

Developing a green nursing workforce to mitigate healthcare emissions and improve human health.

Commentary: Luque-Alcaraz OM, Aparico-Martinez P, Gomera A, Vaquero-Abellan 2024 The environmental awareness of nurse as environmentally sustainable healthcare leaders: a mixed method analysis. *BMC Nursing* 23:229.¹

Implications for practice and research

- Healthcare emissions contribute to climate change and threaten human health, therefore nurses have a professional obligation to become environmentally informed, take action to reduce healthcare emissions and support green solutions.
- Future research must understand and modify workplace barriers to promote environmentally sustainable staff behaviour and facilitate the green transformation of healthcare systems.

Context

Climate change is increasingly harming human health. Extreme weather events cause devastation, low crop yields and failure, contributing to food insecurity, economic hardship, and resource shortages. While rising temperatures increase the spread of infectious diseases and epidemics. Globally, countries are using healthcare services as an initial method of addressing these challenges ², however healthcare systems are major contributors to environmental pollution ³.

Nurses can advocate for and implement sustainable environmentally aware behaviours and actions, which aim to minimise the environmental footprint of healthcare systems. Green teams, started in United States of America, seek to implement sustainable activities to reduce the environmental impact of healthcare systems. Many green teams have been initiated by nurses and most involve nurses ⁴.

Methods

The research ¹ utilised a mixed method study, to investigate nurses' environmental knowledge and behaviour. The first phase concentrated on the total population of nurses in Spain in 2020, some 388,153 nurses. From this figure a random sample of 314 participants was selected from multiple regions. Inclusion and exclusion criteria centred on nursing staff, nursing care staff and nursing students with relevant degrees. Participants were invited to complete an online survey, which measured nurses' awareness of environmental issues, environmental behaviour inside and outside the workplace. In the second phase of the study, environmental coordinators, and members of the green team from one region were selected for interview from the random sample. Ten interviews, of approximately 30 minutes, were convened following staff attendance at environmental sustainability sessions. In addition, an observation study, was conducted in one healthcare setting by a researcher who observed nurses' actions during their daily work.

Findings

Online questionnaire data indicated that although nurses were aware of their impact on the environment, 52.23% rarely performed sustainable activities in the workplace, with 35.03% indicating such activity was difficult. In contrast nurses scored higher on environmental awareness behaviour outside the workplace. Interview data indicates the value of green teams led by knowledgeable nurses, as important information disseminators, effective for delivering training, supporting understanding and for providing advice on best practice. Barriers to actions include lack of time, scarce and inadequate resources.

Commentary

This study adds to the increasing evidence on nurses' understanding and environmental behaviour within and outside the workplace. Environmentally aware nurse leaders are essential to the development, establishment, and organisation of sustainable environmentally supportive healthcare systems, they are also required to support the development and growth of environmentally aware and responsible nurses. Nurses, as trusted professionals, advocates for health and members of green teams are well placed within healthcare settings to accurately identify and address grassroots barriers to good environmental practice. Green health teams and green systems provide opportunities for education and collaborative working to identify and establish low carbon equipment alternatives, consider energy efficiency, minimise waste, decrease pharmaceutical pollution, appraise water use, improve transport systems, review hospital food menus to reduce waste and improve health, and develop solutions for environmental challenges relevant to work settings ⁵.

Organisations such as the NHS in the UK have harnessed the power and reach of green teams by introducing competitions between teams to facilitate change and gain extra publicity and support for their health improving environmental work ⁶. While collaborative working and networking within and between team members has the potential for more ambitious projects and goals.

Nurses can also be greener in their own personal lives, making decisions about car journeys versus public transport, recycling actions and food choices, all of which have an impact on personal and collective carbon footprints.

References

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Dr Anne Mills
Principal Academic
Bournemouth University,
Centre for Public Health,
Bournemouth, Dorset, BH8 8GP, UK
amills@bournemouth.ac.uk
Tel:1202967389

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