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## BEVERAGE SPECIFIC EFFECT OF ALCOHOL ON SUICIDE AND HOMICIDE RATES IN RUSSIA

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**Background:** High suicide and homicide rates in Russia and its profound fluctuation over the past decades have attracted considerable interest. There is growing evidence that binge drinking pattern increasing the propensity for the alcohol-related suicide and lethal violence. In line with this evidence we assume that higher level of vodka consumption in conjunction with binge drinking pattern results in close aggregate-level association between vodka sale and suicide/homicide in Russia.

**Aims and method:** To test this hypothesis trends in beverage-specific alcohol sale per capita and suicide/homicide rates from 1970 to 2005 in Russia were analyzed employing ARIMA time series analysis.

**Results:** The rate of suicide and homicide tend to be more responsive to changes in distilled spirits consumption per capita than to the total level of alcohol consumption. The results of time series analysis suggest that a 1 litre increase in vodka sale is expected to increase suicide rate by 9.3% for men and by 6% for women and homicide rate by 15.2% for men and by 13.4% for women.

**Conclusions:** Assuming that drinking spirits is usually associated with intoxication episodes, these findings provide additional evidence that drinking pattern is important determinant in the alcohol-suicide and alcohol-homicide relationship. The outcomes of this study also provide support for the hypothesis that suicide and alcohol are closely connected in culture where intoxication-oriented drinking pattern prevails and adds to the growing body of evidence that alcohol played a crucial role in the fluctuation in suicide mortality rate in Russia during the last decades.