Original Paper

## Clinical characteristics of addictive states in aborigines of the Russian North

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**Abstract.** Ethnocultural aspects of risk factors, formation of clinical dynamics of alcoholism in 409 patients (group 1) from aboriginal population of Kamchatsky Krai living under conditions of Far North (Koryaks, Evens, Aleuts, Chukchi, Itelmens, Yakuts, Nivkhi, etc.) compared with patients of Slavic nationality (group 2, n=168) were studied. Specific factors of alcoholism are presented: early onset, quick tempo of development and progression of course with psychopathologic transformation of intoxication up to withdrawal syndrome development, brutality of aggressive behaviour in intoxication during excessive nature of alcoholization and high level of consumption of surrogates of alcohol, severe degradation of the personality with high level of social maladaptation and asocial behaviour.

Keywords: Alcoholism, ethnocultural features, aboriginal population, Kamchatsky Krai

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**RELEVANCE** Development of social-economic forms and methods of health care for aboriginal population is the most important task of the contemporary narcology. During development of methods of improvement of narcological care for population, geographic, economic, and social and ethnocultural features of eastern regions of Russia should be taken into account (Kosareva, 2000; Kozlova, 2000; Gusamov, 2005). It should be stated that ethnocultural aspects of alcoholism are ones of the least studied in narcology; and in the epoch of existence of Soviet Union, ethnonarcological studies were of fragmentary nature and their findings bore the seal of "family secret" of the state (Semke & Bokhan, 2008).

Origins of this unfavourable phenomenon go possibly back to sociocultural aspect of study of the problem. Having begun in the XIX and reached its maximum in the XX century, the process of acculturation of small peoples of Far East being characterized by destabilizing influence of newcomers, adoption of foreign traditions, in particular, tradition of alcohol use, ideologically caused by attempts to cultivate in aborigines norms and values, not inherent in them, has led to destruction of historically formed life stereotype of these ethnoses, loss by them of their cultural-ecological roots – native language, ritual and festive ceremonies, national moral. All this has undermined balanced bases of existence of archaic populations and has facilitated formation of various forms of mental maladaptation and destructive behaviour (for example, alcoholism) in many of them. Such a fast, from the viewpoint of evolution, introduction of ethanol into everyday life of aborigines has caused serious biological (neuroendocrine, enzymatic) dysfunctions in them, which in totality with traditionally low amount of alcoholdehydrogenase in the organism creates the biological preconditions of severe course of alcoholism in representatives of small peoples of Far East. As a whole in Russia, there are 65

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aboriginal small ethnoses (these are 0,3% of the entire population of the Russian Federation). Among Mongoloids, a special place is occupied by aboriginal small peoples of the North. These are the smallest, most vulnerable, in a number of cases relict ethnoses living at remote places, under extreme natural conditions.

In the period of the newest history of radical social reforms, real possibilities for broadening the complex studies of relevant mental health problem of small peoples of Siberia, Far East and Far North have emerged (Semke *et al*, 2009). But up to present time issues of prevalence, clinic and prevention of alcoholism and alcoholic psychoses in Eastern regions of the country, including remote territories of Kamchatsky Krai, remain insufficiently studied.

Kamchatsky Krai including Koryak Autonomous Okrug represents a natural ground for comparative study of ethnocultural aspects of alcoholism in Slavic and aboriginal peoples of this region. This has been caused by the fact that many Far-Eastern small peoples live in the region (Koryaks, Evens, Aleuts, Chukchi, Itelmens, Yakuts, and Nivkhi etc.). However, absence of reliable information on ethnocultural aspects of narcological disorders hinders efficacy of prophylaxis of alcoholism, treatment and rehabilitation of patients, improvement of medico-social indices of narcological situation in the region.

On this basis with the purpose to study preconditions of stabilization of narcological situation among aboriginal population of Kamchatsky Krai, living under conditions of Far North, the task is detection of ethnocultural features and clinical dynamics of alcoholism in representatives of aboriginal ethnoses.

**MATERIAL AND METHODS** Taking into account that the largest aboriginal peoples of Kamchatsky Krai are Koryaks, Evens, Aleuts and Itelmens, comparative analysis of registered prevalence of alcoholism was carried out in these ethnic groups. With the use of clinical-psychopathological method, clinical dynamics of alcoholism in patients under therapy at Krai Narcological Dispensary (city Petropavlovsk-Kamchatsky) were studied. Basic group (1; n=409) consisted of patients from the above mentioned ethnic groups (males aged 26-52 years). Group of comparison (2) consisted of 168 alcoholic patients (matched with patients of group 1 in age, stage and length of the disease), who were born and lived in the same territory.

**RESULTS** The highest level of registered morbidity with alcoholism was found among Koryaks (30.5 per 1,000 of the population) and Evens (28.4 per 1,000 of the population); among Aleuts and Itelmens it was lower (within 16 per 1,000 of representatives of this ethnos). In all ethnic groups of aborigines, morbidity with alcoholism among males reliably exceeded the morbidity among females (differences of indices reached from 1.9 to 6 times), that indicates larger vulnerability of males for this disease. The highest level of prevalence of alcoholism was revealed in male Evens (53.0 per 1,000 of the population). These data allow stating the higher prevalence of alcoholism among aboriginal peoples of the region compared with Slavs living here. It may be supposed that real prevalence among aborigines is higher because conditions of their living (remote and hardly to reach places) to significant extent hinder comprehensive detection of patients.

Comparative study of socio- and ethnocultural characteristics of persons of aboriginal and Slavic nationalities suffering from alcoholism has allowed revealing the following features. Less than 25% of aborigines consider language of their nationality as their native one that testifies to loss of their cultural-ethnic roots by most of them. This leads to loss of personal integrity and weakens psychological stability facilitating the development of alcohol dependence.

Overwhelming majority (more than 80%) of patients among aborigines and Slavs grew under conditions of dysfunctional upbringing. Its most prevalent variant - both in aborigines and in Slavs - was authoritative one, forming such traits of the personality as passiveness, lack of volition, inability to

withstand difficulties. Formation of personality pathology belongs to risk factors of development of alcohol dependence.

In both ethnic groups of patients, persons with elementary and secondary education predominated. Concerning employment of patients, both groups of patients were characterized by large number of not working persons. Among Slavs, such persons were more than two third, among aborigines about a half. This testifies not only to occupational maladaptation of patients with alcoholism but reflects adverse social-economic situation in the Krai, especially in its rural districts.

Study of family status has shown that almost in a half of all cases patients of both ethnic groups had not own family, that indicates their severe maladaptation in family-household sphere. In addition, in patients with own families, relations in them in two third of cases are of destructive or formal nature. This pattern to equal extent is typical both for Slavs and aborigines.

Leading place in system of personal values in patients of aboriginal nationalities is occupied by issues of financial wellbeing, in Slavs – issues of family and marriage. In studied groups of patients, less than a half of Slavs and more than one fourth of aborigines considered themselves as religious. 67.2% of aborigines' typical feature was belief in traditional, pagan, in their essence, cults. More than one third of religious patients of both nationalities were characterized by such a form of expression of religious beliefs as "inner belief", i.e., belief without observance of established religious performance. In addition, 60% of religious Slavs address to religion only in critical situations that is more appropriate in its essence for archaic forms of psychological defence according to type of superstition. Summarizing, it may be stated that patients of both ethnic groups are to larger extent more superstitious than religious in true meaning of the word. This is why therapeutic and rehabilitative activities should be performed with account for mentioned features.

In result of carried out study, we were successful in identifying similarity and differences on main clinical parameters of alcohol dependence in patients of compared ethnic groups. First of all, of relevance is analysis of differences, which should be taken into account in preventive and therapeutic-rehabilitative work with patients. So, in 40% of patients of both nationalities we have revealed adverse premorbid traits of the personality. Aborigines were more characterized by protest and aggressive forms of behaviour, and Slavs by inferiority complexes.

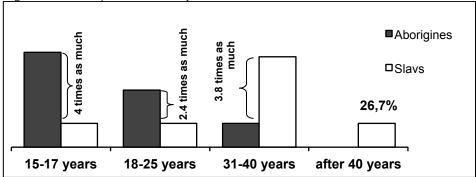
Formation of alcoholism in studied patients was facilitated by incorrect attitude of parents toward alcohol use by their children. So, no less than a half of mothers and two third of fathers have indifferent attitude or themselves taught children to use alcohol. This adverse phenomenon is more prevalent in families of aboriginal peoples. In Russians, indifference was revealed more frequently and in aborigines practically customization of children to drinking.

For alcoholic patients of both ethnic groups, early onset of systematic alcohol use is typical; first of all, this concerns patients of group 1. Among them part of persons, having begun to use alcohol systematically at the age of 15-17 years, exceeds analogous indicator among Slavs 4-fold, and at the age of 18-25 years, 2.4-fold. Among patients of Slavic nationalities, specific weight of persons with onset of systematic alcohol use at the age of 31-49 years is higher 3.8-fold. It is especially demonstrative that if among alcoholic patients—Slavs number of persons with onset of systematic alcohol use after 40 years, is 26.7%, so among patients-aborigines there were not such persons (**Figure 1**).

Study of patients of aboriginal nationalities has shown that the most prevalent motivations of alcohol use in them are as follows: traditional (accustomed alcoholization, 92.3% of all patients); deprivation-affective (loneliness, melancholy, feeling of being abandoned; 79.8%) and hyperactivation (way out from state of boredom, novelty seeking; 75%). The second group of motivations according to frequency was as follows: pseudo-cultural (ritualization of alcohol use;,69.7%), submissive (submission to requirements of micro-social group; 64.9%) and macro-social (determined by worsening of social-economic situation in the country, unemployment, lowering the level of life, social insecurity; 63%). The third group included two forms of motivations of alcohol use: hedonistic (obtaining the pleasure, euphoria; 49%) and asthenic (for heightening the endurance, power, vital tonus; 39.9%). Less prevalent motivations were included into the fourth group: ataractic (sedation, removal of mental tension; 20.2% of patients), family-household (adversity in family life, accompanied by conflicts, scandals, divorce; 20.2%), protest (18.8%). In patients of Slavic nationalities leading place is occupied

by alcoholic traditions of the society (80.7% of all patients). Parts of the rest factors are from 40 to 66% of cases.

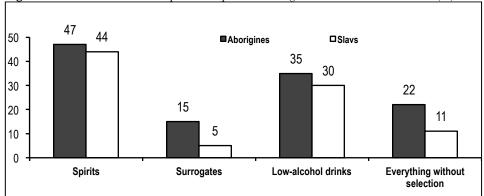
Figure 1 Onset of systematic consumption of alcohol



Thus, in patients of both ethnic groups a leading place among motivations of alcohol use is occupied by alcoholic traditions, existing in the society. In aborigines, their influence is more expressed, in spite of the fact that such traditions were initially absent in culture of aboriginal peoples of Far East. In both ethnic groups, deprivation-affective, auto-destructive and macro-social motivations are practically equal in frequency. Among patients-aborigines compared with Slavs, the specific weight of submissive, pseudo-cultural and hyperactivation motivations and in Slavs – hedonistic, ataractic, family-household and asthenic ones – is reliably higher. These data show that reflection and self-doubt, striving artificially, without their own efforts, to change their own mental state (either to euphoria or to sedation), high need for feeling of own worth, accompanied by own overestimation and hypertrophied ambitions are more inherent in Slavs. In addition, among Slavs part of patients whose motivations to use alcohol are associated with family adversity exceeds part of such patients among aborigines 3.3-fold. From our viewpoint, this indicates not the family wellbeing in aboriginal peoples but relatively lesser significance of family-household problems for them.

Identification of predominant kind of alcohol use has shown (**Figure 2**) that almost a half of all aborigines suffering from alcoholism (47.6%) uses mainly spirits (vodka, spirit). One fifth of all patients (22.1%) has no preferences concerning any kind of alcohol; other kinds of alcohol are used by aborigines reliably more seldom. Patients of Slavic nationalities also use mostly spirits as well (44%); drink "everything without selection" (11.6%).

Figure 2 Kind of alcohol consumption in dependent aborigines and Slavs of Kamchatka (%)



Relatively low average daily dose of alcohol (0.5 l) is found in aboriginal patients 2-fold more frequently, than in Slavic patients (84.1 and 42%, respectively). Among the latter, the specific weight of persons with high daily dose is higher (0.5-1.5 l and more) 58% vs. 15,9% among aborigines. Findings

testify to significantly lower tolerance of alcohol in aborigines suffering from alcoholism (group 1). Among patients of group 2 compared with aborigines, part of alcohol users against the background of high tolerance (3-4 times per week or every day) is higher. In the group of patients of aboriginal nationalities, the specific weight of persons using alcohol every day against the background of low tolerance and of patients with dipsomania (several times per month) is higher. Revealed differences allow concluding about low tolerance in aborigines suffering from alcoholism and also show severity of clinical manifestations of the disease in this ethnic group of the population.

Study of clinical variants of pattern of intoxication in compared ethnic groups of patients has shown (**Figure 3**), that in patients of group 1 intoxication with dysphoria (62.5%), aggression (37.8%), paranoid attitude (27.9%) is reliably more frequent. In almost a half of patients of aboriginal nationalities intoxication with torpor, accompanied by onset of apathy, drowsiness, inhibition was typical; other variants of intoxication are revealed reliably more seldom. Number of amnesias correlates positively with surrogate consumption, excessive alcohol use, severity of alcohol degradation with cognitive disturbances (**Figure 4**). In Slavic patients the simple intoxication is predominant (32.7% of all cases), while different forms of changed intoxication are found reliably more seldom: intoxication with explosiveness (16.7%), depression (14%), hysteric manifestations (12%).

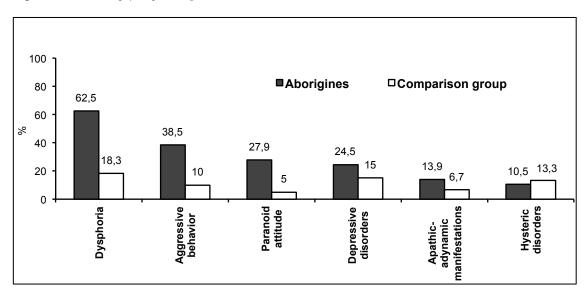


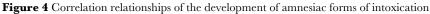
Figure 3 Variants of psychopathological transformation of alcohol intoxication

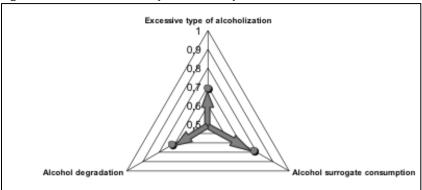
Comparative study of clinical variants of withdrawal syndrome in studied groups of patients has allowed identifying that in persons of aboriginal nationalities withdrawal syndrome with mental disorders is the most frequent variant (53.9%). The second variant according to prevalence is withdrawal syndrome with vegetative-somatic disorders (34.9%). In the group of comparison, in contrast, withdrawal syndrome with vegetative-somatic disorders dominates (46%), and withdrawal syndrome with mental disorders is found more seldom (34%).

Distribution of patients according to stages of development of the disease testifies that most of them have diagnosis of stage II alcoholic disease (94.7% among aborigines and 82.7% among Slavs). Both initial (I) and end (III) stages are revealed relatively more frequently in Slavs. In the first case their parts are 14% and 4.3%, in the second 3.3% and 1%, respectively.

Considerable predominance of patients with stage II alcoholism in both ethnic groups reflects situation when in sight of psychiatrists and addiction specialists patients occur mainly at this stage. Concerning larger part of persons with stage I of the disease among patients-Slavs this is associated, on one hand, with their greater possibilities for referral to addiction specialist, on the other hand, in peoples of the North alcoholism is transformed into the stage II faster, that hinders detection of patients at early stages of the development of the disease. Other causes underlie predominance among patients-Slavs of

persons with stage III alcoholism. With account for more adverse course of the disease, the significant part of them does not live up to mean age of the development of this stage of the disease.





During consideration of predominant form of alcohol use by patients of compared ethnic groups, it was identified that in aborigines, suffering from alcohol dependence, leading form of alcohol use is dipsomania (49.0%), continuing most frequently for 5-7 days, then permanent drinking against the background of low tolerance (23.6%), permanent alcohol use against the background of high tolerance (16.8%), pseudo-dipsomania (10.1%). In group of patients of Slavic nationalities, the most frequent form of alcohol use is also dipsomania (45.3%); then permanent drinking against the background of high (22.7%) and low (18%) tolerance, pseudo-dipsomania (12.7%) and one-day excesses (1.3%).

Characterizing types of course of alcoholism in patients of compared ethnoses it should be mentioned that almost in two-third of patients of both ethnic groups the disease was of averagely progressing pattern. Mildly progressing dynamic was diagnosed in Slavs more frequently (15.3%) than in aborigines (9.6%), and highly progressing course, vice versa, was more frequent in representatives of aboriginal peoples (17.3%) than in Slavs (8.7%). These data confirms larger frequency of cases of adverse course of alcoholism in small peoples of Far East.

**DISCUSSION** Comparison of features of alcoholism in aboriginal and Slavic peoples of Kamchatsky Krai and population of Koryak Autonomous Okrug allows concluding the following: for aborigines higher prevalence of alcoholism, greater severity of its clinical manifestations, adverse course, severe progression, higher incidence rate and degree of alcoholic personality changes of moralethical and intellectual-mnestic decline, social and professional maladaptation are typical.

During development of evidence-based programs of improvement of prevention of alcoholism among aboriginal population of Kamchatsky Krai, living under conditions of Far North, it is purposeful to take into account necessity of distinguishing the organizing and ethnocultural directions of problem resolution. Organizing directions envisage improvement of structure and system of narcological care in the region of Far East. Programs of optimization of narcological care should be of ethno-differentiated nature; in relation to aboriginal population urgent activities should be undertaken. These programs should envisage maximum possible decentralization of narcological care, its accessibility for population, especially for living in rural area, heightening the professional level of ethno-oriented specialists working in remote districts.

Improvement of narcological care for aboriginal peoples of Far East supposes its approximation to place of compacted living of aborigines. Expeditionary method of work is especially appropriate for specifics of the region. Organization of regular expeditionary journeys of specially formed narcological teams to places of compacted living of small peoples is meant. Specialists (addiction specialists, clinical psychologists, social workers) must know ethnocultural features of the examined ethnic groups, specifics of onset and course of alcoholic diseases in them to use this knowledge in preventive, therapeutic-diagnostic and rehabilitative work.

Ethnonarcological problems of aboriginal population of Kamchatsky Krai need monitoring of narcological situation for effective planning of services and assessment of efficacy of activities. For starting point of basic trends, of significance is monitoring of general situation. The first level is generalized information on the problem from official sources, specifically a system of indicators, assessment of profile services and state of mental health, assessment of need of aboriginal population for prevention, analysis of volumes of use, planning and advancing the information. The second level gives personal information on patients and users from official sources. It is necessary for analysis of users and models of use among aboriginal population.

Thus, knowledge of ethnocultural specifics of patients of aboriginal peoples of Far North, living in Kamchatsky Krai, allows achieving the differentiated understanding of models of formation of alcoholic pathology in them and using this information for differentiated work on primary and secondary prevention of alcoholism. On the other hand, knowledge of ethnocultural features of alcoholism in patients of aboriginal small peoples provides possibility of more differentiated and effective implementation of prevention, diagnosis and treatment of these diseases that will improve narcological situation in Far East.

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