EDITORIAL

A CALL TO ACTION FOR NURSES IN CLIMATE CHANGE AND POPULATION HEALTH

Kashaf Waseem MPhil. Scholar, Quaid- e-Azam University, Islamabad +92-334-5450404 itskashafwaseem@gmail.com

Climate change has a drastic effect on humankind and planet Earth, which is the most significant caution/ threat to human life nowadays. ¹ According to the United Nation, climate change can be defined as the long-lasting changes in temperature and weather patterns. ² These changes have profound negative impacts on human health, which is posing a question on human survival. For instance, the increment in the respiratory disorders and population growth of climate refugees due to flooding, fires, land sliding, and food shortage, requires an urgent need for immediate action. ^{3,4} According to a new report by the Intergovernmental Panel on Climate Change, climate change is disrupting human health including both physical and mental health globally. ⁵ World Health Organization (WHO) estimates that from the year 2030-2050, climate change can trigger approximately 250,000 more mortalities annually because of heat strain, malaria, diarrhea, and malnutrition. ⁶

American Academy of Nursing noted in a 2018 policy report that nurses play an important role in public health and emergency services, as well as in responding to and mitigating the health consequences of climate change. The International Council of Nurses (ICN) in Position Statement on Nurses, Climate Change and Health, emphasizes that nurses should adopt instantaneous step to shape climate-resilient health systems. Consequently, nurses associations are being asked to develop policy documents on climate change to raise awareness about the potential health effects of climate change. In the United States and globally, health care accounts for 8.5% of carbon emissions.^{8,9} With the 28 million nurses, as the only health profession globally, can and should aid decarburize health care, signifying approximately 60% of health specialists and in the United States over its 5 million. 10,11 In the literature, numerous activities of nurses have been highlighted that are environmentally friendly such as shifting to hybrid staff meetings, proper waste disposal, signing off the computers and laptops when not in practice, usage of public transports, making files and preferring electronic documents over papers. 17,18 During patient care, nurses guide to throw the garbage in bins and not waste the resources that can pose a threat to the climate. 18 A study conducted in China, it was found that nurses sustainably practiced the habits of recycling the products no longer in use, green travel, using reusable items, producing less garbage, and using degradable products. 12 Nurses should initiate to mitigate climate change causing minor actions that are done unknowingly in promoting climate actions. 12 Nurses use a diversity of products in their daily routine, personal care products, products for nutrition, and pharmaceutics inappropriately.^{13,14} In numerous cases, products used regularly are discarded as partially used or perished and a wide range of devices and products are meant for one-time use only. Some items to be used are excessively boxed which leads to a risen carbon footprint on healthcare. 15 Concern, specifically regarding medical waste, which encompasses items like gloves, syringes, and containers, poses environmental pollution and if not disposed appropriately leads to soil and water contamination. On the other hand, caregivers single use of plastics on a daily basis has also contributed to plastic pollution in landfills and oceans with consequent harmful effects on ecosystems and wildlife. Hospitals use lot of energy for lighting, heating, cooling and medical equipments apart from being heavily dependent on fossil fuel sources for power generation. This produces greenhouse gases that contribute to global warming. Nurses also consume fossil-fuel powered vehicles while departing to work or visiting patients generates carbon emissions. Besides handling numerous medications, antibiotics or chemicals are only some examples of the harmful substances that might spill or dispose unsafely thus contaminating soil or water bodies. As far as tests involving toxic chemicals are concerned, they should be handled and treated in an environment friendly way. Health care facilities also emit their own varieties of wastewater laced with chemical residues, pesticides and other pollutants quality.16 which can affect aquatic ecosystems and water

1 J Gandhara Nurs Alli Health Sci July - December 2024

However, nurses must be aware of the climate problems which rising temperatures are causing serious diseases and leading to mortality specifically in heart patients throughout the world. One study showed that mainstream nurses are deficient in knowledge and awareness in terms of changing climate and its linkage with population health impacts.⁴ There was a deep connection regarding their level of education and awareness of the negative consequences of climate change on human health. They only linked climate change with flooding, drought, etc. 17 To address this gap, nurses should be involved in teams for defining and influencing sustainable product choices and criteria. On top of that, compostable plates and cups should be used instead, along with staff bike schemes. By implementing these moves, healthcare can be made more resilient as well as environmentally friendly which will also result in improved patient care. 16 A sustainable approach is necessary within the hospitals and health institutes in Pakistan in correspondence to climate change. Educational training must be given to nurses and lower staff so that the health of the patients can be improved by playing a vital role in mitigating the adverse impacts. Climate change and health topics should be added to nursing courses for ease of living. There is a need to reduce the carbon footprint by advocacy and leadership, so that environmentally sustainable activities can be initiated in health care. Nurses can take personal startup actions as chasing the 5 R's waste management strategy; refuse, reduce, reuse, repurpose, and recycle. These collective attempts can make the way for healthy survival and a greener future. 14,17,18

REFERENCES

- Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Beagley J, Belesova K, et al. The 2020 report of the Lancet Countdown on and climate change: responding converging Lancet. to crises.
- United Nations. What is climate change? Accessed April 19, 2024
- 3. Climate Change 2014 synthesis report. 2014.
- Romanello M, Di Napoli C, Drummond P, Green C, Kennard H, Lampard P, et al. The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. Lancet. 2022;400:1619-1654.
- Zaiton IZ. Climate change 2022: impacts, adaptation and vulnerability. Intergovernmental Panel on Climate Change. July 22, 2022.
- World Health Organization. Climate change and health.
- Leffers J, Butterfield P. Nurses play essential roles in reducing health problems due to climate change. Nurse Outlook. 2018;66(2):210-213.
- International Council of Nurses, Nurses, climate change and health [Position Statement]. 2018.
- Eckelman MJ, Huang K, Lagasse R, Senay E, Dubrow R, Sherman JD7. Health care pollution and public health damage in the United States: An update Health Aff. 2020;39(12):2071-20799.
- World Health Organization 12. State of the world's nursing 2020: investing in education, jobs, and leadership. 202013.
- 11. National Council of State Boards of Nursing. Nursing statistics. 2023.
- Whitmee S, Haines A, Beyrer C, Boltz FG, Capon AG, de Souza Dias BF, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. Lancet. 2015;386:1973-2028.
- 13. Brusco JM, Ogg M. Health care waste management and environmentally preferable purchasing. AORN J. 2010;92:S62–S69.
- 14. Becker J, Méndez-Quigley T, Phillips M. Nursing role in the pharmaceutical life cycle. Nurs Adm Q. 2010;34:297-305.
- Dias-Ferreira C, Santos T, Oliveira V. Hospital food waste and environmental and economic indicators-A Portuguese case study. Waste Manag. 2015;46:146-154.
- 16. Pati S, Pati S. Climate change and health: A nursing concern. Indian J of Pub Health. 2017;61(4):309-311.
- Buriro NA, Mureed S, Kumar R, Ahmed F, Hussain K, Fatima A. Nurses' Perception, Knowledge and Information Sources on Climate Change and Health at Dow University Hospital Karachi. J Liaquat Uni Med Health Sci. 2018;17(4):265-271.
- Yang L, Liao W, Liu C, Zhang N, Zhong S, Huang C. Associations between Knowledge of the Causes and Perceived Impacts of Climate Change: A Cross-Sectional Survey of Medical, Public Health and Nursing Students in Universities in China. Int J Environ Res Public Health. 2018;15(12):2650.

July - December 2024 J Gandhara Nurs Alli Health Sci | 2