



LONG-TERM TRENDS IN CANCER MORTALITY IN THE REPUBLIC OF MOLDOVA

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Introduction. Cancer ranks second among the cause-of-death mortality patterns in the Republic of Moldova for both sexes and accounts for 16% of the overall mortality. The aim of the study is to analyze trends in cancer mortality by detailed cause in the Republic of Moldova for the period of 1965-2018 based on the continuous cause-of-death time series reconstructed in terms of the 10th revision of the International Classification of Diseases and Causes of Death.

Material and methods. This present study was based on the reconstructed cause-of-death time series for the Republic of Moldova published in The Human Cause-of-Death Database (www.causesofdeath.org) for the period 1965-2014 and prolonged until 2018. Population counts for 1965-2014 are intercensal estimates and for 2015-2018 are post-census estimates. The direct method of standardization was used for data analysis.

Results. The overall trend in cancer mortality during 1965-2018 is characterized by absolute insensitivity to the social and economic circumstances such as M. Gorbachev's anti-alcohol campaign and the socio-economic crisis of the 1990s. After the gradual increase in the 1980s, the trend in cancer mortality reversed and began declining in the 1990s. This downward trend was in sharp contrast with a huge upsurge in cardiovascular mortality and violent deaths due to the social and economic crisis of the 1990s. From the late 1990s onwards, the mortality trend resumed its growth and has continued up to now.

Tobacco and alcohol-related cancer mortality (of respiratory system, upper aerodigestive tract and urinary system) manifested a stable increase during 1965-2018. After a quick increase in the 1980s, mortality due to lung cancer showed a moderate decline in the first half of the 1990s followed by a steady growth. To explain the decline in mortality from lung cancer in the 1990s, we assume the hypothesis on competing risks earlier proposed to explain the same phenomenon, at least partially, in Russia and Ukraine. We suggest that the rapid growth of mortality from diseases of the circulatory system and accidents caused by the economic and the social crisis of the 1990s, increased the risk of dying from these causes among people suffering from cancer.

Breast cancer has followed a growing tendency for the period under study. Between 1965 and 2018 the standardized mortality rates increased by 2.5 times, which is linked, first, to the late diagnosis of the disease. Uterine cancer mortality, on the contrary, declined, especially fast in the 1970s and 1980s. Standardized mortality rates from stomach cancer reduced more than by three times in males and twice in females between 1965 and 2018. At the same time, the bowel cancer mortality and other digestive organs increased significantly.

Conclusions. Although the overall trend in cancer mortality is increasing in males and more or less stable in females in 1965-2018, the analysis of the detailed causes revealed the opposite trends. For certain causes (stomach and uterus cancer) some progress has been achieved, while for other causes (lung, breast and intestine cancer) the situation has deteriorated significantly. The moderate decline in lung cancer in the 1990s must be interpreted with caution.