

MODERN TENDENCY OF DEATH RATE OF THE POPULATION IN FAR EAST REGION OF RUSSIA

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1. Introduction

Over the last decades a fall in fertility and a increase in mortality have caused a decrease of the population. This is the reason why the problem of health preservation and death-rate reduction is one of the most urgent in present-day Russia. Our investigation is aimed at the study of economic and social factors influence on mortality and health of the population in the Russian Far East.

2. Mortality during the period of 1990-2008. Factors affecting mortality.

The prevailing reasons for the mortality and morbidity increase are identical anywhere in the world representing lowering of living standards, poverty, unhealthy nutrition, health services system degradation, contamination of the environment. Strengthening these reasons is the economic crises in Russia that has stimulated a further deterioration of the situation in the Russian Far East. The population death rate has been steadily growing since 1993. Its dynamics is represented in Table 1.

Table 1.

| Region | The crude death rate (per 1000) | | | | |
|------------------------|---------------------------------|------|------|------|------|
| | 1990 | 1995 | 2000 | 2005 | 2008 |
| The Russian Federation | 11,2 | 15,0 | 15,3 | 16,1 | 14,6 |
| Far East of Russia | 8,2 | 12,8 | 13,2 | 15,3 | 13,6 |

The following showings can be cited as an example:

A crude death – rate in Russia had increased 1.3 times for the period of 1990 - 2008 (accounted per 1000 heads), in the Far East this showing being 1.6.

It should be pointed out that until the above-mentioned period average showings of mortality over Russia had exceeded those in the Russian Far East, the age structure of the population being younger in this region, as compared to the

rest of the country. But during the period of 1990- 2008 mortality had increased 30.3% in Russia (calculated per 1000 heads), and in the Russian Far East - 65.8%, while in most countries of Europe it had decreased (16% in Austria, 19% in Great Britain).

The main causes of death in the Russian Far East are as follows:

- Cardiovascular diseases – 55.7 (increased about 23% over the last 8 years)
- Accidents, murders and suicides – 14.9%
- Oncology – 12.8%

Reduction of this death rate could in particular be achieved by means of some measures aimed at the prevention of accidents, murders and suicides.

One of the most important factors affecting death rate is age-sex structure of the population. On the whole, a change in the separate age groups mortality, correlated with their sex structure, influences the death-rate structure. After the death rate had achieved its peak in 2005, the showings were observed to slowly go down with both male and female population. In 2008 the mortality showings became the lowest within the able-bodied age groups of 40-44, having decreased 38.6% for men and 40.5% for women; age groups of 50-54 -25.7% and 17.2%, correspondingly, and in the age groups of 55-59 – 26.7% and 36.4%, correspondingly. Starting at the age of 30-34, the age-specific mortality for men differ from those for women, being three times as much. For example, the death rate of 30-34 year-old men is 10.8, while the female showing is 3.7. In elder ages no sudden reduction of that difference is observed.

Among the socially stipulated factors of increase in male mortality a leading place belongs to unhealthy life style, first and foremost to alcoholism with the men of able-bodied age. It actually takes 100% in the structure of mortality caused by mental frustration (psychoses and poisoning). In 1995 the showing was much lower taking only 19.7%.

Life expectancy is one of the overwhelmingly important demographic categories, representing a kind of generalizing characteristics of human mortality. The mortality crises growing in the Russian Far East, during the period of 1998-

2006 average life expectancy of its citizens had reduced for 2.77 years, while over Russia this showing was 2 years. However, there is a striking difference in absolute values of life expectancy: 65.07 years, as average Russia parameters, and only 62.42 years - in the Far East. Since 2006 it has been observed some growth of life expectancy in both Russia and the Far East, but still there remains a gap of about 12 years between male and female life expectancy.

To reveal basis factors affecting mortality of the population in the Russian Far East, the coefficients of correlation between life expectancy, mortality and separate showings of living standards were calculated. As a result, it has been revealed that the greatest influence on the population death rate in the region is exerted by the level of living wage ($r = + 0,82$), income of the population ($r = + 0,8$). The inverse correlation between mortality and housing conditions is less vividly expressed.

Hard climatic conditions, low living standards, medical staff shortage, separate settlements remoteness, unhealthy life style – all these things result in the morbidity and mortality showings increase. Therefore, in prospect the dynamics of these showings will first and foremost be connected with the dynamics of the population living standards, development and availability of medical services.

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