

EDITOR-IN-CHIEF'S PREFACE TO ISSUE 1, 2026

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Analyzing the articles in this issue, I focused on two manuscripts devoted to a pressing issue of our time – the development of cognitive disorders. The causes of these disorders are multifactorial and often remain unknown, and therefore their early diagnosis, prevention, and treatment are delayed. One of them is a review by a team of authors from Arkhangelsk and Yakutsk (A.S. Detkov, et al.), dedicated to prion diseases that literally shook the scientific world a few decades ago with their unusual etiology and pathogenesis, but which have recently been almost forgotten. The other one is the article by A.A. Pytkina, I.M. Madaeva, O.N. Berdina, et al. (Irkutsk) regarding the pathogenetic role of severe obstructive sleep apnea as tau protein and BDNF levels increase in the blood. These data may contribute to the development of measures for the prevention of cognitive impairment in such patients.

Regarding researches in **neuropsychophysiology**, we should add the work of O.V. Krivonogov, et al. (Arkhangelsk), which showed an important role of uncontrolled arterial hypertension in cognitive decline in women aged 60–74 years. Two studies from Irkutsk are devoted to the development of psychophysiological functions and identity in gifted schoolchildren (M.Yu. Kuzmin and D.P. Tyumentseva), as well as differences in the kinetic component of voluntary movements in children (i.e., the formation of prefrontal motor systems of the brain and anterior parts of the corpus callosum) in urban and rural children (V.M. Plyakov, et al.). These findings are important for personalizing the learning process at school.

A number of studies are related to the **epidemiology of infectious and non-communicable diseases**, which is crucial for timely mass preventive measures. In the work of S.E. Budaeva, et al. (Irkutsk), it was shown that the leptospirosis site in the Irkutsk region was activated after the flood of 2019. In a collaborative study by scientists from Irkutsk, Kazan and Moscow (K.A. Belova, et al.), it was demonstrated that there are unique genetic variability of the tick-borne encephalitis virus in the Ekhirit-Bulagatsky district. The study by M.R. Akhmedzyanova, et al. (Irkutsk) identified risk groups for hypovitaminosis D in the population of the Irkutsk region, taking into account seasonality, sex, and age. The work of I.Yu. Egorova, et al. shows a high frequency of menstrual function disorders in female students aged 14–17, which is important for the active detection and correction of these disorders.

Several works are devoted to improving the methods of diagnosis, analysis, and prognosis for both diseases and epidemiological risk. M.A. Darenskaya, et al. (Irkutsk) showed that endogenous intoxication can be a marker of the initial manifestations of periodontitis in young men. M.E. Lobanov, et al. (Saratov, Moscow) demonstrated a high diagnostic significance of genome-wide sequencing in compound heterozygous conditions and suggested introducing it into the routine practice of pediatricians. N.E. Garashchenko, et al. (Irkutsk) compared sleep questionnaires and identified the most appropriate ones for assessing the severity of insomnia.

I would like to highlight in this section a study by V.V. Sinkov, et al. (Irkutsk), who developed an integrated index for assessing the epidemiological risk of territories for the prevalence of TB with multidrug and extensively drug-resistant tuberculosis. This index could serve for state sanitary and epidemiological control.

In the journal's surgical section, I would highlight the comprehensive work of a number of Moscow institutions (S.A. Kosenkov, D.A. Ivanova, M.V. Sinitsyn),

devoted to the pressing issue of improving the surgical treatment of tuberculosis with multidrug and extensively drug-resistant tuberculosis. Other works are devoted to endoprosthesis technologies for shoulder joint replacement (G.A. Airapetov, et al., Moscow – Pyatigorsk), endoscopic intraluminal interventions in the early stage of neuroendocrine duodenal tumors (V.V. Matochkin, et al., Irkutsk), and the description of a unique case of Ehlers – Danlos syndrome with developed abdominal complications (V.N. Stalmakhovich, et al., Irkutsk).

The issue's experimental works are interesting, though not numerous. Those working in the field of obesity will undoubtedly be interested in the positive effect of *Inula helenium L.* extract on the prevention of olanzapine-induced weight gain in drosophila (K.O. Gakkoeva, et al., Republic of Alania) and the study of vascularization of fat grafts during experimental lipofilling by an international team of authors from Moscow and Baku (I.V. Kastiro, et al.)

One of the problems **of biotechnology**, which has been so frequently discussed recently, is being addressed by A.V. Akhova, et al. (Perm), who demonstrated the varying effectiveness of *Escherichia coli* strains for polyamine production.

Most readers will also be interested **in the literature reviews** published in the issue. The geography of the authors is quite wide: Ufa, Irkutsk, Chita, Nalchik.

I hope that our readers will gain new insights from this issue.

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