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SOCIALLY SIGNIFICANT LIVER DISEASES AMONG THE ELDERLY POPULATION IN THE CONDITIONS OF THE ANDIJAN REGION (BASED ON THE RESULTS OF A 21-YEAR POPULATION-EPIDEMIOLOGICAL STUDY, GENDER CHARACTERISTICS)

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Abstract:

Socially significant diseases of the liver, such as chronic hepatitis and cirrhosis of the liver, lead to the formation of structurally abnormal areas in the liver and cause irreversible changes, accompanied by a violation of the architecture of the liver. According to WHOSIS (2008), the incidence of liver cirrhosis in the world is recognized as 20-40 patients per hundred thousand of the population, and its prevalence, according to the results obtained by researchers, is steadily increasing. The contribution of liver cirrhosis caused by chronic hepatitis V, C, V+D, viral etiology, is 10-23.5% of all cirrhosis.

Keywords: Chronic hepatitis, liver cirrhosis, epidemiology, gender

RELEVANCE. Socially important liver diseases (IAEJK), such as chronic hepatitis and liver cirrhosis, lead to the formation of structural anomalous areas in the liver and cause irreversible changes, and they are accompanied by a violation of the architecture of the liver [1, p.53-55].

According to WHOSIS (2008), the incidence of liver cirrhosis in the world is recognized as 20-40 patients per hundred thousand population, and its prevalence, according to the results obtained by researchers, is steadily increasing [2, p. 3-8].

The contribution of viral etiological liver cirrhosis caused by chronic hepatitis V, C, V+D is 10-23.5% of all cirrhosis [3, p. 324-329; 4, p. 769-771; 5, p. 299-301].

In some research studies, more specific scientific opinions are highlighted: in recent years, the frequency of detection of cirrhosis caused by viral hepatitis C has increased to 30.3% [6, p. 77; 14, p. 74-80].

These results are also confirmed in the data obtained by researchers of distant foreign countries. Marcellin P. (1999) presented similar data in a clinical examination as early as the last century. According to the author, the leading role in the origin of cirrhosis of the liver is played by the chronic infection of viral hepatitis C. It was the cause of liver cirrhosis in 40 percent of cases [15, p. 11-13].

However, it should be noted that these issues have not been fully explored in special epidemiological studies, especially in the field of preventive medicine in Uzbekistan, and remain relevant.

Based on the existing literature, clinical and population-based studies show that the epidemiological characteristics of chronic hepatitis and liver cirrhosis have been changing in recent years: a steady increase in the disease is recorded in almost all countries of the world. In addition, it has been confirmed that patients with these diseases have an increased risk of developing cardiovascular diseases, compared to the general population [7, p. 59; 8, p. 78-102; 16. p. 565].

Our meta-analysis showed that it is possible to improve the quality of medical care in hepatitis and cirrhosis only by introducing new working (communication) preventive technologies into practice. In order to solve the problem of hepatitis and cirrhosis, attempts at liver transplantation have been made, but in most cases they have ended in failure and there have been problems related to expanding the capacity of the donor fund. In other words, the bigger and more popular the preventive approach is, the better it is for patients with chronic hepatitis and liver cirrhosis.

It is considered a first-level scientific and practical task to create programs and algorithms of individual/massive, regional advanced prevention technologies of socially significant liver diseases, and to select from them and adopt them for operation. [9, p. 71-99; 10, p. 60-63.; 17].

The presented data and epidemiological studies are valuable and important in the implementation of programs related to the prevention of hepatitis and liver cirrhosis among the population, as well as in defining promising scientific topics for the study of these socially important liver diseases. In this

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regard, leading scientific schools and experts expressed unanimous opinions. We think that they should be considered and implemented [11, p. 7-10; 12, p. 36; 13, p. 48].

THE PURPOSE OF THE STUDY is to study the epidemiology of socially important liver diseases (JIAEK) in the elderly population and gender characteristics of 21-year changes in Andijan conditions.

RESEARCH MATERIAL AND METHODS. A population of men and women (4585) aged 18-74 with a diagnosis of chronic hepatitis and treated in the departments of the Andijan State Medical Institute clinic were included in the study.

The medical history data of patients with confirmed diagnosis of JIAEK (by clinical, questionnaire, biochemical, instrumental, functional and autopsy methods) were studied using a special questionnaire, subjective and objective clinical condition was evaluated. This questionnaire (U.K. Kayumov, 2020), approved and recommended for the detection of chronic non-infectious diseases, is standardized and unified, used in epidemiological studies and approved by the SSV of Uzbekistan. The method of questionnaire identification and assessment of SGs and JTs was expanded with additional investigations.

Clinical examination methods. In addition to the use of physical examination methods, the stage of the infection process in the blood serum of patients was determined using immunoenzyme (IFA) analysis. This approach is confirmed and approved by modern spiritual research[1]. Using the Russian standard set "Vetor-Best", markers of viral hepatitis were identified: HBs - antigen for HBV infection, HBe - antigen, anti HBs antibody, HDV marker; HCV infection: Anti-HCV total, Anti-HCV corelgG, Anti-HCV corelgM, Anti-HCVNS3, AntiHCVNS4, Anti-HCVNS5; HBelgG, HBclG, HbclgM. Liver enzymes aspartate aminotransferase were measured by standard biochemical methods ("Vector Best" standard kit, etc.)

(AST), alanine aminosaminase (ALT), alkaline phosphatase, as well as total protein, creatinine, urea, potassium, sodium, coagulogram, glucose, iron were checked.

Instrumental inspection methods. Abdominal organs (liver, spleen, portal vein vessels, gall bladder, kidneys) were subjected to ultrasound examination (UTT) of the patients. The test was carried out on the ALOKA-5500 Prosound (Japan) device in one-dimensional (M), two-dimensional (V) order, with a convex sensor with a frequency of 2-7.5 MHz following the generally accepted rules (Ryxtik P.I., 2009).

Electrocardiographic examination was recorded using "6-NEK" electrocardiography in 12 channels at rest, and its results were evaluated according to the Minnesota code. FEGDS, MRI and CT, and portal vein ultrasound were used individually as needed.

Echocardiography (ExoKG) examination. ALOKA-5500 Prosound transthoracic method according to the recommendations of the American Society of Echocardiography (ASE, 2015) and using local clinical hospital facilities

In (Japan) equipment, sector S was implemented on a 1-5 MHz sensor. When using these methods, the international standards for the detection and diagnosis of JIAEK (SG, JTs) were followed.

Research results. The 21-year epidemiology and changes of socially important liver diseases - chronic hepatitis and liver cirrhosis (IAEJK-"SG+JTs"), characteristics in men and women were studied and evaluated (the obtained results are numerically presented in Table 1).

[1] Ravzatov J.B. Prognosis of cardiohemodynamic disorders in patients with viral cirrhosis of the liver, development of treatment and preventive measures//PhD dissertation– 2022. –Б. 38-40.

World Bulletin of Public Health (WBPH)
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1 – table
Characteristics of the gender prevalence of socially significant liver diseases (SG+JTs) in Andijan population and 21-year dynamics

Audit years	Male population		Female population		Total population	
	ChH+LC		ChH+LC		ChH+LC	
	n	%	n	%	n	%
2000 year	136	5,48	104	4,95	240	5,2
2001 year	186	7,49	122	5,81	308	6,7
2002 year	156	6,28	110	5,24	266	5,8
2003 year	146	5,88	114	5,43	260	5,7
2004 year	149	6,00	118	5,62	267	5,8
2005 year	73	2,94	56	2,67	129	2,8
2006 year	164	6,60	140	6,66	304	6,6
2007 year	74	2,98	68	3,24	142	3,1
2008 year	127	5,11	123	5,85	250	5,5
2009 year	116	4,67	95	4,52	211	4,6
2010 year	186	7,49	154	7,33	340	7,4
2011 year	144	5,80	106	5,05	250	5,5
2012 year	128	5,15	108	5,14	236	5,1
2013 year	150	6,04	107	5,09	257	5,6
2014 year	40	1,61	61	2,90	101	2,2
2015 year	28	1,13	34	1,62	62	1,4
2016 year	40	1,61	32	1,52	72	1,6
2017 year	111	4,47	97	4,62	208	4,5
2018 year	106	4,27	100	4,76	206	4,5
2019 year	109	4,39	143	6,81	252	5,5
2020 year	115	4,63	109	5,19	224	4,9
2000 – 2020 year	2484	100,0	2101	100,0	4585	100,0

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IAEJK is diagnosed with "SG+JTs", i.e. cases of combined hepatitis and cirrhosis, with a prevalence of 4.9% in the general population aged ≥ 18-74 years. 5.19 percent in the female population and 4.63 percent in the male population are recorded with detection frequency (R>0.05).

It is noted that the prevalence of these diseases in different years was determined at relatively high rates: 6.7 percent in 2001, 6.6 percent in 2006, and 7.4 percent in 2010. In addition, a sharp decrease in the frequency of its detection (2005 - 2.8 percent, 2014 - 2.2 percent, 2015 - 1.4 percent, 2016 - 1.6 percent) and stabilized years (from 2017 to 2020) are confirmed.

The dynamics of these changes are important in improving preventive and clinical activities based on correction or forecasting. In general, in the last 21 years, the frequency of distribution of IAEK "SG+JTs" - from 5.2 percent to 4.9 percent - decreased significantly (R>0.05).

In the male population, the frequency of detection of IAEJK "SG+JTs" decreased year by year and was confirmed by the trend of decreasing from 5.4 percent (2000) to 4.63 percent. However, the frequency of IAEJK "SG+JTs" spread in the female population increased from 4.95 percent (in 2000) to 5.19 percent (R>0.05).

We believe that the obtained data are of diagnostic, prophylactic and prognostic importance, or it is necessary to change the diagnostic strategies of treatment in this direction.

In the study, the age-related epidemiological description of all socially important liver diseases (including all types of hepatitis and cirrhosis) and the diagnosis of 21-year changes were studied (data analysis results are summarized in Fig. 1).

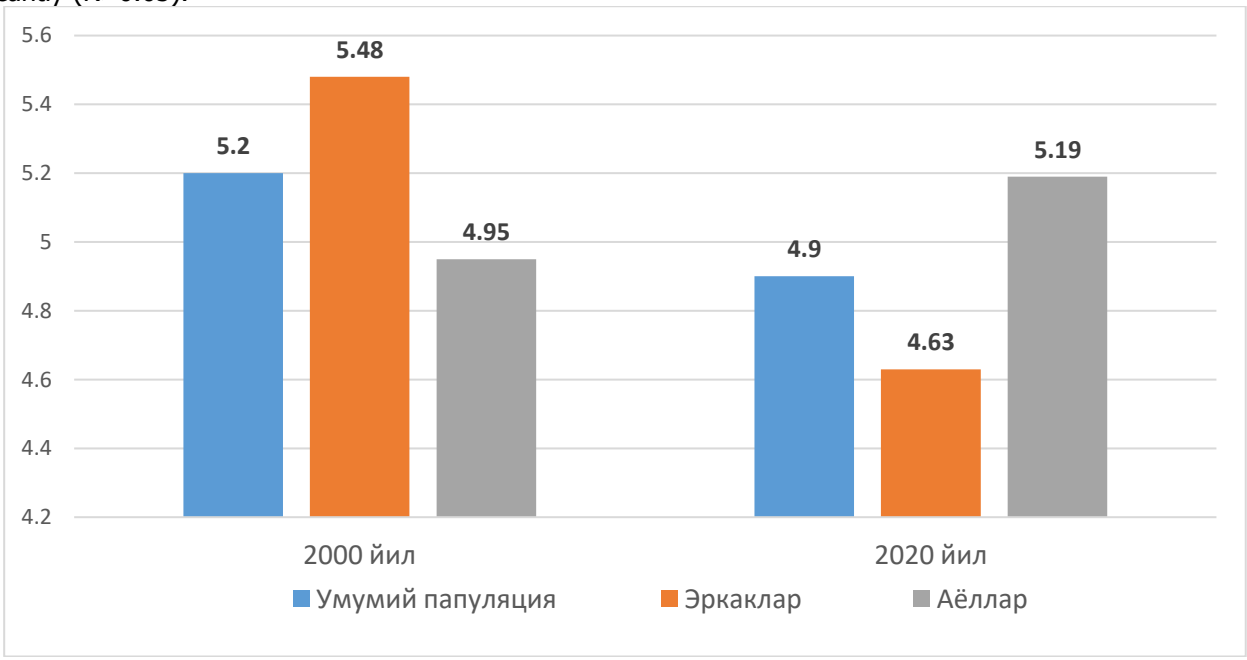

Figure 1. Representation of IAEJK ("SG+JTs") distribution frequency and 21-year change trend in Andijan conditions.

In conclusion, it should be noted that IAEJK ("SG+JTs") was characterized by a 21-year trend with an insignificant decrease in frequency. But in men, it was confirmed that, although not reliably, the tendency to increase imperceptibly remained.

The obtained results confirm that increasing age is undoubtedly confirmed as a risk factor for IAEJK, and the age groups with the highest risk for the disease are 30-44 and 60-74, as the average risk age - 18-29 and 60-74, low risk age groups <18 and 75-89 were confirmed as fertile, and age group ≥90 as very low-risk age group (Fig. 2).

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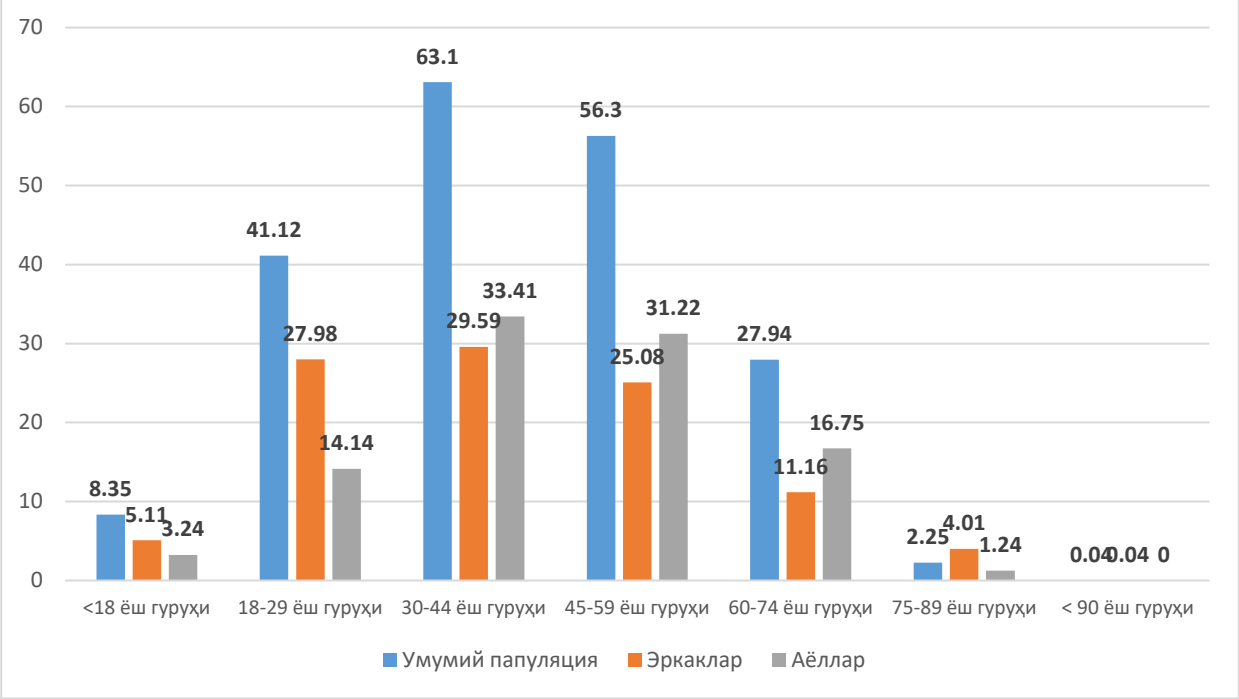

Figure 2. Characteristics of the frequency of formation and detection of IAEJK in Andijan population of different age groups

These data complemented the results of existing clinical studies [48, p. 71-100; 66, p. 23; 121, p. 299-301; 208, p. 11-13], enriches with new directions and serves as a basis for future epidemiological/prophylactic directions. So far, no 21-year prospective study has been conducted on these diseases in a wide age range..

CONCLUSIONS:

1. Liver diseases of social importance were confirmed by the following frequencies of detection in the elderly population:

"SG + JTs" - 4.9 percent (in women - 5.19 percent and in men - 4.63 percent) and liver cirrhosis - 73.5 percent (in men - 74.8 percent and in women - 72.0 percent).

2. The highest risk age groups for IAEJK are the 18-29 and 60-74 age groups, and the low-risk age groups are < 18 years and 75-89 years.

3. IAEJK ("SG+JTs") in the 21-year trend was characterized by the frequency of an insignificant decrease. In the male population, the frequency of detection of IAEJK "SG+JTs" has decreased year by year. However, in the female population, the frequency of IAEJK "SG+JTs" increased from 4.95 percent to 5.19 percent (R>0.05).

We believe that the obtained data are of diagnostic, prophylactic and prognostic importance, or it is necessary to change the diagnostic strategies of treatment in this direction.

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