

## Specific Characteristics And Prevalence of Mental Disorders in Oncological Diseases of The Lung And Gastrointestinal Tract

Rustamov U.T<sup>1</sup>, Tilavov M.T., Karimova S.SH<sup>2</sup>, Istamov M.B<sup>3</sup>, Jo'raev Sh.J<sup>4</sup>

<sup>1,2,3,4</sup>Bukhara State Medical Institute.

\*Corresponding author's E-mail: Rustamov U.T

| Article History                                                          | Abstract                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Received: 06 June 2023<br>Revised: 05 Sept 2023<br>Accepted: 30 Nov 2023 | <i>Mental disorders are more common in cancer patients than other somatic diseases, which reduces their flexibility and the quality of rehabilitation. The article describes the clinical characteristics of mental disorders in patients with various oncological diseases (lung, gastrointestinal tract cancer).</i> |
| <b>CC License</b><br>CC-BY-NC-SA 4.0                                     | <b>Keywords:</b> Depression, Organic Disorders, Mental Disorders, Hypochondria, Anxiety, Panic, Agitation                                                                                                                                                                                                              |

### 1. Introduction

(Global Cancer Observatory) According to Globocan, an interactive web-based cancer statistics platform, 8.2 million people worldwide die from cancer every year [2]. In 2016, 599,348 oncological diseases were diagnosed in the Russian Federation, the increase of this indicator compared to 2015 was 1.7% [5]. Cancer deaths among all causes. In Tomsk region, according to Tomskstat in 2010, 15,202 patients were registered with a malignant tumor for the first time in their lives, and in 2015, this figure increased to 18,413 [4]. In general, the morbidity and mortality rates in the Siberian Federal District the increase is from malignant tumors [17]. Although cancer control programs are being established, cancer continues to occupy the top five places in the world for the incidence of lung, colon and stomach cancer [3]. Thus, oncological diseases cause fear of death, disability, pain and helplessness among the population, serious psychological problems that can lead to psychological stress, long and severe mental disorders, personality changes and even suicide. In oncological pathology, adjustment disorder is often observed (up to 68% among respondents) and clinical depression (up to 13%) [8]. Anxiety and depressive disorders are usually more common in cancer patients than in their peers[9]. The etiology and pathogenesis of malignant tumors are not well understood. The hypothesis that psychosocial, immune or endocrine mechanisms can be determined, through which emotional factors can affect the growth or reduction of a possible tumor, has been discussed several times in the literature. In addition, many authors have expressed the opinion that mental disorders, in turn, affect the development of cancer [7, 12, 13, 14, 15]. Almost half of cancer patients suffer from postoperative depression or other psychological disorders. report difficulties in most cases are alleviated after a few months Stomatized patients face social, personal problems and an intimate life related to feelings Shame and embarrassment due to the possibility of leaking intestinal contents, which other, already adapted patients to overcome can best help [16]. Patients with lung cancer are characterized by severe anxiety, asthenia, and fear. In stomach and intestinal cancer, severe hypochondria can be observed [12].

Objective Of The Research: Study of clinical and psychopathological characteristics of patients diagnosed with cancer of different localization (gastrointestinal tract, lung cancer).

### 2. Materials And Methods

56 patients, 32 men and 24 women with malignant tumors of certain localization (lung, stomach, sigmoid, colon and rectum) were taken for observation. The age of the examined patients ranged from 28 to 76 years, the average age of the patients was 56.2±1.5 years. The study included patients in the thoracic-abdominal surgery department. The following methods were used in the work: clinical-psychopathological examination, clinical-psychological examination Hamilton depression scale (HADS-21) [18]. Statistical package "Statistica v.6.0" was used to process the obtained data.

### 3. Results and Discussion

The following distribution of patients according to the nosological structure was obtained: adjustment disorder (20% of cases), affective disorders (11%), organic mental disorders (15%), prenosological disorders (54%). The severity of depression assessed by the Hamilton depression scale was compared in patients with the following diagnoses: adjustment disorder ( $13.3 \pm 1.1$  points), affective disorders ( $12.8 \pm 2.2$  points), organic disorders ( $11.3 \pm 1.5$  points) ( $p > 0.05$ ), but it was statistically significantly more accurate compared to patients with prenosological disorders ( $6.3 \pm 0.4$ ,  $p < 0.05$ ). It was found that patients diagnosed with colon cancer had more frequent prenosological diseases than other groups. The article discusses psychotherapeutic and psychopharmacological studies of mental disorders observed for each type of oncological nosology. The distribution of patients with oncological disorders according to adaptation, affective disorders, organic mental disorders, and prenosological disorders depending on the localization of oncopathology is presented in Table 1. Distribution of mental disorders according to nosological structure in patients with various oncological pathologies.

Table 1

|                             | <b>Stomach<br/>Cancer%</b> | <b>LUNG<br/>CANCER%</b> | <b>Colon cancer<br/>%</b> | <b>Total %</b> |
|-----------------------------|----------------------------|-------------------------|---------------------------|----------------|
| Adjustment disorder         | 8 (33.3%)                  | 2 (12.5%)               | 3 (16.7%)                 | 9 (20%)        |
| Affective disorders         | 7 (8.3%)                   | 2 (12.5%)               | 2 (11.1%)                 | 5 (11%)        |
| Mental organic disorders    | 2 (16.7%)                  | 3 (18.7%)               | 2 (11.1%)                 | 7 (15%)        |
| Pre-morbid mental disorders | 5 (41.7%)                  | 9 (56.25%)              | 11 (61.1%)                | 25 (54%)       |
| Total:                      | 22 (100%)                  | 16 (100%)               | 18 (100%)                 | 56(100%)       |

The largest number in the study sample was in patients with prenosological diseases, their volume share was 54.35% ( $n=25$ ). In terms of the frequency of development, patients with affective disorders were the smallest group (11% -  $n = 5$ ). A brief description of mental disorders was found in patients with the following oncopathology. Clinically, prognostic diseases were manifested with milder symptoms than diagnosed patients. This group included 25 people (18 men and 7 women) with prenosological diseases (asthenic variant with a predominance of mental diseases). Weakness was detected in 15 people, asthenic variant with predominant physical weakness – in 8 people, somatovegetative variant – in 2 people). In the asthenic variant of the prenosological disorder, where mental weakness prevails, patients, as a rule, complained of apathy and fatigue. Asthenic variant, where physical weakness prevailed, was characterized by tears, emotional instability. When going to sleep, fatigue, the desire to rest, sit or lie down during the day, the somatovegetative variant is expressed by periodic headaches, unexpected anxiety, a feeling of restlessness, general heaviness in the body. - decreased within 4 weeks. Adjustment disorder in patients with oncological pathology was characterized by low mood, anxiety, obsessive thoughts about serious illness, life-threatening consequences. Patients "cannot survive the operation", believe that the upcoming treatment will be "ineffective and only cause pain and suffering". These thoughts are painful, they prevent patients from focusing on something else, from some useful or pleasant activity. In addition, patients with adjustment disorders are associated with feelings of helplessness in the face of the current situation and reduced performance. Among the examined patients, adjustment disorder was found in 19 people (18 women and 1 man diagnosed with lung cancer). In 18 women with adjustment disorders, oncological pathology was distributed as follows: lung cancer - 6 people, intestinal cancer - 2 people, stomach cancer - 10 people. Patients are worried about the next inevitable changes in their social status, the need to register in disability groups, and notice the financial difficulties that arise in this case. In addition, family and personal conflicts intensify, even suicidal thoughts appear, however, adjustment disorders are not always associated with the diagnosis of cancer in some patients, several traumatic situations or a psychotraumatic situation.

Affective disorders: In this group of patients, depressive manifestations developed with the deepening and strengthening of the oncological disease. Anxiety was more characteristic of acute illness and depression was characteristic of long-term cancer patients. The following affective disorders were diagnosed: mild to moderate depressive episode without psychotic symptoms (2 people), dysthymia (2 people), hypomania (1 person) , characterized by carelessness, slight irritability and general weakness. At the same time, patients tried to hide their mood and make a good impression on others. A 30-year-old man was diagnosed with hypomania with a diagnosis of rectal cancer. The patient spoke in detail, actively gestured, spoke quickly, expressed confidence that "everything is great" with him, randomly switching from one topic to another, elevated mood, not sleeping well at night, sleeping late, waking up early One of the reasons for the sad and depressed mood is after the surgical procedure for oncological pathology, painful experiences, for example, may be associated with the disorder, the

removal of the damaged organ or the unsuccessful result of the operation, which is still psychologically re- not worked. The inability to process existing negative information can lead to the formation of psychopathological symptoms such as hopelessness, apathy, insomnia, loss of appetite, return to children's protective reactions, actualization of suicidal behavior. With these disorders, crisis psychotherapy is indicated. It is discussed in complex psychotherapy that the early postoperative period increases the effectiveness of treatment [10].

**Organic disorders:**The following organic disorders were identified in the examined sample of patients: organic depressive disorder (n=3) and organic emotionally labile asthenic disorder (n=4), cerebral circulation caused by an acute event (n = 3), brain injury (n = 2). In addition, it is necessary to take into account the development or deterioration of organic diseases against the background of toxic effects of chemotherapy and radiotherapy in oncology patients (n=2). Typical manifestations of organic depressive disorder were observed, such as a constant decrease in mood, a feeling of guilt, and a depressive disorder in the form of loss of interests. , feeling of fatigue and weakness, poor sleep and appetite were found. In one case, the patient expressed suicidal thoughts. Organic asthenic disorders are characterized by emotional lability, irritability and even some rudeness, flatness in judgments, and physical fatigue. It was necessary to reduce the severity of asthenic and algic symptoms and cognitive disorders in patients with organic diseases [11]. The most important indicators for the person to emphasize are the sub-items of this scale) and the variant of mental disorder was determined. (Table 2) Indicators on the Hamilton Depression Rating Scale (HADS-21) in patients with various psychopathologies.

**Table 2**

| <b>Hamilton's assessment of this</b> | <b>Adjustment disorder</b> | <b>Affective disorders</b> | <b>Mental organic disorders</b> | <b>Mental disorders leading to illness</b> |
|--------------------------------------|----------------------------|----------------------------|---------------------------------|--------------------------------------------|
| Average overall score                | 13.3+1.1<br>-              | 12.8+2.2                   | 11.3=1.5                        | 6.3=0.4                                    |
| Low mood                             | 1.3=0.2                    | 2.0=0.5                    | 1.0=0.4                         | 0.6=0.1                                    |
| Guilt                                | 0.9=0.4                    | 1.4=0.4                    | 1.0=0.4                         | 0.4=0.1                                    |
| Early insomnia                       | 0.9=0.1                    | 0.6=0.3                    | 0.7=0.2                         | 0.7=0.1                                    |
| Mental anxiety                       | 1.1=0.3                    | 1.0=0.0                    | 0.9=0.1                         | 0.6=0.1                                    |

Statistically significant data were found when comparing data on the HADS 21 scale in patients with different mental pathologies. It is obtained only when comparing prenosological disorders with mental disorders ( $p<0.05$ ). No statistically significant differences were found in the group of mental disorders ( $p>0.05$ ). At the same time, there is a tendency to increase current depression symptoms in adjustment disorders due to sleep disorders and mental disturbance. It should be noted that the indicators for separate subsections are scales) depending on the localization of oncological pathology (stomach, intestinal cancer, lung)

**Table 3**

| <b>Hamiltonian evaluation</b> | <b>Stomach cancer</b> | <b>Colon cancer</b> | <b>Cancer lung</b> |
|-------------------------------|-----------------------|---------------------|--------------------|
| Average overall score         | 10.5±1.0              | 8.6±1.1             | 9.0±1.3            |
| Low mood                      | 1.4±0.2               | 0.7±0.2             | 0.9±0.3            |
| Guilt                         | 1.2±0.3               | 0.6±0.2             | 0.5±0.2            |
| Early insomnia                | 0.7±0.1               | 0.8±0.1             | 0.7±0.1            |
| Decrease in working capacity  | 0.4±0.2               | 0.4±0.1             | 0.8±0.2            |
| Stiffness                     | 0.3±0.2               | 0.3±0.1             | 0.7±0.2            |
| Agitation                     | 0.8±0.2               | 0.9±0.2             | 0.5±0.1            |
| Mental anxiety                | 0.9±0.2               | 0.8±0.1             | 0.6±0.1            |

Statistically significant differences were found when comparing oncological diagnoses ( $p>0.05$ ), but there is a tendency for depression to increase in cancer patients. However, we found a high level of depression in patients with stomach cancer due to the emergence of feelings of guilt and mental anxiety. along with pathological reactions, we observed symptoms of simple emotional reactions to the news of a cancer diagnosis: rejection, irritation, acceptance disappointment, anxious reactions, panic and excessive guilt. In addition, patients were worried about the future, fear of death, It was found that there are feelings of hopelessness, anxiety about the upcoming operation, its results, possible complications after the operation, sleep disorders, lack of confidence in the future, and discomfort about the old way of life. In the acute period of the disease, with severe anxiety and

insomnia, anxiolytics and hypnotics are prescribed. In case of adjustment disorders and depressive disorders, including organic disorders, the antidepressant fluvoxamine from the SIOZS group was prescribed, which has a pronounced anti-anxiety and hypnotic effect. Benzodiazepine tranquilizers were not used in the sample of patients reviewed because there were no severe anxiety states. Patients with organic pathology were additionally observed by a neurologist and received vascular and nootropic therapy. In the presence of mental disorders associated with oncopathology, the combination of drug treatment and psychotherapy has a positive effect in the long term, which helps to increase the adaptability of patients, leads to a decrease in the risk of suicide [11]. When conducting this study, psychotherapeutic counseling had an individual character, because in the first stages of hospitalization in the department, patients underwent many medical examinations, and therefore for them joining a psychotherapeutic group was difficult. Patients with prenosological diseases and patients without mental disorders (normal emotional reaction), as a rule, they turned to a psychotherapist (problem-oriented therapy) with a specific request. In relation to patients with adjustment disorders, attention was paid to reducing anxiety, guilt, adaptation, the situation (this was not always adaptation to the diagnosis), normalization of sleep and mood within the framework of supportive and existential psychotherapy, cognitive for affective disorders in psychotherapeutic work - elements of behavioral therapy were used, normalization of mood, reduction of sleep and mental disturbance, normalization of mental state in organic mental disorders, reduction of mental stress was achieved due to support. In the course of work, we found that patients have certain characteristics depending on the localization of oncopathology. Thus, patients diagnosed with lung cancer responded well to care. For patients diagnosed with colon cancer, supportive psychotherapy is needed in the pre- and post-operative periods, and an educational program on colostomy maintenance skills should also be included at this stage. Gastrointestinal cancer patients have responded positively to information and education programs about proper nutrition and a healthy lifestyle. Patients of an oncological hospital are often outside the scope of specialists, although they should be treated not only by a psychiatrist-psychotherapist. In the postoperative period, specialists: staff, psychiatrists, oncologists, ward staff, especially junior staff, should help alleviate the feelings of discomfort, shame and physical weakness that arise in patients.

#### **4. Conclusion**

Thus, in oncological diseases, a wide range of mental pathologies appears: prenosological diseases, adjustment disorders, affective disorders, external organic diseases depending on the location of cancer (intestines, stomach, lungs). Important factors for relevant patients, worsening of the mental state becomes the consequences of oncological diagnosis and extensive surgical treatment, as well as subsequent chemotherapy and radiation therapy. Psychopathological Manifestations of various oncopathologies require individual psychopharmacological and psychotherapeutic programs within the framework of individual therapy. to be the next direction of research. Collision.

#### **References:**

1. Развитие сибирской психоонкологии / В.Я. Семке, Е.Л. Чойнзонов, И.Е., Куприянова, Л.Н. Балацкая. Томск: Изд-во Том. ун-та, 2008: 198.
2. Ferlay J., Soerjomataram I., Ervik M., Dikshit R., Eser S., Mathers C., Rebelo M., Parkin D.M., Forman D., Bray F. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC Cancer Base No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013. Available from: <http://globocan.iarc.fr>, accessed on day/month/year.
3. Bray F., Ren J.S., Masuyer E., Ferlay J. Global estimates of cancer prevalence for 27 sites in the adult population in 2008. *Int J. Cancer*. 2013 Mar 1; 132(5):1133–45. DOI: 10.1002/ijc.27711
4. Томская область в цифрах. 2016: Краткий статистический сборник. Томск: Томскстат, 2016: 252.
5. Состояние онкологической помощи населению России в 2016 году / под ред. А.Д. Каприна, В.В. Старинского, Г.В. Петровой. М.: МНИОИ им. П.А. Герцена - филиал ФГБУ «НМИРЦ» Минздрава России, 2017: 236.
6. Лебедева Е.В., Счастный Е.Д., Симуткин Г.Г., Рябова Л.М., Кудяков Л.А., Горшкова Л.В., Семке В.А. Организация психотерапевтической и социально-психологической поддержки пациентов со злокачественными новообразованиями в условиях онкодиспансера. *Сибирский вестник психиатрии и наркологии*. 2015; 4(89): 106–112.
7. Бехер О.А. Нервно-психические расстройства у женщин, страдающих раком молочной железы. *Сибирский онкологический журнал*. 2008; приложение 1: 16–17.
8. Costa G., Salamero M., Gil F. Validity of the questionnaire MOS-SSS of social support in neoplastic patients. *Med. Clin*. 2007; 128(18): 687–691. <http://www.biomedsearch.com/nih/Validityquestionnaire-MOS-SSS-social/17540143.html>
9. Jadoon N.A., Munir W., Shahzad M.A., Choudhry Z.S. Assessment of depression and anxiety in adult cancer outpatients: a cross-sectional study. *BMC Cancer*. 2010; 10: 594. <https://doi.org/>

- 10.1186/1471-2407-10-594 10. Дубский С.В., Куприянова И.Е., Чойнзонов Е.Л., Балацкая Л.Н. Психологическая реабилитация и оценка качества жизни больных раком щитовидной железы. Сибирский онкологический журнал. 2008; 4: 17–21.
11. Комплексная реабилитация пациентов с депрессивными расстройствами, ассоциированными с онкопатологией: Медицинская технология / Е.В. Лебедева, Е.Д. Счастный, Г.Г. Симуткин. Томск: «Иван Федоров», 2016: 40.
12. Марилова Т.Ю., Андрианов О.В., Марилов Т.В. Психопатологические реакции онкологических больных. Вестник РОНЦ им. Н.Н. Блохина РАМН. 2003; 2: 28–30.
13. Greer S., Morris T., Pettingale K.W. Psychosocial response to breast cancer: effect on outcome. Lancet. 1979; 314(8146): 785–787. DOI: [https://doi.org/10.1016/S0140-6736\(79\)92127-5](https://doi.org/10.1016/S0140-6736(79)92127-5)
14. Frass L., Litin E.M., Pearson J.S. Comparison of symptoms in carcinoma of the pancreas with those in some other intra-abdominal neoplasms. Am J Psychiatry. 1967 Jun;123(12): 1553-62. DOI: 10.1176/ajp.123.12.1553
15. Boyd A.D., Riba M. Depression and Pancreatic. J Natl Compr Canc Netw. 2007; 5 (1):113–116; DOI: <https://doi.org/10.6004/jnccn.2007.0012>
16. Thomas C., Madden F., Jehu D.J. Psychological effects of stomas-II. Factors influencing outcome. J Psychosom Res. 1987; 31(3): 317–23. [https://doi.org/10.1016/0022-3999\(87\)90051-1](https://doi.org/10.1016/0022-3999(87)90051-1)
17. Слонимская Е.М., Бехер О.А., Куприянова И.Е. Нервно-психические расстройства у женщин, страдающих раком молочной железы. Психические расстройства в общей медицине. 2009. 01: 22–24.
18. Чойнзонов Е.Л., Писарева Л.Ф., Жуйкова Л.Д., Одинцова И.Н., Ананина О.А., Пикалова Л.В., Батищева М.С. Качество диагностики и учета онкологических больных в Томской области в 2004–2014 гг. Здоровоохранение Российской Федерации. 2015; 59(6): 14–18.
19. Hamilton M. A rating scale for depression. Journal of Neurology, Neurosurgery, and Psychiatry. 1960. 23: 56–62.
20. T., R. U. (2021). Specific Features of Psychoemotional Disorders in Functional Disorders of Gastrointestinal Activity. Central Asian Journal of Medical and Natural Science, 308-310. <https://doi.org/10.47494/cajms.vi0.432>
21. Modern Approaches To The Treatment Of Depression And Anxiety In Dangerous Usma Diseases Of The Stomach And Duodenum Of Flour. (2022). Journal of Pharmaceutical Negative Results, 3494-3496. <https://doi.org/10.47750/pnr.2022.13.S09.434>
22. КОРРЕКЦИЯ НЕГАТИВНЫХ ВЛИЯНИЙ СУДОРОЖНЫХ ПРИПАДКОВ НА КАЧЕСТВО ЖИЗНИ ПАЦИЕНТОВ//ЖЖ Ёдгоров - Scientific progress, 2022.Том 3. 61-65.
23. БОЛАЛАРДА КЕЧУВЧИ ТУТҚАНОҚ ХУРУЖИ ВА ЭПИЛЕПСИЯ: УНИНГ САБАБИ ВА ОҚИБАТЛАРИ ХУСУСИДА/ЖЖ ЁДГОРОВ - International Journal of Philosophical Studies and Social Sciences, 2022.Том2.130-134
24. Тулкинович, Т. М. . (2023). ОСОБЕННОСТИ ТЕЧЕНИЯ ШИЗОФРЕНИИ ОСНОВНАЯ ПРИЧИНА РАЗВИТИЯ И ТАКТИКА ЛЕЧЕНИЯ . Research Journal of Trauma and Disability Studies, 2(5), 269–274. Retrieved from <http://journals.academiczone.net/index.php/rjtds/article/view/919>
25. Tilavov M.T, Kuchkorov U.I, & Barzhakova G.R. (2022). Evaluation of Neurotic Disorders in the Post-Covid Period and Treatment Tactics. Eurasian Medical Research Periodical, 7, 147–150. Retrieved from