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Components and possible determinants of decrease in Russian mortality in 2004-2010

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Abstract

Background: After a long decline, life expectancy in Russia substantially increased in 2004-2010; this is the longest period of health improvement that has been observed in the country since 1965. This study is the first analysis of this positive trend.

Objective: We seek to determine the causes and age groups that account for the additional years of life gained in 2004-10 and the remaining gap between Russia and Western countries, to assess to what extent these recent trends represent a new development relative to previous mortality fluctuations, and to identify possible explanations for the improvement.

Methods: We present an analysis of trends in life expectancy, and in age- and cause-specific mortality in Russia and selected countries in Eastern and Western Europe. We use decomposition techniques to examine the life expectancy rise in 2004-2010 and the Russia-UK life expectancy gap in 2010.

Results: Like the previous mortality fluctuations that have occurred in Russia since the mid-1980s, the increase in life expectancy was driven by deaths at ages 15 to 60 from alcohol-related causes. Uniquely in the recent period, there were also improvements at older ages, especially in cerebrovascular disease mortality among women. In addition, there were reductions in deaths from avoidable causes, such as from tuberculosis and diabetes. The life expectancy gap between Russia and Western countries remains large, and is mostly attributable to deaths from cardiovascular disease, alcohol-related conditions, and violence.

Conclusions: The decrease in alcohol-related mortality may be attributable to measures taken in 2006 to control the production and sale of ethanol. The lower number of cerebrovascular-related deaths may reflect advancements in blood pressure control. The reduction in the number of deaths from tuberculosis and diabetes may be associated with a general improvement in health care. Although the decline in mortality since 2004 has been substantial, the question of whether it can be sustained remains open.

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