
AGGREGATE-LEVEL EFFECT OF ALCOHOL ON ALCOHOL-RELATED MORTALITY RATE IN RUSSIA: DOES THE TYPE OF ALCOHOL MATTER?

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Introduction: The harmful use of alcohol was identified as a major contributor to premature deaths toll in Russia. Research evidence has suggested that the consumption of different types of alcoholic beverage may have a differential effect on alcohol-related mortality rate.

Objective: The aim of this study was to examine the relation between the consumption of different beverage types and alcoholism/alcohol psychoses mortality rates in Russia.

Method: Age-standardized male and female mortality data for the period 1970-2005 and data on beverage-specific alcohol sales were obtained from Russian State Statistical Committee. Time-series analytical modeling techniques (ARIMA) were used to examine the relation between the sale of different alcoholic beverages (vodka, wine, beer) and alcoholism/alcohol psychoses mortality rates.

Results: The analysis suggests that of the three beverages vodka alone was associated with alcoholism and alcohol psychoses mortality in Russia. The estimated effects of vodka sales on the alcoholism and alcohol psychoses mortality rates are clearly statistically significant for both sexes: a 1 liter increase in vodka sales would result in a 32.5% increase in the male alcoholism and alcohol psychoses mortality rate and in 37.7% increase in female mortality rate.

Conclusions: The present study indicates that alcoholism and alcohol psychoses mortality tends to be more responsive to changes in spirits consumption per capita than to the wine or beer consumption. The findings from this study suggest that public health efforts should focus on both reducing overall consumption and changing beverage preference away from distilled spirits in order to reduce alcohol-related mortality rates in Russia.