

The expansion of the geography of mosquito vector regions and their adaptation to colder and drier climatic conditions with the potential for transmission of infection gradually expand the area and require scientific study and monitoring of hemorrhagic fever viruses and Zika virus in particular.

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### MODERN PROBLEMS OF INFECTIOUS DISEASES PREVENTION IN PUBLIC HEALTH OF REPUBLIC OF GUINEA

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Republic of Guinea is one of the developing countries of West Africa. Of the whole GDP only 400–500 USD are on one inhabitant annually. More than half habitants live down the poverty level. The country carries a heavy burden of many infectious diseases.

The aim of the study was to describe the actual problems of infectious diseases prevention in public health of Republic of Guinea.

Statistical data from public health institutions of the country were used. Methods — descriptive and analytical.

Population size of Guinea increases and numbers now more than 12 millions habitants. The public health structure of the country includes: 925 first-aid posts, 410 prefecture and regional centers of health, 8 communal health centers, 26 prefecture, 7 regional and 3 national hospitals. Though medical aid is below of the regional norms of WHO. In Guinea 74 nosoforms of infectious and non infectious diseases are registered. The part of infectious diseases in the morbidity structure was 38–44% (1.9–2.5 millions cases annually). The most widespread infections were malaria, acute respiratory (ARI) and intestinal infections. In the mortality structure ARI occupied 12.5%, malaria — 10%, acute intestinal infections — 6%, HIV infection consists 5%. The sexual transmissible infections are widespread: 200 thousand cases in a year. The outbreaks of measles, meningitis, cholera, Yellow Jack are registered too. Prevention measures are actively conducted. All little children are vaccinated obligatorily against: poliomyelitis (4<sup>th</sup> time), BCG, kombi (diphtheritic, tetanus and pertussis), measles, Yellow Jack. The pregnant women receive anti malaria drugs as prevention and anti tetanus vaccine. The HIV positive pregnant women receive antiretroviral therapy. One realizes health education programs, particularly among the youth. One popularizes the use of contraceptives, organizes centers of family planning. However this activity meets some difficulties because of the low education level, some religious and socio-cultural customs of population, what was visually revealed during Ebola fever outbreak. The vaccination program meets such difficulties as cold chain, lack of qualified medical personnel, lack of medicaments and technical equipment of diagnostics laboratories, which number is insufficient. In order to dissolve these problems of diagnostics, control and prevention of infectious diseases in 2018 the 3-years program “National strategy on medical biology” was elaborated.

In spite of difficulties the public health of Guinea goes on to develop. The realization of the “National strategy” will help in strengthening of health and welfare of population of Guinea.

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### FECAL-ORAL MECHANISM IN THE GROUP AND EPIDEMIC STRUCTURES ON THE TERRITORY OF THE ROSTOV REGION WITHIN 10 YEARS

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Infections with the fecal-oral transmission take one of the leading places in the infection pathology of population including economically developed counties, going only after respiratory infections among mass infectious diseases.

In Rostov region according to the form of statistic observation No. 23–17 “Information about outbreaks of infectious diseases”, within 10 years from 2008 until 2017<sup>th</sup> 104 cases of group and outbreak morbidity was reported, with 1853 caseload, including 1130 children under 17 years (61.0% of the total number of cases).

In structure the main gravity in the region lies on the fecal-oral mechanism (76.9%) and also on aspiration (10.6%) and others (12.5%).

The spread was occurred by food — in 47 cases (45.2%), by water — in 14 (13.5%), by household contacts — in 19 (18.3%), airborne-in 11 (10.5%) and other — 13 (12.5%)

Etiological factors in group and outbreak morbidity were bacterial pathogens of infection: *Salmonella* Enteritidis (11), *Salmonella* Typhimurium (3), *Salmonella* Seegefeld (1), *Salmonella* Muenchen (1), *Salmonella* Isangi (1), *Salmonella* spp. (1), *Shigella sonnei* (6), opportunistic pathogenic microflora (7) (*Staphylococcus aureus*, *Proteus vulgaris*, *Citrobacter*, *Escherichia coli*, *Enterobacter aerogenes*), viral aetiology: group A rotaviruses (15), 2 genotype Noroviruses (18), hepatitis a virus (9), Enteroviruses (14), mixed etiology (1), undetermined etiology (4), measles virus (5), Crimean-Congo hemorrhagic fever (1), parvovirus in 19 (1), influenza (1), tuberculosis (1), chickenpox (1), community-acquired pneumonia (1) and epidparotite (1).

Improvement of decoding of acute intestinal infections (ОКИ) and further development of laboratory diagnostics in etiological structure dramatically changes were noticed: the increasing epidemiological importance is given to “intestinal” viruses, the intensity of circulation of which has increased in recent years (enteroviruses, rotaviruses and noroviruses).

The changed structure of the epidemic process including acute intestinal infections, the growth of viral infections requires new approaches in the improvement of activities and diagnosis, anti-epidemic supply and prevention activity.

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### THE CHARACTER OF MICROBIOTA IN THE INTENSIVE CARE UNIT OF THE CHILDREN'S HOSPITAL AND ITS EPIDEMIOLOGICAL SIGNIFICANCE

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As is known, the risk of infections associated with medical care is highest in intensive care units, especially in the department of pathology of newborns and premature infants. The aim of the study was to study the composition and characteristics of bacteria circulating in the intensive care unit of the children's hospital.