SECTION 2

MEDICAL ECOLOGY

ANALYSIS OF MORBIDITY OF POPULATION LIVING IN THE TERRITORY OF GOMEL REGION AFFECTED BY RADIOACTIVE CONTAMINATION

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Radioactive contamination of the environment is the most significant environmental consequence of the nuclear accidents with radionuclide emissions. Town Korma and Korma district of Gomel region are areas with a different radionuclide contamination density. Morbidity Patterns of the adult population living in town Korma and Korma district of Gomel region during the period 2006–2015 were analyzed.

Keywords: radioactive contamination, prevalence, incidence, long-term dynamics, tendency, structure.

Radioactive contamination of the environment is the major factor influencing health and living conditions of people in the territories affected by radioactive contamination. Danger degree of surfaces contaminated by radioactive substances is determined by radionuclide composition of contamination, density of radioactive contamination, the nature of the contaminated surfaces, the time that had passed. Town Korma and part of inhabitant localities of Korma district of Gomel region are areas with a different radionuclide contamination density. The consequences of environmental problems of the region are characterized by the dynamics of the main morbidity indicators [2].

The purpose of this work was to analyzed dynamics of incidence of adult population of. A stern and Kormyansky district during 2006–2015 in general and on separate classes of diseases. Reporting materials about number of cases of the diseases registered at the population served HCI «Korma Regional Clinical Hospital» became an object of a research.

For the studied period the expressed statistically significant growth of the general incidence of adult population is noted (R^2 = 0,91). The indicator in 2015 in relation to incidence in 2006 has increased by 23,2%. In dynamics of primary morbidity the orientation of a tendency isn't revealed, however indicators at the end of the studied period in relation to initial year of a research have decreased by 3%. The relation of primary also sheathe incidences in 2006 has made 1:2,7, in 2015 – 1:3,4 that indicates accumulation of chronic forms of pathology. In structure of the general incidence during the entire period of observation the first rank place was taken by diseases of cardiovascular system – 26,8%, the second – diseases of respiratory organs – 12,8%, the third – mental disorders – 9,2%. The extensive indicator of mental disorders in structure of the general incidence by the end of the studied period has increased twice. Specific weight of diseases of bone and muscular system was 8,6%, injuries and endocrine pathology – on 5,9%. In structure of primary morbidity the first rank places were taken by diseases of respiratory organs have made – 29,5%, injuries of – 16,8%, diseases of bone and muscular system – 9,1%, cardiovascular diseases – 7,7%, mental disorders – 6%, diseases of digestive organs – 4,9%. The carried-out analysis of dynamics of incidence have allowed to determine a steady tendency to growth of the general incidence of cardiovascular pathology and mental disorders by classes of diseases (R^2 = 0,79 and 0,86 respectively). During observation the general incidence on these classes of diseases has increased in 1,4 and 2,2 times respectively. Primary incidence of cardiac pathology by 2015 have decreased by 29,6%, the incidence of mental disorders has increased by 1,7 times. In dynamics of the general and primary incidence on classes of diseases of respiratory organs, bone and muscular system and from external influences poorly expressed decrease is revealed. Frequency of again revealed cases of diseases of respiratory organs during observation has decreased by 13,7%, bone and muscular system – for 23,8%. The incidence of the population from external influences has decreased by 13,6%. The research of structure, dynamics and regional features of incidence of the population are a basis for development and carrying out effective measures for strengthening of health" [1].

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