TP Sabgayda, VG Semyonova

Avoidable mortality in Russia and the EU: similarities and differences

Federal Research Institute for Health Organization and Informatics of Ministry of Health of Russian Federation, Moscow

During the last decade life expectancy in Russia increased by 6.4 years for men and by 4.1 years for women. Decrease of Russian mortality is largely determined by changes in the level of avoidable mortality. It was due to the improvement of socio-economic conditions, rising health care costs, significant improvement of medical facilities and reorganization of the health care system. It determines the relevance of using the indicator "avoidable mortality" to identify major weaknesses in prophylactic and therapeutic activity of the health care system.

New list of preventable causes (PC) for epidemiological monitoring in post-industrial European countries was developed. Old list is useful in less developed countries yet. The question is: how choice of list of PC influences on analysis results in different countries?

We compared results based on two lists of PC for Russia and EU before May 2004. List 1 (W Holland, 1997) was adopted for use in Russia in 2005. List 2 was proposed by E Nolte and M McKee (2004). European mortality database was used. As a limited number of death causes is represented there so both lists of PS were not fully formed. Analysis was conducted for men and women aged 25-64 years for 1999-2013. In both lists, we grouped PC into three levels of death prevention.

In 2013, avoidable mortality of men and women in Russia was higher than in EU at 4.1 and 2.2 times for List 1 and 6.1 and 3.2 times for List 2. From 2003 to 2013, mortality of men and women has decreased more in Russia than in EU: 1.7 and 1.6 times vs 23.8% and 13.1% for List 1 and 1.7 and 1.6 times vs 41.3% and 29.0% for List 2. The greatest reduction in Russian mortality comes in group 1 for both sexes and both Lists. The greatest death reduction in EU comes in group 3 among men and in group 2 among women for List 1; in group 1 among both sexes for List 2.

In Russia, the rate of decline of avoidable mortality managed by the primary disease prevention is the greatest while in the EU the level of this mortality is consistently low. The rate of decline of mortality managed by the quality of medical care in Russia is higher than in the EU countries, and the rate of decline of mortality managed by the earliest beginning of treatment is less.

Results of avoidable mortality analysis in EU depend significantly on list of PC in contrast to Russia. For EU, it isn't appropriate to include the causes that depend on primary prevention into the list of PC in contrast to the less developed countries.

Control of PC is not the same at different stages of society development. Thus, in postindustrial societies, mortality from cerebrovascular disease depends on the quality of care while in Russia which located at the previous stage of the epidemiological transition, it depends on the alcohol policy in a greater extent. Similarly, the death rate from coronary heart disease in Russia is determined by socio-economic factors to a greater extent than by therapeutic ones in contrast to EU.

When cross-country analysis, it is permissible to use any of PC list, while domestic analysis requires verification of current PC list.

For Russia, the list of preventable causes, drawn up at the beginning of the century for European countries, can only serve as an additional source of information to the results obtained on the basis of previous list.