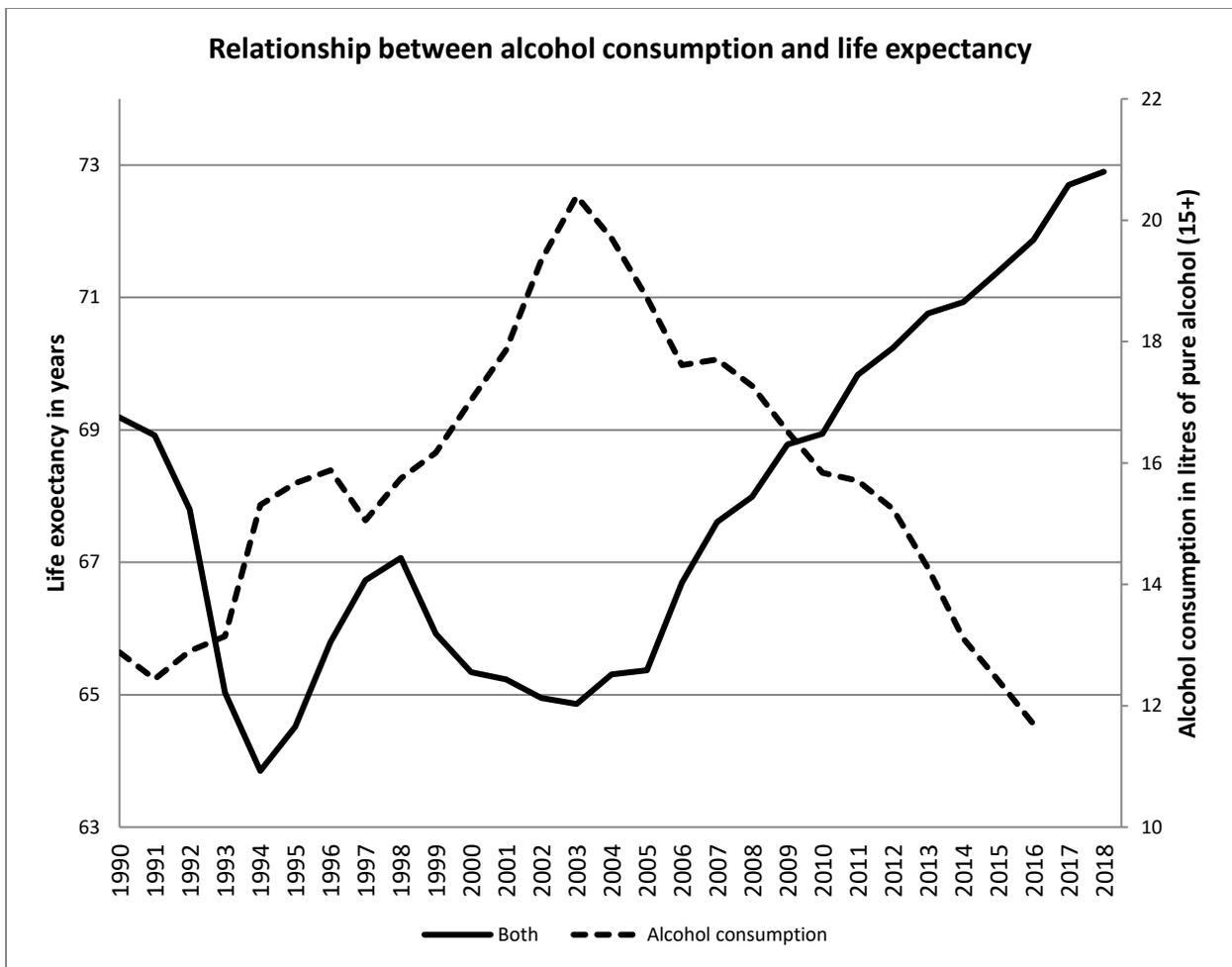


Frequently asked questions about the WHO Case Study

1. *Q: Why do you think is alcohol the most important factor in the observed trends of mortality/life expectancy?*

A: Our case study provides clear evidence on the decisive role of alcohol in shaping trends in Russian mortality and hence life expectancy. There is a clear negative correlation between alcohol per capita consumption and life expectancy throughout the 28 years that were covered by our study (see Figure). We could also assess the impact of alcohol control policy on mortality using a more complicated statistical modeling approach and the relationship was also very clear: at times of no alcohol control policy mortality rates were increasing, at times of strict alcohol control, mortality rates were dropping. The stronger the policy response was, the steeper were the drops in mortality rates.



2. *Q: What is the proportion of mortality in % that could be reduced due to decreased alcohol consumption? In other words: what role does alcohol play in the observed development in percent?*

A: As this is multifactorial relationship and mortality rates are influenced by various other factors, we cannot give you a specific percentage. We are dealing with an interaction of several factors here - for instance further risk factors such as smoking and high blood pressure, economic factors, factors related to healthcare and service provision at the national level. However, we can definitively say that alcohol is the most decisive factor in this interaction. In a counter-factual scenario where alcohol would not exist, the mortality rates would be much lower for Russia as compared to other factors.

3. *Q: Which developments would you expect in the future for Russia?*

A: Our data is very clear on that. If Russia keeps implementing and enforcing effective and evidence-based alcohol control measures, mortality will keep decreasing. There is still a lot of room for improvement in reducing mortality from cardiovascular diseases as they are hugely impacted by drinking patterns at the population level, most importantly heavy episodic drinking that is still common in Russia. If Russia will stop implementing alcohol policy, trends will reverse very quickly and mortality will rise steeply again. As the Russian history shows – there were such alcohol-related fluctuations in mortality before and their magnitude was very large. Also, certain alcohol control policies need to be adjusted over time – for instance alcohol excise rates or minimum unit prices need to be adjusted to inflation rates regularly in order to remain effective. Moreover, enforcement of policies is the most important aspect of alcohol control. Alcohol control measures have no impact and thus no value if they only exist on paper and are not enforced.

4. *Q: The Ministry of Health of the Russian Federation has announced that it will increase the minimum legal age for purchasing alcoholic beverages with a strength of 28% and above to 21. What do you think about this legislation?*

A: The WHO strongly supports the Russian Ministry in this measure as it is our mission to protect young people from alcohol and its harms. We have ample evidence on the relationship between young age of drinking initiation and higher risks of alcohol use disorders later in life. Therefore, raising the minimum age is a very important step in creating an environment free of alcohol-related harm. We are supporting our Russian partners in this legislation and will help evaluating the effects of this important measures.

5. *Q: What can other countries learn from the example of Russia?*

A: The Russian case provides all the strong arguments that alcohol control works. By employing alcohol control policies, one of the heaviest drinking countries of the world with the globally highest alcohol-attributable burden could reverse the most worrisome trends within a relatively short period of time. What other countries could take from this case is that alcohol control policy saves lives. There are a number of policies that were identified by the WHO as cost-effective in reducing alcohol consumption and mortality: 1) restrictions of alcohol marketing 2) restrictions of availability of retailed alcohol 3) higher taxation of alcohol. In Russia, various measures in all of these three areas were taken. So other countries could learn from the example and the experience of Russia that these measures work. Other countries should

specifically not shy away from increasing prices on alcohol as this is one of the least implemented policy in the WHO EURO region. The Russian case provides clear empirical evidence in this regard: the less affordable alcohol is, the less it is consumed at the population level.

6. *Q: What about the protective effects of alcohol? Did you account for them in your analysis as well?*

A: the only strong evidence that exists on the protective effects of alcohol relates to the so called “cardio-protective effect” of alcohol, which, however, occurs only when very small amounts of alcohol are consumed very regularly over a longer period of time. The cardio-protective effect disappears, however, when even sporadic episodes of heavy drinking appear in the drinking pattern.

Considering the specificity of Russian drinking patterns, namely a relatively large share of abstainers and a high proportion of heavy episodic drinking among drinkers, the cardio-protective effect is negligible at the population level in Russia.

However, as we have analysed not only mortality due to cardiovascular diseases in our analysis, but also trends in all-cause mortality, one could say that the cardio-protective effect of alcohol was nevertheless accounted for.

7. *Q: Are you sure that the data is correct?*

A: Yes, we are absolutely sure. For Russia, even Soviet data on all-cause mortality were correct. We have used national data from the Russian Federal Statistical Service and they were in line with international data. As we simply correlate alcohol policy response and mortality data, we can be very sure that this strong relationship is not by chance and not due to a calculation error.

8. *Q: How sure are you about the relationship between policy response and mortality?*

A: Very sure. We have conducted an interrupted time series analysis, which is a statistical method to assess impact of changes in legislation on the behavior of people, in this case impact of changing alcohol policy on mortality. We have analyzed monthly mortality data covering a period of 28 years, thus 336 months. Throughout the entire period we have seen a clear relationship: if alcohol control was loosened, mortality was rising and if alcohol policy measures were implemented, mortality was dropping. This relationship was stronger in men, as predicted. The statistical model shows that a relationship at this level cannot be by coincidence and that there is a causal link behind this.

9. *Q: You have analyzed 28 years of contemporary Russian history in your study. How sure can you be that alcohol is the most important risk factor if there are so many other things that happened during those 28 years?*

A: Our study has focused on alcohol and alcohol policy as there is ample literature documenting that this is the most important risk factor for Russian mortality. However, we have considered other factors as background factors in our analysis and came to the conclusion that alcohol plays a major role in shaping trends in Russian mortality and life expectancy.