# THE FACTOR OF REDUCING CHILD MORBIDITY AS A WAY TO IMPROVE THE EFFICIENCY OF BUSINESS ACTIVITIES IN HEALTH CARE

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## ABSTRACT

*Aim of the study: The occurrence of diseases and their distribution are determined by natural, environmental and socio-economic factors, the latter of which are becoming increasingly important due to the influence of lifestyle, income, housing conditions, nutritional structure, and a number of other factors. Researchers justify their schemes for classifying factors of morbidity and public health in different ways. Let's consider separate approaches to their allocation and classification.*

*Methodology: Four groups of health protection factors were identified: lifestyle, biological factors, the state of the surrounding (natural) environment, and the volume and quality of medical care. At the same time, he showed that the intensity of the influence of these groups of factors differs significantly. Thus, the first group, which includes factors such as Smoking, alcohol abuse, drug use, poor nutrition, work in harmful conditions, stress, lack of exercise, unsatisfactory living conditions and hyper urbanization, accounts for 51-52% of the total impact.*

*Conclusion: The environmental (natural) factor (in particular, air, water, soil pollution, overtime radiation levels, electromagnetic fields, etc.) covers 20-21% of the influence, biological factors (heredity, gender, age, etc.) – 19-20%. The group of factors related to the volume and quality of medical care (in particular, vaccination, frequency of medical examinations, timeliness and quality of treatment) accounts for 8-9% of the impact.*

**Keywords:** Entrepreneurship, Sprouted Triticale, Extruded Grain Products, Extruded Products.

## INTRODUCTION

Each group of factors may have different degrees of positive and negative signs in certain regions. In General, characterized by such negative factors of morbidity: an intensive process of population aging, a significant scale of external migration of the population in the younger age groups, the relatively low income levels and widespread poverty, an unformed middle class, relatively low level of economic accessibility of medical services (first of all, not only economic, but also physical accessibility of medical services in rural areas), lack of qualified medical personnel, relatively high level of air pollution, relatively low quality of drinking water (Alternatives for Easing). The combination of these factors has a negative impact on the level and prevalence of various types of morbidity among the population of regions. However, the positive factors of population health are changing individual demographic indicators (the ratio of mortality and birth rate, increased life expectancy), the prospects for reform of the health system and modernization of the economy through the use of environmentally sound production technologies (Anheier et al., 2012).

## METHODOLOGY

V. Shevchenko's works became an important theoretical and methodological legacy of medical and geographical mapping (Bumble, 2000). In particular, his works elaborated on the issues of the history of medico-geographic cartography, the health status of the population as a criterion of environmental quality methodological basis for the creation of maps of morbidity, health services, the prerequisites of morbidity, medico-geographical zoning. V. Shevchenko introduced the concept of "*Territorial morbidity systems*", which are formed as a result of the interaction of individual population groups with the environment in the process of nature management and is the object of medical and geographical analysis (Daniels, 1998). The main approach to medical and geographical analysis, the scientist considered anthropocentric, noting that diseases are to a certain extent a function of the territory, the uneven manifestation of which depends on natural and socio-economic conditions, as well as on the properties of the population. Eduard Bondarenko's research was devoted to cartographic modeling of the state and development of infectious diseases in the population (Freeman,1998).

Another area of medical and geographical research is the study of the impact of natural and environmental factors on the health of the population. In medical geography, this area was founded and developed by Vasily Gutsulyak. His proposed ecological-geographical concept combined two scientific approaches geographical (landscape-geographical) and anthropo-ecological. The scientist considered the compliance of the environmental potential of the environment with the optimal needs of the population to be the criterion of medical and environmental assessment (Henderson, 2008). This direction is related to the search for criteria for optimal interaction that would provide the necessary quality of the environment for a person. V. Gutsulyak has carried out comprehensive medical-geographical characteristics of the region, analyzed mass disease of alopecia of the child population in 1988, spent notoriousseg zoning. Based on the analysis of indicators of man-made pollution and public health, he assessed the medical and environmental situation of settlement landscapes (Kerckhoff, 1996).

## RESULTS AND DISCUSSION

Galina Petomets in the course of lectures on medical geography focused on the natural specificity and geographical distribution of vector-borne diseases, classification of diseases by the degree and nature of their dependence on the properties of the environment, the spread of diseases caused by the geophysical properties of natural complexes of different latitudes, as well as social and environmental characteristics of diseases (Libecap, 1990).

The continuation of the study of the impact of environmental conditions on the health of the population in different regions was reflected in a number of protected dissertations. So, to establish a link between the concentration of pollutants in landscapes and the incidence of the region's population, K. Mukha made a medical and environmental assessment of the region using correlation analysis, identified and analyzed natural and anthropogenic factors that contribute to the growth of medical and demographic risks (Mason, 1997).

I. Mezentseva carried out an ecological and geographical analysis of the morbidity of the region's population, which included an assessment of the impact of urban air pollution by emissions of harmful substances from industrial facilities and vehicles, the presence of heavy metals in urban areas and the presence of Park and street plantings on the morbidity of the population. Based on the calculated coefficients of the relationship between the overall level of the disease, individual not claim and pollution of the atmosphere, soil and Park-street spaces, the

content of heavy metals in soil and vegetation, deviation of heavy metals content from the benchmark it was divided into three categories of cities according to the degree of environmental hazard. In General, the ecological and geographical analysis of the morbidity rate of the region's population showed that there is a close relationship between environmental factors and the spread of certain diseases, and most of all this applies to the natural components of lead and cadmium (Paludi, 2008).

D. Shiyan investigated the health problems of the population, which is characterized by significant anthropogenic transformations of the natural environment. Their research was based on the fact that the structure of morbidity of the population distinguishes the incidence of environmentally caused diseases diseases that develop among the population of a certain territory under the influence of harmful environmental factors (chemicals or physical factors) and are manifested by symptoms and syndromes characteristic of the action of this factor or other non-specific deviations. The study confirmed the effectiveness of using a geographical approach for detecting a large group of cause-and-effect dependencies, building models and spatial analysis of epidemiological phenomena and various groups of diseases in an industrial city (Semenutina, 2018).

Medico-geographical analysis of the morbidity of the population of the region was carried out by T. SHOVKUN.

The territorial and nosological structure of the region's population morbidity based on the medical and environmental analysis of the territory and the predestination of nosologies by environmental indicators (pollution of soil, atmospheric air and drinking water) are presented in the monograph by A. kornus, A. Kornus and V. Shishchuk. In particular, its authors note the need to assess the medical and environmental risk and implement medical and environmental monitoring of the territory.

They consider medical and environmental monitoring as a system of organizational, technical and preventive measures that ensure monitoring of the state of the environment and public health, their assessment and forecast, and the development of measures aimed at identifying, preventing and eliminating the impact of harmful environmental factors (risk factors) on public health (Taran, 2018).

I. Demyanchuk carried out a medico-geographical study of the region taking into account cause-and – effect relationships in the system "*Natural conditions anthropogenic changes in the environment-people and their health*" and a spatial analysis of demographic and medico-geographical indicators. The study was concluded that the differences in morbidity of the population in the administrative districts of the region due to different living standards, different effective work of healthcare institutions, low motivation installation on a healthy lifestyle and inadequate level of cultural behavior in relation to their own health, a significant part of the population; other factors (structural and health organization) (United States, 2003).

An important direction in medical geography was the study of medical and geographical systems at the regional level, founded By L. Nemets & G. Barkovoyu. They understand the medical system as an open, dynamic, complex subsystem of the regional sociogeosystem, a set of institutions, technologies and resources for maintaining a normal level of health of the population, connected by flows of matter and energy, direct and reverse information links. In their opinion, the concept of a system, in contrast to the concept of a complex, more clearly reflects its main properties-integrity, relationships between elements, structure (spatial and functional), and emergence (United States, 2005). Medical systems at all hierarchical levels are closely related to each other and have no less close links to the environment in which they

operate. The main element of the external environment for each level is the society that defines requirements, forms a social request, and acts as a customer and consumer of medical services.

Researching medical system region, G. Barkov concluded that the territorial peculiarities and differences in medical systems of different levels due to the specificity of the territorial organization of economic activity of a certain region, the system of settlement and geographical position and historical development. The main element of the territorial structure of the medical system – the medical-geographical area-it considers as an integral part of the territory with a unique set of interrelated components (elements) of natural-geographical, demographic, socio-economic, etc. nature, which directly or indirectly affect the organization of the medical system in order to maximize the possible needs of the population in medical services (United States, 2007).

Territorial peculiarities of the system of health, key components of which are health care institutions, medical personnel and management system, studied So Porebski, geoprotecta to streamline the health regions. Power Now.

I. Martusenko investigated the territorial organization of the regional medical complex on the example of the region. In her opinion, the regional medical complex is a system of medical, treatment-and-prophylactic, sanitary-and-anti-epidemic and other medical, medical-service, medical-industrial institutions that provide all possible directions of health improvement and recreation of the region's population through the rational organization of the health system (United States, 2004). Under territorial organization, Martusenko understands the natural process of placing the relevant enterprises and institutions, the emergence and functioning of their spatial combinations and system formations in close interaction with territorial systems of settlement and production under the influence of mainly socio-economic and geographical factors in a certain system of spatial and temporal coordinates. The elements of the territorial structure of the regional medical complex are the point, center, node and area of medical care (United States, 2008).

Another area of medical geography is the study of spatial aspects of population morbidity and the influence of natural, socio-economic and infrastructural factors on them. In the works of N. Mezentseva, and S. Batchenko the geography of the incidence of the population is considered as a component of medical geography that studies the spatial differences and peculiarities of morbidity, explores the regularities of spatial distribution of diseases and sets of causes that determine them. Since geographical study morbidity of the population includes the spatial-temporal analysis of disease spread and identifying factors that determine spatial aspects of morbidity for different types of diseases involve the typing of regions for the spread of diseases, the morbidity of the population dynamics of the propagation of various types of diseases (United States, 2010).

A number of scientists emphasize the importance of geographical study of morbidity and health in the context of the concept of quality of life of the population. So, taking into account this methodological position, a medical and geographical study of the health of the population of the region was conducted by G. Molikevich. This study was carried out taking into account the spatial features of population reproduction, taking into account the fact that the development of medical geography and geodemography is accompanied by cross-topics, analysis of those problems and phenomena that need both a purely nosogeographic and geodemographic assessment, measurement or interpretation (loss of population from epidemics, development of new territories and the formation of labor potential, the development of settlement systems, the consequences of migration, etc.). Medico-demographic situation defined as spatial-temporal

demographic processes in their causal relationship with the qualitative characteristics of the population, primarily to the state of his health, in the framework of multivariate dependence (Wintle, 2000).

Analyzing the issues of medical geography, G. Milicevic believes that the historical process has varied approaches to the treatment of the actual health of the population: if the stages of health science was considered in the context of preventing premature mortality of the population, today, health is considered from the standpoint of quality of life, focusing not on the disease, and not the implementation of the needs and interests of the people in any state of their health. This implies significant changes in approaches to health research.

## CONCLUSION

A. Romanov was carried out study the state of health of children population in areas where habitat was considered as a multilevel structure, a set of interrelated subsystems that have an impact on health status (includes natural, technological, socio-economic and socio-psychological components that interact to form specific territorial environment type, which defines the territorial type of children's health). It concludes that the level of health of the child population indicates how much the environment contributes to its preservation, and the combination of environmental factors entails a medico-geographical risk–the level of uncertainty associated with the deterioration of health in specific spatial coordinates as a result of the integral impact of the environment.

The modern period of medical and geographical research is characterized by significant methodological groundwork and the introduction of new research methods. Traditionally, medical geography studies use the method of medico-geographical mapping to study spatial differences and dependencies of population morbidity. At the same time, multidimensional analysis and modeling methods have become widely used. So, for search of correlation between indicators of the environmental components and socio-economic indicators that characterize the influence of factors on the morbidity of the population used correlation analysis to establish the role and weight of individual factors in the formation of medico-geographical situation – technique of factor analysis to identify similarity regions by the indicators characterizing the health status of the population, use the methods of cluster analysis and building of self-organizing Kohonen maps to identify the regional characteristics of the development of the health system a method of modeling the trajectory of the development of socioecosystem oznakowany in normalized multidimensional space, and graphic-analytical method of multidimensional classification of geographical objects, for modeling the dynamics of socio-economic and medico-geographical indicators regression analysis.

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