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## **ALCOHOL AND SUICIDE IN BELARUS**

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**Background:** It is well recognized that both acute and chronic alcohol use are among the major behaviorally modifiable factors that are associated with suicidal behaviour. High suicide rate in the former Soviet Republics and its profound fluctuation over the past decades have attracted considerable interest. There is mounting evidence that the role of alcohol is a crucial in understanding this phenomenon.

Aim: To estimate the aggregate level effect of alcohol on the suicide rate in the former Soviet republic Belarus.

Method: Trends in alcohol consumption per capita and suicides rate from 1979 to 2007 were analyzed employing ARIMA time series analysis.

Results: According to Bureau of Forensic Medicine autopsy reports the number of BAC-positive suicides increased by 47.7% (from 10.7 to 15.8 per 100.000) and number of BAC-negative suicides increased by 31.4% (from 7 to 9.2 per 100.000). Alcohol in blood was found in 62% suicide victims for the whole period, with the minimum figure 49.3% in 1988 and maximum 68.5% in 1981. The results from the time series analysis indicated the presence of a statistically significant association between the alcohol consumption and BAC-positive suicide rates, while changes in the number of BAC-negative suicides were not related to fluctuation in alcohol consumption level. The analysis suggests that a 1 litre increase in alcohol consumption per capita would result in a 10,9% increase in a number of BAC-positive suicides.

Conclusion: The results of present study support the idea that alcohol was responsible for the fluctuation in suicide rate in Belarus.