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**The state of oxidative stress in the body of women living in the Sub-Aral area****Kultanov B Zh, Ivasenko S A, Rakhimova B B and Kelmyalene A A**  
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The Aral crisis is recognized as one of the global environmental problems of our time. Existing environmental trouble in the region is reflected on the health of the population in almost all areas of the Aral Sea region marked increase in the number of diseases of the endocrine, nervous, digestive and urinary systems. Numerous studies conducted by scientists of Kazakhstan shows that the health of population in recent decade's sub-Aral area continues to deteriorate. In the period of 2014-2016 years, the research team of Karaganda State Medical University (KSMU) carried out the study of health status of population in Sub-Aral area in the medical and biological direction under the state program. The study was conducted to determine the integrated approaches in solving problems of the region, to carry out systematic monitoring of the health status of the population of Sub-Aral area and development of complex of therapeutic and preventive measures based on the results obtained. This approach provides multidirectional nature of health research not only in the zone of ecological adversity of Kyzylorda region, but also regions adjacent to Sub-Aral area, namely: Aktobe region and South Kazakhstan regions. As a result of the research, we have established higher values of indicators of oxidative stress on the markers of lipid peroxidation and DNA damage in the blood of women living in zone of ecological disaster in the Aralsk-city and Aiteke-Bi-village (Kyzylorda region) and women living in the area environmental pre-crisis state Kyrgyz-village (Aktobe region) and Ulytau-village (Karaganda region), in the age group 30-39 years. The presence of elevated levels in blood markers of lipid peroxidation and DNA damage indicates the development of a general oxidative stress in the body of women surveyed and indicates the presence of most acute diseases, aggravation of chronic processes, intoxication and other pathological changes.

**Biography**

Kultanov B Zh has done his PhD from Kazakh Academy of Nutrition in Almaty in the year 2006. He is Head of the Department of Molecular Biology and Medical Genetics of the Karaganda State Medical University. The main focus of his research is the study of the biochemical, morphological and molecular indicators of reproductive status under the influence of physical and chemical factors. He is the author of various domestic and foreign editions of the textbooks of Biology developed in the state language and Russian languages.

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