2021

Impact Factor

5.634

THE AMERICAN JOURNAL OF APPLIED SCIENCES

Crossref doi

10.37547/tajas

VOLUME-03

THE AMERICAN JOURNAL OF APPLIED SCINCES

(TAJAS)
SJIF-5.634
DOI-10.37547/tajas

Volume 3 Issue 05, 2021

ISSN 2689-0992

The USA Journals, USA
www.usajournalshub.com/index.php/tajas

12. Ergash Yuldashevich Turaev, Jasurbek Jumaev, Shahlo Karimova, (2021). Charge State Of Impurity Atoms In Semiconductors Studyed By The Emission Mössbauer Spectroscopy Method. *The American Journal of Applied Sciences*, *3*(05), 71-75.

13. E.Yu. Turaev, S.Ya. Shaimardonova, Sh.S. Zamonova, A.O Khodzhamov, (2021). Application Of Mössbauer Spectroscopy To Determine The Parameters Of The EFG Tensor At Barium Nodes For YBA2CU3O7-X. *The American Journal of Applied Sciences*, *3*(05), 76-80.

14. Malika Kholiyor Kizi Khidirova, Shakhnoza Burievna Nashirova, (2021). The Use Of Songs And Music As A Motivational Tool In ELT. *The American Journal of Applied Sciences*, *3*(05), 81-85.

15. Odiljon Tukhtasinovich Mirzamakhmudov, Muhtorjon Murodillaevich Mamajanov, Botirjon Bobir Ugli Turaev, (2021). Ways Of Developing Ecological Culture In The Education Of The Young Generation. *The American Journal of Applied Sciences*, *3*(05), 86-93.

16. Rasuljonovna Zuxra Ergasheva, (2021). Methods Of Teaching The Topics Of Nuclear Physics In The Course Of Physics. *The American Journal of Applied Sciences*, *3*(05), 94-102.

17. Yo.Q. Hayitov, I.A. Ramazonova, M.O. Rajabova, (2021). Some Problems In The Use Of Reservoirs And Their Solutions (An Example Is The Todakol Reservoir). *The American Journal of Applied Sciences*, *3*(05), 103-115.

18. Nuriddin Nazhmiddinovich Soliev, Odiljon Shermatovich Boymatov, (2021). Serotonin Regulation Of Energy Metabolism Of Mitochondria Of Various Organs Of Rats. *The American Journal of Applied Sciences*, *3*(05), 116-122.

19. Denis Bakhtiyorovich Sadullaev, (2021). Reduction Of A Term In A Scientific Theory. *The American Journal of Applied Sciences*, *3*(05), 123-131.

20. Gulshan Subhonovna Khalimova, Anvar Nusratovich Nematov, (2021). Effects Of Climate On Human Health (On The Example Of Bukhara Region). *The American Journal of Applied Sciences*, *3*(05), 132-135.

21. Istat Elmurodovna Mirzoyeva, Guzalbonu Fazliddin Kizi Tukhtaeva, (2021). Morphological Types Of Central Asian Deserts And Their Geographical Aspects. *The American Journal of Applied Sciences*, *3*(05), 136-139.

22. Muhammad Karim Adkhamovich Mukimov, Mirabbos Mirzakarimovich Mirzakhalilov, Muhammadrasul Sharopovich Nazarov, (2021). Assessment Of Hydrochemical Analysis And Phytoplankton Community Of Different Ponds Of A Fish Farm. *The American Journal of Applied Sciences*, *3*(05), 140-147.

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | Pages: 132-135
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-20

IMPACT FACTOR
2021: 5. 634

OCLC - 1121105553

Journal Website: http://usajournalshub.com/index.php/tajas

Effects Of Climate On Human Health (On The Example Of Bukhara Region)

Gulshan Subhonovna Khalimova
PhD, Senior Lecturer, Department Of Ecology And Geography, Bukhara State University, Uzbekistan

Anvar Nusratovich Nematov
Senior Lecturer, Department Of Ecology And Geography, Bukhara State University, Uzbekistan

ABSTRACT

This article focuses on the effects of climate on human health. There is information about the diseases that affect the health of the local population due to the climatic features of Bukhara, as well as scientific research in this area.

Human health is one of the most important issues for every period of society's development. Indeed, the level of health and literacy of the population living in the region determine the state of development of any country. These two indicators reflect the role of states in the world community and their socio-economic potential. Each season is distinguished in terms of its natural features by the outbreak of certain diseases or the temporary cessation of some of their vital activities. In particular, due to a sharp drop in temperature in winter, infectious diseases are reduced, while in humans, due to sudden changes in temperature, colds increase. This, in turn, leads to the opposite.

KEYWORDS

Climatic conditions, air pressure, atmospheric composition, wind direction, human health, hypertension, stroke, neurosis, renal dysfunction.

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | Pages: 132-135
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-20

IMPACT FACTOR
2021: 5. 634

OCLC - 1121105553

INTRODUCTION

The health of a population is directly related to the natural conditions of the area in which it lives. The economic activity and lifestyle of the population are closely linked with the natural zones of the earth's surface and general geographical laws. Well-known historian, expert on the ethnogenesis of the peoples of the East L. Gumilov noted that the origin of ethnic groups (tribes, clans) is associated with the natural conditions of the region, while leading medical experts such as L.N. Ermakova, N.I. Tolmacheva connects with.

It is known that the climatic conditions of the region have a significant impact on human health. The territory of the Republic of Uzbekistan is located within the mainland, ie far from the seas and oceans. This indicates a relatively low incidence of diseases (asthma, boils, diseases caused by upper respiratory tract infections), which are characterized by a maritime climate and are typical of humid countries.

One of the peculiarities of the climate of the republic is the change of seasons. One season differs from another in temperature, pressure, humidity, solar radiation. Winter in Uzbekistan is colder than in other regions of the same latitude and is characterized by frequent weather changes. When cold air masses enter the territory of our country from the north and northeast, the air becomes clear, the temperature drops, and sometimes a cold bitter winter of -370C begins. In winter, when cyclones come in from the west, southwest, clouds form in the air and the temperature rises.

Each season is distinguished in terms of its natural features by the outbreak of certain diseases or the temporary cessation of some of their vital activities. In particular, due to a sharp drop in temperature in winter, infectious diseases are reduced, while in humans, due to sudden changes in temperature, colds increase. This, in turn, leads to the opposite.

The territory of Bukhara region of the Republic of Uzbekistan is located in the middle of the deserts of Central Asia and has the climatic features of the southern (subtropical) deserts. The region is characterized by a sharp continental desert climate with subtropical features. Due to the warm winter in Bukhara region, the number of diseases (colds) associated with this season is declining, but with the advent of spring, the share of infectious diseases will increase sharply. In winter, infectious diseases associated with respiratory infections, polyarthritis, airborne infectious diseases (influenza, pediatric infectious diseases) are more common among the population of the republic than in other periods of the year [1; 30-58 p.].

Experts point out that changes in the amount of oxygen in the air, air pressure, temperature and humidity can cause various complications related to brain and heart function in patients with hypertension (high blood pressure). The data show that due to the sharp changes in the weather in Uzbekistan in winter, the incidence of diseases among the population increases, especially when the average daily barometric pressure is from 1 to 29 mb. It has been reported that the number of patients with stroke increases when this pressure decreases. The amount of oxygen in the atmosphere depends mainly on air pressure, temperature and humidity. The increase in oxygen content

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 | Pages: 132-135
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-20

Impact Factor
2021: 5. 634

OCLC - 1121105553

occurs during the cold period of the year. This situation leads to an increase in hypertension and stroke [5; 13-18 p.].

In spring, the average daily temperature is above 5oC. This season is the highest in the country, with 40-43% of annual precipitation in the plains and 40-50% in the foothills. The sudden warming of the days in the spring (average temperature in March is 11.5oC in the southern regions and -4-5oC in the northern regions) requires epidemiologically necessary measures. Because this condition allows the development of many infectious-parasitic diseases. Infectious diseases such as rabies, brucellosis, measles are widespread during this period, especially in areas specializing in animal husbandry. For all of these diseases, especially spring is a period of awakening. However, from the end of May, the real summer will begin in our region. Climate change during this period also has a significant impact on the nosogeographic situation. Most of the fast-growing pathogens in the spring go into their latent periods due to high temperatures in the summer. With the arrival of a rainy but warm autumn, they resume their vital activities. In general, the summer season is clear, dry, scorching hot, and the sunlight falls steeply and shines for a long time [3; 4].

In some years, the temperature rises sharply in the summer, reaching 48oC in some areas. This leads to an increase in circulatory system diseases among the population of the region. During this season, people's moods, nervous system and internal organs function change due to the decrease in the amount of oxygen in the atmosphere. The appetite of the population decreases, metabolic processes are disrupted, and the incidence of intestinal infections in humans increases.

It should be noted that some diseases, including mental disorders (neuroses, neurosthenia, epilepsy, etc.) are seasonal in nature, the incidence of such diseases increases in autumn and spring, the situation is exacerbated in such patients.

It should be noted that there are many diseases associated with the seasons by their nature. While some of them may escalate in a season, some may be the opposite. Especially in spring and autumn, which are the coldest (winter) and hottest (summer) seasons, it is difficult for people to adapt to nature and changes in it. As a result, the incidence and mortality of many chronic diseases increase during this period.

Air pressure and winds, which are important elements of the climate, also play an important role in the formation of the nosogeographic situation. Air pressure and winds in the territory of Uzbekistan are distributed differently by region and season, depending on its surface structure, temperature. The average annual air pressure in the country varies from south-east to north-west.

It should be noted that in many cases, in the construction of large industrial and production facilities, special attention is paid to the geographical location, population density, raw material resources, but the movement of winds in this area, their direction is not taken into account. This, in turn, poses a number of medical geographic challenges to the activities of the people living in the area. In particular, the toxic gases generated by the aluminum plant in neighboring Tajikistan are causing severe damage to the southern regions of Uzbekistan through the wind. According to the data, 85-90% of the hazardous damage caused

The American Journal of Applied sciences
(ISSN – 2689-0992)
Published: May 31, 2021 Pages: 132-135
Doi: https://doi.org/10.37547/tajas/Volume03Issue05-20

IMPACT FACTOR
2021: 5. 634
OCLC - 1121105553

by the plant's activities falls on the territory of our republic [2, 67-78 p.]

Also, many scientists have identified changes in the atmosphere in the southern regions of the country under the influence of the "Afghan" wind. The results show that during such winds, the content of elements Sm, Na, Au, La, Hg, Cs, Zn, Co in the atmosphere increases by 3-4 times, and Sc and Fe by 8-10 times. The elements Ce and Cr also appear in the air during this wind. As a result of the experiments, the element Br in the atmosphere disappeared during the "Afghan" wind. All of these cases have an impact on human health [5, 130-150 p.]

In summary, natural conditions, especially climate, are a major factor influencing human health. The optimum air temperature for the human body is 22-24oC. Humidity should not be less than 50%. In the climate of Bukhara region, such a favorable situation can be observed only in a very short time, ie in March-April. Almost 5-6 months of the year are hot and dry. Given these climatic conditions, the population of the region in order to maintain their health should pay attention to the quality of clothing, that is, the use of natural fabrics and pay close attention to the diet [5, 13-18 p.]

REFERENCES

1. Ермакова Л.Н., Толмачева Н.И. Влияние погодных условий на здоровье человека // Современные географические исследования. Пермь, 2006. С. 135-143.
2. Исломова Н.Х. Тиббиёт географиясининг назарий ва амалий масалалари. Тошкент: "Шарк", 2006. 299 б.
3. Назаров И.К., Аллаёров И.Ш. Бухоро географияси. Бухоро, 1994. 67 б.
4. Нуров У.Н. Бухоро вилояти иқлими ва унинг ресурслари. Бухоро, 1996. 44 б.
5. Рафиқов А., Азимов Ш. Амалий география. Т.: Ўқитувчи, 2000. 239 б.
6. Тўраев З. Ўзбекистон Республикасининг жанубий регионларини муҳофаза қилиш ва назорат қилиш муаммолари, уларнинг ҳал қилишнинг физик усуллари. Т.: Фан, 2000. 124 б.