

ALCOHOL CAUSES MORE THAN HALF OF ALL THE PREMATURE DEATHS IN RUSSIAN ADULTS

Excessive alcohol consumption in Russia, particularly by men, has in recent years caused more than half of all the deaths at ages 15-54 years. Sudden changes in alcohol drinking patterns account for most of the large fluctuations in Russian mortality since 1984, and tobacco and excessive alcohol use account for the large difference in adult mortality between Russia and Western Europe. These are among the conclusions of an article in *The Lancet* (June 27, 2009)¹, written by Professor David Zaridze, Russian Cancer Centre, Moscow, Professor Sir Richard Peto, Clinical Trial Service Unit and Epidemiological Studies Unit (CTSU), University of Oxford, UK, Doctors Paolo Boffetta and Paul Brennan, International Agency for Research on Cancer (IARC), Lyon, France, and colleagues.

The study looked at mortality in three typical Russian industrial cities—Tomsk, Barnaul, and Biysk. The addresses of some 60,000 residents who had died at ages 15–74 years in the period 1990–2001 were visited during 2001–05. For 50,066 of them a family member was still present, and from 97% (48,557) of these, information was provided on the deceased's past alcohol use and other lifestyle factors.

A total of 43,802 deaths (cases) were from external causes or from diseases that the authors judged beforehand could well be substantially affected by alcohol or tobacco; the 5475 deaths from other diseases acted as controls. The main case-control analyses are restricted to ever-drinkers, and the relative risks (RRs) compare the reference category (defined as usual weekly consumption always less than 250ml vodka and maximum daily consumption also less than 250ml vodka) versus other drinkers, classified by usual weekly vodka consumption into three categories: less than 500ml, 500-1499ml, and 1.5L or more (mean 2.7 litres).

The researchers found that, in men, the greatest absolute excesses of alcohol-associated mortality were in the deaths from accidents and violence (RR 5.9 for the highest versus the lowest alcohol consumption category); alcohol poisoning (RR 21.7); and acute heart disease other than heart attack (which included some from mis-certified alcohol poisoning) (RR 3.0). There were also excesses of throat cancer (3.5) and liver cancer (2.1). A further five disease groups had RRs of more than 3.0 in the highest alcohol category: tuberculosis (4.1), pneumonia (3.3), liver disease (6.2), pancreatic disease (6.7), and ill-specified conditions (ie, deaths where the person certifying the death did not find out what disease had caused it) (RR 7.7).

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After correction for reporting errors, alcohol-associated excesses accounted for 52% of all study deaths at ages 15-54 years (men 8182 [59%] of 13968; women 1565 [33%] of 4751), and 18% of those at age 55-74 years. The authors say: “Allowance for [the] under-representation [in our study] of extreme drinkers would further increase alcohol-associated proportions. Large fluctuations in mortality from these ten strongly alcohol-associated causes were the main determinants of recent fluctuations in overall mortality in the study region and in Russia as a whole.”

The authors argue that the excess mortality from liver cancer, throat cancer, liver disease, and pancreatic disease is largely or wholly because alcohol caused the disease that caused death. The excess mortality from tuberculosis and pneumonia may be partly a result of increased exposure to infection, reduced immune competence, or decreased likelihood of cure.

The authors suggest that, without alcohol, mortality rates in Russia would be much less than double the rates in Western Europe. However, the actual Russian mortality rate in people aged 15-54 years was more than five times (for men) and three times (for women) the rate in Western Europe. They say: “This...is consistent with alcohol being responsible for about three quarters of all male Russian deaths at ages 15-54 years and about half of all female Russia deaths at these ages—ie, [proportions] even greater than in our study population.”

They end: “We conclude that alcohol is the main cause (and perhaps the only major cause) of the large fluctuations in Russian adult mortality since 1980, and that alcohol and tobacco account for most or all of the large difference in premature adult mortality between Russia and western Europe.”

In an accompanying comment, Dr Robin Room, Turning Point Alcohol & Drug Centre, Melbourne, and University of Melbourne, Australia, and Dr Jürgen Rehm, Centre for Addiction and Mental Health, Toronto, Canada, say: “In estimating that more than 50% of all adult premature deaths are attributable to alcohol, the study is a stark reminder that most of these deaths are avoidable with more effective alcohol policies. The findings are a wake-up call that needs to be heeded both in national policy making and at international levels as WHO moves toward the institution of a Global Alcohol Strategy. In view of the ongoing globalisation of the alcohol market, a framework convention for alcohol control, analogous to the tobacco convention, would contribute to reducing the alcohol-attributable disease burden not only for Russia, but also worldwide.”

Dr Wild, Director, IARC, stated that: “This study demonstrates the cancer risks associated with alcohol drinking, but also highlights the importance of considering broader health implications linked to alcohol intake and consequently the benefits of reducing one’s consumption.”

A linked editorial in this week's Lancet concludes, that in addition to implementing the proven policies outlined in The Lancet Alcohol Series (see separate releases) , "Russia must stop or tax the illicit production of spirits, believed to account for at least 50% of consumption in the country. This in turn means confrontation with organised criminals and corrupt officials. But the time has never been better for Russia to shake off the chains of alcohol. The country has strong and ambitious leaders, the recently launched National Priority Project for health can provide a framework, and income from vast energy reserves can offset costs. All that is needed is the political will to make public health a priority."

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