

## CHANGES IN DRINKING HABITS AND ALCOHOL-RELATED MORTALITY IN EASTERN EUROPE<sup>1</sup>

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### Short abstract

Excessive consumption of alcohol is one of the main reasons for lower life expectancy at birth in Eastern Europe, in former European USSR republics in particular, compared to Western countries. In former Soviet Union states, the Gorbachev anti-alcohol campaign showed an enormous dependence of adult mortality on alcohol consumption and a very wide range of causes of death linked to this habit.

However, not all post-Soviet countries experienced the same drinking habits in the common Soviet past, and not all of them followed the same path after the collapse of the communist regime. For Russia and Ukraine, the traditional representatives of the Nordic type of alcohol consumption, mortality from violent deaths plays the leading role in alcohol-related mortality, while Moldova that is much closer to Mediterranean drinking culture experiences much less problems with acute alcoholism but by far much higher mortality from liver cirrhosis. Based on continuous cause-of-death time series available for a few ex-Soviet countries (Ukraine, Moldova, Russia, the Baltic countries) since the mid-1960s and the official statistical data on alcohol consumption, we analyse the different patterns of alcohol-related mortality in relation to the changes in drinking habits in these countries.

### Extended abstract

Excessive consumption of alcohol is one of the main reasons for lower life expectancy at birth in Eastern Europe, in the former European USSR republics in particular, compared to Western countries. Many studies on mortality trends in the post-Soviet republics illustrate very marked fluctuations in mortality related to the social and economic traumas which these countries underwent in the 1980s and 1990s (Meslé, 2004). The Gorbachev anti-alcohol campaign launched in 1985 showed a tremendous dependence of adult mortality on alcohol consumption and a very wide range of causes of death linked to this habit. The soon abolishment of the campaign followed by grave social and economic transformations occurred in the early 1990s due to the break of the USSR and a sudden transition to a market economy were accompanied by huge adult mortality deterioration, alcohol-related mortality in particular, although with certain peculiarities in some of these countries (Grigoriev P. *et al.*, 2010). However, not all post-Soviet states experienced the same drinking culture in the common Soviet past. Thus, for Russia and Ukraine, the traditional representatives of the 'dry', Nordic type of alcohol consumption, mortality from violent deaths plays the leading role in alcohol-related mortality (Shkolnikov *et al.*, 2004; Meslé *et al.*, 1996; Meslé, Vallin *et al.*, 2013). On the other hand, Moldova that is much closer to Mediterranean drinking culture has much less problems with acute alcoholism but by far much higher mortality from liver cirrhosis (Figure 1). Further, for this country an exceptionally high

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mortality from liver cirrhosis is the main reason for very unfavourable health status of Moldovan females compared to Russian or Ukrainian women (Penina, Meslé, Vallin, 2013).

Not all post-soviet states followed the same path after the collapse of the communist regime. For Central European countries, like Poland, Romania and Hungary, the positive trends in mortality from violent deaths contributed a great deal to the overall life expectancy growth after the post-communist transition (Meslé, 2004; Pechholdová, Fihel, 2013), while in former USSR republics, like Russia or Ukraine, the alcohol-related mortality continued to affect the adult population health for a long time (Meslé et al., 1996; Meslé, Vallin et al., 2004). However, the recent positive changes in mortality from violent deaths in Russia attributed by researchers to the measures taken in 2006 to control the production and sale of ethanol (Shkolnikov et al., 2013) give us hope for further sustainable improvements.

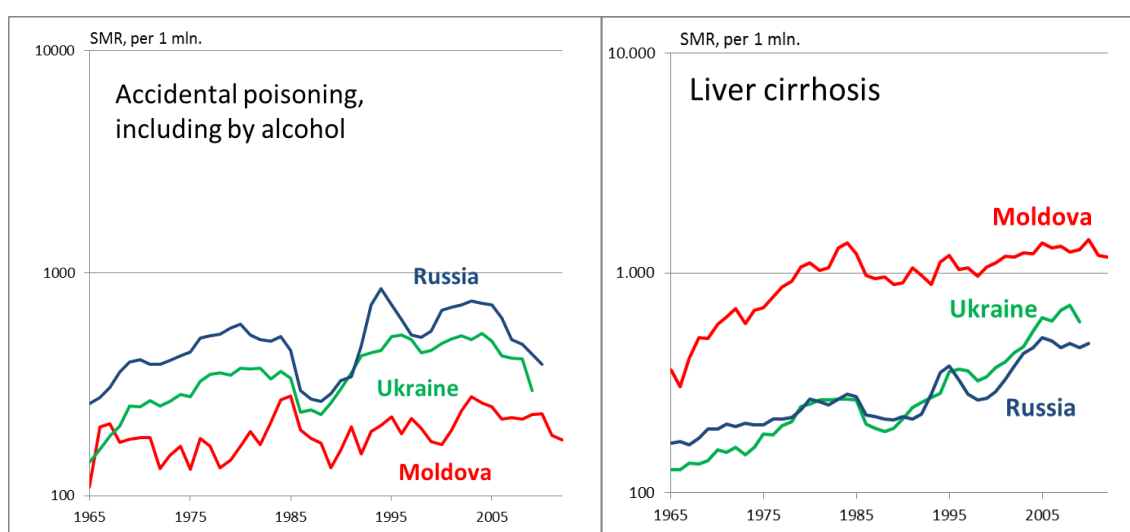


Figure 1. Trends in standardized mortality rates for accidental poisoning, including by alcohol and liver cirrhosis in Moldova, Ukraine and Russia, males, since 1965.

In this study, based on continuous cause-of-death time series available for a few Eastern European countries (Ukraine, Moldova, Russia, the Baltic countries) since the mid-1960s and the official statistical data on alcohol consumption, we want to answer to a question “*How do changes in alcohol consumption (level and pattern) influence the alcohol-related mortality in Eastern Europe?*”.

The statistical death time series for all the countries covered by the analysis were reconstructed according to a constant medical definition: the 10<sup>th</sup> Revision of the International Classification of Diseases for the Baltic countries (Meslé, Vallin, unpublished) and Moldova (Penina, Meslé, Vallin, 2012); 1981 Revision of the Soviet Classification revised in 1988 for Ukraine (Meslé, Vallin et al., 2012) and Russia (Meslé et al., 1996). For Ukraine and Russia, the continuous time series for the recent period were completed with the unreconstructed data retrieved from the WHO mortality database<sup>2</sup>.

<sup>2</sup> [http://www.who.int/healthinfo/mortality\\_data/en/](http://www.who.int/healthinfo/mortality_data/en/)

Information on alcohol consumption is the available regional official statistics and the data derived from the Global Information System on Alcohol and Health<sup>3</sup>.

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<sup>3</sup> <http://apps.who.int/gho/data/view.main?showonly=GISAH>