

Letter to the Editor

Russian Alcohol Policy in False Mirror

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Turbulent events of the last 9 years on the Russian alcohol scene became the subject of special attention in the expert community. Among the papers dedicated to the alcohol events, we should pay attention to the article ‘Effect of Specific Alcohol Control Policy Measures on the Level of Alcohol-Related Mortality in Russia from 1998 to 2013’ by *Khaltourina and Korotayev (2015)*. The authors analyzed the trends following several parameters: rate of spirits and vodka production, vodka sales level and mortality due to acute alcohol poisoning, male and total mortality rates. They correlated these parameters to the adoption of different laws that regulate alcohol market and concluded that ‘The effect of the policy measures introduced in 2006 lasted through the following years’ (p. 8). Let us see if it is true.

Anti-alcohol activity in this country began with the adoption of two laws in 2005. The first one (102—FL), among other issues, introduced new excise stamps from January 1, 2006. After that time, other stamps have been prohibited. The second law (209—FL) significantly increased nominal capital of alcohol market players since July 1, 2006, so that the market became free from small and average players in favor of large producers. Moreover, the law 209 introduced new and more toxic denaturant additives for household alcohol-containing liquids after July 1, 2006. The introduction of new excise stamps has been a routine procedure: since 1994, they have been changed seven times (1994, 1996, 1997, 1998, 2001, 2003 and 2005) and differed only in their protection level. There was a significant delay with their printing: first stamps were issued in February 2006 only for 0.5l vodka bottles. Stamps for other beverages were printed during the year. This resulted in long and complex market disorganization. In addition, since July 1, chaos had increased because small producers and distributors left the market. Naturally those changes were accompanied by both consumption and mortality rate decrease in 2006–2007 (Fig. 1). One of the consequences of the legal alcohol shortages was appearance of additional amounts of toxic ‘alcohol substitutes’ on the market, for example household chemistry liquids with new denaturant additives. The latter led to the increase of toxic hepatitis incidence and increased mortality rates due to liver diseases in the following years. By 2008, the crisis in the alcohol market was overcome, and mortality rates returned to the 2004–2005 trends (Fig. 1). Therefore, the effect of the policy

measures introduced in 2006 was rather a side effect of the two laws characterized by numerous negative consequences.

The explanation of the decrease of the mortality level due to alcohol poisoning in 2004 by the increase of the excise taxes by 6% provided by the authors seems rather dubious because this increase is comparatively small. However, it is important that the beginning of the decrease of alcohol mortality level had preceded the adoption of anti-alcohol legislation of 2005, and this decrease, by all the provided data, had not been due to any of the government’s maneuvers on the alcohol market. Therefore, the analysis of the alcohol situation in modern-day Russia must set the framework for the decision, whether the decrease in alcohol mortality level is the effect of the alcohol policy or this phenomenon should be viewed in the context of the algorithm (trend) set during the anti-alcohol campaign of 1985. The acute decrease in alcohol consumption and mortality in 2004–2013 was the third one (the first two being in 1985–1988 and 1995–1998). Unfortunately, the authors did not consider it necessary to discuss an alternative hypothesis.

In general, the authors have provided a correct overview of the increasing number of anti-alcohol events (p. 5). However, the effectiveness of these had been decreasing, if judged by the criterion of overall mortality tied with alcohol poisoning (Fig. 1), the fact the authors failed to mention.

There are numerous methodological drawbacks in the article. First and foremost: for the analysis of the alcohol situation in Russia, the authors are using the absolute numbers of deaths, which might lead to incorrect conclusions in case of analysis of dynamic sequences. The authors’ state: ‘The year 2005 shows complex dynamics with declining alcohol production and sales, and declining mortality from alcohol poisoning, but with minor increases in the number of deaths and adult male mortality rate. This can be interpreted as a moderate increase in unrecorded alcohol consumption against the background of a decrease in recorded alcohol consumption’. The standardized mortality indices do not however reproduce this phenomenon. Both male and female mortality continued, with some fluctuations, the trend set in 2004, until 2013, and only in 2014, deaths from alcohol poisoning started to increase. Therefore, the conclusion about the moderate increase in unregistered alcohol consumption in 2005 should be considered ungrounded.

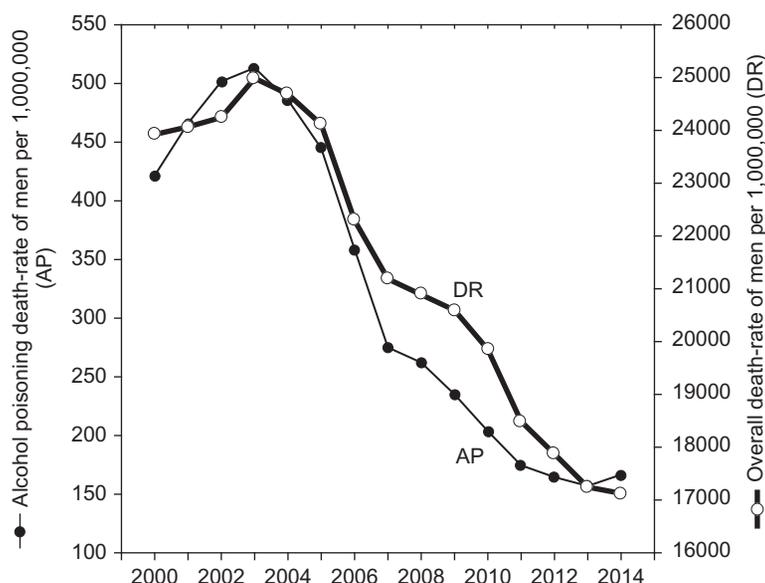


Fig. 1. Male alcohol poisoning death rate (AP) and overall death rate (DR) in Russia, 2000–2014.

The use of the Pearson correlation analysis that had demonstrated that the level of ethanol production correlates to a larger extent with the mortality indices than the level of vodka production and sales level seems to be inadequate in this case. The use of a more adequate Spearman correlation for table 2 would shorten the gap in the correlation indices, making it totally irrelevant in every third case. The authors' theory that the ethanol production index reflects the real consumption rates better may be considered correct and rather interesting. Unfortunately, the authors have not noticed that this theme had been already discussed in the Russian special literature (Krasnova, 2011). This point set by the authors may not be considered well proven, because the use of simple correlation in the analysis of temporal sequences may lead to false correlations, which can be avoided by using the method of ARIMA and autocorrelation, which requires, however, around 50 time points (authors have only 14) (Norström, 1989).

It should be noted also that, in the article, there are several cases of odd free interpretation, for example of the acute increase in ethanol production levels in 2004: 'unrecorded ethyl alcohol and alcohol producers could have been preparing for the forthcoming tightening of the alcohol market regulation in 2006'. It is rather hard to agree to this psychological phenomenon, for the law had been adopted so unexpectedly that the required excise stamps could not be printed in time in the amounts needed. Besides, the level of ethanol production decreased in 2005, which does not match the hypothesis of 'the forthcoming tightening of the alcohol market regulation in 2006'.

CONCLUSION

Khaltourina and Korotayev tend to connect the decrease in alcohol mortality in Russia in 2005–2013 entirely with the complex of

anti-alcohol measures without providing proofs. It is highly probable that this decrease was based not on the direct action of the laws of 2005, as the authors state, but rather on negligent execution of these laws and subsequent chaos on the alcohol market. As a result, the fast decrease in alcohol and overall mortality rates in 2006–2008 was a side effect of this chaos provoked by the laws of 2005. Highly important for the decrease in alcohol consumption and connected mortality was the forced elimination of mid-level and small market participants in mid-2006. However, large-scale alcohol business had compensated for this loss by 2008. One cannot completely rule out the influence of the laws in question on the decrease of mortality in the country, but it is almost impossible to separate this influence from other factors. A recent study has appeared on the same topic demonstrating that alcohol policy has a very weak influence on the alcohol situation in Russia (Grigoriev and Andreev, 2015).

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