

NEW SCIENTIFIC SPACE:

INTERDISCIPLINARY RESEARCH,
GLOBAL CHALLENGES AND
PROMISING SOLUTIONS

TASHKENT - LONDON

AUGUST 18, 2026

academscience.com



Academic Research Publisher (United Kingdom)

UniScience journal (Republic of Uzbekistan)

Hamroh books (Uzbekistan)

MATERIALS

**The international scientific-practical conference
«NEW SCIENTIFIC SPACE: INTERDISCIPLINARY
RESEARCH, GLOBAL CHALLENGES AND
PROMISING SOLUTIONS»**

Tashkent, London

August 18, 2026

New scientific space: interdisciplinary research, global challenges and promising solutions // Materials International Scientific-Practical Conference.
Tashkent-London. August 18, 2026.

Editorial board of the conference

Temnova L.V. - DSc, Professor (Moscow, Russia); **Sagatbayev Y.N.** - PhD, professor (Astana, Kazakhstan); **Duyshenaliev CH.D.** - DSc, Professor (Bishkek, Kyrgyzstan); **Pashkov S.V.** - PhD, professor (Petropavlovsk, Kazakhstan); **Khakimov K.A.** - PhD, docent (Tashkent, Uzbekistan); **Melekoglu M.** - DSc, professor (Eskisehir, Turkey); **Jurayev J.** - PhD, docent (Samarkand, Uzbekistan); **Azimov S.** - PhD, docent (Tashkent, Uzbekistan); **Shonazarov J.** - PhD, docent (Qarshi, Uzbekistan); **Gapparov B.** - Docent, (Jizzakh, Uzbekistan); **Qo'shayev T.** - Teacher, (Termiz, Uzbekistan); **Arifxodjayeva L.** - Teacher, (Tashkent, Uzbekistan)

The event aims to discuss contemporary research across various scientific fields, exchange new scientific ideas, and support scientific activities aligned with global innovative processes.

Within the conference framework, scientists, researchers, young scholars, and practicing specialists will have the opportunity to present their research findings, exchange scientific ideas, and expand international collaboration.

The main objective of this International Scientific-Practical Conference is to consolidate the results of contemporary research across various scientific fields and strengthen the integration of science and practice through advanced scientific approaches.

**The authors are responsible for the content of the articles, the information, facts, and figures presented therein.*

The proceedings of the International Scientific-Practical Conference have been discussed by the Scientific-Technical Council of the international publisher „**Academic Research Publisher**“ (London, United Kingdom) and recommended for publication (August 17, 2026, Protocol No. 31).

ON THE HARMONY OF SOCIAL DESIGN FOR ARCHITECTS.....	218
OCHIQ KON ISHLARIDA AVTOAG‘DARMALAR PARAMETRLARINI OPTIMALLASHTIRISH VA BALAND YARUSLI AG‘DARMALAR MUSTAHKAMLIGINI GEOMEXANIK BAHOLASH («Yoshlik-1» koni «Janubiy» avtoag‘darmasi misolida).....	223
5. MEDICINE, PHARMACY, AND HEALTHCARE	232
FEATURES OF EXERCISE TEST RESULTS IN A HIGH FUNCTIONAL- DEMAND OCCUPATIONAL COHORT WITHOUT HEMODYNAMICALLY SIGNIFICANT CORONARY STENOSIS	233
СОВРЕМЕННЫЕ ПОДХОДЫ РЕАБИЛИТАЦИИ РЕЦИПИЕНТОВ ПОСЛЕ ОРТОТОПИЧЕСКОЙ ТРАНСПЛАНТАЦИИ ПЕЧЕНИ ОТ ЖИВОГО ДОНОРА	235
VITAMIN D DEFICIENCY IN UZBEKISTAN AND ITS ASSOCIATION WITH CHRONIC DISEASES.....	238
CORRELATION BETWEEN THE VISCERAL SENSITIVITY INDEX AND NEUROTIC DISORDERS IN PATIENTS WITH IRRITABLE BOWEL SYNDROME	243
РАННИЙ ПОСЛЕОПЕРАЦИОННЫЙ ПЕРИОД У ПАЦИЕНТОВ С РАКОМ ЖЕЛУДКА: ТАКТИКА ВЕДЕНИЯ, ПРОФИЛАКТИКА ОСЛОЖНЕНИЙ.....	247
МАРКЕРЫ ОСТРОГО ВОСПАЛЕНИЯ У РОЖЕНИЦ С МЕТАБОЛИЧЕСКИМ СИНДРОМОМ	253
O‘TIRIB ISHLASH TURMUSH TARZIDA GIPODINAMIYANING YURAK- QON TOMIR TIZIMIGA SALBIY TA’SIRI VA UNI JISMONIY MASHQLAR ORQALI KORREKSIYA QILISH.....	255
СПЕКТР КИШЕЧНЫХ ПАРАЗИТОВ У ДЕВОЧЕК ХОРЕЗМСКОЙ ОБЛАСТИ	260
6. AGRICULTURE, VETERINARY MEDICINE, AND FOOD TECHNOLOGY	262
COMPARATIVE ANALYSIS OF GROWTH AND DEVELOPMENT, YIELD, AND FRUIT QUALITY PARAMETERS OF PEAR CULTIVARS	263
ПОИСК ПЕРСПЕКТИВНЫХ ТЕРМИТЦИДОВ В РЯДУ РАСТИТЕЛЬНЫХ СОЕДИНЕНИЙ С РАЗЛИЧНОЙ ХИМИЧЕСКОЙ ПРИРОДОЙ	273
YOZ MAVSUMIDA DASTALARGA TURLI VOSITALAR BILAN ISHLOV BERISHNING PILLA NAVDORLIGIGA TA’SIRI.....	282

CORRELATION BETWEEN THE VISCERAL SENSITIVITY INDEX AND NEUROTIC DISORDERS IN PATIENTS WITH IRRITABLE BOWEL SYNDROME

Gafurova Sabohat Shayunusovna

Assistant, Department of Neurology and Medical Psychology, Tashkent State Medical University

Abstract. *The aim of the study was to assess the relationship between the Visceral Sensitivity Index and neurotic disorders in patients with irritable bowel syndrome. The study included 80 patients. Visceral sensitivity was assessed using the Visceral Sensitivity Index (VSI), while neurotic disorders were evaluated using the Yakhin and Mendelevich questionnaire. The results demonstrated a statistically significant correlation between the Visceral Sensitivity Index and neurotic disorders.*

Keywords: *irritable bowel syndrome, Visceral Sensitivity Index, VSI, neurotic disorders, correlation analysis.*

Introduction. Irritable bowel syndrome (IBS) is one of the most common functional disorders of the gastrointestinal tract and is characterized by abdominal pain, altered bowel habits, and increased visceral sensitivity. In recent years, it has been established that, in addition to biological factors, psychological factors, particularly neurotic disorders, play an important role in the development of IBS. Assessment of the Visceral Sensitivity Index (VSI) is an important criterion for determining the psychological perception of intestinal symptoms and disease severity in patients. Therefore, studying the relationship between visceral sensitivity and neurotic disorders in patients with IBS is of significant scientific and practical importance for comprehensive assessment of the disease and selection of effective treatment methods.

Results. The study was conducted in 80 patients with a confirmed diagnosis of irritable bowel syndrome who were treated at the Gastroenterology Department of the Multidisciplinary Clinic of Tashkent Medical Academy during 2021–2023. The mean age of the patients was 35 ± 9.2 years. The diagnosis was established according to the Rome IV criteria.

According to the analysis, various correlations were identified between the types of neurotic disorders and the levels of visceral sensitivity. The correlations

between the VSI and the K.K. Yakhin questionnaire were positive ($r \approx 0.5$), indicating that an increase in the severity of neurotic symptoms was associated with increased visceral sensitivity. These findings suggest that neurasthenia, autonomic disorders, obsessive-phobic disorders, and anxiety have a significant negative impact on the visceral sensitivity index. This relationship indicates that disturbances in the psycho-emotional sphere may mutually reinforce one another and contribute to the aggravation of disease symptoms.

Thus, the statistical findings provide convincing evidence that psycho-emotional disorders not only coexist with neuroses but may also represent one of the key factors contributing to their development and exacerbation, as well as to a decline in patients' quality of life.

When assessing the correlation between the clinical types of neurosis and the Visceral Sensitivity Index, the following results were obtained (Table 1).

Table 1

Correlation analysis between the VSI and the K.K. Yakhin and D.M. Mendelevich questionnaires among the respondents

K.K.Yakhin and D.M.Mendelevich Questionnaire	Correlation with VSI			
	Low level	Moderate level	High level	Very high level
Neurasthenia	0,22	0,32	0,30	0,31
Anxiety	0,23	0,46	0,72	0,77
Neurotic depression	0,25	0,11	0,31	0,36
Hysteria	0,27	0,18	0,34	0,32
Obsessive-phobic disorder	0,21	0,34	0,71	0,72
Autonomic disorders	0,23	0,25	0,32	0,73

Neurotic disorders and VSI questionnaire scores showed consistent positive correlations. The correlation coefficients for all indicators were positive, ranging from 0.11 to 0.77. This indicates that as the severity of neurotic disorders increased, the Visceral Sensitivity Index also increased. According to the analysis, the strongest positive correlations were observed for anxiety ($r \approx 0.77$), obsessive-phobic disorders ($r \approx 0.72$), and autonomic disorders.

Moderate positive correlations were identified between neurasthenia ($r \approx 0.31$), hysteria ($r \approx 0.32$), and neurotic depression ($r \approx 0.36$). As these neurotic syndromes became more severe, **visceral sensitivity also increased in parallel**; however, this association was not as strong as that observed with anxiety or obsessive-phobic disorders.

These findings indicate that an increase in the severity of neurotic symptoms is associated with increased visceral sensitivity in patients. In particular, anxiety and obsessive-phobic disorders were identified as leading psychological factors contributing to the development of visceral hypersensitivity.

Statistically, these results were significant at the $p < 0.01$ level, indicating that they were not due to chance but reflected a reliable correlation. Overall, the presence and severity of neurotic disorders can be considered important psychological factors associated with an increase in the Visceral Sensitivity Index.

Conclusion: The findings support the **biopsychosocial model** of irritable bowel syndrome (IBS). Visceral hypersensitivity is associated not only with peripheral mechanisms but also with pain-processing mechanisms in the central nervous system and the psycho-emotional state of the patient. The high correlations ($r > 0.70$) observed in anxiety and obsessive-phobic disorders indicate increased perception of intestinal symptoms and excessive attention to these symptoms in such patients. Although the correlations observed in neurasthenia, neurotic depression, and hysteria were relatively lower, their statistical significance confirms the influence of these disorders on the clinical course of IBS. Therefore, when assessing patients with IBS, it is important to comprehensively evaluate not only gastroenterological parameters but also their psychological status.

References

1. Drossman, D. A. (2016). Functional gastrointestinal disorders: History, pathophysiology, clinical features, and Rome IV. *Gastroenterology*, 150(6), 1262–1279.
2. Lacy, B. E., Pimentel, M., Brenner, D. M., Chey, W. D., Keefer, L. A., Long, M. D., & Chang, L. (2021). ACG Clinical Guideline: Management of irritable bowel syndrome. *The American Journal of Gastroenterology*, 116(1), 17–44.
3. Gafurova, S. S., Sharodiya, D., & Alimuhamedova, S. J. (2025). TO IDENTIFY ANXIETY-PHOBIC DISORDERS IN IRRITABLE BOWEL SYNDROME AND STUDY THE EFFECTIVENESS OF COGNITIVE BEHAVIORAL THERAPY IN THEM.
4. Yusuphodjayeva S., Gafurova S. Depressive-anxiety disorders in patients with rheumatoid arthritis and methods of their psychocorrection // *Interpretation and Researches*. – 2023. – Vol. 2, №3. – P. 9–16.

5. Gafurova S. Detection of neurotic disorders in irritable bowel syndrome and study of the effectiveness of systematic desensitization therapy // *Central Asian Journal of Medical and Natural Science*. – 2025. – Vol. 6, №1. – P. 392–397.

6. Gafurova S., Yusupkhodjayeva S. Дифференциальный анализ невротических расстройств при синдроме раздраженного кишечника и совершенствование медико-психологической поддержки при них // *Talqin va tadqiqotlar*. – 2023. – Vol. 1. – P. 19.