

DEPUTY EDITOR-IN-CHIEF'S PREFACE TO ISSUE 6-2, 2021

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In the final issue of the *Acta biomedica scientifica* in 2021, the main attention is drawn to the series of articles devoted to infectious diseases.

A novel coronavirus infection is increasingly being detected in children, and therefore research in this age group is becoming more relevant. Scientists from Irkutsk presented the results of a study of the antioxidant status in children and adolescents with COVID-19, indicating the feasibility of using antioxidant therapy, and a group of scientists from Saint Petersburg shared the experience of the first year of the pandemic regarding the effectiveness of antiviral therapy for COVID-19 in children. The COVID-19 pandemic has led to the widespread use of various respiratory support techniques in combination with the use of prone position. Researchers from Chita assessed the effect on hemodynamics of the prone position maneuver in patients with COVID-19 when switching respiratory support from oxygen therapy to non-invasive lung ventilation. The authors from Moscow and Irkutsk proposed to quantify the relationship between the intensity of the COVID-19 pandemic and the institutional characteristics of the countries of the world. Recommendations are given to enhance the efficiency and improve the use of institutional capacity to counter a pandemic, as well as to increase the effectiveness of protective and restrictive measures, which can be useful if new epidemic threats emerge.

Another infection that is highlighted in this issue is HIV infection. Researchers from the Scientific Centre for Family Health and Human Reproduction Problems studied the course of the neonatal period in the high-risk group of vertical infection in perinatally HIV-exposed children receiving an enhanced chemoprophylaxis regimen of mother-to-child transmission of HIV and confirmed the need for increased attention and improvement approaches to their medical support. There is also an interesting review of the literature highlighting the issue of the safety and efficacy of protease inhibitor therapy in HIV-infected patients.

Two more articles from the Scientific Centre for Family Health and Human Reproduction Problems (Irkutsk) deserve the attention of pediatricians. One of them offers comprehensive rehabilitation for spastic forms of infantile cerebral palsy, which is important, since until now there is no radical method of treating children with this ailment. The results of another study of the intestinal microbiota in obese adolescents justify the search for early predictors of the formation of functional intestinal diseases associated with obesity in the adult cohort.

Improving organizational technologies for early detection of malignant neoplasms using targeted programs for large-scale cancer screening is a priority task of primary health care. Therefore, it is valuable that the authors from Saint Petersburg assessed the potential of lean technologies to optimize cancer screening during clinical examination of certain groups of the adult population.

Authors from the Irkutsk Scientific Centre of Surgery and Traumatology presented a series of literature reviews devoted to the problem of adhesions prevention in cardiac surgery, the analysis of modern methods of diagnosis and treatment of patients with defects in the articular surfaces of the scapula and humeral head with chronic shoulder dislocations, and the prospects for the creation of antimicrobial drugs based on copper nanoparticles and copper oxides. Another work of the authors from this centre is devoted to the study of the activity of genes of matrix metalloproteinases and their inhibitors in stenosing processes of the spinal canal and dural sac.

Researchers from the East Siberian Institute of Medical and Ecological Research (Angarsk) in their work assessed the effectiveness of “Neo inulin” in the complex treatment of patients with type 2 diabetes mellitus, and a group of authors from Irkutsk presented their vision of improving the methodology for determining the cost of public services in the system health care taking into account their resource intensity.

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