Melnikova G. F.

INCLUSIVE TECHNOLOGIES IN SOCIAL AND PROFESSIONAL ACTIVITIES

Teaching Aid

G. F. Melnikova

INCLUSIVE TECHNOLOGIES IN SOCIAL AND PROFESSIONAL ACTIVITIES

Teaching Aid

Electronic Edition
For Local Distribution

Saint Petersburg
Naukoemkie technologii
2026

Review by:

S. E. Chirkina, Candidate of Psychological Sciences (Ph.D. in Psychology), Associate Professor;
D. L. Likhacheva, Candidate of Pedagogical Sciences (Ph.D. in Pedagogy)

This teaching aid is intended for international students majoring in various fields, including medicine (31.05.01 General Medicine, 31.05.03 Dentistry), as well as for those interested in inclusion and social integration of individuals with various disabilities and the specifics of inclusive work with children with special needs. The aid covers in detail key topics related to the theoretical and practical aspects of working with individuals with disabilities and developmental delays. Each topic includes relevant information, legislative frameworks, interactions with various groups of people, as well as modern technologies and development paths for inclusive practices in medicine and social services.

Additionally, the aid includes assignments for ongoing progress monitoring, helping to consolidate acquired knowledge and develop practical skills. Working with this material will help future professionals acquire relevant competencies necessary to provide comprehensive and respectful care to individuals with special needs, as well as promote the development of an inclusive approach in medical practice, social and professional activities.

Text electronic publication
Minimum system requirements:
– processor: Intel x86, x64, AMD x86, x64 no less than 1 GHz;
– RAM: at least 512 MB;
– hard disk free space (HDD): at least 120 MB;
– operating system: Windows XP and higher;
– Adobe Acrobat Reader;
– CD-ROM drive;
– mouse.

Educational Publication

Melnikova Gulnar Faritovna

Inclusive Technologies in Social and Professional Activities

Teaching Aid

Electronic Edition
for Local Distribution

The teaching aid is published in the author's version

Chief-in-Editor *V. M. Korovin*

Table of contents

Introduction

This teaching manual is a contemporary educational resource aimed at improving the training of specialists working with persons with disabilities. The relevance of this topic stems from the growing need of the modern society to create an accessible environment that ensures equal opportunities for all categories of the population. As inclusive practices develop in the medical, social, and educational spheres, this aid meets modern requirements for developing competencies that facilitate social integration and professional development of specialists.

This work covers the theoretical foundations of inclusive technologies, regulatory and legal aspects, up-to-date approaches, and practical methods for their implementation in various fields. The structure of the manual ensures a systematic and consistent presentation of the material, promoting effective knowledge acquisition and development of practical skills of students and professionals. This publication is a valuable resource for enhancing professional preparedness and fostering a humanistic attitude toward people with special needs.

The course "Inclusive Technologies in Social and Professional Activities" provides a comprehensive understanding of the integration of persons with disabilities into various areas of social life and professional activity, and is aimed at providing students with knowledge about special aspects and technologies of inclusive interaction, and practical skills for their application in the professional sphere.

Purposes and objectives of the discipline

The purpose of studying the course is to provide students with theoretical knowledge about the features and technologies of inclusive interaction and practical skills (development) in organizing joint professional activities and social interaction with persons with disabilities.

Objectives of studying the discipline:

– to form in students an understanding of the regulatory and ethical foundations of interaction with persons with disabilities and health limitations;

– to form in future specialists the moral position necessary for working with persons with disabilities;

– to form a system of knowledge about the special communication needs of various categories of persons with disabilities;

– provide information about state-of-the-art technologies, forms and methods of interaction with persons with disabilities.

Lecture 1. Inclusion and Inclusive Employment

The concept of inclusion and inclusive interaction

"Inclusion" is a term that has come into use in Russian national science relatively recently. Historically, both in Russia and abroad, this term has been widely used in relation to the education of persons with disabilities. However, inclusion is a much broader term encompassing not only inclusion in the educational environment of an educational institution but also in social structures and systems. Researchers review this concept in two aspects: as a process of interaction between individuals or groups of people in society and as an educational concept, a set of measures that enable persons with disabilities to "integrate" into the educational environment of an educational institution —kindergarten, school, or university. The literal translation of the term "inclusion" is inclusion, involvement, or becoming part of something as part of a whole. In our country, the words "inclusion" and "inclusive" are most often used in conjunction with the words "education," "upbringing," and "children." Inclusion is most often mentioned in relation to persons with disabilities and is considered a process of educating and learning persons with disabilities alongside typically developing peers, enabling them to achieve full social progress. However, inclusive education encompasses more than just persons with disabilities. Inclusive education is an organization of the educational process in which all individuals, regardless of their physical, mental, intellectual, cultural and ethnic, linguistic, or other characteristics, are included in the general education system and study alongside their peers without disabilities in educational institutions that take their specific educational needs into account and provide them with the necessary specialized support. The term "inclusive education" was first officially recognized in the Salamanca Declaration on Principles, Policy, and Practice in Special Needs Education in 1994.

UNESCO views inclusion as "a dynamic approach that embraces positive attitude towards pupils' diversity and sees individual differences not as problems but as opportunities to enrich learning".

Principles of inclusion and inclusive society:
– a person's value does not depend on his abilities and achievements;
– every person is capable of thinking and feeling;
– every person has the right to communicate and to be heard;
– all people need each other;
– true education can only take place in the context of real relationships;
– all people need support and friendship from their peers;
– for all learners, progress is achieved in what they can do rather than in what they cannot do;
– diversity enhances all aspects of life.

These principles underpin the concept of an inclusive society, in which all people, regardless of their differences, are equal members. The widespread implementation of inclusive measures and practices is part of the UN Sustainable Development Goals adopted in 2015. Specifically, building an inclusive society is

addressed by Goals 4 "Quality Education," 8 "Decent Work and Economic Growth," and 10 "Reduced Inequalities."

If we consider inclusion in a broader sense, we define it as a dynamic process of human interaction within a complex set of relationships. However, as researchers note, this is not simply interaction, but interaction that legitimizes and technologizes human interactions. Therefore, inclusion can be discussed not only in relation to the education of children with disabilities, but also in relation to their social integration and adaptation, provided that these processes occur not spontaneously, but within the framework of legitimized interactions between people in social groups.

Thus, we can give the following definition of inclusion in relation to persons with disabilities: the process of increasing the degree of participation of persons with disabilities in society, in which society creates conditions for the acceptance of people with special needs by changing the very structure of society.

Social inclusion can be applied not only to persons with disabilities, but also to migrants, the elderly, youth, minorities, and groups with special needs. Andrew Brayton defines inclusion as the creation of systems and processes that allow each person to fully participate in the life of society according to their choice, faith, and desires. V.N. Yarskaya asserts that social inclusion, in a broad sense, is "the democratic act of including an individual or a group in a larger community with the goal of engaging in a specific activity or cultural process."

The humanistic ideals of inclusion emphasize the importance of each individual and accept their disability as a condition of human existence, a manifestation of individuality, a unique characteristic, rather than a mark of quality. The idea of inclusion presupposes the development of a fundamentally new societal philosophy toward people with special needs, based on the concept of an independent and self-sufficient lifestyle for individuals with disabilities. According to this concept, social conditions should be aimed at helping individuals with disabilities become as independent and self-sufficient as possible. They can thus take an active and responsible stance in life, be equal members of society, and realize their potential within society. They can and should shape their own life trajectory and the architecture of relationships between people, becoming agents of life-creation, engaging in productive processes, and participating in the activities of civil society institutions (S.V. Alekhina, M.M. Semago, N.Ya. Semago, A.K. Fadina, N.M. Nazarova, and others).

Historical aspects of the implementation of an inclusive approach to persons with disabilities

Throughout history, societal attitudes toward people with developmental disabilities have varied. In the Middle Ages, the prevailing view was that physical defects were punishment for sin or a sign of involvement with evil spirits. This attitude often led to persons with disabilities being shunned and feared, or considered "sick." The most acceptable way of life for the disabled was confinement and isolation, rather than participation in work and normal social life. At the same time, various forms of social assistance, protection, and care have existed at all times and among all peoples, reflected in beliefs, worldviews, and ideologies. However, within the framework of

social policy, the idea of social inclusion for persons with disabilities began to be widely implemented only in the twentieth century, primarily through the protection of equal rights for certain segments of society. People with disabilities were the last to gain equal rights in the West. Society was slow to recognize that democracy is meaningless if the social exclusion of people with disabilities persists. This awareness was fostered by social movements and the advocacy of scientists and activists from among the disabled. A wave of research on the conditions and consequences of diseases and on brain function took place in the West in the period following World War I. This new knowledge transformed society's attitude toward the disabled, previously rooted in misunderstanding and ignorance. Changes in social policy also occurred, primarily through the creation of a system of services. A certain step in recognizing the rights and dignity of the disabled is also evident in the election of Franklin Roosevelt, a paraplegic, to the presidency of the United States. Veterans of World War II, disabled as a result of their injuries, also contributed to the popularization of the idea of human dignity, and many doors opened for those previously marginalized.

In the 1950s and 1960s, the normalization approach to social policy for persons with disabilities, originating in Sweden, spread across Western countries. Opportunities for independent living are constantly expanding. Most modern housing projects feature so-called group homes, where residents share expenses for food, transportation, and emergency assistance. Such homes appeared in the West as early as the 1970s, replacing residential facilities for the disabled. Beginning in the late 1960s and early 1970s, governments in the United States, Sweden, and several other developed countries, influenced by disability movements and research, began pursuing a policy of " deinstitutionalization." The idea was to allow people previously confined to closed institutions (boarding schools, prison colonies, psychiatric hospitals, and orphanages) to live, receive treatment, and undergo rehabilitation, correctional, and educational programs in more accommodating conditions. Such settings could be provided by foster families, outpatient clinics, social and psychological support services, volunteer assistance programs, and so-called group homes (small-scale residential facilities for 8–10 people, including a small staff). The idea of group homes was based on the humanistic belief that people with intellectual disabilities can live relatively independently in the community and be included in the social world. At that time, principles of protecting client rights and respecting human dignity were established, according to which people should live and receive necessary services (medical, educational, social) in the least restrictive environment.

One of the key concepts in the deinstitutionalization process was the "dignity of risk"—the assumption that those released from strict care should have the right to do everything everyone else can, including making the occasional mistake. Part of the experience of growing up comes from learning from our mistakes. In practice, this right is rarely granted to those with intellectual disabilities. Observations led to the conclusion that the professionals caring for and working with these individuals consciously or unconsciously treated them as if they needed constant protection from the vagaries of the welfare system, the cruelty of the "normal" world, and their own "bad impulses." People with intellectual disabilities are considered highly dependent

on others, and many people, especially relatives, treat them like children. However, in their interviews with researchers, they expressed frustration at not being perceived as adults. The scientists' findings confirm that it is possible and even necessary to engage in open dialogue with people, beginning with particular patience and empathy, and a desire to understand the real context in which people with intellectual disabilities live their lives. The modern era establishes social justice and equality as the moral foundations of society. The principles of respect for human dignity, regardless of physical and mental health, age, gender, religion, and social status, include the observance of human rights, including the right to healthcare, education, and work.

Classification of developmental disorders

Visual impairment

This pathology is classified as a sensory disorder and is one of the main types of diseases that can lead to getting a disability group. Patients are classified into several categories based on the severity of their visual impairment:

Blind people are those with complete loss of visual perception or those with light perception, meaning they are unable to see the outlines of objects and can only discern the presence of light. This group of patients is further classified into two degrees:

1 – complete loss of visual function;

2 – practical blindness with light perception and the ability to see silhouettes of objects.

Visually impaired people are persons with disabilities whose vision allows them to distinguish objects, but at the same time cannot clearly see their contours.

Decreased vision is often accompanied by impaired spatial perception, impaired self-regulation, and impaired self-control, as well as decreased precision and coordination of body movements. Furthermore, changes in posture, the development of flat feet, and often respiratory muscle weakness are observed.

Concomitant pathologies associated with visual impairment typically include neuroses, cardiovascular and respiratory diseases, and metabolic disorders. Hearing loss, general speech impairment, fatigue, cerebral palsy (CP), and sometimes minimal brain dysfunction (MBD) may also occur.

Intellectual disability.

The basis of the signs of this group is the underdevelopment of various aspects of mental function: cognitive processes, need-motivational, emotional-volitional spheres, etc. The leading role in mental deviations is given to the delay in the development of cognitive ability, a typical characteristic of which is considered to be mental retardation.

Intellectual disability is the incomplete development of mental processes or their delay, which is primarily manifested by a decline in abilities characteristic of a particular period of development. These include social, cognitive, speech, and motor abilities, which ultimately form the basic foundation of personality and provide the opportunity for further development.

Individuals with mental retardation almost always experience cognitive impairment. The speed and intensity of neural processes, the quality of higher mental

functions, and analytical and synthetic processes are reduced. These abnormalities often lead to the development of dysplasia (pathological cell changes).

Problems with bone tissue and posture begin, and skeletal and foot deformities develop, which is generally characterized by physical imbalances accompanied by impaired motor coordination. Furthermore, such patients experience other sensory abnormalities, internal organ diseases, congenital heart defects, and endocrine pathologies.

In 90–100% of children with moderate intellectual disability, motor impairments are observed, with impaired tempo, precision, and coordination of movements. They are clumsy, slow, and have underdeveloped mechanisms for throwing, running, and jumping.

Changes in the musculoskeletal system (MSS).

Musculoskeletal diseases that can lead to a disability group are divided into three types:

Nervous system pathologies – poliomyelitis, cerebral palsy.

Congenital anomalies include hip dislocation, torticollis, and arthrogryposis (a congenital malformation). Deformities and defects of the upper and lower extremities include clubfoot, and malformations of toes and hands.

Acquired diseases and injuries – pathological changes resulting from trauma to the brain or spinal cord, arms, legs, limb pathologies, polyarthritis, systemic skeletal diseases.

In general, these pathologies are accompanied by degenerative changes in bone and neuromuscular tissue, disruption of regulatory mechanisms, and contractures. Dysfunctions of respiration, circulation, digestion, and metabolic processes occur, resulting in decreased performance. In addition, phantom pain, which causes significant discomfort to patients, is often present.

One type of musculoskeletal disorder that leads to disability is forced movements or involuntary motor reactions (for example, upper limb tremors). These create significant interference with voluntary movements and impede the acquisition of many motor skills.

In patients with a disability category based on musculoskeletal dysfunction, the primary defect is a defect in this system—underdevelopment, pathology, or loss of certain motor abilities. In musculoskeletal disorders of cerebral origin, there is a decrease in weight-bearing capacity, impaired balance, coordination, spatial orientation, upright posture, and macro- and micromotor skills.

Osteochondrosis, osteoporosis, contractures, muscle wasting, and physical imbalances are frequently diagnosed. Respiratory and cardiovascular diseases, as well as internal organ pathologies, are also common. Decreases in vision, hearing, and intelligence are often observed, ultimately leading to reduced performance.

Spinal musculoskeletal disorders are characterized by partial or complete loss of sensation and movement, as well as dysfunction of the pelvic organs. Autonomic dysfunction and pressure ulcers develop. Osteoporosis is a common occurrence.

When the upper (cervical) spine is affected, respiratory and orthostatic disturbances are observed. The development of flaccid paralysis is accompanied by

muscle atrophy, while spastic paralysis is accompanied by decreased joint mobility, contractures, and increased muscle tone.

In musculoskeletal disorders resulting from congenital defects or amputation, normal weight-bearing ability and walking (in the case of leg loss), posture, motor coordination, and the ability to maintain an upright posture are lost. These changes are often accompanied by a decrease in vascular capacity and body weight.

Speech impairment.

Speech is one of the most important human social functions, the performance of which depends on the coordinated activity of the brain and numerous peripheral nerves of the face. Four sensory systems are involved in speech, as well as reading and writing: visual, auditory, kinesthetic, and motor.

This complex process requires the proper functioning of all the muscles involved (larynx, jaws, tongue, palate), as well as the condition of the mouth, pharynx, and paranasal sinuses, the so-called resonator cavities. Equally important is respiratory coordination and the ability to produce high-quality pronunciation.

Speech mechanisms are complex and multi-layered, and changes in any part of this chain can lead to loss or deterioration of function. Factors that can cause speech abnormalities include:

– hereditary predisposition;
– genetic changes;
– intrauterine pathology;
– unfavorable delivery;
– diseases of the first years of life.

Speech impairments can be both oral and written, and these changes can be accompanied by pathologies of vision, hearing, intellect, or the musculoskeletal system. Depending on the combination of these factors, characteristic types of general developmental disabilities often arise. The presence of various forms of speech impairments suggests a diagnosis of mental retardation.

The variety and combination of pathologies leading to disability are unfortunately very wide, but this classification makes it much easier for medical examiners and other physicians to identify the underlying condition in each patient. This allows for a faster and more accessible way to provide medical care for these patients, as well as their rehabilitation and adaptation to everyday life.

Technical solutions to improve infrastructure for persons with disabilities

Creating an accessible environment for persons with disabilities is a priority for modern society. A fundamental aspect of this process is the development and implementation of technical solutions that facilitate the creation of a barrier-free environment.

Ramps for persons with disabilities provide barrier-free access to public buildings and structures. Their design must comply with established slope and width standards, allowing for maximum comfort. Handrails for persons with disabilities, installed along ramps and in restrooms, enhance safety and independence.

Special lifts for persons with disabilities significantly simplify access to high floors of buildings where there are no elevators.

An induction loop for the hearing impaired is a system that transmits sound directly to the hearing aid, making speech perception much easier in noisy environments.

Tactile signs in Braille and tactile mnemonic diagrams are essential navigation elements for people with visual impairments, allowing them to navigate independently.

The implementation of these technical solutions helps create conditions for a full life for persons with disabilities, making the environment more inclusive and comfortable for everyone.

Successful examples of accessible infrastructure for persons with disabilities

In modern society, increasing attention is being paid to creating accessible environments for persons with disabilities. Effective infrastructure for persons with disabilities requires comprehensive equipment for public spaces that ensures comfort and independence for this category of citizens.

Ramps for the disabled are now mandatory at building entrances, allowing wheelchairs to easily navigate thresholds. Handrails for the disabled and tactile navigation are installed in public transportation and metro stations, facilitating orientation and navigation. Induction loops for the hearing-impaired, installed in theaters and cinemas, help improve sound perception.

To support the independence of persons with disabilities, tactile Braille signage on doors and in elevators has become the norm. A wheelchair lift provides access to all floors of the building, making the space fully accessible.

Creating a barrier-free environment is an important step towards an inclusive society where every person feels like a full participant in community life.

The role of the state and society in creating infrastructure for persons with disabilities is a priority for both government agencies and society as a whole. An important aspect is equipping urban infrastructure with elements that facilitate the mobility and independence of persons with disabilities. Ramps and handrails for persons with disabilities should be integrated into the architecture of public buildings and structures, ensuring barrier-free access.

Creating a barrier-free environment requires the active participation of not only government agencies but also private businesses, public associations, and every citizen. Through joint efforts, significant progress can be made in ensuring equality and improving the quality of life for persons with disabilities.

Features of inclusive employment.

ILO experts assert that most individuals with disabilities want to work but face numerous barriers to employment, maintaining employment, and building a career. For persons with disabilities, access to formal employment is often difficult, especially in developing countries. To improve the situation, a "two-pronged approach" is needed: overcoming specific barriers and discrimination, and integrating individuals with disabilities into the labor market, providing appropriate social protection, support, and occupational safety and health. The main barriers to inclusive employment for persons with disabilities include entrenched negative perceptions about the low productivity of this category of individuals.

Addressing the above-mentioned issues requires effective measures from government and regional authorities through the development of targeted programs and projects that provide support for persons with disabilities in the labor market, their support, industrial adaptation, and training.

International organizations (the UN, WHO, ILO, World Bank, and others) have developed principles and recommendations for promoting the rights of persons with disabilities and their effective integration into the labor market. These principles often focus on areas such as accessible infrastructure, inclusive education, employment opportunities, and social protection. By implementing these principles, countries are working to create an environment in which persons with disabilities can fully participate in society, access the open labor market, vocational training, and maintain their well-being.

Attention to the status and rights of persons with disabilities is driven by the increase in their absolute and relative numbers, a trend that is reflected globally and in Russia. According to ILO experts, current constitutions in 22 countries explicitly guarantee the right to work or prohibit employment discrimination against persons with disabilities. These efforts aim to ensure equal opportunities and promote the development of an inclusive society where everyone has the right to work and develop their abilities. In recent years, the increased availability of services for persons with disabilities, including jobs, has contributed to their increased economic activity.

The Convention on the Rights of Persons with Disabilities is an international United Nations human rights treaty that embodies and enshrines key principles for the protection of the rights of persons with disabilities. This international document is a landmark achievement in inclusive lawmaking for the human rights community. The Convention does not establish new rights for persons with disabilities, but rather "clarifies the obligations and legal duties of States to respect and ensure the equal enjoyment of all rights by persons with disabilities." The signing and ratification of the Convention on the Rights of Persons with Disabilities demonstrates our country's agreement to comply with the provisions of this legally binding international instrument guaranteeing the protection of the rights of persons with disabilities.

The Convention on the Rights of Persons with Disabilities defines disability as "the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others." The Convention states that "all persons are equal before and under the law and are entitled without any discrimination to the equal protection and equal benefit of the law" (Article 5). For states that have signed the above-mentioned document, its status is binding under international law. The Russian Federation, as a party to the Convention, is committed to improving legal regulation to prevent discrimination against persons with disabilities in all areas, including the right to work and employment in the labor market.

In 2020, UNESCO adopted an action plan that includes "research and evidence-based data collection, development of policies and strategies for disability inclusion, creation of an enabling environment and awareness raising, development of appropriate training and capacity building tools."

The UN adopted a resolution, "Transforming Our World: The 2030 Agenda for Sustainable Development," which includes targets aimed at creating positive action by governments to ensure that every person with disabilities can exercise their rights. This document emphasizes the need for high-quality, accessible, relevant, and reliable statistical and monitoring data to implement these efforts and to review progress.

The 2024 Disability and Development Report: Accelerating Progress on the UN Sustainable Development Goals notes that only one in three persons with disabilities of working age is employed (compared to 56% of people without disabilities). The global unemployment rate among persons with disabilities is 10%, higher than the 8 % rate among workers without disabilities. Young persons with disabilities are twice as likely as young people without disabilities to be unemployed, uneducated, or untrained. Persons with disabilities face lower wages and are overrepresented in the informal economy and self-employment.

ILO reports highlight that persons with disabilities face limited opportunities in the world of work: a concentration in low-paid and unskilled jobs; a lack of representation at various management levels; limited mobility to workplaces and transportation; and low social adaptation.

ILO standards in the areas of social security and employment include a number of conventions and recommendations. For example, ILO Recommendation No. 202 concerning National Floors of Social Protection provides the basic standards for states to establish and implement national floors of social protection.

In substantiating the corresponding advantages of inclusive, specially equipped workplaces for the category of citizens in question, the ILO places emphasis on access to talent, which, according to experts such as Sanchez-Bayon A., Hancock B., Scharinger B., Kaliannan M., is increasingly becoming the basis of management and can become the key to a company's development;

– increasing innovation based on the diverse experiences of persons with disabilities, who can offer new approaches to solving problems;

– on increased motivation and involvement.

Control task within the framework of current monitoring of academic performance

Sample topics for papers:

1. History of the development of inclusive processes in society in Russia and abroad.

2. Philosophical approach to inclusive issues.

3. Dynamics of the conceptual and categorical apparatus in psychological and pedagogical studies of the problem of inclusion/integration.

4. The social essence of a person in the context of inclusive education.

5. Tolerance in relationships in an inclusive environment. Tolerance and communication culture.

6. Basic ideas and principles of the educational strategy for developing tolerance.

7. Analysis of the biography of a famous person with a disability and/or limited health capacity (the person and their field of activity are chosen by the student).

8. Evolution of the attitude of the state and society towards individuals with developmental disabilities.

9. Prevalence of disability in Russia.

10. Inclusive employment practices.

11. Inclusive employment: adaptation of workplaces and barriers to employment for Russian persons with disabilities.

12. Inclusive employment: guarantees and problems.

13. Inclusive Environment Design Issues

14. Inclusive art

15.Problems of employment of persons with disabilities.

16. Barriers and risks in the implementation of social and professional inclusion

17. Ethical aspects of interaction in the professional sphere.

18. Extrability as a Phenomenon of Inclusive Culture

19. Features of career guidance and employment of persons with visual impairments.

20. Features of career guidance and employment of persons with hearing impairments.

21. Features of career guidance and employment of persons with speech impairments.

22. Specifics of socialization, career guidance and employment of persons with consequences of injuries and amputations of organs of the musculoskeletal system.

23. Typical features of career guidance and employment of persons with cerebral palsy.

24. Specifics of socialization, career guidance and employment of persons with mental retardation.

25. Specifics of socialization, career guidance and employment of persons with mental retardation.

26. Supported employment programs for people with... (the type of disability is chosen by the student).

27. Inclusive business models: problems and prospects.

28. Inclusive entrepreneurship as a vector of business development.

Lecture 2. Inclusion at the Legislative Level

The idea of the equality of all people on Earth as a legal norm was substantiated by the 17th-century Enlightenment in the concept of natural human rights and enshrined in the US Declaration of Independence of 1776 and the French Declaration of the Rights of Man and of the Citizen of 1789. The legislation of many foreign countries today is characterized by constitutional and other normative enshrinement of the principle of equal rights for disabled and non-disabled persons, prohibiting discrimination on a number of grounds, including disability. In 1948, the Universal Declaration of Human Rights was adopted. The adoption of the Universal Declaration of Human Rights by the United Nations (UN) in 1948 was a true achievement of world civilization in the humanitarian sphere. It did not directly include sections on the treatment of persons with disabilities, but Article 1 of the Declaration states: "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood." The main thing here is the reflection of the principle of equality of all members of the human community, adults and children, and the inadmissibility of discrimination against a person for any reason is emphasized.

The Declaration of the Rights of the Child, adopted in 1959, states: "The child shall enjoy special protection, opportunities and favorable conditions, by law and by other means, to enable him or her to develop physically, mentally, morally and spiritually in a healthy and normal manner, in conditions of freedom and dignity. In the enactment of laws for this purpose, the best interests of the child shall be the paramount consideration."

In 1975, the UN adopted the Declaration of the Rights of Disabled Persons, which states: "Disabled persons, whatever the origin, nature and gravity of their impairment or handicap, have the same fundamental rights as their fellow citizens of the same age, which means, first and foremost, the right to a satisfactory life which is as normal and full as possible." The principle of equal rights for persons with and without disabilities assumes that the needs of all individuals, without exception, are of equal importance. The resources available in society should be used to create living conditions for persons with disabilities in which they can perform all the human activities characteristic of every individual in that society.

Another important international document is the Convention on the Rights of the Child, adopted by the UN General Assembly in New York on November 20, 1989. According to the Convention, children have the right to equality before the law, the right to legal protection, the right to development, the right to life, health, choice of residence, family reunification, the right to expression, information, freedom of association, privacy, access to reliable information, and the right to education. Article 23 of the Convention on the Rights of the Child is also worth mentioning, recognizing the right of children with disabilities to live a full life in conditions that guarantee their dignity, foster their independence, and facilitate their active participation in society. Children with special needs should be able to participate in public events. For example, hiring a sign language interpreter will allow deaf children to attend plays and

performances. Blind children and children with mobility impairments should receive assistance with access and transportation. Children with disabilities, like other children, have equal rights to protection if their rights are violated by parents or guardians. They have the right to special attention from rehabilitation services and to receive a good education. The right to health and medical services means they can freely access medical services for habilitation, rehabilitation, or preventive care.

The Convention states that children's rights must be respected within the family, which is recognized as the natural environment for the growth and well-being of children. States that have adopted this document have committed to respecting the rights and responsibilities of parents, guardians, and other individuals directly responsible for the child's well-being, upbringing, and development, as nature itself destined children to grow up within a family, in an atmosphere of kindness, love, and understanding, for their full and harmonious development. With varying degrees of intensity, ideas of segregation of persons with disabilities are being displaced in modern societies, while integration and assimilation are being promoted, calling for the inclusion of persons with disabilities in everyday life, creating conditions for their full lives.

In the United States, the rights of persons with disabilities are enshrined in law and integrated into the general civil rights system, which prohibits discrimination. The fundamental legal framework in this area is the Americans with Disabilities Act of 1990, which protects the rights of this social group at the federal level and prohibits discrimination in employment, government agencies, public accommodations, commerce, and transportation. The law requires government agencies at all levels to ensure that persons with disabilities have "equal access to the benefits of various activities, programs, and services." This includes access to public education, health care, and social services, as well as access to courts, polling stations, and town meetings. The law requires "reasonable modifications to policies, practices, and procedures to avoid discrimination against individuals with disabilities." Furthermore, relevant government agencies and construction companies in the United States must accommodate the needs of persons with disabilities when constructing new buildings and renovating existing structures to facilitate access for wheelchair users. Public transportation administrations must not discriminate against persons with disabilities when providing their services. It is required to provide adequate accommodations for persons with disabilities when boarding, disembarking, and traveling on public transportation, or to provide special transportation for those with disabilities who are unable to independently use standard forms of public transportation. The US Individuals with Disabilities Employment Act prohibits discrimination against persons with disabilities in hiring, promotion, training, and compensation.

The Constitution of Canada also enshrines the principle of equality of persons with disabilities and the impossibility of discrimination against them on the basis of physical or mental disabilities.

The UK Disability Discrimination Act 1995 also includes the principle of equal rights for disabled and non-disabled persons.

In 1994, the Basic Law of the Federal Republic of Germany was amended to read: "No one shall be disadvantaged because of his or her disability (mental or physical)." Currently, the Federal Republic of Germany has completed the process of adopting Section IX of the Social Code (Rehabilitation and Participation of Disabled Persons in Society), which summarizes legal provisions concerning rehabilitation and ensuring the rights of persons with disabilities. The amendment to the Code entered into force on July 1, 2001.

In Hungary, the principle of equal rights is enshrined in the Law on the Rights of Persons with Disabilities and Ensuring Equal Opportunities for Them of 1998. In China, 36 laws contain provisions guaranteeing the rights and interests of persons with disabilities.

According to UN experts, most countries use general legislation to provide social protection for persons with disabilities, meaning that the rights and obligations of citizens of the state apply to persons with disabilities.

UN experts believe that specialized legislation that ensures equal access to general legislation for persons with disabilities is a stronger legal instrument. Russia combines both general and specialized legislation. General legislation does not discriminate against persons with disabilities; in some respects, it is perhaps overly lenient.

The implementation of the rights of persons with disabilities requires the presence of:

– legislative and institutional framework in the field of solving disability problems;

– the ability to defend one's rights in both large and small cities; today, it is impossible to claim equal access to the judicial and administrative liability system.

– the right to special assistance to enforce their rights in court. The rights of a disabled person are difficult to enforce due to the difficult circumstances of the individual and their family. It is especially difficult for people with severe disabilities to defend their rights. Persons with disabilities have limited mobility, and courts and executive bodies are sometimes simply inaccessible to them;

– an expanded system of information about rights.

Current Russian legislation regarding care and assistance for persons with disabilities is closely aligned with laws and principles adopted internationally. In 1991, our country adopted the law "On the Fundamental Principles of Social Protection for Disabled Persons in the USSR," which enshrined the fundamental principles and guidelines for addressing disability issues. Subsequently, the Russian Federation declared itself a rule-of-law and social state, bringing its constitution and federal legislation into line with international human rights standards, primarily the 1948 Universal Declaration of Human Rights, the 1969 Declaration of Social Progress and Development, the 1975 Declaration of the Rights of Disabled Persons, the 1993 Standard Rules on the Equalization of Opportunities for Disabled Persons, and the World Programme of Action concerning Disabled Persons, all adopted by the UN General Assembly. Although persons with disabilities and their families continue to face barriers to understanding and communicating with others, there is considerable

evidence that overall social attitudes toward persons with disabilities are gradually changing, moving from inattention and rejection to acceptance and recognition of their rights, dignity, and full participation in society. The adoption of the Law "On Social Protection of Persons with Disabilities in the Russian Federation" by the State Duma on July 20, 1995, the development of the draft Law "On Special Education," and the creation of 52 rehabilitation centers—all of this speaks to this changing social policy.

Laws on Disabilities in the Russian Federation Federal Laws and Regulations

Federal Law "On Amendments and Supplements to Article 16 of the Law of the Russian Federation "On Education" dated July 20, 2000 N 102-FZ

Federal Law "On Social Protection of Disabled Persons in the Russian Federation" (as amended on July 24, 1998, January 4, July 17, 1999, May 27, 2000, June 9, August 8, December 29, December 30, 2001) dated November 24, 1995 N 181-FZ

Resolution of the Government of the Russian Federation "On Approval of the Procedure for the Upbringing and Education of Children with Disabilities at Home and in Non-State Educational Institutions" No. 861 of July 18, 1996.

Resolution of the Government of the Russian Federation "On the provision of free social services and paid social services by state social services" No. 739 of June 24, 1996

Decree of the President of the Russian Federation "On measures for professional rehabilitation and employment of persons with disabilities" No. 394 of March 25, 1993

Federal Law "On Additional Guarantees for the Social Protection of Orphans and Children Left without Parental Care" No. 159-FZ of December 21, 1996

Federal Law "On the Basic Guarantees of the Rights of the Child in the Russian Federation" No. 124-FZ of July 24, 1998

Federal Law "On the Fundamentals of Social Services to the Population in the Russian Federation" No. 195-FZ of December 10, 1995

Resolution of the Government of the Russian Federation "On ensuring the formation of an accessible living environment for persons with disabilities" No. 927 of August 12, 1994

Federal Law "On Social Protection of Disabled Persons in the Russian Federation" No. 181-FZ of November 24, 1995

Decree of the President of the Russian Federation "On measures to ensure state support for persons with disabilities" No. 1011 of July 1, 1996 (as amended on April 27, 2000) •Decree of the President of the Russian Federation "On scientific and information support for problems of disability and persons with disabilities" No. 802 of July 27, 1992

Industry regulations:

– Resolution of the Ministry of Social Protection of the Population of the Russian Federation "On pension provision for children who are fully supported by the state" No. 1–6-u of June 23, 1995.

– Resolution of the Ministry of Labor "On approval of the model Regulation on the individual rehabilitation program for disabled persons" No. 42 of December 14, 1996.

– Order of the Ministry of Education dated June 18, 2001 No. 2417 On the implementation of the decision of the board dated May 15, 2001 No. 10 "On the experience of Russian universities in ensuring accessibility of higher professional education for persons with disabilities."

– Order of the Ministry of Education of the Russian Federation of October 22, 1999 No. 636 "On approval of the regulations on the practical psychology service in the system of the Ministry of Education of the Russian Federation."

– Letter of the Ministry of Education of the Russian Federation dated March 25, 1999 No. 27/502–6 "On the conditions for the admission and training of persons with disabilities in institutions of higher professional education."

– Resolution of the Ministry of Labor and Social Development of the Russian Federation of July 19, 2000 No. 52 On approval of Methodological recommendations for organizing the activities of the state (municipal) institution "Center for Social Assistance to Families and Children".

– Clarification of the Ministry of Labor of the Russian Federation and the Social Insurance Fund of the Russian Federation dated April 4, 2000 No. 3/02–18/05–2256 "On the procedure for providing and paying additional days off per month to one of the working parents (guardian, trustee) for caring for disabled children" (approved by Resolution of the Ministry of Labor of the Russian Federation and the Social Insurance Fund of the Russian Federation dated April 4, 2000 No. 26/34).

– Resolution of the Ministry of Labor of the Russian Federation of July 27, 1999 No. 29 "On approval of Methodological recommendations for organizing the activities of social and health centers for elderly citizens and persons with disabilities."

– Resolution of the Ministry of Labor of the Russian Federation of October 29, 1998 No. 44 "On Recommendations for the creation and organization of activities of trustee (public) councils at social welfare institutions."

– Order of the Ministry of Health of the Russian Federation and the Ministry of Labor of the Russian Federation dated February 25, 1998 No. 50/18 "On approval of the form for referring children under 16 years of age for examination at medical and social examination institutions."

– Resolution of the Ministry of Labor of the Russian Federation and the Ministry of Health of the Russian Federation of January 29, 1997 No. 1/30 "On approval of Classifications and temporary criteria used in the implementation of medical and social expertise."

– Resolution-order of the Ministry of Labor of the Russian Federation, the Ministry of Health of the Russian Federation and the Ministry of Education of the Russian Federation of December 23, 1996 N 21/417/515 "On approval of the Model Regulations on a Rehabilitation Institution".

– Order of the Ministry of Education of the Russian Federation and the Ministry of Health and Medical Industry of the Russian Federation dated July 18, 1994 No. 268/146 "On exemption from final certification of graduates of grades 9, 11 (12) of general educational institutions."

– Resolution of the Ministry of Labor of the Russian Federation of September 8, 1993 No. 150 "On the list of priority professions of workers and employees, the

mastery of which gives persons with disabilities the greatest opportunity to be competitive in regional labor markets"

Ethics of communication with disabled persons

An important component of activities to ensure the accessibility of buildings, structures and services provided to the population is compliance with ethical rules of communication with disabled persons.

Ethics is the study of morality and ethics. The term "ethics" was first used by Aristotle (384–322 BC) to describe practical philosophy, which seeks to answer the question of what we must do to perform correct moral actions. The most important categories of ethics are: "good," "evil," "justice," "benevolence," "responsibility," "duty," "conscience," etc. An integral part of ethics is professional ethics—a set of moral, ethical, and ethical standards and a model of behavior for specialists in the relevant professional field. Professional, or so-called business ethics, is designed to regulate the activities of specialists in the sphere of official relations, including with the subjects of their work. For each specialist, professional ethics is not simply a formal requirement, but a guiding principle of their daily activities. Being a bearer of ethical principles is important for several reasons: adherence to professional ethics leads to the successful provision of services to citizens specific to the institution's field of activity, the creation and maintenance of the institution's reputation, and the development of a positive culture within the institution or organization.

To further improve the state social policy of the Russian Federation, in accordance with Decree of the President of the Russian Federation No. 597 of May 7, 2012, the Government of the Russian Federation has developed a set of measures for the adoption of codes of professional ethics. In recent years, the following have been adopted:

– Code of Ethics and Official Conduct of Federal Civil Servants of the Ministry of Health and Social Development of the Russian Federation;

– Code of Ethics and Official Conduct of Employees of Social Protection Authorities and Social Service Institutions;

– Code of professional ethics and official conduct of employees of federal state institutions of medical and social expertise.

These codes define the most important components of professional ethics. These include requirements such as integrity, humanism, impartiality, competence, neutrality, correctness, tolerance, non-confrontational behavior, responsibility, honesty, and strict confidentiality.

An integral part of the philosophy of social protection for persons with disabilities is the philosophy of independent living. The concept of "independent living" conceptually encompasses two interrelated aspects:

1. Independent living is the right of a person to be an integral part of the life of society and to take an active part in social, political and economic processes, to have freedom of choice and freedom of access to residential and public buildings, transport, communications, insurance, work and education, the opportunity to independently determine and choose, make decisions and manage life situations.

2. Independent living is a way of thinking and a psychological orientation of an individual that depends on their relationships with others, their physical abilities, their support system, and their environment. The general principles and goals of independence for persons with disabilities are formulated in the Declaration of Independence of the Disabled.

Declaration of Independence of the Disabled:

Don't see my disability as a problem.

No need to feel sorry for me, I'm not as weak as I seem.

Do not consider me as a patient, as I am simply your compatriot.

Don't try to change me. You have no right to do so.

Don't try to control me. I have the right to my own life, like any other person.

Don't teach me to be submissive, humble, and polite. Don't do me any favors.

Recognize that the real problem that persons with disabilities face is their social devaluation and oppression, and prejudiced attitudes towards them.

Please support me so that I can contribute to society to the best of my ability.

Help me know what I want.

Be someone who cares, takes the time, and doesn't fight to make things better.

Be with me even when we fight each other.

Don't help me when I don't need it, even if it gives you pleasure. • Don't admire me. The desire to live a full life does not deserve admiration. • Get to know me better. We can become friends.

Be allies in the fight against those who use me for their own satisfaction.

Let's respect each other. After all, respect implies equality. Listen, support, and act. Rules of etiquette when communicating with persons with disabilities. Employees of organizations providing services to the public must assist persons with disabilities in overcoming barriers that prevent them from receiving services equally with others. The combination of abilities, knowledge, and skills necessary for effective communication when helping persons with disabilities overcome barriers is called communicative effectiveness. Communication is considered the most important aspect of any activity, largely ensuring its success and productivity. Communicative competence is necessary for everyone. For specialists, the ability to correctly perceive and understand another person, and to competently provide services in an institution or organization are professionally significant. The development of communication skills consists of the following basic skills: — avoid conflict situations; — listen attentively to the disabled person and hear them; — regulate your own emotions that arise during interaction; — ensure a high level of culture and ethics in relationships; — resist manipulation in a civilized manner.

There are general rules of etiquette when communicating with persons with disabilities that can be used by employees of professional educational organizations providing services to the public, depending on the specific situation:

1. Addressing the person: When you speak to a person with a disability, address them directly, and not the accompanying person or sign language interpreter who is present during the conversation.

2. Shaking hands: When you are introduced to a disabled person, it is quite natural to shake his hand: even those who have difficulty moving their hand or who use a prosthesis can shake hands — right or left, which is quite acceptable.

3. Identify yourself and others: When meeting with someone who is visually impaired or completely blind, be sure to identify yourself and anyone else who is with you. If you are having a group discussion, be sure to clarify who you are addressing and identify yourself.

4. Offering help: If you offer help, wait until it is accepted, and then ask what and how to do.

5. Appropriateness and politeness: treat adults with disabilities as adults. Address them by name and only use the informal "you" if you know them well.

6. Don't lean on someone's wheelchair: Leaning on or hanging from someone else's wheelchair is the same as leaning on or hanging from the person using it, and it's just as annoying. A wheelchair is part of the private space of the person using it.

7. Attentiveness and patience: When you're talking to someone who has difficulty communicating, listen carefully. Be patient, wait for them to finish their sentence. Don't correct them or finish their sentence. Never pretend to understand if you don't. Repeating that you understand will help them respond and help you understand them.

8. Conversation Position: When speaking to someone in a wheelchair or on crutches, position yourself so that your eyes are level with theirs; this will make the conversation easier. When speaking to someone who can lip-read, position yourself so that the light falls on you and you can be seen clearly. Try to ensure that nothing (food, cigarettes, or hands) gets in your way.

9. Getting someone's attention: To get the attention of someone who is hard of hearing, wave or tap them on the shoulder. Look them straight in the eye and speak clearly, but keep in mind that not all hard of hearing people can lip read.

10. Don't be embarrassed if you accidentally make a mistake by saying "See you later" or "Have you heard about...?" to someone who can't see or hear. There are also rules of etiquette for people with various disabilities. The list is quite extensive. When in doubt, rely on your common sense and empathy. Treat the other person as you would yourself, and respect them in the same way—then your service and communication will be effective.

Control task within the framework of current monitoring of academic performance

Sample essay topics:

1. Persons with disabilities – who are they?

2. Special health abilities – an obstacle or incentive to achieve success (examples of famous people in various professional fields)

3. Technical and computer means for providing an accessible information environment.

4. Architectural environment as a condition of accessibility for organizing inclusive interaction.

5. Prospects for the development of inclusion in Russia.

6. Regulatory and legal framework for inclusive interaction.

7. Development of the concept of inclusive interaction abroad.

8. Inclusion and diversity policies in Russia: benefit or harm?

9. Do special people inspire you?

10. Communicative and personal characteristics of individuals with disabilities (the type of disability is chosen by the student) and their impact on professional activity and social interaction.

11. The older generation as a subject of social and professional inclusion in modern society.

12. Stigmatization of persons with disabilities.

13. The attitude of society, the state and business towards persons with disabilities.

14. The role of professional development in the rehabilitation of persons with disabilities

15. The role of art in the rehabilitation of persons with disabilities

16. Inclusion in business: a growth point for a company or a development constraint?

Lecture 3. Features of Interaction with Persons with Visual and Hearing Impairments

Psychological characteristics of people with hearing impairments.

The following types of hearing impairments are distinguished:

1. Deaf people – people with a complete lack of hearing, which cannot be used to develop a vocabulary. This group is divided into subgroups: deaf without speech (children born deaf or who lost their hearing before the age of 2–3, before speech development) and deaf people who lost their hearing when speech was almost fully developed.

2. Hearing-impaired people – people with partial hearing loss that impedes speech development. A distinction is made between conductive and sensorineural hearing loss. Conductive hearing loss can occur in anyone due to inflammation of the middle ear (otitis media), the formation of earwax, etc. These impairments also occur due to deformation of the auricle, obstruction of the ear canals, etc. They are most often temporary and can be treated. Sensorineural hearing loss is associated with damage to the auditory nerve and is permanent and irreversible. People with hearing loss have varying degrees of hearing loss:

Level 1: The individual can perceive conversational speech at a distance of 6 meters or more, even a whisper. However, in noisy environments, they experience significant difficulty perceiving and understanding speech. They communicate using spoken language.

Level 2 – the individual perceives spoken language at a distance of less than 6 meters; some perceive whispered speech at a distance of up to 0.5 meters. They may have difficulty perceiving and understanding speech in quiet environments. Hearing aids are required during classes. Individuals communicate using spoken language, which has specific characteristics.

Level 3 – they perceive conversational speech indistinctly at a distance of less than 2 meters, and they cannot hear whispers. They usually understand speech when they see the speaker's face. The constant use of hearing aids is mandatory for communication with others and for learning.

Level 4 – speech perception at conversational volume is indistinct even at the ear itself; whispers are inaudible. They understand speech with hearing aids, when they can see the speaker's face, and the topic of conversation is clear.

Psychological characteristics of hearing loss

The unique development of attention and perception in people with hearing impairments significantly impacts memory. They have a dominant visual perception, so the entire memorization process is primarily based on visual images, while for hearing people, this process is auditory-visual and relies on active speech.

Due to hearing impairment, vision plays a special role, as it is the basis for the development of speech in a deaf child.

Motor, tactile, and tactile-vibrational sensations become very important in the process of learning about the surrounding world.

The memory of deaf and hard-of-hearing individuals exhibits a number of distinctive characteristics. Representations change significantly more intensely than those of normally hearing individuals (loss of clarity and vividness of object reproduction, reduction in size, displacement of individual parts of the object in space, and the likening of the object to another, well-known one).

Memorization is closely dependent on the method of presenting the material, which is why memorization, storage and reproduction of speech material – words, sentences and texts – is difficult.

Oral speech impairments lead to written language impairment, manifesting as various dysgraphias and agrammatisms. In cases of complete hearing loss, speech development is only possible through specialized training and the use of auxiliary forms, such as facial expressions, fingerspelling, and lip reading.

Hearing individuals acquire a significant portion of social experience spontaneously, while those with hearing impairments are limited in this regard. This can sometimes lead to communication difficulties, unique relationships, and isolation. Hearing individuals often believe that a hearing aid is like a pair of glasses for hearing, instantly enabling a person to hear and speak. This is true only for mild hearing loss (degrees I and II); for severe hearing loss (degrees III and IV, deaf individuals), the aid merely improves speech intelligibility and can compensate for the impairment. Auditory speech perception, in which a child listens without looking at the interlocutor, is only accessible to those with mild hearing loss (degree I). Visual speech perception is more commonly used by deaf individuals, who partially perceive and understand speech based on the articulation of the interlocutor.

Technical means of rehabilitation

Technical means rehabilitation for deaf and hearing-impaired people — means/devices that compensate for hearing impairment and facilitate a person's adaptation to the environment.

The main methods of correcting hearing impairments are:
– hearing aids – use of hearing aids;
– use of technical means for domestic and professional adaptation;
– application of special rules for communication with the hearing impaired;
– cochlear implantation is a method of surgical treatment of deafness.

Modern hearing aids can:
– compensate for the disturbance in the perception of volume and frequency of sounds;
– ensure high speech intelligibility (in quiet, noisy environments, during group conversations);
– ensure natural perception (of speech, one's own voice, music, sounds of the environment);
– automatically maintain a comfortable volume level;
– reliably reproduce danger signals;
– provide telephone conversation.

Types of hearing aids:

A behind-the-ear hearing aid fits behind the ear and consists of a plastic housing. Amplified and converted sound reaches the eardrum through an earmold.

In-the-ear hearing aids are shaped and sized to match the human ear canal and are positioned in the outer part of the auricle.

In-the-canal hearing aids. Their main difference from in-the-ear hearing aids is their minimal size, making them almost or completely invisible to others. These devices are equipped with a pull cord for removal from the ear, have no volume control, and are turned off by opening the battery compartment.

Pocket hearing aids consist of a rectangular housing that houses the electronics and power source. The sound emitter is connected to the device via a cord and placed in the ear with an earmold. These devices typically offer maximum power and are suitable for severe hearing loss and borderline deafness.

Nowadays, there are also many devices that can convert sound signals; they are called sound signalers.

Light and vibration sound alarms are devices that convert a sound signal into a light or vibration signal.

Sound alarms include devices of various types and kinds:

– signaling devices that are connected to a telephone (fax), doorbell, alarm clock to convert a sound signal into a light signal;

– signaling devices designed to be connected to an alarm clock to convert a sound signal into vibration;

– telephone call indicator (telephone alarm), which can be connected to a room lamp;

– light alarm for baby crying, doorbell; alarm clock with light and vibration signal;

– smoke detector with light signaling device.

Sound alarms, light and vibration, are issued to hearing-impaired individuals with limited ability to communicate and orient themselves in the presence of illnesses or consequences of hearing organ injuries that have led to hearing loss (stages III and IV hearing impairment).

Televisions with teletext for receiving programs with closed captions, video information carriers with subtitles — are issued to persons with disabilities with hearing impairment of the fourth degree in the absence of a hearing aid or the impossibility of hearing aids.

A telephone device with video communication, navigation, and text output functions – a mobile phone for rehabilitation to restore the ability of the deaf to communicate (issued to hearing-impaired individuals with stage IV hearing impairment, taking into account reading skills and perception of read information).

A voice-generating device is an internal communication device for individuals with impaired voice production; the device is issued to individuals with illnesses, congenital anomalies, or the consequences of speech organ injuries to restore voice production.

Russian Sign Language (RSL) interpretation services are also considered a means of rehabilitation for the deaf and are provided to hearing-impaired individuals free of charge for 84 hours per year (RF Government Resolution No. 334 of March 6, 2021).

Rules of etiquette when communicating with people with hearing impairments:

When speaking to someone with hearing loss, look directly at them. Don't obscure your face or block it with your hands, hair, or other objects. Your conversation partner should be able to see your facial expression.

There are several types and degrees of deafness. Consequently, there are many ways to communicate with people who are hard of hearing. If you're unsure which one to choose, ask them.

Some people can hear but perceive certain sounds incorrectly. In this case, speak louder and more clearly, adjusting the volume accordingly. In other cases, simply lowering the pitch of your voice may be necessary, as the person has lost the ability to perceive high frequencies.

To get the attention of someone who is hard of hearing, call their name. If there's no response, you can gently touch them or wave your hand.

Speak clearly and evenly. Don't overemphasize anything. Shouting, especially in someone's ear, is also a no-no.

If you're asked to repeat something, try rephrase your sentence. Use gestures.

Make sure you've been understood. Don't hesitate to ask if the other person has understood you.

If you are communicating information that includes a number, technical or other complex term, or address, please write it down, fax it, email it, or use any other method that will clearly understand it.

If you have difficulty communicating verbally, ask if it would be easier to write.

Be mindful of your surroundings. Large or crowded spaces can make it difficult to communicate with people who have hearing loss. Bright sunlight or shade can also be barriers.

Deaf people often use sign language. If you communicate through an interpreter, remember to address the person you're speaking to directly, not the interpreter.

Not all people with hearing loss can lipread. It's best to ask about this at the first meeting. If your interlocutor does have this skill, there are a few important rules to follow. Remember that only three out of ten words can be easily read.

You need to look your interlocutor in the face and speak clearly and slowly, use simple phrases and avoid nonessential words.

You need to use facial expressions, gestures, and body movements if you want to emphasize or clarify the meaning of what you said.

Psychological characteristics of people with visual impairments

Vision is the most powerful source of information about the outside world. 85–90% of information reaches the brain through the visual analyzer, and partial or severe impairment of its functions causes a number of deviations in a person's physical and mental development. The visual analyzer ensures the performance of complex visual functions. Five main visual functions are commonly distinguished:

1) central vision;
2) peripheral vision;
3) binocular vision;
4) light perception;
5) color perception.

The following visual impairments are distinguished: blind and visually impaired. Blind people are divided into totally blind (Vis — 0) and with residual vision (Vis from 0 to 0.04 with optical correction with glasses on the better eye. People with visual impairment are those with visual acuity from 0.2 to 0.6 (with optical correction with glasses on the better eye). This category includes people with the following diseases: myopia, hyperopia, strabismus, astigmatism, albinism, amblyopia, nystagmus, microphthalmos, people with monocular vision, as well as with disorders of central and peripheral vision, etc. Features of attention. Due to poor vision, involuntary attention is impaired. A decrease in voluntary attention is caused by a violation of the emotional-volitional sphere and leads to disinhibition — a low volume of attention, chaos, i.e. lack of purposefulness, the transition from one type of activity to another, or, conversely, to children's inhibition, inertia, and low level of attention switching.

Features of memory.

Visual analyzer defects, by disrupting the balance between the basic processes of excitation and inhibition, negatively impact the speed of memorization. Rapid forgetting of learned material is explained not only by insufficient or absent repetitions, but also by the insufficient significance of objects and the concepts that denote them, which people with visual impairments can only acquire verbal knowledge of. Limited memory, reduced speed, and other deficiencies in the memorization of students with visual impairments are secondary in nature, i.e., they are caused not by the visual impairment itself, but by the mental developmental delays it causes. In people with visual impairments, the role of verbal-logical memory increases. Weak preservation of visual images and a decrease in long-term memory have been identified. Short-term auditory memory is high in all categories of people with visual impairments. Perception characteristics. Depending on the degree of visual impairment, the integrity of perception is impaired. In the visually impaired, visual-motor-auditory perception predominates. They are able to simultaneously perceive one or two movements or individual elements of movements. The process of recognizing color, outline, and silhouette images in visually impaired individuals is complex. Of all image types, color images are best recognized because color provides additional information beyond the image's shape. The more complex the shape of an object and the less closely it resembles geometric shapes, the more difficult it is for them to recognize it. When perceiving outline images, successful recognition depends on the clarity, contrast, and thickness of the line. For example, children recognize lines 1.5 mm thick and in black on a white background the fastest.

Orientation and mobility systems for visually impaired people.

The main systems of orientation and mobility for visually impaired people include:

1) Movement without any special means using the following techniques:

a) tracking the hand along the wall;

b) foot tests;

c) defensive hand techniques.

2) A visually impaired person moving with an accompanying person. Note: The visually impaired person holds the accompanying person's hand (or takes their arm, or holds their arm just above the elbow).

3) Moving with a cane. Note: A visually impaired person uses various techniques and methods with a long cane to quickly detect obstacles, stairs, descents, and ascents along the way.

4) Use of electronic mobility aids. Note: These aids are most often based on ultrasound or infrared technology and warn of approaching obstacles or looming obstructions, which can significantly improve safety and speed.

5) Orientation and movement in space with the help of a guide dog.

6) Use of various optical correction aids for spatial orientation. Note: This system can be learned by blind individuals with residual visual acuity. Optical aids such as monoculars, binoculars, and telescopes can be used for spatial orientation. These aids can be used to survey the surrounding area, form a general impression of it, and identify landmarks. Upon completion of this training, a visually impaired individual should be proficient in more than one mobility system (usually three or four) and be able to select the appropriate option depending on the situation and their own capabilities.

Orientation in space using intact analyzers

When visually impaired people navigate in space, intact analyzers play a major role, providing important information about the surrounding space:

a) vestibular apparatus;

b) proprioception (muscle sensitivity);

c) touch;

d) hearing;

d) sense of smell;

e) residual vision (if any).

Orientation in space using a guide cane

The orientation cane for the blind is white, a distinctive sign of visual impairment. The handle of this cane has a loop, but for safety reasons, it should not be worn on the hand. It is used only for hanging the cane on a hook.

The orienting cane is a versatile tool that performs several functions:

a) probe — lengthens the arm and expands the examination area.

b) buffers — softens the impact or prevents collision with an object.

c) sound generator — using a cane you can create a sound and receive a sound reflected from obstacles.

d) a warning sign for vehicle drivers.

Rules of etiquette when communicating with persons with disabilities, visual impairments or the blind:

When offering assistance, guide the person, don't squeeze their hand, and walk as you normally would. Warn them of obstacles.

Use phrases that describe sound, smell, and distance, if appropriate. Share what you see.

Treat guide dogs differently than you would any other pet. Do not command, touch, or play with a guide dog.

If you're going to read to a blind person, let them know first. Speak in a normal voice. Don't omit information unless asked.

If a blind person is required to sign a document, be sure to read it aloud. Disability does not relieve a blind person of the responsibilities associated with the document.

Always speak directly to the person, even if they cannot see you, and not to their sighted companion.

Always introduce yourself and others you're speaking to, as well as everyone else in the room. If you'd like to shake hands, say so.

When you invite a blind person to sit, don't force them to sit, but rather guide their hand to the back of the chair or the armrest. Don't move their hand across the surface; instead, allow them to freely touch the object. If you're asked to help them pick up an object, don't pull their hand toward it or try to grasp it.

Don't make your interlocutor talk into the void: if you move, warn him. • It is perfectly normal to use the word "look". For a blind person, this means "seeing with your hands", touching.

Avoid vague definitions and instructions that are usually accompanied by gestures, such as "The glass is somewhere over there on the table." Try to be precise: "The glass is in the middle of the table."

If you notice that a blind person has lost his way, do not direct his movements. from a distance, come up and help get on the right path.

When ascending or descending stairs, guide the blind person perpendicular to them. Avoid jerking or sudden movements. When escorting a blind person, avoid clasping your hands behind your back—this can be uncomfortable.

Control task within the framework of current monitoring of academic performance

Sample discussion topics:

1. Rules of etiquette when communicating with people with hearing impairments.

2. Rules of etiquette when communicating with persons with disabilities, visual impairments or blind people.

3. The problem of accessibility of the urban environment/medical institutions for people with hearing and/or vision impairments.

4. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with hearing and/or visual impairments.

5. People with hearing and/or vision impairments in medical practice.

6. Rules of etiquette when communicating with persons with disabilities who have difficulty moving.

7. The problem of accessibility of the urban environment/medical institutions for people with musculoskeletal disorders.

8. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with musculoskeletal disorders.

9. People with musculoskeletal disorders in medical practice.

10. Rules of etiquette when communicating with people who have difficulty speaking.

11. The problem of accessibility of the urban environment/medical institutions for people with speech impairments.

12. Application of modern digital technologies in organizing interaction and implementing professional activities of persons with speech impairments.

13. People with speech disorders in medical practice.

14. Rules of etiquette when communicating with people with mental and psychiatric disabilities.

15. The problem of accessibility of the urban environment/medical institutions for people with mental and psychiatric disabilities.

16. Application of modern digital technologies in organizing interaction and implementing professional activities of people with intellectual and mental disabilities.

17. People with mental or psychiatric disabilities in medical practice.

Lecture 4. Features of Interaction with People with Musculoskeletal Impairments

Despite the diversity of congenital and acquired diseases and injuries of the musculoskeletal system, most people have similar problems. The leading clinical picture is a motor defect, namely a delay in the formation, underdevelopment, impairment or loss of motor functions, which have varying degrees of severity: — with a severe degree, people do not master the skills of walking and manipulative activity. Their self-care skills are not developed; — with a moderate degree of motor impairment, people master walking, but move uncertainly, often with the help of special orthopedic devices (crutches, Canadian sticks, etc.). Their self-care skills are not fully developed due to disturbances of the manipulative function (the most numerous group); — with a mild degree of motor impairment, people walk independently, feel confident both indoors and outdoors; Self-care skills are developed, and they have sufficiently developed manipulative activity, but at the same time, pathological postures, gait disturbances, forced movements, etc. may be observed. Due to the fact that cerebral palsy (CP) occupies the main place among musculoskeletal disorders, 89% of children with musculoskeletal disorders are children with CP.

In recent years, this condition has become one of the most common nervous system disorders in children. Therefore, it is appropriate to examine the psychological and pedagogical characteristics of people with cerebral palsy.

Common disorders that make up the structure of motor defects in cerebral palsy:

– a violation of muscle tone by the type of increase (spasticity, muscle hypertonia) or decrease (hypotonia), as well as changing tone or a mixed form with various combinations of disorders (dystonia).

– the presence of paralysis and paresis (complete absence or limitation of the range of voluntary movements).

Depending on the severity of the brain damage, a complete or partial loss of certain movements may occur. This, in turn, impedes the development of walking, self-care skills, and academic and other activities.

Depending on the location of the disorder, there are 4 types of cerebral palsy:

– tetraplegia (damage to all four limbs);

– diplegia (damage to either the upper or lower limbs); hemiplegia (damage to either the right or left half of the body);

– monoplegia (damage to one limb).

Impaired balance and motor coordination (ataxia). Unsteadiness is observed when sitting, standing, and walking. In severe cases, the person cannot sit or stand without support. Impaired balance and motor coordination manifest themselves in an abnormal gait, which is observed in various forms of cerebral palsy. Coordination of fine, differentiated movements is impaired. As a result, the person experiences difficulties with manipulation and writing. Such individuals have difficulty throwing a ball at a target or catching it. Movement disproportion (especially in the hands) is observed. The person is unable to accurately grasp an object and place it in a designated place.

Impaired sense of movement (kinesthesia). In all forms of cerebral palsy, kinesthetic sensitivity is impaired, making it difficult for a person to determine their own body position in space, with impaired motor coordination. Many people have a distorted perception of the direction of movement. For example, moving a leg forward is perceived as moving to the side. Individuals with cerebral palsy are characterized by specific developmental delays. The mechanism of these delays is complex and is determined by both the duration and the severity of damage to the central nervous system. Motor deficits lead to motor, sensory, cognitive, and social deprivation, as well as emotional-volitional disorders. It is believed that approximately 20–25% of children with cerebral palsy have the potential to retain intelligence; however, their development occurs under deficient conditions, which impacts their mental development.

It is important to note that all mental processes in this disease have a number of common features, such as:

– a violation of active voluntary attention, which negatively affects the functioning of the entire cognitive system of a person with cerebral palsy;

– severity of asthenic manifestations

– increased fatigue, exhaustion of all mental processes; — increased inertia and slowness of all mental processes.

Let's highlight the specific cognitive developmental characteristics of people with cerebral palsy: impaired selectivity, stability, concentration, switching, and attention distribution. Individuals become stuck on individual elements. Difficulties in developing voluntary attention are noted. Impaired spatial perception; people with cerebral palsy have difficulties with spatiotemporal orientation. Impaired development of figurative memory (including visual, auditory, and tactile memory) is largely a consequence of impaired perception. Verbal-logical memory presupposes a sufficient level of speech and thinking development, and since these functions tend to develop late in children with cerebral palsy, this type of memory is also delayed.

People with cerebral palsy remember brightly colored objects and those that can be associated more fully. Students with cerebral palsy have a number of unique developmental characteristics. Visual-action thinking develops significantly later; since people with cerebral palsy are unable to move, or have limited mobility, they learn about the world based solely on observations and stories from others. Therefore, children with cerebral palsy often verbalize.

Based on their emotional and volitional manifestations, people with cerebral palsy can be conditionally divided into two groups.

In one case, they exhibit decreased excitability and hypersensitivity to all external stimuli. They are typically restless, fidgety, disinhibited, and prone to outbursts of irritability and stubbornness. They are emotionally unstable: one moment they are overly cheerful and boisterous, the next they suddenly become lethargic, irritable, and tearful. A tendency toward mood swings is often combined with inertia in emotional reactions. For example, once a person starts crying or laughing, they are unable to stop. Behavioral disturbances can manifest as motor disinhibition,

aggression, and protest reactions toward others, intensifying in new environments and with fatigue.

It should be emphasized that not all people with cerebral palsy experience behavioral disturbances. In a larger group, inhibition predominates over excitation. These individuals are characterized by lethargy, passivity, lack of initiative, indecisiveness, and inhibition. They have difficulty adapting to new environments, are unable to adapt to changing conditions, and have great difficulty establishing relationships with new people. This category of individuals exhibits such developmental disturbances as decreased motivation for activity, fears related to movement, falling, sleep, and social interaction. When they experience fear, they experience physiological changes (increased heart rate and respiration, increased muscle tone, sweating, increased salivation, and hyperkinesis). They tend to limit social interactions. These disturbances are most often caused by overprotective parenting and a reaction to a physical defect.

Organization of social and domestic rehabilitation for individuals with disabilities of the musculoskeletal system among incapacitated and partially incapacitated citizens. Home and environmental safety

Pathology of the musculoskeletal system is a consequence of a congenital defect, the consequences of injuries, or degenerative-dystrophic changes in the musculoskeletal system.

According to the International Nomenclature of Impairments, Disabilities, and Handicaps, movement disorders are classified in a variety of ways. Movement disorders are classified as:

due to the complete or partial absence of one or more limbs, including amputations;

due to the absence of one or more distal parts of the limbs (finger, hand, foot);

due to the absence or impairment of voluntary mobility of four limbs (quadriplegia, tetraparesis);

due to the absence or impairment of mobility of the lower limbs (paraplegia, paraparesis);

due to impaired voluntary mobility of the upper and lower limbs on one side (hemiplegia, hemiparesis);

due to impaired muscle strength of the lower limbs;

due to impaired motor functions of one or both lower limbs.

The consequence of these violations is limitations in life activities in the sphere of self-care and movement.

Self-care ability is the ability to independently satisfy basic physiological needs, perform daily household activities and personal hygiene skills.

Self-care ability includes:

satisfaction of basic physiological needs, control of physiological functions;

maintaining personal hygiene: washing the face and the whole body, washing hair, combing hair, brushing teeth, cutting nails, hygiene after bowel movements;

putting on and undressing outerwear, underwear, hats, gloves, shoes, using fasteners (buttons, hooks, zippers);

food preparation: cleaning, washing, cutting food, cooking it, using kitchen utensils;

eating: the ability to bring food to the mouth, chew, swallow, use cutlery and utensils;

fulfillment of everyday household needs: purchasing food, clothing and household items;

use of bed linen and other bedding, making the bed;

washing, cleaning, repair of linen, clothing and other household items;

use of household appliances and devices (locks, latches, switches, taps, lever devices, iron, telephone, household electric and gas appliances, matches, etc.);

cleaning the premises (sweeping and washing the floor, windows, dusting, etc.).

Parameters used to assess limitations in self-care ability may include:

assessment of the need for assistive devices, the possibility of correcting the ability to self-care with the help of assistive devices and home adaptation;

assessment of the need for outside assistance in meeting physiological and everyday needs;

assessment of the time intervals at which such a need arises (1–2 times a week): long intervals (1 time per day), short (several times per day), constant need.

The ability to move independently is the ability to move independently in space, overcome obstacles, maintain body balance, within the framework of everyday, social, and professional activities.

The ability to move independently includes:

independent movement in space, walking on level ground at an average pace (4–5 km/h over a distance corresponding to average physiological capabilities);

overcoming obstacles: climbing and descending stairs, walking on an inclined plane (with an angle of inclination of no more than 30 degrees);

maintaining body balance when moving, at rest and when changing body position, the ability to stand, sit, stand, sit down, lie down, maintain the adopted posture and change body position (turns, bending the body forward, to the sides);

performing complex types of movement and displacement: kneeling and rising, moving on knees, crawling, increasing the pace of movement (running),

use of public and private transport (entry, exit, movement of vehicle).

Parameters used to assess mobility may include:

the distance a person can move,

walking pace (normally 80–100 steps per minute);

walking rhythm coefficient (normal 0.94–1.0);

double step duration (normally 1–1.3 s);

speed of movement (normally 4–5 km/h);

need and possibility of using assistive devices.

Both types of disability in individuals with musculoskeletal disorders are interrelated, although it can be argued that limitations in self-care are predominant in those with upper limb pathology, while limitations in mobility are predominant in those with lower limb injuries. However, it is known that individuals with lower limb impairment due to spinal injury experience limitations in more than just mobility.

He also has, therefore, a limited ability to care for himself. If we limit our consideration of a disabled person's mobility to the confines of an apartment, a confined living environment, then we can speak of a disabled person's ability to move within a small living space.

Problems with self-care and independent movement are resolved through social and everyday rehabilitation.

The organization of social and domestic rehabilitation is associated with a number of methodological approaches that underlie the technology of this form of rehabilitation.

During the initial assessment of a disabled person at the Bureau of Medical and Social Expertise (MSE), a social worker, in consultation with a clinical expert, identifies the type of impairment and associated limitations. Subsequently, the social worker examines the disabled person's need for devices and assistive devices to achieve a relatively independent life. The next step is to determine whether the disabled person's home provides the conditions necessary for relative independence.

During the implementation of social and everyday rehabilitation technology, the so-called social information obtained by the social worker is included in the individual rehabilitation program for the disabled person.

The process of social and everyday rehabilitation of persons with disabilities must include a number of consistent, meaningful, and technological components.

The implementation of social and domestic rehabilitation should begin with social and domestic orientation, during which a social worker guides the disabled person in his or her ability to live in any specific conditions, reveals the prospects for his or her ability to carry out life activities, and shows the need for certain efforts.

The implementation of social and domestic rehabilitation of a disabled person with musculoskeletal disorders involves teaching him techniques for restoring lost (distorted) skills in social and domestic self-care.

A specialist teaching a disabled person social and everyday skills must understand the purpose of the device, its mechanism of action, and the ability to use it. The teacher must also be familiar with the specific anatomical defect underlying the disability and the physiological functions of individual muscle groups. The specialist teaching the disabled person must utilize medical recommendations that take into account the intended effect of the device on the affected joint (limb).

An important component of social and everyday rehabilitation of persons with disabilities of the musculoskeletal system is social and everyday adaptation, which is the process of adapting a person with a disability to living conditions with the help of special assistive devices and devices to stabilize life with an existing defect in new, established conditions.

The final stage of social and domestic rehabilitation of a disabled person is social and domestic placement—living in an apartment with specially created living conditions that meet all the needs of the disabled person.

When organizing social and domestic rehabilitation of persons with disabilities with musculoskeletal disorders, it is necessary to proceed from the following fundamental provisions.

1. Provide the opportunity for a disabled person to use everyday household equipment and coupon utensils through training (retraining).

2. Equip existing equipment and utensils with basic special devices (attachments, levers, etc.) for use by a disabled person.

3. Equip the apartment with new special adaptive technical means taking into account the needs of the disabled person, adapt the living conditions to the needs of the disabled person, taking into account the type of defect.

The implementation of these provisions will vary depending on the location of the anatomical defect (damage to the upper or lower extremities). However, regardless of the location of the injury, it is necessary to provide a consistent social and everyday rehabilitation technology for individuals with disabilities.

When implementing the first provision, it is necessary to educate not only the disabled person but also their family members on the possibility of adapting their damaged hands to the use of everyday household equipment and kitchen utensils. A social worker should not only provide guidance but also teach the disabled person, directly and indirectly through the involvement of family members, how to use a refrigerator, gas (or electric) stove, and how to open door locks, transoms, window frames, etc.

It should be noted that this provision applies to individuals with upper limb injuries only at the initial stage, when approaching the development of full social and everyday rehabilitation. Implementation of this provision makes it possible to identify the individual's potential for social and everyday adaptation.

In connection with the fact that this provision is implemented under the supervision of a social worker, the need arises to implement the second provision, i.e. equipping the existing standard (everyday, typical) household equipment with special devices.

Devices of this kind are installed in the bathroom in the form of electric razors fixed to the wall, extended handles for combs and toothbrushes, in the form of automatic toothpaste and liquid soap dispensers, in the form of lever faucets for water in the washbasin and in the kitchen sink for dishes.

Equipment should also facilitate bathing for individuals with upper limb disabilities. It should ensure comfort and safety. A hanging seat, a non-slip footrest, washcloth holders, and grab bars for lifting and moving around the bathtub are essential. Nail scissors with a plastic spring for easy opening are recommended.

Toilet adaptations are also necessary for people with upper limb disabilities. These include various supports (wall-mounted, folding, vertical, and horizontal) for the toilet, as well as devices for lowering and lowering the toilet seat.

To prepare food yourself, you need tools for washing and cleaning vegetables and fish, cutting food, washing dishes, opening cans and bottles, gripping pot lids, turning off the electric stove, etc.

A social worker should determine the need for a person with upper limb impairment to be provided with specialized devices for opening curtains, picking up objects from the floor, opening windows, and installing special door handles for a

person without hands. Persons with upper limb impairments also require devices for putting on shoes, clothing, fastening buttons and zippers, etc.

Even greater challenges in self-care arise for bedridden individuals with disabilities. In these cases, limitations in self-care are not due to upper limb impairments, but to the inability to move. All activities occur within a confined space. Therefore, it is necessary to equip this space with special devices for eating, reading, writing, and other leisure activities. An overbed table, equipped with attachments for holding books, pens, brushes, hand tools, etc., can serve this purpose. The table should have a tilt and height adjustment feature. A horizontal rail on the wall where the bed is located is essential, allowing the person with disabilities to sit up independently.

For individuals with lower limb disabilities whose limitations primarily involve mobility, specialized apartment equipment is of primary importance. This equipment should not only facilitate movement as a physiological act but also enable other functions related to other life activities. In other words, the apartment's equipment should ensure access to all rooms and objects within the apartment, allowing the individual to fully function.

A disabled person with injuries to the lower limbs needs, first of all, individual mobility aids (cane, crutches, walker, wheelchair).

In this regard, when equipping an apartment with stationary devices, it is necessary to ensure that they do not create obstacles to the use of individual means of transportation.

Rules of etiquette when communicating with persons with disabilities who have difficulty moving:

Remember that a wheelchair is a person's private space. Do not lean on it, push it, or put your feet on it without permission. Pushing a wheelchair without the disabled person's consent is the same as grabbing and carrying the person without their permission. Always ask if help is needed before offering it.

If your offer to help is accepted, ask what needs to be done and follow the instructions carefully.

If you are allowed to push the stroller, roll it slowly at first. The stroller picks up speed quickly, and a sudden jolt could cause you to lose your balance.

Always ensure the accessibility of the event venues in person. Inquire in advance about any potential issues or barriers and how they can be addressed.

If possible, position yourself so that your faces are at the same level. Avoid a position that requires your interlocutor to tilt their head back.

If there are architectural barriers, warn about them so that the person can make decisions in advance.

Remember that people with mobility difficulties generally do not have problems with vision, hearing, or understanding.

Don't think that having to use a wheelchair is a tragedy. It's a way to move freely (if there are no architectural barriers). There are people who use wheelchairs but haven't lost the ability to walk and can move around with the help of crutches, canes, and so on. They use wheelchairs to conserve energy and move around more quickly.

Control task within the framework of current monitoring of academic performance

Sample discussion topics:

1. Rules of etiquette when communicating with people with hearing impairments.

2. Rules of etiquette when communicating with persons with disabilities, visual impairments or blind people.

3. The problem of accessibility of the urban environment/medical institutions for people with hearing and/or vision impairments.

4. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with hearing and/or visual impairments.

5. People with hearing and/or vision impairments in medical practice.

6. Rules of etiquette when communicating with persons with disabilities who have difficulty moving.

7. The problem of accessibility of the urban environment/medical institutions for people with musculoskeletal disorders.

8. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with musculoskeletal disorders.

9. People with musculoskeletal disorders in medical practice.

10. Rules of etiquette when communicating with people who have difficulty speaking.

11. The problem of accessibility of the urban environment/medical institutions for people with speech impairments.

12. Application of modern digital technologies in organizing interaction and implementing professional activities of persons with speech impairments.

13. People with speech disorders in medical practice.

14. Rules of etiquette when communicating with people with mental and psychiatric disabilities.

15. The problem of accessibility of the urban environment/medical institutions for people with mental and psychiatric disabilities.

16. Application of modern digital technologies in organizing interaction and implementing professional activities of people with intellectual and mental disabilities.

17. People with mental or psychiatric disabilities in medical practice.

Lecture 5. Features of Interaction
with People with Speech Difficulties

Speech disorders are caused by the impact of external or internal harmful factors on the body, or their interactions, which determine the specific nature of the speech disorder and without which it cannot occur. The etiology of speech disorders is determined by both the factors directly causing the disorder and the conditions that facilitate its development. Therefore, the development of a speech disorder is a consequence of the underlying cause and predisposing factors. The causes of speech disorders are numerous and varied.

Among the factors contributing to the development of speech disorders in children, a distinction is made between unfavorable external (exogenous) and internal (endogenous) factors, as well as external environmental conditions.

The causes of speech disorders are divided into biological and socio-psychological .

Depending on the nature of the speech apparatus damage, a distinction is made between organic and functional causes. Depending on the timing of exposure to pathogenic factors, pathologies are classified as perinatal (intrauterine), natal (damage during birth), and postnatal (exposure to various adverse factors after birth).

Among the causes of speech disorders, biological and socio-psychological risk factors are distinguished.

Biological causes of the development of speech disorders are pathogenic factors that act mainly during the period of intrauterine development and childbirth (fetal hypoxia, birth injuries, etc.), as well as in the first months of life after birth (brain infections, injuries, etc.). Factors such as a family history of speech disorders, left-handedness and right-handedness play a special role in the development of speech disorders .

Biological factors: 1) brain development defects associated with chromosomal aberrations (mutations, rearrangements), i.e. genetic changes;

2) pregnancy pathology: parasitic diseases (toxicosis, toxoplasmosis); viral diseases (rubella, influenza), endocrine diseases (diabetes mellitus, hypothyroidism, etc.); cardiovascular diseases, kidney diseases, venereal diseases (syphilis), tuberculosis. The first trimester of pregnancy is the most vulnerable time for the fetus. The earlier the pathological factor acts, the more the fetus suffers;

3) physical factors (radioactive exposure);

4) chemical factors (alcohol, smoking, influence of narcotics, thoughtless use of medications, hypo- and hypervitaminosis, vitamin deficiency, lack of microelements, ecological state of the environment);

5) birth trauma, asphyxia, hypoxia (rapid labor — pressure difference, prolonged labor, use of auxiliary means — vacuum extraction of the fetus, application of obstetric forceps);

6) diseases in the first years of life (dysentery, whooping cough, rickets, meningoencephalitis — especially dangerous, leads to cerebral palsy, paresis, paralysis, severe speech impairment; brain injuries: concussion, contusion);

7) unfavorable heredity, burdened by speech pathology (in the family of stutterers; no congenital stuttering; inheritance of the neuropathic background of the parents' character and imitation).

Social and psychological risk factors are primarily associated with mental deprivation in children. Of particular importance is the child's insufficient emotional and verbal communication with adults.

Social and psychological factors:

1) incorrect speech of others (stuttering, tachylalia in parents);

2) inadequate type of child upbringing;

3) pedagogical neglect, insufficient attention to the development of the child's speech;

4) increased demands on the child's speech, excessive stimulation of the child's speech development;

5) adapting an adult to the child's speech (the child must be spoken to in normal language);

6) deficit or insufficiency of speech contacts (social deprivation);

7) the need for a young preschool child to simultaneously master two language systems: bilingualism.

As a result of these factors, the child may experience developmental disorders in various aspects of speech.

Among the organic causes (associated with damage to the speech organs) we can highlight:

– Hereditary causes: when speech disorders are inherited from parents. — Congenital causes: when speech disorders are caused by medications or complications during pregnancy.

– perinatal causes: speech disorders are caused by complications during childbirth.

Postnatal causes: speech disorders appear after birth, for example, as a result of premature birth. Functional speech disorders. There are no anatomical changes, but rather abnormal functioning of the speech apparatus.

Functional speech disorders include stuttering (in most cases), functional dyslalia, and some voice disorders (for example, rhinophonia).

Among the functional causes (pathology of the organs involved in speech) we can highlight:

– endocrine causes — mainly related to the child's psychomotor development; — environmental causes (a person's linguistic characteristics are influenced by their environment);

– psychosomatic causes (play an important role in the development of speech disorders, since thoughts can provoke abnormal oral speech; and, conversely, difficulties and speech disorders can negatively affect thinking; all this makes it difficult to speak correctly and understand speech).

This division is somewhat arbitrary, since, on the one hand, the function of an organ depends on its anatomical and physiological structure: if the structure is

damaged, then the function is also impaired; on the other hand, prolonged improper functioning can lead to muscular atrophy of the organ.

Types of speech disorders identified in the clinical and pedagogical classification

The clinical-pedagogical classification is based on the study of the causes and pathological manifestations of speech impairment. According to the clinical-pedagogical classification, the analysis of any speech disorder requires consideration of key aspects: medical, speech therapy (pedagogical), psychological, and psycholinguistic.

The medical aspect of classification involves taking into account which of the speech analyzers is impaired (speech motor or speech-auditory), in which section there is a disorder, and the time of occurrence of the disorder.

The speech therapy approach focuses on which part of the speech system is affected. The psychological approach involves considering the extent of the communicative function of speech, the personality deviations that accompany the speech disorder, the spontaneous developmental tendencies, and the prognosis for a given speech disorder.

The psycholinguistic aspect involves the study of various perception processes and the production of speech utterances. It is used in the study of systemic speech disorders (alalia, aphasia).

Currently, all speech disorders in this classification are divided into two groups: disorders of oral and written speech.

Oral speech disorders are in turn divided into two types:

– violations of the phonational (external) design of the utterance, or violations of the pronunciation aspect of speech;

– structural-semantic violations, or violations of the internal design of the statement (systemic violations, or polymorphic).

In turn, violations of phonation design are divided into:

– voice production disorder dysphonia, aphonia;

– violation of the tempo-rhythmic organization of the utterance – stuttering;

– violations of the intonation-melodic organization of the utterance – bradilalia, tachylalia;

– sound production disorders – dyslalia, rhinolalia, dysarthria.

Structural-semantic disorders: alalia and aphasia.

Written speech disorders – dyslexia, dysgraphia, dysorthography.

There are 12 forms of speech disorders:

– 9 disorders of oral speech (dysphonia, tachylalia, bradylalia, stuttering, dyslalia, rhinolalia, dysarthria, alalia, aphasia)

– 3 written speech disorders (dyslexia, dysgraphia, dysorthography).

Speech disorders can have different dynamics and progression.

The following types of flow are distinguished:

stationary nature (symptoms are stable — dyslalia, dysarthria);

progressive course (the severity of speech disorder symptoms increases over time – stuttering, voice disorder); regressive (the severity of speech disorder decreases – stuttering, aphasia);

wave-like type (with subsequent alternation of strengthening or weakening of symptoms — stuttering, rhinolalia)

Recurrent (recurrence of speech disorder symptoms after complete elimination – stuttering, rhinolalia). Disorders of the sound production aspect of speech – dyslalia, rhinolalia, dysarthria.

Dyslalia is a speech sound disorder with normal hearing and intact innervation of the speech apparatus. Dyslalia is a speech sound disorder associated with: anatomical defects of the articulatory apparatus; phonemic hearing impairments; and unfavorable conditions for speech development. The causes of speech sound disorder can be either individual or a combination of these factors.

There are two forms of dyslalia: functional and mechanical.

Functional dyslalia.

Medical aspect. Functional dyslalia is a pronunciation disorder caused by functional impairments. Time of onset: Functional dyslalia occurs during the development of speech and manifests itself in omissions, substitutions, confusions, and distortions of sounds.

Pedagogical aspect. Only the phonetic aspect of speech is affected; other aspects of speech are preserved (only consonants of late ontogenesis are impaired – hissing, whistling, and sonorant sounds).

Psychological aspect. Communication is not impaired. With functional dyslalia, the child's intellect is always preserved, and there are no significant emotional-volitional impairments .

Mechanical dyslalia.

Medical aspect. Mechanical dyslalia is a pronunciation disorder caused by congenital or acquired disorders of the peripheral part of the speech motor analyzer. Time of onset. Congenital mechanical dyslalia is more common, for example, a short sublingual frenulum (a congenital organic defect of the articulatory apparatus). Acquired mechanical dyslalia is less common, for example, as a result of trauma.

Pedagogical aspect. Only the pronunciation of sounds is impaired.

Psychological aspect. Sometimes the emotional-volitional sphere is affected, but the child's communication function is intact, and their intellect is preserved.

More often, the consolidation of the impaired pronunciation of the sound is observed.

Rhinolalia is a disorder of voice timbre and sound production caused by anatomical and physiological defects of the speech apparatus.

Medical aspect. Rhinolalia is associated with damage to the peripheral part of the speech analyzer (lip anomalies combined with cleft palate). Onset is often before speech development (exposure to harmful factors in the prenatal period causes a congenital disorder). Damage to the speech analyzer in rhinolalia can also be acquired, for example, as a result of trauma.

Educational aspect. Both vowels and consonants are affected, and secondary underdevelopment of the main speech components is often observed. Rhinolalia is often accompanied by hearing loss.

Psychological aspect. Communicative speech is severely impaired. Speech is incomprehensible to others. Emotional and volitional functions are impaired, leading to a fear of speech and withdrawal from communication. If rhinolalia is complicated by general speech underdevelopment (GSU), cognitive function is also impaired.

Dysarthria is a speech pronunciation disorder caused by insufficient innervation of the vocal apparatus. It affects sound production and prosody (intonation, melody, etc.).

Medical aspect. Dysarthria is associated with damage to the central part of the speech apparatus: most often, the conduction pathways are affected; less common is damage to various brain structures necessary for controlling the motor mechanism of speech (nuclei, roots, or peripheral trunks of the cranial nerves). Time of onset. Dysarthria is most often the result of any harmful factor in the prenatal or early postnatal period, for example, dysarthria in a child with cerebral palsy. However, dysarthria can also appear after speech has developed, for example, as a result of illnesses (stroke, meningoencephalitis, etc.).

Pedagogical aspect. Pronunciation of both vowels and consonants, breathing, voice, and prosodic speech are impaired. All speech components may be affected secondarily.

Psychological aspect. Communicative function is severely impaired due to slurred speech. With severe damage to the central nervous system, speech becomes impossible. Such disorders are called anarthria —a severe form of dysarthria (mooing and isolated sounds instead of speech). According to clinical and psychological characteristics, children with dysarthria represent a heterogeneous group (dysarthria in children with normal psychophysical development, dysarthria in children with cerebral palsy, dysarthria in children with intellectual disabilities, etc.). Children with cerebral palsy often have intellectual disabilities.

Dysphonia is a disorder of phonation (sound production) due to pathological changes in the vocal apparatus. Aphonia is the complete absence of voice with preserved whispering phonation.

Medical aspect. Voice disorders are associated with pathological processes in the central or peripheral parts of the vocal apparatus, whether functional or organic in nature. Timing of onset: Voice disorders can appear at various stages.

Pedagogical aspect. The language system is not impaired, only the voice is affected.

Psychological aspect. Aphonia impairs the communicative function of speech, and affects the emotional and volitional spheres. Intellect is preserved.

Disturbances in the tempo, rhythm, and fluency of speech: tachylalia, bradylalia, stuttering.

Tachylalia is an abnormally accelerated rate of speech. Bradylalia is an abnormally slow rate of speech.

Medical aspect. The central link in the pathological mechanism of tachylalia and bradylalia is a disturbance in the rate of external and internal speech due to a pathological predominance of excitation (in tachylalia) or inhibition (in bradylalia).

Disturbances in speech rate can cause organic and functional damage to the nervous system.

Tachylalia and bradylalia are associated with disorders of the speech motor analyzer localized in the subcortical region, which can be organic and functional in nature.

Pedagogical aspect. No language impairments are observed. Only prosody is affected.

Psychological aspect. Communicative function is preserved, but speech may be unintelligible. There are no personality changes or changes in the emotional-volitional sphere.

Stuttering is a disorder of the tempo-rhythmic organization of speech, caused by a convulsive state of the muscles of the speech apparatus.

Medical aspect.

There are two types of stuttering: developmental stuttering (occurs in preschool-aged children, during the period of incomplete speech development and is considered an independent speech disorder); and symptomatic stuttering (occurs more often in adults and is a symptom of another disorder).

In clinical studies, evolutionary stuttering is divided into two forms: neurotic and neurosis-like stuttering.

Neurosis-like stuttering occurs due to an organic lesion of the central nervous system. Furthermore, stuttering forms differ in the time of onset of speech impairment, its course, and the severity of symptoms. A doctor makes the diagnosis and determines whether there is an organic lesion of the central nervous system. Onset is typically during the speech development period (2 to 5 years). In older children, stuttering may develop as a result of psychological trauma.

Pedagogical aspect. The language system is not primarily affected. Psychological aspect. Stuttering severely disrupts the communicative function of speech (unlike tachylalia). This leads to changes in the emotional and volitional spheres: logophobia (fear of speech), scoptophobia (the fear of appearing ridiculous and ridiculous in the eyes of others), and shame for one's speech. Cognitive function is not affected. Intelligence is preserved. At an early age, stuttering may disappear spontaneously under favorable environmental conditions. Stuttering tends to worsen without specialized therapeutic and corrective pedagogical work.

Impairments in the structural and semantic processing of utterances: alalia and aphasia. Alalia is the absence or underdevelopment of speech due to organic damage to the speech areas of the cerebral cortex during prenatal and early development in a child with normal hearing and intact intellectual abilities.

Medical aspect. Alalia is associated with organic damage to the cortical end of the speech motor or speech-auditory analyzer, as well as various areas of the cerebral cortex, or their immaturity. The onset is the effect of any harmful factor in the prenatal or early postnatal period.

Pedagogical aspect. The main characteristic is the undeveloped linguistic system of speech, i.e., the phonetic, phonemic, and lexical-grammatical components of speech are not fully developed.

Psychological aspect. The communicative function of speech is severely impaired, including the "nominative" function of speech, despite the need for communication. Speech negativism develops, and motivation for verbal utterance is absent. Speech impairment or its absence causes a number of developmental issues in the child, including cognitive functioning, emotional and volitional functioning, and so on.

Aphasia is a complete or partial loss of speech caused by local damage to the brain.

Medical aspect. Aphasia is caused by organic damage to the cortical part of the speech motor or speech-auditory analyzer.

A.R. Luria, on the basis of whose works the modern theory of aphasia was developed, identified 6 forms of aphasia:

1) sensory;

2) acoustic-mnestic;

3) semantic;

4) dynamic;

5) motor afferent;

6) motor efferent.

Pedagogical aspect. Aphasia is characterized by impairment of all levels of the language system with partial preservation of individual components.

Psychological aspect. The communicative function of speech completely disintegrates. Internal and external, oral and written speech are impaired. In severe cases, there is a decline in intelligence and a weakening of emotional and volitional processes (depression, anxiety). Prognosis: not always favorable, especially in adults. Sometimes, full speech recovery is not observed.

Written speech disorders: dysgraphia, dyslexia, dysorthography.

Dysgraphia is a partial, specific impairment of the writing process. Agraphia is a complete inability to master the writing process.

Dyslexia is a partial specific disorder of the reading process.

Alexia — a complete inability to master the reading process.

Dysorthography is a specific disorder of the processes of acquisition and application of spelling rules.

Medical aspect. Writing and reading disorders can be caused by organic and functional factors, and may be due to the underdevelopment or deterioration of higher mental functions that normally mediate reading and writing.

Pedagogical aspect. Dyslexia can be an independent disorder, but can also be observed with alalia and aphasia. Dysgraphia can be an independent disorder, but can also be observed with rhinolalia, dysarthria, alalia, and aphasia.

Depending on what speech disorder accompanies dyslexia, dysgraphia, certain aspects of speech will be affected.

Dysorthography is a special type of writing disorder caused by incomplete acquisition of spelling rules, inability to relate them to each other, low ability to transfer acquired rules to similar language material, and insufficient sense of language.

Rules of etiquette when communicating with a disabled person who has difficulty speaking:

• Don't ignore people who have difficulty speaking, because it is in your best interest to understand them.

• Do not interrupt or correct a person who is having difficulty speaking. Start speaking only when you are sure that he has finished his thought.

• Don't try to rush the conversation. Be prepared for the fact that talking to someone with speech difficulties will take you longer. If you're in a hurry, it's best to apologize and arrange to talk at another time.

• Look your interlocutor in the face, maintain eye contact. Give this conversation your full attention.

•Don't assume that speech difficulties are an indicator of a person's low intelligence. Try to ask questions that require short answers or a nod.

• Don't pretend if you don't understand what someone said to you. Don't be shy about asking again. If you still don't understand, ask them to pronounce the word more slowly, perhaps spelling it out.

• Remember that a person with a speech impediment also needs to speak. Do not interrupt or suppress them. Do not rush the speaker.

• If you have problems communicating, ask if your interlocutor would like to use another method — write, type.

Control task within the framework of current monitoring of academic performance

Sample discussion topics:

1. Rules of etiquette when communicating with people with hearing impairments.

2. Rules of etiquette when communicating with persons with disabilities, visual impairments or blind people.

3. The problem of accessibility of the urban environment/medical institutions for people with hearing and/or vision impairments.

4. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with hearing and/or visual impairments.

5. People with hearing and/or vision impairments in medical practice.

6. Rules of etiquette when communicating with persons with disabilities who have difficulty moving.

7. The problem of accessibility of the urban environment/medical institutions for people with musculoskeletal disorders.

8. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with musculoskeletal disorders.

9. People with musculoskeletal disorders in medical practice.

10. Rules of etiquette when communicating with people who have difficulty speaking.

11. The problem of accessibility of the urban environment/medical institutions for people with speech impairments.

12. Application of modern digital technologies in organizing interaction and implementing professional activities of persons with speech impairments.

13. People with speech disorders in medical practice.

14. Rules of etiquette when communicating with people with mental and psychiatric disabilities.

15. The problem of accessibility of the urban environment/medical institutions for people with mental and psychiatric disabilities.

16. Application of modern digital technologies in organizing interaction and implementing professional activities of people with intellectual and mental disabilities.

17. People with mental or psychiatric disabilities in medical practice.

Lecture 6. Features of Communication with Persons with Mental and Psychiatric Disabilities

Mental disabilities are severe disturbances of mental development that primarily affect the ability to interact socially and behave. When using the term "mental disabilities," we mean mental and/or intellectual disabilities. This term is less stigmatizing than the term "mental illness." According to the WHO, one in five people on the planet has a mental disability. Mental disabilities include disorders of mental and intellectual development, including autism, schizophrenia, intellectual disability, genetic diseases, organic damage to the central nervous system, dementia, clinical depression, and others. Persons with disabilities and mental disabilities may have a wide variety of diagnoses and functional characteristics, but they all share one common feature: their perception of information from the outside world, including from other people, differs from the norm. Developmental differences in the mental sphere are not always associated with a decrease in intelligence, but they always create certain difficulties in perceiving information in a familiar, understandable manner and format. These characteristics must be taken into account when developing a program, in teaching methods, and in the very process of interacting with such individuals. Nowadays, the birth of children with mental disabilities is very common. A child with mental disabilities is a special child who, due to their psychological characteristics, perceives the world around them differently. The immaturity of basic neural processes and psychological instability make such a child vulnerable to many negative factors that disrupt the development of behavioral acts.

Types of mental disorders and their characteristics.

Oligophrenia or mental retardation. Intellectual disability (mental retardation) is a persistent impairment of cognitive function resulting from organic brain damage. In some cases, mental retardation is combined with other disorders: 4 • musculoskeletal disorders (for example, cerebral palsy), • hearing or vision, • mental disorders (such as autism, epilepsy, schizophrenia, behavioral disorders, etc.). Of course, concomitant disorders seriously affect the clinical picture and rehabilitation paths. Mental retardation affects all areas of a person's life, causing social, emotional, and behavioral disorders. Therefore, rehabilitation for such people requires a comprehensive approach — medical, psychological, and pedagogical.

The causes of congenital mental retardation are varied: severe infectious diseases of the mother during pregnancy, intoxication, endocrine disorders, environmental conditions, stressful situations, chromosomal abnormalities and other hereditary diseases.

Acquired mental retardation can result from severe traumatic brain injury, meningitis, or meningoencephalitis. This condition occurs in children under three years of age, when the child's psyche should be developing, but due to external or internal circumstances, this does not occur, and the person's development stalls at a low mental level.

Mental retardation is divided into four forms:

1. Mild (retardation) – IQ from 70 to 50. This individual has impaired abstract thinking and flexibility, as well as short-term memory. However, they speak normally, albeit slowly, and understand what is said to them. Often, such a person is indistinguishable from others. However, they are unable to use acquired academic skills, such as financial management, etc. In social interactions, they lag behind their peers, and therefore are susceptible to negative influence from others. They can perform simple everyday tasks independently, but more complex ones require assistance.

2. Moderate (not severe imbecility) – IQ 49–35. The person requires constant, uninterrupted supervision, including for establishing interpersonal relationships. Oral speech is very simple, and the person does not always correctly interpret what they hear;

3. Severe (severe imbecility) – IQ from 34 to 20. The person has a poor understanding of speech and numbers, and the concept of time is inaccessible to them – everything happens here and now. They speak in monosyllables, and their vocabulary is limited. They require constant supervision and care in terms of hygiene, clothing, and nutrition.

4. Profound (idiocy) – IQ level less than 20. Speech, its understanding, and sign language are very limited, but they are able to express simple words and directions, as well as their desires and emotions through nonverbal communication. Severe sensory and motor problems are present. They are completely dependent on others.

People with different forms of mental retardation have varying potential for psychophysical development, socialization, and varying susceptibility to corrective and pedagogical interventions. The primary deficiencies in thinking are the inability to generalize, compare, and analyze. Speech impairments manifest themselves in: — communication: the person has difficulty verbally expressing their needs and desires; as a rule, they do not take the initiative in addressing others; — cognitive activity: they do not ask questions; — regulatory function: they have difficulty subordinating their actions and behavior to verbal instructions. The statements of a person with intellectual disabilities are predominantly situational in nature; phrasal speech can be simple, with grammar and pronunciation errors, making it difficult for others to understand. Facial expressions may be inexpressive, not reflecting emotions, or the face may display a frozen smile, also unrelated to the internal state. Such people perceive the speech of others slowly and do not always understand what is expected of them. However, all these and other characteristics also depend on the upbringing conditions: many who grow up in favorable circumstances are able to respond to requests, demands, and other appeals. People with intellectual disabilities have a weak capacity for willpower and self-control. They have difficulty adapting to new environments, demands, and conditions, and struggle to switch to new activities. All children with intellectual disabilities experience difficulty mastering general education programs and require adapted programs, special conditions, and teaching methods. Adapted programs emphasize minimal academic knowledge, focusing instead on life concepts, fostering independence in everyday life, social skills, and work training. Children with mild to

moderate intellectual disabilities who receive early instruction are able to master practical professional skills and work in a team. For those who have been disabled since childhood, a gap between their physiological and psychological age accumulates as they grow older. This is noticeable in both everyday interactions and socialization in general. Many of them cannot do without an escort.

Down syndrome is the most well-known chromosomal disorder, in which a person has 47 chromosomes instead of 46. On the one hand, Down syndrome is always accompanied by mental retardation (severe in 20% of cases, moderate in 75%, and mild in 5%), but on the other hand, the syndrome has distinct features. The syndrome is named after the English physician John Langdon Down, who first described this disorder in 1862. The connection between the external signs of the syndrome and the presence of an extra chromosome was discovered in 1959 by the French geneticist Jerome Lejeune. In the 20th century, Down syndrome became a fairly common diagnosis. Most people with Down syndrome died as infants or children. Because of the epicanthus defect, Down used the term "mongoloid" (the syndrome was called " mongolism "). The concept of Down syndrome was strongly linked to racism until the 1970s. The World Health Organization (WHO) officially removed the name " mongolism " in 1965 after an appeal from Mongolian delegates. Advocates for the rights of people with Down syndrome and parents welcomed the removal of the mongoloid label placed on their children. In 1975, the US National Institutes of Health recommended stopping the use of the name "Down syndrome" since its discoverer did not suffer from the disorder. Despite this, the term remains in use worldwide.

Down syndrome is typically accompanied by the following external features: craniofacial changes: a flattened face and nasal bridge, brachycephaly (round head), a short, wide neck, a flat occiput, and deformed ears; in newborns, a characteristic skin fold on the neck. The face is distinguished by a Mongoloid eye shape, the presence of an epicanthus (a vertical fold of skin covering the inner corner of the eye), a half-open mouth, often with thick lips and a large, protruding tongue. Muscle tone is decreased; Joint hypermobility, chest deformity, short limbs, a transverse ("simian") crease on the palm, malocclusion, a furrowed tongue, etc. Depending on the severity of Down syndrome, the patient may experience congenital heart defects, frequent infections, leukemia, early onset of Alzheimer's disease, sleep apnea, obesity, and other conditions, as well as varying degrees of neurodevelopmental delay. If intervention is undertaken from early childhood and all necessary medical, medical-social, and psychological -pedagogical measures are taken, then problems with excess weight, articulation, and cognitive development in general can be corrected or mitigated. Children with Down syndrome are granted disability status immediately after an accurate diagnosis. Mental retardation in children with Down syndrome is usually severe. Developmental delays begin in infancy: children struggle to focus their gaze on a toy or follow its movement; they begin sitting, crawling, and walking late. Babbling and onomatopoeia are delayed, with phrasal speech emerging at five or six years of age, and sometimes even later. However, even in late preschool and early school years, their vocabulary remains limited, and their pronunciation is difficult to understand. By nature, most children are affectionate, good-natured, obedient, and sensitive to others.

However, if not raised properly, they can become stubborn, capricious, withdrawn, and aggressive, especially in adolescence, which can make raising them and teaching them in a group setting challenging. Children with Down syndrome, if given early intervention, acquire skills such as drawing, reading, writing, basic arithmetic, and manageable household chores. Typically, people with Down syndrome do not achieve independence in social life and require constant supervision.

Cases of severe dementia are sometimes observed during puberty. Today, the average life expectancy for people with this genetic disorder is approaching 55–60 years, whereas just a few decades ago, they only lived to 25 years due to unfavorable living conditions.

Autism Spectrum Disorders (ASD) ASD is a clinically heterogeneous group of developmental disorders characterized by qualitative abnormalities in social interaction and communication patterns, as well as a restricted, stereotyped, and repetitive set of interests and activities. These qualitative abnormalities are common features of an individual's functioning across all situations and can vary significantly in severity. In most cases, development is abnormal from early childhood, and with rare exceptions, these conditions manifest within the first five years of life. According to statistics, ASD occurs in 3 to 15 cases per 10,000 children, with autism affecting boys more often than girls. The term "autism" was first introduced by E. Bleuer in 1920 as a symptom of severe disturbances in interaction with reality in adults with schizophrenia. Early childhood autism was described by Leo Kanner (1943, Kanner syndrome), and then by Hans Asperger (1949). Back then, one definition of autism was "a person's disconnection from the outside world." The causes of the disorder are not fully understood. Various factors play a role in its development, and their combination influences the development of brain structures and the child's future behavior.

The following types of disorders are identified:

• Childhood autism. Onset occurs before age 3, but may be diagnosed later. Symptoms include the classic triad: impaired social interactions, stereotypies (repetition of movements, words, or phrases), and speech regression.

• Atypical form of autism. Differs from the previous form of the disorder by a later onset and/or the absence of the entire triad of symptoms. Characteristic of individuals with profound mental retardation and severe receptive speech impairment.

Rett syndrome. A genetic disorder diagnosed in girls. Characterized by complete or partial loss of speech, ataxia, profound mental retardation, and stereotypical circular movements of the hands.

Interest in communication is relatively preserved, therefore not all researchers classify this disorder as ASD.

• Childhood disintegrative disorder. Develops after 2 years of normal ontogenesis. Behavior is similar to childhood autism and childhood schizophrenia. At least two out of four regressions are observed: social skills, language, motor skills, bowel and bladder control. The question of classifying this pathology as an ASD remains open.

Asperger's syndrome . Speech and cognitive functions are better developed than in childhood autism. Distinguishing characteristics are eccentricity, clumsiness,

monotonous behavior patterns, concrete thinking, and difficulty understanding irony and humor.

• Other general ontogenetic disorders. Diseases characterized by stereotypies, qualitative deviations in social interactions, and repetitive interests. They cannot be clearly attributed to any of the diseases listed above due to the vagueness or mixed nature of symptoms.

• Disorder of ontogenesis, unspecified. It manifests itself as a broad range of cognitive and behavioral deviations, and impaired social activity. It does not meet the criteria for other ASDs. Patients with autism spectrum disorders experience communication difficulties. They are unable to initiate and continue dialogue, approach people, empathize, sympathize, share emotions, or engage others in their ideas. In severe cases, there is a complete lack of response to attempts by others to establish contact. Specific thinking determines problems in understanding the sensory and role-based subtext of relationships. Children do not make friends, refuse to play, or participate without engaging in playful interactions, without using their imagination.

Communication is relatively preserved in people with Asperger's syndrome, but the concrete nature of their thinking and their inability to understand facial expressions and intonations make it difficult to establish friendships, and in adults, even romantic relationships. Most people with ASD have problems with nonverbal communication. They may avoid eye contact, lack gestures and intonation, and have difficulty understanding nonverbal communication. Through specialized training, they may learn a small number of functional gestures, but their variety is much less than that of other people, and their use is not spontaneous.

Severe forms of the disorder are accompanied by a complete lack of eye contact, gestures, and facial expressions. Patients' interests are limited and stubborn. Pathological attachments to objects—to toys or collectibles, personal dishes, furniture, and clothing—are often present. Pathological reactions to incoming sensory stimuli, such as light, sound, touch, and temperature changes, are common. The paradoxical nature of this response lies in the fact that unpleasant stimuli, such as pain, may be perceived calmly, while neutral ones—whispers, noise, and dim lighting—evoke unpleasant sensations. Stereotypes manifest themselves in simple actions, speech, and complex behavior. Children run in circles, bang toys on hard surfaces, and arrange them in a strict order. Adults perform rituals, are pathologically pedantic about the arrangement of objects in the room, and experience a need for immutability and consistency (in the arrangement of objects, daily routine, walking route, and a strict menu).

Verbal stereotypies are characterized by verbal and phrasal echolalia — meaningless, repeated repetitions of words, final syllables, and phrase endings. Many patients have intellectual disabilities and speech impairments. Movement disorders are often observed, including an unsteady or awkward gait, tiptoeing, and lack of coordination. Adults and adolescents are prone to depression and anxiety.

Catatonia-like behavior is possible in various forms of the disorder. In its most severe form, catatonia manifests as a complete lack of movement and speech, prolonged postural rigidity, and waxy flexibility (catalepsy).

How to communicate with people with mental disorders.

1. Use accessible language, express yourself precisely and to the point.

2. Avoid clichés and figurative expressions unless you are sure that your interlocutor is familiar with them.

3. Don't talk down to others. Don't think you won't be understood.

4. When discussing tasks or projects, explain them step by step. Allow the other person to play out each step after you've explained it.

5. Assume that an adult with a developmental disability has the same experiences as any other adult.

6. Use illustrations or photographs if necessary. Be prepared to repeat several times. Don't give up if you're not understood the first time.

7. Treat the person with developmental disabilities the same way you would treat anyone else. Discuss the same topics you would with other people, such as weekend plans, vacations, the weather, and recent events.

8. Address the person directly.

9. Remember that people with developmental disabilities are capable and can sign documents, contracts, vote, consent to medical care, etc.

10. If necessary, write down your message or proposal and suggest they discuss it with a friend or family member. Include your phone number in the note and offer to discuss it at your next meeting.

11. Provide necessary support in establishing connections. To better understand each other, we need to use language that is accessible and understandable to each group. This will improve the quality of our communication and information exchange.

12. During the conversation, ask questions that require a short answer or a nod of the head, or give the opportunity for a written answer (in case of severe speech impairments)

13. Use special forms and methods of receiving and transmitting information (if necessary, provide information in electronic (printed) or audio format)

People with mental disorders

1. Mental health problems are not the same as developmental problems. People with mental health problems may experience emotional disturbances or confusion that complicate their lives. They have a unique and changing worldview.

2. Don't think that people with mental disorders necessarily need additional help and special treatment.

3. Treat people with mental disabilities as individuals. Avoid jumping to conclusions based on your experiences with others with the same disability.

4. Don't assume that people with mental health issues are more prone to violence than others. This is a myth. If you're friendly, they'll feel at ease.

5. It is not true that people with mental disorders always take or should take medication.

6. It is not true that people with mental disabilities cannot sign documents or consent to treatment. They are generally recognized as having legal capacity.

7. It is not true that people with mental disabilities have problems with understanding or are lower in intelligence than most people.

8. It's not true that people with mental disabilities are incapable of working. They can perform many tasks that require specific skills and abilities.

9. Don't think that people with mental disorders don't know what is good and what is bad for them.

10. If a person with mental health issues is upset, ask them calmly what you can do to help them.

11. Don't think that a person with mental disorders cannot cope with anxiety.

12. Avoid speaking harshly to someone with mental disabilities, even if you have reason to do so. When communicating with people with mental disabilities, it's important to be mindful of their behavior, which can vary greatly.

Limitation of legal capacity.

Disabilities are more pronounced in their learning abilities. However, with adequate remedial and pedagogical intervention, they are capable of learning specific everyday skills and basic vocations.

Limited ability to work is expressed by a lack of consistency in the work process due to distractibility and erratic behavior. Work processes are more accessible in specially created conditions that preclude measured work operations.

Limited ability to control one's behavior is explained by imperfect adaptive mechanisms and difficult-to-acquire social experience. This category of people requires outside supervision. There is a limitation in the ability to perform purposeful motor activity unrelated to defects in the musculoskeletal system. This is caused by impaired coordination and impaired fine motor skills due to imperfect neurophysiological mechanisms.

A limited ability to orient oneself is expressed in the inability to navigate a situation limited to a given space or a specific task. This is explained by an insufficiently developed attention and memory function.

The social rehabilitation program for individuals with severe mental retardation includes activities across all areas. Social and everyday rehabilitation requires improving knowledge of the surrounding environment and arranging daily life according to community norms and rules.

These activities are carried out in the process of long-term corrective and pedagogical influence, subject to constant reinforcement and control.

Social and environmental rehabilitation interventions are particularly important. Teaching patients to avoid the negative influences of their social environment is the primary goal of rehabilitation measures.

The family plays a key role in social and environmental rehabilitation, being viewed as a microsocial rehabilitation environment. Education and training in household skills contribute to the development of a work ethic and the expansion of social experiences (shopping, payment, delivery, etc.).

For this category of people, learning the skills of independent living, mastering household chores, the ability to make independent decisions, and navigate modern market relations is of particular importance.

The social rehabilitation program for individuals with severe mental retardation should include physical education and sports training. This will help overcome motor

retardation and have a beneficial effect on overall physical and mental development, improving willpower and communication skills.

Leisure activity training is essential in the social rehabilitation program for mentally retarded individuals.

Due to the insufficiently developed aesthetic needs of individuals with severe debility, they require active involvement in activities to introduce them to music, fine arts, literature, etc.

Addressing personal issues should be a key focus in the social rehabilitation program for individuals with severe mental retardation. Sex education, information about the consequences of intimate relationships, and information about sexually transmitted diseases are acceptable.

Disabled people with severe mental retardation—pronounced imbecility —make up the contingent of psychoneurological boarding schools.

Limitations in life activities are more pronounced. Limited ability to care for oneself manifests itself in difficult-to-learn skills such as hygiene and housework, which are performed with the assistance and supervision of others.

The limitation of the ability to perform motor operations is expressed in insufficient coordination of movements and the development of fine motor skills.

Limited communication skills are expressed in underdeveloped speech, a small vocabulary, a defect in the speech apparatus, and the emotional component predominates over the speech component in communication.

There is a significant limitation in learning ability, which is associated with underdeveloped functions of perception, attention, memory, and thinking.

The limitation of work capacity is severe and is explained by underdeveloped task acquisition, an inability to master technological processes, and imperfect motor skills. Work can be performed under specially created conditions.

The limited ability to orientate is quite pronounced, due to imperfect functions of attention, perception, memory, and spatial orientation. Outside assistance is required in new situations.

A significant limitation in the ability to control one's behavior is also present, which is associated with impaired adaptive mechanisms and the awareness of social experience. Correction and control are necessary.

Control task within the framework of current monitoring of academic performance

Sample discussion topics:

1. Rules of etiquette when communicating with people having hearing impairments.

2. Rules of etiquette when communicating with people having visual impairments or blind people.

3. The problem of accessibility of the urban environment/medical institutions for people with hearing and/or vision impairments.

4. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with hearing and/or visual impairments.

5. People with hearing and/or vision impairments in medical practice.

6. Rules of etiquette when communicating with people who have difficulty moving.

7. The problem of accessibility of the urban environment/medical institutions for people with musculoskeletal disorders.

8. Application of modern digital technologies in organizing interaction and implementation of professional activities of persons with musculoskeletal disorders.

9. People with musculoskeletal disorders in medical practice.

10. Rules of etiquette when communicating with people who have difficulty speaking.

11. The problem of accessibility of the urban environment/medical institutions for people with speech impairments.

12. Application of modern digital technologies in organizing interaction and implementing professional activities of persons with speech impairments.

13. People with speech disorders in medical practice.

14. Rules of etiquette when communicating with people with mental and psychiatric disabilities.

15. The problem of accessibility of the urban environment/medical institutions for people with mental and psychiatric disabilities.

16. Application of modern digital technologies in organizing interaction and implementing professional activities of people with intellectual and mental disabilities.

17. People with mental or psychiatric disabilities in medical practice.

Lecture 7. Contemporary Inclusive Technologies

Modern Russia is devoting considerable attention to the development of assistive technologies and the development of domestic manufacturers of devices for the disabled. This factor, coupled with the high cost of imported goods, which still predominate in the rehabilitation sector, offers Russian developers the opportunity to realize their vision.

Assistive technology is a term encompassing a variety of assistive products and services. Assistive products are designed to maintain or enhance people's functional abilities and autonomy, thereby promoting their well-being. Hearing aids, wheelchairs, assistive communication devices, eyeglasses, prosthetics, pill organizers, and reminders are all examples of assistive products. Worldwide, more than one billion people require at least one assistive product.

With the global population aging and the rise in noncommunicable diseases, by 2050, more than two billion people will need at least one assistive device, and many older adults will need two or more. Currently, only one in 10 people in need has access to an assistive device.

Assistive technologies empower people to be healthy, productive, independent, and maintain dignity, as well as to pursue education, enter the labor market, and participate in society. Assistive technologies reduce the need for formal healthcare and support services, long-term care, and caregiver services. People without access to assistive technologies often find themselves excluded from society, isolated, and poor, increasing the negative impact of illness and disability on the individual, their family members, and society as a whole.

The categories of people who have the greatest need for assistive technologies include: persons with disabilities; the elderly; people with non-communicable diseases such as diabetes and stroke; people with mental disorders, including dementia and autism; and people suffering from a gradual decline in functional abilities.

Assistive technologies can positively impact the health and well-being of individuals and their families, and have broader socioeconomic benefits. The high cost of assistive devices is a major reason for their low uptake in low-income countries. Very few countries have a national assistive technology policy or program. In many countries, access to assistive technologies in the public sector is poor or nonexistent. Even in high-income countries, assistive devices are often rationed or not included in health and social insurance benefits, forcing patients and their families to make large out-of-pocket payments. For example, in many European countries, it is common for public programs to provide only one hearing aid to people with age-related hearing loss, while most require two.

The production of assistive devices is currently characterized by low volumes and high specialization, primarily targeting high-value markets. There is a lack of government funding, national service delivery systems, user-focused research and development, procurement systems, quality and safety standards, and design solutions that take into account operational conditions.

In high-income countries, services are often isolated and unintegrated. People are forced to schedule appointments with multiple specialists in different locations, which incurs additional costs and exacerbates the burden on users, their caregivers, and health and social care budgets.

In many low- and middle-income countries, there is no national system for providing assistive technology services. Those who can afford them purchase assistive devices directly from pharmacies, private clinics, or manufacturers. Less affluent groups are forced to rely on free products, irregularly provided through charitable organizations, often based on the mass distribution of low-quality or used products. These products are often unsuitable for the patient's needs or intended use.

WHO is the coordinator of the Global Collaboration on Assistive Technologies (GATE), which aims to expand access to high-quality, affordable assistive products for everyone worldwide. The GATE initiative is developing four practical tools to support countries in addressing the challenges described above. WHO views the GATE initiative as a concrete step toward achieving the goals of the UN Convention on the Rights of Persons with Disabilities, universal health coverage, and the Sustainable Development Goals. The GATE initiative will contribute to the implementation of the WHO global strategy for people-centered, integrated health care throughout the life course, as well as action plans on noncommunicable diseases, ageing and health, disability, and mental health. We are already seeing the emergence of domestically produced alternatives to imported assistive devices, which can compete in terms of quality and functionality, but with more attractive pricing.

We shouldn't rest on our laurels; these achievements are merely the first signs of technological advances that facilitate the creation of accessible environments for persons with disabilities. There's no doubt that we need to strengthen support for domestic creators of assistive technologies and modernize the existing system of state provision of technical aids to people with limited mobility.

The Stradivary prosthesis is equipped with wireless internet access, displaying information on a flexible display located on the forearm. The device is designed to allow for the replacement of fingers with working tools, adapting the prosthesis to various purposes. The color, shape, and size of the artificial limb can be customized. Since April 2014, the Kibi has been certified as an active traction prosthesis, and anyone with a disability who requires it can currently receive it through state compensation. Both the Kibi and the Stradivary have a unique appearance, highlighting the individuality of the user. This unusual, convertible Caterwill wheelchair is the first to be produced by the Novosibirsk plant at the end of winter 2016. It is equipped with an electric drive and is unique in that it has both a wheeled and a tracked platform.

When presenting the latest assistive technologies, it's impossible not to mention the Info+ outdoor information terminals, the ElBraille portable organizers, the BlindBot Braille printer, the Troynik orthopedic device that simulates reciprocating movements, and the Minik universal wheelchair lift. All of these recent domestic developments allow persons with disabilities to perform activities that were previously inaccessible.

Foreign " assistive technologies" facilitating the social adaptation of individuals with developmental disabilities and working with them. A whole class of modern assistive devices is made up of those used to address difficulties in perceiving or reproducing oral and written language, of various natures. The effectiveness of assistive devices and aids depends primarily on the extent to which they enable the use of functions that are, to varying degrees, preserved in individuals with special needs who use them.

Assistive devices from the Daisy system are widely used by individuals who understand spoken language but have difficulty comprehending written language (printed texts). They convert spoken language into written form, thereby eliminating barriers to the perception of different types of speech. They also offer the option of listening to pre-recorded audio texts, making speech perception more comfortable. These devices and their advantages (audio recordings in Daisy format, the functioning of Daisy audio libraries) are used by individuals with various developmental disabilities, including the visually impaired. For individuals who have difficulty reproducing spoken language but comprehend printed text and are able to compose texts from pre-programmed fragments, the use of so-called "communicators" (developed by GUS Communication Inc.) is effective. These communicators are portable computer-based devices (from pocket-sized to full-fledged laptops) with touchscreens and additional speakers. They are equipped with a special software tool, SpeechPRO, which allows text to be generated on the screen using suggested prompts in the form of continuations of typed words, ready-made phrases or their fragments, suitable in meaning for continuations of the text, modifications of ready-made pieces of text, etc. Once the text is generated, the user turns on the synthesizer, which pronounces this text to the interlocutor.

This idea, in its simplest form, was first implemented in portable electronic dictionaries: by typing the first letters, the user is presented with a list of words from which to select the desired translation. In "communicators," this idea has been developed and expanded to meet the modern challenges of providing communication to persons with disabilities. Specialized mobile phone software is used for the same purposes.

The next class of devices consists of numerous assistive devices intended for direct use by individuals with severe short-term memory impairments, difficulties in planning actions, disorientation in the surrounding space, etc. Their goal is to ensure the greatest possible independence in these cases for a person in everyday life, performing everyday activities, which is reflected in their name — ADL (activities of daily living). Such devices help not only the patients themselves, but also their caregivers. Here are a few examples. One of the simplest devices of this kind is the Watchminder wristwatch, which reminds its owner to perform specified actions either by an audible signal or vibration; a corresponding mnemonic message is displayed on the dial. The watch's memory stores up to 30 such events. Another example of a device of this class is the audiovisual assistant for people with memory disorders (Visual Assistant). This software is installed on a personal computer, a pocket computer, or a programmable cell phone. The user is provided with visual and voice prompts, which

consist of step-by-step, customized tasks pre-programmed by a teacher, mentor, or caregiver. Sequential completion of these tasks by the disabled person leads them to the desired result.

Jogger software is designed to monitor a variety of daily functions. It is installed on a pocket computer with a touchscreen and wireless internet connection. The system allows the user to use step-by-step prompts and instructions necessary for adequate behavior and life support. The device notifies the user in advance of an upcoming task using a voice prompt, an audible signal, highlighted text on the screen, or a combination of these methods. The user responds to the prompts by touching the touchscreen, and their responses and the time required to complete the task are recorded. If the user fails to respond to the device prompt, "ignoring" is also recorded. The device records the user's use of the programmed prompts and "records" the user's responses, which are in turn sent via the internet to a specialist doctor or caregiver for analysis and modification. The system is fully customizable. Thus, prompts or instructions can be added for the sequence of daily household chores, or for actions to be taken when leaving work, taking medications, etc. As the individual learns the order of a particular task and no longer requires consistent reminders, the information can be deleted from the device. The Jogger system consists of two software modules: an information module stored directly on the user's device, and a control software module located on a web server, which allows medical specialists and support staff to schedule tasks, adjust them, delete them, and monitor the individual's response. Specialists enter tasks on the server, which are downloaded directly to the user's device via the internet.

Among the assistive devices in this class, there is a PEAT system. It is unique in that it can intervene in the planning process of actions required by a disabled person, adjusting its own program. When entering an action plan into the device, the task completion time can be either fixed precisely, or a time interval can be specified, or the desired order of the actions can be varied. This "intelligent" system can independently determine the best time to remind the disabled person to complete the task, based on the results of previous actions. If the disabled person fails to complete any tasks within the expected time, the system reschedules the schedule (scenario) based on the priority of the actions. Reminder methods can be combined: audio, text, and graphic. If the person has difficulty or forgets how or why a task should be performed, a step-by-step description is entered into the device, and the method of presentation (graphic, audio, or text) varies according to the person's capabilities.

Assistive technologies are also aimed at expanding access to education for persons with disabilities and integrating them into the mainstream educational environment. Modern assistive technologies are developed based on the latest scientific and technological advances, including research findings in fields far removed from the development of modern household devices and tools, such as the application of artificial intelligence in aeronautics.

Control task within the framework of current monitoring of academic performance

Typical task for the situational practical training:

Exercise:

Analyze the environment of any organization or public space (cultural, educational, healthcare institutions, etc.) for accessibility for individuals with disabilities or health restrictions.

1. Specify the name and address of the selected organization.

2. Complete the diagnostic card for accessibility of the environment in the organization for individuals with hearing impairments.

3. Complete the diagnostic card for accessibility of the organization's environment for individuals with visual impairments.

4. Fill out the diagnostic card for the accessibility of the environment in the organization for persons with musculoskeletal disorders.

*When filling out the diagnostic card, you must attach supporting photographs.

Diagnostic card in Appendix 1.

Lecture 8. Developing Inclusion
in Business and Entrepreneurship

Among the dominant factors in managing the employment of persons with disabilities identified by international organizations, the most prominent is their effective integration into the labor market, which includes: the realization of equal rights to decent work; the creation of an accessible environment; comprehensive social protection and support, etc.

In the context of implementing the recommendations of international organizations and the provisions of the Convention, the European Union adopted a new "European Disability Strategy 2010–2030 (Disability Strategy)", which is not only part of the "European Action Plan for Social Rights", but also a key instrument for promoting compliance with the Convention on the Rights of Persons with Disabilities (UNCRPD) both at the EU and national levels. The strategy contains "7 flagship initiatives": implementation of the "EU Platform on Disability" (2021); launch of the "European Employment Package for Persons with Disabilities"; creation of the "Accessible EU" resource center (2022); implementation of the "European Disability Map" (2023); formation of the "Framework of Best Practice in Social Services for Persons with Disabilities" (2024), etc.

The adoption of this Strategy stems from the fact that persons with disabilities continue to face unfavorable employment conditions and adaptation to the labor market, ultimately leading to long-term unemployment and a lower standard of living than people without disabilities. This is also highlighted in the OECD report "Disability, Work, and Inclusion: Mainstreaming in All Policies and Practices," which contains a comprehensive analysis identifying current trends in the situation of persons with disabilities in the open labor market [19].

In the near term, integrating persons with disabilities into the digital economy is crucial to ensuring their full participation and opportunities in the workforce. One way to expand the labor rights of persons with disabilities through digitalization is through a technology-enabled work environment. Such an environment may include providing assistive technologies and tools to help persons with disabilities perform their jobs. Technology can create virtual and flexible workspaces that allow this category of people to work remotely (from home or other accessible locations).

Another area where digital technologies can have a real impact is the creation of digital jobs, and AI-based tools can be used in the hiring process to reduce bias against persons with disabilities. Furthermore, digital technologies also play a vital role in improving access to education for young persons with disabilities. With the development of online and distance learning, this category of people is no longer limited to attending educational institutions and can receive education online.

International organizations have recognized that the implementation of the right to decent work, the formation of an appropriate production environment, and training are among the dominant factors in managing the employment of persons with disabilities.

Most countries' legislation contains explicit legal provisions prohibiting discrimination against persons with disabilities in all areas of employment and occupation (hiring, remuneration, dismissal, and promotion). A number of countries include employment issues for persons with disabilities in the development of government strategies and programs, alongside initiatives specifically targeting this category of citizens.

Sweden, for example, has integrated measures to promote employment and training for persons with disabilities into its overall national labor market policy. A number of countries have adopted specific regulations to overcome barriers faced by persons with disabilities in accessing training, self-employment, entrepreneurship, and employment opportunities. In the United States, persons with disabilities can use the Ticket to Work program to receive employment services from the Employment Network in their state of residence. Spain and Finland have developed relevant laws to ensure that disability benefits do not serve as an obstacle to job searches and are preserved during employment, including as self-employed individuals.

It's important to note that one form of employment for persons with disabilities abroad that offers long-term support is "supported employment" (or the "supported employment" model). A distinctive feature of this model is the flexibility of the interactions used between various departments, foundations, employment services, recruitment agencies, philanthropists, and other entities to facilitate the employment, training, and adaptation of people with severe disabilities.

Based on the provisions of the approved "European Disability Strategy 2010–2030," all Eurozone countries have developed additional national regulations to promote the employment of persons with disabilities. For example, Romania has adopted the National Strategy "A Society Without Barriers for Persons with Disabilities," which aims to integrate persons with disabilities into the open labor market. The Strategy includes the implementation of adapted training programs for persons with disabilities to increase their motivation and prepare them for work; familiarization programs with entrepreneurship; supported employment programs, and other programs.

In Spain, the "Law on the Rights of Persons with Disabilities and Their Social Inclusion" has been adopted, which also focuses on access for persons with disabilities to the open labor market. This law regulates the following: preventing or compensating for unfavorable working conditions for persons with disabilities; encouraging employment services to support their employment; organizing monitoring of the allocation of quota-based jobs in public and private organizations, and more. In Italy (Lombardy), comprehensive measures are being implemented to promote the employment of persons with disabilities based on adopted legislation, advancing policies for their social inclusion and employment. Specific programs are being developed at the provincial (metropolitan) level, and the Lombardy regional government provides funding and coordinates the implementation of decisions regarding employment promotion for persons with disabilities.

The programs being developed are aimed at encouraging and supporting:

– dependent, autonomous and entrepreneurial companies for persons with disabilities;

– integration and social inclusion through the creation of a coordinated system of actions by government bodies and the adaptation of persons with disabilities in the workplace;

– coordinated activities of the network of employment services, as well as social assistance, education and training services operating in the provinces.

To achieve these goals, the Lombardy region authorities ensure the implementation of:

– initiatives for training, internships, orientation, transition to work after retraining, as well as retraining, including through the restoration of education in combination with the education system;

– models of support for employers in fulfilling the requirements of legislation in the field of social support for persons with disabilities

– conditions for the formation of regional employment funds for persons with disabilities, the purpose of which is to finance initiatives for the employment and retention of persons with disabilities in jobs.

Based on the analysis conducted, it is possible to identify the main areas for creating conditions for promoting employment of persons with disabilities, implemented in international practice.

Improving the mechanism for setting job quotas for persons with disabilities. In foreign countries, employers fulfill their obligations to set job quotas for persons with disabilities in various ways: by employing disabled workers in equipped workplaces or through subcontracting in sheltered workshops or specialized enterprises.

In many countries (Italy, France, Germany, Spain), companies are required to hire disabled workers with varying degrees of disability within the framework of quotas. Failure to comply with the quota conditions entails various sanctions: associations defending the interests of disabled workers can file a civil lawsuit for non-compliance with the law; employers are excluded from public procurement procedures; companies are subject to fines, etc. In Eurozone countries, failure to comply with the conditions and procedures for establishing quotas for the employment of persons with disabilities is considered a serious administrative offense and may result in fines.

In European countries, there are three types of job quota models for the employment of persons with disabilities: an optional quota without sanctions; a mandatory quota without sanctions; and a mandatory quota with sanctions.

According to experts, despite its widespread use, the system of job quotas for the employment of persons with disabilities has certain shortcomings and does not always produce effective results, due to the following reasons:

1. The quota system does not always create optimal conditions for hiring persons with disabilities with appropriate qualifications;

2. The quota system may lead to over-regulation of the hiring process for persons with disabilities, limiting the ability of employers to select the best candidates for specific positions based on skills and experience;

3. Companies may focus on complying with legal quota requirements rather than developing a truly inclusive culture, resulting in superficial quota compliance rather than meaningful change.

In general, the effectiveness of the applied job quota models for persons with disabilities is influenced by many factors: the general situation in the labor market; the level of funding for employment promotion activities; the level of control over the allocation of jobs for persons with disabilities within the framework of job quotas; the volume of vocational rehabilitation services provided; the motivation of employers to employ workers with disabilities, etc.

Ensuring employment for persons with disabilities. Job fields open to job seekers with disabilities.

Promoting entrepreneurship and self-employment among persons with disabilities. Several examples of mechanisms implemented at the state level in developed countries provide for the inclusion of persons with disabilities in the workforce, including through the promotion of entrepreneurial skills. For example, Bulgaria's National Action Plan for Employment (2022) includes measures to promote self-employment for persons with disabilities through regional business creation programs implemented by the Agency for Persons with Disabilities. In Spain, the adopted "Strategy for Supporting Persons with Disabilities for 2022–2030" includes measures to promote and support new business opportunities for persons with disabilities, as well as entrepreneurship and self-employment.

The main priorities for state support for the development of entrepreneurial initiatives among persons with disabilities are:
– development of entrepreneurial skills;
– provision of business organization consultants with the aim of mitigating negative business trends in the future;
– provision of financial (grant) support;
– conducting monitoring studies to determine the impact of the implementation of programs (projects) for the development of entrepreneurship on the overall employment of persons with disabilities in the labor market, etc.

Development of specialized social enterprises for persons with disabilities and the promotion of social employment. In most countries, alongside policies to expand employment opportunities for persons with disabilities in the open labor market, measures are also being implemented to support and develop special forms of employment for persons with disabilities, such as sheltered workshops, specialized enterprises for people with severe disabilities, and social enterprises and organizations.

Social economy enterprises and organizations are enterprises, cooperatives, development trust funds, credit unions, and microcredit associations that have clear social goals and are characterized by democratic, non-profit, and inclusive activities. They provide a wide range of social goods and services, including: social protection; education; health care; banking; insurance; crafts and training. In Europe, these organizations provide 10% of all jobs for persons with disabilities. However, the growth of this sector is hampered by insufficient awareness of its role, insufficient government support, and limited financial resources [37].

Many European countries have some form of sheltered employment system. Countries where social enterprises integrate a large proportion of persons with disabilities include Italy, Germany, and Spain. Social enterprises have great potential to increase their employment opportunities. In France and Luxembourg, employment of persons with disabilities has increased in recent years thanks to the development of sheltered (supported) employment programs.

Examples of best practices in supporting social enterprises from state and regional authorities and public organizations include the following projects:

1. The Accessibility in Ireland project, which provides a package of services: training; advice on government-supported grants for the employment of persons with disabilities; advice on measures to stimulate the hiring of persons with disabilities above established quotas, etc.

2. The Fundación ONCE project in Spain provides for the implementation of sub-projects in various areas: promoting the full labor integration of persons with disabilities into the open labor market; improving professional qualifications, professional competencies and professional skills in order to increase the level of competitiveness of persons with disabilities; promoting the promotion of initiatives aimed at developing the entrepreneurial talents of persons with disabilities (the Desafío Emprende and Emprende Talent Awards competitions). The activities being implemented are aimed at: increasing the independence of persons with disabilities; enhancing their motivation to work; and developing necessary skills within the framework of a supported employment regime.

Supported social employment varies across countries and includes the following key measures:

1. implementation of inclusive vocational training and skills development programs;

2. providing employment and mentoring services to support persons with disabilities in finding and maintaining employment;

3. organization of specially equipped workplaces that ensure the effective performance of their work duties by employees with disabilities;

4. promoting inclusive hiring practices and raising awareness of the benefits of employing persons with disabilities with varying degrees of disabilities;

5. supporting self-employment and entrepreneurship initiatives for persons with disabilities through the provision of adequate financial assistance, the development of training programs and the organization of supervised mentoring.

Assisting persons with disabilities in improving their qualifications and vocational training. Professional support and job-oriented training (both for finding and performing work) are essential for integrating persons with disabilities into the workforce.

Creating mechanisms to incentivize employers to increase employment rates for persons with disabilities. Employer incentive mechanisms developed in EU countries over the past decade are aimed not only at increasing the employment of persons with disabilities but also at creating an inclusive workplace. In most cases, legislatively defined incentive measures take the form of financial benefits to offset the anticipated

or actual increase in employer costs that may arise when hiring persons with disabilities.

In Germany, the government has developed compensation measures for organizations (both public and private) to cover the anticipated costs associated with the low productivity of persons with disabilities. The amount of compensation typically depends on the organization's projected financial losses, the need for continuing education courses, adaptation measures, and mentor salaries. In some cases, support of up to 70% of the disabled person's salary is possible, but payments are provided for a maximum of 24 months. People with particularly severe disabilities, such as those who have left sheltered workshops, can receive support for 60 months.

Employers can support persons with disabilities in employment and career advancement by implementing the following strategies:

1. implement reasonable accommodations for individuals with disabilities in the workplace to ensure equal access to employment opportunities and performance of duties through the provision of assistive technology, modified work schedules, or additional equipment in the workplace;

2. support employees with disabilities by providing training and retraining opportunities that will help them acquire new skills and advance their careers. This may include new specialized on-the-job training programs, mentoring programs, supervision, and access to remote professional development resources;

3. create a supportive and inclusive work environment in which persons with disabilities can realize their skills and professional abilities. This may include: promoting diversity and inclusion initiatives; offering support services, such as counseling or mental health resources;

4. encourage open communication with employees with disabilities to understand their needs and preferences for performing their duties in the workplace. This can help identify potential barriers to success and develop individualized solutions to support the career development of employees with disabilities.

Adaptation, support, and mentoring for persons with disabilities occupy an important place among measures to promote employment. The process of adapting a person with disabilities to the workplace can be accompanied by material support (providing various aids and support staff, adapting the workplace to the person's needs) or non-material support (adjusting work hours and arranging remote work). This support can range from one-time support to comprehensive and periodic assistance.

Most countries have achieved the goal of integrating persons with disabilities into the workplace, in accordance with the provisions of the Convention on the Rights of Persons with Disabilities and other international organizations. In recent years, the adoption of anti-discrimination laws and quota laws, which require employers to reserve a certain percentage of jobs for persons with disabilities, has accelerated. Many countries have developed and strengthened national mechanisms for promoting, protecting, and monitoring measures to ensure the right to work and promote the employment of persons with disabilities (e.g., adopting strategies; developing monitoring and sociological research systems; information campaigns; establishing interdepartmental bodies and councils, etc.).

In most countries, the implementation of measures to promote employment for persons with disabilities is based on the following: amendments to legislative and other regulatory documents; harmonization of rules for ensuring access to infrastructure (transportation, information and communications, work, etc.); the creation of conciliation commissions at the regional and local levels to support various projects and initiatives in the area of employment of persons with disabilities.

Overall, promoting the integration of persons with disabilities into the open labor market requires a multifaceted approach that addresses barriers at the individual, organizational, and systemic levels. At the individual level, it is important to provide comprehensive support so that persons with disabilities can demonstrate their skills. At the systemic level, there is a need to implement government measures to promote equal opportunity, anti-discrimination measures, and incentives for employers to hire this category of people.

As an analysis of international practices has shown, the primary goal of national and regional programs (projects) supporting employment and promoting the employment of persons with disabilities (including people with severe mental disabilities) is to develop a comprehensive incentive mechanism for employers. Incentive instruments primarily include wage subsidies, reimbursement of training costs, discounts on social security contributions, and the provision of loans, grants, and other incentives.

Targets for the employment of persons with disabilities in foreign countries primarily focus on creating a more inclusive and accessible labor market through preventive measures, diversifying labor market structures, and improving access to employment opportunities. Furthermore, crucial aspects of this policy include raising awareness and developing new opportunities for workplace "protection" for workers with disabilities of varying severity.

The use of foreign technologies to promote employment for persons with disabilities in domestic practice will enable the transition of services for employment, adaptation, and training for persons with disabilities to a " proactive " format.

Control task within the framework of current monitoring of academic performance

Sample topics for papers:

1. History of the development of inclusive processes in society in Russia and abroad.

2. Philosophical approach to inclusive issues.

3. Dynamics of the conceptual and categorical apparatus in psychological and pedagogical studies of the problem of inclusion/integration.

4. The social essence of a person in the context of inclusive education.

5. Tolerance in relationships in an inclusive environment. Tolerance and communication culture.

6. Basic ideas and principles of the educational strategy for developing tolerance.

7. Analysis of the biography of a famous person with a disability and/or limited health capacity (the person and their field of activity are chosen by the student).

8. Evolution of the attitude of the state and society towards individuals with developmental disabilities.

9. Prevalence of disability in Russia.

10. Inclusive employment practices.

11. Inclusive employment: adaptation of workplaces and barriers to employment for Russian persons with disabilities.

12. Inclusive employment: guarantees and problems.

13. Inclusive Environment Design Issues

14. Inclusive art

15.Problems of employment of persons with disabilities.

16. Barriers and risks in the implementation of social and professional inclusion

17. Ethical aspects of interaction in the professional sphere.

18. Extrability as a Phenomenon of Inclusive Culture

19. Features of career guidance and employment of persons with visual impairments.

20. Features of career guidance and employment of persons with hearing impairments.

21. Features of career guidance and employment of persons with speech impairments.

22. Specifics of socialization, career guidance and employment of persons with consequences of injuries and amputations of organs of the musculoskeletal system.

23. Typical features of career guidance and employment of persons with cerebral palsy.

24. Specifics of socialization, career guidance and employment of persons with mental retardation.

25. Specifics of socialization, career guidance and employment of persons with mental retardation.

26. Supported employment programs for people with... (the type of disability is chosen by the student).

27. Inclusive business models: problems and prospects.

28. Inclusive entrepreneurship as a vector of business development.

Appendix 1

Accessibility Diagnostic Map for Persons with Disabilities

Name of the object_____

Location address_____ _____

Inspection date _____

* Types of barriers:
Ph – physical
O – organizational
I — informational
**LMP – low-mobility population groups

Significant environmental barriers for all categories of persons with disabilities

Significant environmental barriers	Type	Mark	Illustration
Lack of information and navigation at the facility for LMP (violation of requirements – being far from the entrance, in an inaccessible place, etc.) – signs indicating accessible areas and directions	I O		
Violation of lighting of places and routes of movement	Ph I		
Lack of information (on the website and information media at the facility) on the procedure for servicing and providing assistance to persons with disabilities (LMP)	I O		
Lack of organization of evacuation routes and information for persons with disabilities (LMP) about emergency situations and emergency notifications	I O		
Lack of means (buttons) for calling personnel in closed spaces and lack of organization of assistance to persons with disabilities (LMP) on the part of employees	Ph I O		
Incompetence of staff in matters of communication and providing assistance to persons with disabilities (LMP)	O		

Table 2

Significant barriers and ways to overcome them for wheelchair users

Significant environmental barriers	Type	Mark	Illustration
Insufficient width of the clear path of movement (including a narrow corridor, passage, driveway, doorway) — not less than 1.2 m (at the narrowest point, a reduction to 0.9 m is allowed)	Ph		
Uneven pavement, loose surface, large slope of traffic routes (slope of exit is more than 10% — 6)	Ph		
No duplication of stairs with ramps or lifting devices	Ph		
Abnormal height difference on traffic paths (curbstone (more than 0.04 m))	Ph		
Substandard ramp (slope, width, surface, no horizontal area between ramp flights)	Ph		
Lack of (violation of requirements) handrails on ramps	Ph		
Lack (violation of requirements) of designated parking spaces for disabled vehicles	Ph I O		
The door closer is not functioning (not adjusted)	Ph		
The small size of the vestibule and the presence of doors opening in different directions, towards each other	Ph		
High placement of information, devices, counters	Ph I		
There is no area for independent wheelchair turning	Ph		
There are no designated areas in the halls with permanent seats	Ph		

Significant environmental barriers	Type	Mark	Illustration
for wheelchair users.			
Insufficient dimensions of the cabin in the sanitary and hygienic room	Ph		
Lack of (insufficient) free space near the toilet	Ph		
Lack of grab bars near the toilet	Ph		
Lack of space under the sink	Ph		

Table 3.

Significant barriers and ways to overcome them for people with visual impairments (in case of complete loss – blindness/in case of partial impairment)

Significant environmental barriers	Type	Mark	Illustration
Lack of tactile information that performs informative, guiding and warning functions on traffic routes (in the adjacent territory, on traffic routes inside the building)	Ph I		
Absence (violation of regulatory requirements) of handrails on stairs and ramps; lack of tactile markings of floors	Ph		
On information signs, boards, diagrams, stands, symbols, and buttons in elevators.	Ph I		
Access to the facility and the waiting area for the guide dog is not organized.	O		
No information about the location of items in sanitary facilities. handrails and hooks for canes	Ph		
Absence (violation of requirements) of contrasting markings of obstacles appearing on the paths of movement (thresholds, steps of stairs, transparent door panels, columns, etc.), as well as internal equipment	Ph I		
On information signs, boards, diagrams, and symbols – the use of signs of insufficient size, insufficient contrast, and insufficient illumination	Ph I		

Table 4.

Significant barriers and ways to overcome them for people with hearing impairments (in case of complete loss – deafness/in case of partial impairment)

Significant environmental barriers	Type	Mark	Illustration
Insufficiency (absence of) visual information)	I Ph		
Disorganization (if necessary) of sign language interpreters, tactile sign language interpreters, or the admission of a sign language interpreter, tactile sign language interpreter when providing services	I O		
Lack of visual (including light) duplication of audio information	I		
The presence of interference for people using hearing aids (external noise, radio and electromagnetic)	I O		

Table 5.

Significant barriers and ways to overcome them for people with intellectual disabilities

Significant environmental barriers	Type	Mark	Illustration
Lack (insufficiency) of understandable information, information in simple language; difficulties in orientation due to ambiguous information	I		
Lack of fencing of hazardous areas; absence (if necessary) of personnel escort	Ph I O		

References

1. Almazov B. N. *Psikhologicheskie osnovi pedagogicheskoi reabilitatsii* [Psychological Foundations of Pedagogical Rehabilitation]. Yekaterinburg, 2000. 310 p. (in Russian).

2. Ardzinba, V. A. Inklyuzivnoe obrazovanie invalidov v Soedinennikh Shtatakh Ameriki [Inclusive Education of People with Disabilities in the United States]. *Psikhologicheskaya nauka i obrazovanie* [Psychological science and education]. 2010. Moscow, Vol. 5, No. 5, pp. 23–29 (in Russian)

3. Bekhterev, V.M. *Obektivnaya psikhologiya* [Objective Psychology]. Moscow Moscow Science,1991. 480 p.

4. Bogdanova, T. G. *Inklyuzivnoe obuchenie lits s sensornimi narusheniyami : uchebnik dlya vuzov* [Inclusive Education of Individuals with Sensory Impairments: Textbook for Universities] Moscow, Publishing house Yurait, 2023. 224 p. (in Russian).

5. Borisova N. A., Denisova O. A*., Osnovi inklyuzivnoi kulturi: uchebnoe* [Basics of Inclusive Culture: Textbook]. Cherepovets, 2021. 214 p. (in Russian).

6. Vishnyakova Y. A. *Sotsialnii marketing. Inklyuzivnie formi : uchebnoe posobie dlya vuzov* [Social Marketing. Inclusive Forms: Textbook]. Moscow, 2023. 140 p. (in Russian).

7. Godovnikova L. V. *Psikhologo-pedagogicheskoe soprovozhdenie obuchayushchikhsya s OVZ: uchebnoe posobie dlya vuzov* [Psychological and Pedagogical Support for Students with Disabilities: Textbook]. Moscow, 2023. 218 p. (in Russian).

8. Deniskina, V. Z. *Osobennosti zritelnogo vospriyatiya u slepikh, imeyushchikh ostatochnoe zrenie* [Features of Visual Perception in the Blind with Residual Vision]. Defectology [Defektologiya], 2011, no. 5, pp. 56–64 (in Russian)

9. Zeigarnik B. V. Zadachi i metody eksperimentalno-psikhologicheskogo issledovaniya v psikhonevrologicheskikh uchrezhdeniyakh. [Tasks and *Methods of Experimental Psychological Research in Psychoneurological Institutions]. Voprosy kliniki nevropsikhologicheskikh zabolevaniy i organizatsii psikhonevrologicheskoy pomoshchi* [Questions of Clinic of Neuropsychic Diseases and Organization of Psychoneurological Care], 1959, vol. 19, pp. 68–74 (in Russian).

10. Kazarenkov V. I., Kazarenkova T. B. *Sotsiologiya upravleniya: konflikt* [Sociology[Sociology of Management: Conflict]. Moscow, 2000. 43 p. (in Russian).

11. Mikhalchi E. V. Inklyuzivnoye obrazovaniye [Inclusive Education]. Moscow, 2026. 172 p. (Higher Education) (in Russian).

12. Pristupa E. N. *Sotsialnaya rabota s litsami s ogranichennymi vozmozhnostyami zdorovia* [Social Work with Persons with Disabilities]. Moscow, 2018. 159 p. (Higher Education: Bachelor) (in Russian).

13. Kohan S. T., Pateyuk A. V. *Sovremennyye podkhody k obucheniyu studentov s narusheniyem slukha* [Modern Approaches to Teaching Students with Hearing Impairments]. Chita, 2021. 143 p. (in Russian).

14.Selivanova O. A. *Sotsialnaya inklyuziya* [Social Inclusion]. Tyumen, 2020. 174 p. (in Russian).

15. Ivanova O. V. *Sotsialnaya inklyuziya v professionalnom obrazovanii* [Social Inclusion in Professional Education]. Saint Petersburg, 2022. 312 p. (in Russian).

16. Shabunova A. A. *Pozhilyye lyudi v sovremennom rossiyskom obshchestve* [Elderly People in Modern Russian Society: Preprint]. Vologda, 2015. 111 p. (in Russian).