

# Alcohol and Alcoholism in Russia: An Update

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## Abstract

The problem of excessive alcohol consumption in Russia is well known; but there is a tendency to exaggerate it. In this way, responsibility for enhanced mortality is shifted onto the people, that is, self-inflicted diseases caused by excessive alcohol consumption. The overestimation of the cause-effect relationship between alcohol consumption and cardiovascular disease has been used for the same purpose. The quality of alcoholic beverages is uneven. Instances of mass poisoning are discussed here. The concept of unrecorded alcohol is not directly applicable to Russia without a comment that ethanol from non-edible sources, diverted from the industry or imported, has been used for production of beverages sold through legally operating shops and eateries. Furthermore, heavy binge drinking has contributed to mortality. Fortunately, this hazardous pattern of alcohol consumption has been declining since the last two decades. Vodka and fortified wine have been partly replaced by a moderate consumption of beer. Efficiency of public policies in the discussed area has been limited. In a separate section, invasive and medicinal treatments without sufficient clinical indications are discussed. The attitude to persons supposed to have an alcohol use disorder is less responsible with lower procedural quality assurance than for other patients. Some ethical and legal aspects of compulsory treatments are briefly delineated. Considering shortcomings of medical practice, research and education, the directives and increase in funding are unlikely to be sufficient for a solution of existing problems. Measures should include participation of authorized foreign advisors.

## Introduction

The problem of excessive alcohol consumption in Russia is well known [1] but there is a tendency to exaggerate it, which is evident for inside observers. The exaggeration aims at disguising shortcomings of the healthcare, with responsibility for the relatively short life expectancy especially among males shifted onto the people i.e. self-inflicted by alcohol. Furthermore, the alcohol overconsumption is a known criminogenic factor [2] but again, the alcohol-related delinquency is sometimes exaggerated by Russian media to veil the non-alcohol-related organized crime, where some civil servants and their relatives have been involved. In fact, the foreign policy can be seen as crime in view of the Ukraine war. Discussing family violence and child abuse, both professional literature and the media often overemphasize the alcohol abuse. Without denying the problem, it should be commented that it is easier to denounce a socially unprotected perpetrator, in particular, an alcoholic. Otherwise, various tools are applied to prevent a disclosure: denial of facts, allegations of slander and/or mental abnormality in the victim, threats and intimidation, appeals to preserve honor of the family or nation. About 99% of publications on outcome evaluation of child maltreatment were based on research conducted in more developed countries (around 83% in the United States) [3] while in less open societies the family violence is persisting without much attention. Authorities, teachers and neighbors in apartment buildings did not react to some known cases of child maltreatment. According to some estimates, the prevalence of family violence in the Russian Federation (RF) during last decades has been 45-70 times higher than, for example, in the United Kingdom and France; details and references are in [4].



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During the anti-alcohol campaign (AAC), launched by Mikhail Gorbachev in 1985 and ended with a failure by 1988-1989, a mass consumption of non-beverage alcohol was observed: perfumery and technical fluids such as window-cleaner. Considering the large scale sales of the window cleaner in some areas e.g. in Siberia, it was knowingly tolerated by the authorities. The drinking of alcohol-containing technical liquids and perfumery decreased abruptly after the AAC, when vodka, beer and other beverages have become easily available and relatively cheap [5]. The alcohol consumption predictably increased after AAC. It facilitated economical reforms of the early 1990s: workers did not oppose privatization of factories thanks to mass drunkenness. Following the abolition of the state alcohol monopoly in 1992, the country was flooded by alcoholic beverages of poor quality, sold through legally operating shops and kiosks. During the 1990s, ethanol was massively transported to Russia from Georgia; the author observed a long line of tank trucks queuing at the border. It was used for production of vodka and other beverages including wine and beer. North Ossetia has been known as a nationwide source of cheap alcohol. Beverages sold in Russia with special reference to quality and toxicity have been reviewed previously [6].

Legally sold alcoholic beverages sometimes caused poisonings up to lethal ones. The incidence of fatal intoxications increased in the early 1990s [7]. The following absolute figures of lethal poisonings with alcohol-containing fluids were reported: 1998 - 21,800, 1999 - 24,100, 2000 - 27,200 [8]. In 2006, a mass poisoning with jaundice was supposedly caused by disinfectant Extrasept-1 sold in vodka bottles in different regions of Russia [9-11]. Reportedly, Extrasept-1 contained "0.08-0.15% or, on average, 0.45 mg/ml" of diethyl phthalate and "0.1-0.14 % or, on average, 0.344 mg/ml" of polyhexamethylene guanidine hydrochloride (PHMG). These contradictory figures have been published by Bonitenko [9]. Respective concentrations 0.08-0.15% and 0.1-0.14% were reported by other authors [10,12]. The number of poisonings during the period August-November 2006 was 12,611 cases, among them 1189 lethal ones [10,12] factual figures were probably higher. Histologically, "cholestatic hepatitis with a severe inflammatory component" was described [12]. However, PHMG and

related polyhexamethylene biguanide (PHMB) are not particularly hepatotoxic. Both substances are used worldwide for disinfection of swimming pools. Apart from PHMG, “chloride compounds” have been discussed as possible causative factors [13]. There is a hypothesis that carbon tetrachloride, dichloroethane or other organochlorides [14,15], used for the dry cleaning of clothes, caused the mass poisoning; there were rumors about it. Bonitenko seems to oppose this hypothesis in favor of PHMG, displaying hardly matching illustrations: a young patient with marked jaundice “after drinking of Extrasept-1” and histological images from liver biopsies with steatosis, moderate inflammation and no visible cholestasis [9]. Note that the median lethal dose ( $LD_{50}$ ) for PHMG is approximately 500-800 mg/kg in rats and rabbits [9,16], which, extrapolated to humans, means that an individual weighing 100 kg would have to ingest around 60 kg of Extrasept-1 to receive  $LD_{50}$  of PHMG. Moreover, the animals died with neurological symptoms, not from hepatotoxicity. As for diethyl phthalate, its acute toxicity to mammals is low; details and references are in [17]. There might be some synergism with ethanol; but experiments cited in [9] are not proving for the role of PHMG and diethyl phthalate in the mass poisoning.

Illegally produced cheap vodka of unclear origin, also containing technical fluids, was sold through shops and eateries [18]. Technical alcohol was added to beer and other beverages. Consumers smelled it; the astringent taste of technical ethanol is known as it has been stolen from factories and scientific institutions, being often used for drinking during AAC. This has been veiled by some writers creating impression that consumers deliberately bought disinfectants: “This outbreak was caused by the consumption of antiseptics with chloride compounds due to the deficit of other non-beverage alcohol” [13]. In fact, there was not the “deficit of other non-beverage alcohol” but a temporary deficit of vodka caused by the elevation of excise duties and tightening of some regulations by the Law 102-FZ of 21 July 2005 [8]. The shortage was compensated by surrogates sold in vodka bottles [10]. Furthermore, 77 lethal cases were reported from Irkutsk in 2016. According to published information, the poisoning was caused by the bath lotion Boyaryshnik (Hawthorn) containing methyl alcohol [19,20]. However, it is suspected that the poisoning was caused by the medicinal hawthorn (*Crataegus*) tincture. The hawthorn tincture is the pharmacy product most frequently consumed by drinkers in Russia [21]. The misinformation might have been intended to disguise the fact that methanol was used as a cheap substitute for medicinal ethanol.

Exaggeration by some authors of an “unrecorded” alcohol consumption shifts responsibility for poisonings onto consumers, who allegedly prefer drinking surrogates [22]. The concept of unrecorded alcohol is not directly applicable to Russia without a comment that ethanol from non-edible sources, diverted from the industry or imported, has been used for production of beverages sold through legally operating shops and eateries [7,11,18,23,24], thus being formally recorded. This occurred generally with the knowledge of authorities. In fact, “most vodka and liquor consumed by the population is purchased in the official retail stores” [25]. The Internet trade has been “typically for bulk orders only” [26]. The consumers are usually unable to distinguish by sight between branded and counterfeit vodka as it is sold at the same shops and looks identical or almost identical. In the 1990s, slanting labels and lax closures

were known as attributes of falsified beverages. Today, bottles with counterfeit beverages are “in good accordance with the original products” [26]. The quality of alcoholic beverages was improving after the mass poisonings discussed above; but at the third year of the Ukraine war (2024) beer and vodka smell poor-quality alcohol more often.

Remarkably, the rate of suicides without measurable blood alcohol concentration (BAC) slightly increased in Belarus after the start of the AAC (1985 - 6.25; 1988 - approximately 6.6 per 100.000 of residents), then decreased to 6.1 after the AAC, which coincided with the peak of optimism at the beginning of the economical reforms around 1991. Thereafter, both the BAC-positive and BAC-negative suicide rates increased considerably, the latter up to approximately 10.4 in 2003 [27]. These figures indicate that dynamics of suicides depend not only on the amounts of consumed alcohol, but also on social factors. It can be reasonably assumed that the increase in the suicide rate after 1991 has been partly caused by deterioration of the social assistance, when many unemployed people were abandoned in a desperate condition.

#### **Alcohol-related vs. cardiovascular mortality**

After AAC, the average life expectancy in Russia decreased especially in men. For the period 1993-2001, this figure was estimated to be around 58-59 years [1,23,28]. The figures have increased since then; but we aren't sure about reliability of the official statistics. Among the causes of enhanced mortality have been limited availability of modern health care, late detection of malignancies, offences and crime against alcohol-dependent people resulting in homelessness and premature death.

The cause of the relatively high registered cardiovascular (CV) mortality in the former Soviet Union, and of its further increase after 1990, is evident for pathologists and other medical specialists. There is a tendency to over diagnose CV diseases both at autopsies and in people dying at home, not undergoing autopsy. If a cause of death is not entirely clear, a standard post mortem diagnosis is “Ischemic heart disease with cardiac insufficiency” or something similar [29]. Not surprisingly, the deterioration of quality in pathology and other healthcare services in the 1990s coincided with the increase in CV mortality [30]. This could be indirectly confirmed by the following citation: “Increases and decreases in mortality related to CV diseases... but not to myocardial infarction, the proportion of which in Russian CV mortality is extremely low” [28]. Indeed, the diagnosis of myocardial infarction is usually based on distinct clinical or morphological criteria, while ischemic or atherosclerotic heart disease with cardiac insufficiency is sometimes used post mortem without strong evidence. Furthermore, the over diagnosis of CV diseases is compatible with the “absence of any substantial variation in mortality rates from neoplasms, including those related to alcohol, during the period 1984-1994” [31] because cancer is rarely diagnosed without evidence. Remarkably, the mortality from lung cancer (requiring X-ray or autopsy for the diagnosis) in males decreased by 17% over the period 1998-2007, while that from breast cancer, rarely remaining undiagnosed, “increased considerably” [28]. Finally, the irregular treatment of arterial hypertension [32] and diabetes mellitus contributes to the CV mortality.

Another citation to be commented: “The changes in Russian mortality in the last few decades are unprecedented in a modern industrialized country in a peacetime” [33]. Indeed, between 1984 and 1994, mortality rates in Russia underwent a rapid decline followed by a steep increase. The magnitude of the fluctuations raised questions about the validity of reported mortality rates. Apparently, an artifact was among the causes of the “huge variation in Russian mortality” [31]. The mortality decrease after 1985 could have been initially overstated to highlight successes of AAC, which has been subsequently compensated by overstated mortality figures; more details and references are in [29].

Certain Russian authors exaggerate the cause-effect relationships between alcohol and CV mortality e.g. [34], thus depicting the high mortality as partly self-inflicted by alcohol. This tendency is relatively new. An epidemiological study from the 1970s reported that the prevalence of CV diseases including hypertension was not significantly higher among men who drank excessively than in the general male population [35]. Furthermore, the heavy binge drinking was discussed as a determinant of the increased mortality in RF [36]. Without denying the harm from this hazardous pattern of alcohol consumption, it should be noted that heavy binge drinking was declining in Russia [37]; recent developments are discussed below.

### Public policies

The effects of recent “alcohol control policy measures” [25] on mortality have been discussed in some Russian literature as if alcohol were the single factor determining the death rate. Other circumstances were not taken into account: availability and adequacy of health care, toxicity of some legally sold alcoholic beverages, questionable reliability of statistics. Apparently, efficiency of governmental policies has been exaggerated by certain writers e.g. [25,37]. At the same time, there has been lack of advocacy for the public interest. The following citations are illustrative: “The effect of alcohol taxation measures is likely to be significant and moderately positive. However, its significance was outperformed with much stronger effects of the measures to reduce availability of ethyl alcohol and non-beverage alcohol with very high alcohol content;” and “All these measures greatly reduced the amount of ethyl alcohol available” [25]. In fact, vodka, beer and other beverages have been easily available since the AAC: sold in supermarkets and other shops; no queues like in the Soviet time. The average salary (pension) / vodka price ratio has remained several times higher than it had been prior to AAC. In their Russian-language book, Khaltourina and Korotayev discussed the role of the “crisis of medicine”, denying any significant role of this factor in the mortality increase [38]. Their argumentation is, however, unconvincing, for example, the unchanged since the Soviet time mortality from stroke despite its increased incidence. The over diagnosis of cardio- and cerebrovascular diseases in unclear cases, both at autopsies and in people dying at home, has been discussed above and in the preceding paper [29]. The registered cardio- and cerebrovascular mortality elevation after 1990 reflected, in fact, the quality decline of post mortem diagnostics and of the healthcare in general. The decrease in the infant and maternal mortality since 1999, proposed as evidence of healthcare improvement [38], may reflect priorities in the policies but is unrelated to the higher mortality of middle-aged and older men [39], who are visibly underrepresented

among patients in governmental polyclinics. There is also mistrust towards medicine because of its commercialization and uneven quality. For these and other reasons, many people stay at home even if they have symptoms, receiving no adequate therapy for chronic diseases.

As discussed above, consumption of technical liquids and perfumery decreased abruptly after AAC, so that the “non-beverage alcohol with very high alcohol content” [25], has hardly played any significant role as a cause of enhanced mortality after AAC. Illegally manufactured beverages, both by regular factories evading taxation and by non-industrial producers (so-called garage vodka), have been sold through legally operating retail [18], generally with the knowledge of authorities. The “specific alcohol control policy measures” [25], have been rather superficial, resulting in moderate oscillations of vodka price considering inflation, and no real decrease in physical availability of alcohol since the AAC. Some governmental measures may have even contributed to a consumption of higher doses, e.g. disappearance of small (0.33l) beer cans and rareness of 150-200 ml vodka vials. The prohibition of alcohol sales between 23 p.m. and 8 a.m. since 2011 (beer since 2013) may result in purchasing by some people of larger amounts in advance with subsequent consumption. Physical restrictions of alcohol availability may cause some decrease in the total consumption but contribute to heavier occasional intoxications. In this way acted queues at bottle stores during the Soviet period: after queuing, larger amounts of alcohol were purchased and then consumed. Analogously, having waited in a queue at the entrance to a beerhouse (pivnoi bar), visitors usually stayed there for hours. This was a foreseeable consequence of the anti-alcohol measures restricting alcohol sales and maintaining queues at retail outlets during the Soviet era.

Pharmacy products, ethanol-containing tinctures and solutions are relatively expensive today. Some alcohol-containing antiseptics have appeared during the Covid-19 pandemic e.g., Aseptolin (ethanol-glycerol mixture), recommended for skin disinfection and reportedly used for drinking. In Moscow, a 100 ml vial cost 70 rubles (around 1 US dollar at that time) which was roughly equivalent to cheap vodka converted to pure ethanol. The concentration indicated on the label (90%) can pertain to the ingredient named Glycerytan, which is the mixture. Organoleptically, the ethanol concentration is about 60% - the liquid is sweetish and tolerated by oral mucosa. The same might be true for the published image of hand sanitizer with the unreadable small-printed text presented by the author as 95% ethanol solution. The small-printed text is unreadable, there is no receipt; only the inscription “Ethylic Alpha up to 95%” could be deciphered [40]. An iPhone allows photographing readable text of this size. Concentrated solutions are usually more expensive per unit of the solved substance. Toxicologically, the medicinal alcohol is not substantially different from that used for the vodka production. Therefore, preparations such as Aseptolin would not have any significantly higher impact on morbidity and mortality compared to vodka. In the meantime, Aseptolin has disappeared from Moscow pharmacies. The hypothesis suggesting that “because of its greater strength, in combination with a lack of labeling, unrecorded alcohol may involve greater intake of ethanol per occasion, leading to over-proportional harm” [41] is questionable for lack of stimuli, such as the pleasant taste and traditional atmosphere, predisposing to prolonged



partying. Moreover, non-beverage alcohol would more readily provoke vomiting. Alcohol-dependent people have their experience, distinguish good and bad products, know their ailments that would worsen after the intake of surrogates with toxic ingredients. Not many people would knowingly drink surrogates today, when vodka and beer are easily available in supermarkets.

### **Recent developments**

According to the official statistics (Rosstat), the adult per capita consumption of recorded vodka and other spirits was declining in RF with some fluctuations throughout the period of 1998-2013 [37]. As per the Global Information System on Alcohol and Health (GISAH), both the total (since approximately 2005) and recorded (the data are available from 2010 to 2019) alcohol consumption is gradually declining [42]. The worldwide sharpest decreases in the per capita consumption were found in the formerly highest consuming nations including Russia (from 18.7 liters in 2005 to 11.7 in 2016) and some other countries of the former SU. The number of alcohol psychosis cases in RF dropped over the period 2007-2016 from 52.3 to 20.5 per 100 000 population [43]. The mortality from toxic effects of alcohol decreased from 13.3 to 6.7 cases per 100 000 over the period 2010-2019. In Siberia this index dropped more than threefold. The mortality rate associated with alcohol consumption, including that from acute alcohol poisonings, decreased considerably in the whole country [44]. The heavy binge drinking is visibly in decline. Unlike the 20th century, it is difficult to meet a heavily drunk person today even among marginalized people. The drinking of vodka and fortified wine has been partly replaced by a moderate consumption of beer. As for young people, many of them adopt a moderate alcohol consumption style from the beginning.

In the author's opinion, the main cause of the decline in heavy binge drinking and overall alcohol consumption is the responsible way of life under the conditions of market economy. This pertains to the social classes that included the majority of alcohol consumers, that is, workers and intelligentsia. Although workers were often skeptical about Soviet ideology, they were influenced by the propaganda about the supremacy of working class, and were confident about their future. This confidence has largely been lost during the economic reforms of the 1990s. Many factories closed, and the workers were confronted with unemployment in an inadequate social security system. The same fate befell the intelligentsia, as many scientific institutions were closed or their personnel reduced. At the same time, crime against people with alcohol use disorders in the form of theft, assault and undue pressure has become widespread. This does not predispose to leisure drinking. Many alcoholics have lost their residences and become homeless. The economic situation is improving but the Soviet-time drinking habits are not coming back en masse. Furthermore, indigenous working people have been gradually replaced by immigrants from Central Asia and the Caucasus, where alcohol consumption is less widespread. The changes are less conspicuous in some smaller towns and rural areas, but in places there have been tensions because of immigration from regions where less alcohol is consumed, such as the North Caucasus.

### **Invasive procedures applied with questionable indications**

Intravenous infusions were recommended for patients with alcoholism including moderately severe withdrawal syndrome:

7-10 infusions daily, sometimes combined with intramuscular injections [45-53]. The intravenous detoxification was regarded to be "indicated to nearly all alcohol-dependent patients, especially to those with prolonged withdrawal syndrome" [45], also in the absence of (severe) intoxication [54]. Recommendations of intravenous infusion therapy of alcohol intoxication and withdrawal syndrome with both crystalloid and colloid solutions was found also in recent instructive publications [55-57]. Apparently, the infusion therapy has been overused not only in supposed alcohol use disorders but also generally. Recent publications recommended a decrease in volumes of intravenous infusions [58]. Many cases with symptoms of excessive infusions, fluid overload, pulmonary or generalized oedema have been reported [59]. In particular, certain dextran solutions (polyglucin, rheopolyglucin) were broadly used in Russia before adverse effects have been more fully understood [60,61]. Some methods were patented e.g. infusion therapy and transcerebral electrophoresis of magnesium as a treatment of alcohol withdrawal syndrome [47,62-64]. According to the Cochrane review, there is no sufficient evidence to decide whether or not magnesium is useful for the therapy of alcohol withdrawal syndrome [65]. Excessive intravenous supply of magnesium can cause adverse effects. Fatal intravenous overdoses of magnesium in alcohol consumers were recorded [66]. Besides, various intramuscular injections were recommended: magnesium sulphate, sodium bromide and thiosulphate, subcutaneous infusions of saline and insufflations of oxygen (300-500 ml); Unithiol, Dimercaprol, cranio-cerebral hypothermia (1-1.5 hours); extracorporeal ultraviolet irradiation of blood, sorbent hemo- and lymphoperfusion etc. [46,52,54,67-70].

The recommended duration of the intravenous detoxification was 5-12 days, or even 14-25 days according to some instructions [45,54,71,72] a more recent publication recommended 2-3 days [55]. This is generally at variance with the international practice. Alcohol and its metabolites are eliminated spontaneously while rehydration can be usually achieved per os. Long-lasting drip infusions are uncomfortable; some patients regarded them as torture. Apparently, ideation of punishment coupled with irresponsibility has played a role in some personnel. It is known that the attitude to persons supposed to have an alcohol use disorder has been less responsible with lower procedural quality assurance than for other patients. Repeated infusions, endovascular and endoscopic manipulations lead to a transmission of viral hepatitis, which is unfavorable especially if combined with alcohol-related liver damage.

Furthermore, antipsychotic drugs (phenothiazines, haloperidol) have been applied in adults and adolescents diagnosed with alcohol dependence in the absence of psychosis (in the generally accepted sense of this term) [49,73-75]. At the same time, the alcohol craving has been interpreted as an "altered state of consciousness", as a paranoid or delusional phenomenon [76,77] within the scope of "productive psychopathology" [73]. Accordingly, the anti-psychotic medication has been recommended by most authoritative handbooks [49,74]. Apart from other potential side effects, the synergism between some antipsychotics and alcohol, possibly aggravating liver injury, should be taken into account [78]. With regard to alcohol-related dementia (and other dementia in alcohol consumers) it should be stressed that antipsychotic use compared with non-use in dementia was associated with increased risks of stroke, venous thromboembolism,

myocardial infarction, heart failure, fracture, pneumonia and acute kidney injury [79]. Unfounded psychopathological interpretations of alcohol consumption and overextended diagnostic criteria of alcoholism, used in Russia, have been pointed out [77]. In fact, many individuals classified as alcohol-dependent are socially adapted and well functioning. The author agrees with the last-cited expert that not all alcohol consumers become dependent and not all dependent people progress to unfavorable outcomes.

Among patients with alcoholism, biopsies were taken from kidneys, pancreas, liver, lung, salivary glands, stomach and skin also for research, repeatedly in some cases [51,80-82]. It was concluded on the basis of a series of biopsy studies that a generalized cytoskeleton abnormality with accumulation of filaments of intermediate type in macrophages, epithelial and other cells is typical for the cell damage by ethanol or the “alcoholic disease” [80-82]. It is known that Mallory bodies, seen in alcoholic hepatitis and some other liver conditions, contain filaments of intermediate type; but generalizations as cited above have never been confirmed by other researchers. In any case, the cytoskeleton can be studied in experiments or post mortem. Another example: renal biopsies were collected from patients with chronic alcoholism and nephritic symptoms, whereas “intracapillary proliferative glomerulonephritis” was diagnosed in all cases. In a later study by the same researchers, the histopathological findings in 40 from 43 patients with alcoholism and nephritic symptoms were morphologically classified as mesangiocapillary (also named membranoproliferative) Gn; while in 29 from 31 patients with nephritic symptoms without alcoholism “fibroplastic” Gn was diagnosed [83,84]. The striking difference between the two groups is indicative of the data trimming. Other invasive procedures (celiography, endoscopic cholangiopancreatography etc.) were applied in persons diagnosed with alcohol use disorder without clear indications [51].

The “ultra-rapid” (one session) psychotherapy of alcoholism, popular in the former Soviet Union and known as coding [85-87], should be briefly commented. This method was started during AAC; it was criticized as incompatible with medical ethics because of mystification, verbal intimidation, spraying of the throat with ethyl chloride, massage of trigeminal nerve branches, forceful backwards movements of the patient’s head etc. [88]. The latter may be dangerous for patients with latent vertebral abnormalities. Nevertheless, it continues to be used.

### **The comorbidity of alcoholism and tuberculosis (Tb)**

A particular ethical problem has been the overuse of surgery in Tb patients concomitantly diagnosed with an alcohol use disorder. According to official instructions, indications for surgery have been broader in alcohol-dependent than in other Tb patients [68]. In case of alcoholism, the surgical treatment was recommended to be implemented earlier, after a shorter period of medical therapy. Perelman insisted on early surgery in Tb patients with alcohol dependence, and operated them also in the absence of demonstrable *Mycobacteria* [72]. The same expert noticed that alcoholics have more frequent post-surgery complications [72]. Bronchoscopy was applied in cases with bronchitis [45], the latter being frequent among alcoholics in Russia due to smoking and the risk to sleep down at a cold place. Along with other complications, vocal cord injuries

were observed after repeated bronchoscopies sometimes performed in conditions of insufficient procedural quality. It was noticed that vomiting triggered by apomorphine within the framework of aversive therapy of alcohol dependence provoked hemoptysis in patients with Tb [45].

According to the governmental Regulation No. 378 of June 16, 2006, patients with contagious Tb are not permitted to reside in one apartment with other people. The outpatient treatment is supposed to be hardly applicable [89]. As per the Federal Law 77-FZ “Prevention of tuberculosis spread” of June 18, 2001 (amended 2013), “patients with contagious tuberculosis, repeatedly violating the anti-epidemic regime, and those evading examinations *or* [emphasis added] therapy, are hospitalized for obligatory examination and treatment.” It is specified by the same law that the principle of informed consent is not applicable under these circumstances, and that the patients must undergo prescribed examination and therapy. The non-observance of this law may lead to a criminal procedure. The police are obliged to help at hospitalizations and to search evading individuals. It was reported that about 60% patients of a “phthisio-narcological” institution for compulsory treatment broke out; over 50% of them were returned by the police [90]. The duration of stay in such institutions was a year or longer [45]. The compulsory treatment has been rooted in laws and regulations [45,91]. In 1974, chronic alcoholism was officially declared to be a ground for enforced treatment; the regulations were made stricter in 1985, making compulsory hospitalization and therapy of chronic alcoholics independent on their anti-social behavior. This practice was found in the 1990s to be contradictory to human rights. Nonetheless, some writers recommended restoration and further expansion of the compulsory treatment system [92]. According to a survey, 62.6% of specialists in addiction medicine supported compulsory treatment of alcoholism [93]. Enforced therapy of socially dangerous alcoholics is stipulated by Articles 97 and 98 of the Criminal Code of RF; besides, there is a legal mechanism enabling compulsory treatment of prison inmates diagnosed with alcohol use disorders [94]. The implementation of compulsory examinations and treatments is increasingly efficient these days, which can be seen by the example of tuberculosis. Reportedly, 100% of *Mycobacterium Tb* excretors in the Moscow region had been hospitalized since 2019 [95]. Compulsory treatments are generally at variance with the international practice and regulations. According to The World Medical Association, neither the statutory exceptions to the principle of informed consent nor the conditions of required care allow legally binding measures against patients refusing a treatment or hospitalization [96]. It should be stressed in this connection that treatment must be provided on the basis of informed consent. If this is absent, as in the case of incapacity (unconsciousness, mental confusion) due to alcohol, drugs, or illness, then the doctor proceeds on the basis of the patient’s best interests or implied consent [97]. However, the presence of alcohol use disorder per se has no effect on a person’s right to refuse treatment. The consent for invasive procedures is of particular importance in conditions where an overtreatment may occur (details are below in the Discussion).

### **Discussion**

People with alcohol use disorders are convenient subjects for interventions and experiments without clinical indications. The

fertile soil has been the autocratic management style, insufficient consideration of professional autonomy and informed consent, partial isolation from the international scientific community. The isolation was conducive to a parallelism in research with repetition of studies on a lower qualitative level, unnecessary experimentation, and application of invasive procedures without sufficient indications [98]. Under conditions of paternalism, misinformation of patients and compulsory treatments are deemed permissible [99]. The mentioning of informed consent started in papers from Russia not long ago, for example, in a bronchoscopic study of pediatric asthma, where consent of parents was sufficient [100]. Of note, the principle of informed consent or assent is applicable to some extent also to adolescents and children. It has been recommended in the recent monograph titled “Pulmonary tuberculoma” to “explain to the patients in popular form that surgery is necessary” [101] instead of objective depiction of pros and cons. There is a widely accepted opinion that potential instability of tuberculoma does not generally justify thoracic surgery and that asymptomatic patients with an unchanging solid focus do not require surgery; details and references are in [102]. Indications for the treatment are not discussed here. Justifications of surgical hyper-radicalism could be heard in private conversations among medics, for example: “The hopelessly ill are dangerous” i.e. may commit reckless acts undesirable by the state. For example, glioblastoma patients were routinely operated on, while it was believed by some staff that the treatment was generally useless, just forcing many patients to spend the rest of their lives in bed [103]. The training of medical personnel under the imperative of readiness for war has been another motive. Some invasive methods with questionable indications were advocated by first generation military surgeons [98]. The Soviet period brought about an expansion of admission numbers to universities and medical educational institutions, sometimes with little regard for the academic preparation [104,105]. At the same time, medical faculties were separated from universities; and medical science was partly separated from the mainstream scientific thought [106]. The ethical and legal basis of medical practice and research has not been sufficiently known and observed in Russia. The term “deontology” is often used for medical ethics in this country. Textbooks and monographs on deontology explained the matter somewhat vaguely, with truisms and generalities but not much practical guidance. Among others, the following has been discussed previously: the overuse of gastrectomy for peptic ulcers, of thoracic surgery in tuberculosis, bronchial asthma and other respiratory diseases, spleno-renal anastomosis for diabetes mellitus [102]. Endocervical ectopies (named pseudo-erosions in Russia) have been routinely cauterized without cytological tests; Papsmears for early detection of cervical cancer have been infrequent and below the international standards, cervical cancer being diagnosed relatively late [107]. Millions of women in the former Soviet Union underwent Halsted and Patey mastectomy with removal of pectoral muscles without evidence-based indications, often without informed consent [102]. Considering shortcomings of medical practice, research and education, governmental directives and increase in funding are unlikely to be sufficient for a solution. Measures for improvement of the healthcare in Russia must include participation of authorized foreign advisors.

## Conclusion

The labor productivity is growing; but unemployment is

persisting, and there are not enough prestigious jobs for everybody. Under these circumstances, alcohol-consuming people of older age can be regarded as voluntary outsiders, ceding their places to more energetic fellow citizens. Following the example of developed nations, they should be given a possibility to spend their time in public houses and then go home, under the condition of maintenance of public order. It might be an idea to reintroduce inexpensive Soviet-time beer halls with the only difference: there must be enough places to sit. Visitors in low-cost beer halls during the Soviet era had to stand, which was a hardship for aged workers after the end of the work day. Moderate alcohol consumption should be permitted in homes for the aged. Today, conditions in Russian facilities lag behind their Western counterparts, some personnel being bossy and not always friendly to the residents. Certain for-profit homes for the aged leave the decision on the beer drinking permission with paying relatives, which is in fact a human right violation of the elderly person, let alone humiliation. Admittedly, it should be taken into account that alcohol is contraindicated in certain diseases, and incompatible with some drugs, which necessitates competent advice. Experience of foreign countries must be studied and authorized foreign advisors invited. At the same time, clinical attachment of Russian doctors abroad should be encouraged. More international trust is needed for that. Improvements of professional skills and remuneration of employees at the homes for the aged and psychiatric hospitals are necessary; while human rights in such facilities should not be forgotten. According to the principle of medical and common ethics, the society must care of its unprotected members, including aged persons suffering of alcohol use disorders.

After all, the conclusion is cautiously optimistic: the heavy binge drinking and overall alcohol consumption are declining in Russia. However, there is still a need to prevent offences against people with alcoholism and alcohol-related dementia, aimed at appropriation of their residences, other properly, to improve the healthcare and public assistance. Unfortunately, it is hard to disagree that people with alcohol use disorders have sometimes been those “who can be disdained, rejected, hated and persecuted, legally and without sense of guilt” [108].

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