Assessment of the prerequisites of economic losses as a result of poor quality of drinking water on the basis of econometric modeling

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The paper proved the relevance and importance of drinking water in different ways. Highlighted 4 zones with iodine deficiency under cartograms of Ukraine, according to which the Ivano-Frankivsk region is the region with severe iodine deficiency. This region was selected for analysis of drinking water. Tabular presents comparative characteristics of water quality indicators in the region according to state health standards 2.2.4-400-10. It is considered that 22 figures are insufficient to analyze the quality of water. According to these standards, the water should be evaluated on 93 indicators of quality that generally corresponds to modern concepts and standards of the EU. These economic losses caused a lower productivity because of iodine deficiency in the region. It is the reasons of increase in the incidence of endemic goiter. Classified factors that affect the incidence of endemic goiter. The main groups of factors are: environmental, economic, social, demographic, legal. To determine the impact and distress communications of individual factors on the incidence of diffuse goiter 1 degree the method of correlation and regression analysis is used. Information for correlation and regression analysis was selected based on statistics of medical institutions of Ivano-Frankivsk region by 2014 in the context of the region. For the calculation Microsoft Excel software is used. Based on correlation and regression analysis revealed a relationship between the resulting indicator, incidence of diffuse goiter, and selected as a result of a logical analysis of the independent variables the iodine content, and disposal of polluted wastewaters into natural surface water bodies in cities and regions. Constructed the econometric model and the opportunity of its application for evaluation of possible economic losses in some regions.

In further studies will be carried out a detailed assessment and analysis of directly economic losses produced by other diseases that result from the incidence of endemic goiter.