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GENERAL CHARACTERISTICS OF PSYCHIATRIC DISORDERS IN OLDER PEOPLE WITH SPINAL CORD TUMORS (LITERATURE REVIEW)

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Abstract. *primary spinal cord tumors are combined with many independent tumors that develop from the spinal parenchyma, its roots, membranes, vertebrae and other structures, which are involved in the formation of the spinal canal, differing in localization, histological structure, clinical development and course prognosis. According to the International Classification of diseases, 10 revisions (ICD 10) distinguish primary spinal cord tumors as benign, malignant histological structure, and cranial nerve spinal tumors.*

Key words: *Spinal tumors, neurosurgical and mental disorders, pathology of the nervous system in adults.*

ОБЩАЯ ХАРАКТЕРИСТИКА ПСИХИЧЕСКИХ НАРУШЕНИЙ У ЛЮДЕЙ ПОЖИЛОГО ВОЗРАСТА С ОПУХОЛЯМИ СПИННОГО МОЗГА (ЛИТЕРАТУРНЫЙ ОБЗОР)

Аннотация. *Первичные опухоли спинного мозга сочетаются со многими самостоятельными опухолями, развивающимися из паренхимы спинного мозга, его корешков, оболочек, позвонков и других структур, участвующих в формировании позвоночного канала, различающихся по локализации, гистологическому строению, клиническому развитию и прогноз курса. Согласно Международной классификации болезней 10 ревизии (МКБ 10) различают первичные опухоли спинного мозга как доброкачественные, злокачественные по гистологической структуре и опухоли черепно-мозговых нервов.*

Ключевые слова: *опухоли позвоночника, нейрохирургические и психические расстройства, патология нервной системы у взрослых.*

Introduction. Spinal cord tumors make up 2% of all neoplasms and 3% of the pathology of the nervous system in adults, compared to brain tumors, they occur in proportion 1:9 [1]. Most often, spinal tumors are observed in a socially active group of people aged 30-50 years, which determines the relevance of this problem.

Based on the data of statistical analysis of adults with spinal cord tumors in Crimea, the following distribution of neoplasms by localization was noted. Cervical tumors accounted for 19 %, thoracic – 47 %, lumbosacral-23%, kauda equina and terminal filament – 11%, corresponding to literature data [2].

More than 4/5 of all neoplasms are localized in the thoracic and lumbosacral parts of the spinal cord, and in women 2.5 times more than in men. Two main groups of tumors were

distinguished: 1) intramedules located inside the spinal substance; 2) extramedullary tumors that grow outside the spinal cord and cause its compression. Extramedullary tumors are extradural and subdural in relation to dura mater [3].

Diagnosis of spinal cord tumors included clinical and neurological examination in conjunction with additional examination methods. Contrast magnetic resonance imaging (MRI) was the main and mandatory modern stage of neuroimaging of spinal cord tumors. Other techniques such as spinal radiography, myelography, cerebrospinal fluid testing have been included in a comprehensive examination, but have been carried out according to guidelines [4].

It should be noted that the use of Mrtangiography allows the detection of spinal vascular neoplasms such as angioma and hemangioma in 6-13% of cases [5].

Extramedullary tumors are four times more frequent than intramedullary tumors, with neurin (1/3) and meningioma (1/4) predominating. Lipomas, angiomas, dermoid cysts, epidermoids, and teratomas are less common [5].

Among intramedullary tumors, ependymomas are most common (11-12% of the total number of neoplasms). Astrocytomas, oligodendrogliomas, glioblastomas and spongioblastomas accounted for 31% of all vertebrates, the most common being astrocytomas (second only to ependym) [6].

MRI was one of the most informative diagnostic methods [7]. The use of MRI made it possible to see the spinal cord and spine along its entire length and determine the location of the tumor. The accumulation of a contrast substance in the tumor stroma allows you to assess not only the spread of the tumor process, but also the histological structure of the tumor (Figure 1). With intramedullary tumors, MRI showed an increase in the volume of the spinal cord with rigid or cystic components of the neoplasm, often with uneven contours. In the tumor infiltration zone, altered sizes of spinal diameter sometimes increased by 1.5–2 times the normal shapes [8].

In extramedullary tumors, spinal compression was found in MRI, with the expansion of the subarachnoid space in the process zone, often with the destruction of spinal canal structures. Computed tomography in some cases helped to establish a differential diagnosis between extramedullary and intramedullary tumors with osteolytic or osteoblastic changes in the spine [9-11].

In patients with spinal neoplasms, a ligurological examination made it possible to identify changes in the structure of the cerebrospinal fluid characteristic of the tumor process: protein-cell dissociation, increased clotting of the cerebrospinal fluid with normal amounts of protein in the cerebrospinal fluid (greater than 0,45 g/l) cells (fruan – Nonne phenomenon). The longer the tumor, the higher the protein content in the cerebrospinal fluid [12-14].

Ligvorodynamic samples (Quekenstedt and Stukey) made it possible to determine the degree of transition of the subarachnoid space.

The most common radiological signs in spinal tumors were: calcification of the tumor; the presence of an Elsberg –Daik symptom (narrowing and flattening of the roots of the spine from pressure by the tumor); osteoporosis or osteosclerosis with the elimination of various parts of the spine [15].

In some cases, descending and ascending myelography was used to determine the upper and lower limits of the tumor. Contrast of the subarachnoid space combined with MRI or computed

tomography of water-soluble contrast agents allowed for a significant increase in the quality of diagnosis of spinal cord tumors, particularly extramedullary tumors [16].

Despite the fact that the clinical picture of spinal tumors is very diverse in their onset and direction, regardless of their histological structure and localization, the progressive course is widespread, sometimes combined with remissions. Extramedullary tumors were characterized by three stages of disease development: 1) radicular; 2) Brown-Secar syndrome; 3) paraparesis or paraplegia.

The initial or radicular stage is characterized by an increase in severe pain in the area of localization of the tumor. Most often, the source of pain is irritation of the spinal roots of the spinal cord. With tumors localized in the cervical spine and tail region, the most severe pain occurs. At the level of the upper chest, the neoplasm is often accompanied by moderate root pain [17-22].

The brown-Secar stage is characterized by the presence of a central paresis on the side of the tumor and impaired muscle-articular feeling, tactile and vibrational sensitivity. The violation of the types of superficial sensitivity is determined against: pain, temperature and less touch. The brounsecar stage is replaced by the paraparesic stage [23].

The paraparesis (paraplegia) stage is the longest. Local neurological symptoms during this period depend on the degree of location of the tumor. At this stage, the average duration of the clinical course with extramedullary tumors is 2-3 years, with cauda equina neoplasms – up to 10 years or more [24].

Intramedullary tumors were characterized by diseases of the cervix or lumbar thickening, radicular pain and dissociated sensitivity.

Pain syndrome is also observed in intramedullary tumors, but in contrast to extramedullary tumor root pain for intramedullary tumors, pain syndrome is characterized by definitions such as "pain", "break", or "bite" in the Torso or extremities [25].

Conductive is a reducing type of sensitivity, while with extramedules it is paresthesia and loss of upward sensitivity. These disorders are based on the law of the eccentric arrangement of long conductors in the spinal cord [26].

Dysfunction of the pelvic organs was due to the degree of spinal compression, which manifested relatively late in cervical thickening with the localization of intramedullary tumors [27].

The characteristic clinical picture of intramedullary tumors was muscle atrophy caused by damage to the anterior spinal cord, but with less muscle spasticity than extramedullary tumors [28].

Extramedullary tumors affecting the posterior surface of the spinal cord have led to the early occurrence of conductive disorders of muscul-articular sensation, vibration and two-dimensional sensitivity. Posterolateral localization of extramedullary tumors was manifested by pain radicular syndrome, a zone of hypesthesia in this area, followed by a complete loss of sensitivity. The initial period of radicular pain with previous localization tumors was often absent with characteristic conductive paresis and subsequent impairment of surface sensitivity [29-32].

Cervical spinal tumors were manifested by sluggish paresis or paralysis in the upper extremities, and Central paresis (paraplegia) in the lower part, impaired sensitivity below the level of injury [33].

The thoracic tumor was characterized by motor disorders of the Central type, with sensitivity disorders below the level of injury. Lumbar thickening tumors (L1 – S2) were manifested by sluggish paresis of the lower extremities, loss of sensitivity from the level of localization of the tumor. Brain cone tumors (S3 – S5) were accompanied by loss of sensitivity in the area of the buttocks, perineum and external genital organs. Peripheral-type pelvic dysfunction (urinary incontinence, stool) has been reported [34-37].

In the practice of Neurosurgery, a topographic and anatomical classification of primary spinal tumors is used: I. in relation to the spinal cord, tumors are divided into two main groups: the spinal cord causes compression.outside-these are extramedules in the spinal substance itself and intramedullary tumors that cause compression [38].

Extramedullary tumors of the spinal cord are classified relative to dura mater: intra and extradural, located in the subdural and extradural location, but with extravertebral growth [39].

Also, extramedullary tumors are divided along the spinal cord: dorsal localization, lateral, dorzo-lateral, ventral and ventrolateral localization.

II. According to the degree of spinal localization, spinal tumors are divided into: tumors at the level of the upper cervical vertebrae (C1-C4) and the lower neck (C5 - Th1). tumors at the level of the thoracic vertebrae (Th2-Th10) and lower thoracic and first lumbar (Th 11 - L1). Cauda equina tumors (L2 - S5).

Epidemiological and statistical studies around the world usually focus on dangerous situations in various structures of the central nervous system for this reason, there is no real data on benign neoplasms of the spinal cord and the central nervous system in general [40-43].

Despite several projects in the world to study neoplasms of the central nervous system, epidemiological data of primary spinal cord tumors are poorly studied, there are no single indicators that indicate the actual frequency and growth of primary spinal tumors. There are several reports in the scientific literature devoted to the study of the epidemiology of primary tumors of the spine, and research data vary widely, as primary tumors of the spine have been studied as part of all tumors in different countries, regions and places.Central nervous system or localization and in separate nosological forms depending on age groups [44-47].

According to foreign and domestic literature, primary spinal cord tumors account for about 4-16 percent of all tumors originating from the central nervous system [48]. Based on the results of long-term, randomized work carried out in countries with high economic growth, the incidence rate of primary tumors of the spine is highest. According to some authors of primary spinal tumors, there is a basic localization with age, therefore, in childhood and adolescence, more than half of tumors are diagnosed in the upper cervix of the spinal cord and cauda equina roots, in the elderly and elderly - almost 90% are located in the thoracolumbar spinal cord [49]. In patients aged 20-50 years, more than 50% of primary tumors of the spine are located in the thoracic region, up to 20% are diagnosed in the cervical region, and 30% of tumors are located in the lumbar spinal cord [50].

Spinal tumors dissolve from the whitest substance intramedullary tumors make up 30-50% of primary spinal tumors, but at the same time no more than 3% of all central nervous tumors. They are most often manifested in childhood (up to 35%), and extramedules in adults [51]. The rate of occurrence of the population is on average 0,5 in females and 0,3 per 100,000 inhabitants per year in males. It is known that intramedules are represented by low levels of gliomas in which

90% of primary spinal cord tumors can be successfully removed. The most common primary spinal tumors among intramedullary spinal tumors are ependymoma (63-65%) cases, astrocytomas (24-30%) cases, and at the same time 4/5 of all intramedullary spinal tumors. Other major spinal cord tumors such as glioblastoma (7,5%) occur in cases, oligodendroglioma (3%) in cases, and the remaining tumors (2%) in cases [51-54]. Some imo has been associated with genetic disorders such as hemangioblastomas and GIPPEL-Lindau disease (Von HippelLindau disease – VHL), which causes Type 2 neurofibromatosis (NF-2). Intramedullary tumors are observed in 19% of patients with NF2 and 20% in VHL [55].

Modern methods of pain relief, microsurgical techniques, endoscopic equipment allow you to remove a spinal tumor at any level and at almost all stages of the tumor process [56].

Surgical treatment included two steps: spinal access and tumor removal. Access is by laminectomy as part of tumor localization or hemilaminectomy. With a tumor of the vertebral body, individual parts of the vertebral body can be resected. Contraindications during surgery, a patient with impaired respiratory and cardiovascular system function was in critical condition.

Extramedules the removal of the tumor begins at the poles and frees it from the surrounding adhesions. If the tumor is subdural, then the dura mater (TMO) opens along the midline. The tumor is often soldered with TMO and sometimes with the spinal cord.

Ependymoma of all glial intramedullary spinal neoplasms accounts for up to 65% of adults and over 10% of all spinal cord tumors.

There are various histological subtypes of ependim, and most of them can be included in the second type of malignancy classified by the who.

A number of authors claim that endomedular ependymomas can be classified as extramedullary tumors, and up to 40% among spinal ependymomas. However, according to literary data, spinal subependimomas can be diagnosed very rarely and often in combination with neurofibromatosis type II [57].

Among Imo, astrocytoma is the second largest in the adult population, and up to 30% after epindem. By the age of 10, astrocytomas reach up to 90% of all glial spinal cord tumors, and this percentage is significantly reduced to 50% by the age of 15 [58]. Among the astrocytomas of the spinal cord, about 75% - benign and 25% - malignant tumors occur.

Hemangioblastomas (gab) are rarely small benign, multi-vascularized single neoplasms extending beyond one or two segments, often located on the posterior or posterolateral surface of the spinal cord. Among all spinal imo, gab is 3-8% and in about 30% of cases is associated with other diseases such as von Hippel-Lindau disease. These tumors are often identified (40-60%) in cases with spinal cysts, which are large in size and are located in the diameter of the solid component of the tumor tissue [59].

The most common (90%) of spinal cord tumors are extramedular localization, with 1,2 cases diagnosed per 100,000 inhabitants per year. Tumors such as neurinoma, Neurofibroma, meningioma occur in 80% of all extramedullary spinal tumors of intradural localization [60].

In a comprehensive study of 1,322 patients with spinal intradural tumors at the Mayo Clinic, most patients identified neuroma (29%) and meningiomas (26%), 22% intramedullary gliomas, 12% extradural sarcoma, hemangioblastoma, chordoma, epidermoid cysts [61].

Intradural extramedullary tumors, meningiomas ranged from 16,6 to 33% in children and 60% in elderly patients. Depending on age groups, neuromas accounted for 25-50% of all tumors, 25% in elderly patients,and no more than 10-11,1% in children [62].

Meningiomas are slow-growing tumors from arachnoid membranes, soft and hard shell cells, often found in middle and elderly people between the ages of 50 and 70, in childhood these tumors are almost not found (no more than 3%), among patients they are more common in women (75-83%). A study of 7,148 patients in the United States from 2004 to 2010 found that the majority of spinal meningiomas (96,1%) were who in class I, then who in Class II (2,5%) and who in Class III (1,4%). Several meningiomas combined with Type 1 neurofibromatosis (NF i) range from 1-2% [63].

Tumors in spinal nerve roots account for about 25% -30% of all extramedullary spinal tumors in adults and 14% in children [13]. Neuroma is more common in middle-aged patients (ages 30-50), while meningiomas are more common in middle-aged and elderly people.patients [64-67].

In children, dysembriogenetic tumors (lipomas, dermoids, epidermoids, teratomas) are more common (up to 5%) than in other age groups, and in adults they make up less than 2% of spinal tumors and are often located in the lumbar part of the spinal canal. The embryonic origin of these neoplasms leads to a frequent association of the tumor with other birth defects in the development of the spine and spinal cord.

Extradural primary tumors of the spinal cord. Currently, most authors consider that the group of primary tumors of the spine includes extradural spinal tumors. The characteristics of primary extradural tumors compared to Intradural tumors are their histogenetic diversity, large size, dominance of malignant forms, and pronounced structural changes of the vertebrae. According to some data, extradural neoplasms make up 32% of all extramedullary tumors [68-74].

Hemangiomas occupy a special place among spinal cord tumors-they occur in 8.9 to 12.5% of autopsies and in a very low percentage of clinically identified cases. Up to 66% of these tumors occur in one vertebral lesion and 34% in most cases, often localized in the thoracic spine – in (60%) cases, (30%) cases localized in the cervix and (10%) cases localized in the sacral spine [75-79].

Among bone tumors, osteochondroma is most commonly diagnosed (36%) in cases and does not exceed 10% of all osteochondromas. It is detected in 75% of cases in young people under 20 years of age, almost always localized in the projection of spinous processes [80-84].

Also, in the group of bone benign tumors, osteoid-osteoma is noted, which is diagnosed in 11-12% of all tumors in the spine. In the works of a number of authors, changes in the structure of the spine with osteoid osteoma were recorded up to 20-30%, with osteoblastoma - up to 40-45%, in men it is detected 2 times more often than in women and manifests itself mainly at a young age [85-89].

Of all malignant spinal tumors, chordoma only occurs more often in the spine, not exceeding 5% of all primary malignant bone tumors and 20% of malignant tumors in the spine [90].

Conclusions. thus, primary tumors of the spine are a relatively rare pathology, but they cause great social and economic damage to society due to their impact on working-age children

and adults. It should be noted that despite the increase in tumors of the central nervous system in recent decades, according to literary data, there is no single information about the epidemiological indicator of primary tumors of the spinal cord, and those with information are contradictory. Epidemiological indicators of spinal primary tumors in the Kr area have not been studied, which indicates the need to create Centers for the study of pathologies. Central nervous system. All of the above allowed us to consider this study relevant for our country.

Intramedullary tumors were often able to be partially or subtotally removed within their borders using an ultrasonic Cleaver. Cystic intracerebral tumors were removed with the opening and aspiration of the cyst contents.

Excessive radicalism in intramedullary tumors, in addition to the removal of ependymomas, can lead to a deep loss of all functions of the spinal cord in the postoperative period. Tropho-paralytic complications that occur in this regard (pneumonia, pressure ulcers, inflammatory changes in the urinary system) lead to negative consequences for the development of the disease.

Extramedullary tumors are four times more common in adults than intramedullary tumors, with predominance of anterior and anterior neurin and meningiomas with characteristic neurological manifestations of pain syndrome, motor and sensory disorders, especially in the cervical region. The radicality of surgical treatment of tumors depends not only on the location and size of the tumor, but also on its histological structure, and is 95% for neurinomas and meningiomas in the considered contingent of patients. The radicality of ependymome removal was 43% and is virtually absent in astracitomas and glioblastomas, which is N. N. According to the Burdenko Institute of Neurosurgery, the treatment results are consistent: recovery is in 43%, improvement is in 19%, postoperative mortality is in 16%, unchanged is in 7%, relapses are in 5%. The use of videoendoscopic techniques in some cases increases the radicality of operations and reduces the number of postoperative complications.

REFERENCES

1. Abdurashidovich N. O., Zamonbek o‘g‘li B. F., Temirpulotovich T. B. Assessment of the relationship of the degree of conformity in patients with schizophrenia with clinical features and socio-demographic factors //european journal of modern medicine and practice. – 2024. – T. 4. – №. 2. – C. 22-30.
2. Abdurazakova Robiya Sheraliyevna,Turaev Bobir Temirpulatovich 2023. Characteristic features of affective disorders in children with autism. Iqro jurnali. 2, 2 (Apr. 2023), 722–727.
3. Allambergenov A. J. et al. Postcovid syndrome and its neuropsychiatric consequences after covid-19 in patients with alcoholism //European Journal of Interdisciplinary Research and Development. – 2023. – T. 11. – C. 42-46.
4. Antsiborov S. et al. Association of dopaminergic receptors of peripheral blood lymphocytes with a risk of developing antipsychotic extrapyramidal diseases //Science and innovation. – 2023. – T. 2. – №. D11. – C. 29-35.
5. Asanova R. et al. Features of the treatment of patients with mental disorders and cardiovascular pathology //Science and innovation. – 2023. – T. 2. – №. D12. – C. 545-550.

6. Asliddinovich M. O. et al. Psychological characteristics of patients with gastrointestinal diseases //IQRO. – 2023. – T. 3. – №. 1. – C. 225-230.
7. Begbudiyev M. et al. Integration of psychiatric care into primary care //Science and innovation. – 2023. – T. 2. – №. D12. – C. 551-557.
8. Bo'Riyev B. et al. Features of clinical and psychopathological examination of young children //Science and innovation. – 2023. – T. 2. – №. D12. – C. 558-563.
9. Borisova Y. et al. Concomitant mental disorders and social functioning of adults with high-functioning autism/asperger syndrome //Science and innovation. – 2023. – T. 2. – №. D11. – C. 36-41.
10. Hamidullayevna X. D., Temirpulatovich T. B. Clinical and psychological features of alcoholism patients with suicidal behavior //IQRO. – 2023. – T. 1. – №. 2. – C. 711-720.
11. Holdorovna I. M., Murodullayevich K. R., Temirpulotovich T. B. Problems of consciousness disorder in modern psychiatry //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 20-27.
12. Holdorovna, I.M. and Temirpulatovich, T.B. 2023. Features of Psychopharmacotherapy in Patients with Severe Mental Disorders. Scholastic: Journal of Natural and Medical Education. 2, 7 (Jul. 2023), 40–46.
13. Holdorovna, I.M. and Temirpulatovich, T.B. 2023. Optimization of complex methods of treatment of patients in schizophrenia. Journal of education, ethics and value. 2, 8 (Aug. 2023), 59–67.
14. Holdorovna, I.M. and Temirpulatovich, T.B. 2023. The Role of the Family in the Formation of Internet Addiction. Scholastic: Journal of Natural and Medical Education. 2, 7 (Jul. 2023), 10–15.
15. Ivanovich U. A. et al. Efficacy and tolerance of pharmacotherapy with antidepressants in non-psychotic depressions in combination with chronic brain ischemia //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 409-414.
16. Konstantinova O. et al. Clinical and psychological characteristics of patients with alcoholism with suicidal behavior //Science and innovation. – 2023. – T. 2. – №. D11. – C. 399-404.
17. Konstantinova O. et al. Experience in the use of thiamine (vitamin B1) megadose in the treatment of korsakov-type alcoholic encephalopathy //Science and innovation. – 2023. – T. 2. – №. D12. – C. 564-570.
18. Kosolapov V. et al. Modern strategies to help children and adolescents with anorexia nervosa syndrome //Science and innovation. – 2023. – T. 2. – №. D12. – C. 571-575.
19. Lapasovich B. S., Usmanovich O. U., Temirpulatovich T. B. Алкоголизмга чалинган беморларда турли дори воситаларни суиистеъмол қилишининг клиник хусусиятлари //Journal of biomedicine and practice. – 2023. – T. 8. – №. 4.
20. Lomakin S. et al. Features of electroencephalographic disorders in patients with mental disorders due to brain damage or dysfunction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 367-372.
21. Lomakin S. et al. Socio-demographic, personal and clinical characteristics of relatives of patients with alcoholism //Science and innovation. – 2023. – T. 2. – №. D12. – C. 278-283.
22. Malakhov A. et al. Problems of prevention of socially dangerous behavior by individuals with mental disorders //Science and innovation. – 2023. – T. 2. – №. D11. – C. 405-412.

23. Murodullayevich K. R., Holdorovna I. M., Temirpulotovich T. B. The effect of exogenous factors on the clinical course of paranoid schizophrenia //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 28-34.
24. Murodullayevich K. R., Temirpulatovich T. B., Holierovna K. H. Social assistance in patients with phobic anxiety disorders //Iqro jurnali. – 2023. – T. 2. – №. 2. – C. 408-413.
25. Nematillayevna S. D. et al. Features of non-psychotic diseases and cognitive disorders in organic brain damage of vascular genesis in elderly people //Amaliy va tibbiyot fanlari ilmiy jurnali. – 2024. – T. 3. – №. 2. – C. 124-130.
26. Nematillayevna S. D. et al. Psychological factors for the formation of aggressive behavior in the youth environment //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 404-408.
27. Nikolaevich R. A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 898-903.
28. Novikov A. et al. Alcohol dependence and manifestation of autoagressive behavior in patients of different types //Science and innovation. – 2023. – T. 2. – №. D11. – C. 413-419.
29. Ochilov U. et al. Factors of alcoholic delirium patomorphosis //Science and innovation. – 2023. – T. 2. – №. D12. – C. 223-229.
30. Ochilov U. et al. The main forms of aggressive manifestations in the clinic of mental disorders of children and adolescents and factors affecting their occurrence //Science and innovation. – 2023. – T. 2. – №. D11. – C. 42-48.
31. Ochilov U. et al. The question of the features of clinical and immunological parameters in the diagnosis of juvenile depression with" subpsychotic" symptoms //Science and innovation. – 2023. – T. 2. – №. D12. – C. 218-222.
32. Ochilov U. U., Turaev B. T., Zhumageldiev N. N. Peculiarities of the formation and course of alcoholism in persons with character accentuations and personality disorders //Bulletin of Science and Education. – 2020. – №. 10-4. – C. 88.
33. Pachulia Y. et al. Assessment of the effect of psychopathic disorders on the dynamics of withdrawal syndrome in synthetic cannabinoid addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 240-244.
34. Pachulia Y. et al. Neurobiological indicators of clinical status and prognosis of therapeutic response in patients with paroxysmal schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 385-391.
35. Pogosov A. et al. Multidisciplinary approach to the rehabilitation of patients with somatized personality development //Science and innovation. – 2023. – T. 2. – №. D12. – C. 245-251.
36. Pogosov A. et al. Rational choice of pharmacotherapy for senile dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 230-235.
37. Pogosov S. et al. Gnostic disorders and their compensation in neuropsychological syndrome of vascular cognitive disorders in old age //Science and innovation. – 2023. – T. 2. – №. D12. – C. 258-264.
38. Pogosov S. et al. Prevention of adolescent drug abuse and prevention of yatrogenia during prophylaxis //Science and innovation. – 2023. – T. 2. – №. D12. – C. 392-397.
39. Prostyakova N. et al. Changes in the postpsychotic period after acute polymorphic disorder //Science and innovation. – 2023. – T. 2. – №. D12. – C. 356-360.
40. Prostyakova N. et al. Changes in the postpsychotic period after acute polymorphic disorder //Science and innovation. – 2023. – T. 2. – №. D12. – C. 356-360.

41. Rotanov A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and innovation. – 2023. – T. 2. – №. D12. – C. 267-272.
42. Rotanov A. et al. Social, socio-cultural and behavioral risk factors for the spread of hiv infection //Science and innovation. – 2023. – T. 2. – №. D11. – C. 49-55.
43. Rotanov A. et al. Suicide and epidemiology and risk factors in oncological diseases //Science and innovation. – 2023. – T. 2. – №. D12. – C. 398-403.
44. Sedenkov V. et al. Clinical and socio-demographic characteristics of elderly patients with suicide attempts //Science and innovation. – 2023. – T. 2. – №. D12. – C. 273-277.
45. Sedenkov V. et al. Modern methods of diagnosing depressive disorders in neurotic and affective disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 361-366.
46. Sedenkova M. et al. Basic principles of organizing gerontopsychiatric assistance and their advantages //Science and innovation. – 2023. – T. 2. – №. D11. – C. 63-69.
47. Sedenkova M. et al. Features of primary and secondary cognitive functions characteristic of dementia with delirium //Science and innovation. – 2023. – T. 2. – №. D11. – C. 56-62.
48. Sharapova D. et al. Clinical and socio-economic effectiveness of injectable long-term forms of atypical antipsychotics in schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 290-295.
49. Sharapova D., Shernazarov F., Turayev B. Prevalence of mental disorders in children and adolescents with cancer and methods of their treatment //Science and innovation. – 2023. – T. 2. – №. D12. – C. 373-378.
50. Sharapova D., Shernazarov F., Turayev B. Social characteristics of patients with schizophrenia for a long time in combination with exogenous-organic diseases of the brain //Science and innovation. – 2023. – T. 2. – №. D12. – C. 284-289.
51. Solovyova Y. et al. Protective-adaptive complexes with codependency //Science and innovation. – 2023. – T. 2. – №. D11. – C. 70-75.
52. Spirkina M. et al. Integrated approach to correcting neurocognitive defects in schizophrenia //Science and innovation. – 2023. – T. 2. – №. D11. – C. 76-81.
53. Sultanov S. et al. Changes in alcohol behavior during the covid-19 pandemic and beyond //Science and innovation. – 2023. – T. 2. – №. D12. – C. 302-309.
54. Sultanov S. et al. Depression and post-traumatic stress disorder in patients with alcoholism after the covid-19 pandemic //Science and innovation. – 2023. – T. 2. – №. D11. – C. 420-429.
55. Sultanov S. et al. Long-term salbi effects of the covid-19 pandemic on the health of existing residents of alcohol addiction //Science and innovation. – 2023. – T. 2. – №. D11. – C. 430-438.
56. Sultanov S. et al. The impact of the covid-19 pandemic on the mental state of people with alcohol addiction syndrome //Science and innovation. – 2023. – T. 2. – №. D12. – C. 296-301.
57. Temirpulatovich T. B. Depressive disorders in alcohol recipients and its socio-economic consequences during the covid-19 pandemic //Web of Scientist: International Scientific Research Journal. – 2023. – T. 4. – №. 1. – C. 162-168.
58. Temirpulatovich T. B. et al. Alkogolizm bilan kasallangan bemorlarda covid-19 o'tkazgandan keyin jigardagi klinik va labarator o'zgarishlar //journal of biomedicine and practice. – 2023. – T. 8. – №. 1.

59. Temirpulatovich T. B. et al. Clinical Manifestations of Suicidal Behaviors as a Result of Depressive Disorders During Adolescence //Eurasian Medical Research Periodical. – 2022. – T. 8. – C. 55-58.
60. Temirpulatovich T. B. et al. Covid-19 pandemiyasi davrida ruhiy omillarning spirtli ichimliklarni iste'mol qilishga ta'siri //Journal of biomedicine and practice. – 2022. – T. 7. – №. 3.
61. Temirpulatovich T. B. et al. Covid-19 pandemiyasi vaqtida spirtli ichimliklarni iste'mol qiluvchi shaxslarda depressiv buzilishlarning tarqalishi //Journal of biomedicine and practice. – 2022. – T. 7. – №. 1.
62. Temirpulatovich T. B. et al. Prevalence of borderline personality disorder among people addicted to alcohol and drugs //IQRO. – 2023. – T. 2. – №. 2. – C. 395-400.
63. Temirpulatovich T. B. et al. Study of the dominant signs of a manifest attack of schizophrenia with the use of psychoactive substances //IQRO. – 2023. – T. 2. – №. 2. – C. 388-394.
64. Temirpulatovich T. B., Sabrievna V. A. Effects of the Covid-19 Pandemic on the Frequency of Alcohol Abuse and Clinical and Psychopathological Features //Eurasian Medical Research Periodical. – 2022. – T. 8. – C. 68-71.
65. Temirpulatovich T. B., Uzokboyevich T. A. Biochemical Changes in the Liver After 64. Covid-19 Disease in Alcohol-Dependent Patients and Their Effects on the Course of Alcoholism //The Peerian Journal. – 2023. – T. 15. – C. 28-37.
66. Temirpulotovich T. B. et al. The Impact Of Medical And Social Factors On Alcohol Abuse In Patients With Alcoholism During The Covid-19 Pandemic //Journal of Pharmaceutical Negative Results. – 2022. – C. 8195-8200.
67. Temirpulotovich T. B. et al. Ways to Develop Speech and Overcome Them in Children With Cerebral Palsy //European journal of modern medicine and practice. – 2024. – T. 4. – №. 2. – C. 355-358.
68. Temirpulotovich T. B. Somatoform variant post-traumatic stress disorder //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 9. – C. 45-52.
69. Turaev B. the course of the disease during the covid-19 pandemic in patients with alcoholism //Science and innovation. – 2022. – T. 1. – №. D8. – C. 130-134.
70. Turaev B., Velilyaeva A. Formation and course of alcoholism in young women with alcoholic psychosis //Eurasian Journal of Medical and Natural Sciences. – 2022. – T. 2. – №. 6. – C. 226-232.
71. Turaev Bobir Temirpulatovich 2023. Socio-demographic, personal and clinical characteristics of relatives of alcoholism patients. Iqro jurnali. 1, 2 (Feb. 2023), 685–694.
72. Turaev Bobir Temirpulatovich 2023. Ways to prevent negative disorders in schizophrenia. Iqro jurnali. 1, 2 (Feb. 2023), 35–44.
73. Turaev Bobir Temirpulatovich,Kholmurodova Hulkar Holierovna,Ochilova Nigina Ulug'bek qizi. Prevalence of borderline personality disorder among people addicted to alcohol and drugs. Iqro jurnali. 2, 2 (Apr. 2023), 395–400.
74. Turaev Bobir Temirpulatovich,Ochilova Nigina Ulug'bek qizi. "Study of the dominant signs of a manifest attack of schizophrenia with the use of psychoactive substances". Iqro jurnali, vol. 2, no. 2, Apr. 2023, pp. 388-94.
75. Turaev Bobir Temirpulatovich. "Clinical manifestations of anxiety depressions with endogenous genesis". Iqro jurnali, vol. 1, no. 2, Feb. 2023, pp. 45-54,

76. Turgunboyev Anvar Uzokboyevich, Turaev Bobir Temirpulatovich, Kholmurodova Hulkar Holierovna 2023. Clinical and psychological analysis of the risk of second admission of patients with psychoses of the schizophrenia spectrum to a psychiatric hospital. Iqro jurnali. 2, 2 (Apr. 2023), 380–387.
77. Uskov A. et al. Atypical anorexia nervosa: features of preposition and premorbid //Science and innovation. – 2023. – T. 2. – №. D12. – C. 310-315.
78. Uskov A. et al. Evaluation of the effectiveness of supportive therapy in the practice of outpatient treatment of schizophrenia with long term atypical antipsychotics //Science and innovation. – 2023. – T. 2. – №. D12. – C. 316-321.
79. Uskov A. et al. Psychological peculiarities of social adaptation in paranoid schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 379-384.
80. Usmanovich O. U. et al. Characteristic Features of Affective Disorders in Anxiety-Phobic Neurosis //European journal of modern medicine and practice. – 2024. – T. 4. – №. 2. – C. 251-259.
81. Usmanovich O. U. et al. Clinical and Psychological Characteristics of Affective Disorders in Children with Autism Disorders //European journal of modern medicine and practice. – 2024. – T. 4. – №. 2. – C. 260-267.
82. Usmanovich O. U. et al. Detection of adrenaline and stress conditions in patients using psychoactive substances with hiv infection //CUTTING EDGESCIENCE. – 2020. – C. 42.
83. Usmonovich, O.U. and Temirpulatovich, T.B. 2023. The influence of the presence of mentally ill children in the family on the psyche of parents. Journal of education, ethics and value. 2, 8 (Aug. 2023), 68–75.
84. Viktorova N. et al. Formation of rehabilitation motivation in the conditions of the medical and rehabilitation department of a psychiatric hospital //Science and innovation. – 2023. – T. 2. – №. D11. – C. 82-89.
85. Viktorova N. et al. Opportunities for comprehensive psychometric assessment of anxiety states in late-age dementia //Science and innovation. – 2023. – T. 2. – №. D11. – C. 90-96.
86. Xushvaktova D., Turayev B., Shernazarov F. Clinical features of mental disorders in synthetic drug users //Science and innovation. – 2023. – T. 2. – №. D10. – C. 242-247.
87. Xushvaktova Dilnoza Hamidullayevna ,Turaev Bobir Temirpulatovich 2023. Clinical and psychological features of alcoholism patients with suicidal behavior. iqro jurnali. 1, 2 (Feb. 2023), 711–720.
88. Xushvaktova Dilnoza Hamidullayevna ,Turaev Bobir Temirpulatovich 2023. Factors of pathomorphosis of alcoholic delirium. Iqro jurnali. 1, 2 (Feb. 2023), 721–729.
89. Очилов У. У., Тураев Б. Т., Хушвактова Д. Х. Распространенность когнитивных нарушений у пациентов с алкоголизмом //Вестник науки и образования. – 2020. – №. 17-2 (95). – С. 104-106.
90. Очилов У., Тураев Б., Алкаров Р. Клинические особенности депрессивных расстройств у подростков //Журнал вестник врача. – 2022. – Т. 1. – №. 4. – С. 75-77.
91. Тураев Б. Т. Маиший ичкиликбозлик муаммоси бўлган шахсларга ижтимоий омилларнинг covid-19 пандемиси даврида таъсири //Журнал биомедицины и практики. – 2022. – Т. 7. – №. 4.