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EPIDEMIOLOGICAL AND CLINICAL FEATURES OF ROTAVIRAL INFECTION

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Introduction. Rotaviral infection is registered in all geographical areas, being the main cause of dehydration by diarrhea in young children. It is responsible for two-thirds of hospitalizations due to gastroenteritis and is associated with severe evolution in the absence of adequate treatment. The aim of the study is to analyze the multiannual morbidity of rotaviral infection and clinical peculiarities of patients hospitalized with this disease.

Material and methods. This research is a descriptive observational epidemiological study, in which morbidity data of rotaviral infection were analyzed. The following were used as information sources: Form 2 of registration and evidence of diseases for the years 2004-2019 and 33 files of patients diagnosed with rotaviral infection during 2019 year, hospitalized in the infectious hospital for children from mun. Chisinau. The following epidemiological indicators were analyzed: distribution of cases by age groups, gender, living environment, seasonal distribution and severity of the disease which was evaluated by applying the Vesikari Scale.

Results. Analyzing the dynamics of multiannual morbidity through rotaviral infection in the Republic of Moldova and mun. Chisinau during the 2004-2019 years, we found an increase in morbidity since 2008, when in the Republic of Moldova were registered 2.21‰ cases and 10.95‰ in mun. Chişinău. The highest morbidity was registered in 2012 with 19.11‰ cases in the Republic of Moldova and 97.84‰ in mun. Chisinau. The average level of morbidity for the entire period in Chisinau was 27.42‰ cases compared to 6.63‰ cases at the republic level, these data reveal an increased morbidity in urban areas compared to rural areas. Depending on residence, the highest average morbidity was registered in urban areas – 10.52‰ compared to 1.64‰ in rural areas. Rotaviral infection is a disease specific to children, which can be easily observed by analyzing multiannual morbidity, where during the study period the incidence of the disease among children was 37.02‰ compared to 0.08‰ in adults. More frequently, rotaviral infection was registered among children aged 0-2 years – 1.47‰, followed by 3-6 years – 0.39‰ and 7-17 years – 0.02‰. Based on medical records, we found that the highest incidence of rotaviral infection in 2019 was registered in March. The boys aged between 1 and 5 years were most frequently affected, the source of infection in most cases remaining unidentified and the diagnosis being established by the ELISA method. Most of the parents have request medical help on the 2nd - 3rd day of illness, this fact proves that the disease worsens on the 3-4th day from the onset. The average length of hospitalization was 5 days. Analyzing the cases of rotaviral infection according to the Vesikari Scale, we determined that 72.73% were in grade III severity and 27.27% in grade II severity, and in group I severity - no patients. Treatment data showed that therapy is largely based on detoxification and rehydration drugs.

Conclusions. Analyzing the multiannual morbidity of rotaviral infection during the 2004-2019 years, we determined an increase in morbidity, especially starting with 2008 year. The clinical evolution of the registered cases is serious, most of them with the grade III severity according to the Vesikari Scale.