Editorial

Sustainable and environmentally responsible healthcare

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Sustainability in healthcare – often referred to as green or ecological healthcare – is an increasingly prominent topic in the delivery of health services. Sustainable development is at the heart of the 2030 goals, emphasizing the need to address environmental issues, including reducing carbon emissions and the impact of climate change on health, and building environmentally sustainable health systems. These actions stem from the serious impacts of climate change, which are being integrated into health priorities (WHO, 2023).

The healthcare sector currently contributes approximately 5% of global greenhouse gas emissions (Pichler et al., 2019), both directly through its own energy and resource use, and indirectly through the products and technologies it uses. However, until recently, the impact of healthcare systems on climate change and their role in mitigating global warming has been largely overlooked in environmental and health policies (Romanello et al., 2021). Even today, the understanding of the links between the environmental, economic, and social sustainability of healthcare systems and climate change remains insufficient (Or and Seppänen, 2024).

There is a growing body of research that supports the idea that green employee behavior can have a significant impact on addressing environmental issues (He et al., 2020; Unsworth et al., 2021). Nurses make up approximately 60% of all healthcare workers worldwide and may be key to achieving the Sustainable Development Goals, environmental sustainability, and human well-being (Álvarez-Nieto et al., 2022; Butterfeld et al., 2021). Nurses are currently still insufficiently prepared to engage in climate action, and therefore the importance in this area needs to be emphasized within nursing profession and nurses' competencies (Vold and Meszaros, 2021).

In general, it appears that achieving changes in healthcare delivery that can reduce emissions and save costs can be challenging. In particular, changes in work practices are needed, which require strong clinical leadership. A suitable strategy could be collective motivation of healthcare workers/nurses, for example by implementing green care protocols. This involves reorganizing healthcare delivery, in terms of understanding the current harms of inefficient care, waste, and overtreatment for both patients and the environment (Or and Seppänen, 2024). However, this area is limited, and nurses are not sufficiently aware of global environmental initiatives for green sustainability (Maiz et al., 2023). An important factor for achieving change for green sustainability in healthcare is the adoption of environmental legislation and other practices aimed at changing behavior, with a greater emphasis on awareness of the benefits of sustainable healthcare (Or and Seppänen, 2024).

In the context of green sustainability in healthcare, the topic of empowering employees towards a more moral workplace culture is also discussed, which, according to research, supports more environmentally conscious behavior (Danish et al., 2021). Management also plays an important role in this area, both in knowing and perceiving policies and practices in the field of environmental sustainability, and in directly supporting the involvement and guidance of employees in environmental activities (Tariq et al., 2020). Creating an ethical atmosphere in organizations can help improve employees' environmental behavior, but also influence their moral discomfort (Maiz et al., 2023). An appropriate ethical atmosphere facilitates discussion of patients' health problems and their solutions, which creates space for nurses to make moral decisions and helps them behave more responsibly within the organization and in the area of environmentally conscious behavior (Ahmad and Umrani, 2019; Maiz et al., 2023).

Another area of discussion in promoting green sustainability in the healthcare system is the embedding of the concept of planetary empathy into the culture of healthcare. The complex context of the concept of planetary health requires collaboration between health, environmental sciences, sociology, and policies (Jochem et al., 2023). By integrating the basic principles of planetary empathy into care protocols, green sustainability in healthcare would become more achievable (Levett-Jones et al., 2025). However, research on the impact of planetary empathy in healthcare is lacking, and therefore this topic requires additional research in various areas, such as developing reliable and valid measurement methods, identifying the most effective strategies to promote planetary empathy among healthcare professionals, or examining its impact on broad societal health outcomes (Levett-Jones et al., 2025). The evidence obtained on the significant impact of planetary empathy can have a significant impact on the devel-

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opment of policies that can lead to substantial improvements in the healthcare system (Voulvoulis et al., 2022). The topic of sustainable and environmentally responsible healthcare requires the adoption of systemic measures to achieve changes at various levels – from healthcare organizations and providers, through healthcare workers/nurses providing healthcare, to influencing public opinion. Adopting systemic changes requires multidisciplinary collaboration of leaders from different sectors, including government, healthcare, education, and industry. There is clear potential to advance policies for environmental sustainability in healthcare systems by building strong partnerships to address human and planetary health challenges. Research is also needed in strategies and factors facilitating change towards more sustainable healthcare delivery.

Ethical aspects and conflict of interest
The author has no conflict of interest to declare.

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