2. **CARE PLAN TEMPLATE**

CARE PLAN				
No.	**Diagnostic nursing (PES)**	**Objectives**	**Interventions**	**Evaluation**