МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РФ ТОМСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ БИОЛОГИЧЕСКИЙ ИНСТИТУТ

СТАРТ В НАУКУ

МАТЕРИАЛЫ

LXX научной студенческой конференции Биологического института

Томск, 26-30 апреля 2021 г.

Томск 2021

THE DANGER OF THE MOUNTAINS: MOUNTAIN SICKNESS AND ISOLATED ALTITUDE PSYCHOSIS

M. D. Markova marina_ru200@mail.ru

Mountains have charmed people for centuries. There is something so invigorating, soul-awakening, renewing, restoring, refreshing, and healing about being in the mountains. The atmosphere of pure, fresh air, the scent of pine needles, cool, dry breezes, winding rivers and babbling brooks, the whisper of wind through the aspen and pines, and the smell of cozy campfires – all provide a sense of well-being. By their sheer size and magnificence, mountains give a sense of wonder and awe that is not found in the valleys and plains below. They give us a better view of the world below, offering a sense of perspective that can be found nowhere else on the planet and at the same time make us suffer.

Altitude sickness, sometimes called "mountain sickness", is a disorder caused by being at a high altitude, where oxygen levels are low, without gradually getting used to the increase in altitude. The condition occurs at altitudes higher than 2,500 meters. Some main factors cause altitude sickness are lack of oxygen, physical fatigue, cooling, dehydration, ultraviolet radiation, severe weather conditions, and sudden temperature changes during the day. Mountain sickness affects such organs and systems as the digestive system, vision, dehydration occurs, and pain sensitivity decreases.

But mountain sickness is not the only danger lurking climbers and explorers at great heights. Phantom satellites, food smells, car noise: at high altitudes, climbers' senses are often deceived by some strange illusion. Doctors consider these symptoms to be a special kind of psychosis that occurs separately from the classic altitude sickness. This psychosis is called an isolated high-altitude psychosis.

The purpose of this work is to collect general information about mountain sickness, its stages, and causes, as well as an isolated high-altitude psychosis, its manifestation, and effect on the human organism.

Academic advisor – senior lecturer E A Melnikova