



Arctic Medicine. Paradoxes and Problems

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ABSTRACT

On the basis of analyzing the views of scientists and experts, and on the basis of their data, the authors express their point of view on the desirability of providing the Arctic (North) medicine as an independent field of theoretical knowledge and practical activity like, for example, tropical medicine.

Keywords: geographical distribution of the population, the arctic, the arctic (north) medicine.

At different times Avtsyn A.P., Orekhov K.V. from the USSR RAMS, North researchers Bezrodnykh A.A., Tikhonov D.G., Khasnulin V.I. [et al.] put forward the Arctic medicine as a new section of medical science [1, 6, 7, 9, 10, 11]. The existence of considerable controversy in the scientific medical community about the desirability of distinguishing the Arctic medicine, for the first time in 1998, Professor Khasnulin V.I. publicly expressed in his book "Introduction to polar medicine" [11].

In 2009 and 2010 two editions of MD, Professor Tikhonov D.G. "The Arctic medicine" monograph in Moscow and Yakutsk were published [8]. In the book for the first time the definition of term, goals and objectives of the Arctic medicine were founded and given: "The Arctic medicine is an area of medical science that studies the features of the functioning of the human body and its diseases in the Arctic in order to develop the most effective and practically acceptable means and methods of prevention, diagnosis and treatment".

Monograph received a positive assessment of the scientific community. In his review of the monograph RAMS Academician V.P. Kaznacheev noted, "... it is the first in 30 years and a very deep attempt to allocate as a subject of study health of indigenous and non-indigenous population, whom destiny links with a common homeland - Arctic Russia" [5]. Doctor of medical sciences, professor, honored worker of science, M.A. Tyrylgin in his review of the monograph stressed: "In the result of his study Tikhonov D.G. came to the important original, but seriously substantiated conclusions: in the arctic regions human diseases have their own characteristics, not only in its prevalence but also in clinical manifestations, risk factors, etiopathogenesis and require inclusion in the process of learning and practice".

In 2009, development Programmes of North (Arctic) and North-eastern federal universities were approved by the RF government, where Arctic medicine was declared as one of the main directions of research. In Arkhangelsk in 2003 the Research institute of Arctic medicine was founded, there is Arctic medicine center in Oulu (Finland). Every four years the International Congress on circumpolar medicine takes place; there were already 14 Congresses. But the paradox! Until now, the Arctic medicine as an independent branch of medicine is not recognized. In this regard it should be noted that the famous explorer of biomedical problems of the North, Academician of the USSR RAMS A.P. Avtsyn in 1985 wrote: "There is other attitude to the proposed term "northern medicine", which is well known to the soviet doctors".



Some foreign researchers relate to the recognition of the independence of the northern medicine with doubt, arguing that it did not have its own specific nosography, like, for example, tropical medicine [8]. From our point of view, there is no reason to doubt the appropriateness of allocating northern medicine as an independent field of theoretical knowledge and practical activity. It should be noted that the infectious nosography of northern circumpolar territories is very original [4], and contrary to popular belief reminds resemblance to tropical medicine. Next, in 1998, in his book "Introduction to polar medicine" V.I. Khasnulin writes: "Even today, at the turn of the third millennium, many scientists, doctors living in the middle latitudes and not test the effect of the North to themselves, argue that any particular problems for human health in the high latitudes cannot exist. In their view, the functioning of homeostatic systems in the human body in the North has no peculiarities, and the extreme climate and geophysical factors absolutely do not mean anything to the development of a particular disease. Moreover, the conclusions of scientists such as A.P. Avtsyn, V.P. Kaznacheev, N.R. Deryapa, N.V. Vasiliev, L.E. Panin, G.M. Danishevskii et al., considered either eccentricity or artifacts. How one can explain such claims if it is ignorance or a tribute to some policy- the question is not a simple one"[11]. Our article in the journal «International journal of circumpolar health» (2013) on Arctic medicine they decided to publish with a mark as a point of view from Russia [12]. It seems that thousands of researchers around the world are engaged in Arctic medicine, not knowing what they do, as there is no definition of Arctic medicine in general. However, the definition of Arctic medicine, offered by us, has not been commented.

Nevertheless, according to some forecasts, sounded at the XIII international congress on circumpolar health (Novosibirsk, June 12-16, 2006) to the northern regions in the future can move about 1.5 billion population, not adapted to the cold climate from the more southern areas of the Earth.

On the territory of the Russian Far North currently about 11 million people live, and in the coastal zone not more than one million people. Thus, in total, on the territory of the Far North in the future its population may increase to the current population of the whole of Russia. On the preservation of the dominant share of Russians in the future population of the Far North must take care now, not for nothing Russia is a country that won the cold [3]. Current state of health of the population of the Far North is far behind the nationwide figures. Solving these problems is an urgent problem of our time. Arctic medicine will help to solve these problems.

Based on the foregoing, the logical **conclusion** is that the health care system requires reform of the arctic regions, taking into account features of human pathology in the North. The need to modernize the health care system in the Far North has arisen due to a lack of high efficiency of the existing health care system, which is partly the result of medical care without regard to the specifics of the north. Arctic medicine - is a modern new area of medical science that can actually lengthen life expectancy and reduce the mortality rate of the population of the Far North.

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