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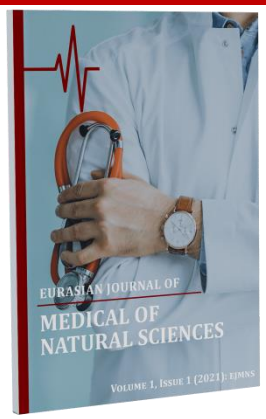

IMPACT OF CLIMATE CHANGE ON CARDIOVASCULAR DISEASES

Rasulova N.F.
Azamatova F.A.
Aminova A.A.
Tashkent Pediatric Medical Institute
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ABSTRACT

Climate change has become an important global problem affecting various aspects of human health. Among the health problems involved, vascular diseases are gaining increasing attention due to their prevalence and severity. This article examines the impact of climate change on patients with vascular diseases, including cardiovascular disease, peripheral arterial disease, and cerebrovascular disease. Explores how changing environmental factors, such as temperature, air pollution, and extreme weather events, can exacerbate vascular disease, increase disease burden, and impact patient outcomes. In addition, potential adaptive strategies and measures to mitigate the adverse effects of climate change on vascular health are discussed.

ВЛИЯНИЕ ИЗМЕНЕНИЯ КЛИМАТА НА СЕРДЕЧНО-СОСУДИСТЫЕ ЗАБОЛЕВАНИЯ

Расулова Н.Ф.
Азаматова Ф.А.
Аминова А.А.
Ташкентский педиатрический медицинский институт
https://doi.org/10.5281/zenodo.12754791

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ABSTRACT

Изменение климата стало важной глобальной проблемой, затрагивающей различные аспекты здоровья человека. Среди затронутых проблем со здоровьем все большее внимание привлекают сосудистые заболевания в связи с их распространенностью и тяжестью. В этой статье рассматривается влияние изменения климата на пациентов с сосудистыми заболеваниями, включая сердечно-сосудистые заболевания, заболевания периферических артерий и цереброваскулярные заболевания. Исследует, как изменяющиеся факторы окружающей среды, такие как температура, загрязнение

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цереброваскулярные заболевания, температура, загрязнение воздуха, экстремальные погодные явления, адаптация.

воздуха и экстремальные погодные явления, могут усугублять сосудистые заболевания, увеличивать бремя болезней и влиять на результаты лечения пациентов. Кроме того, обсуждаются потенциальные адаптивные стратегии и меры по смягчению неблагоприятного воздействия изменения климата на здоровье сосудов.

YURAK QON TOMIR KASALLIKLARIGA IQLIM O‘ZGARISHING TA’SIRI

Rasulova N.F.
Azamatova F.A.
Aminova A.A.
Toshkent pediatriya tibbiyot instituti
https://doi.org/10.5281/zenodo.12754791

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Iqlim o'zgarishi, qon tomir kasalliklari, yurak-qon tomir kasalliklari, periferik arteriya kasalliklari, serebrovaskulyar kasalliklar, harorat, havo ifloslanishi, ekstremal ob-havo hodisalari, moslashish.

ABSTRACT
Iqlim o'zgarishi inson salomatligining turli jabhalariga ta'sir ko'rsatuvchi muhim global muammoga aylandi. Ta'sir qilingan sog'liq muammolari orasida qon tomir kasalliklari ularning tarqalishi va zo'ravonligi tufayli tobora ko'proq e'tiborni tortmoqda. Ushbu maqolada iqlim o'zgarishining qon tomir kasalliklari, jumladan, yurak-qon tomir kasalliklari, periferik arteriya kasalliklari va serebrovaskulyar kasalliklarga chalingan bemorlarga ta'siri o'rganiladi. Harorat, havo ifloslanishi va ekstremal ob-havo hodisalari kabi o'zgaruvchan atrof-muhit omillari qon tomir kasalliklarini kuchaytirishi, kasallik yukini oshirishi va bemorning natijalariga qanday ta'sir qilishi mumkinligini o'rganadi. Bundan tashqari, iqlim o'zgarishining qon tomirlari salomatligiga salbiy ta'sirini yumshatish uchun potentsial adaptiv strategiyalar va aralashuvlar muhokama qilinadi.

Relevance. Climate change is one of the most urgent problems of our time and has serious consequences for human health. Among the many health impacts of climate change, vascular disease stands out as an important concern. Vascular disease includes a number of conditions that affect the blood vessels, such as cardiovascular disease (CVD), peripheral artery disease (PAD), and cerebrovascular disease (CVD). These conditions contribute significantly to the global burden of disease and are the leading causes of morbidity and mortality worldwide [1]. With ongoing changes in climate patterns, evidence for direct and indirect effects of climate change on vascular health is mounting. Rising temperatures, increased occurrence of extreme weather events, changes in air pollution levels, and changes in precipitation patterns affect the prevalence, development, and outcomes of vascular disease [2].

Hyperthermia and Cardiovascular Health:

An increase in temperature is associated with an increase in the negative consequences of the cardiovascular system, including myocardial infarction, stroke and heart failure. Extreme heat can exacerbate pre-existing cardiovascular disease, leading to higher hospitalization and death rates. In addition, heat waves can cause acute cardiovascular events in susceptible individuals, especially the elderly and those with vascular disease [3].

Air pollution and vascular health:

Air pollution, a byproduct of industrialization and urbanization, contributes significantly to the burden of vascular disease. Particulate matter (PM), nitrogen dioxide (NO2), sulfur dioxide (SO2), and ozone (O3) are among the common air pollutants that adversely affect cardiovascular disease. Exposure to these pollutants is associated with an increased risk of CVD, PAD, and stroke. In addition, air pollution can exacerbate existing vascular conditions and contribute to disease progression [4].

Extreme weather events and vascular diseases:

Extreme weather events such as hurricanes, floods, and wildfires pose immediate risks to vascular health and can have long-term consequences. Displacement, injuries, and disruption of health care services during these events can lead to adverse cardiovascular outcomes. Additionally, the effects of extreme weather events, including water pollution, mold growth, and mental health stress, can further exacerbate the burden of vascular disease [5].

Adaptation and mitigation strategies:

Recognizing the significant impacts of climate change on vascular health, efforts to adapt and mitigate these impacts are critical. Public health interventions to reduce greenhouse gas emissions, improve air quality standards, and increase public health resilience to extreme weather events are important. In addition, promoting lifestyle changes such as regular physical activity, healthy eating, and access to cardiovascular health services may help mitigate the adverse effects of climate change on vascular disease [6].

Research and policy implications:

Further research is needed to better understand the complex interactions between climate change and vascular health and to develop targeted interventions. In addition, policymakers play a critical role in implementing policies to address the health impacts of climate change and promote sustainable development practices. By prioritizing climate resilience and population health, we can strive to maintain vascular health in the face of environmental challenges [7].

Summary. In conclusion, climate change poses serious challenges to vascular health, affecting cardiovascular disease, peripheral artery disease, and cerebrovascular disease. Rising temperatures, air pollution, and extreme weather events increase the burden of disease and exacerbate existing vascular conditions. However, proactive adaptation and mitigation strategies, combined with strong research and policy initiatives, can help mitigate these impacts and protect vascular health under a changing climate. Summary. In conclusion, climate change poses serious challenges to vascular health, affecting cardiovascular disease, peripheral artery disease, and cerebrovascular disease. Rising temperatures, air pollution, and extreme weather events increase the burden of disease and exacerbate existing vascular conditions. However, proactive adaptation and mitigation strategies, combined with strong

research and policy initiatives, can help mitigate these impacts and protect vascular health under a changing climate.

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