COMPARATIVE CHARACTERISTICS OF THE PREVALENCE OF SOME MEDICAL AND SOCIAL FACTORS ON THE BACKGROUND OF HIV INFECTION

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Abstract: This article describes the direct relationship between socio-medical behavioral factors. The need to take them into account when conducting a primary survey and influencing them will undoubtedly reduce their frequency of occurrence, which means it will improve the quality of life of HIV-infected people and prolong life.
Keywords: HIV-infected, social status, risk factors.

Introduction. HIV infection, if once it was an epidemic, has acquired the character of a pandemic in recent years. Being a global threat to the life of mankind, and a socially significant disease, it more and more affects different age social strata of the population. Despite the improvement in diagnostics and the introduction of modern methods of therapy, the HIV/AIDS epidemic in the world continues to develop rapidly. In recent years, HIV infection has moved from a concentrated stage, when it spreads to risk groups - drug addicts, prostitutes, homosexuals, into a generalized stage. At this stage, HIV infection goes beyond risk groups and also affects socially well-off segments of the population through heterosexual sexual intercourse, and therefore the infection is spreading more and more. Territorial differences in the prevalence of the disease are due to the influence of natural, anthropogenic and social environmental factors.

Research is becoming more and more relevant, allowing to identify additional external factors and conditions for the formation of regional features of the manifestation of socially significant diseases of the population in various territories. On the other hand, the problem of HIV infection is a multifactorial problem that requires an urgent solution of both medical and psychological, pedagogical, social and other problems [1]. Awareness of HIV/AIDS among the population remains very low. The majority of medical workers are still extremely underinformed or even negative about HIV-positive patients. That is why the general level of knowledge among the population remains extremely low. All of the above indicates the relevance of the presented topic and dictates the need for a comprehensive and comprehensive study of the influence of social factors on the implementation of HIV prevention [4,7,13].

Aim. Study and evaluate, along with behavioral risk factors, factors such as characteristics of family status, living conditions, social and educational status against the background of HIV infection.

Materials and methods. The materials of the study were HIV-infected patients of the Andijan city. Diagnosis of HIV infection/AIDS was carried out in the laboratories of the regional AIDS center using specific (ELISA - to detect antibodies in blood plasma according to 4 generations of test systems), express (quick) tests to detect antibodies to HIV in saliva, blood, serum and plasma blood (agglutination, immunofiltration, immunochromatographic and renal chromatographic tests), immunoblot and polymerase chain reaction, as well as non-specific methods - determination of the number of CD-4 lymphocytes in compliance with the testing strategy in accordance with the recommendations of WHO, UNAIDS, SDS [WHO / SDS/CSR/EDS/2020'16, UNIADS/19.22E]. Such a strategy was applied with the involvement and participation of specialists from regional and Republican AIDS centers.

Methods of multivariate statistical analysis, rank correlation analysis according to the methods of Pearson, Spearman and Kendall were used; u-test, Fisher's angle-transform test, Pearson's (χ^2) test, relative risk test, and Schelling-Wolffeil test. To assess the differences, four main levels of significance were adopted: unreliable (insignificant) - $P>0.05$; marginal (low) - $P<0.05$, medium - $P<0.01$ and high - $P<0.001$.

Results. When studying the comparative assessment of the prevalence of tobacco smoking (TS) in the population of HIV-infected people with various disadvantaged social statuses (Table 1), it was noted that in the presence of an unfavorable epidemiological status, the detection rate of TC increases on average two times ($P<0.01$). It looked like this: in the presence of poor housing and living status (HLS), smoking was observed with a frequency of 36.7%, in the presence of a low educational status (LES) - 33.9% and in the presence of chronic stress (CS) - 55.9%. The highest frequency of TS is detected in connection with chronic stress, dysfunctional family status and poor living conditions. In general, the contribution of socio-economic factors in the development of the TS is an average of 40.3%.

Table 1

Comparative characteristics of the prevalence of tobacco smoking in the population of HIV-infected people with various disadvantaged social statuses

Socioeconomic status of HIV-infected patients	N	Proportion of HIV and tobacco smokers			
		Smoking		No smoking	
		abs	%	abs	%
Poor housing status	272	100	36,7*	55	20,2
Dysfunctional marital status	211	101	47,8*	54	25,6
Disadvantaged social status	449	124	27,6***	31	6,9
Low educational status	289	48	33,9*	57	19,7
Chronic stress	170	95	55,9	60	35,3

Table 2 summarizes the data of statistical analysis on the study of the contribution of behavioral social risk factors in the formation of epidemiological

indicators of the prevalence of alcohol abuse among the HIV-infected population. At the same time, it was found that in the presence of various behavioral risk factors, the frequency of detection of cases of alcohol abuse (AA) increases significantly and is observed in the following frequency: due to poor housing and living status - 37.9% (P<0.05), in the presence of a dysfunctional family status - 66.8% (P<0.001), due to chronic stress - 82.4%

Table 2

The contribution of behavioral social risk factors to the formation of epidemiological indicators of the prevalence of alcohol abuse among the HIV-infected population

| Socioeconomic status of HIV-infected patients | N | Proportion of HIV-infected people who abuse alcohol | | | |
| | | with alcohol abuse | | without alcohol abuse | |
		abs	%	abs	%
Poor housing status	272	103	37,9*	57	20,9
Dysfunctional marital status	211	141	66,8***	19	9,0
Disadvantaged social status	449	133	29,6***	27	6,0
Low educational status	289	83	28,7	77	26,6
Chronic stress	170	140	82,4***	20	11,8

Relatively high rates of AA occur in CS, disadvantaged social status and poor housing status. Under the influence of these risk factors or in the presence of a disadvantaged socioeconomic status in HIV-infected people, the predisposition to ASD increases on average by 2.9 times (P<0.01). The frequency of AA in 49.1% of cases among the HIV-infected population is influenced by behavioral social factors.

Table 3 presents data on the prevalence of drug use in the population of HIV-infected people with different socioeconomic statuses.

Table 3

Comparative characteristics of the prevalence of narcotic drug use in the population of HIV-infected people with different socioeconomic statuses

| Socioeconomic status of HIV-infected patients | N | Proportion of people who use narcotic drugs | | | |
| | | narcotic drug users | | narcotic drug unusers | |
		abs	%	abs	%
Poor housing status	272	141	51,8***	47	17,2
Dysfunctional marital status	211	136	64,5***	12	5,8
Disadvantaged social status	449	138	30,7***	10	2,2
Low educational status	289	91	31,5*	57	19,7
Chronic stress	170	84	49,4*	64	37,6

As can be seen from the data presented in Table 3, socio-economic factors play a significant role in the development of drug addiction. It was revealed that in the presence of poor housing status among the HIV-infected population, drug users are 51.8% (P<0.001), with a dysfunctional marital status (DMS) - 64.5% (P<0.001), with a disadvantaged social status (DSS) - 30.7% (P<0.001), with low educational status - 31.5% (P<0.05) and with CS - 49.4% (P<0.05).

In connection with socio-economic risk factors, the number of people who use drugs increases by 2.1 times (P<0.01). The increase in narcotic drug users (NDU) in 45.6% of cases is influenced by the noted 5 factors.

Further, we studied the comparative characteristics of the prevalence of microelementoses (MTOS) in the population of HIV-infected people with different socioeconomic statuses. Data in this respect are presented in Table 4.

Table 4

Comparative characteristics of the prevalence of MTOSs in the population of HIV-infected people with different socioeconomic statuses

Socioeconomic status of HIV-infected patients	N	Proportion of HIV-infected persons with MTOSs			
		with MTOSs		without MTOSs	
		abs	%	abs	%
Poor housing status	272	141	51,8**	52	19,1
Dysfunctional marital status	211	115	54,5*	78	36,9
Disadvantaged social status	449	178	92,2***	19	4,2
Low educational status	289	102	$35,2^{ND}$	91	31,4
Chronic stress	170	99	58,2*	69	40,6

From the data of Table 4, it follows that in the presence of PHS in the HIV-infected population, MTOSs are diagnosed with a frequency of 51.8%, with DMS - 54.5%, with DSS - 92.2%, in connection with LES - 35.2% and with ChS - 58.2%. In the presence of these RFs, the prevalence of MTOSs increases statistically significantly by more than 2.6 times (P<0.01). Of these, chronic stress and disadvantaged social status had the greatest contribution. The contribution of socio-economic factors to the development of MTOSs in the HIV-infected population, in general, is 58.4%.

Thus, LBW due to PHS is observed with a frequency of 88.6% (P<0.001), with DMS - its prevalence is 93.8% (P<0.001), with LES - 61.9% (P<0.05) and with ChS - 50.6% (P<0.05).

Table 5

Comparative characteristics of the prevalence of underweight (LBW) in the population of HIV-infected people with different socioeconomic statuses

Socioeconomic status of HIV-infected patients	N	Proportion of HIV-infected persons with LBW	
		with LBW	without LBW

		abs	%	abs	%
Poor housing status	272	241	88,6***	31	11,4
Dysfunctional marital status	211	198	93,8***	13	6,2
Disadvantaged social status	449	416	92,6***	5	7,4
Low educational status	289	179	61,9*	139	48,1
Chronic stress	170	86	50,6*	63	37,1

Relatively high LBW rates occur in the presence of a dysfunctional family and social status (93.8% and 92.6%, respectively).

Conclusions. Thus, epidemiological short-sightedness or population underestimation in the prevention of risk factors in HIV-infected people disarms the modern clinician to a certain extent, not setting them up for a more "targeted" and active action in relation to the therapeutic continuum from secondary somatic diseases against the background of HIV infection.

It has been argued that the presence of behavioral factors (smoking, moderate heavy alcohol consumption, alcohol abuse, significantly pronounced MTOS, severe MTOS, poor housing and living status, dysfunctional family status, low educational status and chronic stress, etc.) lead to an "aggressive" accumulation of disadvantaged epidemiological conditions in relation to the therapeutic continuum among the HIV-infected population. They are priority objects for planning and implementation of "life-saving prevention" in HIV-infected people, positively influencing the "epidemiological endpoints" in the HIV-infected population.

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