

Affected persons have some cells with a normal copy of this regulatory gene and some cells with the abnormal gene (mosaic). The variability of symptoms associated with Proteus is due in part to the ratio of healthy cells to abnormal cells. When all cells have the abnormal gene, the condition is not compatible with life. Researchers believe that this somatic mutation occurs randomly for no apparent reason (sporadically). Proteus syndrome is an extremely rare disorder. Approximately 200 patients have been reported in the medical literature and it seems to affect people of all ethnic and racial groups. However, researchers with extensive experience in Proteus syndrome reviewed these cases and determined that just fewer than 100 met the stringent diagnostic criteria for Proteus syndrome. Because the diagnosis of Proteus syndrome is so difficult some people may go undiagnosed, while others may be incorrectly diagnosed with Proteus syndrome. Therefore, it is extremely difficult to determine the true frequency of this disorder in the general population. Diagnosis of Proteus syndrome is made using published clinical diagnostic criteria and molecular testing.

Conclusion. At this time there is no cure for Proteus Syndrome but there are currently some medications under trial that are considered to be extremely effective in curing this rare medical condition.

CHANGE IN WEATHER AND MECHANISM/STRATEGY OF ADAPTATION: THE CASE OF WEST AFRICANS STUDENTS IN UKRAINE

Arku Yamoah, Naboka O. I., Luchko E.

Scientific supervisor: prof. Filiptsova O. V.

National University of Pharmacy, Kharkiv, Ukraine

bigparon4ag@yahoo.com

Introduction. Over the years there has been geographical migration all over the world. It is believed that early migration of humans originated from Africa over 40,000 years ago and spread all over the world. The temperature in Africa is dominated by very high temperatures and Africans living in this area possess adaptive features such as physiological and behavioral, psychological mechanism to cope with this heat.

Aim. Therefore, this research focuses on the how Africans studying in Ukraine cope/adapt psychologically, physiologically and behavioral to the extreme cold weather during the winter.

Material and methods. The questionnaire was developed for 20 items, and the pilot study on data is ongoing. Currently 63 volunteers took their participation.

Results and discussion. Africans have migrated to Europe in order to obtain high quality education over a decade and one country that records the highest African students in take is Ukraine. Ukraine is one of the coldest countries in Europe with temperatures ranging between -20°C during the winter to +30°C in the summer (weather-and-climate.com). The human thermoregulatory system relies on behavior and on physiological responses for thermal homeostasis. Our physiological mechanisms are limited: basically, thermal balance in humans is maintained by vasodilation/vasoconstriction of the skin and peripheral tissues within the so-called thermo-neutral zone. We have one extra physiological mechanism in the heat (sweat evaporation) and 2 extra mechanisms in the cold (shivering- [ST] and nonshivering-thermogenesis [NST]). Humans are good sweaters with maximal values observed exceeding 3.5 l/hour. This acquired additional cooling power is maintained for several weeks, even when not exposed to heat anymore. Human adaptation to thermal extremes is not only an academic question, but important to assess the impact of climate change on mortality and morbidity.

Conclusions. Study of adaptations mechanisms of temporary migrants are very actual and potentially can highlight the ways of optimal coping with some challenges, increasing the quality of life.