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QUALITY OF LIFE AND FEATURES OF MEDICAL AND DEMOGRAPHIC DEVELOPMENT OF THE FAR EASTERN FEDERAL DISTRICT TERRITORIES

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The aim of the study was to analyse the indicators characterising the quality of life and health of the population in the subjects of the Far Eastern Federal District (FEFD). Official data of the Federal State Statistics Service and the Analytical Centre under the Government of the Russian Federation were used as sources of information. It was found that despite the fact that most of the Far Eastern territories have a high level of human development, they are significantly inferior to the Russian Federation in terms of some indicators characterising the social well-being of the FEFD residents (life expectancy, mortality from certain causes, crime and suicide rates, etc.). In some constituent entities of the FEFD there is still a high level of mortality from "injuries with uncertain intentions", which may include a part of socially caused and socially significant incidents; the quality of official statistics on mortality from external causes in these territories is highly questionable. In order to achieve sustainable growth in the well-being of the residents of the Far Eastern Federal District, it is necessary to implement a comprehensive regional policy aimed at realizing the development potential of each region, overcoming infrastructural and institutional limitations, creating equal opportunities and promoting human development.

Keywords: quality of life, human development index, social well-being of the population, mortality, Far Eastern Federal District.

Introduction. The development of the Far Eastern Federal District (FEFD), which is under the close attention of the President of Russia, is one of the state's priority tasks.

From his first public speech as President V.V. Putin has identified demography as one of the most pressing topics. V.V. Putin has identified demography as one of the most pressing issues. The topic of demographic development of the Far East has been repeatedly raised in the President's annual messages to the Federal Assembly, and V.V. Putin did not ignore it at the WEF-2023 held recently in Vladivostok. Putin did not ignore it at the WEF-2023 recently held in Vladivostok. One of the strategically important tasks for the socio-economic development of Russia as a whole and the Far East in particular is to strengthen human potential, which is inextricably linked to health and a competent demographic policy. That is why, in order to realize the objectives set by the Government and the President of the Russian Federation for the development of the Russian Far East,

the solution of the issue of formation and preservation of the labor potential of the population acquires special significance. A number of government programs aimed at attracting and retaining human capital in the region have been developed and are currently being implemented. The Russian Government Order No. 1298-r dated 20.07.2017 approved the Concept of demographic policy of the Far East for the period until 2025, and the national project "Demography" is being implemented. However, despite the measures taken, the Far Eastern region, which is the richest in terms of natural resources, remains unattractive for human resources.

Materials and Methods. The analysis of statistical data characterising the quality and standard of living of the population of the Far Eastern Federal District, individual mortality rates in the context of the territories of the district and in comparison with Russian indicators was carried out.

Official data of the Federal State Statistics Service and the Analytical Centre under the Government of the Russian Federation were used as sources of information [1, 2]. The study was carried out using statistical, mathematical methods, as well as methods of comparative analysis. The dynamics of individual mortality indicators in the Far Eastern Federal District was analysed.

Results and discussion. Two aspects of the demographic situation in the Far Eastern region seem to be the most important: the economic aspect, which is reflected in the reduction in the growth of

labor resources, and the demographic aspect itself.

Over the period from 1990 to 2018, the population of the Far Eastern Federal District decreased by 1,892.2 people: from 8,054.2 to 6,165.3 thousand people, or by 23.5%, which corresponds to the number of residents of Khabarovsk Krai and Sakhalin Oblast, while the working-age population of the Far Eastern Federal District decreased by a quarter. The largest losses were registered in the Chukotka Autonomous District (by 3 times), Magadan Oblast (by 2 times), and Sakhalin Oblast (by 32%). As of January 1, 2023, the population of the Okrug amounted to 7903.9 thousand people after the addition of the Republic of Buryatia and Zabaikalsky Krai, or 5.4% of the population of the Russian Federation.

The main reasons for the decline in the population of the Far Eastern Federal District since the early 1990s are natural (up to 40%) and mechanical population loss (up to 60%), significantly outpacing the Russian Federation.

In the last 10 years, this trend has continued in the majority of the FEFD subjects. In 2022, population reduction due to natural decline and migration outflow was noted in the Republic of Buryatia, Transbaikalia, Kamchatka, Khabarovsk and Primorsky Krai, Amur, Magadan, Sakhalin and Jewish Autonomous Oblasts. In the Republic of Sakha (Yakutia), Chukotka Autonomous Okrug there was a decrease in population due to the excess of migration outflow over natural population growth.

The main reason for the unfavorable

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demographic trends is that the real standard of living of the population lags behind the national average. In this case, the quality and standard of living simultaneously act both as a condition and as a result of the development of labor potential [3].

The quality of life of the population is a generalizing socio-economic category, through which the level of consumption of goods and services by the population, the ability to meet intellectual and moral needs, as well as public health, life expectancy, environmental conditions surrounding a person, moral and psychological climate, mental comfort, etc. are assessed.

The share of the population with incomes below the poverty line (subsistence minimum) in the FEFD territories is still very high. While in the Russian Federation as a whole this indicator amounted to 9.8% in 2022, in the Jewish Autonomous Region - 20.3%, the Republic of Buryatia - 19.0%, Transbaikalian Territory - 18.0%, the Republic of Sakha (Yakutia) - 15.6%, Kamchatka Territory - 12.8%, Amur Region - 13.3%, Primorsky Territory - 11.5%, Khabarovsk Territory - 10.5%. Only in 3 territories of the Far East (Magadan, Sakhalin Oblasts and Chukotka Autonomous Okrug) the number of residents with incomes below the subsistence minimum was lower than the Russian average (7.4%, 7.0% and 6.7%, respectively).

In 7 out of 11 territories of the Far Eastern Federal District the unemployment rate in 2022 was higher than the Russian average (3.9%). The highest unemployment rate is observed in the Transbaikalian Territory (8.7%), the Republic of Buryatia (7.4%), the Republic of Sakha (Yakutia) (6.5%), the Jewish Autonomous Region (5.2%).

Various indices and indicators are regularly calculated to measure the situation of the population in the world, to assess the level and quality of life. One of the most universal indicators is the Human Development Index (hereinafter - HDI), which is an integral indicator characterizing the ability to lead a long and healthy life, the ability to acquire knowledge and the ability to achieve a decent standard of living. In calculating the HDI, such indicators as life expectancy, per capita income and education are taken into account. The HDI can take values from 0 to 1. Regions with an index below 0.5 are considered to have a low level of human development, 0.5-0.8 - an average level, 0.8 and more - a high level of development.

The leading country in terms of human development today remains Norway with

an index of 0.957 (2019 data), Russia was 52nd in the rating out of 189 countries (HDI - 0.824), again falling into the group of countries with a "very high level of human development".

In 2019, in the regional breakdown of individual subjects of the Russian Federation, the leaders in terms of the Human Development Index are traditionally Moscow (0.940), St. Petersburg (0.918) and the Khanty-Mansi Autonomous Okrug (0.914). These regions lead with a large gap from the Yamalo-Nenets Autonomous Okrug (0.902) [2]. In the Far Eastern Federal District in 2019, the HDI amounted to 0.846 against 0.870 in the Russian Federation as a whole, which corresponded to the penultimate, 8th place among the federal districts.

Most of the territories of the Far Eastern Federal District had a high or average level of the Human Development Index according to the assessment criteria in 2019. Three territories of the Far East had HDI indicators above or at the level of the national average (Sakhalin Oblast - 0.889, Republic of Sakha (Yakutia) - 0.886 and Magadan Oblast - 0.871). The Jewish Autonomous Region (HDI - 0.788) was again among the outsider regions in terms of human development, ranking 84th out of 85.

If we consider the place of the Far Eastern territories in the Russian HDI ranking, we can note positive dynamics for most of the territories: the Republic of Sakha (Yakutia) moved from 14th in 2000 to 9th place in 2019, the Sakhalin Oblast - from 37th to 8th, the Magadan Oblast - from 48th to 14th. Chukotka Autonomous Okrug - from 75th to 43rd.

At the same time, interregional differentiation in the Far East has significantly increased over the past decade, as evidenced by the analysis of the dynamics of the human development index of the regions. According to the results of 2019, only the Sakhalin Region and the Republic of Sakha (Yakutia) were among the leaders of the human development rating. The explanation is simple, as the regional economy in these territories is built around the extraction of minerals with high added value and high demand in global markets. The development of mining contributes to higher growth rates of the gross product, thanks to which the regions' positions in the rating are consistently high.

Despite the fact that GRP per capita in Sakhalin, Magadan Oblasts and Chukotka AO exceeds GRP in Moscow and St. Petersburg, the HDI in these territories is nevertheless much lower (Fig. 1).

It is no coincidence that the concept of

human development emerged precisely in the years of dramatic progress in the fight against mortality, because health and longevity are not only components and consequences, but also the most important prerequisite for the development of human potential. Thus, the reduction of mortality opens up the possibility of accumulating knowledge both on the basis of personal longer life experience and in the course of intergenerational interaction. The intergenerational transmission of cultural values is becoming much more reliable, and the development of science is accelerating. In addition, health is an important prerequisite for education in youth and its further improvement.

Health is clearly linked to the ability to work more efficiently and productively and to increase personal and social well-being. Poor health, on the other hand, hinders economic development by reducing productivity, increasing disability, and leading to higher living costs.

For a long time, the Far East has registered lower overall mortality rates compared to the Russian Federation. In 2022, the total mortality rate in the Far Eastern Federal District exceeded the Russian average (13.3 and 12.9 per 1,000 population, respectively), although for many years it did not rise above the Russian average (Fig. 2).

The most pronounced natural population decline (above the Russian average) was observed in the Primorsky and Khabarovsk Territories, the Amur and Jewish Autonomous Regions.

Standardized mortality rates for men in the Far Eastern Federal District exceed the national average by 19%, and for women by 15%. For individual classes of causes of death, this excess is as follows: 44% and 45% respectively for respiratory diseases, 29% and 47% for digestive diseases, 20% and 19% for diseases of the circulatory system, 19% and 54% for external causes of death.

In 2020, working-age mortality rates from all causes in the Far Eastern Federal District exceeded the Russian average by 18%, from external causes of mortality by 51% (46% for men and 60% for women), from diseases of the digestive system by 27% (18% for men and 46% for women), from diseases of the respiratory system by 35% (35% for men and 30% for women), and from diseases of the circulatory system by 18% (12% for men and 36% for women), from respiratory diseases - by 35% (35% for men and 30% for women), from diseases of the circulatory system - by 18% (12% for men and 36% for women), from neoplasms - by 8% (2% for men and 19% for women).

The average age of death from all causes in 2020 was 66.4 years for men in the Russian Federation and 64.0 years for the Far Eastern Federal District (2.4 years less), and 76.3 years and 74.4 years for women, respectively (1.9 years less). In some territories, the average age of death for men was 9 years less than the Russian average (Amur Oblast, Jewish Autonomous Okrug), for women - almost 20 years less (Chukotka Autonomous Okrug) (Table 1).

Today, the Russian Far East lags significantly behind the Russian average in such an important indicator as life expectancy at birth. The dynamics of this indicator repeats the Russian average, but there has been a lag of about 3 years for many years. While the average indicator of life expectancy in 2022 is 69.58 years in the Far Eastern Federal District, in the Chukotka Autonomous District it amounted to 66.27 years, in the Jewish Autonomous District - 67.74 years, with the maximum level in the Republic of Sakha (Yakutia) - 72.7 years. The average for the Russian Federation in 2022 was 72.76 years. The difference between women's and men's life expectancy is more than 10 years, both in the Russian Federation and in the Far Eastern Federal District. This gender disparity has been persisting for many years, is indicative of the hypermortality of men of working age, and is one of the largest in the world. This trend should be expected to persist with further growth in life expectancy as a result of measures taken to improve the social sphere.

Since the calculation of life expectancy is based on age-specific mortality indicators, a significant reserve for its increase is the reduction of infant mortality, which, despite positive dynamics, remains higher in the Far Eastern Federal District than the Russian average. In 2022, it amounted to 5.2 per 1,000 live births (RF - 4.4), from 3.4 in Magadan Oblast to 15.8 in Chukotka AO.

When analyzing the structure of infant mortality in recent years, we can note an increase in the proportion of children who died from external causes. This class of diseases in a number of territories of the Far Eastern Federal District is persistently moving from the fourth place to the second or third place, ahead of respiratory diseases (Republic of Buryatia, Jewish Autonomous Okrug, Chukotka Autonomous Okrug).

Such dynamics cannot but be alarming. Most studies devoted to the analysis of infant mortality allow us to conclude that more than half of the factors determining the health of children of the first

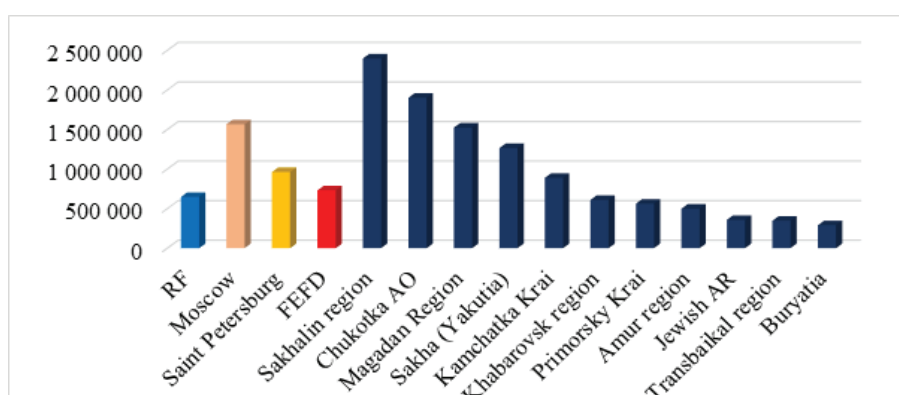


Fig. 1. Gross regional product per capita in the Russian Federation and the subjects of Far Eastern Federal District in 2019 (rubles) [1]

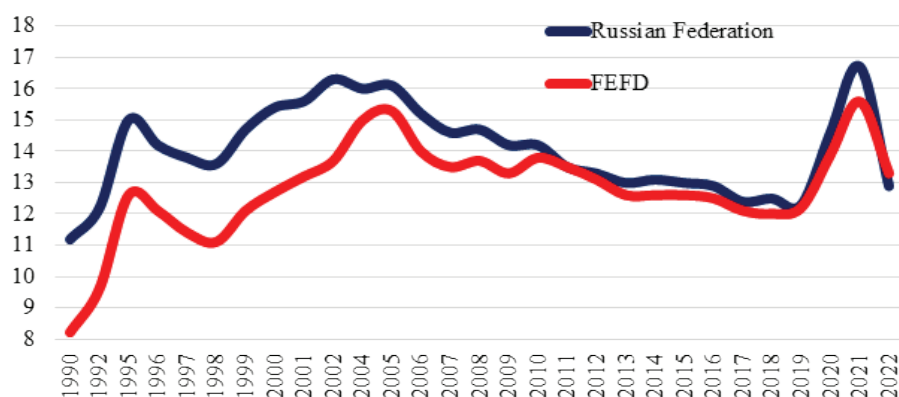


Fig. 2. Dynamics of mortality rate in the Russian Federation and FEFD in 1990-2022 (per 1000 population) [1]

year of life and infant mortality relate to manageable, avoidable exogenous factors - socio-hygienic and medical-organizational. These include housing and material conditions, family composition, child care, family climate and, most importantly, family lifestyle. All these factors

can be successfully managed, and they constitute an operational reserve for reducing infant mortality and increasing life expectancy.

The high prevalence of socially significant diseases such as alcoholism and drug addiction, which have a significant

Table 1

Average age of death from all causes in 2020 (years) [1]

	man	Δ	woman	Δ
RF	66.4		76.3	
Far Eastern Federal District	64.0	- 2.4	74.4	- 1.9
The Republic of Buryatia	65.3	- 1.1	75.0	- 1.3
The Republic of Sakha (Yakutia)	66.0	- 0.4	75.9	- 0.4
Transbaikalian region	62.9	- 3.5	73.9	- 2.4
Kamchatka Krai	64.0	- 2.4	75.0	- 1.3
Primorsky Krai	64.5	- 1.8	74.7	- 1.6
Khabarovsk region	63.2	- 3.2	74.2	- 2.1
Amur region	57.2	- 9.2	72.8	- 3.5
Magadan Region	63.5	- 2.9	74.9	- 1.4
Sakhalin region	64.6	- 1.8	75.0	- 1.3
Jewish AR	57.5	- 8.9	72.6	- 3.7
Chukotka AO	62.5	- 3.9	56.5	- 19.8

impact on mortality rates, should also be considered a serious sign of social disadvantage in the Far Eastern territories. The incidence of alcoholism in the Far East is 1.96 times higher than the national average, and in some territories (Sakhalin Oblast and the Republic of Sakha (Yakutia)) it is 2.8-3.1 times higher than the national average. - 2.8-3.1 times. In Chukotka, the alcoholism incidence rate in 2021 was 8.4 times higher than the national average (Fig. 3). The number of alcoholism patients registered per 100,000 population in the FEFD exceeds the Russian figures by 40%, in some territories from 2 (Kamchatka Krai, Magadan and Sakhalin Oblasts) to 5 times (Chukotka Autonomous Okrug) (Fig. 4).

In the case of drug addiction, the situation is similar, but here the "leader" is the Jewish Autonomous Region and the Amur Region, with the Primorsky and Khabarovsk Territories and the Sakhalin Region lagging slightly behind (Fig. 5). Thus, the task of preventing and treating addiction to psychoactive substances remains highly relevant for the Far East.

The incidence rate of malignant neoplasms in the Far Eastern Federal District as a whole does not differ much from the national average. In a number of territories (Khabarovsk, Kamchatka Krai, Amur, Sakhalin, and Jewish Autonomous Oblasts), morbidity rates exceed the national average by 3.6-12.1%. At the same time, the mortality rate for causes of death from neoplasms in the Far Eastern Federal District has increased in recent years, approaching the Russian average, which may indicate a decline in the quality and availability of medical care. The mortality rate from neoplasms in the working age group exceeds the national average. The growth of mortality from neoplasms is observed in most Far Eastern territories. Especially high values of the indicator are in Primorsky Krai, Amur and Sakhalin Oblasts, Jewish Autonomous Okrug.

Tuberculosis as a cause of death was registered 2.2 times more often in the FEFD compared to the RF in 2022, 4.6 times more often in the Jewish Autonomous Region, 3.3 times more often in the Amur Region and Primorsky Krai.

The mortality rate from external causes in the Far East regions for many years remains noticeably higher than the Russian average (in 2022 - 147.6 and 99.5 per 100 thousand population, respectively) (Fig. 6). Among the Far Eastern territories, the values of this indicator are particularly high in the Chukotka Autonomous Okrug (225.6 per 100,000 population), the Amur Region (184.8

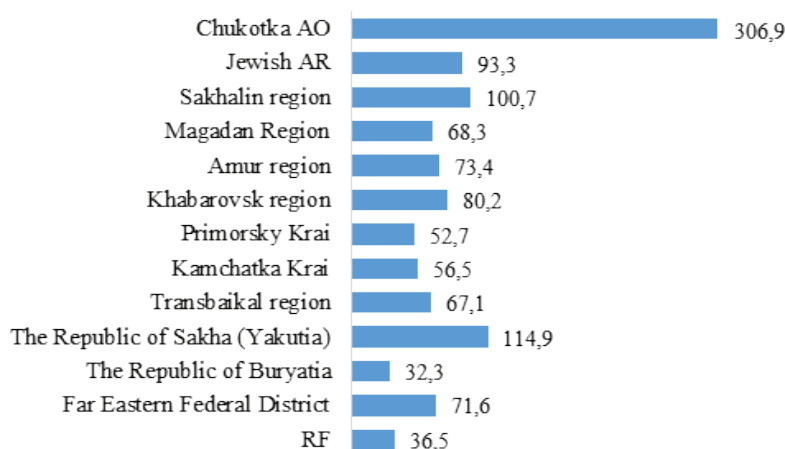


Fig. 3. Number of first-time detections of persons with alcohol dependence syndrome in 2021 (per 100 thousand population) [1]

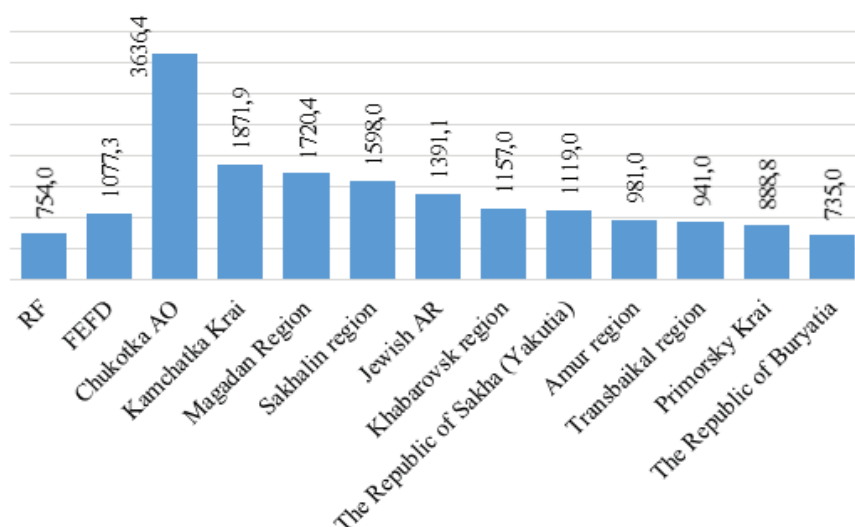


Fig. 4. Population with alcoholism and alcoholic psychosis in 2021. (per 100 thousand population) [1]

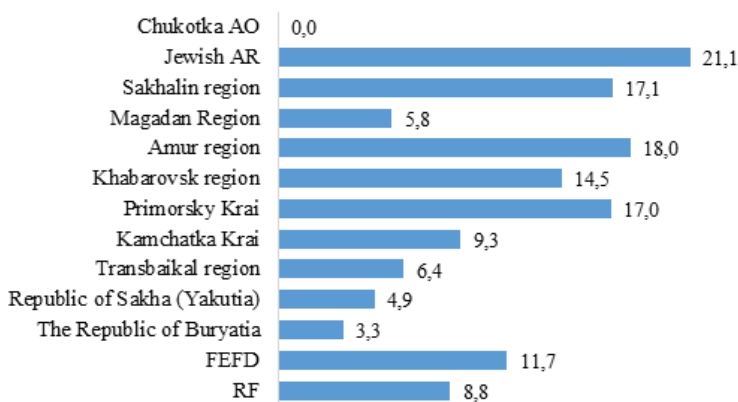


Fig. 5. Number of first-time detected persons with substance dependence syndrome in 2021 (per 100,000 population) [1]

per 100,000 population), the Republic of Buryatia and the Transbaikial Territory (182.7 per 100,000 population) (Fig. 7).

In the context of a difficult socio-economic situation in the country and the world, the analysis of suicide mortality deserves special attention. Despite a significant decrease in the frequency of suicides in recent years, the Far Eastern Federal District still consistently ranks first among the territories with an unfavorable suicide situation. It is believed that the suicide mortality rate worldwide is one of the most reliable indicators of the level of social and economic well-being of society, as well as the state of mental health of the population.

In the District as a whole, the indicator was 1.9 times higher than the Russian one, and only three territories of the FEFD in 2022 (as in previous years) had suicide mortality rates significantly lower than the average for the Russian Federation and the FEFD (Khabarovsk and Kamchatka Krai, Sakhalin Oblast) (Fig. 8). At the same time, in these territories in recent years there has been a significant increase in the causes of death referred to as "injuries with undetermined intent" (IUI), i.e. such cases when the actual cause of death remained unclear. The excess of IUI cases over suicides in these territories can be tens and hundreds of times, with the average value for the Russian Federation being 3.3, and for the Far Eastern Federal District - 2.8 (Table 2).

This situation speaks about the quality of medical statistics, the degree of responsibility for the health of the population and may be due to conscious or unconscious deformation of the structure of causes of mortality, both due to undercounting of mortality from individual causes, and due to masking some deaths from homicides, suicides and alcohol poisoning under the rubric of "damage with uncertain intentions" in an effort to achieve the monitored indicators of social well-being of the territories. But this does not bring real well-being, and the picture of mortality formed in this case calls into question the real scale of losses from external causes, trends in mortality from external causes as a whole and from individual causes, including homicides and suicides, and does not allow to objectively assess the situation and make the right decisions on its correction.

When assessing the homicide mortality rate in the Far Eastern Federal District, it should be remembered that the crime rate in the Far East remains one of the highest in Russia. In 2022, 21 regions of the Russian Federation were categorized as disadvantaged (with high and very

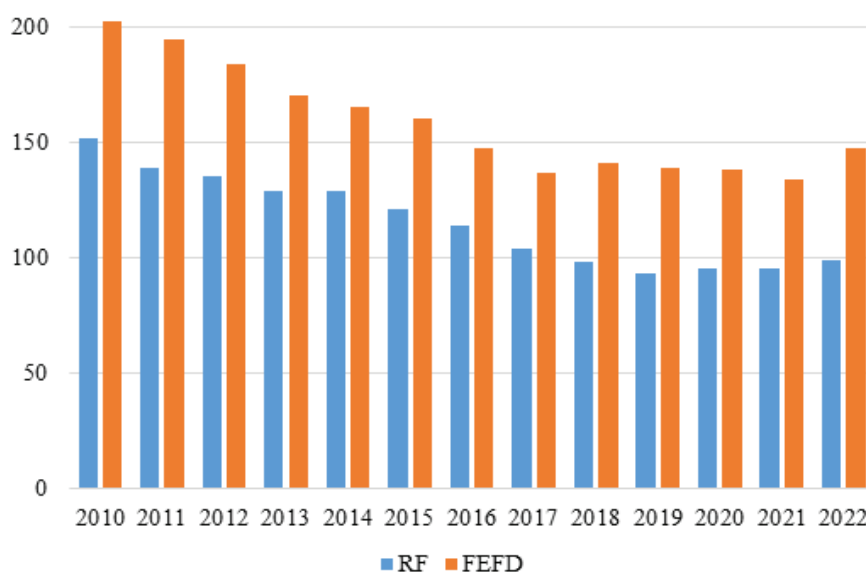


Fig. 6. Dynamics of mortality rate from external causes in the Russian Federation and FEFD in 2010-2022 (per 100 thousand population) [1]

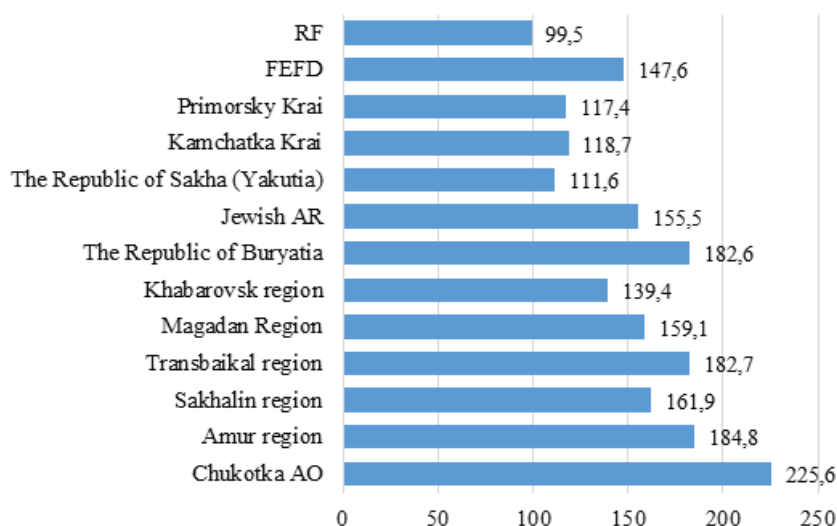


Fig. 7. Mortality rate from external causes in the Russian Federation and FEFD subjects in 2022 (per 100,000 population) [1]

high severity of the problem) in terms of crime. Half of them belong to the Far Eastern Federal District. 10 out of 11 territories of the Far East fell into the disadvantaged group, except for the Republic of Sakha (Yakutia). The most unfavorable situation in 2022 is in the Amur Region, the Jewish Autonomous Region and the Transbaikial Territory. All these regions are among the least safe, they are united by low urbanization, low living standards and significant migration outflow.

This is confirmed by mortality data: in 2022, as in previous years, the Far Eastern Federal District ranked 1st in the homicide mortality rate among all federal districts (8.6 cases per 100,000 population, 2.3 times higher than in the

Russian Federation). In some territories of the FEFD, the homicide mortality rate exceeded the Russian rate from 2 (Khabarovsk Krai) to 5 (Chukotka Autonomous Okrug) times (Fig. 9).

It should be remembered that this indicator, along with many others, is an indicator of the social climate in society and the attitude to human life in general, largely reflecting the state of the level of physical security in a particular territory.

Conclusion. The above data reflect only some social indicators characterizing the level and quality of life and health of the population. But even this analysis shows that, despite the fact that most of the Far Eastern territories are now categorized as territories with a high level

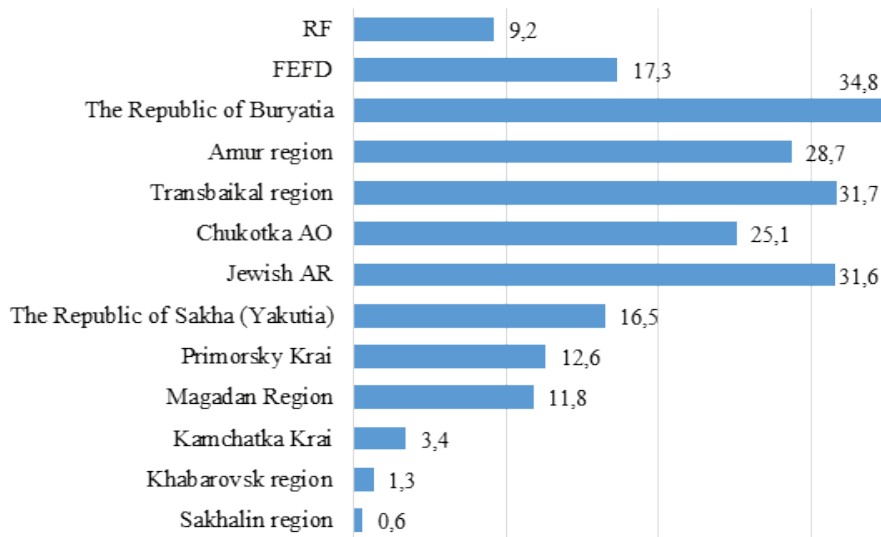


Fig. 8. Level of suicide mortality rate in the Russian Federation and FEFD subjects in 2022 (per 100 thousand population) [1]

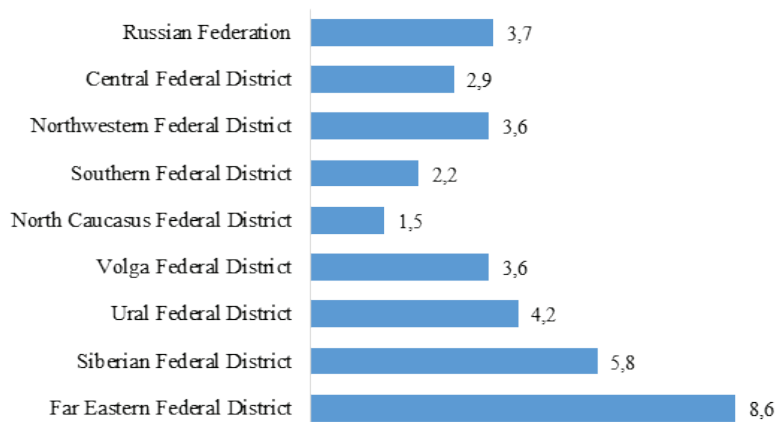


Fig. 9. Suicide Mortality Rate by Federal Districts of the Russian Federation in 2022 (per 100,000 population) [1]

of human development, they are significantly inferior to Russia in some positions. This is a factor that largely determines the stable outflow of population to the western regions of the country, to the near and far abroad.

In the near future, significant efforts will be required by both the authorities and citizens themselves to create better development opportunities in most of the Far Eastern territories. Longevity remains the most problematic component of human development. First and foremost, it is necessary to expand the opportunities for residents of the Far East to live long and healthy lives. According to the forecast, even in 2030 the longevity index in most regions of the country will not reach the critical value of 0.800, while in the countries of the Organization for Economic Cooperation and Development (OECD) it was already 0.880 in 2004. It

is impossible to achieve the goals of reducing poverty, reducing mortality, and increasing life expectancy, especially for men, without technological restructuring, without a transition to a knowledge economy, when labor efficiency will increase significantly and skilled labor will be adequately paid.

The issue of improving the quality of life of Far East residents and overcoming territorial differentiation remains the top priority today. This follows from the statements of the President of the Russian Federation V.V. Putin at the plenary session of the 8th Eastern Economic Forum. Putin's statements at the plenary session of the 8th Eastern Economic Forum - the Far East is becoming a strategic priority for Russia for the entire 21st century and should become an attractive place not only for work, but also for life.

In order to achieve sustainable growth

Table 2

Ratio of cases of "injuries with uncertain intentions" and suicides in the territories of the Far Eastern Federal District, 2022 [1]

	IUI/suicide
RF	3.3
Far Eastern Federal District	2.8
The Republic of Buryatia	0.5
The Republic of Sakha (Yakutia)	1.3
Transbaikal region	1.4
Kamchatka Krai	16.7
Primorsky Krai	2.9
Khabarovsk region	71.5
Amur region	1.1
Magadan Region	6.8
Sakhalin region	197.2
Jewish AR	0.4
Chukotka AO	2.9

in the well-being of FEFD residents, it is necessary to pursue a comprehensive regional policy aimed at realizing the development potential of each region, overcoming infrastructural and institutional constraints, creating equal opportunities and promoting human development.

As a result of the forum, a number of instructions were given to the Government of the

Russian Federation, federal and regional authorities, which will be implemented in the near future.

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