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THE INTEGRATION APPROACH A LOT OF STUDY OF THE DYNAMICS OF MORBIDITY BY INFECTIONS WITH HAEMOCONTACT MECHANISM OF TRANSFER (HIV, HEPATITIS B AND C) OF THE SAKHA REPUBLIC (YAKUTIA) AND EPIDEMIOLOGICAL ESTIMATION OF FACTORS ITS DETERMINING.

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A conjugate retrospective analysis a lot of study of the dynamics in HIV, hepatitis B and C morbidity in the Republic of Sakha (Yakutia) having the general (haemocontact) mechanism of transfer in comparison with the determinants that are presumably able to affect its pattern. The leading significance of antiepidemic measures in health facilities and current trends in the prevalence of drug addiction in the population is shown. The difference in the mechanism of formation above infections disease in Yakutia as compared to other regions of Russia.

Key words: HIV, hepatitis B and C, epidemic process, risk factors.

Introduction.

The actual of a problem of infections with the haemocontact mechanism of transfer is caused by set of social, economic and epidemiological indicators [5,7,9,13]. In Far East Federal district one of the highest levels of prevalence parenteral virus hepatitis and HIV the Russian Federation [5,4,8].

Analysis of the literature has allowed us to conclude that the dynamics in different regions of the morbidity of infections with hemocontact mechanism of transfer along with the general features characteristic of the Russian Federation as a whole has especially [3,8,12]. Therefore in addition operating factors influence a regional conditions. However studies aimed for studying the epidemiological situation in Yakutia and the mechanisms of its formation in relation to such infections have not been conducted.

In epidemiology are traditionally considered isolated epidemic process (EP) of individual infections. As shown by our studies [10,11,12] an integrated approach to the study of the epidemiology of infections with the same mechanism of transfer allows a more objective assessment of the epidemiological situation and the conditions conducive to its formation. In this aspect of the epidemiology of HIV, hepatitis B (HB) and hepatitis C (HC) has not been studied.

The purpose of this study was to analyze many years dynamics of the disease incidence of infections hemocontact mechanism of transfer in the Sakha Republic (Yakutia) and the identification of factors influencing its development. The dynamics of morbidity is seen as a reflection of the factors that set and / or power of influence that change over time [1].

Materials and methods.

Materials for the retrospective epidemiological analysis was compiled using Federal State Statistical Observation by the Sakha Republic (Yakutia) - "Information about infectious and parasitic diseases (f.2) The registration of infectious patients (f.60), epidemiological survey map pockets HB and HC (p .357) for 1979 -2010.

Epidemiological evaluation given to the most important factors determining the development of EP infections hemocontact mechanism of transfer and recommended by the descriptive and evaluative studies [1,8]. To study the effect of vaccination on hepatitis B EP used "Information about preventive vaccination" (f.5). In order to assess the impact of epidemiological factors of drug abuse on the intensity of the EP used the data of the morbidity of the drug addiction in the Sakha Republic (Yakutia) of the annual collection of statistics SF "Yakut Republican Medical Information Analytical Center." The influence factor of disordered sexuality, in accordance with the recommendations of L.P. Zueva with the authors [2] evaluated the dynamics of syphilis morbidity.

For information about the morbidity of the HB and HC, HIV in Russia received the report of the Chief State Sanitary Doctor of Russia G.G Onishchenko (2010). We used statistical methods: tendency EP was evaluated using the alignment of the time series by least squares. Correlation studies were performed by the method of Spearman [1].

An epidemiological study used the techniques of formal logic: the methods of the similarities differences and changes accompanying residues [1].

Results and discussion.

In result of study in spite of the common mechanism of transfer and consequently the factors influencing to the appearance and intensity of the EP the dynamics of HIV, HB and HC in the Sakha Republic (Yakutia) have different direction of type (pic.1) and particularly drew the attention of the morbidity of the acute hepatitis B (AHB). Its rise began in 1981 (Rate of increase = 8%) and peaked in 1988, 1989 and 1990. Then the disease incidence began to decline (Rate of reduction=-17,3%) with a small splash in 1995 and 1996. And by 2010 reached a record low for the entire period of observation. It should be emphasized that from 1982 to 1995 the morbidity rate of the AHB in the Sakha Republic (Yakutia) were significantly higher than the average for Russia. Pronounced rise of the morbidity the acute hepatitis B in the Republic began much earlier than in Russia as a whole and therefore in most other parts of the country. [8,12]. By 2010 the morbidity rate of Yakutia with almost equal morbidity rate in the Russian Federation.

From 1994 in the Republic officially started to register acute hepatitis C (AHC). The disease incidence of infection throughout the period were lower than AHB and whole Russia. The dynamic of morbidity was not observed AHC such as AHB. Until 2000 the morbidity rate ranged at 5.2 prosantimil and then fell to 1-2-prosantimil and not different from AHB. The morbidity rate of OGB in the Republic was more lower than for Russia. In 1999 – 2000 the rise of the morbidity didn't mention in Russia.

Until 1996 Yakutia was considered a free zone of HIV. Retrospective analysis of many years dynamics of HIV in the Republic to assign three periods. The first - from 1996 to 1999 was characterized by its elevation (Rate of increase = 71.4%) in 2000 (13.1% ooo). In the second period (2001-2005) assigned lowering of morbidity (Rate of reduction = 51%). But from 2006 again assigned the increase (Rate of increase = 20.3%). The appearance of the curve reflecting the dynamics of HIV in the Sakha Republic of (Yakutia) was close to Russia in 2000, not 2001, as in Russia. The morbidity rate in Yakutia the analysis were significantly lower than for Russia.

Pic. 1. The dynamic morbidity of the acute hepatitis B and C and HIV of the Sakha Republic (Yakutia) and whole Russian Federation (per 100 thousand population).

Epidemiological evaluation of factors that could potentially determine the specified EP infections in the Republic, showed sharp rise of the morbidity of hepatitis B since 1981 it was associated with medical manipulations. Form an opinion of the epidemiological history of patients for 1989 - 1991 years the most part of infections (60-70%) were occurred during the various parenteral manipulations blood transfusion and / or its components. It is not a clear which the reason for the sharp increase the risk population of Yakutia in the health facilities in 80s of last century. With the introduction of the practice of order MH of the USSR from 12.07.89 № 408 «About measures to reduce the disease incidence of viral hepatitis in the country» and in following tightening up of requirements in connection with the prevention

of HIV infection the effectiveness of lead anti-epidemic measures preferred the morbidity of AHB began to descend.

The leading factor contributing to the increase of morbidity of parenteral viral hepatitis and HIV infection in a different regions of the Russian Federation was growth of drug addiction [5, 8, 12]. In pic.2 explosive increase of morbidity of the drug addiction in Yakutia has not led to rise in the morbidity of any AHB or AHC, which began in early 90s of last century. Conducted a correlation analysis of morbidity between these infections and drug addiction showed no connection.

Pic 2. The dynamic morbidity of the acute hepatitis B and C, HIV and drug addiction of the Sakha Republic (Yakutia) (per 100 thousand population).

The analysis epidemiological history of patients revealed that from 1995 to 2003, most of parenteral viral hepatitis infections (47%) occurred in the health facilities in various medical manipulations [6]. Comparison of the morbidity rates of AHB in 80s and now suggests that the risk population of Yakutia in hospitals was failed. In last years, among patients predominates the sexual way (34%). The significant influence to level of the morbidity of parenteral viral hepatitis total population does not proved, because it reduces the activity factor of disordered sexual relations. This is evidenced by lowering trend from 1998 to 2006 and the stabilization of the population of Yakutia in the morbidity of the lues (pic.3) – the indicator of infection, reflecting the situation with the influence this factor in the region. the part of infected UGA and PSO with intravenous drug use accounts for no more than 15-20%.

Pic.3 The dynamic morbidity of the lues of the Sakha Republic (Yakutia) (per 100 thousand population).

Completely different mechanism of EP formed HIV in the Republic. In the first period (1996-1999) rise the morbidity of this infection occurred by a delivering incidents. A virus entered the local drug addicts and began to spread speed among them as a consequence of injecting way of infection, and sexual. This is indicated by the results of correlation analysis between the morbidity of HIV and drug addiction population of Yakutia (straight strong relationship $r = 0,8$) and rise HIV, drug addiction and lues.

A tendency to reduce the morbidity of hepatitis B associated with vaccinal prevention [8]. In Yakutia it was started in 1996. The first time it has covered health care workers and newborn of mothers-carriers of HbsAg and students under 13 years. And the last vaccination was carried out in order to prevent the risk of disease in a group of 15-19-year-old who along with 20-29-year-olds are carry in the main contribution to the disease incidence HB and HC. Since 1998 began to inculcate students from high and secondary educational institutions children's homes and other groups. However a vaccinal prevention

HB in Yakutia was started from the time when the disease incidence of this infection was lowered. As the experience of other countries vaccination of only high-risk groups can not achieve lowering the disease incident of the population [8]. In accordance with the order of the Ministry of Health and Social Development of the Russian Federation № 229 of 2001 in the Yakutia started to vaccinate all newborns and children 13 years old. As of 31.12.2010 vaccinated 84.6% the total population of the Republic the modern period affects level the morbidity of population in Yakutia HB and prevents the risk of possible infection in the future. Moreover studies show as a result of the integration competitive interrelation between viruses HB and HC it is possible that vaccination may also influence the development of EP HC [10,12].

CONCLUSIONS:

1. A lot of years of the dynamics of morbidity infection with hemocontact mechanism of transfer in the Sakha Republic of (Yakutia) in 1979-2010 years appears the activity of a number of social and biological factors among which the priority of the organization and have the actual effectiveness of control activities in health facilities as well as the preading of the drug addition.

2. Rise of morbidity ABC (1981-1990.) and HIV (1996-1999) caused by different factors. The growth of drug addition in the Republic did not affect the dynamics of morbidity of parenteral viral hepatitis. This mechanism of morbidity of these infections the population of Yakutia is different from other Russian regions.

Used literature:

1. Belyakov V.D, Semenenko T.A, Shruga M.H. Introduction to the epidemiology of infectious and noninfectious diseases in man .- Moscow.: Medicine, 2001 – 264 p.

2.Zueva L.P., Eremin C.R., Aslanov B.I. Epidemiological diagnostics. - 2nd ed. rev. and add. - SPb: OOO "Foliant", 2009. – 312 p.

3.Kandabarova T.A. The epidemiological situation of hepatitis B in the Rostov Region //Epidemiology and infection dis. -2005. - № 4. - P.11-14.

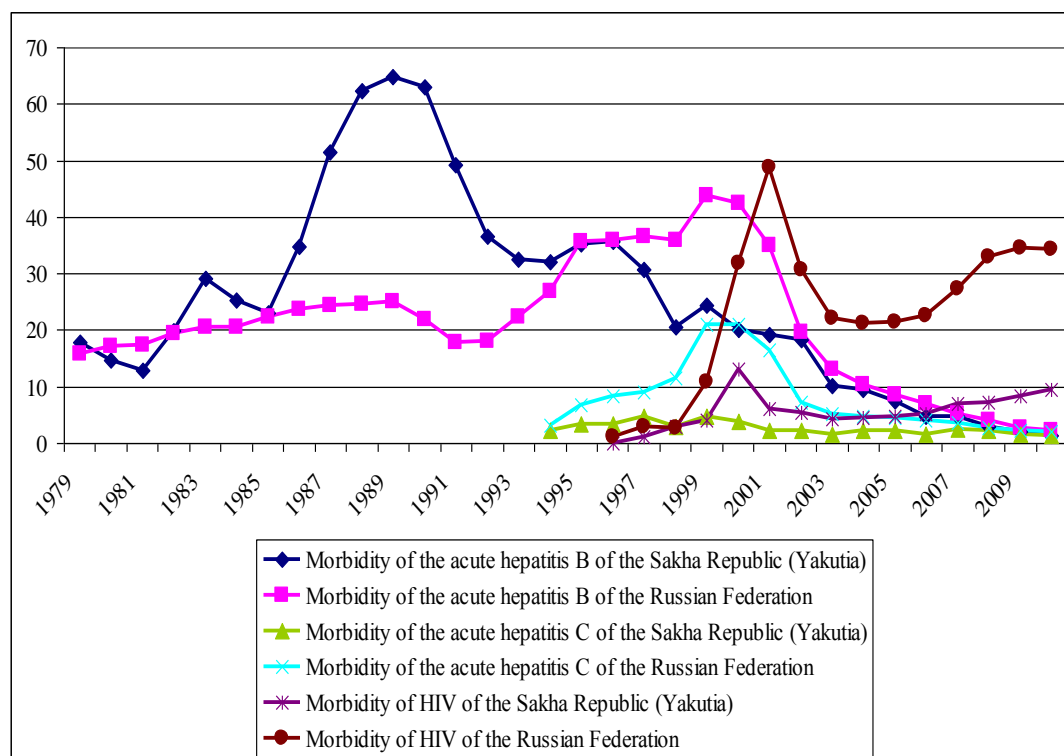
4.Molochny V.P. Dynamics of infectious diseases of the population of the Far East in the period 2002-2007 // Far East Journal infection. pathology. - 2008. - № 13. - P. 4-8.

5.Sotnichenko S.A, Markelova E.V., Sklar L.F., Yakovlev A.A. HIV coinfection with tuberculosis in the Primorye Territory: Modern epidemiology, clinics, immunopathogenesis, diagnosis and treatment. - Vladivostok: Dalnauka, 2009. – 166 p.

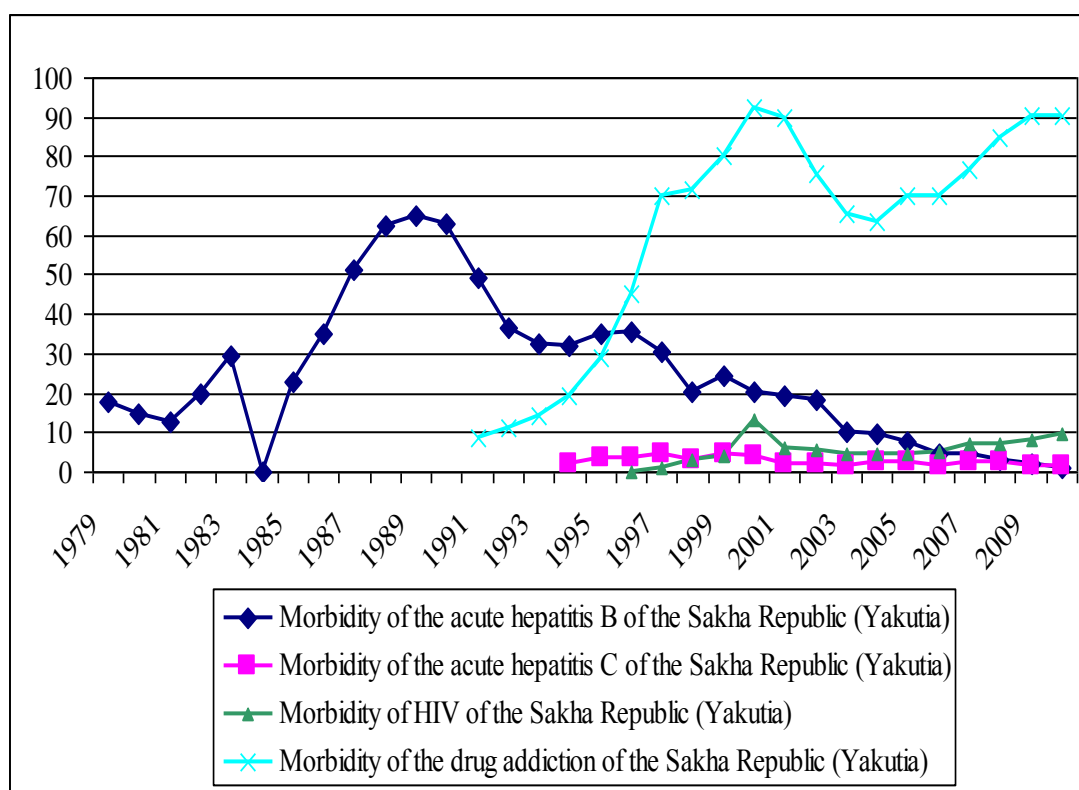
6. Stepanova G.I., Alekseev M.N., Torchinsky N.V., Kiryanova E.V. Epidemiological characteristics of hepatitis C in the Sakha Republic (Yakutia) // Epidemiology and infection dis. 2008. - № 4. - P.4-7.
7. Shahanina I.L. The prevalence of hepatitis B among federal districts of Russia // Epidemiology and infection dis. - 2003. - № 5. - P.7-11.
8. Shahgildyan I.V., Mikhailov M.I., Onishchenko G.G. Parenteral viral hepatitis (epidemiology, prevention, diagnosis) - M: SFM VUNMTS MH of the RF, 2003. – 384 p.
9. Shlyahtenko L.I. Epidemiological diagnosis of chronic viral hepatitis. - SPb., 2001. – 183 p.
10. Yakovlev A.A. The concept of integration competitive development of the epidemic process // Pacific Med. Journal. - 2006. - № 3. - P. 10-15
11. Yakovlev A.A., Karamova S.N., Sergienko N.I. and oth. The integration approach to the study of the spatial spread of hepatitis A and dysentery Flexner in Primorye // Pacific Med. Journal. - 2010. - № 3. - P.51-54
12. Yakovlev A.A., Pozdeeva E.S. Integrative epidemiology of hepatitis B and C in the Primorye Territory. - Vladivostok: Medicine Far Eastern, 2011. – 116 p.
13. Zuckerman A. More than third of world's population has been infected with hepatitis B virus / Brit.Med. Journal. - 1999. - № 318. - R.1213.

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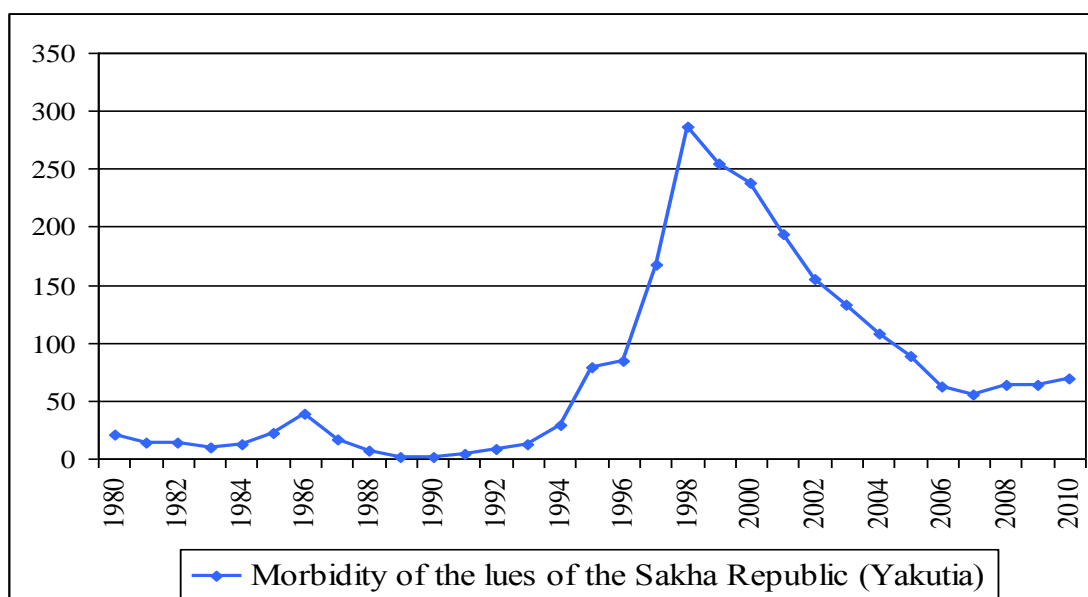
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Pic. 1. The dynamic morbidity of the acute hepatitis B and C and HIV of the Sakha Republic (Yakutia) and whole Russian Federation (per 100 thousand population).



Pic 2. The dynamic morbidity of the acute hepatitis B and C, HIV and drug addiction of the Sakha Republic (Yakutia) (per 100 thousand population).



Pic.3 The dynamic morbidity of the lues of the Sakha Republic (Yakutia) (per 100 thousand population).

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Anthrax- especially dangerous infection in clinical practice

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In article tactics of rendering medical aid to the anthrax patient is submitted. The brief characteristic of organizational actions is given at treatment of 7 patients with this especially dangerous infection. On a clinical example anthrax rare complication as a gastric bleeding is shown. Endoscopic picture of plural ulcer defects in a stomach differs that on periphery of ulcer inflammatory infiltration shaft is absent, and ulcer surfaces are covered with necrotic scab. Tactics of anthrax patient treatment complicated with a bleeding is shown.

Keywords: anthrax, clinical cases, diagnostics, treatment.

1. Abramova F.A. Pathology of inhalational anthrax in 42 cases from the Sverdlovsk outbreak in 1979 / F.A. Abramova, L.M. Grinberg, O.V. Yampolskaya // Proc Natl Acad Sci USA .-1993.- Vol. 90.-P.2291-2294.
2. Brachman P.S. Anthrax /P.S. Brachman //Plotkin & Mortimer, ed. Vaccines. Philadelphia (PA): W.B. Saunders; 1994. p. 730.
3. Caksen H. Cutaneous anthrax in eastern / H.Caksen, F.Arabaci, M. Abuhandan // Turkey. Cutis 2001.-Vol. 67.-P.488-492.
4. Cieslak T.J. Jr. Clinical and Epidemiologic Principles of Anthrax / T.J.Cieslak, E.M.Eitzen // Emerg Infect Dis.- 1999.-№.5.-P.552-555.
5. Danies J.C. A major epidemic of anthrax in Zimbabwe / J.C.Danies // Centr Afr J Med.- 1982.- №28.-P.291-298.