

Climate change, impact on health in BiH and the role of the nursing profession

Climate change is seen by many as the current biggest threat to human health and its negative consequences are already visible in Bosnia and Herzegovina as well.

Heat waves, floodings and extreme weather episodes are expected to deteriorate the necessary conditions for a healthy living. They will impact our environment, food production, availability of water and even safety. Think of the potential impact of drought, wildfires, biodiversity loss on our living conditions. Not even mentioning the direct effects of air pollution, plastic pollution and chemical dispersion in the environment that might affect our health in the nearest future.

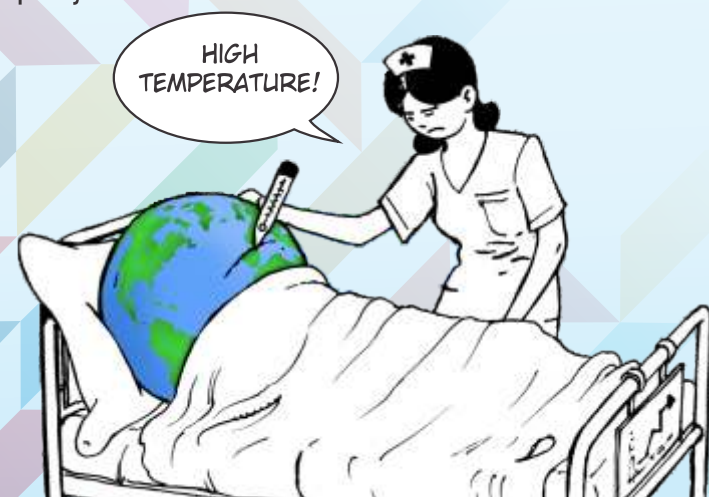
Health professionals, and nurses in particular, have a role to play in (i) raising awareness amongst the frail population, (ii) preventing the consequences of heat waves, pollution peaks, (re-)emerging diseases, (iii) putting measures in place to allow the population to receive appropriate attention, such as health professional training, dedicated helplines or even dedicated 'clinics' in case of an environmental hazard.

The health system, as a whole, is estimated to contribute to 5% of the greenhouse gas (GHG) emissions. Therefore, all reasonable measures to decarbonize health sector activities should be considered and implemented without any delay.

What is bringing us there? The example of fossil fuels

Fossil fuel combustion (for example in industry, road traffic, heating, electricity generation), is a primary driver of both air pollution and climate change, evident in increased temperature, heatwaves, poor air quality, floods and droughts, alterations in vectors ecology, impaired water quality and food shortages, etc.

The extraction and combustion of fossil fuels are threatening a fundamental mission of the health system – to improve health and well-being – by creating and exacerbating illness, disrupting infrastructure, increasing costs, and threatening the delivery of quality health care.



What are the health consequences?

The mechanisms through which health is affected are both direct and indirect. The potential impact on health and well-being includes increased number of respiratory and cardiovascular diseases, asthma in children, heat stress and deaths, increased food-, water-borne and vector-borne diseases, diabetes mellitus type 2, adverse pregnancy outcomes, loss of livelihoods, and others.

The World Health Organisation (WHO) predicts that between 2030 and 2050, climate change will cause approximately 250,000 additional deaths every year.

While health impacts are experienced by everyone to some degree, groups that are already considered disadvantaged and vulnerable are most at risk for adverse health and wellbeing outcomes (young children, pregnant women, elderly people, people with existing health conditions and disabilities, those living in poverty).

The impact on the health care system

Climate change deeply affects healthcare systems as well. Hospitals and health centers shoulder the burden of caring for people experiencing the health consequences of climate change. Health care facilities could also face disruptions to their operations, for example in the form of power outages or flooding, that inhibit the delivery of care.



Facing the challenge

This unprecedented challenge demands an unprecedented response. Bosnia and Herzegovina is a signatory of the Paris Climate Agreement (2015), which includes a commitment to reduce greenhouse gas emissions in order to “limit the global temperature rise to well below 2 degrees, ideally 1.5 degrees, by 2100”.

Laws on healthcare and laws on the protection of the population from infectious diseases in Bosnia and Herzegovina oblige public health institutions to implement preventive measures that improve the general state of health.

These preventive measures refer, among other things, to the protection from risk factors originating from the environment (contaminated water, food, air, land, carriers of infectious diseases, etc.), including meteorological and climatic factors.

Healthcare professionals can be critical to mitigate the health consequence of climate change.

The nursing profession can make a strong contribution to climate change adaptation (reducing vulnerability to the harmful effects) and mitigation (reducing or preventing greenhouse gas emissions)

- Firstly, because nurses comprise about 60% of health professionals. Their collective potential to change the trajectory of climate action is unparalleled.
- Secondly, nurses are trusted and generally perceived as being accessible and responsive to the needs of others. They are often the first health provider that people meet when they are seeking care. Nursing has immense potential to create and disseminate messages about the climate change.
- Thirdly, nurses are close to the people most vulnerable to climate change: frail, underserved or marginalized people.

The call from the nursing profession

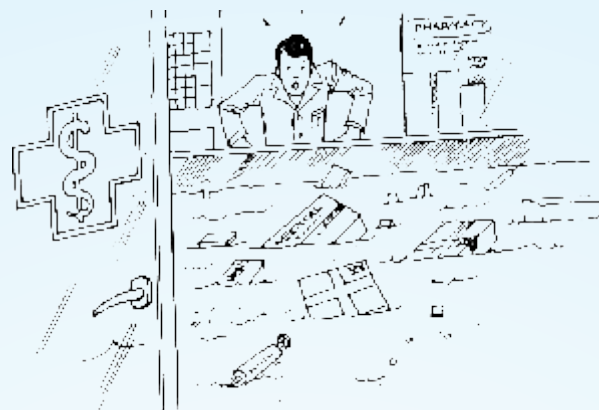
The International Council of Nurses (ICN), the European Federation of Nurses (EFN) and other international associations call on nursing associations and individual nurses in their role as clinicians, educators, researchers, policy influencers, or executives, to:

- ➔ embed the concept of sustainability in nursing practice as well as **climate change-related knowledge into nursing curricula** and in continuing education,
- ➔ at healthcare settings, **foster a move from the current heavy use of energy and nonrenewable resources towards clean energy and sustainable resources**. This can be done without sacrificing the quality of care,
- ➔ **advocate for policies that promote the reduction of healthcare waste** and correct waste management,
- ➔ **better schedule nurses' working distances**, particularly of those working at community or home settings, to reduce transportation by road to the bare minimum,
- ➔ **empower individuals, families and communities to make healthy lifestyle choices and change own practices**. This can imply preventive measures during heat waves; use of low carbon transport such as walking, cycling or public transport, which would both increase physical activity and reduce the risk of cardiovascular diseases, obesity and diabetes, as well as reducing greenhouse gas emissions. Healthcare advocates should raise the awareness of patients to the planetary health diet and reduce animal product consumption which would decrease the carbon

footprint of people while simultaneously reducing the levels of saturated fat and meat consumed, decrease the incidence of cardiovascular disease and bowel cancer,

- ➔ **engage with the media** to promote public awareness of the harmful effects of climate change on health and promote mitigation strategies,
- ➔ **advocate for sustainable policies** in city planning, waste management, pollution control, transportation strategies, food sources, energy sources, and water sanitation. This would result in more efficient policies for the benefit of people and the environment.

"The future will ask, what did you do?" is a succinct and startling provocation that reminds us what is at stake for us and our children. Much needs to be done, and quickly. **Nursing has both the skills and the mindset to meet the moment.**



References:

- 1) The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. Lancet. 2022 Nov 5; 400(10363): 1619-1654. <https://pubmed.ncbi.nlm.nih.gov/36306815/>
- 2) Strategija prilagodbe klimatskim promjenama i iskoemisijskog razvoja BiH za razdoblje 2020-2030, 2020
- 3) Strategija prilagođavanja na klimatske promjene niskoemisionog razvoja za Bosnu i Hercegovinu, 2013 (<https://www.undp.org/sites/g/files/zskgke326/files/migration/ba/CC-LAT-publish-on-WEB.pdf>)
- 4) IFMSA Policy Document: Health, Environment and Climate Change. 2018. https://ifmsa.org/wp-content/uploads/2020/04/GS_MM2020_Policy_Climate-Change-amended.pdf
- 5) Sustainable and Resilient Health Care in the Face of a Changing Climate. Annual Review of Public Health. 2023. <https://www.annualreviews.org/doi/abs/10.1146/annurev-publhealth-071421-051937>
- 6) Nursing's pivotal role in global climate action. BMJ 2021; 373 <https://www.bmj.com/content/373/bmj.n1049>
- 7) EFN Policy Statement on the Nurses' Contribution to Tackle Climate Change. 2020