



LETTER TO THE EDITOR / EDITÖRE MEKTUP

Acute Pancreatitis and Alcohol in Russia
Rusya'da Akut Pankreatit ve Alkol

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The problem of alcohol misuse in Russia is well known; but nevertheless there is a tendency to exaggerate it, which is visible for an inside observer. The exaggeration tends to disguise shortcomings of the health care, whereas responsibility for the relatively low life expectancy¹ is shifted onto the patients, who supposedly choose to drink excessively, to consume poor quality or non-beverage alcohol, and prefer the heavy binge drinking pattern associated with social and health-related risks. Such exaggeration can be illustrated with the example of studies on acute pancreatitis and alcohol consumption^{2,3}.

The conclusion of the study² that a high level of alcohol consumption and binge drinking are contributors to the pancreatitis mortality rate is in accordance with the generally accepted knowledge⁴; but significant items are not discussed in². Incidence of complications including acute pancreatitis may be related not only to the quantity of consumed alcohol but also to its quality i.e. substances other than ethanol in poor-quality beverages and non-beverage alcohol. Epidemiologic data indicate a higher frequency of alcohol-induced acute pancreatitis in geographical areas where surrogates or homemade alcohol are easily available⁵. Such beverages contain, in addition to ethanol, considerable admixtures of higher alcohols (e.g. propanol and butanol) and other contaminants (aldehydes, esters etc.), whose potency to induce pancreatic damage is insufficiently known⁵. During the anti-alcohol campaign (1985-88) in the former Soviet Union, massive consumption of alcohol-containing industrial fluids and perfumery was observed. Considering the large scale e.g. of the window cleaner sales in some areas, it was knowingly tolerated by the authorities.



The alcohol consumption predictably increased after the anti-alcohol campaign. Following the abolition of the state alcohol monopoly in 1992, the country was flooded by counterfeit alcohol⁶. Some alcoholic beverages legally sold at that time tasted unusually. It should be commented that millennial adaptation of certain human populations to alcohol included adaptation to chemical by-products of natural fermentation. Alternative methods of alcohol manufacturing are accompanied by a generation of new by-products, adaptation to which has not developed. In the National Manual of Medical Toxicology⁷ an example is given that sales of a diluted disinfectant in vodka bottles resulted in 12,611 cases of hepatotoxicity with jaundice including 1189 lethal cases during the period August-November 2006. Unrecorded figures must have been higher. About a half of the cases of lethal intoxication by alcohol-containing fluids during the 1990s were reported to be caused in some areas by legally sold beverages, while in many lethal cases a relatively low blood alcohol level was found⁸. Admittedly, a tendency of quality improvement of alcoholic beverages has been noticed since approximately the last decade.

Furthermore “the harm indicator series used was alcohol psychoses incidence rate because this indicator depends almost entirely on alcohol consumption”². The alcohol psychosis rate may reflect the total alcohol consumption level in the countries with a stable quality of alcoholic beverages but not in Russia. By analogy with other complications, psychosis-like conditions may be caused not only by excessive intake of ethanol but also by other substances in poor quality alcoholic beverages. We observed marked mental confusion e.g. after consumption of poor-quality fortified wine sold in shops. Misdiagnosis as psychosis of neurological derangements after ingestion of toxic alcohol-containing fluids cannot be excluded as well.

The main conclusion of the article² is that “unfavorable mixture of higher overall level of alcohol consumption and binge drinking pattern is an important contributor to the pancreatitis mortality rate”. However, it was reported that alcohol consumption in Russia has tended to decrease since approximately the last decade⁹. The heavy male drinking was also reported to decline in Moscow and St Petersburg¹⁰, which agrees with our observations. A similar tendency has also been noticed in some rural areas and small towns, favored by the immigration from the regions with less widespread alcohol consumption, or explained by the fact that local alcoholics have “died out” with fewer successors. During the Soviet period and shortly afterwards, many inebriated persons could be observed in public places. There are not so many heavily drunk people in the streets today. Consumption of vodka and fortified wines

has been partly replaced by beer¹¹ contributing to the decline in the heavy binge drinking pattern.

Another passage to be commented: according to a study encompassing the period 1970-2005, "of the 3 beverages [vodka, wine, beer] vodka alone was associated with pancreatitis mortality in Russia"³. It should be commented that fortified wines (alcohol concentration around 17-19% by volume) were massively produced and consumed till 1986-1987. There are no reliable statistics but it is obvious for an inside observer that, especially in the period between the two anti-alcohol campaigns (1972-1985), the part taken by the fortified wines was considerable, being larger than that of vodka in many parts of the country. According to the author's observations, in Moscow, fortified wines constituted a larger part of the consumed alcohol during that period than vodka; so it was also in many other regions. This proportion was largely preserved also during the anti-alcohol campaign (1985-1988), when vodka price doubled, but relatively cheap wines were still available, acknowledging that their quality worsened and there were queues at bottle stores. Some fortified wines were poor quality; their consumption resulted in more severe intoxication and hangover than vodka. It was obviously caused by poor-quality alcohol, that is, substances other than ethanol occurring naturally in alcoholic beverages¹² or additives. The poor quality of the added distilled alcohol was masked by the taste of wine or, increasingly since the late 1980s, by artificial aromas. Furthermore, the statements like "vodka preference was associated with the consumption of bigger doses of pure ethanol" or "drinking pattern of spirits users was substantially different from wine or beer users"¹³ would be accurate only with a corresponding time frame: till 1988-89 fortified wines had been broadly used for heavy binge drinking and were consumed in high doses. Further details are in¹⁴.

Finally, costs of drugs for an outpatient treatment are not covered by the obligatory medical insurance in Russia; and there are no discounts for a majority of patients. Regular therapy of chronic diseases including pancreatitis, especially that using modern medication or equipment, is hardly affordable on a regular basis for many people with low incomes. Limited availability of pancreatitis treatment, including endotherapy and extracorporeal lithotripsy, should have been overviewed or at least mentioned in the article dedicated to the pancreatitis mortality². In the author's opinion¹⁵, insufficient availability of adequate health care tends to be disguised in some publications, while the role of alcohol is sometimes exaggerated.

In conclusion, among the main causes of the relatively high mortality in Russia especially among men are insufficient quality and availability of health care, poor quality and toxicity of

some alcoholic beverages. Admittedly, there has been a tendency of quality improvement since approximately the last decade. The matter requires further independent research. In particular, results of toxicological analysis of some alcoholic beverages sold in shops during the last decades would be of interest. Potencies of different contaminants in producing pancreatic injury should be studied in experiments.

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Geliş tarihi/ Received: 22.06.2015**Kabul tarihi/Accepted: 04.07.2015**