Results and discussion. According to the results of organoleptic and microbiological studies, the salts $Hg(NO_3)_2$ and $Co(NO_3)_2$ exhibit bactericidal action against Lactobacillus bulgaricus irrespective of their concentrations. $Bi(NO_3)_2$, $Pb(NO_3)_2$, $Co(NO_3)_2$, $CuSO_4$, $NiSO_4$, salts exhibit bacteriostatic activity irrespective of their concentrations (small number of colonies when grown on a nutrient medium compared with the standard and control sample), and violate the homogeneous structure of the product «yogurt». $ZnSO_4$ in experimental samples compared with control does not inhibit the growth of Lactobacillus bulgaricus. The nutrient media on which Lactobacillus bulgaricus was cultivated with $ZnSO_4$ and NaCl salts gave the largest number of colonies compared to cultivating lactobacilli with other salts studied.

Conclusions. Lactobacillus bulgaricus refers to the beneficial microflora of the human body, its intensity and growth is reduced due to the action of heavy metal salts on it.

HEPATITIS B. STATISTICAL ANALYSIS OF MORBIDITY IN UKRAINE FROM 2013 TO 2017

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Introduction. Hepatitis B is one of the most common infectious diseases. It is caused by the hepatitis B virus (HBV). About 2 billion people are infected in the world and 400 million have chronic hepatitis B (CHB). Every year are detected 4.5 million new infections and 700 thousand deaths.

Aim. To conduct investigation of the morbidity and development trends of Hepatitis B on the Ukrainian territory for the period of 2013-2017.

Materials and methods. Analysis of the scientific literature and the results of the advanced research in the field of medicine and pharmacology.

Results and discussion. According to the official registration of cases of the disease of the Ministry of Health of Ukraine «Report on individual infections and parasitic diseases» (annual), for 5 years (2013-2017), 15801 cases of HBV infection were officially registered in Ukraine, including 7578 cases of acute hepatitis B (AHB) – (47.96 ± 0.40)% and 8223 CHB (cronic hepatitis B) – (52.04 ± 0.40)%. In recent years, according to official statistics, in the country as a whole and in separate territories, the same number of acute and chronic forms of GV-viral infection were registered, with a slight predominance of chronic forms.

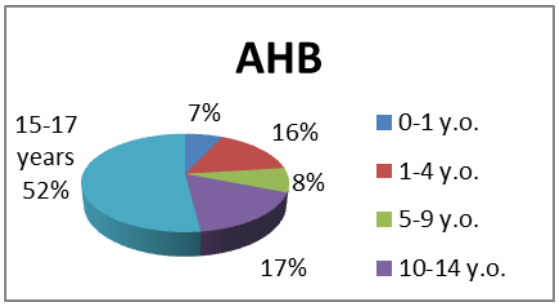
Specific gravity, % / ratio	Years				
	2013	2014	2015	2016	2017
AHB (acute hepatitis B)	48.87	52.51	56.48	51.13	58.36
CHB (chronic hepatitis B)	51.13	47.49	43.52	48.87	41.64
AHB/ CHB	0,96:1	1.11:1	1.30:1	1.05:1	1.40:1

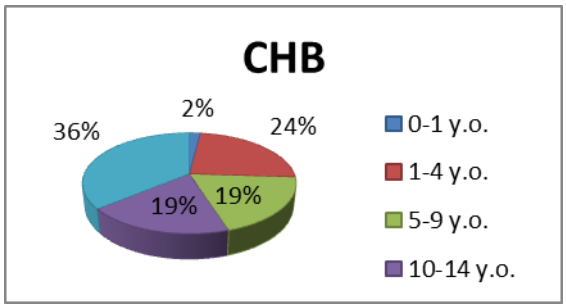
For comparison, in EU / EEA countries, according to official ECDC data, in 2013 (28 countries), 2014 (30 countries) and 2015 (30 countries) among the total reported cases of HB, 15.2% (2896 cases), 11.9% (2667) and 10.2% (2505), respectively, had acute forms of the disease; 71.4% (13629), 64.0% (14371) and 63.5% (15595) – chronic; At the time of registration, 11.2% (2138), 22.4% (5020) and 19.4% (4777) remained «unknown», according to diagnostic criteria common to EU / EEA countries, and 2.3% (438), 1.7% (384) and 6.9% (1696) of the cases were not included in the list of «acute», «chronic» or «unknown» because of incompatible format required for reporting data. Thus, in Ukraine, the proportion of AHB (on the basis of official registration) is much higher than in the EU, because we can observe a significant «under-estimation» of CHB cases, in particular, due to the lack of standardized diagnostic criteria, according to which the case of HB refers to «acute», «chronic», or «unknown»; it is possible that a certain proportion of cases registered as AHB are in fact chronic cases.

The incidence rate of GHB of the total population in the intensive index ranged from a minimum of 3.08 per 100 thousand population in 2014 to a maximum of 3.98 per 100 thousand population in 2013. The indicators of the morbidity of the total population for chronic forms of HB were highest in 2015 – 4.09 per 100 thousand population, the lowest in the analyzed period – in 2017 – 3.54 per 100 thousand population. The average multi-year indicator of the incidence of AHB in Ukraine was 3.39 per 100 thousand population, and the chronic – 3.75 per 100 thousand population. One can state the stable tendency to reduce the incidence of acute and chronic infections in the 5-year-old dynamics. Similar trends have been identified in a lot of regions in Ukraine, despite significant territorial heterogeneity in recorded incidence rates. The incidence rate of AHB in Ukraine exceeds the EU / EEA analogues in 2013 – 2017 (0.6 per 100,000 population) on average in 5.75 times, while the incidence rates for CHB are lower than indexes in EU / EEA countries in 2013-2017 (9.9 per 100 thousand population) in 2.64 times.

Adults more often suffered from HB than children under the age of 18. On average, the adult population accounted for (95.81 ± 8.96)% of all cases of HBV-infection. For 1 case of AHB in children in different years there were 14.3 to 22.7 cases of disease among adults (on average – 17.4); for 1 case of CHB – from 25.1 to 45.5 cases respectively (on average – 31.8).

Among children, the largest number of cases of GV in total for 2013-2017 belonged to the age group of 15-17 years – 302, then 1-4 years – 128 cases, 10-14 years – 117 cases, 5-9 years – 81 cases, children up to 1 year – 34 cases. The proportion of morbidity in GHB and HGV in children of different age groups is somewhat different.





Conclusions.

– During the analyzed period, no significant changes were observed in the manifestations of the epidemic process of HB in Ukraine in terms of incidence: the epidemic tendency of the incidence for the period from 2013 to 2017 was characterized by a moderate decline in the intensity indicators for both AHB and CHB.

– The decrease in the number of patients with CHB in Ukraine than in the EU / EEA countries by 2.64 times, as well as the increase in the incidence of AHB in 5.75 times doubts the accuracy of the incidence of AHB and CHB and indicates the inadequacy of data and can not accurately describe the situation morbidity.

– AHB and CHB in absolute numbers were recorded predominantly among the adult population (not less than 95%), but a high incidence of HB in children 1-4 and 5-9 was shown, which is related to the reduction of vaccination coverage against HB.

BACTERIOLOGICAL EVALUATION OF SOME COMMERCIAL FELINE RAW DIETS

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Introduction. An important component of the health of Pets – quality food. Today, every responsible owner has a huge choice than to feed your pet: ready-made dry and wet food or natural food. Components used for the production of super Premium feed, the highest quality. Preparation of feed of this class is carried out with the use of special technologies. Due to this, the nutrients of feed are most