Economic Consequences of Noncommunicable Diseases and Injuries in the Russian Federation



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Economic Consequences of Noncommunicable Diseases and Injuries in the Russian Federation

Marc Suhrcke, Lorenzo Rocco, Martin McKee, Stefano Mazzuco, Dieter Urban and Alfred Steinherr



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Executive summary

There is increasing evidence of the two-way relationship between health and economic growth. While economic development can lead to improved population health, a more healthy population can also drive economic growth. Similarly, at the level of the individual, while greater wealth contributes to better health, good health is an important determinant of economic productivity. This finding has important policy implications: national and international policy-makers interested in promoting the economic development of a country should seriously consider the role health investment could play in achieving their economic policy goals. Yet little is known about the direct relevance of these recent findings for the transition countries in central and eastern Europe and the Commonwealth of Independent States (CIS) that are facing a very particular health challenge, predominantly comprising noncommunicable diseases (NCD) and injuries. To date, their economic implications have hardly been analysed. This study takes a first step towards analysing the issue. The focus is the Russian Federation, although the findings are also relevant to other transition economies. In particular, we begin to answer two important questions.

- What effect has adult ill-health, in particular NCD and injuries, had on the Russian economy and the economic outcomes of the people living there?
- If the excessive burden of adult ill-health in the Russian Federation were reduced, what economic benefits could result?

The overarching message from our findings is unambiguous: poor adult health negatively affects economic well-being at the individual and household levels in the Russian Federation; and, if effective action were taken, improved health would play an important role in sustaining high economic growth rates.

Our findings relating to the first question are as follows.

- A simple, conservative estimate indicates significant costs of absenteeism due to illness.
- Ill-health appears to have had a significant and sizeable impact on labour productivity in recent years, but less so on labour supply.
- However, the labour supply has been significantly and sizeably affected to the extent that jobholders suffering from chronic illness have retired as a result.
- Severe alcohol consumption significantly increases the probability of losing one's job.
- The death of a household member affects surviving household members' welfare and behaviour in at least two ways, i.e. by increasing the probability of depression and of increased alcohol consumption.
- Chronic illness has negatively affected household incomes, particularly during the period 1998–2002.

The second part of this study assesses the macroeconomic benefits that would accrue by reducing NCD and injury mortality rates among adults in the Russian Federation. The main conclusion is that these benefits would be substantial for the Russian economy, irrespective of how they are evaluated. This occurs despite the fact that we assess only the effect of mortality reductions, setting aside morbidity reduction, which would probably attend mortality improvement and almost certainly also be sizeable. Our main findings are set out here.

- The static economic benefit (i.e. valuing a life year gained by one gross domestic product (GDP) per capita) of gradually bringing the Russian Federation's adult NCD and injury mortality rates down to the most recent rates for European Union (EU) Member States (those belonging to the EU prior to May 2004) by 2025 is estimated to be between 3.6% and 4.8% of the 2002 Russian GDP.
- The broadly defined "welfare" benefits (i.e. using a "value of life" measure) from achieving the rates of the EU Member States (those belonging to the EU prior to May 2004) by 2025 are estimated to be as high as 29% of the 2002 Russian GDP.
- The dynamic benefits (i.e. the effect on economic growth rates) are massive and growing over time. Even if the future returns are discounted to the starting-year value (2002), they represent a multiple of the static GDP effects.

The third part of the study briefly examines the potential response to the findings obtained, identifying some of the institutional barriers to effective action and setting out some of the policy options.

We have not directly taken into account the costs of different health interventions, the next logical step towards a full economic assessment, but the expected economic benefits would easily exceed any reasonable increase in investments to maintain and promote health, both inside and outside the health system. Another logical step will be to assess the benefits that would accrue from the morbidity reductions expected from those same investments.

These findings have obvious implications for economic and health policymakers in the Russian Federation as well as for international organizations interested in the country's social and economic development: investing in the health of the Russian adult population should be seriously considered as one (of several) means by which to achieve economic policy goals. Furthermore, while the analyses were possible in the Russian Federation because of the existence of appropriate data, it is likely that similar findings would be obtained from other economies in transition, given the similarity of their health and economic situations. Hopefully, this report will be a stimulus to other countries in the region to reassess the priorities they place on investment in health as one of the drivers of economic growth.